

## Invitation for Bid

**BID NO.**                    **5-97648038**

**TITLE:**                    **PAVING RENOVATIONS-MULTIPLE LOCATIONS**

### **PROCUREMENT**

**LEAD:**                    **Jennifer West**  
                                 **UCPS Purchasing Department**  
                                 [facilitiesbids@ucps.k12.nc.us](mailto:facilitiesbids@ucps.k12.nc.us)

Union County Public Schools seeks quotes for the above referenced project.

### **SCOPE OF WORK**

Scope of work is described on Exhibit 1. Any applicable plans and specifications are referenced therein.

### **INSTRUCTIONS**

Instructions are as follows:

- **BID SUBMITTAL: 2:00 p.m., April 23, 2025**

All bids must be sealed in an opaque envelope marked with the Company Name, Address, and Bid Number. Bids are to be received at the UCPS Facilities Department located at 201 Venus Street, Monroe, NC 28112 no later than the date and time indicated above.

Refer to Bidder's Checklist for documents required for bid submittal.

- **PREBID MEETING**

A **MANDATORY Prebid Meeting** will be held 9:00 a.m., April 14, 2025 at the front entrance of New Town Elementary School, 1100 Waxhaw Indian Trail Rd S, Waxhaw, NC 28173 and will proceed to the remaining project locations. Bidders shall become familiar with all aspects of project prior to bid submittal. Failure to meet this requirement will not be cause for a change order.

- **COMMUNICATIONS**

During the bid process, all communication relating to this bid shall be directed to the Procurement Lead identified above. Failure to meet the requirement may consider your bid non-responsive.

All questions relating to this project shall be directed to the Procurement Lead identified above in the form of an email no later than 2:00 p.m., April 17, 2025. Answers will be provided to all bidders in the form of an addendum.

- **CONTRACT FORM**

Your attention is directed to terms and conditions identified within Exhibit 3 which shall be deemed to be incorporated into any purchase order, notice to proceed, or contract. Especially note applicable insurance requirements and obligations to comply with all applicable laws and Union County Board of Education policies. Insurance certificates shall be provided upon request of UCPS Procurement Lead.

- **AWARD**

UCPS reserves the right to award this project in a method considered to be most advantageous. This includes the right to issue single award, multiple awards, or reject all bids. UCPS is not required to award a contract. UCPS reserves the right to waive any informality in bids. If a bidder wants to protest a contract awarded by the Union County Public Schools resulting from this solicitation, then they must submit a written request to the UCPS Purchasing and Contract Division, 201 Venus Street, Monroe NC 28112. This request must be received in the Division of Purchase and Contract within five (5) consecutive calendar days from the date of the contract award. Protest letters must contain specific reasons and any supporting documentation for the protest. Note: Contract award notices are sent only to those actually awarded contracts, and not to every person or firm responding to this solicitation.

### **BIDDERS CHECKLIST**

Executed Cost Proposal Form  
License  
Bid Bond (5% of Total Bid)  
Good Faith Efforts (Affidavit A or B)  
Identification of Minority Participation Form

### **RECOMMENDATION OF AWARD**

- ☐ Certificate of Insurance
- ☐ Good Faith Efforts (Affidavit C or D)
- ☐ Performance, Payment Bonds (100% of award value)

### **INVOICE ATTACHMENTS**

- ☐ NC Sales and Use Tax Certification Form
- ☐ MBE Documentation for Contract Payments Form
- ☐ Subcontractor Documentation for Contract Payments Form

**SCOPE OF WORK**

**PART 1-GENERAL**

Union County Public Schools is soliciting bids for resurfacing and expanding drive and parking areas in designated areas.

Contractor is to provide all labor, equipment, materials, permits, fees, inspections, etc. to provide a turnkey project as indicated on the drawings and specifications provided herein. Permits and Inspections shall be provided to the assigned UCPS Project Coordinator.

Note: Contract drawings are provided to give a general description of the Work. Contractor is to visit the site and field verify all existing conditions that affect the design and layout of this project prior to preparation of submittals. Contractor is responsible for all measurements and material lists.

Contractor shall comply with all current local, state, and national codes and regulations. This includes, but not limited to, complying with all ADA requirements. In the event of a conflict between the Scope of Work and code regulations, the Contractor shall immediately notify the assigned UCPS Project Coordinator for direction.

Contractor shall be properly licensed within the state of North Carolina to perform all work listed within the bid documents. A copy of this license shall be included in the bid submittal.

Contractor must have successfully completed a minimum of 5 projects of this type and size within the past 5 years. References are to be provided within 24 hours of request.

Note: Refer to Site Map located with Exhibit 2 for more details.

**PART 2- ALLOWANCES/UNIT COST**

**A. Allowances**

1. Contractor shall include allowance(s) indicated within the Cost Proposal Form within their bid amount to cover unforeseen conditions.
2. If identified as an unforeseen condition, the Contractor shall submit a cost proposal to the Owner for consideration. Upon approval of proposal, an Allowance Authorization letter will be sent to the Contractor authorizing the work.
3. Any unused Allowance funds will be credited to the Owner upon completion of the Contract.

**B. Unit Cost**

1. Contractor shall include Unit Cost for Removal and Replacement of unsuitable soil per cubic yard.
2. Contractor shall include Unit Cost for Resurfacing per square foot.

## PART 3-GENERAL SPECIFICATIONS

## C0 Positive Drainage

Project areas are to be constructed in a method to promote positive drainage. Contractor shall ensure all" connections from existing surfaces to newly surfaced areas are smooth and formed to provide such" positive drainage. Ponding will not be acceptable.

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cpf'crrtqzko cvgn "4/34"lpej gu'cm0

## E0 Parking Curbs (Stops)

Parking Curbs shall be a minimum of 5,000 PSI, sized as needed per parking space, and formed with a" sloped design in order to protect vehicles. This protection includes, but not limited to, vehicle's tires"and" rims. The Parking Curbs shall be neutral in color. All parking areas are to be uniform per site. The" Parking Curbs shall be installed per manufacturer's recommendation.

## F 0 Restripe

Contractor shall restripe and remark areas to match existing layout and is to include all parking stalls," ADA parking stalls, access aisles/routes, directional markings, traffic lanes, stop bars, concrete stops,"fire" lanes, and all other existing entrance, drive and parking lot markings. Painting over or block out"painting" of existing pavement markings are not allowed. Sherwin Williams Hotline Fast Dry Latex"Traffic" Marking Paint TM2152 White TTP-1952D, TM2153 LF Yellow TTP-1952D, and TM2133 Blue"are" approved for markings. Product substitutions must be requested within the time and method allowed"for" questions, refer to page 2 of IFB.

G0 Resurfacing<

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F. Reconstruction

Contractor shall remove pavement overlay and subgrade layer until suitable soil is found. Areas that may have larger vehicle traffic (i.e. buses, delivery trucks, waste/recycling trucks, etc.), Contractor shall reconstruct with a minimum of 8-inch of ABC stone base, 3-inch Type I 19.0 B asphalt, and 2-inch Type RS 9.5 C asphalt mix. Parking Curbs are to be replaced by Contractor.

G. New Parking Areas

Contractor shall construct new parking areas designed for common traffic with a minimum of 6-inch ABC stone base, compact to 95% minimum density, 3-inch Type I 19.0 B and a minimum of 2-inch RS 9.5 C asphalt mix.

Contractor shall construct new parking areas designed for larger vehicle traffic (buses, delivery trucks, waste/recycling trucks, etc.) with a minimum of 8-inch ABC stone base, compact to 95% minimum density, 3-inch of Type I 19.0 B and a minim of 2-inch RS B asphalt mix.

H. Service Drives

Contractor shall construct all service drives (within project areas) with a minimum of 8-inch ABC stone base, compacted to 95% minimum density, 3-inch Type I 19.0 B, and a minimum of 2-inch Type RS 9.5 C asphalt mix.

I. Miscellaneous

New surfaces including, but not limited to, edging and transitions are to be smooth in order to prevent tripping hazards. Contractor shall seed and straw all disturbed soil. The seed shall match the existing terrain. Trees, shrubs, existing natural areas are to not be disturbed. When in conflict, contact the assigned UCPS Project Manager to direction. In some cases, this may require removal and reinstallation by Contractor. All debris resulting from project shall be properly disposed of off Union County Public Schools property. School dumpsters are not to be used. At minimum daily cleanup of project areas is required.

## PART 10 TENTATIVE SCHEDULE

A. June 12, 2025 Notice to Proceed anticipated for release

B. All work is to be closely scheduled with assigned UCPS Project Coordinator to ensure no disruption to school activities. If the above schedule cannot be met, Contractor shall list the number of consecutive calendar days required for completion per each location on the Cost Proposal Form. If project cannot be completed within the time-frame at no fault of the Contractor, the Contractor shall request additional days in writing. The request must include the reason for the extension. Approvals must be in writing.

C. Contractor shall appoint a Project Manager to be the sole point of contact through the duration of the project. The Project Manager shall be fluent in the English Language (speaking and writing).

## PART 11-SAFETY

- A. Contractor shall ensure one (1) lane is open for traffic at all times. Under no circumstances, is there to be a road or entrance to a site closed.
- B. Contractor is solely responsible for safeguarding the project areas through the duration of the project. This includes, but not limited to, barricades, snow fencing.
- C. The Contractor may setup on site at a location authorized by the assigned UCPS Project Coordinator. Any equipment or supplies left on school property shall be securely locked. UCPS will not be responsible for damages or theft of Contractor's or 3<sup>rd</sup> party (i.e. rental equipment) property.
- D. Contractor shall require all employees to abide by the OSHA safety guidelines. A written safety policy shall be provided to the assigned UCPS Project Coordinator within 24 hours of request.
- E. All representatives of Contractor shall dress appropriate for school environment and perform work in a professional manner. Compliance is at the sole discretion of Union County Public Schools. Any individual not in compliance will be asked to leave Union County Public School property.
- F. There is not to be any drugs, firearms, tobacco, or weapons on school property.
- G. Contractor's Project Manager shall provide daily, to front office of worksite, a list of employees working onsite that day.

## PART 12-WARRANTY

- A. Contractor shall provide full manufacturers warranty and a minimum of 1 year workmanship warranty. Refer to Draft Contract for additional Warranty Information (Exhibit 3).
- B. Contractor is responsible for damages to UCPS property as a direct result of this project. Contractor shall repair, replace to the fullest extent needed to restore the property to the original state at no cost to Union County Public Schools. The timeliness of repair/replacement shall not exceed 10 business days from notification.

## COST PROPOSAL/EXECUTION OF PROPOSAL

### Paving Renovations Multiple Locations BID NO. 5-97648038

By submitting this proposal, the potential contractor certifies the proposal is signed by an authorized representative of the firm.

The cost and availability of all equipment, materials, and supplies associated with performing the services described herein have been determined and included in the proposed cost. All labor costs, direct and indirect, including taxes, have been determined and included in the proposed cost. The offeror is aware of prevailing conditions associated with performing these services. The potential contractor has read and understands the conditions set forth in this bid and agrees to them with no exceptions.

Bidders should consider the manufacturer's price at time of bid. Contractor shall order materials immediately upon Notice to Proceed. If a manufacturing price increase occurs causing an additional expense at no fault of the Contractor, the Contractor may request a change order for the unforeseen price increase. The change order request shall include backup documentation showing the date the materials were ordered, a letter from the manufacturer on the manufacturer's letterhead indicating the amount and date of price increase, and invoice of the additional expense charged to the Contractor. The amount of the change order request shall be limited to the exact amount of increase; profit and overhead expenses will not be accepted. Increase of labor cost (i.e. pay raises) will not be accepted. Manufacturing increase as it relates to Unit Costs will also not be accepted.

Therefore, in compliance with this Request for Proposals, and subject to all conditions herein, the undersigned offers and agrees, if this proposal is accepted within **90 days** from the date of the opening, to furnish the subject services for a cost not to exceed:

	Bid Amount (All Inclusive)	Allowance Funds		
New Town Elementary School	\$ _____	Alternate#1	\$ _____	10% Allowance
Stallings Elementary School	\$ _____	Alternate#1	\$ _____	10% Allowance
Facilities	\$ _____	Alternate#1	\$ _____	10% Allowance
Piedmont High School	\$ _____		\$ _____	10% Allowance
Porter Ridge High School	\$ _____		\$ _____	10% Allowance
Discount if awarded all locations listed above.	\$ _____		\$ _____	10% Allowance

Consecutive calendar days required to achieve Final Completion from issuance of Notice to Proceed: \_\_\_\_\_ calendar days

ALL INCLUSIVE TOTAL \$ \_\_\_\_\_ Includes \$ \_\_\_\_\_ Allowances Funds \_\_\_\_\_ CCD

**UNIT COST** Unit Costs may be used to add/or delete from project at discretion of Owner. Such changes are to be reflected in Change Order(s).

Removal and replacement of unsuitable soil (per Cubic Yard) \$ \_\_\_\_\_

Resurfacing (per square foot): \$ \_\_\_\_\_

**ADDENDA ACKNOWLEDGEMENT:** Addendum 1: \_\_\_\_\_ Addendum 2: \_\_\_\_\_ Addendum : \_\_\_\_\_

### QUALIFICATION

Successfully completed a minimum of five (5) projects of this type and size within the past five (5) years? Properly licensed within the state of North Carolina to perform all work listed within Exhibit 1? YES NO

License Classification/Limitation: \_\_\_\_\_

License Number: \_\_\_\_\_ Valid Through: \_\_\_\_\_

### EXECUTION

OFFEROR: \_\_\_\_\_ FEDERAL ID NO. \_\_\_\_\_

ADDRESS: \_\_\_\_\_ CITY, STATE, ZIP \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_ MOBILE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

AUTHORIZED SIGNATURE: \_\_\_\_\_ TITLE: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

Please add the following Unit Cost items.

1. Place and Grade ABC Stone. Furnishing, mobilizing, placing, and grading of material is included: \$\_\_\_\_\_ per TON.
2. Undercut/Mill and Provide Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material: \$\_\_\_\_\_ per TON
3. Provide 4-inch-wide Striping: \$\_\_\_\_\_ per LF
4. Provide 4-inch Sidewalk. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material: \$\_\_\_\_\_ per SF
5. Provide Curb and Gutter. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material: \$\_\_\_\_\_ per LF
6. Provide Concrete Wheel Stop. Include the related cost for furnishing, mobilizing, and installing of the wheel stop: \$\_\_\_\_\_ per EA
7. Import and Replacement of #57 Stone \$\_\_\_\_\_per TON.
8. Import and Placement of Geotech Fabric \$\_\_\_\_\_Per SY.



**SITE MAPS AND SCOPE OF WORK**

New Town Elementary School  
Stallings Elementary School

Facilities  
Piedmont High School  
Porter Ridge High School

**IMPORTANT:**

**Site Maps are to project a generalized idea of Scope of Work.**

Contractors are responsible for field-verification.  
Failure to perform such verification prior to bid submittal will  
not be cause for a change order.

**EXHIBIT 1**

**Scope of Work**

Union County Public Schools is soliciting bids for resurfacing and restriping the main drive of the Porter Ridge Campus.

**Resurfacing**

Areas to be resurfaced are to be edge mill at all curbs, ramps, and all other joints to a depth of 2 inches. All areas that contain a damaged sub-base resulting in potholes, alligator cracks, pavement depression, rutting, pavement slippage cracks and/or corrugation are to be repaired by undercutting the sub-base and reinstall as needed to obtain 95% minimum density. Resurface with 2 inches of Type RS 9.5C Asphalt Mix. Some of the areas to be repaired are marked on the site map; however, is not to be misconstrued as a complete list. It is the responsibility of the Contractor to provide a turn-key project to the highest standards of the industry.

**Restripe**

Contractor shall restripe and remark areas to match existing layout and is to include all parking stalls, ADA parking stalls, access aisles/routes, directional markings, traffic lanes, stop bars, concrete stops, fire lanes, and all other existing entrance, drive and parking lot markings. Painting over or block out painting of existing pavement markings are not allowed. Sherwin Williams Hotline Fast Dry Latex Traffic Marking Paint TM2152 White TTP-1952D, TM2153 LF Yellow TTP-1952D, and TM2133 Blue are approved for markings.

Contractor is to provide all labor, equipment, materials, permits, fees, inspections, etc. to provide a turnkey project as indicated on the drawings and specifications provided. Permits and inspection shall be provided to the assigned UCPS Project Manager.

Note: Contract drawings are provided to give a general description of the work. Contractor is to visit the site and field verify all existing conditions that affect the design and layout of this project prior to preparation of submittals. Contractor is responsible for all measurements and material lists.

# Paving Specifications

## Positive Drainage

Project areas are to be constructed in a method to promote positive drainage. Contractor shall ensure all connections from existing surfaces to newly surfaced areas are smooth and formed to provide such positive drainage. Ponding will not be acceptable.

## Restripe

Contractor shall restripe and remark areas to match existing layout and is to include all parking stalls, ADA parking stalls, access aisles/routes, directional markings, traffic lanes, stop bars, concrete stops, fire lanes, and all other existing entrance, drive and parking lot markings. Painting over or block out painting of existing pavement markings are not allowed. Sherwin Williams Hotline Fast Dry Latex Traffic Marking Paint TM2152 White TTP-1952D, TM2153 LF Yellow TTP-1952D, and TM2133 Blue are approved for markings.

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## Reconstruction

Contractor shall remove pavement overlay and subgrade layer until suitable soil is found. Areas that may have larger vehicle traffic (i.e. buses, delivery trucks, waste/recycling trucks, etc.) Contractor shall reconstruct with a minimum of 8-inch of ABC stone base, 3-inch Type I 19.0 B asphalt, and 2-inch Type RS 9.5 C asphalt mix. Parking Curbs are to be replaced by Contractor.

## New Parking Areas

Contractor shall construct new parking areas designed for common traffic with a minimum of 6-inch ABC stone base, compact to 95% minimum density, 3-inch Type I 19.0 B and a minimum of 2-inch RS 9.5 C asphalt mix. Contractor shall construct new parking areas designed for larger vehicle traffic (buses, delivery trucks, waste/recycling trucks, etc.) with a minimum of 8-inch ABC stone base, compact to 95% minimum density, 3-inch of Type I 19.0 B and a minim of 2-inch RS B asphalt mix.

## Service Drives

Contractor shall construct all service drives (within project areas) with a minimum of 8-inch ABC stone base, compacted to 95% minimum density, 3-inch Type I 19.0 B, and a minimum of 2-inch Type RS 9.5C asphalt mix.

## Speed Bumps

All asphalt/rubber speed bumps are to be removed and replaced by Contractor. Rubber speed bumps are to be replaced with new asphalt speed bumps. The new speed bumps are to be the same width as the drive and approximately 2-1/2 inch tall.

Paving Specifications

**Parking Curbs** (Tire Stops)

Parking Curbs shall be a minimum of 5,000 PSI, sized as needed per parking space and formed with a sloped design in order to protect vehicles. This protection includes, but not limited to vehicle tires and rims. The parking Curbs shall be neutral in color. All parking areas are to be uniform per site. The Parking Curbs shall be installed per manufacturer's recommendation.





**EXHIBIT 1**

**Scope of Work**

Union County Public Schools is soliciting bids for resurfacing, restriping and expanding the Love Mill Road entrance.

**Resurfacing**

Areas to be resurfaced are to be edge mill at all curbs, ramps, and all other joints to a depth of 2 inches. All areas that contain a damaged sub-base resulting in potholes, alligator cracks, pavement depression, rutting, pavement slippage cracks and/or corrugation are to be repaired by undercutting the sub-base and reinstall as needed to obtain 95% minimum density. Resurface with 2 inches of Type RS 9.5C Asphalt Mix. Some of the areas to be repaired are marked on the site map; however, is not to be misconstrued as a complete list. It is the responsibility of the Contractor to provide a turn-key project to the highest standards of the industry.

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### Service Drives

Contractor shall construct all service drives (within project areas) with a minimum of 8-inch ABC stone base, compacted to 95% minimum density, 3-inch Type I 19.0 B, and a minimum of 2-inch Type RS 9.5C asphalt mix.

### Speed Bumps

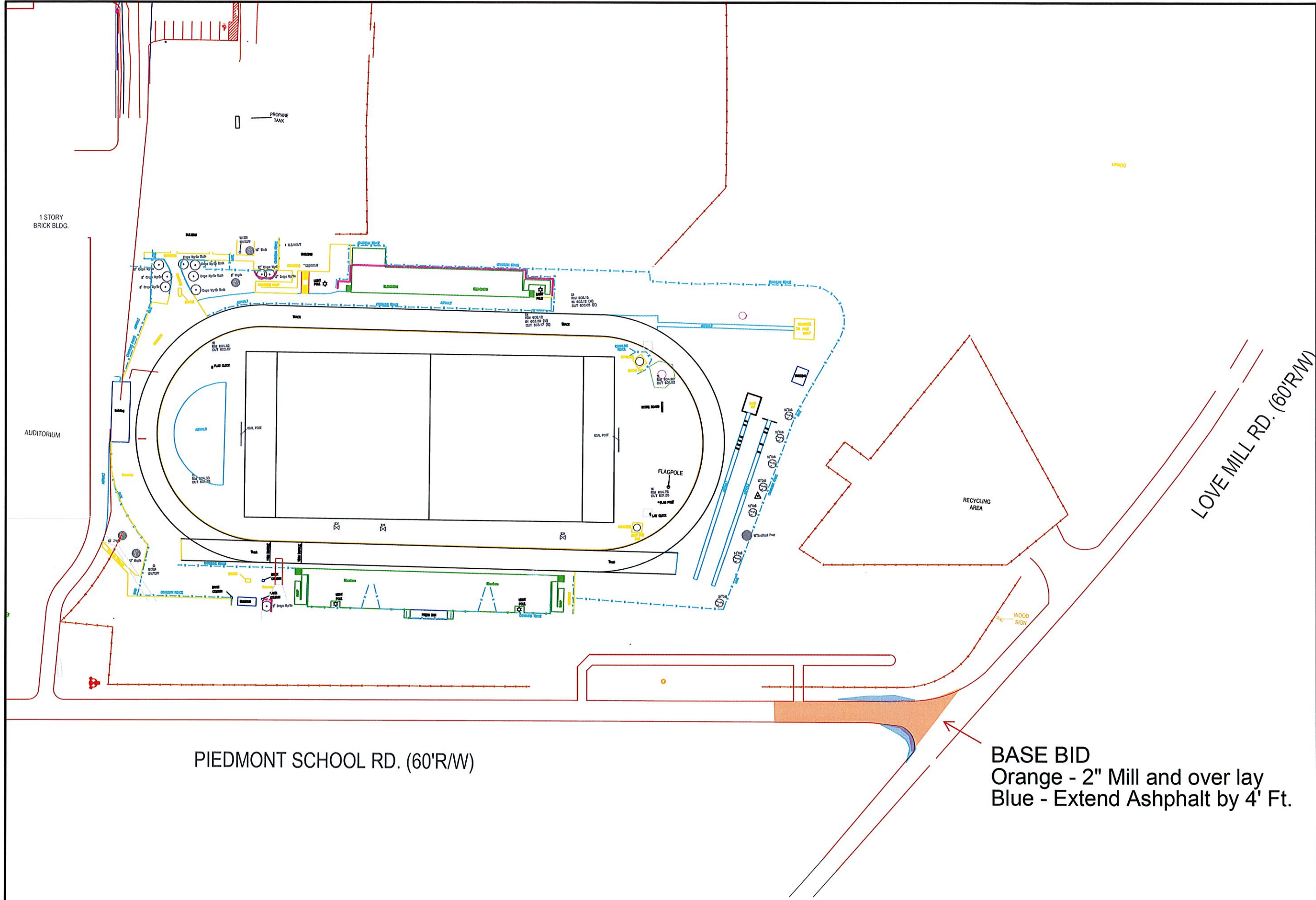
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Paving Specifications

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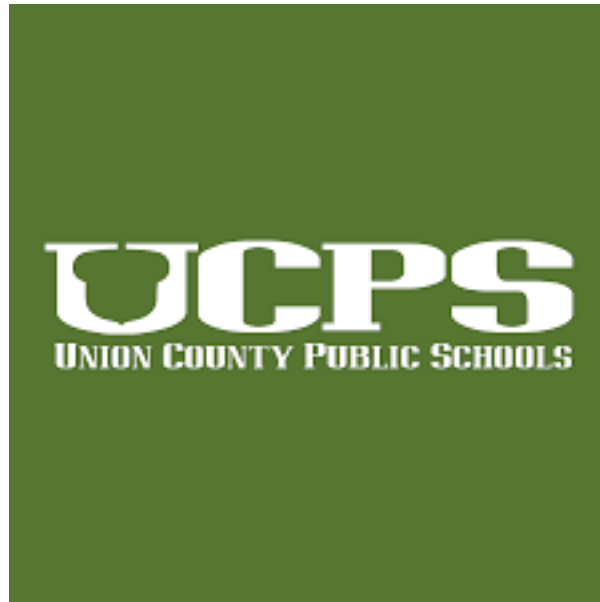


BASE BID  
 Orange - 2" Mill and over lay  
 Blue - Extend Ashphalt by 4' Ft.

**SECTION 00 01 01  
PROJECT TITLE PAGE**

**PROJECT MANUAL**

**FOR**



**UNION COUNTY PUBLIC SCHOOLS  
201 VENUS STREET,  
MONROE, NORTH CAROLINA 28112**

**NEW TOWN ELEMENTARY SCHOOL PAVEMENT IMPROVEMENT  
1100 WAXHAW INDIAN TRIAL ROAD S,  
WAXHAW, NORTH CAROLINA 28173  
REI PROJECT NO. R25PVG-004**

**02-03-2025**

**PREPARED BY:**



**1927 J.N. PEASE PLACE, SUITE 201, CHARLOTTE, NC 28262  
NORTH CAROLINA FIRM LICENSE C-1520**

**SECTION 00 01 07**

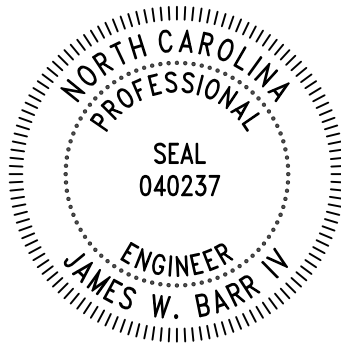
**SEALS PAGE**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Design Firm for New Town Elementary School Pavement Improvement with Project Manual dated 02-03-2025:
1. REI Engineers, Inc., 1927 J.N. Pease Place, Suite 201, Charlotte, NC 28262.
  2. North Carolina Firm License C-1520

**Professional Engineer**



**END OF SECTION**

## **SECTION 00 01 10**

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**END OF SECTION**

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**PART 1 GENERAL**

**1.1 SUMMARY**

A. The following drawings dated 02-03-2025 are included as part of the Contract Documents:

1. G-001 Cover
2. C-101 Site Plan
3. C-501 Details

**END OF SECTION**

## **SECTION 00 11 16**

### **INVITATION TO BID**

#### **PART 1 GENERAL**

##### **1.1 PROJECT INFORMATION**

- A. Project Name: New Town Elementary School Pavement Improvement
- B. Project Address: 1100 Waxhaw Indian Trail Road S, Waxhaw, North Carolina 28173
- C. Owner: Union County Public Schools

##### **1.2 BIDS**

- A. Sealed bids for the project will be received from bidders by the Owner at 201 Venus Street, Monroe, North Carolina 28112 until 2:00 PM on 04-16-2025, at which time they will be privately opened.

##### **1.3 PROJECT DOCUMENTS**

- A. Electronic project documents may be obtained from the Engineer, REI Engineers, Inc., 1927 J.N. Pease Place, Suite 201, Charlotte, NC 28262, Marcos Quesada, mquesada@reiengineers.com at no cost.

##### **1.4 BIDDING REQUIREMENTS**

- A. All bidders are hereby notified that they shall be properly licensed under the state laws governing their trades.
- B. Bid security in the amount equal to not less than 5% of the gross amount of the bid is required.
- C. Submit questions to REI Engineers, Inc. in writing to the email address listed above no later than 5:00 PM at least 7 days prior to the bid due date.

##### **1.5 PRE-BID MEETING**

- A. A Pre-Bid Meeting is scheduled for 04-07-2025 on 10:00 AM at the project address listed above.
- B. Attendance is mandatory.

**END OF SECTION**

## **SECTION 00 21 13**

### **INSTRUCTIONS TO BIDDERS**

#### **PART 1 GENERAL**

##### **1.1 DEFINITIONS**

- A. The Bidding Documents consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Bid Form, and other sample bidding and contract forms.
- B. The proposed Contract Documents consist of the Form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and Addenda issued prior to execution of the Contract.
- C. Addenda are written or graphic instruments issued by the Engineer prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.
- D. A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- E. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.
- F. An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
- G. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.
- H. A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.
- I. A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work.

##### **1.2 BIDS**

- A. Submit Bid Form along with required enclosures in a sealed envelope, with the Bidder's name, license number, and project name written on the outside; place this sealed envelope in another envelope and deliver to the Owner at the address specified.
- B. Bids will be received until the date and time specified at which time they will be privately opened.
- C. Fill in and sign the bid form correctly. Bids that show any omission, alterations of form, additions not called for, conditional Bids, or any irregularities of any kind may be rejected. If erasures are necessary and appear on the forms, each such erasure must be initialed by the person signing the proposal.



- D. Bids that are non-responsive or fail to follow the Instructions to Bidders may be rejected.
- E. No bid may be withdrawn after receipt of Bids for a period of 60 days.

### **1.3 ACCEPTANCE OF BID (AWARD)**

- A. It is the intention of the Owner to award a contract for work under this project to the lowest responsible Bidder; however, in the interest of suitability to the need of the Owner and/or economy, equipment, materials and furnishings other than the lowest in price may be selected.
- B. The Owner reserves the right to reject any or all Bids, to accept any bid submitted, to waive any formalities, and to negotiate with the low Bidder or Bidders any changes considered necessary or desirable. The Owner reserves the right to reject any Bid when such rejection is in the interest of the Owner to reject the bid of the bidder who has previously failed to perform or to complete on time Contracts of a similar nature; and to reject the bid of a bidder who is not, in the opinion of the Engineer, in a position to perform the Contract.
- C. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted. Alternates may be accepted at any time during the bid holding period.

### **1.4 PRE-BID MEETING**

- A. Refer to the invitation or advertisement for bids for the date, time and location of the Pre-Bid Meeting.
- B. A Pre-Bid Meeting will be held for purposes of considering questions posed by Bidders. All interpretations and corrections to Contract Documents deriving from this meeting will be documented via Addendum.
- C. If the Bidder does not attend the Pre-Bid Meeting, it is the Bidder's responsibility to obtain the Pre-Bid Meeting Minutes and all Addenda.

### **1.5 DISQUALIFICATION**

- A. The Owner reserves the right to disqualify Bids, before or after opening, upon evidence of collusion with intent to defraud or commit other illegal practices upon the part of the Bidder.

### **1.6 CONTRACTOR'S LICENSE**

- A. All Bidders must have proper licenses for contractors as required by State Law. The Bidder's license number shall be listed on the bid form and on the outside of the inner sealed envelope in which the bid is submitted.

### **1.7 CONFLICT OF INTEREST**

- A. Bidders must disclose in writing with their bid the name of any owner, officer, director, or agent who is also an employee of the Owner.
- B. Bidders must disclose in writing with their bid the name of any employee of the Owner who owns, directly or indirectly, an interest of 5 percent or more in the Bidder's firm or any of its branches or subsidiaries.

- C. By submitting a bid, the Bidder certifies that there is no relationship between the Bidder and any person or entity which is, or gives the appearance of, a conflict of interest related to this project.

## **1.8 NON-DISCRIMINATION**

- A. The Bidder shall not discriminate against any individuals and will take proactive measures to assure compliance with all Federal and State requirements concerning fair employment, employment of people with disabilities, and concerning the treatment of all employees without regard to discrimination based upon age, race, color, religion, sex, national origin, or disability.

## **1.9 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS**

- A. Examine Drawings and Specifications and all Addenda or other revisions thereto and thoroughly familiarize himself with the detailed requirements thereof prior to submitting a proposal.
- B. Should a Bidder find discrepancies or ambiguities in, or omissions from the Specifications and Drawings bound herein, or should be in doubt as to their meaning, notify the Engineer in writing immediately. Engineer will issue an interpretation in the form of an addendum. This addendum will be forwarded to all Bidders of record.
- C. Addenda will be issued no later than four days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.
- D. Act promptly and allow sufficient time for a reply to be provided before the date established for submission of Bids.
- E. Acknowledge receipt of all addenda on the Bid Form.
- F. No oral interpretations will be made to any Bidder as to the meaning or intent of the Contract Documents or be effective to modify any of the provisions of the Contract Documents.

## **1.10 SUBSTITUTIONS**

- A. References are made to certain specific products solely to denote the quality standard of the desired product and are not intended to restrict Bidders to a specific brand, make, manufacturer, or name. These products have been noted to assist in establishing material types and acceptable products. Equivalent products will be considered acceptable provided that the approval of the specific product has been given in writing by the Engineer.
- B. Written requests for substitution of equivalent products from prime bidders will be considered if received by the Engineer 7 calendar days prior to the bid opening.
- C. Identify the product or the fabrication or installation method to be replaced in each request. Include related specification sections and drawing number.
- D. Provide complete documentation on both the product specified and the proposed substitution including the following information as appropriate:
  - 1. Comparison of specified and proposed substitute product data, fabrication drawings, and installation procedures.

2. Samples where applicable or requested.
  3. Detailed comparison of significant qualities of the proposed substitution with those of the work specified.
  4. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate Contractors that will become necessary to accommodate the proposed substitution.
- E. Certification by the Bidder or manufacturer that the substitution proposed is equal to or better in every respect to that required by the Contract Documents, and that it will perform equal or superior to product specified in the application indicated. The Bidder waives any right to additional payment or time, which may subsequently become necessary because of the failure of the substitution to perform adequately.
- F. Engineer's Action: The Engineer may request additional information or documentation necessary for evaluation of the request. The Engineer will notify the Bidders of acceptance of the proposed substitution by means of an addendum to the bid documents. If the proposed substitute is accepted through an addendum use the product specified by name. Engineer's Substitution Approval during bidding and subsequent addendums does not void the Bidder's responsibility to submit the required shop drawings and comply with the other contract documents and requirements.

#### **1.11 SITE INVESTIGATION**

- A. Examine the site to determine the extent of work involved, size of work, etc., and the conditions under which the work must be staged and performed. Examine the grounds and buildings, utilities and roads and ascertain by any reasonable means conditions that will in any manner affect its work. Ask the Engineer for any additional information that he deems necessary to be fully informed as to exactly what is to be expected prior to submitting a proposal. The drawings have been prepared on the basis of surveys and inspections of the site and physical conditions at the site. This, however, does not relieve the Bidder of the necessity for fully informing itself as to the existing physical conditions. Secure field measurements for quantities upon which proposal is based. Carefully examine the existing conditions as compared to the Contract Documents.
- B. The submission of a bid will be construed as evidence that such an investigation has been made, and no subsequent allowance will be made in this connection on behalf of the bidder for any error or negligence.
- C. Upon arrival at the Project Site, immediately proceed to the main entrance/office and advise the administrative personnel of its presence and purpose. Sign the visitor's log, giving his name, his company and the time and date of the visit.
- D. Inspection of the work areas shall occur between the hours of 8:00 AM and 5:00 PM. No inspections will be conducted on Saturdays, Sundays, or holidays.

#### **1.12 BID SECURITY**

- A. Bid bond or a certified check drawn on a bank or trust company insured by the FDIC in an amount equal to not less than 5% of the gross amount of the bid is required.

#### **1.13 PRIME CONTRACT**

- A. Perform all work under a single prime contract.

#### **1.14 PERMITS, FEES AND TAXES**

- A. Secure and pay the costs of licenses, permits and fees for inspections required by City, County and/or State authorities; Social Security and other applicable Local, State and Federal Government taxes, and sales taxes. Include such costs in its bid.

#### **1.15 SUBCONTRACTORS**

- A. List names of subcontractors on the Bid Form. Identify work by the general, subcontractor or not applicable for each trade; utilize blank lines to list trades not provided in the table. Do not list suppliers. All blanks must be filled in. Failure to do so may result in bid being declared non-responsive. If there is more than one subcontractor per trade identified below, list all. If no subcontractors are to be utilized, indicate by signing at the appropriate place at the bottom of the table.
- B. A Bidder whose bid is accepted shall not substitute any person as subcontractor in the place of the subcontractor listed in the original bid, except if the listed subcontractor's bid is later determined by the successful Bidder to be nonresponsive or nonresponsive or the listed subcontractor refuses to enter into a contract for the complete performance of the bid work, or with the approval of the awarding authority, the Owner, for good cause shown by the successful Bidder.
- C. The terms, conditions, and requirements of each contract between the successful Bidder and a subcontractor performing work under a subdivision or branch of work listed in this subsection shall incorporate by reference the terms, conditions, and requirements of the contract between the contractor and the Owner.

#### **1.16 FORM OF AGREEMENT**

- A. The form of agreement between the Owner and Contractor to be entered into shall be the sample contained in Section 00 52 13 - Standard Form of Agreement.

#### **1.17 BIDDER QUALIFICATIONS**

- A. Bids will be accepted from Bidders who are regularly engaged in, and licensed to perform, the work they are bidding, which represents a significant portion of their total volume and who perform this work with workers regularly employed on their direct payrolls. Before a bid is considered for award, the Bidder may be requested by the Engineer to submit a statement of facts in detail as to its previous experience in performing similar or comparable work and of its business and technical organization and financial resources available to be used in contemplated work. The Bidder may also be required to submit a statement of facts in detail on his proposed subcontractors as to their previous experience and past performance in performing similar work or comparable work.

**END OF SECTION**

**SECTION 00 41 13**

**BID FORM**

**PART 1 GENERAL**

**1.1 PROJECT AND ITS PARTIES**

- A. TO:
- Maurice Brown  
Union County Public Schools  
201 Venus Street,  
Monroe, North Carolina 28112
- B. PROJECT:
1. New Town Elementary School Pavement Improvement
  2. REI Project No. R25PVG-004
- C. FROM:
1. Date: \_\_\_\_\_
  2. Bidder: \_\_\_\_\_
  3. Address: \_\_\_\_\_
  4. Phone: \_\_\_\_\_ Email: \_\_\_\_\_
  5. GC License #: \_\_\_\_\_ Classification: \_\_\_\_\_ Limitation: \_\_\_\_\_

**1.2 BASE BID**

- A. The undersigned, as bidder, hereby declares that the only person or persons interested in this bid as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this bid or in the contract to be entered into; that this proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud. The Bidder further declares that he has examined the site of the work and the contract documents relative thereto dated 02-03-2025 as prepared by REI Engineers, Inc., and has read all special provisions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed. The Bidder proposes and agrees if this bid is accepted to contract with the Owner in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools apparatus, means of transportation and labor necessary to complete the construction of the project with a definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and the Contract Documents, for the sum of:
1. Words: \_\_\_\_\_
  2. Figures: \$ \_\_\_\_\_.

### 1.3 BID BREAKDOWN

A. Base bid is broken down as follows:

Item	Dollar Amount in Figures
Permits/ Bonds	\$
Labor	\$
Materials	\$
State Sales/ Use Tax	\$
County Sales/Use Tax	\$
Allowances	\$
Total Base Bid (must match 1.2, 2)	\$

### 1.4 ALTERNATES:

A. The undersigned agrees to perform alternative work as described in Section 01 23 00 - Alternates for the sums stated below resulting in additions to or deductions from the base bid stated above. Additions and deductions shall include any modifications of the Work or additional work that may be reasonably included as part of the alternative work. All alternative work is to be completed within the same timeframe as the base bid work. All alternates must be filled out. A zero or no entry after any alternate indicates no cost change to include that Alternate. Alternates may be accepted at any time during the bid holding period. The undersigned acknowledges that failure to complete all information requested in this section may result in the rejection of this bid.

1. Alternate No. 1: Concrete Curb Replacement

a. Words: \_\_\_\_\_

b. Figures: \$ \_\_\_\_\_.

c. Select One: \_\_\_ Add or \_\_\_ Deduct

### 1.5 ALLOWANCES:

A. Include in the Base Bid the following Quantity Allowances:

1. Undercut/Mill and Provide 40 TONS of Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material.

### 1.6 UNIT PRICES:

A. Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically noted. Unit prices shall be applied, as appropriate, to compute the total value of changes in the scope of the work all in accordance with the contract documents.

1. Place and Grade ABC Stone. Furnishing, mobilizing, placing, and grading of material is included: \$ \_\_\_\_\_ per TON.

2. Place and Grade Washed #57 Stone. Furnishing, mobilizing, placing, and grading of material is included: \$ \_\_\_\_\_ per TON.

3. Undercut/Mill and Provide Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material: \$\_\_\_\_\_ per TON
4. Provide 4-inch wide Striping: \$\_\_\_\_\_ per LF
5. Provide 4-inch Sidewalk. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material: \$\_\_\_\_\_ per SF
6. Provide Curb and Gutter. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material: \$\_\_\_\_\_ per LF
7. Provide Concrete Wheel Stop. Include the related cost for furnishing, mobilizing, and installing of the wheel stop: \$\_\_\_\_\_ per EA

**1.7 BID HOLDING TIME AND ACCEPTANCE:**

- A. The undersigned hereby agrees that this bid may not be revoked or withdrawn after the time set for the opening of bids but shall remain open during the bid holding period as specified in Section 00 21 13 - Instructions to Bidders.
- B. No bid may be withdrawn after receipt of Bids for a period of 60 days.

**1.8 SCHEDULE OF COMPLETION:**

- A. The undersigned understands that time is of the essence and agrees to the Contract Time and liquidated damages as indicated in General Conditions of the Contract for Construction and Supplementary Conditions apply to this Work. The undersigned hereby agrees to commence work on this project within 30 days following receipt of an Executed Agreement between the Owner and Contractor. Date of commencement will be established in a Notice to Proceed issued to the Contractor. Complete work under the Base Bid and all alternates accepted within 30 calendar days from the date of commencement.
  1. Applicable liquidated damages shall be as stated in the Supplementary Conditions.

**1.9 ADDENDUM:**

- A. Addendum received and used in computing bid:
  1. Addendum No. 1: \_\_\_\_\_
  2. Addendum No. 2: \_\_\_\_\_

**1.10 SUBCONTRACTORS:**

- A. Fill out all blanks on the list below listing all subcontractors. Identify work by the general, subcontractor or not applicable for each trade; utilize blank lines to list trades not provided. Do not list suppliers. All blanks must be filled in. Failure to do so may result in bid being declared non-responsive. If there is more than one subcontractor per trade identified below, list all. If no subcontractors are to be utilized, indicate by signing at the appropriate place at the bottom of the table.

1. Trade: General Contractor: \_\_\_\_\_
2. Trade: Paving Contractor: \_\_\_\_\_
3. Trade: Concrete Contractor: \_\_\_\_\_
4. Trade: Utility Locate Contractor: \_\_\_\_\_
5. Trade: Waste Disposal Contractor: \_\_\_\_\_
6. Trade: Reclaiming Contractor: \_\_\_\_\_
7. Trade: Grading Contractor: \_\_\_\_\_
8. Trade: Milling Contractor: \_\_\_\_\_
9. Trade: Trucking Contractor: \_\_\_\_\_
10. Trade: Striping Contractor: \_\_\_\_\_
11. Trade: \_\_\_\_\_ Contractor: \_\_\_\_\_
12. Trade: \_\_\_\_\_ Contractor: \_\_\_\_\_
13. We do not plan to use subcontractors: \_\_\_\_\_ (Signed)

**1.11 ENCLOSURES:**

A. Provide the following enclosures with submitted bid:

1. Bid Bond
2. Minority Business Enterprise Submittals

**1.12 SUBMITTED BY:**

- A. Contractor Name: \_\_\_\_\_
- B. Authorized Signing Officer Name: \_\_\_\_\_
- C. Authorized Signing Office Title: \_\_\_\_\_
- D. Signature: \_\_\_\_\_
- E. Respectfully submitted this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

**1.13 NOTARIZED BY:**

- A. I, \_\_\_\_\_ (print name), a Notary Public for \_\_\_\_\_ County of \_\_\_\_\_ (State), do hereby certify that \_\_\_\_\_ (officer listed above) personally appeared before me this day and acknowledged the due execution of the foregoing instrument. Witness my hand and official seal, this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_. My commission expires \_\_\_\_\_ of \_\_\_\_\_, 20 \_\_\_\_\_.



B. Signed: \_\_\_\_\_

(OFFICIAL SEAL)

**END OF SECTION**

## **SECTION 00 43 13**

### **BID BOND FORM**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Owner's required Bid Bond Form attached to this section.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 BID SECURITY**

- A. File a bid bond in the amount equal to not less than 5% of the gross amount of the bid executed in accordance with and conditioned as prescribed by GS 143-129, as amended by Chapter 1104 of the North Carolina Public Laws of 1951.
- B. In lieu thereof, each bid may be accompanied by a certified check drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation (FDIC) in an amount equal to not less than 5% of the gross amount of the bid.
- C. Bid Bond shall be signed by the Bidder and notarized.
- D. If the successful Bidder fails to execute the contract within 10 days after award, the above deposit will be retained by the Owner on the bid bond executed on liquidated damages.

**END OF SECTION**

## **SECTION 00 43 39**

### **MINORITY BUSINESS ENTERPRISE**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Owner's required Minority, Women and Small Business Enterprise Program.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**SECTION 00 52 13**

**STANDARD FORM OF AGREEMENT**

**PART 1 GENERAL**

**1.1 SUMMARY**

A. Section Includes:

1. Owner-Contractor Agreement

**1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**SECTION 00 60 00**

**PROJECT FORMS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. The following documents are hereby incorporated into the Contract Documents by reference:
- B. The following documents are included in the Project Manual:
  - 1. Section 00 62 76.13 - Sales Tax Report
  - 2. Section 00 63 13 - Request for Interpretation
  - 3. Section 00 63 25 - Substitution Request Form

**END OF SECTION**

**SECTION 00 62 76.13**

**SALES TAX REPORT**

**PART 1 GENERAL**

**1.1 SUMMARY**

A. Section Includes:

1. Submit the attached State and County Sales/Use Tax Statement and Certification with each application for payment.

**1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**END OF SECTION**

### STATE AND COUNTY SALES/USE TAX STATEMENT AND CERTIFICATION

**Project Name:**

Application/Invoice #:

**Contractor's Name:**

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

Subcontractor's Name: \_\_\_\_\_

<b>Invoice Number</b>	<b>Invoice Date</b>	<b>Vendor's Name</b>	<b>Materials Purchased</b>	<b>Amount of Invoice Before Sales Tax</b>	<b>Sales Tax</b>	<b>Total Invoice</b>	<b>Name of County to Which Sales Tax Paid</b>
TOTALS							

## CERTIFICATION

This will certify that the above-listed amounts include only Sales or Use Taxes paid on purchases of tangible personal property for use in performing the contract for construction of the above-mentioned project which have become annexed to, affixed to, or have become a part of the building or structure.

SWORN AND SUBSCRIBED BEFORE ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_

Contractor:

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

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

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

NOTARY PUBLIC

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

**SECTION 00 63 13**

**REQUEST FOR INTERPRETATION**

**PART 1 GENERAL**

**1.1 REQUEST FOR INTERPRETATION**

- A. RFI No.: \_\_\_\_\_
- B. Project: New Town Elementary School Pavement Improvement
- C. REI Project No. R25PVG-004
- D. Request Date: \_\_\_\_\_
- E. From: \_\_\_\_\_ (Company Name)

**1.2 REFERENCE**

- A. Specification Section: \_\_\_\_\_ Paragraph: \_\_\_\_\_
- B. Drawing Sheet: \_\_\_\_\_ Detail No(s): \_\_\_\_\_

**1.3 DESCRIPTION OF REQUEST**

- A. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- B. Signed by: \_\_\_\_\_
- C. Signature: \_\_\_\_\_

**1.4 REI RESPONSE**

- A. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- B. Attachments: \_\_\_\_\_  
\_\_\_\_\_
- C. Response Date: \_\_\_\_\_
- D. Signed by: Marcos Quesada
- E. Signature: \_\_\_\_\_



**SECTION 00 63 25**

**SUBSTITUTION REQUEST FORM**

**PART 1 GENERAL**

**1.1 SUBSTITUTION REQUEST INFORMATION**

- A. Project: New Town Elementary School Pavement Improvement
- B. REI Project No. R25PVG-004
- C. Request Date: \_\_\_\_\_

**1.2 REFERENCE**

- A. Specification Section: \_\_\_\_\_ Paragraph(s): \_\_\_\_\_

**1.3 DESCRIPTION**

- A. Manufacturer Name: \_\_\_\_\_
- B. Product Name: \_\_\_\_\_
- C. General Description of Substitution Request: \_\_\_\_\_  
\_\_\_\_\_

**1.4 CERTIFICATION**

- A. The undersigned certifies:
  - 1. Proposed substitution has been investigated and determined that it meets or exceeds the quality level of the specified product.
  - 2. Same warranty will be furnished for proposed substitution as for specified product.
  - 3. Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
  - 4. Proposed substitution does not affect dimensions and functional clearances.
  - 5. Payment will be made for changes to building design, including engineering design, detailing, and construction costs caused by the substitution.
  - 6. Contractor waives right to additional payment or time, that may subsequently become necessary because of the failure of the substitution to perform adequately.
- B. Submitted by (Print Name): \_\_\_\_\_
- C. Contractor Company Name: \_\_\_\_\_
- D. Signature: \_\_\_\_\_

### 1.5 ATTACHED SUPPORTING DATA

A. The following items are attached to this substitution request:

1. ☐ Product Data
2. ☐ Test Reports
3. ☐ Applicable Drawings
4. ☐ (\_\_\_\_\_)
5. ☐ (\_\_\_\_\_)

### 1.6 ENGINEERS ACTION

A. This substitution request is:

1. ☐ Approved
2. ☐ Approved as noted
3. ☐ Rejected - utilize specified materials
4. ☐ Rejected due too late submittal - utilized specified materials

B. Signed by: Marcos Quesada

C. Signature: \_\_\_\_\_

**END OF SECTION**

**SECTION 00 65 36**

**CONTRACTOR'S WARRANTY**

**PART 1 GENERAL**

**1.1 WARRANTY**

- A. Know all men by these presents, that we, \_\_\_\_\_  
(Contractor), having installed pavement related work on the New Town Elementary School Pavement Improvement under contract between Union County Public Schools and Contractor, warrant to the Owner with respect to said work that for the period specified below, the work shall be free from defects, provided however the following are excluded from this Warranty: 1) defects or failures resulting from abuse by the Owner and 2) damages caused by fire, tornado, hail, hurricane, acts of God, wars, vandalism, riots or civil commotion.
- B. We agree that for the period specified below, we will make repairs at no expense to the Owner to defects which may develop in the work in a manner compatible to the system and acceptable under industry standards and general practice as established by the Engineer.
- C. We agree to attend one post construction field inspection no earlier than one month prior to the Contractor's Warranty expiration date and to complete corrective actions requested by Owner, Engineer, or Manufacturer at no additional cost to the Owner.
- D. Warranty Period: 2 years from date of substantial completion of \_\_\_\_\_, 20\_\_\_\_.

**1.2 EXECUTED BY**

- A. Contractor: \_\_\_\_\_
- B. Authorized Signing Officer Name: \_\_\_\_\_
- C. Authorized Signing Office Title: \_\_\_\_\_
- D. Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**1.3 NOTARIZED BY:**

- A. I, \_\_\_\_\_ (print name), a Notary Public for \_\_\_\_\_ County of \_\_\_\_\_ (State), do hereby certify that \_\_\_\_\_ (officer listed above) personally appeared before me this day and acknowledged the due execution of the foregoing instrument. Witness my hand and official seal, this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_. My commission expires \_\_\_\_\_ of \_\_\_\_\_, 20 \_\_\_\_.
- B. Signed: \_\_\_\_\_

(OFFICIAL SEAL)

**END OF SECTION**

## SECTION 01 11 00

### SUMMARY OF WORK

#### PART 1 GENERAL

##### 1.1 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Name: New Town Elementary School Pavement Improvement
- B. Project Address: 1100 Waxhaw Indian Trail Road S, Waxhaw, North Carolina 28173
- C. Owner: Union County Public Schools
- D. Engineer: The Contract Documents, dated 02-03-2025, were prepared by REI Engineers, Inc.
- E. This work includes the provision of labor, material, equipment, supervision and administration to integrate the work outlined in these specifications and Contract Drawings. In general, the scope of work in the Base Bid includes:
  - 1. Locate public and private utilities prior to work occurring.
  - 2. Provide barricades and signage for traffic control and designating work zones as indicated in the Contract Drawings. Fencing requirements are described in the specifications.
  - 3. Proof roll substrate to confirm suitability for paving. Report deflections to the Engineer and Owner.
  - 4. Provide striping as-is, unless otherwise stated in the Contract Drawings or by the Owner and approved by the Engineer.
  - 5. Provide erosion controls to protect contamination from leaving the work area and protect storm structures from sediment contamination.
  - 6. Provide a Portable Toilet and hand washing station. Access inside the facility is not available.
  - 7. Provide concrete equipment with a premanufactured washout apparatus.
  - 8. Pavement striping is for illustration only. Existing striping layouts should be noted prior to demolition.
  - 9. Existing trees and landscape are to remain in place unless otherwise noted.
  - 10. Backfill and compact landscaped and disturbed areas with like material. Grade areas level to surrounding existing and new surfaces. Slope surfaces to allow desired surface drainage. Seed and straw planted surfaces with surrounding like grass.
  - 11. Defined slopes have a tolerance of +/- 0.5%.
  - 12. Defined lengths have a tolerance of +/- 6 inches.

- F. Provide electrical, plumbing, mechanical, and other related trade work necessary to facilitate project operations.
- G. General requirements and specific recommendations of the material manufacturers are included as part of these specifications. The manufacturers' specifications are the minimum standards required for the completed systems. Where specific items listed herein improve the standards required by the manufacturers, they take precedence where their compliance does not affect the manufacturers' guarantee or warranty provisions.
- H. Prior to excavation, coordinate with designated Owner personnel all known utility locations. Provide utility locate and mark location of utilities on the ground. The Contractor remains responsible for protecting existing utilities from damage.
- I. The contractor is responsible for labor and materials needed for backfilling and fine grading necessary to comply with the requirements of these documents and conform to the requirements of the current Building Code approved in the State of the project location.
- J. Serve as the Project Expeditor and coordinate work and schedules of others hired.

## **1.2 REFERENCE STANDARDS**

- A. CSI/CSC MF - Masterformat; 2016.

## **1.3 CONTRACT**

- A. Project constructed under a single prime general construction contract between Owner and Contractor.

## **1.4 WORK UNDER OTHER CONTRACTS**

- A. Separate Contract: Owner may award a separate contract for performance of certain construction operations at Project site.
  - 1. None
- B. Cooperate with separate contractors so work on those contracts are carried out smoothly without interfering with or delaying Work under this Contract.

## **1.5 SPECIFICATION FORMATS AND CONVENTIONS**

- A. Specification Format: The Specifications are organized into Divisions and Sections using the CSI/CSC MF 49-division format and numbering system.
  - 1. Section Identification: The Specifications use section numbers and titles to cross-reference Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Interpret words and meanings as appropriate. Infer words implied, but not stated, as the sense requires. Interpret singular words as plural and plural words as singular where applicable as the context of the Contract Documents indicates.
2. Imperative mood and streamlined language are generally used in the Specifications. Perform requirements expressed in the imperative mood. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
  - a. The words "shall", "shall be", or "shall comply with" depending on the context, are implied where a colon (:) is used within a sentence or phrase.

**END OF SECTION**

## **SECTION 01 14 00**

### **WORK RESTRICTIONS**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Administrative and procedural requirements for work sequence, work restrictions, occupancy requirements and use of premises.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections, apply to this Section.

##### **1.3 SUBMITTALS**

- A. Background Checks: Provide background checks for employees anticipated to work on-site during the project.

##### **1.4 WORK SEQUENCE**

- A. Construct Work in phases to accommodate the Owner's use; if applicable, of the premises during the construction period; coordinate the construction schedule and operations with the Owner and Engineer.
- B. Construct the Work in phases to provide for public convenience. Do not close off public use of facility until completion of one phase of construction provides alternative usage.
- C. Schedule construction in such a manner that once work has commenced on site, the work force will remain at that site continuously each workday through final completion at that facility.

##### **1.5 WORK RESTRICTIONS**

- A. K-12 School Work Restrictions:
  - 1. There are no work hour restrictions provided work is completed within the specified construction duration when students are not in school. If work extends beyond the completion deadline, perform work after school hours which includes non-school days, holidays, semester breaks, Saturdays, Sundays or after student dismissal on school days. These imposed work restrictions are in addition to the specified liquidated damages.
  - 2. Coordinate work schedule with School's testing and special events schedule. Contractor may not be allowed on-site during certain testing days/events.

##### **1.6 OCCUPANCY REQUIREMENTS**

- A. Owner Occupancy:

1. Owner occupies the premises during construction to conduct his normal operations. Cooperate with Owner in construction operations to minimize conflict, and to facilitate Owner usage.
2. Conduct operations as to ensure the least inconvenience and the greatest amount of safety and security for the Owner, building occupants, and the general public.
3. Control noise from operations so that building occupants are not affected.

## **1.7 SECURITY**

- A. Restrict the access of persons entering upon the Owner's property in connection with the work to the Contractor's Entrance and to the site of the work.
- B. Maintain an accurate record of the names and identification of visitors entering upon the Owner's property in connection with the work of this contract, including times of entering and times of leaving, and submit a copy of the record to the Owner weekly.
- C. Background Checks: No persons/personnel allowed on site without the following background checks: Nationwide, Sex Offender check, Social Security Number check. Provide this information to the Engineer/Owner 5 business days prior to the scheduled access for each person. Owner's decision on acceptability of personnel. Each person is required to wear a badge with name, photograph, and company name. Ensure background checks for persons are submitted to Owner and those persons denied access are not allowed on-site. Follow requirements of Jessica Lunsford Act for North Carolina school facilities.

## **1.8 USE OF SITE**

- A. Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.
- B. Confine its apparatus, the storage of materials, and operations of its workmen to limits required by law, ordinances, permits or directions of the Owner, and do not unnecessarily encumber the site. Prepare grounds for storage of materials, equipment set-up, foot and vehicular traffic.
  1. Driveways and Entrances: For areas where no construction is taking place keep driveways, entrances and/or access points serving premises clear and available to Owner, Owner's employees, and emergency vehicles. Do not use these areas for parking or storage of materials.
    - a. Schedule deliveries to minimize use of driveways and entrances.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
    - c. Schedule deliveries to avoid student pick up and drop off times.
  2. Do not allow equipment or operators to come within ten feet of power lines on the site. Adjust methods of demolition and construction accordingly to stay a safe distance from low or high voltage power lines.
  3. Move stored materials and equipment that interfere with operations of the Owner.



4. Protect surface improvements not included in scope of work including pavements, curbs, sidewalks, lawn and landscaped areas, utilities, etc.
5. Clean up daily refuse, rubbish, scrap materials, and debris caused by its operations. Present a neat, orderly, and controlled appearance of the site.
6. No access to the facility unless authorized. Do not utilize restrooms inside the facility. Provide a portable toilet and remain for the duration of the project.
7. Keep areas at the facility, except areas under construction, safely accessible to vehicles.
8. Perform Work in a way that does not restrict the site outside of the work area.

C. Transportation Facilities

1. Truck and equipment access:
  - a. Avoid traffic conflict with vehicles of the Owner's employees and customers and avoid over-loading of street and driveways elsewhere on the Owner's property, limit the access of trucks and equipment to the designated areas.
  - b. Provide adequate protection for curbs and sidewalks over which trucks and equipment pass to reach the job site.
2. Contractor's vehicles:
  - a. Require contractor's vehicles, vehicles belonging to employees of the contractor, and other vehicles entering the Owner's property in performance of the work the contract, to use only the designated access route.
  - b. Do not permit such vehicles to park on street or other area of the Owner's property except in the designated area.

D. Repair to the Owner and Engineer's satisfaction, or to restore to condition at the time of award of Contract, or to make restitution acceptable to the Owner, damages to surface improvements resulting from, or attributable to, the work operation.

1. Repair damaged concrete by replacing full sections of concrete between control/expansion joints.
2. Fill ruts in grass areas and grade to original conditions. Provide grass seed and straw.
3. Replace disturbed landscaping in mulched or natural areas.

## 1.9 NORTH CAROLINA K-12 SCHOOL POLICIES

- A. Tobacco Policy: The Owner has adopted a Tobacco Free Policy which applies to school property. This is a total ban on tobacco products including cigarettes, cigars, pipes, chewing tobacco, snuff, etc. Contractor is responsible for employee's actions while they are on school property. Failure to follow this policy constitutes a breach of contract and said contract may be terminated without penalty to the school system.

- B. Weapons and Explosives Policy: Excluding law enforcement, persons are prohibited from possessing, carrying, using or threatening to use, or encouraging another person to possess, carry, use or threaten to use, weapons or explosives on school property or while attending curricular or extracurricular activities sponsored by the school. This policy applies to weapons or explosives carried openly or concealed. For purposes of this policy, a weapon includes, but is not limited to gun, rifle, pistol or other firearm; or BB gun, stun gun, air rifle, air pistol, bowie knife, dirk, dagger, slingshot, leaded cane, switchblade knife, blackjack, metallic knuckles, razors and razor blades (except solely for personal shaving), fireworks, or sharp-pointed or edged instrument except instructional supplies, unaltered nail files and clips and tools used solely for preparation of food, instruction and/or maintenance on educational property. For purposes of this policy, an explosive includes, but is not limited to and dynamite cartridge, bomb, mine or powerful explosive as defined in N.C. G.S. 14-284.1. For purposes of this policy, school property is school building or bus, school campus, grounds, recreational area, athletic field, or other property owned, used or operated by The Board of Education. This policy does not apply to: 1) a weapon or explosive used solely for educational or school sanctioned ceremonial purposes, or used in a school approved program conducted under the supervision of an adult whose supervision has been approved by the school authority, or 2) firefighters, emergency personnel, North Carolina Forest Service personnel, and private police employed by the School Board, when acting in the discharge of their official duties.
- C. Criminal Record Investigation: When requested by Owner, obtain a county, state and national criminal history covering the past ten years on contractor applicant or contractor employee, hereafter called prospective worker, providing services to Owner. As a minimum, criminal information sources include State and National access to the SBI/DCI Criminal History Record Information for the prospective worker's residence(s), past ten years and fingerprints forwarded to the Federal Bureau of Investigation for the search. Previously conducted criminal histories more than one year old are required to be updated. Provide a Criminal Histories Report two weeks prior to arriving "on-site" and update report monthly for new hires. Prospective workers who refuse to provide fingerprints and/or consent to the Criminal Background checks or who have been convicted of sexual deviance, sexual crime, domestic violence, violence against another human being, larceny, alcohol/drug trafficking, alcohol/drug abuse or other disqualifying offense as determined by the Owner, are not be allowed on the property.
- D. Conduct Policy: The conduct of contractor employees to be exemplary; profanity, drinking, lewd or suggestive comments or gestures or other acts of this nature are not tolerated.
- E. Drug Free Policy: Owner conforms to a drug free policy. Contractor employee must be tested upon request of Owner and results provided to Owner. If the employee is found to have been under the influence or using drugs, it constitutes a breach of contract and said contract may be terminated without penalty to the school system.
- F. Dress Code Policy: Shirts and shoes are required, as well as long pants. Identification of employees, vehicles, uniforms, etc. is required when indicated.

#### **END OF SECTION**

## **SECTION 01 21 00**

### **ALLOWANCES**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Administrative and procedural requirements governing allowances.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section, including but not limited to:
  - 1. Section 31 00 00 - Earthwork
  - 2. Section 32 12 16 - Asphalt Paving
  - 3. Section 32 17 23 - Pavement Markings

##### **1.3 ABBREVIATIONS**

- A. Abbreviations for typical units of measurement:
  - 1. Square Foot (SF)
  - 2. Square Yard (SY)
  - 3. Cubic Foot (CF)
  - 4. Linear Foot (LF)
  - 5. Each (EA)
  - 6. Tonnage (TON)

##### **1.4 QUANTITY ALLOWANCES**

- A. Include the specified quantity allowances in the base bid. Use the unit price submitted on the Bid Form to compute the quantity allowances. The quantities indicated on the Bid Form are estimated quantities only for the purpose of comparing bids. Compensation for the unit price bid made for the exact quantity of work performed under the unit price item. Deductive amounts of unit price work included in the Contract Sum are calculated at 100% of the quoted add unit price.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION**

##### **3.1 SCHEDULE OF ALLOWANCES**

- A. Quantity Allowances:

1. Undercut/Mill and Provide 40 TONS of Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material.

**END OF SECTION**

## **SECTION 01 22 00**

### **UNIT PRICES**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Administrative and procedural requirements for unit prices.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section, including but not limited to:

1. Section 31 00 00 - Earthwork
2. Section 32 12 16 - Asphalt Paving
3. Section 32 17 23 - Pavement Markings

##### **1.3 DEFINITION**

A. Unit price is an amount proposed by Bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

##### **1.4 ABBREVIATIONS**

A. Abbreviations for typical units of measurement:

1. Square Foot (SF)
2. Square Yard (SY)
3. Cubic Foot (CF)
4. Linear Foot (LF)
5. Each (EA)
6. Tonnage (TON)

##### **1.5 UNIT PRICE MEASUREMENT**

- A. Prior to performing work under a unit price as specified herein, notify the Engineer to allow for measurement of the actual quantities of work. Work performed under these items without prior approval and measurement is at the Contractor's expense.
- B. Maintain a daily log including visual documentation (i.e. digital photographs) showing dates, location and exact quantities of unit price work.

- C. Owner and Engineer reserve the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent party.

## **1.6 UNIT PRICE PAYMENT**

- A. Include in unit prices costs associated with performing the unit price work including but not limited to labor, material, equipment, insurance, applicable taxes, overhead and profit, bonds, etc.

## **1.7 UNIT PRICE PERFORMANCE**

- A. Install unit price work in accordance with the applicable specification sections and Contract Drawings.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 SCHEDULE OF UNIT PRICES**

- A. Provide a unit price for:
  - 1. Place and Grade ABC Stone. Furnishing, mobilizing, placing, and grading of material is included. Unit of Measurement: TON.
  - 2. Place and Grade Washed #57 Stone. Furnishing, mobilizing, placing, and grading of material is included. Unit of Measurement: TON.
  - 3. Undercut/Mill and Provide Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material. Unit of Measurement: TON
  - 4. Provide 4-inch wide Striping. Unit of Measurement: LF
  - 5. Provide 4-inch Sidewalk. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material. Unit of Measurement: SF
  - 6. Provide Curb and Gutter. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material. Unit of Measurement: LF
  - 7. Provide Concrete Wheel Stop. Include the related cost for furnishing, mobilizing, and installing of the wheel stop:. Unit of Measurement: EA

**END OF SECTION**

## SECTION 01 23 00

### ALTERNATES

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. Section Includes:

1. Administrative and procedural requirements for alternates.

##### 1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### 1.3 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction or in the products, materials, equipment, systems or installation methods described in the Contract Documents.

##### 1.4 ALTERNATES

- A. Indicate on the Bid Form whether the alternate bid amount is to added to or deducted from the base bid in the event the alternate bid is accepted.
- B. The Owner reserves the right to accept or reject any or all of the alternate bids.
- C. Responsible for determining to his own satisfaction and for his own purposes the limits and extent of the work affected by the alternate bids and to make proper allowance therefore in the submission of alternate bid.
- D. Include the cost of each alternate bid as specified in the technical specification sections and as described on the drawings. Perform work required by the alternate bids in accordance with applicable specifications and drawings of the trade section affected.
- E. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate selected alternates into the Work. No other adjustments are made to the Contract Sum.
- F. The Owner reserves the right to delay the acceptance of the alternate bids during the bid holding period prior to accepting the contract without a change in the dollar amount of the alternate bids.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION**

**3.1 SCHEDULE OF ALTERNATES**

- A. Alternate No. 1: Concrete Curb Replacement

**END OF SECTION**



## SECTION 01 26 00

### CONTRACT MODIFICATION PROCEDURES

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. Section Includes:

1. Administrative and procedural requirements for handling and processing Contract modifications.

##### 1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### 1.3 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: A detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time will be issued by the Engineer along with supplemental or revised Drawings and Specifications.

1. Proposal Requests issued by Engineer are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
2. Within 5 days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
  - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits. If requested, furnish survey data to substantiate quantities.
  - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - c. Include costs of labor and supervision directly attributable to the change.
  - d. Include an updated Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, propose changes by submitting a request for a change to Engineer.

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.

2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits. If requested, furnish survey data to substantiate quantities.
  3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  4. Include costs of labor and supervision directly attributable to the change.
  5. Include an updated Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  6. Comply with requirements in Division 1 if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Approval:
1. If sufficient contingency allowance funds remain, written approval will be provided by the Engineer in the form of an Allowance Authorization signed by the Engineer, Contractor and Owner.
  2. If contingency allowance funds are not available; upon approval by Owner, written approval will be provided by the Engineer in the form of a Change Order as provided in the Conditions of the Contract.
    - a. Form of Change Order: Owner or Engineer Standard Form submitted by the Engineer signed by the Contractor and Owner.
    - b. Do not commence work or purchase materials for such change orders until written approval is received in the form of an executed Allowance Authorization or Change Order.
    - c. An executed Change Order is the only legal document which can change the Contract Sum or Time.

#### **1.4 SUPPLEMENTAL INSTRUCTIONS**

- A. Supplemental instructions authorizing minor changes in the Work, not involving an adjustment to the Contract Sum or Contract Time, will be issued by the Engineer on Engineer's Supplemental Instructions form.

#### **1.5 CONSTRUCTION CHANGE DIRECTIVE**

- A. Construction Change Directive: When the Owner and Contractor are not in total agreement on the terms of a Proposal Request; the Engineer may issue a Construction Change Directive on Engineer's Standard Form, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
1. The Construction Change Directive will contain a description of the change in the Work and designate the method followed to determine the change in the Contract Sum or Contract Time.

2. Submit unit costs, equipment rates and labor rates as requested by the Engineer and agree upon submitted rates before the work progresses unless directed to proceed in the absences of an agreement or in an emergency.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive. Provide a copy of those records the Engineer.
1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

**END OF SECTION**

## **SECTION 01 31 00**

### **PROJECT MANAGEMENT AND COORDINATION**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

**A. Section Includes:**

1. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - a. Project Schedule
  - b. General project coordination procedures.
  - c. Coordination.
  - d. Administrative and supervisory personnel
  - e. Project meetings

##### **1.2 RELATED DOCUMENTS**

- A.** Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 COORDINATION**

- A.** Coordinate construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Coordinate its operations with those included in different Sections that depend on each other for proper installation, connection, and operation.
1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
  3. Make adequate provisions to accommodate items scheduled for later installation.
- B.** Coordinate the scheduling and sequence of operations with the Owner and Engineer.
- C.** If necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

- D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Construction Schedule.
  2. Preparation of the Schedule of Values.
  3. Installation and removal of temporary facilities and controls.
  4. Delivery and processing of submittals.
  5. Progress meetings.
  6. Pre-Construction conference.
  7. Pre-installation conferences.
  8. Project closeout activities.

#### **1.4 PROJECT MEETINGS**

A. Pre-Construction Meeting

1. A Pre-Construction Meeting will be scheduled as soon as possible after the award of the contract. The Engineer's Representative will compile minutes of the meeting and will furnish a copy of the minutes to each person present.
2. Attendance: Project Manager, Job Superintendent and Job Foreman, Owner, Engineer's Representative, manufacturer's representatives, installers of related work and other persons concerned with the installation and performance.
  - a. Provide 3 telephone numbers to contact the Contractor or his authorized representative in the event of an emergency after normal business hours.
3. Minimum Agenda: Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers, and the Project Manager; channels and procedures for communication; construction schedule, including sequence of critical work; contract documents, including distribution of required copies of Drawings and revisions; processing of Shop Drawings and other data submitted to the Project Manager for review; rules and regulations governing performance of the work and procedures for safety, first aid, security, quality control, housekeeping and related matters.

B. Substantial Completion Inspection Meeting

1. Scheduled by Owner and Engineer upon written notification of substantial completion of work from the Contractor.
2. Attendance: Owner, Engineer, Contractor, material manufacturer.
3. Minimum Agenda: Walkover inspection, verification of substantial completion, identification of punch list items and identification of problems potentially impeding issuance of warranties.

C. Final Inspection Meeting

1. Scheduled by Owner and Engineer upon written notification of final completion of work from the Contractor.
2. Attendance: Owner, Engineer, Contractor.
3. Minimum Agenda: Verification of final completion including the completion of the punch list items.

**END OF SECTION**

**SECTION 01 33 00**  
**SUBMITTAL PROCEDURES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.

**1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**1.3 SUBMITTAL PROCEDURE**

- A. General: The Contractor is responsible for providing the submittals to the Engineer. Each submittal is required to be accepted in writing prior to commencement of work.
- B. Submission Requirements:
  - 1. Submit required submittals electronically in pdf format to the Engineer for review. The submittals will then be returned electronically to the Contractor with comments. Final submittals require written responses to submittal comments.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as specified below, commencing on Engineers receipt of submittal.
  - 1. Initial Review: Allow 7 work days for initial review of submittals.
  - 2. Allow 7 work days for processing each resubmittal.
  - 3. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
- D. Identification:
  - 1. Submit as one pdf file with bookmarks for each scheduled item.
- E. Deviations: Highlight, encircle, or otherwise identify deviations from the Contract Documents on submittals and provide letter describing in detail proposed changes, substitutions, or deviations from the project or manufacturers specifications. Include a written explanation of why substitutions should be considered under the appropriate tab.
- F. Transmittal: Package submittals appropriately for transmittal. Engineer will discard submittals received from sources other than Contractor. Include Contractors certification stating that information submitted complies with requirements of the Contract Documents.
- G. Use for Construction: Use only final submittals with mark indicating action taken by Engineer in connection with construction.

## **1.4 SCHEDULE OF SUBMITTALS**

- A. Refer to the applicable specification section for list of submittal requirements for each section.
- B. Submit the following submittal items electronically with a title page and/or pdf bookmark for each submittal item to meet the requirements specified herein:
  - 1. Owner/Contractor Agreement:
    - a. Copy of Executed Owner/Contractor Agreement
    - b. Copy of Contractors Certificate of Insurance
  - 2. Section 01 14 00 - Work Restrictions
  - 3. Section 01 31 00 - Project Management and Coordination
  - 4. Section 01 77 00 - Closeout Procedures
  - 5. Section 31 00 00 - Earthwork
  - 6. Section 31 01 16.71 - Cold Milling Asphalt Pavement
  - 7. Section 32 12 16 - Asphalt Paving
  - 8. Section 32 17 23 - Pavement Markings
  - 9. Shop Drawings: Shop drawings or letter stating installation of materials as detailed in the Contract Drawings unless properly authorized by the Engineer.
  - 10. Existing Damage Documentation: Existing damaged/dysfunctional components documentation (videotape, photos, etc.) including but not limited to asphalt spills, windows, walls, sidewalks, paving, ceilings, etc. Lack of submission prior to commencement of work indicates no existing damaged components and Contractor takes responsibility for damages caused by operations.

## **PART 2 PRODUCTS**

### **2.1 SUBMITTALS**

- A. General: Prepare and submit Submittals required herein and by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  - 1. If information is specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
  - 2. Mark each copy of each submittal to show which products and options are applicable.
  - 3. Include the following information, as applicable:
    - a. Manufacturers written recommendations.



- b. Manufacturers product specifications.
  - c. Manufacturers installation instructions.
  - d. Manufacturers catalog cuts.
  - e. Wiring diagrams showing factory-installed wiring.
  - f. Printed performance curves.
  - g. Operational range diagrams.
  - h. Compliance with recognized trade association standards.
  - i. Compliance with recognized testing agency standards.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
- 1. Preparation: Include the following information, as applicable: dimensions, identification of products, fabrication and installation drawings, schedules, coordination requirements and notation of dimensions established by field measurements.
  - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.
- D. Samples: Prepare physical units of materials or products, including the following:
- 1. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from the same material used for the Work, cured and finished in manner specified, and physically identical with the product proposed for use, and that show range of color and texture variations expected. Samples include, but are not limited to, partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
  - 2. Submit three sets of Samples. Engineer will retain two Sample sets; remainder will be returned.
  - 3. Preparation: Mount, display, or package Samples in manner specified to facilitate review of qualities indicated. Prepare Samples to match Engineers sample where so indicated. Attach label on unexposed side.
  - 4. Submit Samples for review of kind, color, pattern, and texture for a final check of these characteristics with other elements and for a comparison of these characteristics between final submittal and component as delivered and installed.
  - 5. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity and used to determine final acceptance of construction associated with each set.

- E. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of engineers and owners, and other information specified.
- F. Product Certificates: Prepare written statements on manufacturers letterhead certifying that product complies with requirements.
- G. Installer Certificates: Prepare written statements on manufacturers letterhead certifying that Installer complies with requirements and, where required, is authorized for this specific Project.
- H. Manufacturer Certificates: Prepare written statements on manufacturers letterhead certifying that manufacturer complies with requirements. Include evidence of manufacturing experience where required.
- I. Material Certificates: Prepare written statements on manufacturers letterhead certifying that material complies with requirements.
- J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.
- K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- L. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software used for calculations. Include page numbers.
- M. Manufacturer's Instructions: Prepare written or published information that documents manufacturers recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer.
- N. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, and term of the coverage.

## **PART 3 EXECUTION**

### **3.1 CONTRACTORS REVIEW**

- A. Review each submittal, check for compliance with the Contract Documents and note corrections and field dimensions prior to submitting to Engineer.

### **3.2 ENGINEERS ACTION**

- A. Submittals: Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Engineer will stamp each submittal item with an action stamp and will mark stamp appropriately to indicate action taken.

- B. Submittals not required by the Contract Documents will not be reviewed and may be discarded.

**END OF SECTION**

## SECTION 01 40 00

### QUALITY REQUIREMENTS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. This Section includes administrative and procedural requirements for quality assurance and quality control.
  - 2. Secure and pay costs of licenses and permits required by City, County and/or State authorities.
    - a. Permits and approvals may include but are not limited to grading, demolition, zoning, building, driveway, detention, subdivision, special use, sewer, and water.

##### 1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### 1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction comply with requirements. Services do not include contract enforcement activities performed by Engineer.
- C. Authority Having Jurisdiction: AHJ

##### 1.4 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Engineer.

##### 1.5 SUBMITTALS

- A. Permit: Provide copy of construction permits and approvals along with required licenses or certifications required by the AHJ.

##### 1.6 QUALITY ASSURANCE

- A. Perform quality assurance in accordance with governing Codes, referenced standards, established standards, or industry standards.

- B. Solely responsible for supervising and directing the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise necessary to perform the Work in accordance with the Contract. Solely responsible for the means, methods, techniques, sequences and procedures of construction and for coordinating portions of the Work under the Contract, except where otherwise specified in the Contract Documents. Solely responsible to the Owner that the finished Work complies with the Contract Documents.
- C. It is the intent under this contract that workmanship be of the best quality consistent with the materials and construction methods specified. The presence or absence of the Owner's or Engineer's representative in no way relieves the Contractor of his responsibility to furnish materials and construction in compliance with the drawings and specifications. The Owner and Engineer have the authority to judge the quality and require replacement of unacceptable work or personnel.
- D. Cooperate in the execution of work and plan work in such manners as to avoid conflicting schedules or delay of work. If the work depends upon the work of another Contractor, report defects affecting the work to the Engineer. Commencement of work where such condition exists constitute acceptance of the other Contractor's work as being satisfactory to receive the work commenced. Coordinate work of trades under this contract in such a manner to obtain the best possible workmanship for the project. Install components of the work in accordance with the best practices of the particular trade. Notify the Owner sufficiently in advance of operations to allow for assignment of personnel.
- E. Solely responsible for health and safety precautions and programs for workers and others in connection with the Work. No inspection by, knowledge on the part of, or acquiescence by the Engineer, the Owner, the Owner's employees and agents, or other entity whatever relieves the Contractor from its sole responsibility for compliance with the requirements of the Contract or its sole responsibility for health and safety programs and precautions.
- F. Materials or methods described by words which, when applied, have a well-known technical or trade meaning are held to refer to such recognized standard. Standard specifications or manufacturer's literature, when referenced, are of the latest revision or printing unless otherwise stated, and are intended to establish the minimum requirements acceptable.
- G. Maintain one set of the contract documents and accepted submittals at the job site.
- H. Provide new materials unless otherwise indicated.
- I. Provide workmanship in accordance with the best modern practice.
- J. When special makes or grades of material which are normally packaged by the supplier or manufacturer are specified or accepted, deliver materials to the site in original packages or containers with seals unbroken and labels intact and do not open until reviewed and accepted by the Engineer. Notify the Engineer prior to such material's delivery.
- K. Verify dimensions and conditions at the site prior to starting work and notify the Engineer immediately of any errors or inconsistencies.
- L. Correct deficiencies identified by Engineer and non-conforming work within 24 hours of receipt of notification, either verbally or written, and submit a plan of action for addressing the deficiencies and non-conforming work. Do not proceed with further tear-off or commencement of other work until deficiencies and non-conforming work are properly addressed.

M. Control of Installation

1. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
2. Comply with manufacturers' instructions, including each step in the sequence
3. Request clarification from Engineer before proceeding in the event manufacturers' instructions conflict with Contract Documents.
4. Comply with specified standards as the minimum quality for the Work, except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
5. Only allow Work performed by person qualified to produce workmanship of specified quality.
6. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

N. Tolerances:

1. Monitor tolerance control of installed products to produce acceptable work. Do not permit tolerances to accumulate.
2. Comply with manufacturers' tolerances. Request clarification from Engineer in the event manufacturers' tolerances conflict with Contract Documents.
3. Adjust products to appropriate dimensions; position before securing products in place.

O. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

1. Maintain applicable federal, state and municipal licenses.
2. Have a minimum of 5 years' experience in installing the same or similar materials specified under the same firm name as that submitting the bid. If requested, submit a copy of firm's Articles of Incorporation to verify years in business. Crew workers on site are experienced and have a working knowledge of the system being installed.
3. Principals of the firm to have a minimum of 10 years' experience in the estimating, supervision, management and administration of a contracting firm engaged in work similar to work as specified.
4. Licensed by state work is occurring in for the type and dollar amount of work contemplated by these Contract Documents.
5. Never filed bankruptcy or filed for protection from creditors.

6. During the construction and completion of work covered by these Specifications, if the conduct of workers of the various crafts is determined unsuitable or a nuisance to the Owner or Engineer, or if the workman is considered incompetent or detrimental to the work, order such party removed from the grounds with the person not returning during the course of work on the project.
7. Superintendent: During the performance of work by the Contractor or subcontractors, provide an on site superintendent/representative meeting the following requirements:
  - a. For the purpose of these Specifications the designation "superintendent" is hereby defined as the individual present on the job site while work is being performed, and whose primary responsibility is to supervise and direct the performance of the Work.
  - b. Be in attendance at the project site during the progress of the work and duties as superintendent limited to this project only. Supervise and instruct workmen without engaging in the work process. If superintendent is absent temporarily from the project, designate a competent foreman to assume duties. During the superintendent's absence, foreman cannot engage in the work process; supervise and instruct only. Likewise, communications given to the foreman are binding as if given to the Contractor.
  - c. Communicate matters pertaining to the Work with the Owner and Engineer. Do not make decisions regarding changes in the Work without the Owner and Engineer's knowledge.
  - d. Decision making authority and ability.
  - e. Able to demonstrate knowledge of work being installed.
  - f. Fluent in the English language (reading, writing and speaking).
  - g. In possession of mobile telephone.
  - h. Employed by the Contractor at least six months prior to project commencement.

## **1.7 QUALITY CONTROL**

- A. The authorized representatives and agents of Owner permitted to inspect work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records.
- B. Owner Responsibilities:
  1. Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
    - a. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of the types of testing and inspecting they are engaged to perform.
- C. Contractor Responsibilities:

1. Repair and protection of work and materials.
2. Replace work or materials not conforming with requirements of the Specifications or damaged during the progress of the work before completion and acceptance of the project.
3. Coordinate documents with manufacturer and perform such testing, reporting, and communication incidental to provisions of the warranty procedures.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 REPAIR AND PROTECTION**

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

**END OF SECTION**



## **SECTION 01 42 00**

### **REFERENCE STANDARDS**

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Requirements relating to referenced standards.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 REFERENCE STANDARDS**

- A. Reference standards are specified in Part 1 of the applicable specification section.
- B. For products or workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- C. Comply with the reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- D. Should specified reference standards conflict with Contract Documents, request clarification from the Engineer before proceeding.
- E. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of the Engineer shall be altered by Contract Documents by mention or inference otherwise in any reference document.

##### **1.4 BUILDING CODE**

- A. Comply with the building code and energy conservation code/standard in effect in North Carolina and current on date of Contract Documents.
  - 1. 2018 North Carolina Building Code
  - 2. 2018 North Carolina Energy Conservation Code

**END OF SECTION**

## SECTION 01 50 00

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. Section Includes:

1. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.

##### 1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### 1.3 REFERENCE STANDARDS

- A. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

##### 1.4 USE CHARGES

A. Include in Contract, cost or use charges for temporary facilities which are not chargeable to Owner. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, occupants of testing and inspecting agencies and personnel of authorities having jurisdiction.

##### 1.5 QUALITY ASSURANCE

- A. Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241 .
- B. Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70 .
- C. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- D. Develop and supervise an overall fire-prevention and first-aid fire-protection program for personnel at Project site. Review needs with local fire department and establish procedures. Instruct personnel in methods and procedures. Post warnings and information.

#### PART 2 PRODUCTS

##### 2.1 MATERIALS

- A. General: Provide new materials or utilize undamaged, previously used materials in serviceable condition if accepted by Engineer. Provide materials suitable for use intended.

- B. Water: Potable.
- C. Self-Contained Toilet Units: Single-occupant units of chemical, aerated recirculation, or combustion type; vented; enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material with a self-contained or standalone exterior handwashing station.
- D. Electrical Outlets: Properly configured, NEMA-polarized outlets to prevent insertion of 110 to 120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button, and pilot light.
- E. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure and the requirements of the local Governing agency.

## **PART 3 EXECUTION**

### **3.1 TEMPORARY UTILITIES**

- A. Water Service: Obtain water from an appropriately metered public water hydrant.
- B. Electrical Power Service: Provide portable generators for electrical power requirements.
  - 1. Electric Distribution: Provide receptacle outlets adequate for connection of power tools and equipment. Provide waterproof connectors to connect separate lengths of electrical power cords if single lengths do reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.

### **3.2 CONSTRUCTION FACILITIES**

- A. Temporary construction facilities include the following:
  - 1. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities. Located facilities at sites approved by Owner. Access inside the facility is not available.
    - a. Disposable Supplies: Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Maintain adequate supply. Provide covered waste containers for disposal of used material.
    - b. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy.
    - c. Wash Facilities: Provide adequate hand washing stations.
    - d. Drinking-Water Facilities: Provide bottled-water, drinking-water units.
  - 2. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations at a location approved by the Owner. Containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from other waste. Use of Owner's waste disposal facilities is not acceptable.
    - a. If required by authorities having jurisdiction, provide separate containers, clearly labeled, for each type of waste material.

### **3.3 TEMPORARY BARRIERS AND ENCLOSURES**

- A. Provide temporary barriers and enclosures for protection from exposure, foul weather, construction operations and other activities. Protect buildings and grounds from damages during construction.
- B. Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard. Where appropriate and needed, provide lighting, including flashing red or amber lights.
- C. Provide security controls to protect work and materials at the project site.
- D. Provide fencing to enclose the materials storage and staging area.
- E. Provide and maintain suitable temporary sidewalks, closed passageways, fences, or other structures required by law so as not to obstruct or interfere with traffic in public streets, alley ways, or private right-of-way. Leave an unobstructed way along public and private places for pedestrians and vehicles.
- F. Provide walks over and around all obstructions in public places. Maintain sufficient light and guards to protect persons from injury.
- G. Provide emergency egress from existing occupied areas at all times as required by AHJ. Maintain egress path in compliance with requirements of the applicable building code.

### **3.4 PROTECTION FACILITIES INSTALLATION**

- A. Provide environmental protection by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Provide Erosion Control Measures:
  - 1. Provide silt fence in landscaped areas and gravel areas downstream from disturbed subgrade.
  - 2. Provide wattles along pavement surfaces downstream from disturbed subgrade.
  - 3. Provide silt sacks under storm grates collecting runoff from areas with disturbed subgrade.
- C. Provide premanufactured concrete washout apparatus or provide approved designated washout area.

### **3.5 TREE AND PLANT PROTECTION:**

- A. Contractors are hereby reminded and cautioned that care shall be exercised to protect trees and plants which are to remain during the progress of the Project. Suitable barriers shall be provided around all trees and plants that are to remain and which are in the construction area and product handling area. All damage to such trees and plants shall be repaired; broken limbs properly and neatly pruned and painted with pruning paint; all trunk damage neatly dressed and painted with pruning paint. Any trees and plants which are excessively damaged shall be replaced in like, kind, size, and species by The Contractor at no additional cost. All work shall be by a recognized and approved nursery.

1. All grading around trees and plants to remain shall be such that the root system shall not be disturbed. Earth shall not be temporarily piled around trees and plants, nor shall earth be graded to the trees and plants above the natural root depth for that particular species.
2. Established trees and plants, which are in the way of construction and which are in the material handling areas, shall be removed and stored for future replanting. The services of a recognized and approved nursery shall be employed to remove the trees and plants and prepare them for storage. Removed trees and plants shall be properly balled and burlapped in accordance with their size. During the time of storage, they shall be properly watered and cared for in accordance with the instructions from the nursery. After the construction work is completed, the stored trees and plants shall be replanted, and those trees and plants not replanted shall be disposed of as directed by the Owner. Provide storm water controls sufficient to prevent flooding from heavy rain.

### **3.6 PROJECT SIGNAGE**

- A. Provide temporary signs to provide information to building occupants directing them away from construction operations.
- B. Provide signage inside adjacent buildings alerting occupants of the Work Area.

### **3.7 VEHICULAR ACCESS AND PARKING**

- A. Parking for vehicles available only in the approved Set-up and Staging area. No other vehicle parking on site is allowed.
- B. Owner Personnel vehicles will be removed from the construction area prior to the start of construction.

### **3.8 TRAFFIC CONTROLS**

- A. Obtain and erect street/parking lot signage as necessary to divert traffic away from staging areas, work area, etc. Coordinate signage requirements with the Owner and Engineer.
- B. Provide temporary traffic controls at junction of temporary roads with public roads. Include warning signs for public traffic and "STOP" signs for entrance onto public roads. Comply with requirements of authorities having jurisdiction.
- C. Obey speed limit of 5 mph for construction vehicles.

**END OF SECTION**

**SECTION 01 73 00**  
**EXECUTION REQUIREMENTS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. General procedural requirements governing execution of the Work.

**1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**1.3 SUBMITTALS**

- A. List of Materials on the project site including manufacturer name and product name.
- B. Safety Data Sheets (SDS):
  - 1. Safety Data Sheets (SDS) for materials/products anticipated for use and stored or brought to the site for completion of this project.
  - 2. Maintain on site with the Superintendent a set of SDS for products/materials on site.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

- A. Material storage area designated by the Owner at the Pre-Bid and Pre-Construction Meetings and/or indicated in Contract Drawings.
  - 1. Store materials as required by the manufacturer and indicated in their installation instructions.
  - 2. Store materials as required by their respective specification section.
  - 3. Properly secure materials to resist wind events.
- B. Deliver and transport materials to project in accordance with the Owner's requirements and coordinate material deliveries with Owner.

**PART 3 EXECUTION**

**3.1 EXAMINATION**

- A. Existing Conditions:
  - 1. The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of construction affecting the Work.

- B. Existing Utilities:
  - 1. The existence and location of utilities and construction indicated as existing are not guaranteed.
  - 2. Before construction, verify the location and points of connection of utility services.
  - 3. Before beginning work, investigate and verify the existence and location of utilities and other construction affecting the Work.
- C. Acceptance of Conditions:
  - 1. Examine areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance.
  - 2. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include a description of the work, a list of detrimental conditions, list of unacceptable installation tolerances and recommended corrections.
  - 3. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### **3.2 PREPARATION**

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each material. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Upon discovery of the need for clarification of the Contract Documents, submit a request for information to Engineer. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

### **3.3 INSTALLATION**

- A. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
- B. Install products at the time and under conditions that ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- C. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

### **3.4 STARTING AND ADJUSTING**

- A. Test equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

### **3.5 PROTECTION OF INSTALLED CONSTRUCTION**

- A. Provide protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

### **3.6 CORRECTION OF THE WORK**

- A. Restore permanent facilities used during construction to their specified condition.
- B. Replace components that are not up to specification standards.

**END OF SECTION**



## **SECTION 01 74 00**

### **CLEANING AND WASTE MANAGEMENT**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Administrative and Procedural requirements for progress cleaning and construction waste management.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 REFERENCE STANDARDS**

A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

##### **1.4 DEFINITIONS**

- A. Waste: Material that has reached the end of its intended use. Waste includes salvageable, returnable, recyclable and reusable material.
- B. Construction waste: Solid wastes including, but not limited to, building materials, packaging materials, debris and trash resulting from construction operations.
- C. Salvage: To remove a waste material from the Project site to another site for resale or reuse by others.
- D. Hazardous waste: Material or byproduct of construction that is regulated by the Environmental Protection Agency and cannot be disposed in a landfill or other waste end-source without adherence to applicable laws.
- E. Trash: Product or material unable to be returned, reused, recycled or salvaged.
- F. Landfill: Public or private business involved in the practice of trash disposal.

#### **PART 2 PRODUCTS**

##### **2.1 MATERIALS**

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or cause damage to finished surfaces.

## **PART 3 EXECUTION**

### **3.1 PROGRESS CLEANING**

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials in a legal manner.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F.
  - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
  - 1. Remove liquid spills promptly.
  - 2. Where dust impairs proper execution of the Work, broom-clean or vacuum the work area, as appropriate.
  - 3. If necessary, have a heavy-duty vacuum on site to remove small, loose debris from work area.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and do not damage exposed surfaces.
- E. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Final Acceptance.
- F. Waste Disposal: Burying or burning waste materials on-site is not permitted. Washing waste materials down sewers or into waterways is not permitted.
- G. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Final Acceptance.
- H. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- I. Limiting Exposures: Supervise construction operations to ensure that no part of the construction completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

### **3.2 DISPOSAL OF WASTE**

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
  - 1. Except as otherwise specified, do not allow waste materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that prevents spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Remove waste materials from Owner's property and legally dispose of them.
- D. Separate, store and dispose of hazardous wastes in accordance with local and EPA regulations and additional criteria listed below:
  - 1. Do not incinerate building products manufactured with PVC or containing chlorinated compounds.
  - 2. Disposal of fluorescent tubes to open containers is not permitted.
  - 3. Do not co-mingle unused fertilizers with construction waste.

### **3.3 FINAL CLEANING**

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting Substantial Completion.
  - 2. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including, waste material, litter, and other foreign substances.
  - 3. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
  - 4. Remove tools, construction equipment, machinery, and surplus material from Project site. Properly dispose of unwanted surplus material.
  - 5. Clean exposed exterior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
  - 6. Remove labels that are not permanent.
  - 7. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess foreign substances.

8. Replace parts subject to unusual operating conditions.
  9. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

**END OF SECTION**

**SECTION 01 77 00**  
**CLOSEOUT PROCEDURES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
    - a. Inspection Procedures
    - b. Project Record Documents
    - c. Warranties

**1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**1.3 SUBMITTALS**

- A. Warranties: Submit copy of warranties to meet the requirements of their respective specification section.

**1.4 SUBSTANTIAL COMPLETION**

- A. Submit written certification to the Engineer that the Project is substantially complete along with the following:
  - 1. Prepare a list of items to be completed and corrected (Contractor's punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Notify Owner of pending insurance changeover requirements.
  - 3. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 4. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 5. Notify Owner of changeover in heat and other utilities.
  - 6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
  - 7. Complete final cleaning requirements, including touchup painting.
  - 8. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- B. Substantial Completion Inspection: On receipt of written substantial completion certification, the Engineer will make a substantial completion inspection within 7 days after receipt of certification.
1. Should the Engineer consider the Work not substantially complete, he will notify the Contractor, in writing, stating the reasons. Complete the Work and send a second written notice to the Engineer, certifying the Project is substantially complete, at which time the Engineer will re-inspect the work.
  2. Should the Engineer consider the Work substantially complete, he will prepare and issue a Certificate of Substantial Completion accompanied by the list of items to be completed or corrected (Punch List).
  3. A punch list of items will be prepared for correction and completion before the Final Inspection. Complete the punch list items within 15 days of the punch list inspection. If the Contractor fails to complete the punch list within this period, the Owner has the right to impose liquidated damages in the amount of \$500.00 for each consecutive day until the items are completed.

## **1.5 FINAL COMPLETION**

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
1. Submit a final Application for Payment according to Division 01.
  2. Submit signed copy of Engineer's inspection list of items to be completed or corrected (punch list) certifying each item has been completed or otherwise resolved for acceptance.
  3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Final Inspection: The submission of the signed punch list constitutes as written request for final inspection for acceptance. On receipt of request, Engineer along with the Owner's Representative will conduct a final inspection within 7 days of receipt of certification.
1. Should the Engineer consider that the Work is finally complete in accordance with requirements of the Contract Documents, Project Closeout Submittals will be requested.
  2. Should the Engineer consider that the Work is not finally complete, notification to the Contractor, in writing, stating the reasons will be made.
  3. Take steps to remedy the stated deficiencies and send a second written notice to the Engineer certifying that the Work is complete, at which time the Engineer will re-inspect the Work.

## 1.6 PROJECT RECORD DOCUMENTS

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Engineer's reference during normal working hours.
  - 1. Submit required record documents and warranties within 30 days of the punch list inspection. If the Contractor fails to properly submit required items within this period, the Owner has the right to impose liquidated damages in the amount of \$500.00 for each consecutive day until the items are properly submitted.
- B. Record Drawings: Maintain and submit one set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
  - 1. Mark Record Prints to show where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
    - a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
    - b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
  - 2. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
  - 3. Note Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification where applicable.
  - 4. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.
- C. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
  - 3. Note related Change Orders and Record Drawings, where applicable.
- D. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
  - 1. Completed and signed Engineer's Punch List

## **1.7 WARRANTIES**

- A. Warranties to commence on the date of Substantial Completion of the project.
- B. Two Year Warranty: Manufacturer's Representative and Contractor's Representative will attend post construction field inspection no earlier than one month prior to the expiration date of the Contractor's Warranty. Submit a written report within 7 days of the site visit to the Engineer listing observations, conditions and recommended repairs or remedial action.

**END OF SECTION**



## **SECTION 31 00 00**

### **EARTHWORK**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Excavate and/or backfill to accommodate the installation of flexible or rigid pavement system.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections apply to this Section:

1. Section 32 12 16 - Asphalt Paving

##### **1.3 REFERENCE STANDARDS**

- A. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)); 2012 (Reapproved 2021).
- B. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)); 2012 (Reapproved 2021).
- C. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System); 2017, with Editorial Revision (2020).
- D. ASTM D2940/D2940M - Standard Specification for Graded Aggregate Material for Bases or Subbases for Highways or Airports; 2020.
- E. ASTM D4491/D4491M - Standard Test Methods for Water Permeability of Geotextiles by Permittivity; 2022.
- F. ASTM D4533/D4533M - Standard Test Method for Trapezoid Tearing Strength of Geotextiles; 2015 (Reapproved 2023).
- G. ASTM D4632/D4632M - Standard Test Method for Grab Breaking Load and Elongation of Geotextiles; 2015a (Reapproved 2023).
- H. ASTM D4751 - Standard Test Methods for Determining Apparent Opening Size of a Geotextile; 2021a.
- I. ASTM D4833/D4833M - Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products; 2007 (Reapproved 2020).

##### **1.4 DEFINITIONS**

A. Backfill: Soil materials used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
  2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Aggregate Base Course (ABC Stone): Well graded stone measuring up to 1 ½" in size.
- C. Bedding Course: Layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Drainage Course: Layer supporting slab-on-grade used to minimize capillary flow of pore water.
- F. Excavation: Removal of material encountered above subgrade elevations.
1. Additional Excavation: Excavation below subgrade elevations as directed by Engineer. Additional excavation and replacement material paid for according to Contract provisions for changes in the Work.
  2. Bulk Excavation: Excavations more than 10 feet in width and pits more than 30 feet in either length or width.
  3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, without additional compensation.
- G. Fill: Soil materials used to raise existing grades.
- H. Rock: Rock material in beds, ledges, unstratified masses, and conglomerate deposits and boulders of rock material exceeding 1 cu. yd. for bulk excavation or 3/4 cu. yd. for footing, trench, and pit excavation that cannot be removed by rock excavating equipment equivalent to the following in size and performance ratings, without systematic drilling, ram hammering, ripping, or blasting, when permitted:
1. Rock Excavation, Trench: Late-model, track-mounted hydraulic excavator; equivalent to Caterpillar Model N, 235D LC; measured according to SAE J-1179.
  2. Rock Excavation, Mass: Late-model, track-mounted loader with a hydraulically operated power ripper; equivalent to Caterpillar Model No. D-8N, Heavy Duty; measured according to SAE J-732.
  3. This classification does not include loose rock, concrete, or other materials that can be removed by means other than drilling and blasting, but which is chosen to remove by drilling and blasting.
- I. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- J. Subbase Course: Layer of standardized ABC Stone installed over the subgrade and prior to flexible or rigid pavement system.
- K. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill below subbase, drainage fill, or topsoil materials.

- L. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and other deleterious materials.
- M. Unsatisfactory Soils: ASTM D2487 soil classification groups MH, CL, CH, OL, OH, and PT, or a combination of these group symbols.
  - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- N. Utilities include on-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.
- O. Uncontaminated Stone: Rock material that has not been combined with a significant amount of foreign soils.

## **1.5 MATERIALS OWNERSHIP**

- A. Materials indicated to be stockpiled are the Owner's property.
- B. Store on site.

## **1.6 SUBMITTALS**

- A. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.
- B. Test Reports: Submit test reports indicating suitability of materials supplied from offsite.

## **1.7 PROJECT CONDITIONS**

- A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Owner and Engineer and then only after arranging to provide temporary utility services according to requirements indicated:
  - 1. Notify Engineer not less than two days in advance of proposed utility interruptions.
  - 2. Do not proceed with utility interruptions without Engineer's written permission.
  - 3. Contact utility-locator service for area where Project is located before excavating.

## **PART 2 PRODUCTS**

### **2.1 SOIL MATERIALS**

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: ASTM D2487 soil classification groups GC, SC, CL, ML, GW, GP, GM, SW, SP, and SM, or a combination of these group symbols; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Backfill and Fill: Satisfactory soil materials.

- D. Subbase: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2- inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- G. Bedding: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- H. Structural Fill and Backfill: Inorganic soil with a maximum particle size of no more than 3 inches, plasticity index of 20 or less, and maximum dry density of at least 90 pounds per cubic foot when tested by the Standard Proctor Method in accordance with ASTM D698.
- I. Rip Rap: Consist of quarry run stone, field stone or granite stone and classified by size into Class 1. Vary in weight from 5 to 200 pounds. At least 30% of the total weight of the rip rap in individual pieces weighing a minimum of 60 pounds. Not more than 10% of the total weight of the rip rap in individual pieces weighing less than 50 pounds.

## **2.2 ACCESSORIES**

- A. Drainage Fabric: Nonwoven geotextile, specifically manufactured as a drainage geotextile; made from polyolefins, polyesters, or polyamides; and with the following minimum properties determined according to ASTM D 4759 and referenced standard test methods:
  - 1. Grab Tensile Strength: 110 lbf; ASTM D4632/D4632M.
  - 2. Tear Strength: 40 lbf; ASTM D4533/D4533M.
  - 3. Puncture Resistance: 50 lbf; ASTM D4833/D4833M.
  - 4. Water Flow Rate: 150 gpm per sq. ft.; ASTM D4491/D4491M.
  - 5. Apparent Opening Size: No. 50; ASTM D4751.

## **2.3 SOURCE QUALITY CONTROL**

- A. Test off-site materials used for suitability under requirements of this section.

## **PART 3 EXECUTION**

### **3.1 PREPARATION**

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

- B. Protect subgrades and foundation soils against freezing temperatures or frost. Provide protective insulating materials as necessary.
- C. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- D. Provide one public and one private utility locates prior to the start of work. De-energize lines within 10 feet of the work and pothole for gauging proper depth.
  - 1. A vacuum truck is required for potholing within 10 feet of all utility lines.
  - 2. Potholed utilities to remain open and protected until demolition/grading is complete.
  - 3. Locate utilities within 10 days of work and refresh every 30 days.
  - 4. Inspect markings daily for signs of wear.
  - 5. Make markings clearly visible for the duration of the project.
  - 6. Stake whiskers in gravel areas to maintain visibility.
  - 7. Submit illustration of marked utilities prior to the start of construction.

### **3.2 DEWATERING**

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
  - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
  - 2. Install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering is no longer required.

### **3.3 EXPLOSIVES**

- A. Explosives: Do not use explosives.

### **3.4 TOPSOIL STRIPPING**

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.
  - 1. Strip surface soil of unsuitable topsoil, including trash, debris, weeds, roots, and other waste materials.
  - 2. Stockpile surplus topsoil and allow for re-spreading deeper topsoil.

### **3.5 EXCAVATION**

- A. Unclassified Excavation: Excavation to subgrade elevations regardless of the character of surface and subsurface conditions encountered, including rock, soil materials, and obstructions.
  - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
- B. Classified Excavation: Excavation to subgrade elevations classified as earth and rock. Rock excavation paid for by adjusting the Contract Sum according to unit prices included in the Contract Documents.
  - 1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; together with soil, boulders, and other materials not classified as rock or unauthorized excavation.
    - a. Intermittent drilling; blasting, if permitted; ram hammering; or ripping of material not classified as rock excavation is earth excavation.
  - 2. Rock excavation includes removal and disposal of rock.
    - a. Do not excavate rock until it has been classified and cross-sectioned by Owner's Geotechnical Representative.
- C. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. Extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
  - 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
  - 2. Excavation for Underground Basins, and Mechanical or Electrical Utility Structures: Excavate to elevations and dimensions indicated within a tolerance of plus or minus 1 inch. Do not disturb bottom of excavations intended for bearing surface.

### **3.6 SUBGRADE**

- A. Notify Engineer and Testing Agency when excavations have reached required subgrade.
- B. If Engineer or Testing Agency determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
  - 1. Additional excavation and replacement material paid for according to Contract provisions for changes in the Work.
- C. Proof roll subgrade and/or subbase with a 10 wheel loaded dump truck weighing a minimum 20 tons. Identify soft pockets and areas of excess yielding. Do not proof roll wet or saturated or frozen subgrades. Limit vehical speed to three miles per hour.
- D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities and retest, as directed by Engineer.

### **3.7 STORAGE OF SOIL MATERIALS**

- A. Stockpile fill and other satisfactory excavated soil materials. Stockpile soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

### **3.8 BACKFILL**

- A. Place and compact backfill in excavations promptly, but not before completing the following:
  - 1. Surveying locations of underground utilities for record documents.
  - 2. Inspecting and testing underground utilities.
  - 3. Removing concrete formwork.
  - 4. Removing trash and debris.
  - 5. Removing temporary shoring and bracing, and sheeting.

### **3.9 FILL**

- A. Preparation: Remove vegetation, topsoil, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface before placing fills.
- B. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material bonds with existing material.
- C. Place and compact fill material in layers to required elevations as follows:
  - 1. Use satisfactory soil material except where otherwise indicated.

### **3.10 MOISTURE CONTROL**

- A. Uniformly moisten or aerate subgrade and subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content or as accepted by Engineer.
  - 1. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
  - 2. Remove and replace, or scarify and air-dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

### **3.11 COMPACTION OF BACKFILLS AND FILLS**

- A. Place backfill and fill materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill materials evenly around structures to required elevations, and uniformly along the length of the structure.

- C. Compact soil to not less than the following percentages of maximum dry density according to ASTM D698:
  - 1. Under structures, building slabs and steps scarify and re-compact top 12 inches of existing subgrade and each layer of backfill or fill material at 98 percent. Compact other fill to 95 percent unless otherwise indicated.
  - 2. Under pavements, compact material to a depth of 8 inches below the finished surface of the subgrade to a density of at least 100% of that obtained by compacting a sample of the material in accordance with AASHTO T 99 as modified by the referenced DOT.
  - 3. Under walkways, scarify and re-compact top 6 inches below subgrade and compact each layer of backfill or fill material at 95 percent.
  - 4. Under lawn or unpaved areas, scarify and re-compact top 12 inches below subgrade and compact each layer of backfill or fill material at 90 percent.
  - 5. Compact utility trenches to 95 percent.

### **3.12 GRADING**

- A. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
  - 1. Provide a smooth transition between adjacent grades.
  - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
  - 1. Lawn or Unpaved Areas: Plus or minus 1 inch when tested with a 10-foot straightedge.
  - 2. Walks: Plus 1/2 inch or minus 1 inch when tested with a 10-foot straightedge.
  - 3. Pavements: Plus 1/4 inch or minus 1/2 inch when tested with a 10-foot straightedge.
- C. Grading inside Building Lines: Finish subgrade to a tolerance of plus 1/4 inch or minus 1/2 inch when tested with a 10-foot straightedge.

### **3.13 SUBBASE AND BASE COURSES**

- A. Under pavements and walks, place subbase course on prepared subgrade and as follows:
  - 1. Place base course material over subbase.
  - 2. Compact subbase and base courses at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 98 percent of maximum dry density according to ASTM D698.



3. Shape subbase and base to required crown elevations and cross-slope grades.
  4. When thickness of compacted subbase or base course is 6 inches or less, place materials in a single layer.
  5. When thickness of compacted subbase or base course exceeds 6 inches, place materials in equal layers, with no layer more than 6 inches thick or less than 3 inches thick when compacted.
- B. Pavement Shoulders: Place shoulders along edges of subbase and base course to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each subbase and base layer to not less than 95 percent of maximum dry density according to ASTM D1557.

### **3.14 DRAINAGE COURSE**

- A. Under slabs-on-grade, place drainage course on prepared subgrade and as follows:
1. Compact drainage course to required cross sections and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D698.
  2. When compacted thickness of drainage course is 6 inches or less, place materials in a single layer.
  3. When compacted thickness of drainage course exceeds 6 inches, place materials in equal layers, with no layer more than 6 inches thick or less than 3 inches thick when compacted.

### **3.15 RESPREADING TOPSOIL**

- A. Re-spread stockpiled topsoil in planted areas. Distribute stockpiled material in a uniform thickness as follows.
1. Lawn Areas: 4 inches minimum.
  2. Athletic Fields: 12 inches minimum.
  3. Planting Areas: 12 inches minimum.
- B. Adjust topsoil as required by Engineer following topsoil depth testing by Owner's testing representative.

### **3.16 PROTECTION**

- A. Protecting Graded Areas: Protect graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
1. Scarify or remove and replace soil material to depth as directed by Engineer; reshape and re-compact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.
- D. Install temporary erosion control measures as stated in Section 01 50 00 - Temporary Facilities and Controls.

### **3.17 DISPOSAL OF SURPLUS AND WASTE MATERIALS**

- A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

**END OF SECTION**

## **SECTION 32 01 16.71**

### **COLD MILLING ASPHALT PAVEMENT**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Cold mill asphalt pavement by way of a milling machine to depths as specified on the drawings.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections, apply to this Section:

1. Section 31 00 00 - Earthwork
2. Section 32 12 16 - Asphalt Paving

##### **1.3 DEFINITIONS**

A. Reclaimed Asphalt Pavement (RAP): The material produced as a result of cold milling asphalt pavement.

##### **1.4 SUBMITTALS**

A. Documentation designating a tonnage and signed by the recipient of RAP to be recycled.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION**

##### **3.1 EQUIPMENT**

- A. Use equipment with automatic grade and slope controls, capable of cold milling existing asphalt pavement to an accurate depth of cut, profile and cross slope and capable of loading the milled material directly into trucks.
- B. The cutting head of the cold milling machine minimum width of four feet.

##### **3.2 PROCEDURE**

- A. Cold milling asphalt pavement performed in a manner which prevents the tearing and breaking of underlying and adjacent pavement and the contamination of the RAP with granular, subgrade or deleterious materials.
- B. RAP loaded directly to trucks from the milling machine and hauled to stockpile or directly recycled.
- C. Sweep clean prior to opening to traffic. Sweep the surface in a manner which minimizes dust.

- D. Repair localized areas of distress in the milled surface that present a hazard to traffic.
- E. At the point of daily termination of cold milling operations, changes in surface profile or cross section limited to 1-1/2 inch and longitudinal transitions maximum of 1 inch vertically per 3 feet.
- F. In the event of rain or other inclement weather, suspend cold milling operations. Make necessary allowances for drainage of water that pond in areas where the milled sections have not been paved.

### **3.3 DISPOSAL**

- A. Except for material indicated to be recycled, remove excavated materials from project site and legally dispose of them in an EPA approved landfill.
- B. A minimum of 80% of the milled pavement documented as stockpiled or directly recycled; see Submittals for required documentation.

**END OF SECTION**

## **SECTION 32 12 16**

### **ASPHALT PAVING**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Provide hot-mix asphalt paving over conditioned and repaired rigid or flexible pavement.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections, apply to this Section:

1. Section 31 00 00 - Earthwork
2. Section 32 01 16.71 - Cold Milling Asphalt Pavement
3. Section 32 17 23 - Pavement Markings

##### **1.3 REFERENCE STANDARDS**

A. Division 6 Asphalt Pavements and Division 10 Materials of the NCDOT Specifications

##### **1.4 SUBMITTALS**

A. Product Test Reports:

1. Provide copies of job mix formula sheets indicating mix temperature and compaction specification.
2. Upon request, provide documentation of field verification of compaction, thickness and application temperatures.
3. Documentation stating the tonnage and location of RAP removed from the site.

##### **1.5 QUALITY ASSURANCE**

- A. A third party may be required at the discretion of the Owner or the Engineer to inspect the stability of the subgrade and/or density of the asphalt as deemed necessary during the duration of the project.
- B. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of the above referenced DOT for asphalt paving work.

##### **1.6 PROJECT CONDITIONS**

- A. Follow the weather and Seasonal Limitations of the above referenced DOT Standard Specifications. Exceptions may be accepted by the Engineer and Owner.

- B. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate tack cure, or if the following conditions are not met.
  - 1. Tack Coat: Minimum surface temperature of 50 deg F.
  - 2. Asphalt Base Course: Minimum surface temperature of 35 deg F and ambient temperature of 35 deg F and rising at time of placement. Ensure the paving surface is not wet or frozen.
  - 3. Asphalt Surface Course: Minimum surface temperature of 50 deg F and ambient temperature of 40 deg F and rising at time of placement. Ensure the paving surface is not wet or frozen.

## **PART 2 PRODUCTS**

### **2.1 AGGREGATES**

- A. Asphalt Plant Mix Materials: Conform to the above referenced DOT Standard Specifications.
- B. Tack Coat: Conform to the above referenced DOT Standard Specifications.
- C. Reclaimed Asphalt Pavement (RAP): Processed material obtained by milling or full depth removal of existing asphalt concrete pavements. Conform to the above referenced DOT Standard Specifications.

### **2.2 ASPHALT PAVING MIX**

- A. General: Use mix design conforming to the above referenced Standard Specifications.
- B. Wedging or Leveling Mix: Use intermediate mix type conforming to the above referenced DOT Standard Specifications.
- C. Standard Allowable Reclaimed Asphalt Pavement (RAP) Content: Use a maximum of 45 percent for a base and intermediate course and a maximum of 30 percent for a surface course. Conform to the above referenced DOT Standard Specifications.
- D. High Performance Allowable Reclaimed Asphalt Pavement (RAP) Content: Use a maximum of 45 percent for a base and intermediate course and a maximum of 20 percent for a surface course, unless otherwise accepted by the Engineer.

### **2.3 SOURCE QUALITY CONTROL AND TESTS**

- A. Obtain materials from a plant approved by the above referenced DOT.
- B. Upon request, show density reports on Pavement Areas and individual lifts.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Verify subgrade is dry and in suitable condition to begin paving.
- B. Proof-roll prepared subbase surface below pavements with heavy pneumatic tired equipment to identify soft pockets and areas of excess yielding.

1. Proof-roll subbase in one direction and repeat in perpendicular direction. Limit vehicle speed to 3 mph.
  2. Proof-roll with a loaded 10-wheel tandem axle dump truck or equivalent weighing not less than 15 tons.
  3. At a minimum, subbase with soft spots and areas of pumping or rutting exceeding depth of ½ inch require correction.
  4. Notify Engineer of subbase with movement in order for Engineer to review prior to paving.
- C. Verify gradients and elevations of base are correct.
- D. Verify utility structure frames and lids are installed in correct position and elevation.
- E. Proceed with paving only after unsatisfactory conditions have been corrected.

### **3.2 TACK COAT**

- A. Clean the surface of debris, dust, dirt, oil or other foreign material.
- B. Apply tack coat at uniform rate of 0.04 gallons/square yard for new asphalt, 0.06 for milled or aged asphalt and 0.08 gallons/square yard for cement concrete.
- C. Apply tack coat to contact surfaces of curbs and gutters.
- D. Grease the surface of utility structures to prevent bond with asphalt pavement. Do not tack-coat these surfaces.
- E. Ensure tack coat breaks prior to beginning the paving operation. The tack has broken once the surface has turned sticky to the touch.

### **3.3 HOT-MIX ASPHALT PLACING**

- A. Install Work in accordance with the above referenced DOT Standard Specifications.
- B. Place asphalt within 24 hours of applying tack coat.
- C. Place asphalt in courses to the thicknesses and dimensions shown on the Drawings.
- D. Place base and intermediate courses.
- E. Place surface course within 2 hours of placing and compacting intermediate course. When intermediate course is placed more than 24 hours before placing surface course, clean surface and apply tack coat before placing surface course.
- F. Compact each course by rolling to specified density. Do not displace or extrude pavement from position. Hand compact in areas inaccessible to rolling equipment.
- G. Perform rolling with consecutive passes to achieve even and smooth finish without roller marks.

### **3.4 JOINTS**

- A. Transverse Joints:

1. When Work is suspended long enough to allow mixture to chill, construct transverse joint.
  2. Use butt joint where traffic does not pass over pavement.
  3. Use sloped wedge ahead of the end of pavement where traffic passes over pavement. Place paper parting strip to aid the removal of a wedge.
  4. Tack coat edge of pavement prior to placing adjoining pavement.
- B. Longitudinal Joints:
1. Tack the edge of longitudinal joints prior to placing adjoining pavement.
  2. Pinch joint by rolling behind the paver.
  3. Offset longitudinal joints in each layer by approximately 6 inches.

### **3.5 TOLERANCES**

- A. Density Compaction: average minimum of 92 percent of Theoretical Maximum Specific Gravity (Gmm) as determined on a moving average by the producer.
- B. Flatness: Maximum variation of 1/8 inch measured with 10-foot straight edge.
- C. Compacted Thickness: Within 1/4 inch.
- D. Variation from Indicated Elevation: Within 1/2 inch.

### **3.6 PAVEMENT MARKING**

- A. Do not apply pavement marking paint until layout, colors, and placement have been verified with the Engineer and the Owner.

### **3.7 FIELD QUALITY CONTROL**

- A. Testing Agency: Engineer or Owner may engage a qualified testing agency to perform tests and inspections.
- B. If nuclear test methods are specified, take one test per 2,000 linear feet or fraction thereof per day on pavement placed at the paver lay down width. Take a minimum of five tests per production day.
- C. If core tests are specified, take one 6-inch diameter full depth pavement core per 2,000 linear feet or fraction thereof per day on pavement placed at the paver lay down width. Take a minimum of three core samples per production day unless directed by the engineer.
- D. Do not core asphalt above 120° F. Cool asphalt with ice as necessary at no additional cost to the owner. Patch core locations with hot mix asphalt of the same type within 24 hours of sampling. Dry and tack core holes before patching.
- E. When tests indicate Work does not meet specified requirements, remove Work, replace, and retest.



### **3.8 PONDING WATER**

- A. The ponding of water on the surface after installation of the pavement system is not acceptable and is grounds for rejection of the system. Ponding is herein defined as precipitation remaining in an area, 1/8 inch or deeper for a period of 2 hours from the termination of precipitation. Provide modifications to the pavement to ensure proper drainage.

### **3.9 DISPOSAL**

- A. Except for material indicated to be recycled, remove excavated materials from project site and legally dispose of them in an EPA approved landfill.

**END OF SECTION**

## **SECTION 32 17 23**

### **PAVEMENT MARKINGS**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Provide contractor grade acrylic, striping paint for asphalt or coated asphalt.
  - 2. Provide contractor grade acrylic, latex, alkyd, or chlorinated rubber striping paint for asphalt and concrete pavements or restriping.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections, apply to this Section:
  - 1. Section 32 12 16 - Asphalt Paving

##### **1.3 SUBMITTALS**

- A. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.

##### **1.4 DELIVERY, STORAGE AND HANDLING**

- A. Deliver pavement-marking materials to the Project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of materials, date of manufacture, and directions for storage.
- B. Store pavement-marking materials in a clean, dry, protected location within temperature range required by manufacturer. Protect stored materials from direct sunlight.

##### **1.5 PROJECT CONDITIONS**

- A. Environmental Requirements:
  - 1. Apply marking paint on a clean surface and in dry weather when pavement and atmospheric temperatures are 55 degrees F or above or in accordance with manufacturer's specification and not exceeding 95 degrees F and are anticipated to remain above 50 degrees F for 4 hours after completing application.
- B. For asphalt wait a minimum of 4 days before marking unless otherwise instructed by the Engineer.

#### **PART 2 PRODUCTS**

##### **2.1 EQUIPMENT**

- A. Commercial compressed air spray striping machine capable of applying an even coating at the manufacturer's recommended thickness in an even width across the stripe.

- B. Commercial airless spray striping machine capable of applying an even coating at the manufacturer's recommended thickness in an even width across the stripe.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Inspect pavement surfaces for conditions and defects that adversely affect quality of work, and which cannot be put into an acceptable condition through normal preparatory work as specified.
- B. Do not place markings over unsound pavements. If these conditions exist, notify the Engineer.
- C. Starting installation constitutes acceptance of surface as suitable for installation.

### **3.2 PREPARATION**

- A. Provide qualified technician to supervise equipment and application of marking. Layout markings using guidelines, templates and forms. Stencils and templates professionally made to industry standards. "Free hand" painting of arrows, symbols, or wording are not allowed.
- B. Thoroughly clean surfaces free of dirt, sand, gravel, oil and other foreign matter.
- C. Protect adjacent curbs, walks, fences, and other items from receiving paint.

### **3.3 APPLICATION**

- A. Parking Lots Markings Spacing: All parking layout designs shall utilize dimensional requirements.
- B. Apply marking paint at a rate of 1 gallon per 300-400 lineal feet of 4 inch wide stripes or to manufacturer's specifications.
- C. Apply stripes straight and even in accordance with schedules.
- D. Apply stripes and other markings in widths and colors previously existing or as otherwise detailed in schedule.

### **3.4 PROTECTION**

- A. Barricade marked areas during installation and until the marking paint is dried and ready for traffic.

**END OF SECTION**

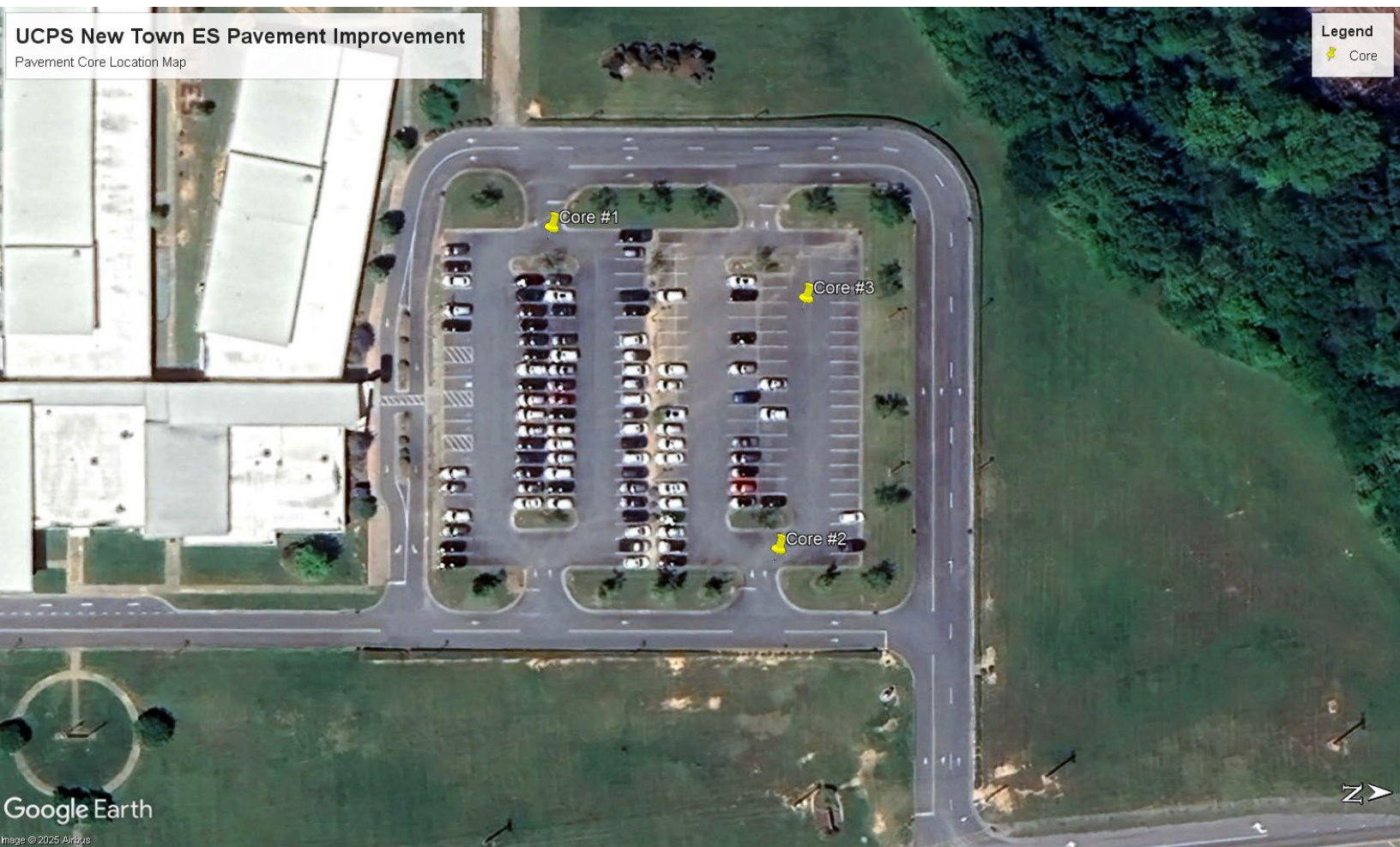
**APPENDIX A**

**PAVEMENT CORES – DCP FORM**

Project: New Town Elementary School Pavement Improvement		Date: January 17, 2025
Location: Core #1		Notes: N/A
Stone Thickness: 7 3/4"	Pavement Thickness: 1 3/4"	Soil Type: Red Clay

Project: New Town Elementary School Pavement Improvement		Date: January 17, 2025
Location: Core #2		Notes: N/A
Stone Thickness: 6 1/2"	Pavement Thickness: 2 1/2"	Soil Type: Red Clay

Project: New Town Elementary School Pavement Improvement		Date: January 17, 2025
Location: Core #3		Notes: Cored in previously crack-filled failure. Core in pieces.
Stone Thickness: 8 1/2"	Pavement Thickness: 1 3/4"	Soil Type: Red Clay





# UNION COUNTY PUBLIC SCHOOLS

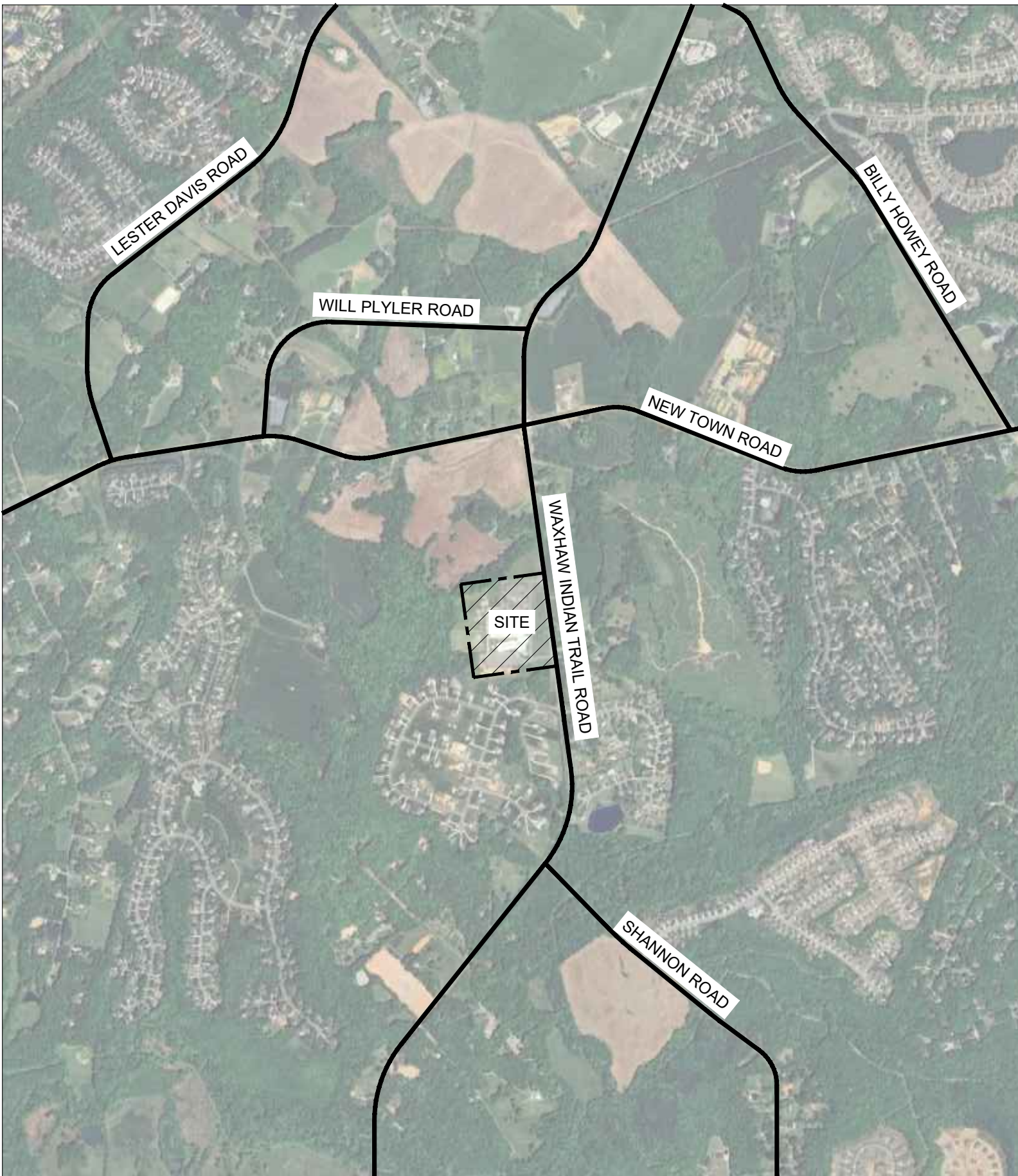
## NEW TOWN ELEMENTARY SCHOOL

### PAVEMENT IMPROVEMENT

1100 WAXHAW INDIAN TRAIL RD S  
WAXHAW, NC 28173

REI PROJECT NO. R25PVG-004

DATE: FEBRUARY 3, 2025



**A** VICINITY MAP  
SCALE: N.T.S.



**B** SITE PLAN  
SCALE: N.T.S.

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2. DIMENSIONS AND DETAIL COMPONENTS ARE FOR INFORMATION ONLY. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL INFORMATION PROVIDED.

3. NOTES ARE INTENDED TO PROVIDE TYPICAL LOCATIONS OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO QUANTIFY ALL LOCATIONS.

4. THIS DRAWING IS NOT A CERTIFIED SURVEY. THE BASE DRAWING WAS CREATED USING AERIAL IMAGERY AND DATA FROM A MUNICIPAL GEOGRAPHIC INFORMATION SYSTEM (GIS) AND THEN FIELD VERIFIED.

DETAIL NOTES:

1. LIGHT LINES REPRESENT EXISTING CONSTRUCTION TO REMAIN AND DARK LINES REPRESENT NEW COMPONENTS TO BE PROVIDED.

DIMENSION NOTES:

1. LENGTH TOLERANCES ONLY APPLIES TO ACCESSIBLE PARKING STALL WIDTHS AND ACCESSIBLE PARKING STALL SIGN HEIGHTS.

2. DEFINED SLOPES HAVE A TOLERANCE OF  $\pm 0.5\%$ .

3. DEFINED LENGTHS HAVE A TOLERANCE OF  $\pm 6"$ .

DRAWING INDEX:

G-001 COVER  
C-101 SITE PLAN  
C-501 DETAILS

ABBREVIATION LIST:

C.B. CATCH BASIN  
C.G. CURB AND GUTTER  
CMP CORRUGATED METAL PIPE  
D.I. DROP INLET  
DS DOWNSPOUT  
EJ EXPANSION JOINT  
EX. EXISTING  
EX.EL. EXISTING ELEVATION  
EX.EL. EXISTING EDGE OF PAVEMENT  
EX.SW. EXISTING EDGE OF SIDEWALK  
FFE FINISHED FLOOR ELEVATION  
F.E.S. FLARED END SECTION  
HDPE HIGH DENSITY POLYETHYLENE  
MAX. MAXIMUM  
MEE MATCH EXISTING ELEVATION  
MIN. MINIMUM  
N.C. NOT IN CONTRACT  
N.T.S. NOT TO SCALE  
O.C. ON CENTER  
PVC POLYVINYL CHLORIDE  
PR. EP. PROPOSED EDGE OF PAVEMENT  
PR. SW. PROPOSED EDGE OF SIDEWALK  
RCP REINFORCED CONCRETE PIPE  
STD. STANDARD  
TYP. TYPICAL

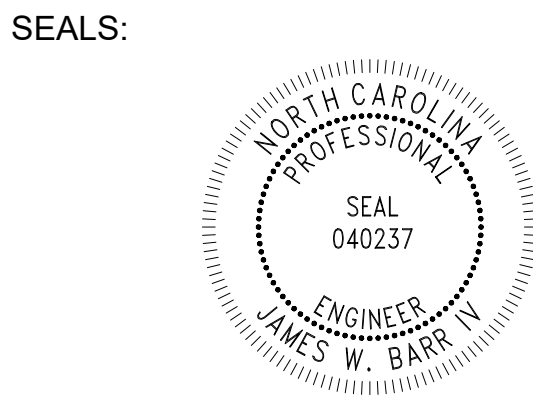
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TOTAL ACCESSIBLE PARKING:	6
VAN ACCESSIBLE PARKING:	3
PROPOSED PARKING:	
TOTAL STALL COUNT:	172
TOTAL ACCESSIBLE PARKING:	6
VAN ACCESSIBLE PARKING:	3

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PROJECT NAME:

UNION COUNTY  
PUBLIC SCHOOLS  
NEW TOWN  
ELEMENTARY  
SCHOOL PAVEMENT  
IMPROVEMENT

1100 WAXHAW INDIAN TRAIL RD S  
WAXHAW, NC 28173

PROJ. NO:

R25PVG-004

REVISIONS:

NO.	DATE	DESCRIPTION

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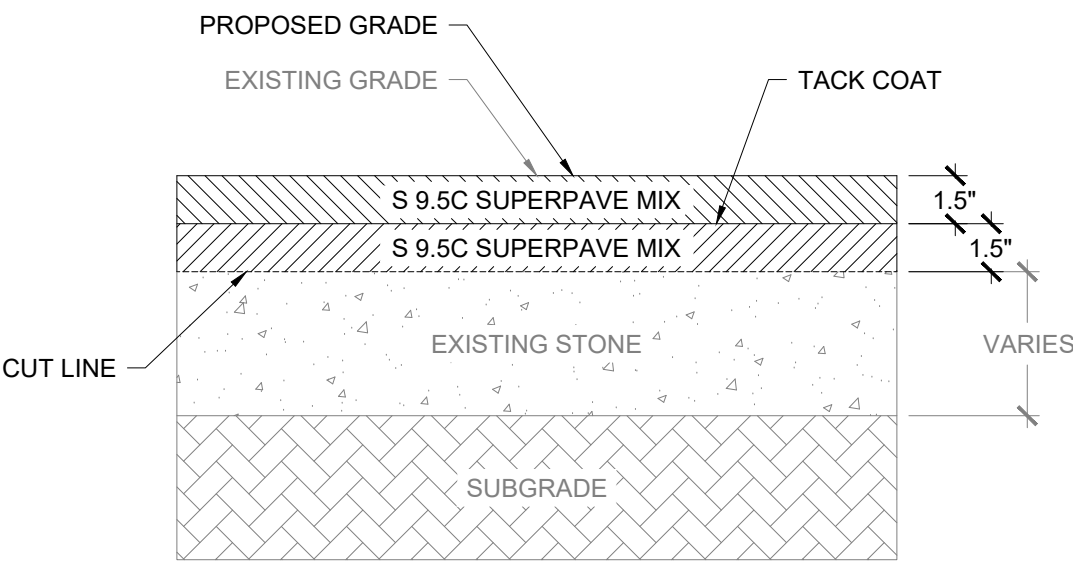
SHEET TITLE

COVER

DRAWING

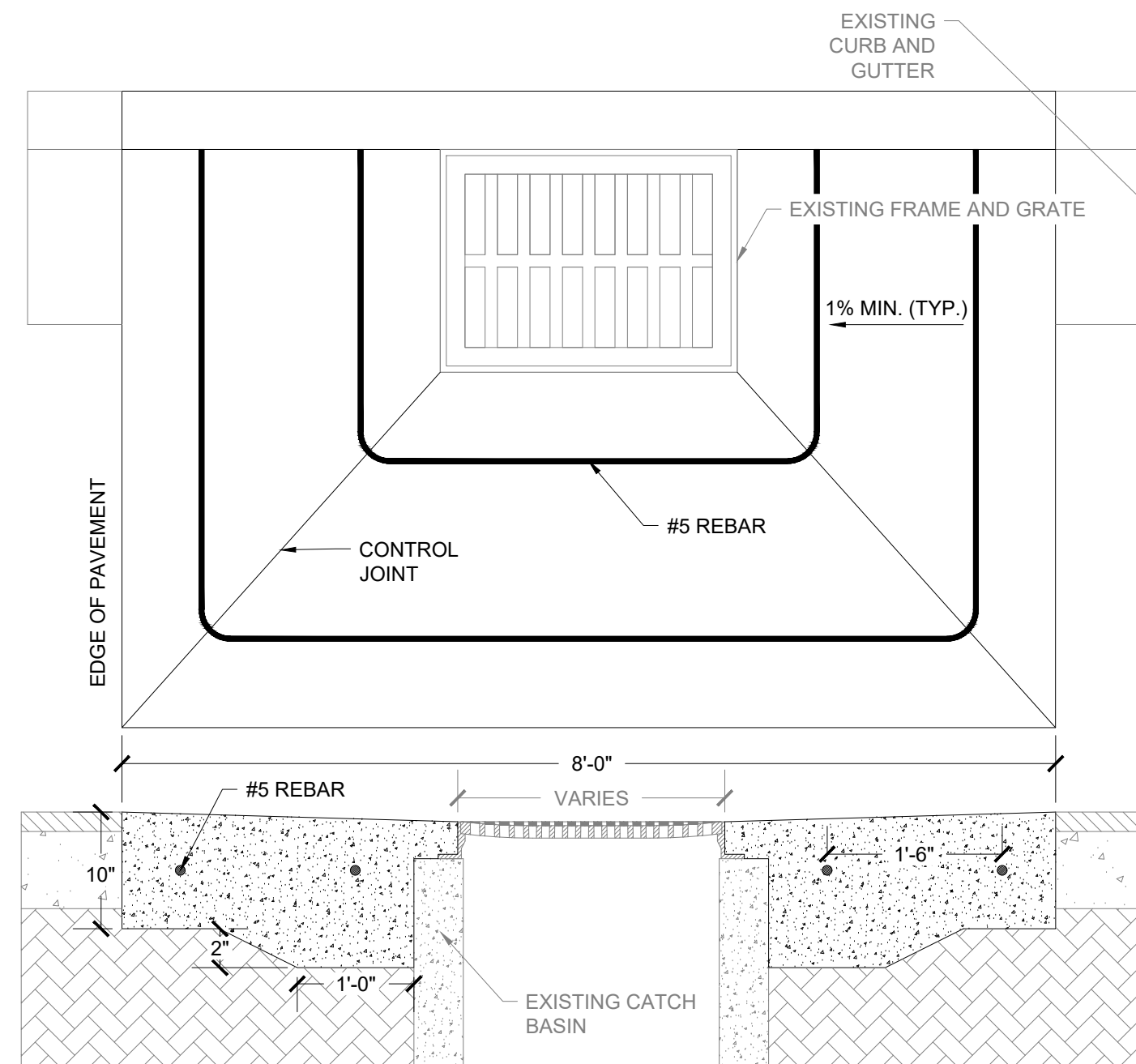
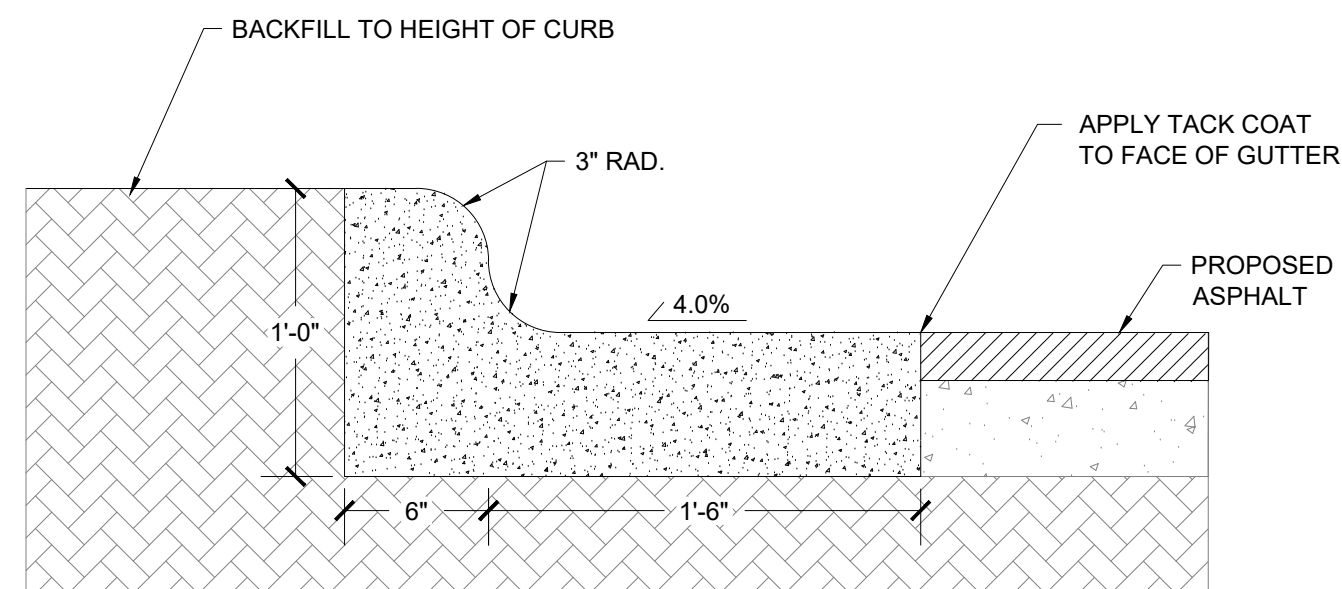
G-001





\*NOTE: WHERE POSSIBLE, OFFSET BY 18" BETWEEN THE INTERMEDIATE AND SURFACE LIFTS

\*NOTE: APPLY TACK COAT TO THE VERTICAL EDGE BETWEEN PASSES



## 1 SECTION I PAVEMENT

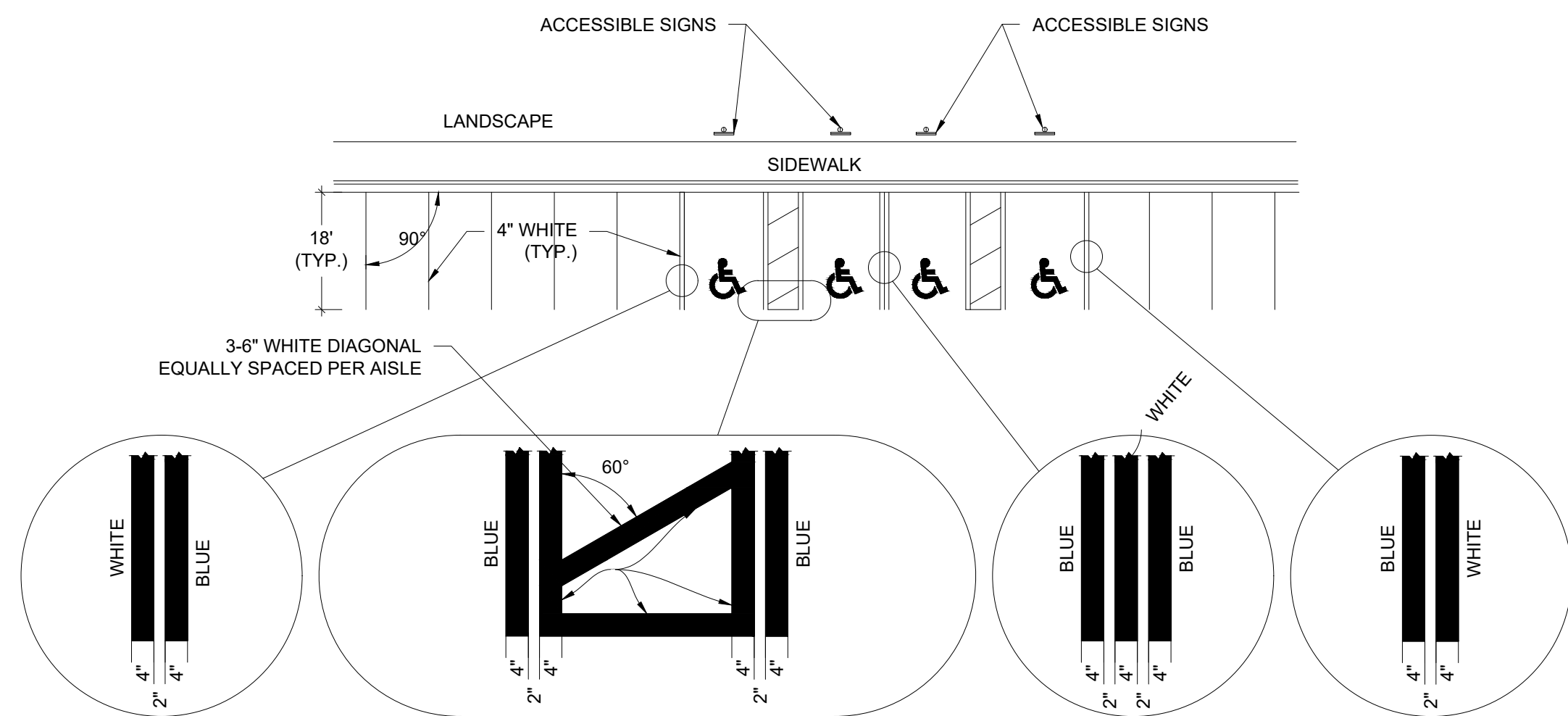
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## 2 CONCRETE CURB AND GUTTER

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## 3 CONCRETE COLLAR

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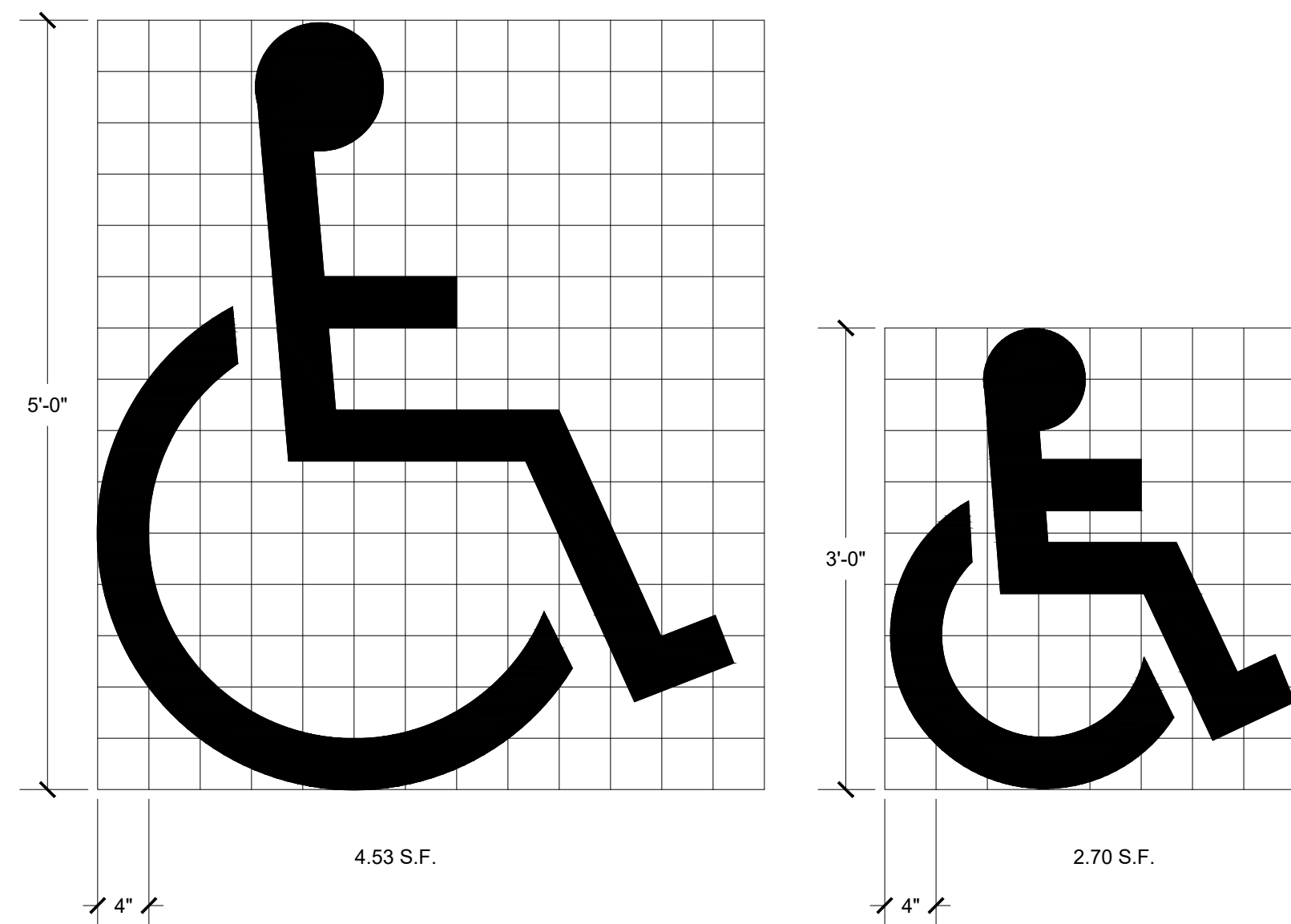


## 4 ACCESSIBLE PARKING STRIPING

SCALE: N.T.S.

## 5 UNIVERSAL SYMBOL OF ACCESSIBILITY

SCALE: N.T.S.



USE OF PAVEMENT SYMBOL IN ACCESSIBLE PARKING SPACES IS OPTIONAL. WHEN USED, THE SYMBOL SHALL BE 3' OR 5' HIGH AND WHITE IN COLOR.

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SHEET NOTES:

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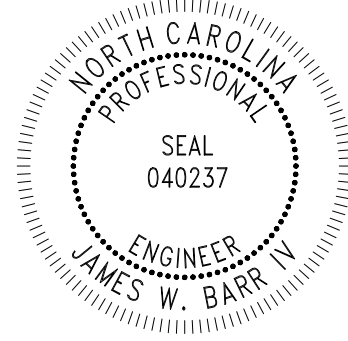
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SCHOOL PAVEMENT  
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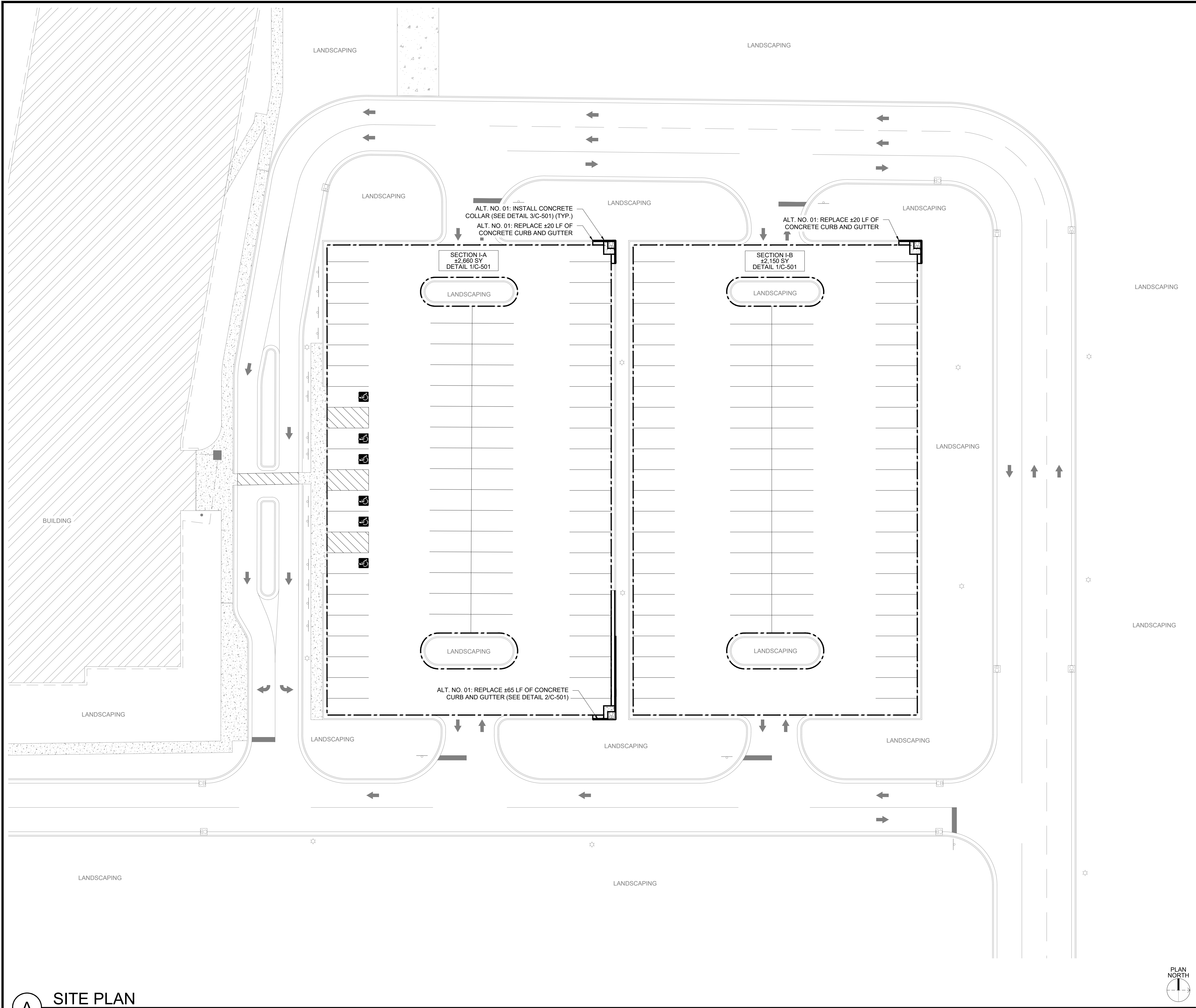
SHEET TITLE

DETAILS

DRAWING

C-501





**A SITE PLAN**  
SCALE: N.T.S.



ENGINEERS

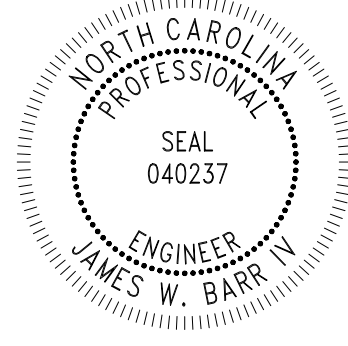
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SCHOOL PAVEMENT  
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SHEET TITLE

**SITE PLAN**

DRAWING

**C-101**

**SECTION 00 01 01  
PROJECT TITLE PAGE**

**PROJECT MANUAL**

**FOR**



**UNION COUNTY PUBLIC SCHOOLS  
201 VENUS STREET,  
MONROE, NORTH CAROLINA 28112**

**STALLINGS ELEMENTARY SCHOOL PAVEMENT IMPROVEMENT  
3501 STALLINGS ROAD,  
STALLINGS, NORTH CAROLINA 28104  
REI PROJECT NO. R25PVG-003**

**02-03-2025**

**PREPARED BY:**



**1927 J.N. PEASE PLACE, SUITE 201, CHARLOTTE, NC 28262  
NORTH CAROLINA FIRM LICENSE C-1520**

**SECTION 00 01 07**

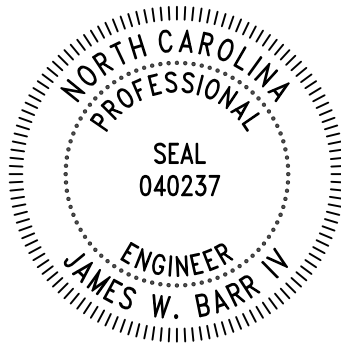
**SEALS PAGE**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Design Firm for Stallings Elementary School Pavement Improvement with Project Manual dated 02-03-2025:
1. REI Engineers, Inc., 1927 J.N. Pease Place, Suite 201, Charlotte, NC 28262.
  2. North Carolina Firm License C-1520

**Professional Engineer**



**END OF SECTION**

## **SECTION 00 01 10**

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- E. 00 11 16 - Invitation to Bid
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- I. 01 40 00 - Quality Requirements
- J. 01 42 00 - Reference Standards
- K. 01 50 00 - Temporary Facilities and Controls
- L. 01 73 00 - Execution Requirements
- M. 01 74 00 - Cleaning and Waste Management
- N. 01 77 00 - Closeout Procedures

## **2.2 DIVISION 31 -- EARTHWORK**

- A. 31 00 00 - Earthwork

## **2.3 DIVISION 32 -- EXTERIOR IMPROVEMENTS**

- A. 32 01 16.71 - Cold Milling Asphalt Pavement
- B. 32 01 16.73 - In Place Cold Reused Asphalt Paving
- C. 32 12 16 - Asphalt Paving
- D. 32 17 23 - Pavement Markings

## **2.4 APPENDIX A**

- A. Pavement Cores - DCP Form

**END OF SECTION**

**SECTION 00 01 15**  
**LIST OF DRAWINGS**

**PART 1 GENERAL**

**1.1 SUMMARY**

A. The following drawings dated 02-03-2025 are included as part of the Contract Documents:

1. G-001 Cover
2. C-101 Site Plan
3. C-301 Pavement Details
4. C-501 Details

**END OF SECTION**

## **SECTION 00 11 16**

### **INVITATION TO BID**

#### **PART 1 GENERAL**

##### **1.1 PROJECT INFORMATION**

- A. Project Name: Stallings Elementary School Pavement Improvement
- B. Project Address: 3501 Stallings Road, Stallings, North Carolina 28104
- C. Owner: Union County Public Schools

##### **1.2 BIDS**

- A. Sealed bids for the project will be received from bidders by the Owner at 201 Venus Street, Monroe, North Carolina 28112 until 2:00 PM on 04-16-2025, at which time they will be privately opened.

##### **1.3 PROJECT DOCUMENTS**

- A. Electronic project documents may be obtained from the Engineer, REI Engineers, Inc., 1927 J.N. Pease Place, Suite 201, Charlotte, NC 28262, Marcos Quesada, [mquesada@reiengineers.com](mailto:mquesada@reiengineers.com) at no cost.

##### **1.4 BIDDING REQUIREMENTS**

- A. All bidders are hereby notified that they shall be properly licensed under the state laws governing their trades.
- B. Bid security in the amount equal to not less than 5% of the gross amount of the bid is required.
- C. Submit questions to REI Engineers, Inc. in writing to the email address listed above no later than 5:00 PM at least 7 days prior to the bid due date.

##### **1.5 PRE-BID MEETING**

- A. A Pre-Bid Meeting is scheduled for 04-07-2025 on 11:00 AM at the project address listed above.
- B. Attendance is mandatory.

**END OF SECTION**

## **SECTION 00 21 13**

### **INSTRUCTIONS TO BIDDERS**

#### **PART 1 GENERAL**

##### **1.1 DEFINITIONS**

- A. The Bidding Documents consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Bid Form, and other sample bidding and contract forms.
- B. The proposed Contract Documents consist of the Form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and Addenda issued prior to execution of the Contract.
- C. Addenda are written or graphic instruments issued by the Engineer prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.
- D. A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- E. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.
- F. An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
- G. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.
- H. A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.
- I. A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work.

##### **1.2 BIDS**

- A. Submit Bid Form along with required enclosures in a sealed envelope, with the Bidder's name, license number, and project name written on the outside; place this sealed envelope in another envelope and deliver to the Owner at the address specified.
- B. Bids will be received until the date and time specified at which time they will be privately opened.
- C. Fill in and sign the bid form correctly. Bids that show any omission, alterations of form, additions not called for, conditional Bids, or any irregularities of any kind may be rejected. If erasures are necessary and appear on the forms, each such erasure must be initialed by the person signing the proposal.



- D. Bids that are non-responsive or fail to follow the Instructions to Bidders may be rejected.
- E. No bid may be withdrawn after receipt of Bids for a period of 60 days.

### **1.3 ACCEPTANCE OF BID (AWARD)**

- A. It is the intention of the Owner to award a contract for work under this project to the lowest responsible Bidder; however, in the interest of suitability to the need of the Owner and/or economy, equipment, materials and furnishings other than the lowest in price may be selected.
- B. The Owner reserves the right to reject any or all Bids, to accept any bid submitted, to waive any formalities, and to negotiate with the low Bidder or Bidders any changes considered necessary or desirable. The Owner reserves the right to reject any Bid when such rejection is in the interest of the Owner to reject the bid of the bidder who has previously failed to perform or to complete on time Contracts of a similar nature; and to reject the bid of a bidder who is not, in the opinion of the Engineer, in a position to perform the Contract.
- C. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted. Alternates may be accepted at any time during the bid holding period.

### **1.4 PRE-BID MEETING**

- A. Refer to the invitation or advertisement for bids for the date, time and location of the Pre-Bid Meeting.
- B. A Pre-Bid Meeting will be held for purposes of considering questions posed by Bidders. All interpretations and corrections to Contract Documents deriving from this meeting will be documented via Addendum.
- C. If the Bidder does not attend the Pre-Bid Meeting, it is the Bidder's responsibility to obtain the Pre-Bid Meeting Minutes and all Addenda.

### **1.5 DISQUALIFICATION**

- A. The Owner reserves the right to disqualify Bids, before or after opening, upon evidence of collusion with intent to defraud or commit other illegal practices upon the part of the Bidder.

### **1.6 CONTRACTOR'S LICENSE**

- A. All Bidders must have proper licenses for contractors as required by State Law. The Bidder's license number shall be listed on the bid form and on the outside of the inner sealed envelope in which the bid is submitted.

### **1.7 CONFLICT OF INTEREST**

- A. Bidders must disclose in writing with their bid the name of any owner, officer, director, or agent who is also an employee of the Owner.
- B. Bidders must disclose in writing with their bid the name of any employee of the Owner who owns, directly or indirectly, an interest of 5 percent or more in the Bidder's firm or any of its branches or subsidiaries.

- C. By submitting a bid, the Bidder certifies that there is no relationship between the Bidder and any person or entity which is, or gives the appearance of, a conflict of interest related to this project.

## **1.8 NON-DISCRIMINATION**

- A. The Bidder shall not discriminate against any individuals and will take proactive measures to assure compliance with all Federal and State requirements concerning fair employment, employment of people with disabilities, and concerning the treatment of all employees without regard to discrimination based upon age, race, color, religion, sex, national origin, or disability.

## **1.9 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS**

- A. Examine Drawings and Specifications and all Addenda or other revisions thereto and thoroughly familiarize himself with the detailed requirements thereof prior to submitting a proposal.
- B. Should a Bidder find discrepancies or ambiguities in, or omissions from the Specifications and Drawings bound herein, or should be in doubt as to their meaning, notify the Engineer in writing immediately. Engineer will issue an interpretation in the form of an addendum. This addendum will be forwarded to all Bidders of record.
- C. Addenda will be issued no later than four days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.
- D. Act promptly and allow sufficient time for a reply to be provided before the date established for submission of Bids.
- E. Acknowledge receipt of all addenda on the Bid Form.
- F. No oral interpretations will be made to any Bidder as to the meaning or intent of the Contract Documents or be effective to modify any of the provisions of the Contract Documents.

## **1.10 SUBSTITUTIONS**

- A. References are made to certain specific products solely to denote the quality standard of the desired product and are not intended to restrict Bidders to a specific brand, make, manufacturer, or name. These products have been noted to assist in establishing material types and acceptable products. Equivalent products will be considered acceptable provided that the approval of the specific product has been given in writing by the Engineer.
- B. Written requests for substitution of equivalent products from prime bidders will be considered if received by the Engineer 7 calendar days prior to the bid opening.
- C. Identify the product or the fabrication or installation method to be replaced in each request. Include related specification sections and drawing number.
- D. Provide complete documentation on both the product specified and the proposed substitution including the following information as appropriate:
  - 1. Comparison of specified and proposed substitute product data, fabrication drawings, and installation procedures.

2. Samples where applicable or requested.
  3. Detailed comparison of significant qualities of the proposed substitution with those of the work specified.
  4. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate Contractors that will become necessary to accommodate the proposed substitution.
- E. Certification by the Bidder or manufacturer that the substitution proposed is equal to or better in every respect to that required by the Contract Documents, and that it will perform equal or superior to product specified in the application indicated. The Bidder waives any right to additional payment or time, which may subsequently become necessary because of the failure of the substitution to perform adequately.
- F. Engineer's Action: The Engineer may request additional information or documentation necessary for evaluation of the request. The Engineer will notify the Bidders of acceptance of the proposed substitution by means of an addendum to the bid documents. If the proposed substitute is accepted through an addendum use the product specified by name. Engineer's Substitution Approval during bidding and subsequent addendums does not void the Bidder's responsibility to submit the required shop drawings and comply with the other contract documents and requirements.

#### **1.11 SITE INVESTIGATION**

- A. Examine the site to determine the extent of work involved, size of work, etc., and the conditions under which the work must be staged and performed. Examine the grounds and buildings, utilities and roads and ascertain by any reasonable means conditions that will in any manner affect its work. Ask the Engineer for any additional information that he deems necessary to be fully informed as to exactly what is to be expected prior to submitting a proposal. The drawings have been prepared on the basis of surveys and inspections of the site and physical conditions at the site. This, however, does not relieve the Bidder of the necessity for fully informing itself as to the existing physical conditions. Secure field measurements for quantities upon which proposal is based. Carefully examine the existing conditions as compared to the Contract Documents.
- B. The submission of a bid will be construed as evidence that such an investigation has been made, and no subsequent allowance will be made in this connection on behalf of the bidder for any error or negligence.
- C. Upon arrival at the Project Site, immediately proceed to the main entrance/office and advise the administrative personnel of its presence and purpose. Sign the visitor's log, giving his name, his company and the time and date of the visit.
- D. Inspection of the work areas shall occur between the hours of 8:00 AM and 5:00 PM. No inspections will be conducted on Saturdays, Sundays, or holidays.

#### **1.12 BID SECURITY**

- A. Bid bond or a certified check drawn on a bank or trust company insured by the FDIC in an amount equal to not less than 5% of the gross amount of the bid is required.

#### **1.13 PRIME CONTRACT**

- A. Perform all work under a single prime contract.

#### **1.14 PERMITS, FEES AND TAXES**

- A. Secure and pay the costs of licenses, permits and fees for inspections required by City, County and/or State authorities; Social Security and other applicable Local, State and Federal Government taxes, and sales taxes. Include such costs in its bid.

#### **1.15 SUBCONTRACTORS**

- A. List names of subcontractors on the Bid Form. Identify work by the general, subcontractor or not applicable for each trade; utilize blank lines to list trades not provided in the table. Do not list suppliers. All blanks must be filled in. Failure to do so may result in bid being declared non-responsive. If there is more than one subcontractor per trade identified below, list all. If no subcontractors are to be utilized, indicate by signing at the appropriate place at the bottom of the table.
- B. A Bidder whose bid is accepted shall not substitute any person as subcontractor in the place of the subcontractor listed in the original bid, except if the listed subcontractor's bid is later determined by the successful Bidder to be nonresponsive or nonresponsive or the listed subcontractor refuses to enter into a contract for the complete performance of the bid work, or with the approval of the awarding authority, the Owner, for good cause shown by the successful Bidder.
- C. The terms, conditions, and requirements of each contract between the successful Bidder and a subcontractor performing work under a subdivision or branch of work listed in this subsection shall incorporate by reference the terms, conditions, and requirements of the contract between the contractor and the Owner.

#### **1.16 FORM OF AGREEMENT**

- A. The form of agreement between the Owner and Contractor to be entered into shall be the sample contained in Section 00 52 13 - Standard Form of Agreement.

#### **1.17 BIDDER QUALIFICATIONS**

- A. Bids will be accepted from Bidders who are regularly engaged in, and licensed to perform, the work they are bidding, which represents a significant portion of their total volume and who perform this work with workers regularly employed on their direct payrolls. Before a bid is considered for award, the Bidder may be requested by the Engineer to submit a statement of facts in detail as to its previous experience in performing similar or comparable work and of its business and technical organization and financial resources available to be used in contemplated work. The Bidder may also be required to submit a statement of facts in detail on his proposed subcontractors as to their previous experience and past performance in performing similar work or comparable work.

**END OF SECTION**

**SECTION 00 41 13**

**BID FORM**

**PART 1 GENERAL**

**1.1 PROJECT AND ITS PARTIES**

- A. TO:
- Maurice Brown  
Union County Public Schools  
201 Venus Street,  
Monroe, North Carolina 28112
- B. PROJECT:
1. Stallings Elementary School Pavement Improvement
2. REI Project No. R25PVG-003
- C. FROM:
1. Date: \_\_\_\_\_
2. Bidder: \_\_\_\_\_
3. Address: \_\_\_\_\_
4. Phone: \_\_\_\_\_ Email: \_\_\_\_\_
5. GC License #: \_\_\_\_\_ Classification: \_\_\_\_\_ Limitation: \_\_\_\_\_

**1.2 BASE BID**

- A. The undersigned, as bidder, hereby declares that the only person or persons interested in this bid as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this bid or in the contract to be entered into; that this proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud. The Bidder further declares that he has examined the site of the work and the contract documents relative thereto dated 02-03-2025 as prepared by REI Engineers, Inc., and has read all special provisions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed. The Bidder proposes and agrees if this bid is accepted to contract with the Owner in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools apparatus, means of transportation and labor necessary to complete the construction of the project with a definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and the Contract Documents, for the sum of:
1. Words: \_\_\_\_\_
2. Figures: \$ \_\_\_\_\_.

### 1.3 BID BREAKDOWN

A. Base bid is broken down as follows:

Item	Dollar Amount in Figures
Permits/ Bonds	\$
Labor	\$
Materials	\$
State Sales/ Use Tax	\$
County Sales/Use Tax	\$
Allowances	\$
Total Base Bid (must match 1.2, 2)	\$

### 1.4 ALTERNATES:

A. The undersigned agrees to perform alternative work as described in Section 01 23 00 - Alternates for the sums stated below resulting in additions to or deductions from the base bid stated above. Additions and deductions shall include any modifications of the Work or additional work that may be reasonably included as part of the alternative work. All alternative work is to be completed within the same timeframe as the base bid work. All alternates must be filled out. A zero or no entry after any alternate indicates no cost change to include that Alternate. Alternates may be accepted at any time during the bid holding period. The undersigned acknowledges that failure to complete all information requested in this section may result in the rejection of this bid.

1. Alternate No. 1: Re-Surface Pavement

a. Words: \_\_\_\_\_

b. Figures: \$ \_\_\_\_\_.

c. Select One: \_\_\_ Add or \_\_\_ Deduct

### 1.5 ALLOWANCES:

A. Include in the Base Bid the following Quantity Allowances:

1. Undercut/Mill and Provide 70 TONS of Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material.

### 1.6 UNIT PRICES:

A. Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically noted. Unit prices shall be applied, as appropriate, to compute the total value of changes in the scope of the work all in accordance with the contract documents.

1. Place and Grade ABC Stone. Furnishing, mobilizing, placing, and grading of material is included: \$ \_\_\_\_\_ per TON.
2. Place and Grade Washed #57 Stone. Furnishing, mobilizing, placing, and grading of material is included: \$ \_\_\_\_\_ per TON.

3. Undercut/Mill and Provide Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material: \$\_\_\_\_\_ per TON
4. Provide 4-inch wide Striping: \$\_\_\_\_\_ per LF
5. Reclaim Existing Material. Reclaim to a depth of approximately 10 inches. Include fine grading, proper compacting, and hauling and standard disposal of approximately 1 to 2 inches of material. Include an additional mobilization and assume a minimum 150 SY of additional Reclaim: \$\_\_\_\_\_ per SY
6. Provide 4-inch Sidewalk. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material: \$\_\_\_\_\_ per SF
7. Provide Curb and Gutter. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material: \$\_\_\_\_\_ per LF
8. Provide Concrete Wheel Stop. Include the related cost for furnishing, mobilizing, and installing of the wheel stop: \$\_\_\_\_\_ per EA

**1.7 BID HOLDING TIME AND ACCEPTANCE:**

- A. The undersigned hereby agrees that this bid may not be revoked or withdrawn after the time set for the opening of bids but shall remain open during the bid holding period as specified in Section 00 21 13 - Instructions to Bidders.
- B. No bid may be withdrawn after receipt of Bids for a period of 60 days.

**1.8 SCHEDULE OF COMPLETION:**

- A. The undersigned understands that time is of the essence and agrees to the Contract Time and liquidated damages as indicated in General Conditions of the Contract for Construction and Supplementary Conditions apply to this Work. The undersigned hereby agrees to commence work on this project within 30 days following receipt of an Executed Agreement between the Owner and Contractor. Date of commencement will be established in a Notice to Proceed issued to the Contractor. Complete work under the Base Bid and all alternates accepted within 45 calendar days from the date of commencement.
  1. Applicable liquidated damages shall be as stated in the Supplementary Conditions.

**1.9 ADDENDUM:**

- A. Addendum received and used in computing bid:
  1. Addendum No. 1: \_\_\_\_\_
  2. Addendum No. 2: \_\_\_\_\_

### 1.10 SUBCONTRACTORS:

- A. Fill out all blanks on the list below listing all subcontractors. Identify work by the general, subcontractor or not applicable for each trade; utilize blank lines to list trades not provided. Do not list suppliers. All blanks must be filled in. Failure to do so may result in bid being declared non-responsive. If there is more than one subcontractor per trade identified below, list all. If no subcontractors are to be utilized, indicate by signing at the appropriate place at the bottom of the table.

1. Trade: General Contractor: \_\_\_\_\_
2. Trade: Paving Contractor: \_\_\_\_\_
3. Trade: Concrete Contractor: \_\_\_\_\_
4. Trade: Utility Locate Contractor: \_\_\_\_\_
5. Trade: Waste Disposal Contractor: \_\_\_\_\_
6. Trade: Reclaiming Contractor: \_\_\_\_\_
7. Trade: Grading Contractor: \_\_\_\_\_
8. Trade: Milling Contractor: \_\_\_\_\_
9. Trade: Trucking Contractor: \_\_\_\_\_
10. Trade: Striping Contractor: \_\_\_\_\_
11. Trade: \_\_\_\_\_ Contractor: \_\_\_\_\_
12. Trade: \_\_\_\_\_ Contractor: \_\_\_\_\_
13. We do not plan to use subcontractors: \_\_\_\_\_ (Signed)

### 1.11 ENCLOSURES:

- A. Provide the following enclosures with submitted bid:
1. Bid Bond
  2. Minority Business Enterprise Submittals

### 1.12 SUBMITTED BY:

- A. Contractor Name: \_\_\_\_\_
- B. Authorized Signing Officer Name: \_\_\_\_\_
- C. Authorized Signing Office Title: \_\_\_\_\_
- D. Signature: \_\_\_\_\_
- E. Respectfully submitted this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_



**1.13 NOTARIZED BY:**

A. I, \_\_\_\_\_ (print name), a Notary Public for  
\_\_\_\_\_ County of \_\_\_\_\_ (State),  
do hereby certify that \_\_\_\_\_ (officer listed above)  
personally appeared before me this day and acknowledged the due execution of the  
foregoing instrument. Witness my hand and official seal, this \_\_\_\_\_ day of  
\_\_\_\_\_, 20 \_\_\_\_\_. My commission expires \_\_\_\_\_ of \_\_\_\_\_, 20 \_\_\_\_\_.

B. Signed: \_\_\_\_\_

**(OFFICIAL SEAL)**

**END OF SECTION**

## **SECTION 00 43 13**

### **BID BOND FORM**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Owner's required Bid Bond Form attached to this section.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 BID SECURITY**

- A. File a bid bond in the amount equal to not less than 5% of the gross amount of the bid executed in accordance with and conditioned as prescribed by GS 143-129, as amended by Chapter 1104 of the North Carolina Public Laws of 1951.
- B. In lieu thereof, each bid may be accompanied by a certified check drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation (FDIC) in an amount equal to not less than 5% of the gross amount of the bid.
- C. Bid Bond shall be signed by the Bidder and notarized.
- D. If the successful Bidder fails to execute the contract within 10 days after award, the above deposit will be retained by the Owner on the bid bond executed on liquidated damages.

**END OF SECTION**

**SECTION 00 43 39**

**MINORITY BUSINESS ENTERPRISE**

**PART 1 GENERAL**

**1.1 SUMMARY**

A. Section Includes:

1. Owner's required Minority, Women and Small Business Enterprise Program.

**1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**SECTION 00 52 13**

**STANDARD FORM OF AGREEMENT**

**PART 1 GENERAL**

**1.1 SUMMARY**

A. Section Includes:

1. Owner-Contractor Agreement

**1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**SECTION 00 60 00**

**PROJECT FORMS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. The following documents are hereby incorporated into the Contract Documents by reference:
- B. The following documents are included in the Project Manual:
  - 1. Section 00 62 76.13 - Sales Tax Report
  - 2. Section 00 63 13 - Request for Interpretation
  - 3. Section 00 63 25 - Substitution Request Form

**END OF SECTION**

**SECTION 00 62 76.13**

**SALES TAX REPORT**

**PART 1 GENERAL**

**1.1 SUMMARY**

A. Section Includes:

1. Submit the attached State and County Sales/Use Tax Statement and Certification with each application for payment.

**1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**END OF SECTION**



**SECTION 00 63 13**

**REQUEST FOR INTERPRETATION**

**PART 1 GENERAL**

**1.1 REQUEST FOR INTERPRETATION**

- A. RFI No.: \_\_\_\_\_
- B. Project: Stallings Elementary School Pavement Improvement
- C. REI Project No. R25PVG-003
- D. Request Date: \_\_\_\_\_
- E. From: \_\_\_\_\_ (Company Name)

**1.2 REFERENCE**

- A. Specification Section: \_\_\_\_\_ Paragraph: \_\_\_\_\_
- B. Drawing Sheet: \_\_\_\_\_ Detail No(s): \_\_\_\_\_

**1.3 DESCRIPTION OF REQUEST**

- A. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- B. Signed by: \_\_\_\_\_
- C. Signature: \_\_\_\_\_

**1.4 REI RESPONSE**

- A. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- B. Attachments: \_\_\_\_\_  
\_\_\_\_\_
- C. Response Date: \_\_\_\_\_
- D. Signed by: Marcos Quesada
- E. Signature: \_\_\_\_\_



**SECTION 00 63 25**

**SUBSTITUTION REQUEST FORM**

**PART 1 GENERAL**

**1.1 SUBSTITUTION REQUEST INFORMATION**

- A. Project: Stallings Elementary School Pavement Improvement
- B. REI Project No. R25PVG-003
- C. Request Date: \_\_\_\_\_

**1.2 REFERENCE**

- A. Specification Section: \_\_\_\_\_ Paragraph(s): \_\_\_\_\_

**1.3 DESCRIPTION**

- A. Manufacturer Name: \_\_\_\_\_
- B. Product Name: \_\_\_\_\_
- C. General Description of Substitution Request: \_\_\_\_\_  
\_\_\_\_\_

**1.4 CERTIFICATION**

- A. The undersigned certifies:
  - 1. Proposed substitution has been investigated and determined that it meets or exceeds the quality level of the specified product.
  - 2. Same warranty will be furnished for proposed substitution as for specified product.
  - 3. Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
  - 4. Proposed substitution does not affect dimensions and functional clearances.
  - 5. Payment will be made for changes to building design, including engineering design, detailing, and construction costs caused by the substitution.
  - 6. Contractor waives right to additional payment or time, that may subsequently become necessary because of the failure of the substitution to perform adequately.
- B. Submitted by (Print Name): \_\_\_\_\_
- C. Contractor Company Name: \_\_\_\_\_
- D. Signature: \_\_\_\_\_

### 1.5 ATTACHED SUPPORTING DATA

A. The following items are attached to this substitution request:

1. ☐ Product Data
2. ☐ Test Reports
3. ☐ Applicable Drawings
4. ☐ (\_\_\_\_\_)
5. ☐ (\_\_\_\_\_)

### 1.6 ENGINEERS ACTION

A. This substitution request is:

1. ☐ Approved
2. ☐ Approved as noted
3. ☐ Rejected - utilize specified materials
4. ☐ Rejected due too late submittal - utilized specified materials

B. Signed by: Marcos Quesada

C. Signature: \_\_\_\_\_

**END OF SECTION**

**SECTION 00 65 36**

**CONTRACTOR'S WARRANTY**

**PART 1 GENERAL**

**1.1 WARRANTY**

- A. Know all men by these presents, that we, \_\_\_\_\_  
(Contractor), having installed pavement related work on the Stallings Elementary School Pavement Improvement under contract between Union County Public Schools and Contractor, warrant to the Owner with respect to said work that for the period specified below, the work shall be free from defects, provided however the following are excluded from this Warranty: 1) defects or failures resulting from abuse by the Owner and 2) damages caused by fire, tornado, hail, hurricane, acts of God, wars, vandalism, riots or civil commotion.
- B. We agree that for the period specified below, we will make repairs at no expense to the Owner to defects which may develop in the work in a manner compatible to the system and acceptable under industry standards and general practice as established by the Engineer.
- C. We agree to attend one post construction field inspection no earlier than one month prior to the Contractor's Warranty expiration date and to complete corrective actions requested by Owner, Engineer, or Manufacturer at no additional cost to the Owner.
- D. Warranty Period: 2 years from date of substantial completion of \_\_\_\_\_, 20\_\_\_\_.

**1.2 EXECUTED BY**

- A. Contractor: \_\_\_\_\_
- B. Authorized Signing Officer Name: \_\_\_\_\_
- C. Authorized Signing Office Title: \_\_\_\_\_
- D. Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**1.3 NOTARIZED BY:**

- A. I, \_\_\_\_\_ (print name), a Notary Public for \_\_\_\_\_ County of \_\_\_\_\_ (State), do hereby certify that \_\_\_\_\_ (officer listed above) personally appeared before me this day and acknowledged the due execution of the foregoing instrument. Witness my hand and official seal, this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_. My commission expires \_\_\_\_ of \_\_\_\_\_, 20 \_\_\_\_.
- B. Signed: \_\_\_\_\_

(OFFICIAL SEAL)

**END OF SECTION**

## SECTION 01 11 00

### SUMMARY OF WORK

#### PART 1 GENERAL

##### 1.1 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Name: Stallings Elementary School Pavement Improvement
- B. Project Address: 3501 Stallings Road, Stallings, North Carolina 28104
- C. Owner: Union County Public Schools
- D. Engineer: The Contract Documents, dated 02-03-2025, were prepared by REI Engineers, Inc.
- E. This work includes the provision of labor, material, equipment, supervision and administration to integrate the work outlined in these specifications and Contract Drawings. In general, the scope of work in the Base Bid includes:
  - 1. Locate public and private utilities prior to work occurring.
  - 2. Provide barricades and signage for traffic control and designating work zones as indicated in the Contract Drawings. Fencing requirements are described in the specifications.
  - 3. Proof roll substrate to confirm suitability for paving. Report deflections to the Engineer and Owner.
  - 4. Provide striping as-is, unless otherwise stated in the Contract Drawings or by the Owner and approved by the Engineer.
  - 5. Provide erosion controls to protect contamination from leaving the work area and protect storm structures from sediment contamination.
  - 6. Provide a Portable Toilet and hand washing station. Access inside the facility is not available.
  - 7. Provide concrete equipment with a premanufactured washout apparatus.
  - 8. Pavement striping is for illustration only. Existing striping layouts should be noted prior to demolition.
  - 9. Existing trees and landscape are to remain in place unless otherwise noted.
  - 10. Backfill and compact landscaped and disturbed areas with like material. Grade areas level to surrounding existing and new surfaces. Slope surfaces to allow desired surface drainage. Seed and straw planted surfaces with surrounding like grass.
  - 11. Defined slopes have a tolerance of +/- 0.5%.
  - 12. Defined lengths have a tolerance of +/- 6 inches.

- F. Provide electrical, plumbing, mechanical, and other related trade work necessary to facilitate project operations.
- G. General requirements and specific recommendations of the material manufacturers are included as part of these specifications. The manufacturers' specifications are the minimum standards required for the completed systems. Where specific items listed herein improve the standards required by the manufacturers, they take precedence where their compliance does not affect the manufacturers' guarantee or warranty provisions.
- H. Prior to excavation, coordinate with designated Owner personnel all known utility locations. Provide utility locate and mark location of utilities on the ground. The Contractor remains responsible for protecting existing utilities from damage.
- I. The contractor is responsible for labor and materials needed for backfilling and fine grading necessary to comply with the requirements of these documents and conform to the requirements of the current Building Code approved in the State of the project location.
- J. Serve as the Project Expeditor and coordinate work and schedules of others hired.

## **1.2 REFERENCE STANDARDS**

- A. CSI/CSC MF - Masterformat; 2016.

## **1.3 CONTRACT**

- A. Project constructed under a single prime general construction contract between Owner and Contractor.

## **1.4 WORK UNDER OTHER CONTRACTS**

- A. Separate Contract: Owner may award a separate contract for performance of certain construction operations at Project site.
  - 1. None
- B. Cooperate with separate contractors so work on those contracts are carried out smoothly without interfering with or delaying Work under this Contract.

## **1.5 SPECIFICATION FORMATS AND CONVENTIONS**

- A. Specification Format: The Specifications are organized into Divisions and Sections using the CSI/CSC MF 49-division format and numbering system.
  - 1. Section Identification: The Specifications use section numbers and titles to cross-reference Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Interpret words and meanings as appropriate. Infer words implied, but not stated, as the sense requires. Interpret singular words as plural and plural words as singular where applicable as the context of the Contract Documents indicates.
2. Imperative mood and streamlined language are generally used in the Specifications. Perform requirements expressed in the imperative mood. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
  - a. The words "shall", "shall be", or "shall comply with" depending on the context, are implied where a colon (:) is used within a sentence or phrase.

**END OF SECTION**

## **SECTION 01 14 00**

### **WORK RESTRICTIONS**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Administrative and procedural requirements for work sequence, work restrictions, occupancy requirements and use of premises.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections, apply to this Section.

##### **1.3 SUBMITTALS**

A. Background Checks: Provide background checks for employees anticipated to work on-site during the project.

##### **1.4 WORK SEQUENCE**

- A. Construct Work in phases to accommodate the Owner's use; if applicable, of the premises during the construction period; coordinate the construction schedule and operations with the Owner and Engineer.
- B. Construct the Work in phases to provide for public convenience. Do not close off public use of facility until completion of one phase of construction provides alternative usage.
- C. Schedule construction in such a manner that once work has commenced on site, the work force will remain at that site continuously each workday through final completion at that facility.

##### **1.5 WORK RESTRICTIONS**

A. K-12 School Work Restrictions:

1. There are no work hour restrictions provided work is completed within the specified construction duration when students are not in school. If work extends beyond the completion deadline, perform work after school hours which includes non-school days, holidays, semester breaks, Saturdays, Sundays or after student dismissal on school days. These imposed work restrictions are in addition to the specified liquidated damages.
2. Coordinate work schedule with School's testing and special events schedule. Contractor may not be allowed on-site during certain testing days/events.

##### **1.6 OCCUPANCY REQUIREMENTS**

A. Owner Occupancy:

1. Owner occupies the premises during construction to conduct his normal operations. Cooperate with Owner in construction operations to minimize conflict, and to facilitate Owner usage.
2. Conduct operations as to ensure the least inconvenience and the greatest amount of safety and security for the Owner, building occupants, and the general public.
3. Control noise from operations so that building occupants are not affected.

## **1.7 SECURITY**

- A. Restrict the access of persons entering upon the Owner's property in connection with the work to the Contractor's Entrance and to the site of the work.
- B. Maintain an accurate record of the names and identification of visitors entering upon the Owner's property in connection with the work of this contract, including times of entering and times of leaving, and submit a copy of the record to the Owner weekly.
- C. Background Checks: No persons/personnel allowed on site without the following background checks: Nationwide, Sex Offender check, Social Security Number check. Provide this information to the Engineer/Owner 5 business days prior to the scheduled access for each person. Owner's decision on acceptability of personnel. Each person is required to wear a badge with name, photograph, and company name. Ensure background checks for persons are submitted to Owner and those persons denied access are not allowed on-site. Follow requirements of Jessica Lunsford Act for North Carolina school facilities.

## **1.8 USE OF SITE**

- A. Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.
- B. Confine its apparatus, the storage of materials, and operations of its workmen to limits required by law, ordinances, permits or directions of the Owner, and do not unnecessarily encumber the site. Prepare grounds for storage of materials, equipment set-up, foot and vehicular traffic.
  1. Driveways and Entrances: For areas where no construction is taking place keep driveways, entrances and/or access points serving premises clear and available to Owner, Owner's employees, and emergency vehicles. Do not use these areas for parking or storage of materials.
    - a. Schedule deliveries to minimize use of driveways and entrances.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
    - c. Schedule deliveries to avoid student pick up and drop off times.
  2. Do not allow equipment or operators to come within ten feet of power lines on the site. Adjust methods of demolition and construction accordingly to stay a safe distance from low or high voltage power lines.
  3. Move stored materials and equipment that interfere with operations of the Owner.



4. Protect surface improvements not included in scope of work including pavements, curbs, sidewalks, lawn and landscaped areas, utilities, etc.
5. Clean up daily refuse, rubbish, scrap materials, and debris caused by its operations. Present a neat, orderly, and controlled appearance of the site.
6. No access to the facility unless authorized. Do not utilize restrooms inside the facility. Provide a portable toilet and remain for the duration of the project.
7. Keep areas at the facility, except areas under construction, safely accessible to vehicles.
8. Perform Work in a way that does not restrict the site outside of the work area.

C. Transportation Facilities

1. Truck and equipment access:
  - a. Avoid traffic conflict with vehicles of the Owner's employees and customers and avoid over-loading of street and driveways elsewhere on the Owner's property, limit the access of trucks and equipment to the designated areas.
  - b. Provide adequate protection for curbs and sidewalks over which trucks and equipment pass to reach the job site.
2. Contractor's vehicles:
  - a. Require contractor's vehicles, vehicles belonging to employees of the contractor, and other vehicles entering the Owner's property in performance of the work the contract, to use only the designated access route.
  - b. Do not permit such vehicles to park on street or other area of the Owner's property except in the designated area.

D. Repair to the Owner and Engineer's satisfaction, or to restore to condition at the time of award of Contract, or to make restitution acceptable to the Owner, damages to surface improvements resulting from, or attributable to, the work operation.

1. Repair damaged concrete by replacing full sections of concrete between control/expansion joints.
2. Fill ruts in grass areas and grade to original conditions. Provide grass seed and straw.
3. Replace disturbed landscaping in mulched or natural areas.

## 1.9 NORTH CAROLINA K-12 SCHOOL POLICIES

- A. Tobacco Policy: The Owner has adopted a Tobacco Free Policy which applies to school property. This is a total ban on tobacco products including cigarettes, cigars, pipes, chewing tobacco, snuff, etc. Contractor is responsible for employee's actions while they are on school property. Failure to follow this policy constitutes a breach of contract and said contract may be terminated without penalty to the school system.

- B. Weapons and Explosives Policy: Excluding law enforcement, persons are prohibited from possessing, carrying, using or threatening to use, or encouraging another person to possess, carry, use or threaten to use, weapons or explosives on school property or while attending curricular or extracurricular activities sponsored by the school. This policy applies to weapons or explosives carried openly or concealed. For purposes of this policy, a weapon includes, but is not limited to gun, rifle, pistol or other firearm; or BB gun, stun gun, air rifle, air pistol, bowie knife, dirk, dagger, slingshot, leaded cane, switchblade knife, blackjack, metallic knuckles, razors and razor blades (except solely for personal shaving), fireworks, or sharp-pointed or edged instrument except instructional supplies, unaltered nail files and clips and tools used solely for preparation of food, instruction and/or maintenance on educational property. For purposes of this policy, an explosive includes, but is not limited to and dynamite cartridge, bomb, mine or powerful explosive as defined in N.C. G.S. 14-284.1. For purposes of this policy, school property is school building or bus, school campus, grounds, recreational area, athletic field, or other property owned, used or operated by The Board of Education. This policy does not apply to: 1) a weapon or explosive used solely for educational or school sanctioned ceremonial purposes, or used in a school approved program conducted under the supervision of an adult whose supervision has been approved by the school authority, or 2) firefighters, emergency personnel, North Carolina Forest Service personnel, and private police employed by the School Board, when acting in the discharge of their official duties.
- C. Criminal Record Investigation: When requested by Owner, obtain a county, state and national criminal history covering the past ten years on contractor applicant or contractor employee, hereafter called prospective worker, providing services to Owner. As a minimum, criminal information sources include State and National access to the SBI/DCI Criminal History Record Information for the prospective worker's residence(s), past ten years and fingerprints forwarded to the Federal Bureau of Investigation for the search. Previously conducted criminal histories more than one year old are required to be updated. Provide a Criminal Histories Report two weeks prior to arriving "on-site" and update report monthly for new hires. Prospective workers who refuse to provide fingerprints and/or consent to the Criminal Background checks or who have been convicted of sexual deviance, sexual crime, domestic violence, violence against another human being, larceny, alcohol/drug trafficking, alcohol/drug abuse or other disqualifying offense as determined by the Owner, are not be allowed on the property.
- D. Conduct Policy: The conduct of contractor employees to be exemplary; profanity, drinking, lewd or suggestive comments or gestures or other acts of this nature are not tolerated.
- E. Drug Free Policy: Owner conforms to a drug free policy. Contractor employee must be tested upon request of Owner and results provided to Owner. If the employee is found to have been under the influence or using drugs, it constitutes a breach of contract and said contract may be terminated without penalty to the school system.
- F. Dress Code Policy: Shirts and shoes are required, as well as long pants. Identification of employees, vehicles, uniforms, etc. is required when indicated.

#### **END OF SECTION**

## **SECTION 01 21 00**

### **ALLOWANCES**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Administrative and procedural requirements governing allowances.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section, including but not limited to:
  - 1. Section 31 00 00 - Earthwork
  - 2. Section 32 12 16 - Asphalt Paving
  - 3. Section 32 17 23 - Pavement Markings

##### **1.3 ABBREVIATIONS**

- A. Abbreviations for typical units of measurement:
  - 1. Square Foot (SF)
  - 2. Square Yard (SY)
  - 3. Cubic Foot (CF)
  - 4. Linear Foot (LF)
  - 5. Each (EA)
  - 6. Tonnage (TON)

##### **1.4 QUANTITY ALLOWANCES**

- A. Include the specified quantity allowances in the base bid. Use the unit price submitted on the Bid Form to compute the quantity allowances. The quantities indicated on the Bid Form are estimated quantities only for the purpose of comparing bids. Compensation for the unit price bid made for the exact quantity of work performed under the unit price item. Deductive amounts of unit price work included in the Contract Sum are calculated at 100% of the quoted add unit price.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION**

##### **3.1 SCHEDULE OF ALLOWANCES**

- A. Quantity Allowances:

1. Undercut/Mill and Provide 70 TONS of Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material.

**END OF SECTION**

## **SECTION 01 22 00**

### **UNIT PRICES**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Administrative and procedural requirements for unit prices.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section, including but not limited to:

1. Section 31 00 00 - Earthwork
2. Section 32 12 16 - Asphalt Paving
3. Section 32 17 23 - Pavement Markings

##### **1.3 DEFINITION**

A. Unit price is an amount proposed by Bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

##### **1.4 ABBREVIATIONS**

A. Abbreviations for typical units of measurement:

1. Square Foot (SF)
2. Square Yard (SY)
3. Cubic Foot (CF)
4. Linear Foot (LF)
5. Each (EA)
6. Tonnage (TON)

##### **1.5 UNIT PRICE MEASUREMENT**

- A. Prior to performing work under a unit price as specified herein, notify the Engineer to allow for measurement of the actual quantities of work. Work performed under these items without prior approval and measurement is at the Contractor's expense.
- B. Maintain a daily log including visual documentation (i.e. digital photographs) showing dates, location and exact quantities of unit price work.

- C. Owner and Engineer reserve the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent party.

## **1.6 UNIT PRICE PAYMENT**

- A. Include in unit prices costs associated with performing the unit price work including but not limited to labor, material, equipment, insurance, applicable taxes, overhead and profit, bonds, etc.

## **1.7 UNIT PRICE PERFORMANCE**

- A. Install unit price work in accordance with the applicable specification sections and Contract Drawings.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 SCHEDULE OF UNIT PRICES**

- A. Provide a unit price for:
  - 1. Place and Grade ABC Stone. Furnishing, mobilizing, placing, and grading of material is included. Unit of Measurement: TON.
  - 2. Place and Grade Washed #57 Stone. Furnishing, mobilizing, placing, and grading of material is included. Unit of Measurement: TON.
  - 3. Undercut/Mill and Provide Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material. Unit of Measurement: TON
  - 4. Provide 4-inch wide Striping. Unit of Measurement: LF
  - 5. Reclaim Existing Material. Reclaim to a depth of approximately 10 inches. Include fine grading, proper compacting, and hauling and standard disposal of approximately 1 to 2 inches of material. Include an additional mobilization and assume a minimum 150 SY of additional Reclaim. Unit of Measurement: SY
  - 6. Provide 4-inch Sidewalk. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material. Unit of Measurement: SF
  - 7. Provide Curb and Gutter. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material. Unit of Measurement: LF
  - 8. Provide Concrete Wheel Stop. Include the related cost for furnishing, mobilizing, and installing of the wheel stop.. Unit of Measurement: EA

### **END OF SECTION**

## **SECTION 01 23 00**

### **ALTERNATES**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Administrative and procedural requirements for alternates.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 DEFINITIONS**

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction or in the products, materials, equipment, systems or installation methods described in the Contract Documents.

##### **1.4 ALTERNATES**

- A. Indicate on the Bid Form whether the alternate bid amount is to added to or deducted from the base bid in the event the alternate bid is accepted.
- B. The Owner reserves the right to accept or reject any or all of the alternate bids.
- C. Responsible for determining to his own satisfaction and for his own purposes the limits and extent of the work affected by the alternate bids and to make proper allowance therefore in the submission of alternate bid.
- D. Include the cost of each alternate bid as specified in the technical specification sections and as described on the drawings. Perform work required by the alternate bids in accordance with applicable specifications and drawings of the trade section affected.
- E. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate selected alternates into the Work. No other adjustments are made to the Contract Sum.
- F. The Owner reserves the right to delay the acceptance of the alternate bids during the bid holding period prior to accepting the contract without a change in the dollar amount of the alternate bids.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION**

**3.1 SCHEDULE OF ALTERNATES**

A. Alternate No. 1: Re-Surface Pavement

**END OF SECTION**



## SECTION 01 26 00

### CONTRACT MODIFICATION PROCEDURES

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. Section Includes:

1. Administrative and procedural requirements for handling and processing Contract modifications.

##### 1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### 1.3 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: A detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time will be issued by the Engineer along with supplemental or revised Drawings and Specifications.

1. Proposal Requests issued by Engineer are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
2. Within 5 days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
  - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits. If requested, furnish survey data to substantiate quantities.
  - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - c. Include costs of labor and supervision directly attributable to the change.
  - d. Include an updated Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, propose changes by submitting a request for a change to Engineer.

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.

2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits. If requested, furnish survey data to substantiate quantities.
  3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  4. Include costs of labor and supervision directly attributable to the change.
  5. Include an updated Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  6. Comply with requirements in Division 1 if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Approval:
1. If sufficient contingency allowance funds remain, written approval will be provided by the Engineer in the form of an Allowance Authorization signed by the Engineer, Contractor and Owner.
  2. If contingency allowance funds are not available; upon approval by Owner, written approval will be provided by the Engineer in the form of a Change Order as provided in the Conditions of the Contract.
    - a. Form of Change Order: Owner or Engineer Standard Form submitted by the Engineer signed by the Contractor and Owner.
    - b. Do not commence work or purchase materials for such change orders until written approval is received in the form of an executed Allowance Authorization or Change Order.
    - c. An executed Change Order is the only legal document which can change the Contract Sum or Time.

#### **1.4 SUPPLEMENTAL INSTRUCTIONS**

- A. Supplemental instructions authorizing minor changes in the Work, not involving an adjustment to the Contract Sum or Contract Time, will be issued by the Engineer on Engineer's Supplemental Instructions form.

#### **1.5 CONSTRUCTION CHANGE DIRECTIVE**

- A. Construction Change Directive: When the Owner and Contractor are not in total agreement on the terms of a Proposal Request; the Engineer may issue a Construction Change Directive on Engineer's Standard Form, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
1. The Construction Change Directive will contain a description of the change in the Work and designate the method followed to determine the change in the Contract Sum or Contract Time.

2. Submit unit costs, equipment rates and labor rates as requested by the Engineer and agree upon submitted rates before the work progresses unless directed to proceed in the absences of an agreement or in an emergency.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive. Provide a copy of those records the Engineer.
1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

**END OF SECTION**

## **SECTION 01 31 00**

### **PROJECT MANAGEMENT AND COORDINATION**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

**A. Section Includes:**

1. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - a. Project Schedule
  - b. General project coordination procedures.
  - c. Coordination.
  - d. Administrative and supervisory personnel
  - e. Project meetings

##### **1.2 RELATED DOCUMENTS**

- A.** Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 COORDINATION**

- A.** Coordinate construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Coordinate its operations with those included in different Sections that depend on each other for proper installation, connection, and operation.
1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
  3. Make adequate provisions to accommodate items scheduled for later installation.
- B.** Coordinate the scheduling and sequence of operations with the Owner and Engineer.
- C.** If necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

- D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Construction Schedule.
  2. Preparation of the Schedule of Values.
  3. Installation and removal of temporary facilities and controls.
  4. Delivery and processing of submittals.
  5. Progress meetings.
  6. Pre-Construction conference.
  7. Pre-installation conferences.
  8. Project closeout activities.

#### **1.4 PROJECT MEETINGS**

A. Pre-Construction Meeting

1. A Pre-Construction Meeting will be scheduled as soon as possible after the award of the contract. The Engineer's Representative will compile minutes of the meeting and will furnish a copy of the minutes to each person present.
2. Attendance: Project Manager, Job Superintendent and Job Foreman, Owner, Engineer's Representative, manufacturer's representatives, installers of related work and other persons concerned with the installation and performance.
  - a. Provide 3 telephone numbers to contact the Contractor or his authorized representative in the event of an emergency after normal business hours.
3. Minimum Agenda: Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers, and the Project Manager; channels and procedures for communication; construction schedule, including sequence of critical work; contract documents, including distribution of required copies of Drawings and revisions; processing of Shop Drawings and other data submitted to the Project Manager for review; rules and regulations governing performance of the work and procedures for safety, first aid, security, quality control, housekeeping and related matters.

B. Substantial Completion Inspection Meeting

1. Scheduled by Owner and Engineer upon written notification of substantial completion of work from the Contractor.
2. Attendance: Owner, Engineer, Contractor, material manufacturer.
3. Minimum Agenda: Walkover inspection, verification of substantial completion, identification of punch list items and identification of problems potentially impeding issuance of warranties.

C. Final Inspection Meeting

1. Scheduled by Owner and Engineer upon written notification of final completion of work from the Contractor.
2. Attendance: Owner, Engineer, Contractor.
3. Minimum Agenda: Verification of final completion including the completion of the punch list items.

**END OF SECTION**

## **SECTION 01 33 00**

### **SUBMITTAL PROCEDURES**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 SUBMITTAL PROCEDURE**

- A. General: The Contractor is responsible for providing the submittals to the Engineer. Each submittal is required to be accepted in writing prior to commencement of work.
- B. Submission Requirements:
1. Submit required submittals electronically in pdf format to the Engineer for review. The submittals will then be returned electronically to the Contractor with comments. Final submittals require written responses to submittal comments.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as specified below, commencing on Engineers receipt of submittal.
1. Initial Review: Allow 7 work days for initial review of submittals.
  2. Allow 7 work days for processing each resubmittal.
  3. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
- D. Identification:
1. Submit as one pdf file with bookmarks for each scheduled item.
- E. Deviations: Highlight, encircle, or otherwise identify deviations from the Contract Documents on submittals and provide letter describing in detail proposed changes, substitutions, or deviations from the project or manufacturers specifications. Include a written explanation of why substitutions should be considered under the appropriate tab.
- F. Transmittal: Package submittals appropriately for transmittal. Engineer will discard submittals received from sources other than Contractor. Include Contractors certification stating that information submitted complies with requirements of the Contract Documents.
- G. Use for Construction: Use only final submittals with mark indicating action taken by Engineer in connection with construction.

## **1.4 SCHEDULE OF SUBMITTALS**

- A. Refer to the applicable specification section for list of submittal requirements for each section.
- B. Submit the following submittal items electronically with a title page and/or pdf bookmark for each submittal item to meet the requirements specified herein:
  - 1. Owner/Contractor Agreement:
    - a. Copy of Executed Owner/Contractor Agreement
    - b. Copy of Contractors Certificate of Insurance
  - 2. Section 01 14 00 - Work Restrictions
  - 3. Section 01 31 00 - Project Management and Coordination
  - 4. Section 01 77 00 - Closeout Procedures
  - 5. Section 31 00 00 - Earthwork
  - 6. Section 31 01 16.71 - Cold Milling Asphalt Pavement
  - 7. Section 32 01 16.73 - In Place Cold Reused Asphalt Paving
  - 8. Section 32 12 16 - Asphalt Paving
  - 9. Section 32 17 23 - Pavement Markings
  - 10. Shop Drawings: Shop drawings or letter stating installation of materials as detailed in the Contract Drawings unless properly authorized by the Engineer.
  - 11. Existing Damage Documentation: Existing damaged/dysfunctional components documentation (videotape, photos, etc.) including but not limited to asphalt spills, windows, walls, sidewalks, paving, ceilings, etc. Lack of submission prior to commencement of work indicates no existing damaged components and Contractor takes responsibility for damages caused by operations.

## **PART 2 PRODUCTS**

### **2.1 SUBMITTALS**

- A. General: Prepare and submit Submittals required herein and by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  - 1. If information is specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
  - 2. Mark each copy of each submittal to show which products and options are applicable.
  - 3. Include the following information, as applicable:



- a. Manufacturers written recommendations.
  - b. Manufacturers product specifications.
  - c. Manufacturers installation instructions.
  - d. Manufacturers catalog cuts.
  - e. Wiring diagrams showing factory-installed wiring.
  - f. Printed performance curves.
  - g. Operational range diagrams.
  - h. Compliance with recognized trade association standards.
  - i. Compliance with recognized testing agency standards.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
- 1. Preparation: Include the following information, as applicable: dimensions, identification of products, fabrication and installation drawings, schedules, coordination requirements and notation of dimensions established by field measurements.
  - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.
- D. Samples: Prepare physical units of materials or products, including the following:
- 1. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from the same material used for the Work, cured and finished in manner specified, and physically identical with the product proposed for use, and that show range of color and texture variations expected. Samples include, but are not limited to, partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
  - 2. Submit three sets of Samples. Engineer will retain two Sample sets; remainder will be returned.
  - 3. Preparation: Mount, display, or package Samples in manner specified to facilitate review of qualities indicated. Prepare Samples to match Engineers sample where so indicated. Attach label on unexposed side.
  - 4. Submit Samples for review of kind, color, pattern, and texture for a final check of these characteristics with other elements and for a comparison of these characteristics between final submittal and component as delivered and installed.
  - 5. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity and used to determine final acceptance of construction associated with each set.

- E. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of engineers and owners, and other information specified.
- F. Product Certificates: Prepare written statements on manufacturers letterhead certifying that product complies with requirements.
- G. Installer Certificates: Prepare written statements on manufacturers letterhead certifying that Installer complies with requirements and, where required, is authorized for this specific Project.
- H. Manufacturer Certificates: Prepare written statements on manufacturers letterhead certifying that manufacturer complies with requirements. Include evidence of manufacturing experience where required.
- I. Material Certificates: Prepare written statements on manufacturers letterhead certifying that material complies with requirements.
- J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.
- K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- L. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software used for calculations. Include page numbers.
- M. Manufacturer's Instructions: Prepare written or published information that documents manufacturers recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer.
- N. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, and term of the coverage.

## **PART 3 EXECUTION**

### **3.1 CONTRACTORS REVIEW**

- A. Review each submittal, check for compliance with the Contract Documents and note corrections and field dimensions prior to submitting to Engineer.

### **3.2 ENGINEERS ACTION**

- A. Submittals: Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Engineer will stamp each submittal item with an action stamp and will mark stamp appropriately to indicate action taken.

- B. Submittals not required by the Contract Documents will not be reviewed and may be discarded.

**END OF SECTION**

## SECTION 01 40 00

### QUALITY REQUIREMENTS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. This Section includes administrative and procedural requirements for quality assurance and quality control.
  - 2. Secure and pay costs of licenses and permits required by City, County and/or State authorities.
    - a. Permits and approvals may include but are not limited to grading, demolition, zoning, building, driveway, detention, subdivision, special use, sewer, and water.

##### 1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### 1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction comply with requirements. Services do not include contract enforcement activities performed by Engineer.
- C. Authority Having Jurisdiction: AHJ

##### 1.4 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Engineer.

##### 1.5 SUBMITTALS

- A. Permit: Provide copy of construction permits and approvals along with required licenses or certifications required by the AHJ.

##### 1.6 QUALITY ASSURANCE

- A. Perform quality assurance in accordance with governing Codes, referenced standards, established standards, or industry standards.

- B. Solely responsible for supervising and directing the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise necessary to perform the Work in accordance with the Contract. Solely responsible for the means, methods, techniques, sequences and procedures of construction and for coordinating portions of the Work under the Contract, except where otherwise specified in the Contract Documents. Solely responsible to the Owner that the finished Work complies with the Contract Documents.
- C. It is the intent under this contract that workmanship be of the best quality consistent with the materials and construction methods specified. The presence or absence of the Owner's or Engineer's representative in no way relieves the Contractor of his responsibility to furnish materials and construction in compliance with the drawings and specifications. The Owner and Engineer have the authority to judge the quality and require replacement of unacceptable work or personnel.
- D. Cooperate in the execution of work and plan work in such manners as to avoid conflicting schedules or delay of work. If the work depends upon the work of another Contractor, report defects affecting the work to the Engineer. Commencement of work where such condition exists constitute acceptance of the other Contractor's work as being satisfactory to receive the work commenced. Coordinate work of trades under this contract in such a manner to obtain the best possible workmanship for the project. Install components of the work in accordance with the best practices of the particular trade. Notify the Owner sufficiently in advance of operations to allow for assignment of personnel.
- E. Solely responsible for health and safety precautions and programs for workers and others in connection with the Work. No inspection by, knowledge on the part of, or acquiescence by the Engineer, the Owner, the Owner's employees and agents, or other entity whatever relieves the Contractor from its sole responsibility for compliance with the requirements of the Contract or its sole responsibility for health and safety programs and precautions.
- F. Materials or methods described by words which, when applied, have a well-known technical or trade meaning are held to refer to such recognized standard. Standard specifications or manufacturer's literature, when referenced, are of the latest revision or printing unless otherwise stated, and are intended to establish the minimum requirements acceptable.
- G. Maintain one set of the contract documents and accepted submittals at the job site.
- H. Provide new materials unless otherwise indicated.
- I. Provide workmanship in accordance with the best modern practice.
- J. When special makes or grades of material which are normally packaged by the supplier or manufacturer are specified or accepted, deliver materials to the site in original packages or containers with seals unbroken and labels intact and do not open until reviewed and accepted by the Engineer. Notify the Engineer prior to such material's delivery.
- K. Verify dimensions and conditions at the site prior to starting work and notify the Engineer immediately of any errors or inconsistencies.
- L. Correct deficiencies identified by Engineer and non-conforming work within 24 hours of receipt of notification, either verbally or written, and submit a plan of action for addressing the deficiencies and non-conforming work. Do not proceed with further tear-off or commencement of other work until deficiencies and non-conforming work are properly addressed.

M. Control of Installation

1. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
2. Comply with manufacturers' instructions, including each step in the sequence
3. Request clarification from Engineer before proceeding in the event manufacturers' instructions conflict with Contract Documents.
4. Comply with specified standards as the minimum quality for the Work, except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
5. Only allow Work performed by person qualified to produce workmanship of specified quality.
6. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

N. Tolerances:

1. Monitor tolerance control of installed products to produce acceptable work. Do not permit tolerances to accumulate.
2. Comply with manufacturers' tolerances. Request clarification from Engineer in the event manufacturers' tolerances conflict with Contract Documents.
3. Adjust products to appropriate dimensions; position before securing products in place.

O. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

1. Maintain applicable federal, state and municipal licenses.
2. Have a minimum of 5 years' experience in installing the same or similar materials specified under the same firm name as that submitting the bid. If requested, submit a copy of firm's Articles of Incorporation to verify years in business. Crew workers on site are experienced and have a working knowledge of the system being installed.
3. Principals of the firm to have a minimum of 10 years' experience in the estimating, supervision, management and administration of a contracting firm engaged in work similar to work as specified.
4. Licensed by state work is occurring in for the type and dollar amount of work contemplated by these Contract Documents.
5. Never filed bankruptcy or filed for protection from creditors.

6. During the construction and completion of work covered by these Specifications, if the conduct of workers of the various crafts is determined unsuitable or a nuisance to the Owner or Engineer, or if the workman is considered incompetent or detrimental to the work, order such party removed from the grounds with the person not returning during the course of work on the project.
7. Superintendent: During the performance of work by the Contractor or subcontractors, provide an on site superintendent/representative meeting the following requirements:
  - a. For the purpose of these Specifications the designation "superintendent" is hereby defined as the individual present on the job site while work is being performed, and whose primary responsibility is to supervise and direct the performance of the Work.
  - b. Be in attendance at the project site during the progress of the work and duties as superintendent limited to this project only. Supervise and instruct workmen without engaging in the work process. If superintendent is absent temporarily from the project, designate a competent foreman to assume duties. During the superintendent's absence, foreman cannot engage in the work process; supervise and instruct only. Likewise, communications given to the foreman are binding as if given to the Contractor.
  - c. Communicate matters pertaining to the Work with the Owner and Engineer. Do not make decisions regarding changes in the Work without the Owner and Engineer's knowledge.
  - d. Decision making authority and ability.
  - e. Able to demonstrate knowledge of work being installed.
  - f. Fluent in the English language (reading, writing and speaking).
  - g. In possession of mobile telephone.
  - h. Employed by the Contractor at least six months prior to project commencement.

## **1.7 QUALITY CONTROL**

- A. The authorized representatives and agents of Owner permitted to inspect work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records.
- B. Owner Responsibilities:
  1. Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
    - a. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of the types of testing and inspecting they are engaged to perform.
- C. Contractor Responsibilities:

1. Repair and protection of work and materials.
2. Replace work or materials not conforming with requirements of the Specifications or damaged during the progress of the work before completion and acceptance of the project.
3. Coordinate documents with manufacturer and perform such testing, reporting, and communication incidental to provisions of the warranty procedures.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 REPAIR AND PROTECTION**

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

**END OF SECTION**



## **SECTION 01 42 00**

### **REFERENCE STANDARDS**

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Requirements relating to referenced standards.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 REFERENCE STANDARDS**

- A. Reference standards are specified in Part 1 of the applicable specification section.
- B. For products or workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- C. Comply with the reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- D. Should specified reference standards conflict with Contract Documents, request clarification from the Engineer before proceeding.
- E. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of the Engineer shall be altered by Contract Documents by mention or inference otherwise in any reference document.

##### **1.4 BUILDING CODE**

- A. Comply with the building code and energy conservation code/standard in effect in North Carolina and current on date of Contract Documents.
  - 1. 2018 North Carolina Building Code
  - 2. 2018 North Carolina Energy Conservation Code

**END OF SECTION**

## SECTION 01 50 00

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.

##### 1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### 1.3 REFERENCE STANDARDS

- A. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

##### 1.4 USE CHARGES

- A. Include in Contract, cost or use charges for temporary facilities which are not chargeable to Owner. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, occupants of testing and inspecting agencies and personnel of authorities having jurisdiction.

##### 1.5 QUALITY ASSURANCE

- A. Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241 .
- B. Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70 .
- C. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- D. Develop and supervise an overall fire-prevention and first-aid fire-protection program for personnel at Project site. Review needs with local fire department and establish procedures. Instruct personnel in methods and procedures. Post warnings and information.

#### PART 2 PRODUCTS

##### 2.1 MATERIALS

- A. General: Provide new materials or utilize undamaged, previously used materials in serviceable condition if accepted by Engineer. Provide materials suitable for use intended.

- B. Water: Potable.
- C. Self-Contained Toilet Units: Single-occupant units of chemical, aerated recirculation, or combustion type; vented; enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material with a self-contained or standalone exterior handwashing station.
- D. Electrical Outlets: Properly configured, NEMA-polarized outlets to prevent insertion of 110 to 120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button, and pilot light.
- E. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure and the requirements of the local Governing agency.

## **PART 3 EXECUTION**

### **3.1 TEMPORARY UTILITIES**

- A. Water Service: Obtain water from an appropriately metered public water hydrant.
- B. Electrical Power Service: Provide portable generators for electrical power requirements.
  - 1. Electric Distribution: Provide receptacle outlets adequate for connection of power tools and equipment. Provide waterproof connectors to connect separate lengths of electrical power cords if single lengths do reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.

### **3.2 CONSTRUCTION FACILITIES**

- A. Temporary construction facilities include the following:
  - 1. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities. Located facilities at sites approved by Owner. Access inside the facility is not available.
    - a. Disposable Supplies: Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Maintain adequate supply. Provide covered waste containers for disposal of used material.
    - b. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy.
    - c. Wash Facilities: Provide adequate hand washing stations.
    - d. Drinking-Water Facilities: Provide bottled-water, drinking-water units.
  - 2. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations at a location approved by the Owner. Containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from other waste. Use of Owner's waste disposal facilities is not acceptable.
    - a. If required by authorities having jurisdiction, provide separate containers, clearly labeled, for each type of waste material.

### **3.3 TEMPORARY BARRIERS AND ENCLOSURES**

- A. Provide temporary barriers and enclosures for protection from exposure, foul weather, construction operations and other activities. Protect buildings and grounds from damages during construction.
- B. Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard. Where appropriate and needed, provide lighting, including flashing red or amber lights.
- C. Provide security controls to protect work and materials at the project site.
- D. Provide fencing to enclose the materials storage and staging area.
- E. Provide and maintain suitable temporary sidewalks, closed passageways, fences, or other structures required by law so as not to obstruct or interfere with traffic in public streets, alley ways, or private right-of-way. Leave an unobstructed way along public and private places for pedestrians and vehicles.
- F. Provide walks over and around all obstructions in public places. Maintain sufficient light and guards to protect persons from injury.
- G. Provide emergency egress from existing occupied areas at all times as required by AHJ. Maintain egress path in compliance with requirements of the applicable building code.

### **3.4 PROTECTION FACILITIES INSTALLATION**

- A. Provide environmental protection by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Provide Erosion Control Measures:
  - 1. Provide silt fence in landscaped areas and gravel areas downstream from disturbed subgrade.
  - 2. Provide wattles along pavement surfaces downstream from disturbed subgrade.
  - 3. Provide silt sacks under storm grates collecting runoff from areas with disturbed subgrade.
- C. Provide premanufactured concrete washout apparatus or provide approved designated washout area.

### **3.5 TREE AND PLANT PROTECTION:**

- A. Contractors are hereby reminded and cautioned that care shall be exercised to protect trees and plants which are to remain during the progress of the Project. Suitable barriers shall be provided around all trees and plants that are to remain and which are in the construction area and product handling area. All damage to such trees and plants shall be repaired; broken limbs properly and neatly pruned and painted with pruning paint; all trunk damage neatly dressed and painted with pruning paint. Any trees and plants which are excessively damaged shall be replaced in like, kind, size, and species by The Contractor at no additional cost. All work shall be by a recognized and approved nursery.

1. All grading around trees and plants to remain shall be such that the root system shall not be disturbed. Earth shall not be temporarily piled around trees and plants, nor shall earth be graded to the trees and plants above the natural root depth for that particular species.
2. Established trees and plants, which are in the way of construction and which are in the material handling areas, shall be removed and stored for future replanting. The services of a recognized and approved nursery shall be employed to remove the trees and plants and prepare them for storage. Removed trees and plants shall be properly balled and burlapped in accordance with their size. During the time of storage, they shall be properly watered and cared for in accordance with the instructions from the nursery. After the construction work is completed, the stored trees and plants shall be replanted, and those trees and plants not replanted shall be disposed of as directed by the Owner. Provide storm water controls sufficient to prevent flooding from heavy rain.

### **3.6 PROJECT SIGNAGE**

- A. Provide temporary signs to provide information to building occupants directing them away from construction operations.
- B. Provide signage inside adjacent buildings alerting occupants of the Work Area.

### **3.7 VEHICULAR ACCESS AND PARKING**

- A. Parking for vehicles available only in the approved Set-up and Staging area. No other vehicle parking on site is allowed.
- B. Owner Personnel vehicles will be removed from the construction area prior to the start of construction.

### **3.8 TRAFFIC CONTROLS**

- A. Obtain and erect street/parking lot signage as necessary to divert traffic away from staging areas, work area, etc. Coordinate signage requirements with the Owner and Engineer.
- B. Provide temporary traffic controls at junction of temporary roads with public roads. Include warning signs for public traffic and "STOP" signs for entrance onto public roads. Comply with requirements of authorities having jurisdiction.
- C. Obey speed limit of 5 mph for construction vehicles.

**END OF SECTION**

**SECTION 01 73 00**  
**EXECUTION REQUIREMENTS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. General procedural requirements governing execution of the Work.

**1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**1.3 SUBMITTALS**

- A. List of Materials on the project site including manufacturer name and product name.
- B. Safety Data Sheets (SDS):
  - 1. Safety Data Sheets (SDS) for materials/products anticipated for use and stored or brought to the site for completion of this project.
  - 2. Maintain on site with the Superintendent a set of SDS for products/materials on site.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

- A. Material storage area designated by the Owner at the Pre-Bid and Pre-Construction Meetings and/or indicated in Contract Drawings.
  - 1. Store materials as required by the manufacturer and indicated in their installation instructions.
  - 2. Store materials as required by their respective specification section.
  - 3. Properly secure materials to resist wind events.
- B. Deliver and transport materials to project in accordance with the Owner's requirements and coordinate material deliveries with Owner.

**PART 3 EXECUTION**

**3.1 EXAMINATION**

- A. Existing Conditions:
  - 1. The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of construction affecting the Work.

- B. Existing Utilities:
  - 1. The existence and location of utilities and construction indicated as existing are not guaranteed.
  - 2. Before construction, verify the location and points of connection of utility services.
  - 3. Before beginning work, investigate and verify the existence and location of utilities and other construction affecting the Work.
- C. Acceptance of Conditions:
  - 1. Examine areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance.
  - 2. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include a description of the work, a list of detrimental conditions, list of unacceptable installation tolerances and recommended corrections.
  - 3. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### **3.2 PREPARATION**

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each material. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Upon discovery of the need for clarification of the Contract Documents, submit a request for information to Engineer. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

### **3.3 INSTALLATION**

- A. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
- B. Install products at the time and under conditions that ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- C. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

### **3.4 STARTING AND ADJUSTING**

- A. Test equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

### **3.5 PROTECTION OF INSTALLED CONSTRUCTION**

- A. Provide protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

### **3.6 CORRECTION OF THE WORK**

- A. Restore permanent facilities used during construction to their specified condition.
- B. Replace components that are not up to specification standards.

**END OF SECTION**



## **SECTION 01 74 00**

### **CLEANING AND WASTE MANAGEMENT**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Administrative and Procedural requirements for progress cleaning and construction waste management.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 REFERENCE STANDARDS**

A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

##### **1.4 DEFINITIONS**

- A. Waste: Material that has reached the end of its intended use. Waste includes salvageable, returnable, recyclable and reusable material.
- B. Construction waste: Solid wastes including, but not limited to, building materials, packaging materials, debris and trash resulting from construction operations.
- C. Salvage: To remove a waste material from the Project site to another site for resale or reuse by others.
- D. Hazardous waste: Material or byproduct of construction that is regulated by the Environmental Protection Agency and cannot be disposed in a landfill or other waste end-source without adherence to applicable laws.
- E. Trash: Product or material unable to be returned, reused, recycled or salvaged.
- F. Landfill: Public or private business involved in the practice of trash disposal.

#### **PART 2 PRODUCTS**

##### **2.1 MATERIALS**

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or cause damage to finished surfaces.

## **PART 3 EXECUTION**

### **3.1 PROGRESS CLEANING**

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials in a legal manner.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F.
  - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
  - 1. Remove liquid spills promptly.
  - 2. Where dust impairs proper execution of the Work, broom-clean or vacuum the work area, as appropriate.
  - 3. If necessary, have a heavy-duty vacuum on site to remove small, loose debris from work area.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and do not damage exposed surfaces.
- E. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Final Acceptance.
- F. Waste Disposal: Burying or burning waste materials on-site is not permitted. Washing waste materials down sewers or into waterways is not permitted.
- G. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Final Acceptance.
- H. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- I. Limiting Exposures: Supervise construction operations to ensure that no part of the construction completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

### **3.2 DISPOSAL OF WASTE**

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
  - 1. Except as otherwise specified, do not allow waste materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that prevents spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Remove waste materials from Owner's property and legally dispose of them.
- D. Separate, store and dispose of hazardous wastes in accordance with local and EPA regulations and additional criteria listed below:
  - 1. Do not incinerate building products manufactured with PVC or containing chlorinated compounds.
  - 2. Disposal of fluorescent tubes to open containers is not permitted.
  - 3. Do not co-mingle unused fertilizers with construction waste.

### **3.3 FINAL CLEANING**

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting Substantial Completion.
  - 2. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including, waste material, litter, and other foreign substances.
  - 3. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
  - 4. Remove tools, construction equipment, machinery, and surplus material from Project site. Properly dispose of unwanted surplus material.
  - 5. Clean exposed exterior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
  - 6. Remove labels that are not permanent.
  - 7. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess foreign substances.

8. Replace parts subject to unusual operating conditions.
  9. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

**END OF SECTION**

**SECTION 01 77 00**  
**CLOSEOUT PROCEDURES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
    - a. Inspection Procedures
    - b. Project Record Documents
    - c. Warranties

**1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**1.3 SUBMITTALS**

- A. Warranties: Submit copy of warranties to meet the requirements of their respective specification section.

**1.4 SUBSTANTIAL COMPLETION**

- A. Submit written certification to the Engineer that the Project is substantially complete along with the following:
  - 1. Prepare a list of items to be completed and corrected (Contractor's punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Notify Owner of pending insurance changeover requirements.
  - 3. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 4. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 5. Notify Owner of changeover in heat and other utilities.
  - 6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
  - 7. Complete final cleaning requirements, including touchup painting.
  - 8. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- B. Substantial Completion Inspection: On receipt of written substantial completion certification, the Engineer will make a substantial completion inspection within 7 days after receipt of certification.
1. Should the Engineer consider the Work not substantially complete, he will notify the Contractor, in writing, stating the reasons. Complete the Work and send a second written notice to the Engineer, certifying the Project is substantially complete, at which time the Engineer will re-inspect the work.
  2. Should the Engineer consider the Work substantially complete, he will prepare and issue a Certificate of Substantial Completion accompanied by the list of items to be completed or corrected (Punch List).
  3. A punch list of items will be prepared for correction and completion before the Final Inspection. Complete the punch list items within 15 days of the punch list inspection. If the Contractor fails to complete the punch list within this period, the Owner has the right to impose liquidated damages in the amount of \$500.00 for each consecutive day until the items are completed.

## **1.5 FINAL COMPLETION**

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
1. Submit a final Application for Payment according to Division 01.
  2. Submit signed copy of Engineer's inspection list of items to be completed or corrected (punch list) certifying each item has been completed or otherwise resolved for acceptance.
  3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Final Inspection: The submission of the signed punch list constitutes as written request for final inspection for acceptance. On receipt of request, Engineer along with the Owner's Representative will conduct a final inspection within 7 days of receipt of certification.
1. Should the Engineer consider that the Work is finally complete in accordance with requirements of the Contract Documents, Project Closeout Submittals will be requested.
  2. Should the Engineer consider that the Work is not finally complete, notification to the Contractor, in writing, stating the reasons will be made.
  3. Take steps to remedy the stated deficiencies and send a second written notice to the Engineer certifying that the Work is complete, at which time the Engineer will re-inspect the Work.

## 1.6 PROJECT RECORD DOCUMENTS

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Engineer's reference during normal working hours.
  - 1. Submit required record documents and warranties within 30 days of the punch list inspection. If the Contractor fails to properly submit required items within this period, the Owner has the right to impose liquidated damages in the amount of \$500.00 for each consecutive day until the items are properly submitted.
- B. Record Drawings: Maintain and submit one set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
  - 1. Mark Record Prints to show where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
    - a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
    - b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
  - 2. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
  - 3. Note Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification where applicable.
  - 4. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.
- C. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
  - 3. Note related Change Orders and Record Drawings, where applicable.
- D. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
  - 1. Completed and signed Engineer's Punch List

## **1.7 WARRANTIES**

- A. Warranties to commence on the date of Substantial Completion of the project.
- B. Two Year Warranty: Manufacturer's Representative and Contractor's Representative will attend post construction field inspection no earlier than one month prior to the expiration date of the Contractor's Warranty. Submit a written report within 7 days of the site visit to the Engineer listing observations, conditions and recommended repairs or remedial action.

**END OF SECTION**



## **SECTION 31 00 00**

### **EARTHWORK**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Excavate and/or backfill to accommodate the installation of flexible or rigid pavement system.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections apply to this Section:

1. Section 32 12 16 - Asphalt Paving

##### **1.3 REFERENCE STANDARDS**

- A. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)); 2012 (Reapproved 2021).
- B. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)); 2012 (Reapproved 2021).
- C. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System); 2017, with Editorial Revision (2020).
- D. ASTM D2940/D2940M - Standard Specification for Graded Aggregate Material for Bases or Subbases for Highways or Airports; 2020.
- E. ASTM D4491/D4491M - Standard Test Methods for Water Permeability of Geotextiles by Permittivity; 2022.
- F. ASTM D4533/D4533M - Standard Test Method for Trapezoid Tearing Strength of Geotextiles; 2015 (Reapproved 2023).
- G. ASTM D4632/D4632M - Standard Test Method for Grab Breaking Load and Elongation of Geotextiles; 2015a (Reapproved 2023).
- H. ASTM D4751 - Standard Test Methods for Determining Apparent Opening Size of a Geotextile; 2021a.
- I. ASTM D4833/D4833M - Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products; 2007 (Reapproved 2020).

##### **1.4 DEFINITIONS**

A. Backfill: Soil materials used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
  2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Aggregate Base Course (ABC Stone): Well graded stone measuring up to 1 ½" in size.
- C. Bedding Course: Layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Drainage Course: Layer supporting slab-on-grade used to minimize capillary flow of pore water.
- F. Excavation: Removal of material encountered above subgrade elevations.
1. Additional Excavation: Excavation below subgrade elevations as directed by Engineer. Additional excavation and replacement material paid for according to Contract provisions for changes in the Work.
  2. Bulk Excavation: Excavations more than 10 feet in width and pits more than 30 feet in either length or width.
  3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, without additional compensation.
- G. Fill: Soil materials used to raise existing grades.
- H. Rock: Rock material in beds, ledges, unstratified masses, and conglomerate deposits and boulders of rock material exceeding 1 cu. yd. for bulk excavation or 3/4 cu. yd. for footing, trench, and pit excavation that cannot be removed by rock excavating equipment equivalent to the following in size and performance ratings, without systematic drilling, ram hammering, ripping, or blasting, when permitted:
1. Rock Excavation, Trench: Late-model, track-mounted hydraulic excavator; equivalent to Caterpillar Model N, 235D LC; measured according to SAE J-1179.
  2. Rock Excavation, Mass: Late-model, track-mounted loader with a hydraulically operated power ripper; equivalent to Caterpillar Model No. D-8N, Heavy Duty; measured according to SAE J-732.
  3. This classification does not include loose rock, concrete, or other materials that can be removed by means other than drilling and blasting, but which is chosen to remove by drilling and blasting.
- I. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- J. Subbase Course: Layer of standardized ABC Stone installed over the subgrade and prior to flexible or ridged pavement system.
- K. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill below subbase, drainage fill, or topsoil materials.

- L. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and other deleterious materials.
- M. Unsatisfactory Soils: ASTM D2487 soil classification groups MH, CL, CH, OL, OH, and PT, or a combination of these group symbols.
  - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- N. Utilities include on-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.
- O. Uncontaminated Stone: Rock material that has not been combined with a significant amount of foreign soils.

## **1.5 MATERIALS OWNERSHIP**

- A. Materials indicated to be stockpiled are the Owner's property.
- B. Store on site.

## **1.6 SUBMITTALS**

- A. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.
- B. Test Reports: Submit test reports indicating suitability of materials supplied from offsite.

## **1.7 PROJECT CONDITIONS**

- A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Owner and Engineer and then only after arranging to provide temporary utility services according to requirements indicated:
  - 1. Notify Engineer not less than two days in advance of proposed utility interruptions.
  - 2. Do not proceed with utility interruptions without Engineer's written permission.
  - 3. Contact utility-locator service for area where Project is located before excavating.

## **PART 2 PRODUCTS**

### **2.1 SOIL MATERIALS**

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: ASTM D2487 soil classification groups GC, SC, CL, ML, GW, GP, GM, SW, SP, and SM, or a combination of these group symbols; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Backfill and Fill: Satisfactory soil materials.

- D. Subbase: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2- inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- G. Bedding: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- H. Structural Fill and Backfill: Inorganic soil with a maximum particle size of no more than 3 inches, plasticity index of 20 or less, and maximum dry density of at least 90 pounds per cubic foot when tested by the Standard Proctor Method in accordance with ASTM D698.
- I. Rip Rap: Consist of quarry run stone, field stone or granite stone and classified by size into Class 1. Vary in weight from 5 to 200 pounds. At least 30% of the total weight of the rip rap in individual pieces weighing a minimum of 60 pounds. Not more than 10% of the total weight of the rip rap in individual pieces weighing less than 50 pounds.

## **2.2 ACCESSORIES**

- A. Drainage Fabric: Nonwoven geotextile, specifically manufactured as a drainage geotextile; made from polyolefins, polyesters, or polyamides; and with the following minimum properties determined according to ASTM D 4759 and referenced standard test methods:
  - 1. Grab Tensile Strength: 110 lbf; ASTM D4632/D4632M.
  - 2. Tear Strength: 40 lbf; ASTM D4533/D4533M.
  - 3. Puncture Resistance: 50 lbf; ASTM D4833/D4833M.
  - 4. Water Flow Rate: 150 gpm per sq. ft.; ASTM D4491/D4491M.
  - 5. Apparent Opening Size: No. 50; ASTM D4751.

## **2.3 SOURCE QUALITY CONTROL**

- A. Test off-site materials used for suitability under requirements of this section.

# **PART 3 EXECUTION**

## **3.1 PREPARATION**

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

- B. Protect subgrades and foundation soils against freezing temperatures or frost. Provide protective insulating materials as necessary.
- C. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- D. Provide one public and one private utility locates prior to the start of work. De-energize lines within 10 feet of the work and pothole for gauging proper depth.
  - 1. A vacuum truck is required for potholing within 10 feet of all utility lines.
  - 2. Potholed utilities to remain open and protected until demolition/grading is complete.
  - 3. Locate utilities within 10 days of work and refresh every 30 days.
  - 4. Inspect markings daily for signs of wear.
  - 5. Make markings clearly visible for the duration of the project.
  - 6. Stake whiskers in gravel areas to maintain visibility.
  - 7. Submit illustration of marked utilities prior to the start of construction.

### **3.2 DEWATERING**

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
  - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
  - 2. Install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering is no longer required.

### **3.3 EXPLOSIVES**

- A. Explosives: Do not use explosives.

### **3.4 TOPSOIL STRIPPING**

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.
  - 1. Strip surface soil of unsuitable topsoil, including trash, debris, weeds, roots, and other waste materials.
  - 2. Stockpile surplus topsoil and allow for re-spreading deeper topsoil.

### **3.5 EXCAVATION**

- A. Unclassified Excavation: Excavation to subgrade elevations regardless of the character of surface and subsurface conditions encountered, including rock, soil materials, and obstructions.
  - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
- B. Classified Excavation: Excavation to subgrade elevations classified as earth and rock. Rock excavation paid for by adjusting the Contract Sum according to unit prices included in the Contract Documents.
  - 1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; together with soil, boulders, and other materials not classified as rock or unauthorized excavation.
    - a. Intermittent drilling; blasting, if permitted; ram hammering; or ripping of material not classified as rock excavation is earth excavation.
  - 2. Rock excavation includes removal and disposal of rock.
    - a. Do not excavate rock until it has been classified and cross-sectioned by Owner's Geotechnical Representative.
- C. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. Extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
  - 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
  - 2. Excavation for Underground Basins, and Mechanical or Electrical Utility Structures: Excavate to elevations and dimensions indicated within a tolerance of plus or minus 1 inch. Do not disturb bottom of excavations intended for bearing surface.

### **3.6 SUBGRADE**

- A. Notify Engineer and Testing Agency when excavations have reached required subgrade.
- B. If Engineer or Testing Agency determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
  - 1. Additional excavation and replacement material paid for according to Contract provisions for changes in the Work.
- C. Proof roll subgrade and/or subbase with a 10 wheel loaded dump truck weighing a minimum 20 tons. Identify soft pockets and areas of excess yielding. Do not proof roll wet or saturated or frozen subgrades. Limit vehical speed to three miles per hour.
- D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities and retest, as directed by Engineer.

### **3.7 STORAGE OF SOIL MATERIALS**

- A. Stockpile fill and other satisfactory excavated soil materials. Stockpile soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

### **3.8 BACKFILL**

- A. Place and compact backfill in excavations promptly, but not before completing the following:
  - 1. Surveying locations of underground utilities for record documents.
  - 2. Inspecting and testing underground utilities.
  - 3. Removing concrete formwork.
  - 4. Removing trash and debris.
  - 5. Removing temporary shoring and bracing, and sheeting.

### **3.9 FILL**

- A. Preparation: Remove vegetation, topsoil, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface before placing fills.
- B. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material bonds with existing material.
- C. Place and compact fill material in layers to required elevations as follows:
  - 1. Use satisfactory soil material except where otherwise indicated.

### **3.10 MOISTURE CONTROL**

- A. Uniformly moisten or aerate subgrade and subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content or as accepted by Engineer.
  - 1. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
  - 2. Remove and replace, or scarify and air-dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

### **3.11 COMPACTION OF BACKFILLS AND FILLS**

- A. Place backfill and fill materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill materials evenly around structures to required elevations, and uniformly along the length of the structure.

- C. Compact soil to not less than the following percentages of maximum dry density according to ASTM D698:
  - 1. Under structures, building slabs and steps scarify and re-compact top 12 inches of existing subgrade and each layer of backfill or fill material at 98 percent. Compact other fill to 95 percent unless otherwise indicated.
  - 2. Under pavements, compact material to a depth of 8 inches below the finished surface of the subgrade to a density of at least 100% of that obtained by compacting a sample of the material in accordance with AASHTO T 99 as modified by the referenced DOT.
  - 3. Under walkways, scarify and re-compact top 6 inches below subgrade and compact each layer of backfill or fill material at 95 percent.
  - 4. Under lawn or unpaved areas, scarify and re-compact top 12 inches below subgrade and compact each layer of backfill or fill material at 90 percent.
  - 5. Compact utility trenches to 95 percent.

### **3.12 GRADING**

- A. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
  - 1. Provide a smooth transition between adjacent grades.
  - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
  - 1. Lawn or Unpaved Areas: Plus or minus 1 inch when tested with a 10-foot straightedge.
  - 2. Walks: Plus 1/2 inch or minus 1 inch when tested with a 10-foot straightedge.
  - 3. Pavements: Plus 1/4 inch or minus 1/2 inch when tested with a 10-foot straightedge.
- C. Grading inside Building Lines: Finish subgrade to a tolerance of plus 1/4 inch or minus 1/2 inch when tested with a 10-foot straightedge.

### **3.13 SUBBASE AND BASE COURSES**

- A. Under pavements and walks, place subbase course on prepared subgrade and as follows:
  - 1. Place base course material over subbase.
  - 2. Compact subbase and base courses at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 98 percent of maximum dry density according to ASTM D698.



3. Shape subbase and base to required crown elevations and cross-slope grades.
  4. When thickness of compacted subbase or base course is 6 inches or less, place materials in a single layer.
  5. When thickness of compacted subbase or base course exceeds 6 inches, place materials in equal layers, with no layer more than 6 inches thick or less than 3 inches thick when compacted.
- B. Pavement Shoulders: Place shoulders along edges of subbase and base course to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each subbase and base layer to not less than 95 percent of maximum dry density according to ASTM D1557.

### **3.14 DRAINAGE COURSE**

- A. Under slabs-on-grade, place drainage course on prepared subgrade and as follows:
1. Compact drainage course to required cross sections and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D698.
  2. When compacted thickness of drainage course is 6 inches or less, place materials in a single layer.
  3. When compacted thickness of drainage course exceeds 6 inches, place materials in equal layers, with no layer more than 6 inches thick or less than 3 inches thick when compacted.

### **3.15 RESPREADING TOPSOIL**

- A. Re-spread stockpiled topsoil in planted areas. Distribute stockpiled material in a uniform thickness as follows.
1. Lawn Areas: 4 inches minimum.
  2. Athletic Fields: 12 inches minimum.
  3. Planting Areas: 12 inches minimum.
- B. Adjust topsoil as required by Engineer following topsoil depth testing by Owner's testing representative.

### **3.16 PROTECTION**

- A. Protecting Graded Areas: Protect graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
1. Scarify or remove and replace soil material to depth as directed by Engineer; reshape and re-compact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.
- D. Install temporary erosion control measures as stated in Section 01 50 00 - Temporary Facilities and Controls.

### **3.17 DISPOSAL OF SURPLUS AND WASTE MATERIALS**

- A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

**END OF SECTION**

## **SECTION 32 01 16.71**

### **COLD MILLING ASPHALT PAVEMENT**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Cold mill asphalt pavement by way of a milling machine to depths as specified on the drawings.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections, apply to this Section:

1. Section 31 00 00 - Earthwork
2. Section 32 12 16 - Asphalt Paving

##### **1.3 DEFINITIONS**

A. Reclaimed Asphalt Pavement (RAP): The material produced as a result of cold milling asphalt pavement.

##### **1.4 SUBMITTALS**

A. Documentation designating a tonnage and signed by the recipient of RAP to be recycled.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION**

##### **3.1 EQUIPMENT**

- A. Use equipment with automatic grade and slope controls, capable of cold milling existing asphalt pavement to an accurate depth of cut, profile and cross slope and capable of loading the milled material directly into trucks.
- B. The cutting head of the cold milling machine minimum width of four feet.

##### **3.2 PROCEDURE**

- A. Cold milling asphalt pavement performed in a manner which prevents the tearing and breaking of underlying and adjacent pavement and the contamination of the RAP with granular, subgrade or deleterious materials.
- B. RAP loaded directly to trucks from the milling machine and hauled to stockpile or directly recycled.
- C. Sweep clean prior to opening to traffic. Sweep the surface in a manner which minimizes dust.

- D. Repair localized areas of distress in the milled surface that present a hazard to traffic.
- E. At the point of daily termination of cold milling operations, changes in surface profile or cross section limited to 1-1/2 inch and longitudinal transitions maximum of 1 inch vertically per 3 feet.
- F. In the event of rain or other inclement weather, suspend cold milling operations. Make necessary allowances for drainage of water that pond in areas where the milled sections have not been paved.

### **3.3 DISPOSAL**

- A. Except for material indicated to be recycled, remove excavated materials from project site and legally dispose of them in an EPA approved landfill.
- B. A minimum of 80% of the milled pavement documented as stockpiled or directly recycled; see Submittals for required documentation.

**END OF SECTION**

## **SECTION 32 01 16.73**

### **IN PLACE COLD REUSED ASPHALT PAVING**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Provide uniform mixture by pulverizing the asphalt pavement, stone base and subgrade materials to a specified depth. Treat the mixture with Portland Cement, mixing and compacting to obtain density requirements.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections apply to this Section.

##### **1.3 REFERENCE STANDARDS**

- A. AASHTO T 99 - Standard Method of Test for Moisture–Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop; 2022.
- B. Division 6 Asphalt Pavements and Division 10 Materials of the NCDOT Specifications

##### **1.4 DEFINITIONS**

- A. Full Depth Reclamation (FDR): The process of using the existing asphalt and earth materials to construct a uniform stable base for a pavement system.

##### **1.5 PROJECT CONDITIONS**

A. Environmental Requirements

1. Minimum ambient temperature of 40°F (5°C.) and rising.
2. Do not place or mix materials with frozen subgrade.

B. Protection

1. Protect the base from freezing for a period of seven days succeeding completion.
2. Regulate operations to limit the application of cement to sections small enough so that mixing, compacting, and finishing operations can be completed within the required time limit of 3 hours.

#### **PART 2 PRODUCTS**

##### **2.1 MATERIALS**

- A. Use existing material free from vegetation, roots, or other objectionable matter, and does not contain asphalt, aggregate or stone larger than 2 inches.

- B. Mix Design requires a rate of 46 lbs of cement per square yard of reclamation. Refer to referenced DOT requirements for Cement and Water Requirements.

## **2.2 EQUIPMENT**

- A. A self-propelled reclaimer, with minimum 400 hp, capable of reclaiming the asphalt to a depth of 12 inches and no less than 8 feet wide, is required. The reclaimer is also required to have a metered full-width spray bar system for adding water directly into the milling drum, and a breaker bar for use in conjunction with the milling drum.
- B. A cement spreader that has an adjustable rate of flow and the capability of spreading the required amount of cement in one pass. Correct leakage of fluids and/or materials promptly or replace such equipment with satisfactory equipment. Use equipment and methods for applying cement and water that does not damage the asphalt.
- C. A motor grader equipped with a cross slope indicator, and capabilities to perform aeration, mixing, spreading and final shaping.
- D. Water truck capable of nursing water into the reclaimer and for adjusting moisture content and for wetting the curing reclaimed sections.
- E. Self-propelled compaction equipment consisting of vibratory sheeps-foot, vibratory smooth-drum, and pneumatic tire rollers.
- F. Details of the asphalt reclaimer submitted to the Engineer for review at least ten calendar days before the machine is brought onto the project.

## **PART 3 EXECUTION**

### **3.1 ALLOWABLE AREA**

- A. Except by written permission of the Engineer, do not exceed the length that can be pulverized, mixed, graded, compacted, pass density, cured and protected against damage by normal anticipated traffic in the same working day.

### **3.2 INITIAL PULVERIZING AND MIXING**

- A. Breakup the asphalt by pulverizing and mixing to the specified depth to the extent that 100% weight passes a 2-inch sieve and a minimum of 50% passes a No. 4 sieve. Maintain the moisture content at a point that is at or below the optimum moisture content of the materials being reclaimed unless otherwise accepted by the Engineer.

### **3.3 SPREADING AND MIXING**

- A. Apply the required quantity of cement, as established by the Engineer, in a uniform spread on the pulverized asphalt material and blend water and cement until uniformly distributed throughout the base mixture. Apply cement on days when wind does not interfere with spreading. Provide multiple mixing passes as necessary to obtain thorough blending. Have the moisture content at or below the optimum moisture at the time of application of cement.
- B. At the time of final mixing and during compaction, maintain the moisture content within a range of optimum to optimum plus 1.5% as determined. Make sure that the moisture content in the mix does not exceed the quantity that causes the base course to become unstable during compaction or finishing operations.

### **3.4 COMPACTION**

- A. Begin compaction after cement and water has been incorporated into the base. During compaction, maintain the moisture content of the material within a range of optimum to optimum plus 1.5%. Provide initial shaping to obtain uniform compaction and required grade and cross-section. Initial compaction of the base performed with an approved self-propelled, vibratory sheep's-foot roller, followed by a vibratory smooth-drum roller and a pneumatic-tired roller. Compact to a density of at least 98% of the maximum density obtained by compaction of material sample in accordance with AASHTO T 99, Method D, as determined by the Engineer.
- B. After uniformly compacting the mixture, grade to required shape and cross-slop. Scarify deficient areas needing additional material before the addition of material, then compact to density requirements, and grade to required shape and cross-slope.
- C. Complete final compaction, including that necessary due to correction of high or low areas, within 3 hours after water has been added to the mixture. Do not leave cement-roadway mixture undisturbed for more than 30 minutes if it has not been compacted and finished. When rain causes excessive moisture, or the 3-hour time limit is exceeded, reconstruct the section. When such reconstruction is necessary, perform the work of reconstruction, and provide the cement required, at no additional cost to the Owner. The amount of cement used in reconstruction is 50% of the original rate.
- D. Compact the final surface of the mixture using a vibratory smooth drum roller to ensure a surface free of voids created by sheep's foot rollers or other deficiencies that can potentially telegraph to the finished surface.

### **3.5 CONSTRUCTION JOINTS**

- A. At the end of each day's construction, form a straight transverse construction joint by cutting back into the completed work to form a vertical face unless the construction area is opened to traffic. Build the base for large, wide areas in a series of parallel lines of convenient length and width meeting the acceptance of the Engineer. Form straight longitudinal joints at the edge of each day's construction by cutting back into the completed work to form a vertical face free of loose or shattered materials.

### **3.6 TOLERANCES**

- A. After final shaping and compacting of the base, the Engineer will check the surface of the base for conformance to the grade and typical section and determine the base thickness. Construct the thickness of the base so that it is within a tolerance of plus or minus 1/2 inch of the base thickness required by the plans. Construct the base so that the maximum differential between the established grade and the base within a 50-foot section is 1/2 inch.

### **3.7 TRAFFIC**

- A. Completed sections of the base may be opened when necessary to lightweight local traffic, provided the base has hardened sufficiently to prevent marring or distorting of the surface, and providing the curing is not impaired. Do not operate construction equipment on the base except as necessary to discharge into the spreader during paving operations.

### **3.8 MAINTENANCE**

- A. Maintain the base in an acceptable condition until final acceptance of the project. Repair defects or damage that occurs. Perform this maintenance at no cost to the Owner and repeat as often as necessary to keep the base in an acceptable condition. Perform repairs to the base by replacing the base for its full depth.

### **3.9 DISPOSAL**

- A. Except for material indicated to be recycled, remove reclaim materials from project site and legally dispose of them in an EPA approved landfill.

**END OF SECTION**



## **SECTION 32 12 16**

### **ASPHALT PAVING**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Provide hot-mix asphalt paving over conditioned and repaired rigid or flexible pavement.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections, apply to this Section:

1. Section 31 00 00 - Earthwork
2. Section 32 01 16.71 - Cold Milling Asphalt Pavement
3. Section 32 17 23 - Pavement Markings

##### **1.3 REFERENCE STANDARDS**

A. Division 6 Asphalt Pavements and Division 10 Materials of the NCDOT Specifications

##### **1.4 SUBMITTALS**

A. Product Test Reports:

1. Provide copies of job mix formula sheets indicating mix temperature and compaction specification.
2. Upon request, provide documentation of field verification of compaction, thickness and application temperatures.
3. Documentation stating the tonnage and location of RAP removed from the site.

##### **1.5 QUALITY ASSURANCE**

- A. A third party may be required at the discretion of the Owner or the Engineer to inspect the stability of the subgrade and/or density of the asphalt as deemed necessary during the duration of the project.
- B. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of the above referenced DOT for asphalt paving work.

##### **1.6 PROJECT CONDITIONS**

- A. Follow the weather and Seasonal Limitations of the above referenced DOT Standard Specifications. Exceptions may be accepted by the Engineer and Owner.

- B. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate tack cure, or if the following conditions are not met.
  - 1. Tack Coat: Minimum surface temperature of 50 deg F.
  - 2. Asphalt Base Course: Minimum surface temperature of 35 deg F and ambient temperature of 35 deg F and rising at time of placement. Ensure the paving surface is not wet or frozen.
  - 3. Asphalt Surface Course: Minimum surface temperature of 50 deg F and ambient temperature of 40 deg F and rising at time of placement. Ensure the paving surface is not wet or frozen.

## **PART 2 PRODUCTS**

### **2.1 AGGREGATES**

- A. Asphalt Plant Mix Materials: Conform to the above referenced DOT Standard Specifications.
- B. Tack Coat: Conform to the above referenced DOT Standard Specifications.
- C. Reclaimed Asphalt Pavement (RAP): Processed material obtained by milling or full depth removal of existing asphalt concrete pavements. Conform to the above referenced DOT Standard Specifications.

### **2.2 ASPHALT PAVING MIX**

- A. General: Use mix design conforming to the above referenced Standard Specifications.
- B. Wedging or Leveling Mix: Use intermediate mix type conforming to the above referenced DOT Standard Specifications.
- C. Standard Allowable Reclaimed Asphalt Pavement (RAP) Content: Use a maximum of 45 percent for a base and intermediate course and a maximum of 30 percent for a surface course. Conform to the above referenced DOT Standard Specifications.
- D. High Performance Allowable Reclaimed Asphalt Pavement (RAP) Content: Use a maximum of 45 percent for a base and intermediate course and a maximum of 20 percent for a surface course, unless otherwise accepted by the Engineer.

### **2.3 SOURCE QUALITY CONTROL AND TESTS**

- A. Obtain materials from a plant approved by the above referenced DOT.
- B. Upon request, show density reports on Pavement Areas and individual lifts.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Verify subgrade is dry and in suitable condition to begin paving.
- B. Proof-roll prepared subbase surface below pavements with heavy pneumatic tired equipment to identify soft pockets and areas of excess yielding.

1. Proof-roll subbase in one direction and repeat in perpendicular direction. Limit vehicle speed to 3 mph.
  2. Proof-roll with a loaded 10-wheel tandem axle dump truck or equivalent weighing not less than 15 tons.
  3. At a minimum, subbase with soft spots and areas of pumping or rutting exceeding depth of ½ inch require correction.
  4. Notify Engineer of subbase with movement in order for Engineer to review prior to paving.
- C. Verify gradients and elevations of base are correct.
- D. Verify utility structure frames and lids are installed in correct position and elevation.
- E. Proceed with paving only after unsatisfactory conditions have been corrected.

### **3.2 TACK COAT**

- A. Clean the surface of debris, dust, dirt, oil or other foreign material.
- B. Apply tack coat at uniform rate of 0.04 gallons/square yard for new asphalt, 0.06 for milled or aged asphalt and 0.08 gallons/square yard for cement concrete.
- C. Apply tack coat to contact surfaces of curbs and gutters.
- D. Grease the surface of utility structures to prevent bond with asphalt pavement. Do not tack-coat these surfaces.
- E. Ensure tack coat breaks prior to beginning the paving operation. The tack has broken once the surface has turned sticky to the touch.

### **3.3 HOT-MIX ASPHALT PLACING**

- A. Install Work in accordance with the above referenced DOT Standard Specifications.
- B. Place asphalt within 24 hours of applying tack coat.
- C. Place asphalt in courses to the thicknesses and dimensions shown on the Drawings.
- D. Place base and intermediate courses.
- E. Place surface course within 2 hours of placing and compacting intermediate course. When intermediate course is placed more than 24 hours before placing surface course, clean surface and apply tack coat before placing surface course.
- F. Compact each course by rolling to specified density. Do not displace or extrude pavement from position. Hand compact in areas inaccessible to rolling equipment.
- G. Perform rolling with consecutive passes to achieve even and smooth finish without roller marks.

### **3.4 JOINTS**

- A. Transverse Joints:

1. When Work is suspended long enough to allow mixture to chill, construct transverse joint.
  2. Use butt joint where traffic does not pass over pavement.
  3. Use sloped wedge ahead of the end of pavement where traffic passes over pavement. Place paper parting strip to aid the removal of a wedge.
  4. Tack coat edge of pavement prior to placing adjoining pavement.
- B. Longitudinal Joints:
1. Tack the edge of longitudinal joints prior to placing adjoining pavement.
  2. Pinch joint by rolling behind the paver.
  3. Offset longitudinal joints in each layer by approximately 6 inches.

### **3.5 TOLERANCES**

- A. Density Compaction: average minimum of 92 percent of Theoretical Maximum Specific Gravity (Gmm) as determined on a moving average by the producer.
- B. Flatness: Maximum variation of 1/8 inch measured with 10-foot straight edge.
- C. Compacted Thickness: Within 1/4 inch.
- D. Variation from Indicated Elevation: Within 1/2 inch.

### **3.6 PAVEMENT MARKING**

- A. Do not apply pavement marking paint until layout, colors, and placement have been verified with the Engineer and the Owner.

### **3.7 FIELD QUALITY CONTROL**

- A. Testing Agency: Engineer or Owner may engage a qualified testing agency to perform tests and inspections.
- B. If nuclear test methods are specified, take one test per 2,000 linear feet or fraction thereof per day on pavement placed at the paver lay down width. Take a minimum of five tests per production day.
- C. If core tests are specified, take one 6-inch diameter full depth pavement core per 2,000 linear feet or fraction thereof per day on pavement placed at the paver lay down width. Take a minimum of three core samples per production day unless directed by the engineer.
- D. Do not core asphalt above 120° F. Cool asphalt with ice as necessary at no additional cost to the owner. Patch core locations with hot mix asphalt of the same type within 24 hours of sampling. Dry and tack core holes before patching.
- E. When tests indicate Work does not meet specified requirements, remove Work, replace, and retest.

### **3.8 PONDING WATER**

- A. The ponding of water on the surface after installation of the pavement system is not acceptable and is grounds for rejection of the system. Ponding is herein defined as precipitation remaining in an area, 1/8 inch or deeper for a period of 2 hours from the termination of precipitation. Provide modifications to the pavement to ensure proper drainage.

### **3.9 DISPOSAL**

- A. Except for material indicated to be recycled, remove excavated materials from project site and legally dispose of them in an EPA approved landfill.

**END OF SECTION**

## **SECTION 32 17 23**

### **PAVEMENT MARKINGS**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Provide contractor grade acrylic, striping paint for asphalt or coated asphalt.
  - 2. Provide contractor grade acrylic, latex, alkyd, or chlorinated rubber striping paint for asphalt and concrete pavements or restriping.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections, apply to this Section:
  - 1. Section 32 12 16 - Asphalt Paving

##### **1.3 SUBMITTALS**

- A. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.

##### **1.4 DELIVERY, STORAGE AND HANDLING**

- A. Deliver pavement-marking materials to the Project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of materials, date of manufacture, and directions for storage.
- B. Store pavement-marking materials in a clean, dry, protected location within temperature range required by manufacturer. Protect stored materials from direct sunlight.

##### **1.5 PROJECT CONDITIONS**

- A. Environmental Requirements:
  - 1. Apply marking paint on a clean surface and in dry weather when pavement and atmospheric temperatures are 55 degrees F or above or in accordance with manufacturer's specification and not exceeding 95 degrees F and are anticipated to remain above 50 degrees F for 4 hours after completing application.
- B. For asphalt wait a minimum of 4 days before marking unless otherwise instructed by the Engineer.

#### **PART 2 PRODUCTS**

##### **2.1 EQUIPMENT**

- A. Commercial compressed air spray striping machine capable of applying an even coating at the manufacturer's recommended thickness in an even width across the stripe.

- B. Commercial airless spray striping machine capable of applying an even coating at the manufacturer's recommended thickness in an even width across the stripe.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Inspect pavement surfaces for conditions and defects that adversely affect quality of work, and which cannot be put into an acceptable condition through normal preparatory work as specified.
- B. Do not place markings over unsound pavements. If these conditions exist, notify the Engineer.
- C. Starting installation constitutes acceptance of surface as suitable for installation.

### **3.2 PREPARATION**

- A. Provide qualified technician to supervise equipment and application of marking. Layout markings using guidelines, templates and forms. Stencils and templates professionally made to industry standards. "Free hand" painting of arrows, symbols, or wording are not allowed.
- B. Thoroughly clean surfaces free of dirt, sand, gravel, oil and other foreign matter.
- C. Protect adjacent curbs, walks, fences, and other items from receiving paint.

### **3.3 APPLICATION**

- A. Parking Lots Markings Spacing: All parking layout designs shall utilize dimensional requirements.
- B. Apply marking paint at a rate of 1 gallon per 300-400 lineal feet of 4 inch wide stripes or to manufacturer's specifications.
- C. Apply stripes straight and even in accordance with schedules.
- D. Apply stripes and other markings in widths and colors previously existing or as otherwise detailed in schedule.

### **3.4 PROTECTION**

- A. Barricade marked areas during installation and until the marking paint is dried and ready for traffic.

**END OF SECTION**

**APPENDIX A**

**PAVEMENT CORES – DCP FORM**



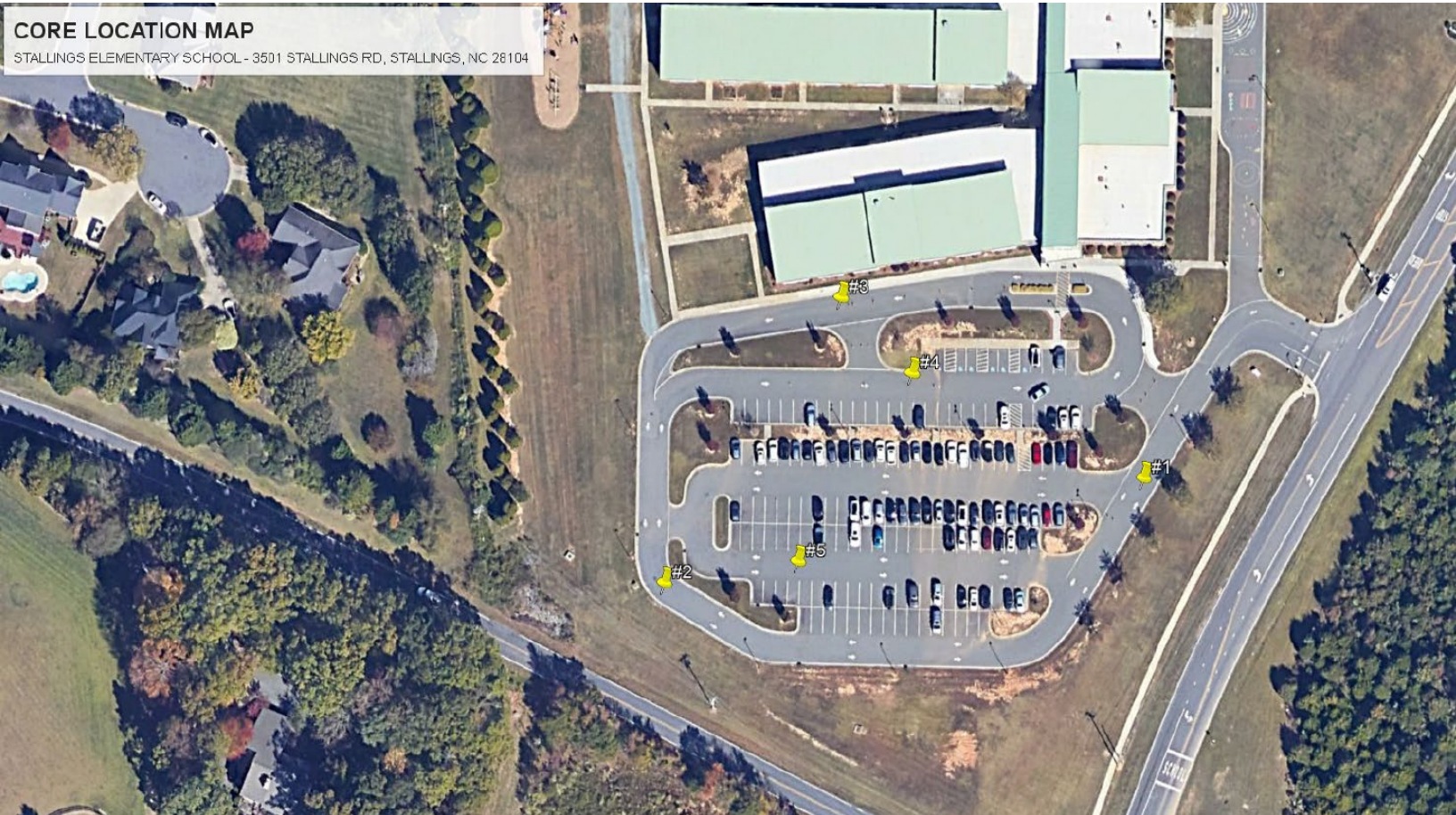
Project: Stallings Elementary School Pavement Improvement		Date: January 24, 2025
Location: Core #1		Notes: Cored in Failure.
Stone Thickness: 7"	Pavement Thickness: 4"	Soil Type: Red Clay

Project: Stallings Elementary School Pavement Improvement		Date: January 24, 2025
Location: Core #2		Notes:
Stone Thickness: 6 $\frac{3}{4}$ "	Pavement Thickness: 3 $\frac{3}{4}$ "	Soil Type: Red Clay

Project: Stallings Elementary School Pavement Improvement		Date: January 24, 2025
Location: Core #3		Notes:
Stone Thickness: 3"	Pavement Thickness: 2"	Soil Type: Red Clay

Project: Stallings Elementary School Pavement Improvement		Date: January 24, 2025
Location: Core #4		Notes:
Stone Thickness: 8"	Pavement Thickness: 2"	Soil Type: Red Clay

Project: Stallings Elementary School Pavement Improvement		Date: January 24, 2025
Location: Core #5		Notes: Matting at 1-2" below Asphalt
Stone Thickness: 4 $\frac{3}{4}$ "	Pavement Thickness: 2 $\frac{1}{4}$ "	Soil Type: Red Clay



**CORE LOCATION MAP**  
STALLINGS ELEMENTARY SCHOOL - 3501 STALLINGS RD, STALLINGS, NC 28104



# UNION COUNTY PUBLIC SCHOOLS

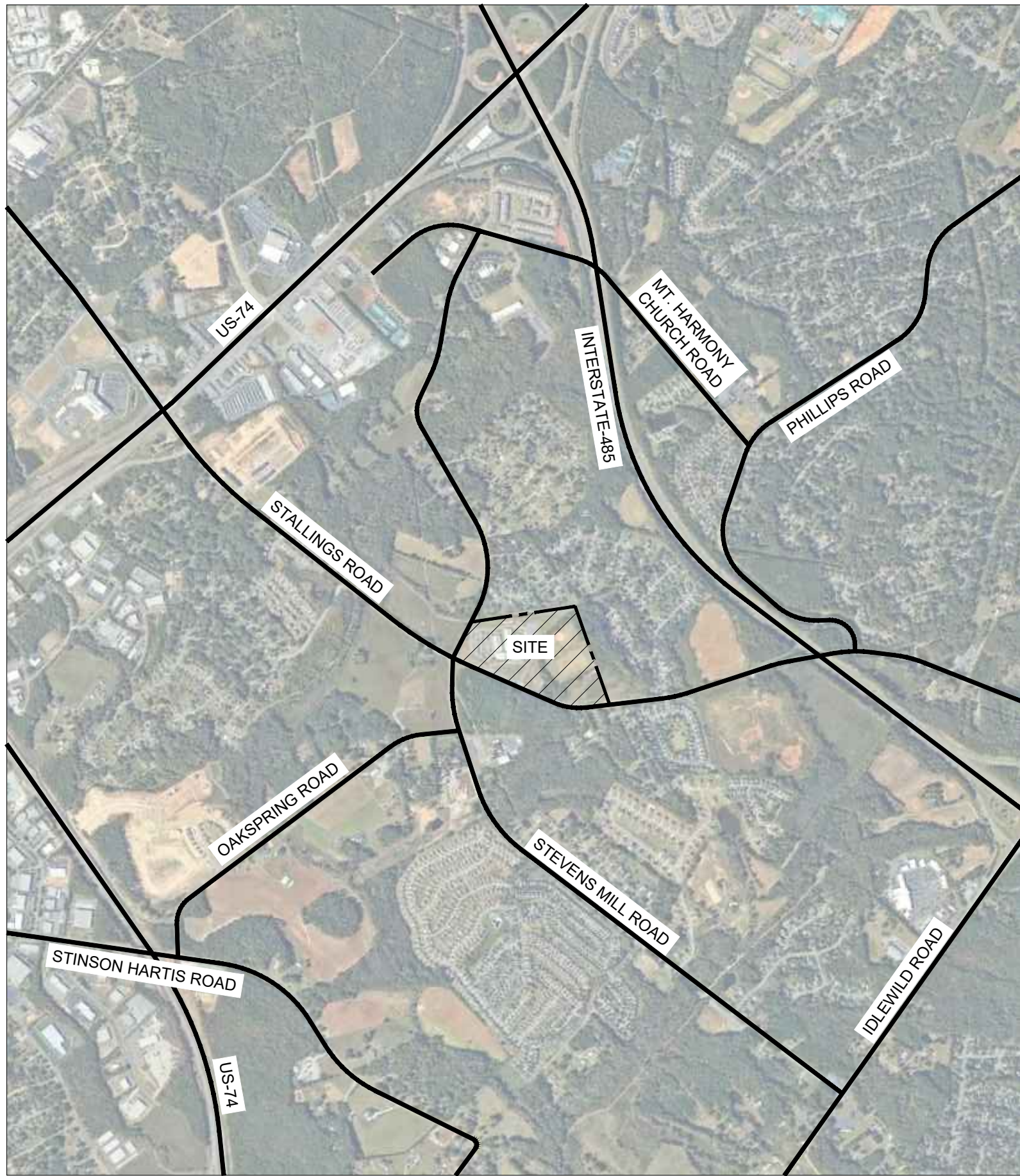
## STALLINGS ELEMENTARY SCHOOL

### PAVEMENT IMPROVEMENT

3501 STALLINGS ROAD  
STALLINGS, NC 28104

REI PROJECT NO. R25PVG-003

DATE: FEBRUARY 3, 2025



**A** VICINITY MAP  
SCALE: N.T.S.



**B** SITE PLAN  
SCALE: N.T.S.

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4. THIS DRAWING IS NOT A CERTIFIED SURVEY. THE BASE DRAWING WAS CREATED USING AERIAL IMAGERY AND DATA FROM A MUNICIPAL GEOGRAPHIC INFORMATION SYSTEM (GIS) AND THEN FIELD VERIFIED.

**DETAIL NOTES:**

1. LIGHT LINES REPRESENT EXISTING CONSTRUCTION TO REMAIN AND DARK LINES REPRESENT NEW COMPONENTS TO BE PROVIDED.

**DIMENSION NOTES:**

1. LENGTH TOLERANCES ONLY APPLIES TO ACCESSIBLE PARKING STALL WIDTHS AND ACCESSIBLE PARKING STALL SIGN HEIGHTS.
2. DEFINED SLOPES HAVE A TOLERANCE OF  $\pm 0.5\%$ .
3. DEFINED LENGTHS HAVE A TOLERANCE OF  $\pm 6"$ .

**DRAWING INDEX:**

G-001	COVER
C-101	SITE PLAN
C-301	PAVEMENT DETAILS
C-501	DETAILS

**ABBREVIATION LIST:**

C.B.	CATCH BASIN
C.G.	CURB AND GUTTER
CMP	CORRUGATED METAL PIPE
D.I.	DROP INLET
DS	DOWNSPOUT
EJ	EXPANSION JOINT
EX.	EXISTING
EX.EL	EXISTING ELEVATION
EX.ED	EXISTING EDGE OF PAVEMENT
EX.SW	EXISTING EDGE OF SIDEWALK
F.F.E.	FINISHED FLOOR ELEVATION
F.E.S.	FLARED END SECTION
HDPE	HIGH DENSITY POLYETHYLENE
MAX.	MAXIMUM
MEE	MATCH EXISTING ELEVATION
MIN.	MINIMUM
N.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
PVC	POLYVINYL CHLORIDE
PR.ED	PROPOSED EDGE OF PAVEMENT
PR.SW	PROPOSED EDGE OF SIDEWALK
RCP	REINFORCED CONCRETE PIPE
STD.	STANDARD
TYP.	TYPICAL

**EXISTING PARKING:**

TOTAL STALL COUNT:	177
TOTAL ACCESSIBLE PARKING:	6
VAN ACCESSIBLE PARKING:	3

**PROPOSED PARKING:**

TOTAL STALL COUNT:	177
TOTAL ACCESSIBLE PARKING:	6
VAN ACCESSIBLE PARKING:	3



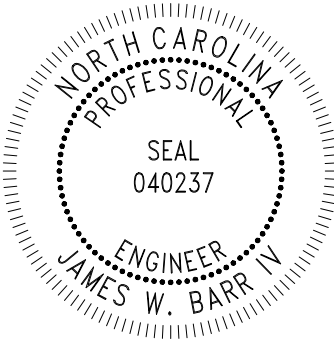
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SEALS:



PROJECT NAME:

UNION COUNTY  
PUBLIC SCHOOLS  
STALLINGS  
ELEMENTARY SCHOOL  
PAVEMENT  
IMPROVEMENT

3501 STALLINGS ROAD  
STALLINGS, NC 28104

PROJ. NO:

R25PVG-003

REVISIONS:

NO.	DATE	DESCRIPTION

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THE ORIGINAL DRAWING

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SCALE DRAWING ACCORDINGLY.

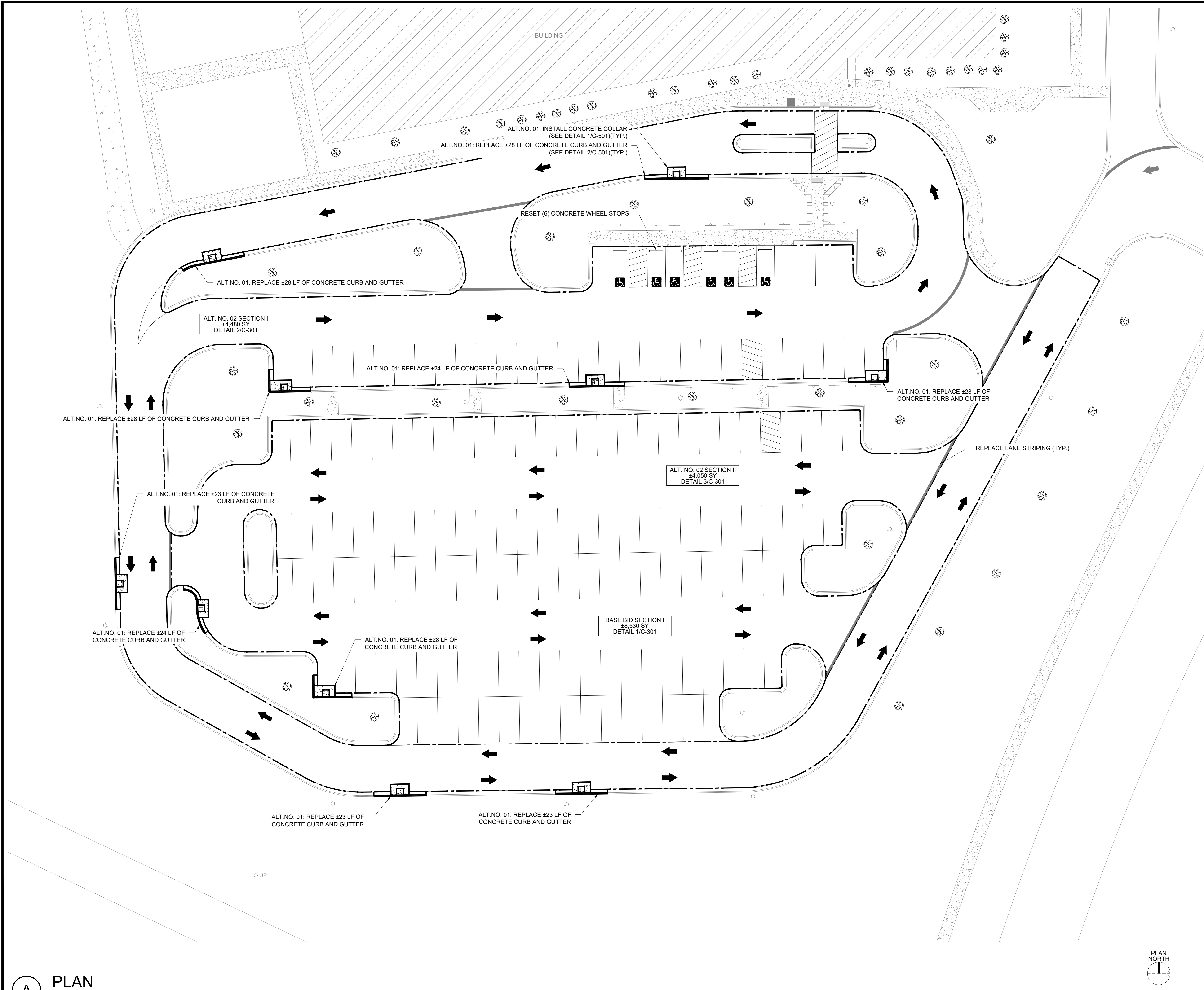
SHEET TITLE

COVER

DRAWING

G-001





**A** PLAN  
SCALE: N.T.S.



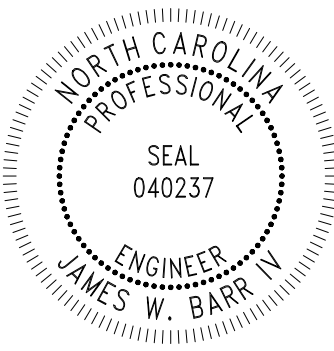
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SEALS:



PROJECT NAME:

UNION COUNTY  
PUBLIC SCHOOLS  
STALLINGS  
ELEMENTARY SCHOOL  
PAVEMENT  
IMPROVEMENT

3501 STALLINGS ROAD  
STALLINGS, NC 28104

PROJ. NO:

R25PVG-003

REVISIONS:

NO.	DATE	DESCRIPTION

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THE ORIGINAL DRAWING

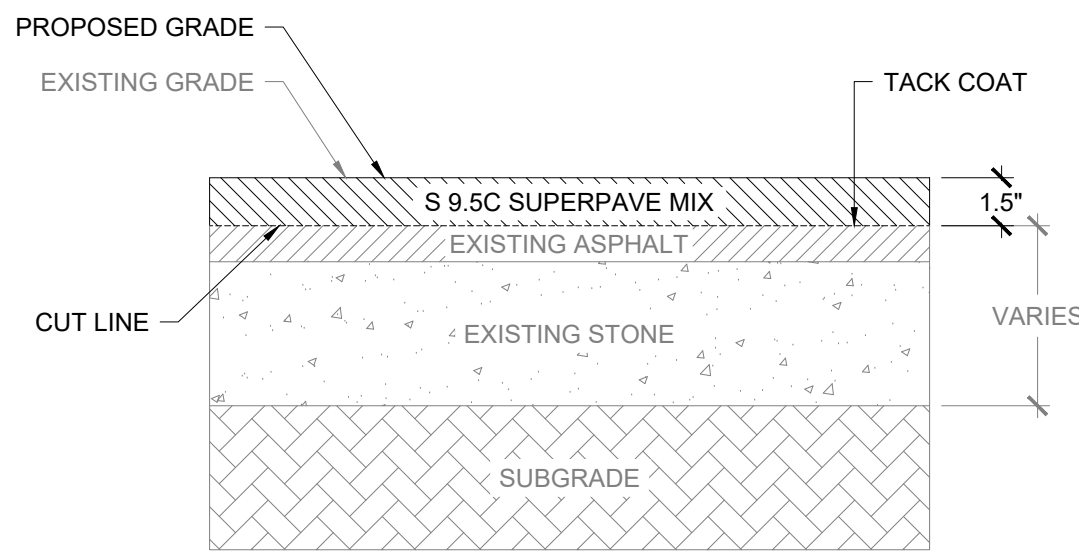
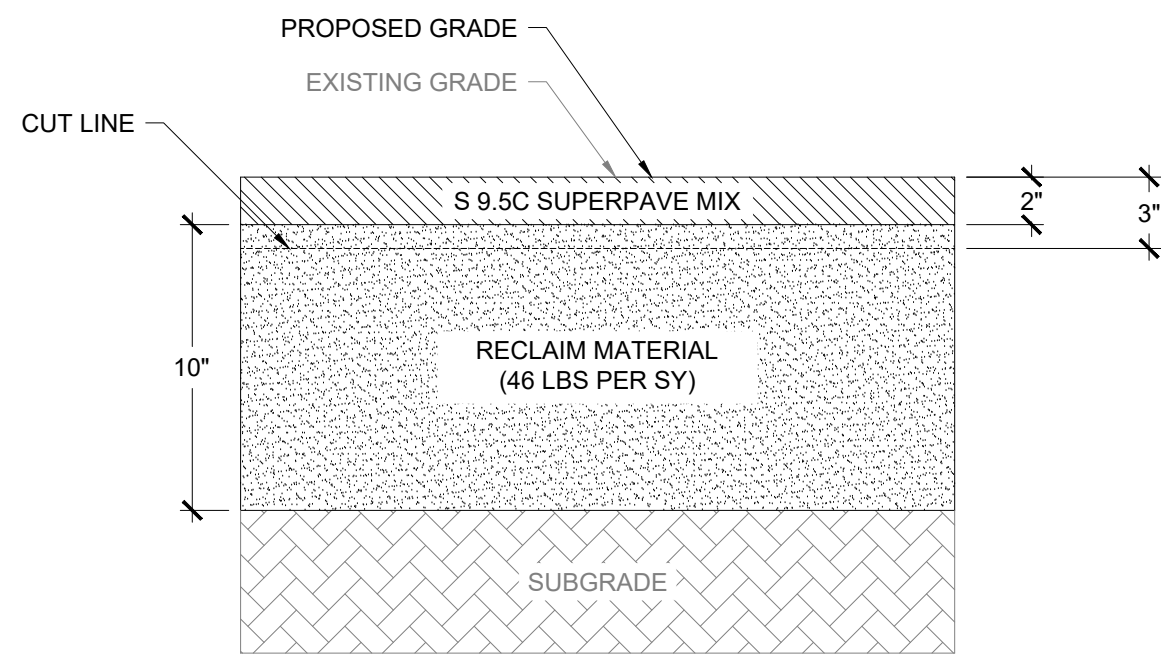
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SHEET TITLE

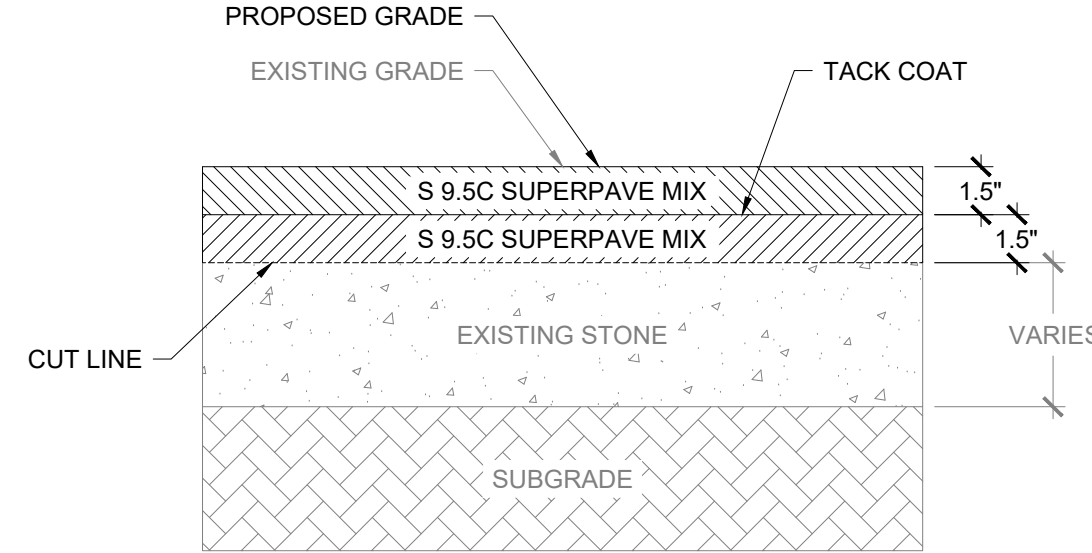
SITE PLAN

DRAWING

C-101



\*NOTE: PROVIDE ±550 LF OF FULL DEPTH, FOUR FOOT (4') WIDE PATCH WHERE LARGE BLOCK CRACKING IS OCCURRING.



\*NOTE: PROVIDE ±550 LF OF FULL DEPTH, FOUR FOOT (4') WIDE PATCH WHERE LARGE BLOCK CRACKING IS OCCURRING.

1 BASE BID SECTION I PAVEMENT  
SCALE: N.T.S.

2 ALTERNATE SECTION I PAVEMENT  
SCALE: N.T.S.

3 ALTERNATE SECTION II PAVEMENT  
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Engineering solutions for tomorrow®

1927 J.N. PEASE PLACE | SUITE 201  
CHARLOTTE, NC 28262

NORTH CAROLINA  
ENGINEERING FIRM  
LICENSE # C-1520

www.reiengineers.com

SEALS:



PROJECT NAME:

UNION COUNTY  
PUBLIC SCHOOLS  
STALLINGS  
ELEMENTARY SCHOOL  
PAVEMENT  
IMPROVEMENT

3501 STALLINGS ROAD  
STALLINGS, NC 28104

PROJ. NO:

R25PVG-003

REVISIONS:

NO.	DATE	DESCRIPTION

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THE ORIGINAL DRAWING

IF IT IS NOT 1 INCH ON THIS PAGE,  
SCALE DRAWING ACCORDINGLY.

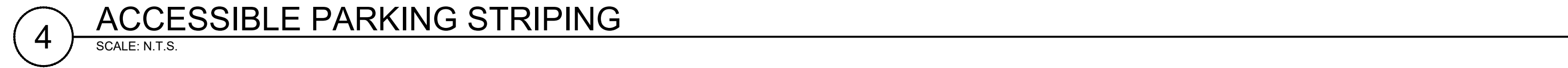
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DETAILS

DRAWING

C-301





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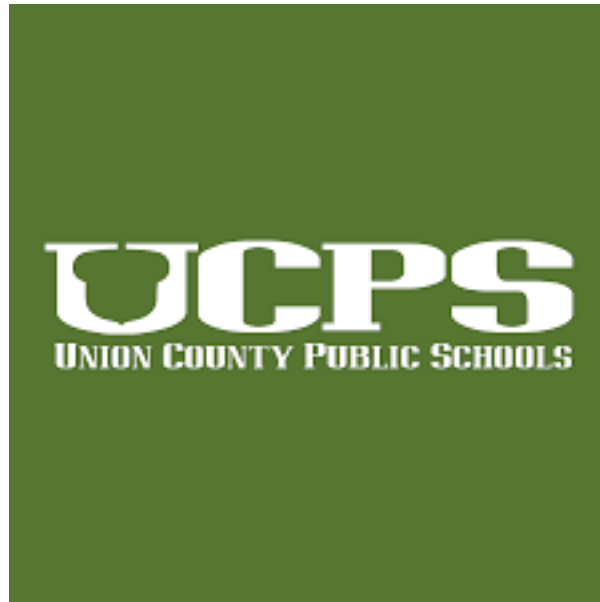
1. FOR DETAILS, LIGHT LINES REPRESENT EXISTING CONSTRUCTION TO REMAIN, AND DARK LINES REPRESENT NEW COMPONENTS TO BE PROVIDED.



**SECTION 00 01 01  
PROJECT TITLE PAGE**

**PROJECT MANUAL**

**FOR**



**UNION COUNTY PUBLIC SCHOOLS  
201 VENUS STREET,  
MONROE, NORTH CAROLINA 28112**

**FACILITIES PAVEMENT IMPROVEMENT  
201 VENUS STREET,  
MONROE, NORTH CAROLINA 28112  
REI PROJECT NO. R25PVG-005**

**02-03-2025**

**PREPARED BY:**



**1927 J.N. PEASE PLACE, SUITE 201, CHARLOTTE, NC 28262  
NORTH CAROLINA FIRM LICENSE C-1520**

## SECTION 00 01 07

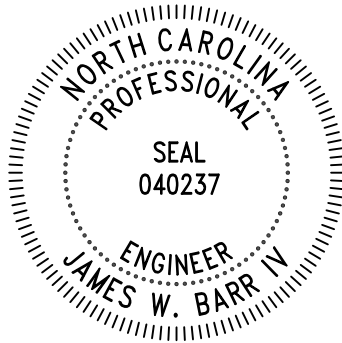
### SEALS PAGE

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Design Firm for Facilities Pavement Improvement with Project Manual dated 02-03-2025:
1. REI Engineers, Inc., 1927 J.N. Pease Place, Suite 201, Charlotte, NC 28262.
  2. North Carolina Firm License C-1520

#### Professional Engineer



END OF SECTION



## **SECTION 00 01 10**

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- E. 00 11 16 - Invitation to Bid
- F. 00 21 13 - Instructions to Bidders
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- A. Pavement Cores - DCP Form

**END OF SECTION**

**SECTION 00 01 15**  
**LIST OF DRAWINGS**

**PART 1 GENERAL**

**1.1 SUMMARY**

A. The following drawings dated 02-03-2025 are included as part of the Contract Documents:

1. G-001 Cover
2. C-101 Site Plan
3. C-501 Details

**END OF SECTION**

## **SECTION 00 11 16**

### **INVITATION TO BID**

#### **PART 1 GENERAL**

##### **1.1 PROJECT INFORMATION**

- A. Project Name: Facilities Pavement Improvement
- B. Project Address: 201 Venus Street, Monroe, North Carolina 28112
- C. Owner: Union County Public Schools

##### **1.2 BIDS**

- A. Sealed bids for the project will be received from bidders by the Owner at 201 Venus Street, Monroe, North Carolina 28112 until 2:00 PM on 04-16-2025, at which time they will be privately opened.

##### **1.3 PROJECT DOCUMENTS**

- A. Electronic project documents may be obtained from the Engineer, REI Engineers, Inc., 1927 J.N. Pease Place, Suite 201, Charlotte, NC 28262, Marcos Quesada, [mquesada@reiengineers.com](mailto:mquesada@reiengineers.com) at no cost.

##### **1.4 BIDDING REQUIREMENTS**

- A. All bidders are hereby notified that they shall be properly licensed under the state laws governing their trades.
- B. Bid security in the amount equal to not less than 5% of the gross amount of the bid is required.
- C. Submit questions to REI Engineers, Inc. in writing to the email address listed above no later than 5:00 PM at least 7 days prior to the bid due date.

##### **1.5 PRE-BID MEETING**

- A. A Pre-Bid Meeting is scheduled for 04-07-2025 on 9:00 AM at the project address listed above.
- B. Attendance is mandatory.

**END OF SECTION**

## **SECTION 00 21 13**

### **INSTRUCTIONS TO BIDDERS**

#### **PART 1 GENERAL**

##### **1.1 DEFINITIONS**

- A. The Bidding Documents consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Bid Form, and other sample bidding and contract forms.
- B. The proposed Contract Documents consist of the Form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and Addenda issued prior to execution of the Contract.
- C. Addenda are written or graphic instruments issued by the Engineer prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.
- D. A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- E. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.
- F. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.
- G. A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.
- H. A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work.

##### **1.2 BIDS**

- A. Submit Bid Form along with required enclosures in a sealed envelope, with the Bidder's name, license number, and project name written on the outside; place this sealed envelope in another envelope and deliver to the Owner at the address specified.
- B. Bids will be received until the date and time specified at which time they will be privately opened.
- C. Fill in and sign the bid form correctly. Bids that show any omission, alterations of form, additions not called for, conditional Bids, or any irregularities of any kind may be rejected. If erasures are necessary and appear on the forms, each such erasure must be initialed by the person signing the proposal.
- D. Bids that are non-responsive or fail to follow the Instructions to Bidders may be rejected.
- E. No bid may be withdrawn after receipt of Bids for a period of 60 days.

### **1.3 ACCEPTANCE OF BID (AWARD)**

- A. It is the intention of the Owner to award a contract for work under this project to the lowest responsible Bidder; however, in the interest of suitability to the need of the Owner and/or economy, equipment, materials and furnishings other than the lowest in price may be selected.
- B. The Owner reserves the right to reject any or all Bids, to accept any bid submitted, to waive any formalities, and to negotiate with the low Bidder or Bidders any changes considered necessary or desirable. The Owner reserves the right to reject any Bid when such rejection is in the interest of the Owner to reject the bid of the bidder who has previously failed to perform or to complete on time Contracts of a similar nature; and to reject the bid of a bidder who is not, in the opinion of the Engineer, in a position to perform the Contract.
- C. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted. Alternates may be accepted at any time during the bid holding period.

### **1.4 PRE-BID MEETING**

- A. Refer to the invitation or advertisement for bids for the date, time and location of the Pre-Bid Meeting.
- B. A Pre-Bid Meeting will be held for purposes of considering questions posed by Bidders. All interpretations and corrections to Contract Documents deriving from this meeting will be documented via Addendum.
- C. If the Bidder does not attend the Pre-Bid Meeting, it is the Bidder's responsibility to obtain the Pre-Bid Meeting Minutes and all Addenda.

### **1.5 DISQUALIFICATION**

- A. The Owner reserves the right to disqualify Bids, before or after opening, upon evidence of collusion with intent to defraud or commit other illegal practices upon the part of the Bidder.

### **1.6 CONTRACTOR'S LICENSE**

- A. All Bidders must have proper licenses for contractors as required by State Law. The Bidder's license number shall be listed on the bid form and on the outside of the inner sealed envelope in which the bid is submitted.

### **1.7 CONFLICT OF INTEREST**

- A. Bidders must disclose in writing with their bid the name of any owner, officer, director, or agent who is also an employee of the Owner.
- B. Bidders must disclose in writing with their bid the name of any employee of the Owner who owns, directly or indirectly, an interest of 5 percent or more in the Bidder's firm or any of its branches or subsidiaries.
- C. By submitting a bid, the Bidder certifies that there is no relationship between the Bidder and any person or entity which is, or gives the appearance of, a conflict of interest related to this project.

## **1.8 NON-DISCRIMINATION**

- A. The Bidder shall not discriminate against any individuals and will take proactive measures to assure compliance with all Federal and State requirements concerning fair employment, employment of people with disabilities, and concerning the treatment of all employees without regard to discrimination based upon age, race, color, religion, sex, national origin, or disability.

## **1.9 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS**

- A. Examine Drawings and Specifications and all Addenda or other revisions thereto and thoroughly familiarize himself with the detailed requirements thereof prior to submitting a proposal.
- B. Should a Bidder find discrepancies or ambiguities in, or omissions from the Specifications and Drawings bound herein, or should be in doubt as to their meaning, notify the Engineer in writing immediately. Engineer will issue an interpretation in the form of an addendum. This addendum will be forwarded to all Bidders of record.
- C. Addenda will be issued no later than four days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.
- D. Act promptly and allow sufficient time for a reply to be provided before the date established for submission of Bids.
- E. Acknowledge receipt of all addenda on the Bid Form.
- F. No oral interpretations will be made to any Bidder as to the meaning or intent of the Contract Documents or be effective to modify any of the provisions of the Contract Documents.

## **1.10 SUBSTITUTIONS**

- A. References are made to certain specific products solely to denote the quality standard of the desired product and are not intended to restrict Bidders to a specific brand, make, manufacturer, or name. These products have been noted to assist in establishing material types and acceptable products. Equivalent products will be considered acceptable provided that the approval of the specific product has been given in writing by the Engineer.
- B. Written requests for substitution of equivalent products from prime bidders will be considered if received by the Engineer 7 calendar days prior to the bid opening.
- C. Identify the product or the fabrication or installation method to be replaced in each request. Include related specification sections and drawing number.
- D. Provide complete documentation on both the product specified and the proposed substitution including the following information as appropriate:
  - 1. Comparison of specified and proposed substitute product data, fabrication drawings, and installation procedures.
  - 2. Samples where applicable or requested.

3. Detailed comparison of significant qualities of the proposed substitution with those of the work specified.
  4. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate Contractors that will become necessary to accommodate the proposed substitution.
- E. Certification by the Bidder or manufacturer that the substitution proposed is equal to or better in every respect to that required by the Contract Documents, and that it will perform equal or superior to product specified in the application indicated. The Bidder waives any right to additional payment or time, which may subsequently become necessary because of the failure of the substitution to perform adequately.
- F. Engineer's Action: The Engineer may request additional information or documentation necessary for evaluation of the request. The Engineer will notify the Bidders of acceptance of the proposed substitution by means of an addendum to the bid documents. If the proposed substitute is accepted through an addendum use the product specified by name. Engineer's Substitution Approval during bidding and subsequent addendums does not void the Bidder's responsibility to submit the required shop drawings and comply with the other contract documents and requirements.

#### **1.11 SITE INVESTIGATION**

- A. Examine the site to determine the extent of work involved, size of work, etc., and the conditions under which the work must be staged and performed. Examine the grounds and buildings, utilities and roads and ascertain by any reasonable means conditions that will in any manner affect its work. Ask the Engineer for any additional information that he deems necessary to be fully informed as to exactly what is to be expected prior to submitting a proposal. The drawings have been prepared on the basis of surveys and inspections of the site and physical conditions at the site. This, however, does not relieve the Bidder of the necessity for fully informing itself as to the existing physical conditions. Secure field measurements for quantities upon which proposal is based. Carefully examine the existing conditions as compared to the Contract Documents.
- B. The submission of a bid will be construed as evidence that such an investigation has been made, and no subsequent allowance will be made in this connection on behalf of the bidder for any error or negligence.
- C. Upon arrival at the Project Site, immediately proceed to the main entrance/office and advise the administrative personnel of its presence and purpose. Sign the visitor's log, giving his name, his company and the time and date of the visit.
- D. Inspection of the work areas shall occur between the hours of 8:00 AM and 5:00 PM. No inspections will be conducted on Saturdays, Sundays, or holidays.

#### **1.12 BID SECURITY**

- A. Bid bond or a certified check drawn on a bank or trust company insured by the FDIC in an amount equal to not less than 5% of the gross amount of the bid is required.

#### **1.13 PRIME CONTRACT**

- A. Perform all work under a single prime contract.



#### **1.14 PERMITS, FEES AND TAXES**

- A. Secure and pay the costs of licenses, permits and fees for inspections required by City, County and/or State authorities; Social Security and other applicable Local, State and Federal Government taxes, and sales taxes. Include such costs in its bid.

#### **1.15 SUBCONTRACTORS**

- A. List names of subcontractors on the Bid Form. Identify work by the general, subcontractor or not applicable for each trade; utilize blank lines to list trades not provided in the table. Do not list suppliers. All blanks must be filled in. Failure to do so may result in bid being declared non-responsive. If there is more than one subcontractor per trade identified below, list all. If no subcontractors are to be utilized, indicate by signing at the appropriate place at the bottom of the table.
- B. A Bidder whose bid is accepted shall not substitute any person as subcontractor in the place of the subcontractor listed in the original bid, except if the listed subcontractor's bid is later determined by the successful Bidder to be nonresponsive or nonresponsive or the listed subcontractor refuses to enter into a contract for the complete performance of the bid work, or with the approval of the awarding authority, the Owner, for good cause shown by the successful Bidder.
- C. The terms, conditions, and requirements of each contract between the successful Bidder and a subcontractor performing work under a subdivision or branch of work listed in this subsection shall incorporate by reference the terms, conditions, and requirements of the contract between the contractor and the Owner.

#### **1.16 FORM OF AGREEMENT**

- A. The form of agreement between the Owner and Contractor to be entered into shall be the sample contained in Section 00 52 13 - Standard Form of Agreement.

#### **1.17 BIDDER QUALIFICATIONS**

- A. Bids will be accepted from Bidders who are regularly engaged in, and licensed to perform, the work they are bidding, which represents a significant portion of their total volume and who perform this work with workers regularly employed on their direct payrolls. Before a bid is considered for award, the Bidder may be requested by the Engineer to submit a statement of facts in detail as to its previous experience in performing similar or comparable work and of its business and technical organization and financial resources available to be used in contemplated work. The Bidder may also be required to submit a statement of facts in detail on his proposed subcontractors as to their previous experience and past performance in performing similar work or comparable work.

**END OF SECTION**

**SECTION 00 41 13**

**BID FORM**

**PART 1 GENERAL**

**1.1 PROJECT AND ITS PARTIES**

- A. TO:
- Maurice Brown  
Union County Public Schools  
201 Venus Street,  
Monroe, North Carolina 28112
- B. PROJECT:
1. Facilities Pavement Improvement
2. REI Project No. R25PVG-005
- C. FROM:
1. Date: \_\_\_\_\_
2. Bidder: \_\_\_\_\_
3. Address: \_\_\_\_\_
4. Phone: \_\_\_\_\_ Email: \_\_\_\_\_
5. GC License #: \_\_\_\_\_ Classification: \_\_\_\_\_ Limitation: \_\_\_\_\_

**1.2 BASE BID**

- A. The undersigned, as bidder, hereby declares that the only person or persons interested in this bid as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this bid or in the contract to be entered into; that this proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud. The Bidder further declares that he has examined the site of the work and the contract documents relative thereto dated 02-03-2025 as prepared by REI Engineers, Inc., and has read all special provisions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed. The Bidder proposes and agrees if this bid is accepted to contract with the Owner in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools apparatus, means of transportation and labor necessary to complete the construction of the project with a definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and the Contract Documents, for the sum of:
1. Words: \_\_\_\_\_
2. Figures: \$ \_\_\_\_\_.

### 1.3 BID BREAKDOWN

A. Base bid is broken down as follows:

Item	Dollar Amount in Figures
Permits/ Bonds	\$
Labor	\$
Materials	\$
State Sales/ Use Tax	\$
County Sales/Use Tax	\$
Allowances	\$
Total Base Bid (must match 1.2, 2)	\$

### 1.4 ALLOWANCES:

A. Include in the Base Bid the following Quantity Allowances:

1. Undercut/Mill and Provide 60 TONS of Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material.

### 1.5 UNIT PRICES:

A. Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically noted. Unit prices shall be applied, as appropriate, to compute the total value of changes in the scope of the work all in accordance with the contract documents.

1. Place and Grade ABC Stone. Furnishing, mobilizing, placing, and grading of material is included: \$\_\_\_\_\_ per TON.
2. Undercut/Mill and Provide Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material: \$\_\_\_\_\_ per TON
3. Provide 4-inch wide Striping: \$\_\_\_\_\_ per LF
4. Provide 4-inch Sidewalk. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material: \$\_\_\_\_\_ per SF
5. Provide Curb and Gutter. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material: \$\_\_\_\_\_ per LF
6. Provide Concrete Wheel Stop. Include the related cost for furnishing, mobilizing, and installing of the wheel stop: \$\_\_\_\_\_ per EA

### 1.6 BID HOLDING TIME AND ACCEPTANCE:

A. The undersigned hereby agrees that this bid may not be revoked or withdrawn after the time set for the opening of bids but shall remain open during the bid holding period as specified in Section 00 21 13 - Instructions to Bidders.

- B. No bid may be withdrawn after receipt of Bids for a period of 60 days.

**1.7 SCHEDULE OF COMPLETION:**

- A. The undersigned understands that time is of the essence and agrees to the Contract Time and liquidated damages as indicated in General Conditions of the Contract for Construction and Supplementary Conditions apply to this Work. The undersigned hereby agrees to commence work on this project within 30 days following receipt of an Executed Agreement between the Owner and Contractor. Date of commencement will be established in a Notice to Proceed issued to the Contractor. Complete work under the Base Bid and all alternates accepted within 30 calendar days from the date of commencement.

1. Applicable liquidated damages shall be as stated in the Supplementary Conditions.

**1.8 ADDENDUM:**

- A. Addendum received and used in computing bid:

1. Addendum No. 1: \_\_\_\_\_

2. Addendum No. 2: \_\_\_\_\_

**1.9 SUBCONTRACTORS:**

- A. Fill out all blanks on the list below listing all subcontractors. Identify work by the general, subcontractor or not applicable for each trade; utilize blank lines to list trades not provided. Do not list suppliers. All blanks must be filled in. Failure to do so may result in bid being declared non-responsive. If there is more than one subcontractor per trade identified below, list all. If no subcontractors are to be utilized, indicate by signing at the appropriate place at the bottom of the table.

1. Trade: General Contractor: \_\_\_\_\_

2. Trade: Paving Contractor: \_\_\_\_\_

3. Trade: Concrete Contractor: \_\_\_\_\_

4. Trade: Utility Locate Contractor: \_\_\_\_\_

5. Trade: Waste Disposal Contractor: \_\_\_\_\_

6. Trade: Reclaiming Contractor: \_\_\_\_\_

7. Trade: Grading Contractor: \_\_\_\_\_

8. Trade: Milling Contractor: \_\_\_\_\_

9. Trade: Trucking Contractor: \_\_\_\_\_

10. Trade: Striping Contractor: \_\_\_\_\_

11. Trade: \_\_\_\_\_ Contractor: \_\_\_\_\_

12. Trade: \_\_\_\_\_ Contractor: \_\_\_\_\_

13. We do not plan to use subcontractors: \_\_\_\_\_(Signed)

**1.10 ENCLOSURES:**

A. Provide the following enclosures with submitted bid:

1. Bid Bond
2. Minority Business Enterprise Submittals

**1.11 SUBMITTED BY:**

- A. Contractor Name: \_\_\_\_\_
- B. Authorized Signing Officer Name: \_\_\_\_\_
- C. Authorized Signing Office Title: \_\_\_\_\_
- D. Signature: \_\_\_\_\_
- E. Respectfully submitted this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

**1.12 NOTARIZED BY:**

- A. I, \_\_\_\_\_ (print name), a Notary Public for \_\_\_\_\_ County of \_\_\_\_\_ (State), do hereby certify that \_\_\_\_\_ (officer listed above) personally appeared before me this day and acknowledged the due execution of the foregoing instrument. Witness my hand and official seal, this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_. My commission expires \_\_\_\_\_ of \_\_\_\_\_, 20 \_\_\_\_\_.
- B. Signed: \_\_\_\_\_

**(OFFICIAL SEAL)**

**END OF SECTION**

## **SECTION 00 43 13**

### **BID BOND FORM**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Owner's required Bid Bond Form attached to this section.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 BID SECURITY**

- A. File a bid bond in the amount equal to not less than 5% of the gross amount of the bid executed in accordance with and conditioned as prescribed by GS 143-129, as amended by Chapter 1104 of the North Carolina Public Laws of 1951.
- B. In lieu thereof, each bid may be accompanied by a certified check drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation (FDIC) in an amount equal to not less than 5% of the gross amount of the bid.
- C. Bid Bond shall be signed by the Bidder and notarized.
- D. If the successful Bidder fails to execute the contract within 10 days after award, the above deposit will be retained by the Owner on the bid bond executed on liquidated damages.

**END OF SECTION**

## **SECTION 00 43 39**

### **MINORITY BUSINESS ENTERPRISE**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Owner's required Minority, Women and Small Business Enterprise Program.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**SECTION 00 52 13**  
**STANDARD FORM OF AGREEMENT**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Owner-Contractor Agreement

**1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.



**SECTION 00 60 00**

**PROJECT FORMS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. The following documents are hereby incorporated into the Contract Documents by reference:
- B. The following documents are included in the Project Manual:
  - 1. Section 00 62 76.13 - Sales Tax Report
  - 2. Section 00 63 13 - Request for Interpretation
  - 3. Section 00 63 25 - Substitution Request Form

**END OF SECTION**

**SECTION 00 62 76.13**

**SALES TAX REPORT**

**PART 1 GENERAL**

**1.1 SUMMARY**

A. Section Includes:

1. Submit the attached State and County Sales/Use Tax Statement and Certification with each application for payment.

**1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**END OF SECTION**

### STATE AND COUNTY SALES/USE TAX STATEMENT AND CERTIFICATION

**Project Name:**

Application/Invoice #:

**Contractor's Name:**

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

Subcontractor's Name: \_\_\_\_\_

<b>Invoice Number</b>	<b>Invoice Date</b>	<b>Vendor's Name</b>	<b>Materials Purchased</b>	<b>Amount of Invoice Before Sales Tax</b>	<b>Sales Tax</b>	<b>Total Invoice</b>	<b>Name of County to Which Sales Tax Paid</b>
<b>TOTALS</b>							

## CERTIFICATION

This will certify that the above-listed amounts include only Sales or Use Taxes paid on purchases of tangible personal property for use in performing the contract for construction of the above-mentioned project which have become annexed to, affixed to, or have become a part of the building or structure.

SWORN AND SUBSCRIBED BEFORE ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_

Contractor:

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

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

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

NOTARY PUBLIC

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

**SECTION 00 63 13**  
**REQUEST FOR INTERPRETATION**

**PART 1 GENERAL**

**1.1 REQUEST FOR INTERPRETATION**

- A. RFI No.: \_\_\_\_\_
- B. Project: Facilities Pavement Improvement
- C. REI Project No. R25PVG-005
- D. Request Date: \_\_\_\_\_
- E. From: \_\_\_\_\_ (Company Name)

**1.2 REFERENCE**

- A. Specification Section: \_\_\_\_\_ Paragraph: \_\_\_\_\_
- B. Drawing Sheet: \_\_\_\_\_ Detail No(s): \_\_\_\_\_

**1.3 DESCRIPTION OF REQUEST**

- A. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- B. Signed by: \_\_\_\_\_
- C. Signature: \_\_\_\_\_

**1.4 REI RESPONSE**

- A. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- B. Attachments: \_\_\_\_\_  
\_\_\_\_\_
- C. Response Date: \_\_\_\_\_
- D. Signed by: Marcos Quesada
- E. Signature: \_\_\_\_\_

**SECTION 00 63 25**

**SUBSTITUTION REQUEST FORM**

**PART 1 GENERAL**

**1.1 SUBSTITUTION REQUEST INFORMATION**

- A. Project: Facilities Pavement Improvement
- B. REI Project No. R25PVG-005
- C. Request Date: \_\_\_\_\_

**1.2 REFERENCE**

- A. Specification Section: \_\_\_\_\_ Paragraph(s): \_\_\_\_\_

**1.3 DESCRIPTION**

- A. Manufacturer Name: \_\_\_\_\_
- B. Product Name: \_\_\_\_\_
- C. General Description of Substitution Request: \_\_\_\_\_  
\_\_\_\_\_

**1.4 CERTIFICATION**

- A. The undersigned certifies:
  - 1. Proposed substitution has been investigated and determined that it meets or exceeds the quality level of the specified product.
  - 2. Same warranty will be furnished for proposed substitution as for specified product.
  - 3. Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
  - 4. Proposed substitution does not affect dimensions and functional clearances.
  - 5. Payment will be made for changes to building design, including engineering design, detailing, and construction costs caused by the substitution.
  - 6. Contractor waives right to additional payment or time, that may subsequently become necessary because of the failure of the substitution to perform adequately.
- B. Submitted by (Print Name): \_\_\_\_\_
- C. Contractor Company Name: \_\_\_\_\_
- D. Signature: \_\_\_\_\_

### 1.5 ATTACHED SUPPORTING DATA

A. The following items are attached to this substitution request:

1. ☐ Product Data
2. ☐ Test Reports
3. ☐ Applicable Drawings
4. ☐ (\_\_\_\_\_)
5. ☐ (\_\_\_\_\_)

### 1.6 ENGINEERS ACTION

A. This substitution request is:

1. ☐ Approved
2. ☐ Approved as noted
3. ☐ Rejected - utilize specified materials
4. ☐ Rejected due too late submittal - utilized specified materials

B. Signed by: Marcos Quesada

C. Signature: \_\_\_\_\_

**END OF SECTION**

## SECTION 01 11 00

### SUMMARY OF WORK

#### PART 1 GENERAL

##### 1.1 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Name: Facilities Pavement Improvement
- B. Project Address: 201 Venus Street, Monroe, North Carolina 28112
- C. Owner: Union County Public Schools
- D. Engineer: The Contract Documents, dated 02-03-2025, were prepared by REI Engineers, Inc.
- E. This work includes the provision of labor, material, equipment, supervision and administration to integrate the work outlined in these specifications and Contract Drawings. In general, the scope of work in the Base Bid includes:
  - 1. Locate public and private utilities prior to work occurring.
  - 2. Provide barricades and signage for traffic control and designating work zones as indicated in the Contract Drawings. Fencing requirements are described in the specifications.
  - 3. Proof roll substrate to confirm suitability for paving. Report deflections to the Engineer and Owner.
  - 4. Provide striping as-is, unless otherwise stated in the Contract Drawings or by the Owner and approved by the Engineer.
  - 5. Provide erosion controls to protect contamination from leaving the work area and protect storm structures from sediment contamination.
  - 6. Provide a Portable Toilet and hand washing station. Access inside the facility is not available.
  - 7. Provide concrete equipment with a premanufactured washout apparatus.
  - 8. Pavement striping is for illustration only. Existing striping layouts should be noted prior to demolition.
  - 9. Existing trees and landscape are to remain in place unless otherwise noted.
  - 10. Backfill and compact landscaped and disturbed areas with like material. Grade areas level to surrounding existing and new surfaces. Slope surfaces to allow desired surface drainage. Seed and straw planted surfaces with surrounding like grass.
  - 11. Defined slopes have a tolerance of +/- 0.5%.
  - 12. Defined lengths have a tolerance of +/- 6 inches.

- F. Provide electrical, plumbing, mechanical, and other related trade work necessary to facilitate project operations.
- G. General requirements and specific recommendations of the material manufacturers are included as part of these specifications. The manufacturers' specifications are the minimum standards required for the completed systems. Where specific items listed herein improve the standards required by the manufacturers, they take precedence where their compliance does not affect the manufacturers' guarantee or warranty provisions.
- H. Prior to excavation, coordinate with designated Owner personnel all known utility locations. Provide utility locate and mark location of utilities on the ground. The Contractor remains responsible for protecting existing utilities from damage.
- I. The contractor is responsible for labor and materials needed for backfilling and fine grading necessary to comply with the requirements of these documents and conform to the requirements of the current Building Code approved in the State of the project location.
- J. Serve as the Project Expeditor and coordinate work and schedules of others hired.

## **1.2 REFERENCE STANDARDS**

- A. CSI/CSC MF - Masterformat; 2016.

## **1.3 CONTRACT**

- A. Project constructed under a single prime general construction contract between Owner and Contractor.

## **1.4 WORK UNDER OTHER CONTRACTS**

- A. Separate Contract: Owner may award a separate contract for performance of certain construction operations at Project site.
  - 1. None
- B. Cooperate with separate contractors so work on those contracts are carried out smoothly without interfering with or delaying Work under this Contract.

## **1.5 SPECIFICATION FORMATS AND CONVENTIONS**

- A. Specification Format: The Specifications are organized into Divisions and Sections using the CSI/CSC MF 49-division format and numbering system.
  - 1. Section Identification: The Specifications use section numbers and titles to cross-reference Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:



1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Interpret words and meanings as appropriate. Infer words implied, but not stated, as the sense requires. Interpret singular words as plural and plural words as singular where applicable as the context of the Contract Documents indicates.
2. Imperative mood and streamlined language are generally used in the Specifications. Perform requirements expressed in the imperative mood. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
  - a. The words "shall", "shall be", or "shall comply with" depending on the context, are implied where a colon (:) is used within a sentence or phrase.

**END OF SECTION**

## **SECTION 01 14 00**

### **WORK RESTRICTIONS**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Administrative and procedural requirements for work sequence, work restrictions, occupancy requirements and use of premises.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections, apply to this Section.

##### **1.3 SUBMITTALS**

- A. Background Checks: Provide background checks for employees anticipated to work on-site during the project.

##### **1.4 WORK SEQUENCE**

- A. Construct Work in phases to accommodate the Owner's use; if applicable, of the premises during the construction period; coordinate the construction schedule and operations with the Owner and Engineer.
- B. Construct the Work in phases to provide for public convenience. Do not close off public use of facility until completion of one phase of construction provides alternative usage.
- C. Schedule construction in such a manner that once work has commenced on site, the work force will remain at that site continuously each workday through final completion at that facility.

##### **1.5 WORK RESTRICTIONS**

- A. K-12 School Work Restrictions:
  - 1. There are no work hour restrictions provided work is completed within the specified construction duration when students are not in school. If work extends beyond the completion deadline, perform work after school hours which includes non-school days, holidays, semester breaks, Saturdays, Sundays or after student dismissal on school days. These imposed work restrictions are in addition to the specified liquidated damages.
  - 2. Coordinate work schedule with School's testing and special events schedule. Contractor may not be allowed on-site during certain testing days/events.

##### **1.6 OCCUPANCY REQUIREMENTS**

- A. Owner Occupancy:

1. Owner occupies the premises during construction to conduct his normal operations. Cooperate with Owner in construction operations to minimize conflict, and to facilitate Owner usage.
2. Conduct operations as to ensure the least inconvenience and the greatest amount of safety and security for the Owner, building occupants, and the general public.
3. Control noise from operations so that building occupants are not affected.

## **1.7 SECURITY**

- A. Restrict the access of persons entering upon the Owner's property in connection with the work to the Contractor's Entrance and to the site of the work.
- B. Maintain an accurate record of the names and identification of visitors entering upon the Owner's property in connection with the work of this contract, including times of entering and times of leaving, and submit a copy of the record to the Owner weekly.
- C. Background Checks: No persons/personnel allowed on site without the following background checks: Nationwide, Sex Offender check, Social Security Number check. Provide this information to the Engineer/Owner 5 business days prior to the scheduled access for each person. Owner's decision on acceptability of personnel. Each person is required to wear a badge with name, photograph, and company name. Ensure background checks for persons are submitted to Owner and those persons denied access are not allowed on-site. Follow requirements of Jessica Lunsford Act for North Carolina school facilities.

## **1.8 USE OF SITE**

- A. Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.
- B. Confine its apparatus, the storage of materials, and operations of its workmen to limits required by law, ordinances, permits or directions of the Owner, and do not unnecessarily encumber the site. Prepare grounds for storage of materials, equipment set-up, foot and vehicular traffic.
  1. Driveways and Entrances: For areas where no construction is taking place keep driveways, entrances and/or access points serving premises clear and available to Owner, Owner's employees, and emergency vehicles. Do not use these areas for parking or storage of materials.
    - a. Schedule deliveries to minimize use of driveways and entrances.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
    - c. Schedule deliveries to avoid student pick up and drop off times.
  2. Do not allow equipment or operators to come within ten feet of power lines on the site. Adjust methods of demolition and construction accordingly to stay a safe distance from low or high voltage power lines.
  3. Move stored materials and equipment that interfere with operations of the Owner.

4. Protect surface improvements not included in scope of work including pavements, curbs, sidewalks, lawn and landscaped areas, utilities, etc.
5. Clean up daily refuse, rubbish, scrap materials, and debris caused by its operations. Present a neat, orderly, and controlled appearance of the site.
6. No access to the facility unless authorized. Do not utilize restrooms inside the facility. Provide a portable toilet and remain for the duration of the project.
7. Keep areas at the facility, except areas under construction, safely accessible to vehicles.
8. Perform Work in a way that does not restrict the site outside of the work area.

C. Transportation Facilities

1. Truck and equipment access:
  - a. Avoid traffic conflict with vehicles of the Owner's employees and customers and avoid over-loading of street and driveways elsewhere on the Owner's property, limit the access of trucks and equipment to the designated areas.
  - b. Provide adequate protection for curbs and sidewalks over which trucks and equipment pass to reach the job site.
2. Contractor's vehicles:
  - a. Require contractor's vehicles, vehicles belonging to employees of the contractor, and other vehicles entering the Owner's property in performance of the work the contract, to use only the designated access route.
  - b. Do not permit such vehicles to park on street or other area of the Owner's property except in the designated area.

D. Repair to the Owner and Engineer's satisfaction, or to restore to condition at the time of award of Contract, or to make restitution acceptable to the Owner, damages to surface improvements resulting from, or attributable to, the work operation.

1. Repair damaged concrete by replacing full sections of concrete between control/expansion joints.
2. Fill ruts in grass areas and grade to original conditions. Provide grass seed and straw.
3. Replace disturbed landscaping in mulched or natural areas.

## 1.9 NORTH CAROLINA K-12 SCHOOL POLICIES

- A. Tobacco Policy: The Owner has adopted a Tobacco Free Policy which applies to school property. This is a total ban on tobacco products including cigarettes, cigars, pipes, chewing tobacco, snuff, etc. Contractor is responsible for employee's actions while they are on school property. Failure to follow this policy constitutes a breach of contract and said contract may be terminated without penalty to the school system.

- B. Weapons and Explosives Policy: Excluding law enforcement, persons are prohibited from possessing, carrying, using or threatening to use, or encouraging another person to possess, carry, use or threaten to use, weapons or explosives on school property or while attending curricular or extracurricular activities sponsored by the school. This policy applies to weapons or explosives carried openly or concealed. For purposes of this policy, a weapon includes, but is not limited to gun, rifle, pistol or other firearm; or BB gun, stun gun, air rifle, air pistol, bowie knife, dirk, dagger, slingshot, leaded cane, switchblade knife, blackjack, metallic knuckles, razors and razor blades (except solely for personal shaving), fireworks, or sharp-pointed or edged instrument except instructional supplies, unaltered nail files and clips and tools used solely for preparation of food, instruction and/or maintenance on educational property. For purposes of this policy, an explosive includes, but is not limited to and dynamite cartridge, bomb, mine or powerful explosive as defined in N.C. G.S. 14-284.1. For purposes of this policy, school property is school building or bus, school campus, grounds, recreational area, athletic field, or other property owned, used or operated by The Board of Education. This policy does not apply to: 1) a weapon or explosive used solely for educational or school sanctioned ceremonial purposes, or used in a school approved program conducted under the supervision of an adult whose supervision has been approved by the school authority, or 2) firefighters, emergency personnel, North Carolina Forest Service personnel, and private police employed by the School Board, when acting in the discharge of their official duties.
- C. Criminal Record Investigation: When requested by Owner, obtain a county, state and national criminal history covering the past ten years on contractor applicant or contractor employee, hereafter called prospective worker, providing services to Owner. As a minimum, criminal information sources include State and National access to the SBI/DCI Criminal History Record Information for the prospective worker's residence(s), past ten years and fingerprints forwarded to the Federal Bureau of Investigation for the search. Previously conducted criminal histories more than one year old are required to be updated. Provide a Criminal Histories Report two weeks prior to arriving "on-site" and update report monthly for new hires. Prospective workers who refuse to provide fingerprints and/or consent to the Criminal Background checks or who have been convicted of sexual deviance, sexual crime, domestic violence, violence against another human being, larceny, alcohol/drug trafficking, alcohol/drug abuse or other disqualifying offense as determined by the Owner, are not be allowed on the property.
- D. Conduct Policy: The conduct of contractor employees to be exemplary; profanity, drinking, lewd or suggestive comments or gestures or other acts of this nature are not tolerated.
- E. Drug Free Policy: Owner conforms to a drug free policy. Contractor employee must be tested upon request of Owner and results provided to Owner. If the employee is found to have been under the influence or using drugs, it constitutes a breach of contract and said contract may be terminated without penalty to the school system.
- F. Dress Code Policy: Shirts and shoes are required, as well as long pants. Identification of employees, vehicles, uniforms, etc. is required when indicated.

#### **END OF SECTION**

## **SECTION 01 21 00**

### **ALLOWANCES**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Administrative and procedural requirements governing allowances.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section, including but not limited to:
  - 1. Section 31 00 00 - Earthwork
  - 2. Section 32 12 16 - Asphalt Paving
  - 3. Section 32 17 23 - Pavement Markings

##### **1.3 ABBREVIATIONS**

- A. Abbreviations for typical units of measurement:
  - 1. Square Foot (SF)
  - 2. Square Yard (SY)
  - 3. Cubic Foot (CF)
  - 4. Linear Foot (LF)
  - 5. Each (EA)
  - 6. Tonnage (TON)

##### **1.4 QUANTITY ALLOWANCES**

- A. Include the specified quantity allowances in the base bid. Use the unit price submitted on the Bid Form to compute the quantity allowances. The quantities indicated on the Bid Form are estimated quantities only for the purpose of comparing bids. Compensation for the unit price bid made for the exact quantity of work performed under the unit price item. Deductive amounts of unit price work included in the Contract Sum are calculated at 100% of the quoted add unit price.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION**

##### **3.1 SCHEDULE OF ALLOWANCES**

- A. Quantity Allowances:
-

1. Undercut/Mill and Provide 60 TONS of Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material.

**END OF SECTION**

## **SECTION 01 22 00**

### **UNIT PRICES**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Administrative and procedural requirements for unit prices.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section, including but not limited to:

1. Section 31 00 00 - Earthwork
2. Section 32 12 16 - Asphalt Paving
3. Section 32 17 23 - Pavement Markings

##### **1.3 DEFINITION**

A. Unit price is an amount proposed by Bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

##### **1.4 ABBREVIATIONS**

A. Abbreviations for typical units of measurement:

1. Square Foot (SF)
2. Square Yard (SY)
3. Cubic Foot (CF)
4. Linear Foot (LF)
5. Each (EA)
6. Tonnage (TON)

##### **1.5 UNIT PRICE MEASUREMENT**

- A. Prior to performing work under a unit price as specified herein, notify the Engineer to allow for measurement of the actual quantities of work. Work performed under these items without prior approval and measurement is at the Contractor's expense.
- B. Maintain a daily log including visual documentation (i.e. digital photographs) showing dates, location and exact quantities of unit price work.



- C. Owner and Engineer reserve the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent party.

## **1.6 UNIT PRICE PAYMENT**

- A. Include in unit prices costs associated with performing the unit price work including but not limited to labor, material, equipment, insurance, applicable taxes, overhead and profit, bonds, etc.

## **1.7 UNIT PRICE PERFORMANCE**

- A. Install unit price work in accordance with the applicable specification sections and Contract Drawings.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 SCHEDULE OF UNIT PRICES**

- A. Provide a unit price for:
  - 1. Place and Grade ABC Stone. Furnishing, mobilizing, placing, and grading of material is included. Unit of Measurement: TON.
  - 2. Place and Grade Washed #57 Stone. Furnishing, mobilizing, placing, and grading of material is included. Unit of Measurement: TON.
  - 3. Undercut/Mill and Provide Asphalt Pavement. The undercut is the removal of stone, subgrade, concrete, and/or asphalt. Include the related cost for hauling and disposal of all undercut material. Exclude the cost for testing, disposal and excess hauling of contaminated material. Unit of Measurement: TON
  - 4. Provide 4-inch wide Striping. Unit of Measurement: LF
  - 5. Provide 4-inch Sidewalk. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material. Unit of Measurement: SF
  - 6. Provide Curb and Gutter. Include the related cost for furnishing, mobilizing, forming, and pouring of material. Include the related cost for hauling and disposal of all existing material. Unit of Measurement: LF
  - 7. Provide Concrete Wheel Stop. Include the related cost for furnishing, mobilizing, and installing of the wheel stop:. Unit of Measurement: EA

**END OF SECTION**

## SECTION 01 26 00

### CONTRACT MODIFICATION PROCEDURES

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. Section Includes:

1. Administrative and procedural requirements for handling and processing Contract modifications.

##### 1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### 1.3 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: A detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time will be issued by the Engineer along with supplemental or revised Drawings and Specifications.

1. Proposal Requests issued by Engineer are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
2. Within 5 days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
  - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits. If requested, furnish survey data to substantiate quantities.
  - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - c. Include costs of labor and supervision directly attributable to the change.
  - d. Include an updated Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, propose changes by submitting a request for a change to Engineer.

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.

2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits. If requested, furnish survey data to substantiate quantities.
  3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  4. Include costs of labor and supervision directly attributable to the change.
  5. Include an updated Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  6. Comply with requirements in Division 1 if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Approval:
1. If sufficient contingency allowance funds remain, written approval will be provided by the Engineer in the form of an Allowance Authorization signed by the Engineer, Contractor and Owner.
  2. If contingency allowance funds are not available; upon approval by Owner, written approval will be provided by the Engineer in the form of a Change Order as provided in the Conditions of the Contract.
    - a. Form of Change Order: Owner or Engineer Standard Form submitted by the Engineer signed by the Contractor and Owner.
    - b. Do not commence work or purchase materials for such change orders until written approval is received in the form of an executed Allowance Authorization or Change Order.
    - c. An executed Change Order is the only legal document which can change the Contract Sum or Time.

#### **1.4 SUPPLEMENTAL INSTRUCTIONS**

- A. Supplemental instructions authorizing minor changes in the Work, not involving an adjustment to the Contract Sum or Contract Time, will be issued by the Engineer on Engineer's Supplemental Instructions form.

#### **1.5 CONSTRUCTION CHANGE DIRECTIVE**

- A. Construction Change Directive: When the Owner and Contractor are not in total agreement on the terms of a Proposal Request; the Engineer may issue a Construction Change Directive on Engineer's Standard Form, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
1. The Construction Change Directive will contain a description of the change in the Work and designate the method followed to determine the change in the Contract Sum or Contract Time.

2. Submit unit costs, equipment rates and labor rates as requested by the Engineer and agree upon submitted rates before the work progresses unless directed to proceed in the absences of an agreement or in an emergency.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive. Provide a copy of those records the Engineer.
1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

**END OF SECTION**

## **SECTION 01 31 00**

### **PROJECT MANAGEMENT AND COORDINATION**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

**A. Section Includes:**

1. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - a. Project Schedule
  - b. General project coordination procedures.
  - c. Coordination.
  - d. Administrative and supervisory personnel
  - e. Project meetings

##### **1.2 RELATED DOCUMENTS**

- A.** Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 COORDINATION**

- A.** Coordinate construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Coordinate its operations with those included in different Sections that depend on each other for proper installation, connection, and operation.
1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
  3. Make adequate provisions to accommodate items scheduled for later installation.
- B.** Coordinate the scheduling and sequence of operations with the Owner and Engineer.
- C.** If necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

- D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Construction Schedule.
  2. Preparation of the Schedule of Values.
  3. Installation and removal of temporary facilities and controls.
  4. Delivery and processing of submittals.
  5. Progress meetings.
  6. Pre-Construction conference.
  7. Pre-installation conferences.
  8. Project closeout activities.

#### **1.4 PROJECT MEETINGS**

A. Pre-Construction Meeting

1. A Pre-Construction Meeting will be scheduled as soon as possible after the award of the contract. The Engineer's Representative will compile minutes of the meeting and will furnish a copy of the minutes to each person present.
2. Attendance: Project Manager, Job Superintendent and Job Foreman, Owner, Engineer's Representative, manufacturer's representatives, installers of related work and other persons concerned with the installation and performance.
  - a. Provide 3 telephone numbers to contact the Contractor or his authorized representative in the event of an emergency after normal business hours.
3. Minimum Agenda: Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers, and the Project Manager; channels and procedures for communication; construction schedule, including sequence of critical work; contract documents, including distribution of required copies of Drawings and revisions; processing of Shop Drawings and other data submitted to the Project Manager for review; rules and regulations governing performance of the work and procedures for safety, first aid, security, quality control, housekeeping and related matters.

B. Substantial Completion Inspection Meeting

1. Scheduled by Owner and Engineer upon written notification of substantial completion of work from the Contractor.
2. Attendance: Owner, Engineer, Contractor, material manufacturer.
3. Minimum Agenda: Walkover inspection, verification of substantial completion, identification of punch list items and identification of problems potentially impeding issuance of warranties.

C. Final Inspection Meeting

1. Scheduled by Owner and Engineer upon written notification of final completion of work from the Contractor.
2. Attendance: Owner, Engineer, Contractor.
3. Minimum Agenda: Verification of final completion including the completion of the punch list items.

**END OF SECTION**

**SECTION 01 33 00**  
**SUBMITTAL PROCEDURES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.

**1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**1.3 SUBMITTAL PROCEDURE**

- A. General: The Contractor is responsible for providing the submittals to the Engineer. Each submittal is required to be accepted in writing prior to commencement of work.
- B. Submission Requirements:
  - 1. Submit required submittals electronically in pdf format to the Engineer for review. The submittals will then be returned electronically to the Contractor with comments. Final submittals require written responses to submittal comments.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as specified below, commencing on Engineers receipt of submittal.
  - 1. Initial Review: Allow 7 work days for initial review of submittals.
  - 2. Allow 7 work days for processing each resubmittal.
  - 3. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
- D. Identification:
  - 1. Submit as one pdf file with bookmarks for each scheduled item.
- E. Deviations: Highlight, encircle, or otherwise identify deviations from the Contract Documents on submittals and provide letter describing in detail proposed changes, substitutions, or deviations from the project or manufacturers specifications. Include a written explanation of why substitutions should be considered under the appropriate tab.
- F. Transmittal: Package submittals appropriately for transmittal. Engineer will discard submittals received from sources other than Contractor. Include Contractors certification stating that information submitted complies with requirements of the Contract Documents.
- G. Use for Construction: Use only final submittals with mark indicating action taken by Engineer in connection with construction.



## **1.4 SCHEDULE OF SUBMITTALS**

- A. Refer to the applicable specification section for list of submittal requirements for each section.
- B. Submit the following submittal items electronically with a title page and/or pdf bookmark for each submittal item to meet the requirements specified herein:
  - 1. Owner/Contractor Agreement:
    - a. Copy of Executed Owner/Contractor Agreement
    - b. Copy of Contractors Certificate of Insurance
  - 2. Section 01 14 00 - Work Restrictions
  - 3. Section 01 31 00 - Project Management and Coordination
  - 4. Section 01 77 00 - Closeout Procedures
  - 5. Section 31 00 00 - Earthwork
  - 6. Section 31 01 16.71 - Cold Milling Asphalt Pavement
  - 7. Section 32 12 16 - Asphalt Paving
  - 8. Section 32 12 36 - Asphalt Pavement Seal Coat
  - 9. Section 32 17 23 - Pavement Markings
  - 10. Shop Drawings: Shop drawings or letter stating installation of materials as detailed in the Contract Drawings unless properly authorized by the Engineer.
  - 11. Existing Damage Documentation: Existing damaged/dysfunctional components documentation (videotape, photos, etc.) including but not limited to asphalt spills, windows, walls, sidewalks, paving, ceilings, etc. Lack of submission prior to commencement of work indicates no existing damaged components and Contractor takes responsibility for damages caused by operations.

## **PART 2 PRODUCTS**

### **2.1 SUBMITTALS**

- A. General: Prepare and submit Submittals required herein and by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  - 1. If information is specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
  - 2. Mark each copy of each submittal to show which products and options are applicable.
  - 3. Include the following information, as applicable:

- a. Manufacturers written recommendations.
  - b. Manufacturers product specifications.
  - c. Manufacturers installation instructions.
  - d. Manufacturers catalog cuts.
  - e. Wiring diagrams showing factory-installed wiring.
  - f. Printed performance curves.
  - g. Operational range diagrams.
  - h. Compliance with recognized trade association standards.
  - i. Compliance with recognized testing agency standards.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
- 1. Preparation: Include the following information, as applicable: dimensions, identification of products, fabrication and installation drawings, schedules, coordination requirements and notation of dimensions established by field measurements.
  - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.
- D. Samples: Prepare physical units of materials or products, including the following:
- 1. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from the same material used for the Work, cured and finished in manner specified, and physically identical with the product proposed for use, and that show range of color and texture variations expected. Samples include, but are not limited to, partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
  - 2. Submit three sets of Samples. Engineer will retain two Sample sets; remainder will be returned.
  - 3. Preparation: Mount, display, or package Samples in manner specified to facilitate review of qualities indicated. Prepare Samples to match Engineers sample where so indicated. Attach label on unexposed side.
  - 4. Submit Samples for review of kind, color, pattern, and texture for a final check of these characteristics with other elements and for a comparison of these characteristics between final submittal and component as delivered and installed.
  - 5. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity and used to determine final acceptance of construction associated with each set.

- E. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of engineers and owners, and other information specified.
- F. Product Certificates: Prepare written statements on manufacturers letterhead certifying that product complies with requirements.
- G. Installer Certificates: Prepare written statements on manufacturers letterhead certifying that Installer complies with requirements and, where required, is authorized for this specific Project.
- H. Manufacturer Certificates: Prepare written statements on manufacturers letterhead certifying that manufacturer complies with requirements. Include evidence of manufacturing experience where required.
- I. Material Certificates: Prepare written statements on manufacturers letterhead certifying that material complies with requirements.
- J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.
- K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- L. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software used for calculations. Include page numbers.
- M. Manufacturer's Instructions: Prepare written or published information that documents manufacturers recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer.
- N. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, and term of the coverage.

## **PART 3 EXECUTION**

### **3.1 CONTRACTORS REVIEW**

- A. Review each submittal, check for compliance with the Contract Documents and note corrections and field dimensions prior to submitting to Engineer.

### **3.2 ENGINEERS ACTION**

- A. Submittals: Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Engineer will stamp each submittal item with an action stamp and will mark stamp appropriately to indicate action taken.

- B. Submittals not required by the Contract Documents will not be reviewed and may be discarded.

**END OF SECTION**

## **SECTION 01 40 00**

### **QUALITY REQUIREMENTS**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. Section Includes:
  - 1. This Section includes administrative and procedural requirements for quality assurance and quality control.
  - 2. Secure and pay costs of licenses and permits required by City, County and/or State authorities.
    - a. Permits and approvals may include but are not limited to grading, demolition, zoning, building, driveway, detention, subdivision, special use, sewer, and water.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 DEFINITIONS**

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction comply with requirements. Services do not include contract enforcement activities performed by Engineer.
- C. Authority Having Jurisdiction: AHJ

##### **1.4 DELEGATED DESIGN**

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Engineer.

##### **1.5 SUBMITTALS**

- A. Permit: Provide copy of construction permits and approvals along with required licenses or certifications required by the AHJ.

##### **1.6 QUALITY ASSURANCE**

- A. Perform quality assurance in accordance with governing Codes, referenced standards, established standards, or industry standards.

- B. Solely responsible for supervising and directing the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise necessary to perform the Work in accordance with the Contract. Solely responsible for the means, methods, techniques, sequences and procedures of construction and for coordinating portions of the Work under the Contract, except where otherwise specified in the Contract Documents. Solely responsible to the Owner that the finished Work complies with the Contract Documents.
- C. It is the intent under this contract that workmanship be of the best quality consistent with the materials and construction methods specified. The presence or absence of the Owner's or Engineer's representative in no way relieves the Contractor of his responsibility to furnish materials and construction in compliance with the drawings and specifications. The Owner and Engineer have the authority to judge the quality and require replacement of unacceptable work or personnel.
- D. Cooperate in the execution of work and plan work in such manners as to avoid conflicting schedules or delay of work. If the work depends upon the work of another Contractor, report defects affecting the work to the Engineer. Commencement of work where such condition exists constitute acceptance of the other Contractor's work as being satisfactory to receive the work commenced. Coordinate work of trades under this contract in such a manner to obtain the best possible workmanship for the project. Install components of the work in accordance with the best practices of the particular trade. Notify the Owner sufficiently in advance of operations to allow for assignment of personnel.
- E. Solely responsible for health and safety precautions and programs for workers and others in connection with the Work. No inspection by, knowledge on the part of, or acquiescence by the Engineer, the Owner, the Owner's employees and agents, or other entity whatever relieves the Contractor from its sole responsibility for compliance with the requirements of the Contract or its sole responsibility for health and safety programs and precautions.
- F. Materials or methods described by words which, when applied, have a well-known technical or trade meaning are held to refer to such recognized standard. Standard specifications or manufacturer's literature, when referenced, are of the latest revision or printing unless otherwise stated, and are intended to establish the minimum requirements acceptable.
- G. Maintain one set of the contract documents and accepted submittals at the job site.
- H. Provide new materials unless otherwise indicated.
- I. Provide workmanship in accordance with the best modern practice.
- J. When special makes or grades of material which are normally packaged by the supplier or manufacturer are specified or accepted, deliver materials to the site in original packages or containers with seals unbroken and labels intact and do not open until reviewed and accepted by the Engineer. Notify the Engineer prior to such material's delivery.
- K. Verify dimensions and conditions at the site prior to starting work and notify the Engineer immediately of any errors or inconsistencies.
- L. Correct deficiencies identified by Engineer and non-conforming work within 24 hours of receipt of notification, either verbally or written, and submit a plan of action for addressing the deficiencies and non-conforming work. Do not proceed with further tear-off or commencement of other work until deficiencies and non-conforming work are properly addressed.

M. Control of Installation

1. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
2. Comply with manufacturers' instructions, including each step in the sequence
3. Request clarification from Engineer before proceeding in the event manufacturers' instructions conflict with Contract Documents.
4. Comply with specified standards as the minimum quality for the Work, except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
5. Only allow Work performed by person qualified to produce workmanship of specified quality.
6. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

N. Tolerances:

1. Monitor tolerance control of installed products to produce acceptable work. Do not permit tolerances to accumulate.
2. Comply with manufacturers' tolerances. Request clarification from Engineer in the event manufacturers' tolerances conflict with Contract Documents.
3. Adjust products to appropriate dimensions; position before securing products in place.

O. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

1. Maintain applicable federal, state and municipal licenses.
2. Have a minimum of 5 years' experience in installing the same or similar materials specified under the same firm name as that submitting the bid. If requested, submit a copy of firm's Articles of Incorporation to verify years in business. Crew workers on site are experienced and have a working knowledge of the system being installed.
3. Principals of the firm to have a minimum of 10 years' experience in the estimating, supervision, management and administration of a contracting firm engaged in work similar to work as specified.
4. Licensed by state work is occurring in for the type and dollar amount of work contemplated by these Contract Documents.
5. Never filed bankruptcy or filed for protection from creditors.

6. During the construction and completion of work covered by these Specifications, if the conduct of workers of the various crafts is determined unsuitable or a nuisance to the Owner or Engineer, or if the workman is considered incompetent or detrimental to the work, order such party removed from the grounds with the person not returning during the course of work on the project.
7. Superintendent: During the performance of work by the Contractor or subcontractors, provide an on site superintendent/representative meeting the following requirements:
  - a. For the purpose of these Specifications the designation "superintendent" is hereby defined as the individual present on the job site while work is being performed, and whose primary responsibility is to supervise and direct the performance of the Work.
  - b. Be in attendance at the project site during the progress of the work and duties as superintendent limited to this project only. Supervise and instruct workmen without engaging in the work process. If superintendent is absent temporarily from the project, designate a competent foreman to assume duties. During the superintendent's absence, foreman cannot engage in the work process; supervise and instruct only. Likewise, communications given to the foreman are binding as if given to the Contractor.
  - c. Communicate matters pertaining to the Work with the Owner and Engineer. Do not make decisions regarding changes in the Work without the Owner and Engineer's knowledge.
  - d. Decision making authority and ability.
  - e. Able to demonstrate knowledge of work being installed.
  - f. Fluent in the English language (reading, writing and speaking).
  - g. In possession of mobile telephone.
  - h. Employed by the Contractor at least six months prior to project commencement.

## **1.7 QUALITY CONTROL**

- A. The authorized representatives and agents of Owner permitted to inspect work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records.
- B. Owner Responsibilities:
  1. Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
    - a. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of the types of testing and inspecting they are engaged to perform.
- C. Contractor Responsibilities:



1. Repair and protection of work and materials.
2. Replace work or materials not conforming with requirements of the Specifications or damaged during the progress of the work before completion and acceptance of the project.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 REPAIR AND PROTECTION**

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

**END OF SECTION**

## **SECTION 01 42 00**

### **REFERENCE STANDARDS**

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Requirements relating to referenced standards.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 REFERENCE STANDARDS**

- A. Reference standards are specified in Part 1 of the applicable specification section.
- B. For products or workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- C. Comply with the reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- D. Should specified reference standards conflict with Contract Documents, request clarification from the Engineer before proceeding.
- E. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of the Engineer shall be altered by Contract Documents by mention or inference otherwise in any reference document.

##### **1.4 BUILDING CODE**

- A. Comply with the building code and energy conservation code/standard in effect in North Carolina and current on date of Contract Documents.
  - 1. 2018 North Carolina Building Code
  - 2. 2018 North Carolina Energy Conservation Code

**END OF SECTION**

## SECTION 01 50 00

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. Section Includes:

1. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.

##### 1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### 1.3 REFERENCE STANDARDS

- A. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

##### 1.4 USE CHARGES

A. Include in Contract, cost or use charges for temporary facilities which are not chargeable to Owner. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, occupants of testing and inspecting agencies and personnel of authorities having jurisdiction.

##### 1.5 QUALITY ASSURANCE

- A. Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241 .
- B. Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70 .
- C. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- D. Develop and supervise an overall fire-prevention and first-aid fire-protection program for personnel at Project site. Review needs with local fire department and establish procedures. Instruct personnel in methods and procedures. Post warnings and information.

#### PART 2 PRODUCTS

##### 2.1 MATERIALS

- A. General: Provide new materials or utilize undamaged, previously used materials in serviceable condition if accepted by Engineer. Provide materials suitable for use intended.

- B. Water: Potable.
- C. Self-Contained Toilet Units: Single-occupant units of chemical, aerated recirculation, or combustion type; vented; enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material with a self-contained or standalone exterior handwashing station.
- D. Electrical Outlets: Properly configured, NEMA-polarized outlets to prevent insertion of 110 to 120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button, and pilot light.
- E. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure and the requirements of the local Governing agency.

## **PART 3 EXECUTION**

### **3.1 TEMPORARY UTILITIES**

- A. Water Service: Obtain water from an appropriately metered public water hydrant.
- B. Electrical Power Service: Provide portable generators for electrical power requirements.
  - 1. Electric Distribution: Provide receptacle outlets adequate for connection of power tools and equipment. Provide waterproof connectors to connect separate lengths of electrical power cords if single lengths do reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.

### **3.2 CONSTRUCTION FACILITIES**

- A. Temporary construction facilities include the following:
  - 1. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities. Located facilities at sites approved by Owner. Access inside the facility is not available.
    - a. Disposable Supplies: Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Maintain adequate supply. Provide covered waste containers for disposal of used material.
    - b. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy.
    - c. Wash Facilities: Provide adequate hand washing stations.
    - d. Drinking-Water Facilities: Provide bottled-water, drinking-water units.
  - 2. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations at a location approved by the Owner. Containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from other waste. Use of Owner's waste disposal facilities is not acceptable.
    - a. If required by authorities having jurisdiction, provide separate containers, clearly labeled, for each type of waste material.

### **3.3 TEMPORARY BARRIERS AND ENCLOSURES**

- A. Provide temporary barriers and enclosures for protection from exposure, foul weather, construction operations and other activities. Protect buildings and grounds from damages during construction.
- B. Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard. Where appropriate and needed, provide lighting, including flashing red or amber lights.
- C. Provide security controls to protect work and materials at the project site.
- D. Provide fencing to enclose the materials storage and staging area.
- E. Provide and maintain suitable temporary sidewalks, closed passageways, fences, or other structures required by law so as not to obstruct or interfere with traffic in public streets, alley ways, or private right-of-way. Leave an unobstructed way along public and private places for pedestrians and vehicles.
- F. Provide walks over and around all obstructions in public places. Maintain sufficient light and guards to protect persons from injury.
- G. Provide emergency egress from existing occupied areas at all times as required by AHJ. Maintain egress path in compliance with requirements of the applicable building code.

### **3.4 PROTECTION FACILITIES INSTALLATION**

- A. Provide environmental protection by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Provide Erosion Control Measures:
  - 1. Provide silt fence in landscaped areas and gravel areas downstream from disturbed subgrade.
  - 2. Provide wattles along pavement surfaces downstream from disturbed subgrade.
  - 3. Provide silt sacks under storm grates collecting runoff from areas with disturbed subgrade.
- C. Provide premanufactured concrete washout apparatus or provide approved designated washout area.

### **3.5 TREE AND PLANT PROTECTION:**

- A. Contractors are hereby reminded and cautioned that care shall be exercised to protect trees and plants which are to remain during the progress of the Project. Suitable barriers shall be provided around all trees and plants that are to remain and which are in the construction area and product handling area. All damage to such trees and plants shall be repaired; broken limbs properly and neatly pruned and painted with pruning paint; all trunk damage neatly dressed and painted with pruning paint. Any trees and plants which are excessively damaged shall be replaced in like, kind, size, and species by The Contractor at no additional cost. All work shall be by a recognized and approved nursery.

1. All grading around trees and plants to remain shall be such that the root system shall not be disturbed. Earth shall not be temporarily piled around trees and plants, nor shall earth be graded to the trees and plants above the natural root depth for that particular species.
2. Established trees and plants, which are in the way of construction and which are in the material handling areas, shall be removed and stored for future replanting. The services of a recognized and approved nursery shall be employed to remove the trees and plants and prepare them for storage. Removed trees and plants shall be properly balled and burlapped in accordance with their size. During the time of storage, they shall be properly watered and cared for in accordance with the instructions from the nursery. After the construction work is completed, the stored trees and plants shall be replanted, and those trees and plants not replanted shall be disposed of as directed by the Owner. Provide storm water controls sufficient to prevent flooding from heavy rain.

### **3.6 PROJECT SIGNAGE**

- A. Provide temporary signs to provide information to building occupants directing them away from construction operations.
- B. Provide signage inside adjacent buildings alerting occupants of the Work Area.

### **3.7 VEHICULAR ACCESS AND PARKING**

- A. Parking for vehicles available only in the approved Set-up and Staging area. No other vehicle parking on site is allowed.
- B. Owner Personnel vehicles will be removed from the construction area prior to the start of construction.

### **3.8 TRAFFIC CONTROLS**

- A. Obtain and erect street/parking lot signage as necessary to divert traffic away from staging areas, work area, etc. Coordinate signage requirements with the Owner and Engineer.
- B. Provide temporary traffic controls at junction of temporary roads with public roads. Include warning signs for public traffic and "STOP" signs for entrance onto public roads. Comply with requirements of authorities having jurisdiction.
- C. Obey speed limit of 5 mph for construction vehicles.

**END OF SECTION**

**SECTION 01 73 00**  
**EXECUTION REQUIREMENTS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. General procedural requirements governing execution of the Work.

**1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**1.3 SUBMITTALS**

- A. List of Materials on the project site including manufacturer name and product name.
- B. Safety Data Sheets (SDS):
  - 1. Safety Data Sheets (SDS) for materials/products anticipated for use and stored or brought to the site for completion of this project.
  - 2. Maintain on site with the Superintendent a set of SDS for products/materials on site.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

- A. Material storage area designated by the Owner at the Pre-Bid and Pre-Construction Meetings and/or indicated in Contract Drawings.
  - 1. Store materials as required by the manufacturer and indicated in their installation instructions.
  - 2. Store materials as required by their respective specification section.
  - 3. Properly secure materials to resist wind events.
- B. Deliver and transport materials to project in accordance with the Owner's requirements and coordinate material deliveries with Owner.

**PART 3 EXECUTION**

**3.1 EXAMINATION**

- A. Existing Conditions:
  - 1. The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of construction affecting the Work.

- B. Existing Utilities:
  - 1. The existence and location of utilities and construction indicated as existing are not guaranteed.
  - 2. Before construction, verify the location and points of connection of utility services.
  - 3. Before beginning work, investigate and verify the existence and location of utilities and other construction affecting the Work.
- C. Acceptance of Conditions:
  - 1. Examine areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance.
  - 2. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include a description of the work, a list of detrimental conditions, list of unacceptable installation tolerances and recommended corrections.
  - 3. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### **3.2 PREPARATION**

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each material. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Upon discovery of the need for clarification of the Contract Documents, submit a request for information to Engineer. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

### **3.3 INSTALLATION**

- A. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
- B. Install products at the time and under conditions that ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- C. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

### **3.4 STARTING AND ADJUSTING**

- A. Test equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.



### **3.5 PROTECTION OF INSTALLED CONSTRUCTION**

- A. Provide protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

### **3.6 CORRECTION OF THE WORK**

- A. Restore permanent facilities used during construction to their specified condition.
- B. Replace components that are not up to specification standards.

**END OF SECTION**

## **SECTION 01 74 00**

### **CLEANING AND WASTE MANAGEMENT**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Administrative and Procedural requirements for progress cleaning and construction waste management.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

##### **1.3 REFERENCE STANDARDS**

A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

##### **1.4 DEFINITIONS**

- A. Waste: Material that has reached the end of its intended use. Waste includes salvageable, returnable, recyclable and reusable material.
- B. Construction waste: Solid wastes including, but not limited to, building materials, packaging materials, debris and trash resulting from construction operations.
- C. Salvage: To remove a waste material from the Project site to another site for resale or reuse by others.
- D. Hazardous waste: Material or byproduct of construction that is regulated by the Environmental Protection Agency and cannot be disposed in a landfill or other waste end-source without adherence to applicable laws.
- E. Trash: Product or material unable to be returned, reused, recycled or salvaged.
- F. Landfill: Public or private business involved in the practice of trash disposal.

#### **PART 2 PRODUCTS**

##### **2.1 MATERIALS**

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or cause damage to finished surfaces.

## **PART 3 EXECUTION**

### **3.1 PROGRESS CLEANING**

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials in a legal manner.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F.
  - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
  - 1. Remove liquid spills promptly.
  - 2. Where dust impairs proper execution of the Work, broom-clean or vacuum the work area, as appropriate.
  - 3. If necessary, have a heavy-duty vacuum on site to remove small, loose debris from work area.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and do not damage exposed surfaces.
- E. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Final Acceptance.
- F. Waste Disposal: Burying or burning waste materials on-site is not permitted. Washing waste materials down sewers or into waterways is not permitted.
- G. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Final Acceptance.
- H. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- I. Limiting Exposures: Supervise construction operations to ensure that no part of the construction completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

### **3.2 DISPOSAL OF WASTE**

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
  - 1. Except as otherwise specified, do not allow waste materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that prevents spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Remove waste materials from Owner's property and legally dispose of them.
- D. Separate, store and dispose of hazardous wastes in accordance with local and EPA regulations and additional criteria listed below:
  - 1. Do not incinerate building products manufactured with PVC or containing chlorinated compounds.
  - 2. Disposal of fluorescent tubes to open containers is not permitted.
  - 3. Do not co-mingle unused fertilizers with construction waste.

### **3.3 FINAL CLEANING**

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting Substantial Completion.
  - 2. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including, waste material, litter, and other foreign substances.
  - 3. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
  - 4. Remove tools, construction equipment, machinery, and surplus material from Project site. Properly dispose of unwanted surplus material.
  - 5. Clean exposed exterior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
  - 6. Remove labels that are not permanent.
  - 7. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess foreign substances.

8. Replace parts subject to unusual operating conditions.
  9. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

**END OF SECTION**

**SECTION 01 77 00**  
**CLOSEOUT PROCEDURES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
    - a. Inspection Procedures
    - b. Project Record Documents
    - c. Warranties

**1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections apply to this Section.

**1.3 SUBMITTALS**

- A. Warranties: Submit copy of warranties to meet the requirements of their respective specification section.

**1.4 SUBSTANTIAL COMPLETION**

- A. Submit written certification to the Engineer that the Project is substantially complete along with the following:
  - 1. Prepare a list of items to be completed and corrected (Contractor's punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Notify Owner of pending insurance changeover requirements.
  - 3. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 4. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 5. Notify Owner of changeover in heat and other utilities.
  - 6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
  - 7. Complete final cleaning requirements, including touchup painting.
  - 8. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- B. Substantial Completion Inspection: On receipt of written substantial completion certification, the Engineer will make a substantial completion inspection within 7 days after receipt of certification.
1. Should the Engineer consider the Work not substantially complete, he will notify the Contractor, in writing, stating the reasons. Complete the Work and send a second written notice to the Engineer, certifying the Project is substantially complete, at which time the Engineer will re-inspect the work.
  2. Should the Engineer consider the Work substantially complete, he will prepare and issue a Certificate of Substantial Completion accompanied by the list of items to be completed or corrected (Punch List).
  3. A punch list of items will be prepared for correction and completion before the Final Inspection. Complete the punch list items within 15 days of the punch list inspection. If the Contractor fails to complete the punch list within this period, the Owner has the right to impose liquidated damages in the amount of \$500.00 for each consecutive day until the items are completed.

## **1.5 FINAL COMPLETION**

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
1. Submit a final Application for Payment according to Division 01.
  2. Submit signed copy of Engineer's inspection list of items to be completed or corrected (punch list) certifying each item has been completed or otherwise resolved for acceptance.
  3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Final Inspection: The submission of the signed punch list constitutes as written request for final inspection for acceptance. On receipt of request, Engineer along with the Owner's Representative will conduct a final inspection within 7 days of receipt of certification.
1. Should the Engineer consider that the Work is finally complete in accordance with requirements of the Contract Documents, Project Closeout Submittals will be requested.
  2. Should the Engineer consider that the Work is not finally complete, notification to the Contractor, in writing, stating the reasons will be made.
  3. Take steps to remedy the stated deficiencies and send a second written notice to the Engineer certifying that the Work is complete, at which time the Engineer will re-inspect the Work.

## 1.6 PROJECT RECORD DOCUMENTS

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Engineer's reference during normal working hours.
  - 1. Submit required record documents and warranties within 30 days of the punch list inspection. If the Contractor fails to properly submit required items within this period, the Owner has the right to impose liquidated damages in the amount of \$500.00 for each consecutive day until the items are properly submitted.
- B. Record Drawings: Maintain and submit one set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
  - 1. Mark Record Prints to show where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
    - a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
    - b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
  - 2. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
  - 3. Note Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification where applicable.
  - 4. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.
- C. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
  - 3. Note related Change Orders and Record Drawings, where applicable.
- D. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.



1. Completed and signed Engineer's Punch List

**END OF SECTION**

## **SECTION 31 00 00**

### **EARTHWORK**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Excavate and/or backfill to accommodate the installation of flexible or rigid pavement system.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections apply to this Section:

1. Section 32 12 16 - Asphalt Paving

##### **1.3 REFERENCE STANDARDS**

- A. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)); 2012 (Reapproved 2021).
- B. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)); 2012 (Reapproved 2021).
- C. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System); 2017, with Editorial Revision (2020).
- D. ASTM D2940/D2940M - Standard Specification for Graded Aggregate Material for Bases or Subbases for Highways or Airports; 2020.
- E. ASTM D4491/D4491M - Standard Test Methods for Water Permeability of Geotextiles by Permittivity; 2022.
- F. ASTM D4533/D4533M - Standard Test Method for Trapezoid Tearing Strength of Geotextiles; 2015 (Reapproved 2023).
- G. ASTM D4632/D4632M - Standard Test Method for Grab Breaking Load and Elongation of Geotextiles; 2015a (Reapproved 2023).
- H. ASTM D4751 - Standard Test Methods for Determining Apparent Opening Size of a Geotextile; 2021a.
- I. ASTM D4833/D4833M - Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products; 2007 (Reapproved 2020).

##### **1.4 DEFINITIONS**

A. Backfill: Soil materials used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
  2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Aggregate Base Course (ABC Stone): Well graded stone measuring up to 1 ½" in size.
- C. Bedding Course: Layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Drainage Course: Layer supporting slab-on-grade used to minimize capillary flow of pore water.
- F. Excavation: Removal of material encountered above subgrade elevations.
1. Additional Excavation: Excavation below subgrade elevations as directed by Engineer. Additional excavation and replacement material paid for according to Contract provisions for changes in the Work.
  2. Bulk Excavation: Excavations more than 10 feet in width and pits more than 30 feet in either length or width.
  3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, without additional compensation.
- G. Fill: Soil materials used to raise existing grades.
- H. Rock: Rock material in beds, ledges, unstratified masses, and conglomerate deposits and boulders of rock material exceeding 1 cu. yd. for bulk excavation or ¾ cu. yd. for footing, trench, and pit excavation that cannot be removed by rock excavating equipment equivalent to the following in size and performance ratings, without systematic drilling, ram hammering, ripping, or blasting, when permitted:
1. Rock Excavation, Trench: Late-model, track-mounted hydraulic excavator; equivalent to Caterpillar Model N, 235D LC; measured according to SAE J-1179.
  2. Rock Excavation, Mass: Late-model, track-mounted loader with a hydraulically operated power ripper; equivalent to Caterpillar Model No. D-8N, Heavy Duty; measured according to SAE J-732.
  3. This classification does not include loose rock, concrete, or other materials that can be removed by means other than drilling and blasting, but which is chosen to remove by drilling and blasting.
- I. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- J. Subbase Course: Layer of standardized ABC Stone installed over the subgrade and prior to flexible or rigid pavement system.
- K. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill below subbase, drainage fill, or topsoil materials.

- L. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and other deleterious materials.
- M. Unsatisfactory Soils: ASTM D2487 soil classification groups MH, CL, CH, OL, OH, and PT, or a combination of these group symbols.
  - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- N. Utilities include on-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.
- O. Uncontaminated Stone: Rock material that has not been combined with a significant amount of foreign soils.

## **1.5 MATERIALS OWNERSHIP**

- A. Materials indicated to be stockpiled are the Owner's property.
- B. Store on site.

## **1.6 SUBMITTALS**

- A. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.
- B. Test Reports: Submit test reports indicating suitability of materials supplied from offsite.

## **1.7 PROJECT CONDITIONS**

- A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Owner and Engineer and then only after arranging to provide temporary utility services according to requirements indicated:
  - 1. Notify Engineer not less than two days in advance of proposed utility interruptions.
  - 2. Do not proceed with utility interruptions without Engineer's written permission.
  - 3. Contact utility-locator service for area where Project is located before excavating.

## **PART 2 PRODUCTS**

### **2.1 SOIL MATERIALS**

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: ASTM D2487 soil classification groups GC, SC, CL, ML, GW, GP, GM, SW, SP, and SM, or a combination of these group symbols; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Backfill and Fill: Satisfactory soil materials.

- D. Subbase: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2- inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- G. Bedding: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- H. Structural Fill and Backfill: Inorganic soil with a maximum particle size of no more than 3 inches, plasticity index of 20 or less, and maximum dry density of at least 90 pounds per cubic foot when tested by the Standard Proctor Method in accordance with ASTM D698.
- I. Rip Rap: Consist of quarry run stone, field stone or granite stone and classified by size into Class 1. Vary in weight from 5 to 200 pounds. At least 30% of the total weight of the rip rap in individual pieces weighing a minimum of 60 pounds. Not more than 10% of the total weight of the rip rap in individual pieces weighing less than 50 pounds.

## **2.2 ACCESSORIES**

- A. Drainage Fabric: Nonwoven geotextile, specifically manufactured as a drainage geotextile; made from polyolefins, polyesters, or polyamides; and with the following minimum properties determined according to ASTM D 4759 and referenced standard test methods:
  - 1. Grab Tensile Strength: 110 lbf; ASTM D4632/D4632M.
  - 2. Tear Strength: 40 lbf; ASTM D4533/D4533M.
  - 3. Puncture Resistance: 50 lbf; ASTM D4833/D4833M.
  - 4. Water Flow Rate: 150 gpm per sq. ft.; ASTM D4491/D4491M.
  - 5. Apparent Opening Size: No. 50; ASTM D4751.

## **2.3 SOURCE QUALITY CONTROL**

- A. Test off-site materials used for suitability under requirements of this section.

## **PART 3 EXECUTION**

### **3.1 PREPARATION**

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

- B. Protect subgrades and foundation soils against freezing temperatures or frost. Provide protective insulating materials as necessary.
- C. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- D. Provide one public and one private utility locates prior to the start of work. De-energize lines within 10 feet of the work and pothole for gauging proper depth.
  - 1. A vacuum truck is required for potholing within 10 feet of all utility lines.
  - 2. Potholed utilities to remain open and protected until demolition/grading is complete.
  - 3. Locate utilities within 10 days of work and refresh every 30 days.
  - 4. Inspect markings daily for signs of wear.
  - 5. Make markings clearly visible for the duration of the project.
  - 6. Stake whiskers in gravel areas to maintain visibility.
  - 7. Submit illustration of marked utilities prior to the start of construction.

### **3.2 DEWATERING**

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
  - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
  - 2. Install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering is no longer required.

### **3.3 EXPLOSIVES**

- A. Explosives: Do not use explosives.

### **3.4 TOPSOIL STRIPPING**

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.
  - 1. Strip surface soil of unsuitable topsoil, including trash, debris, weeds, roots, and other waste materials.
  - 2. Stockpile surplus topsoil and allow for re-spreading deeper topsoil.

### **3.5 EXCAVATION**

- A. Unclassified Excavation: Excavation to subgrade elevations regardless of the character of surface and subsurface conditions encountered, including rock, soil materials, and obstructions.
  - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
- B. Classified Excavation: Excavation to subgrade elevations classified as earth and rock. Rock excavation paid for by adjusting the Contract Sum according to unit prices included in the Contract Documents.
  - 1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; together with soil, boulders, and other materials not classified as rock or unauthorized excavation.
    - a. Intermittent drilling; blasting, if permitted; ram hammering; or ripping of material not classified as rock excavation is earth excavation.
  - 2. Rock excavation includes removal and disposal of rock.
    - a. Do not excavate rock until it has been classified and cross-sectioned by Owner's Geotechnical Representative.
- C. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. Extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
  - 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
  - 2. Excavation for Underground Basins, and Mechanical or Electrical Utility Structures: Excavate to elevations and dimensions indicated within a tolerance of plus or minus 1 inch. Do not disturb bottom of excavations intended for bearing surface.

### **3.6 SUBGRADE**

- A. Notify Engineer and Testing Agency when excavations have reached required subgrade.
- B. If Engineer or Testing Agency determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
  - 1. Additional excavation and replacement material paid for according to Contract provisions for changes in the Work.
- C. Proof roll subgrade and/or subbase with a 10 wheel loaded dump truck weighing a minimum 20 tons. Identify soft pockets and areas of excess yielding. Do not proof roll wet or saturated or frozen subgrades. Limit vehical speed to three miles per hour.
- D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities and retest, as directed by Engineer.

### **3.7 STORAGE OF SOIL MATERIALS**

- A. Stockpile fill and other satisfactory excavated soil materials. Stockpile soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

### **3.8 BACKFILL**

- A. Place and compact backfill in excavations promptly, but not before completing the following:
  - 1. Surveying locations of underground utilities for record documents.
  - 2. Inspecting and testing underground utilities.
  - 3. Removing concrete formwork.
  - 4. Removing trash and debris.
  - 5. Removing temporary shoring and bracing, and sheeting.

### **3.9 FILL**

- A. Preparation: Remove vegetation, topsoil, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface before placing fills.
- B. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material bonds with existing material.
- C. Place and compact fill material in layers to required elevations as follows:
  - 1. Use satisfactory soil material except where otherwise indicated.

### **3.10 MOISTURE CONTROL**

- A. Uniformly moisten or aerate subgrade and subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content or as accepted by Engineer.
  - 1. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
  - 2. Remove and replace, or scarify and air-dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

### **3.11 COMPACTION OF BACKFILLS AND FILLS**

- A. Place backfill and fill materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill materials evenly around structures to required elevations, and uniformly along the length of the structure.



- C. Compact soil to not less than the following percentages of maximum dry density according to ASTM D698:
  - 1. Under structures, building slabs and steps scarify and re-compact top 12 inches of existing subgrade and each layer of backfill or fill material at 98 percent. Compact other fill to 95 percent unless otherwise indicated.
  - 2. Under pavements, compact material to a depth of 8 inches below the finished surface of the subgrade to a density of at least 100% of that obtained by compacting a sample of the material in accordance with AASHTO T 99 as modified by the referenced DOT.
  - 3. Under walkways, scarify and re-compact top 6 inches below subgrade and compact each layer of backfill or fill material at 95 percent.
  - 4. Under lawn or unpaved areas, scarify and re-compact top 12 inches below subgrade and compact each layer of backfill or fill material at 90 percent.
  - 5. Compact utility trenches to 95 percent.

### **3.12 GRADING**

- A. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
  - 1. Provide a smooth transition between adjacent grades.
  - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
  - 1. Lawn or Unpaved Areas: Plus or minus 1 inch when tested with a 10-foot straightedge.
  - 2. Walks: Plus 1/2 inch or minus 1 inch when tested with a 10-foot straightedge.
  - 3. Pavements: Plus 1/4 inch or minus 1/2 inch when tested with a 10-foot straightedge.
- C. Grading inside Building Lines: Finish subgrade to a tolerance of plus 1/4 inch or minus 1/2 inch when tested with a 10-foot straightedge.

### **3.13 SUBBASE AND BASE COURSES**

- A. Under pavements and walks, place subbase course on prepared subgrade and as follows:
  - 1. Place base course material over subbase.
  - 2. Compact subbase and base courses at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 98 percent of maximum dry density according to ASTM D698.

3. Shape subbase and base to required crown elevations and cross-slope grades.
  4. When thickness of compacted subbase or base course is 6 inches or less, place materials in a single layer.
  5. When thickness of compacted subbase or base course exceeds 6 inches, place materials in equal layers, with no layer more than 6 inches thick or less than 3 inches thick when compacted.
- B. Pavement Shoulders: Place shoulders along edges of subbase and base course to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each subbase and base layer to not less than 95 percent of maximum dry density according to ASTM D1557.

### **3.14 DRAINAGE COURSE**

- A. Under slabs-on-grade, place drainage course on prepared subgrade and as follows:
1. Compact drainage course to required cross sections and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D698.
  2. When compacted thickness of drainage course is 6 inches or less, place materials in a single layer.
  3. When compacted thickness of drainage course exceeds 6 inches, place materials in equal layers, with no layer more than 6 inches thick or less than 3 inches thick when compacted.

### **3.15 RESPREADING TOPSOIL**

- A. Re-spread stockpiled topsoil in planted areas. Distribute stockpiled material in a uniform thickness as follows.
1. Lawn Areas: 4 inches minimum.
  2. Athletic Fields: 12 inches minimum.
  3. Planting Areas: 12 inches minimum.
- B. Adjust topsoil as required by Engineer following topsoil depth testing by Owner's testing representative.

### **3.16 PROTECTION**

- A. Protecting Graded Areas: Protect graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
1. Scarify or remove and replace soil material to depth as directed by Engineer; reshape and re-compact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.
- D. Install temporary erosion control measures as stated in Section 01 50 00 - Temporary Facilities and Controls.

### **3.17 DISPOSAL OF SURPLUS AND WASTE MATERIALS**

- A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

**END OF SECTION**

## **SECTION 32 01 16.71**

### **COLD MILLING ASPHALT PAVEMENT**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Cold mill asphalt pavement by way of a milling machine to depths as specified on the drawings.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections, apply to this Section:

1. Section 31 00 00 - Earthwork
2. Section 32 12 16 - Asphalt Paving

##### **1.3 DEFINITIONS**

A. Reclaimed Asphalt Pavement (RAP): The material produced as a result of cold milling asphalt pavement.

##### **1.4 SUBMITTALS**

A. Documentation designating a tonnage and signed by the recipient of RAP to be recycled.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION**

##### **3.1 EQUIPMENT**

- A. Use equipment with automatic grade and slope controls, capable of cold milling existing asphalt pavement to an accurate depth of cut, profile and cross slope and capable of loading the milled material directly into trucks.
- B. The cutting head of the cold milling machine minimum width of four feet.

##### **3.2 PROCEDURE**

- A. Cold milling asphalt pavement performed in a manner which prevents the tearing and breaking of underlying and adjacent pavement and the contamination of the RAP with granular, subgrade or deleterious materials.
- B. RAP loaded directly to trucks from the milling machine and hauled to stockpile or directly recycled.
- C. Sweep clean prior to opening to traffic. Sweep the surface in a manner which minimizes dust.

- D. Repair localized areas of distress in the milled surface that present a hazard to traffic.
- E. At the point of daily termination of cold milling operations, changes in surface profile or cross section limited to 1-1/2 inch and longitudinal transitions maximum of 1 inch vertically per 3 feet.
- F. In the event of rain or other inclement weather, suspend cold milling operations. Make necessary allowances for drainage of water that pond in areas where the milled sections have not been paved.

### **3.3 DISPOSAL**

- A. Except for material indicated to be recycled, remove excavated materials from project site and legally dispose of them in an EPA approved landfill.
- B. A minimum of 80% of the milled pavement documented as stockpiled or directly recycled; see Submittals for required documentation.

**END OF SECTION**

## **SECTION 32 12 16**

### **ASPHALT PAVING**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Provide hot-mix asphalt paving over conditioned and repaired rigid or flexible pavement.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections, apply to this Section:

1. Section 31 00 00 - Earthwork
2. Section 32 01 16.71 - Cold Milling Asphalt Pavement
3. Section 32 17 23 - Pavement Markings

##### **1.3 REFERENCE STANDARDS**

A. Division 6 Asphalt Pavements and Division 10 Materials of the NCDOT Specifications

##### **1.4 SUBMITTALS**

A. Product Test Reports:

1. Provide copies of job mix formula sheets indicating mix temperature and compaction specification.
2. Upon request, provide documentation of field verification of compaction, thickness and application temperatures.
3. Documentation stating the tonnage and location of RAP removed from the site.

##### **1.5 QUALITY ASSURANCE**

- A. A third party may be required at the discretion of the Owner or the Engineer to inspect the stability of the subgrade and/or density of the asphalt as deemed necessary during the duration of the project.
- B. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of the above referenced DOT for asphalt paving work.

##### **1.6 PROJECT CONDITIONS**

- A. Follow the weather and Seasonal Limitations of the above referenced DOT Standard Specifications. Exceptions may be accepted by the Engineer and Owner.

- B. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate tack cure, or if the following conditions are not met.
  - 1. Tack Coat: Minimum surface temperature of 50 deg F.
  - 2. Asphalt Base Course: Minimum surface temperature of 35 deg F and ambient temperature of 35 deg F and rising at time of placement. Ensure the paving surface is not wet or frozen.
  - 3. Asphalt Surface Course: Minimum surface temperature of 50 deg F and ambient temperature of 40 deg F and rising at time of placement. Ensure the paving surface is not wet or frozen.

## **PART 2 PRODUCTS**

### **2.1 AGGREGATES**

- A. Asphalt Plant Mix Materials: Conform to the above referenced DOT Standard Specifications.
- B. Tack Coat: Conform to the above referenced DOT Standard Specifications.
- C. Reclaimed Asphalt Pavement (RAP): Processed material obtained by milling or full depth removal of existing asphalt concrete pavements. Conform to the above referenced DOT Standard Specifications.

### **2.2 ASPHALT PAVING MIX**

- A. General: Use mix design conforming to the above referenced Standard Specifications.
- B. Wedging or Leveling Mix: Use intermediate mix type conforming to the above referenced DOT Standard Specifications.
- C. Standard Allowable Reclaimed Asphalt Pavement (RAP) Content: Use a maximum of 45 percent for a base and intermediate course and a maximum of 30 percent for a surface course. Conform to the above referenced DOT Standard Specifications.
- D. High Performance Allowable Reclaimed Asphalt Pavement (RAP) Content: Use a maximum of 45 percent for a base and intermediate course and a maximum of 20 percent for a surface course, unless otherwise accepted by the Engineer.

### **2.3 SOURCE QUALITY CONTROL AND TESTS**

- A. Obtain materials from a plant approved by the above referenced DOT.
- B. Upon request, show density reports on Pavement Areas and individual lifts.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Verify subgrade is dry and in suitable condition to begin paving.
- B. Proof-roll prepared subbase surface below pavements with heavy pneumatic tired equipment to identify soft pockets and areas of excess yielding.

1. Proof-roll subbase in one direction and repeat in perpendicular direction. Limit vehicle speed to 3 mph.
  2. Proof-roll with a loaded 10-wheel tandem axle dump truck or equivalent weighing not less than 15 tons.
  3. At a minimum, subbase with soft spots and areas of pumping or rutting exceeding depth of ½ inch require correction.
  4. Notify Engineer of subbase with movement in order for Engineer to review prior to paving.
- C. Verify gradients and elevations of base are correct.
- D. Verify utility structure frames and lids are installed in correct position and elevation.
- E. Proceed with paving only after unsatisfactory conditions have been corrected.

### **3.2 TACK COAT**

- A. Clean the surface of debris, dust, dirt, oil or other foreign material.
- B. Apply tack coat at uniform rate of 0.04 gallons/square yard for new asphalt, 0.06 for milled or aged asphalt and 0.08 gallons/square yard for cement concrete.
- C. Apply tack coat to contact surfaces of curbs and gutters.
- D. Grease the surface of utility structures to prevent bond with asphalt pavement. Do not tack-coat these surfaces.
- E. Ensure tack coat breaks prior to beginning the paving operation. The tack has broken once the surface has turned sticky to the touch.

### **3.3 HOT-MIX ASPHALT PLACING**

- A. Install Work in accordance with the above referenced DOT Standard Specifications.
- B. Place asphalt within 24 hours of applying tack coat.
- C. Place asphalt in courses to the thicknesses and dimensions shown on the Drawings.
- D. Place base and intermediate courses.
- E. Place surface course within 2 hours of placing and compacting intermediate course. When intermediate course is placed more than 24 hours before placing surface course, clean surface and apply tack coat before placing surface course.
- F. Compact each course by rolling to specified density. Do not displace or extrude pavement from position. Hand compact in areas inaccessible to rolling equipment.
- G. Perform rolling with consecutive passes to achieve even and smooth finish without roller marks.

### **3.4 JOINTS**

- A. Transverse Joints:



1. When Work is suspended long enough to allow mixture to chill, construct transverse joint.
  2. Use butt joint where traffic does not pass over pavement.
  3. Use sloped wedge ahead of the end of pavement where traffic passes over pavement. Place paper parting strip to aid the removal of a wedge.
  4. Tack coat edge of pavement prior to placing adjoining pavement.
- B. Longitudinal Joints:
1. Tack the edge of longitudinal joints prior to placing adjoining pavement.
  2. Pinch joint by rolling behind the paver.
  3. Offset longitudinal joints in each layer by approximately 6 inches.

### **3.5 TOLERANCES**

- A. Density Compaction: average minimum of 92 percent of Theoretical Maximum Specific Gravity (Gmm) as determined on a moving average by the producer.
- B. Flatness: Maximum variation of 1/8 inch measured with 10-foot straight edge.
- C. Compacted Thickness: Within 1/4 inch.
- D. Variation from Indicated Elevation: Within 1/2 inch.

### **3.6 PAVEMENT MARKING**

- A. Do not apply pavement marking paint until layout, colors, and placement have been verified with the Engineer and the Owner.

### **3.7 FIELD QUALITY CONTROL**

- A. Testing Agency: Engineer or Owner may engage a qualified testing agency to perform tests and inspections.
- B. If nuclear test methods are specified, take one test per 2,000 linear feet or fraction thereof per day on pavement placed at the paver lay down width. Take a minimum of five tests per production day.
- C. If core tests are specified, take one 6-inch diameter full depth pavement core per 2,000 linear feet or fraction thereof per day on pavement placed at the paver lay down width. Take a minimum of three core samples per production day unless directed by the engineer.
- D. Do not core asphalt above 120° F. Cool asphalt with ice as necessary at no additional cost to the owner. Patch core locations with hot mix asphalt of the same type within 24 hours of sampling. Dry and tack core holes before patching.
- E. When tests indicate Work does not meet specified requirements, remove Work, replace, and retest.

### **3.8 PONDING WATER**

- A. The ponding of water on the surface after installation of the pavement system is not acceptable and is grounds for rejection of the system. Ponding is herein defined as precipitation remaining in an area, 1/8 inch or deeper for a period of 2 hours from the termination of precipitation. Provide modifications to the pavement to ensure proper drainage.

### **3.9 DISPOSAL**

- A. Except for material indicated to be recycled, remove excavated materials from project site and legally dispose of them in an EPA approved landfill.

**END OF SECTION**

## **SECTION 32 12 36**

### **ASPHALT PAVEMENT SEAL COAT**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Provide an engineered asphalt emulsion and refined coal tar to an asphalt pavement surface at the rate and number of coats specified.

##### **1.2 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections, apply to this Section:

1. Section 32 12 16 - Asphalt Paving
2. Section 32 17 23 - Pavement Markings

##### **1.3 REFERENCE STANDARDS**

- A. ASTM C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates; 2019.
- B. Division 6 Asphalt Pavements and Division 10 Materials of the NCDOT Specifications

##### **1.4 SYSTEM DESCRIPTION**

- A. Provide primer, 2 applications of the coating in areas specified and a third coat in high traffic areas as shown on drawings.

##### **1.5 SUBMITTALS**

- A. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.
- B. Manufacturer's Instructions: Latest edition of the Manufacturer's current material specifications and installation instructions.
- C. Material Certificates: Evidence products meet specified requirements.

##### **1.6 QUALITY ASSURANCE**

- A. Approved by the material manufacturer with experience of 5 similar coating projects. Provide verification to the Engineer upon request.
- B. Manufacturer producing seal coat products in the United States for a minimum of 10 years with a consistent composition for a minimum of 5 years without a change in the basic product design.

## **1.7 PROJECT CONDITIONS**

### **A. Environmental Requirements**

1. Apply seal coat when surface temperature is at least 60 degrees F. and ambient temperature is 55 degrees F. and rising. Apply when temperature is anticipated to stay above 50 degrees F for a period of 48 hours.
2. Apply sealer during dry weather and when rain is not anticipated within 48 hours after application is completed.
3. Mist the pavement with water if the ambient temperature is above 80 degrees F. Ensure surface is damp with no standing water.

## **PART 2 PRODUCTS**

### **2.1 MANUFACTURERS**

#### **A. Manufacturers:**

1. Neyra Industries, Inc.
2. SealMaster
3. Engineers accepted equivalent.

### **2.2 MATERIALS**

#### **A. A polymer modified or added refined coal tar emulsion/engineered asphalt emulsion specifically formulated to extend pavement life.**

1. Neyra - JenniteAE
2. Neyra - Jennite
3. SealMaster - Liquid Road
4. Neyra - PaveShield
5. Neyra - Tarconite
6. SealMaster - Polymer Modified MasterSeal
7. SealMaster - PMCTS Pavement Sealer

### **2.3 RELATED MATERIALS**

#### **A. Additive: Neyra - Armorflex**

#### **B. Additive: Neyra - Maxum**

#### **C. Primers:**

1. Neyra - Petrobond

2. SealMaster - Prep Seal
- D. Sand: Clean, dry, pure silica sand, free of contaminants. American Foundry Society (AFS) fineness number between 50 and 70 when tested in accordance with ASTM C136/C136M.
- E. Water: Potable and free from harmful soluble salts. A minimum temperature of 50 degrees F.

## **2.4 MIX**

- A. SealMaster Sealers:
  1. Do not dilute mixture with water or other additive without the Engineer's acceptance and the manufacture's consent.
  2. Add sand at a rate of 4 lb per gallon of sealer.
  3. Agitate at a speed to 8 revolutions per minute while 1 50 lb bag of sand per 30 seconds is introduced to the sealer mix. Mix to a homogenous condition. Decrease agitation speed to 4 revolutions per minute.
- B. Neyra Sealers:
  1. Add water at rate of 38% to the Tarconite concentrate sealer and mix until diluted sealer is homogenous.
  2. Add Armorflex to the diluted sealer at a rate of 2 percent of the sealer concentrate, unless otherwise directed by the Engineer. Dilute with 1 part water to 1 part concentrate prior to mixing products. Agitate until the mixture is homogenous and has slightly thickened.
  3. Add sand at a rate of 4 lbs./gal. of concentrated sealer.
  4. Agitate at a speed to 8 revolutions per minute while one 50 lb bag of sand per 30 seconds is introduced to the sealer mix. Mix to a homogenous condition. Decrease agitation speed to 4 revolutions per minute.

## **PART 3 EXECUTION**

### **3.1 PREPARATION**

- A. Asphalt Patching: Patch pavement areas as directed by the drawings.
- B. Curing: Allow pavement to cure for a minimum of 30 days. A notice to proceed must be issued by the Engineer in order to proceed with the coating process.
- C. Allow oil sheen to wash away prior to coating applications.
- D. Irrigation systems adjacent or within the vicinity of the seal coat area turned off by the Owner and confirmed by the Contractor within the last 48 hours prior to commencement of work. Unless otherwise determined, it's requested for the Owner to leave irrigation systems turned off for a minimum of 48 hours following completion of the seal coat.
- E. Clean Surface: Clear surface of debris and loose aggregate.

- F. Protection: Protect adjacent curbs, walks, fences and other unintentional surfaces from receiving primer or coating.
- G. Oil Spot: Clean oil spots thoroughly, and then treat with an appropriate primer.

### **3.2 APPLICATION**

- A. General:
  - 1. Apply seal coat in accordance with manufacturer's instructions and the following requirements.
- B. Priming:
  - 1. Neyra - Petrobond: Dilute mixture of 1 part primer to 2 parts water.
  - 2. SealMaster - Prep Seal: Do not dilute mix. Apply as is.
  - 3. Apply at a rate of 0.06 gallons per square yard.
- C. Sealcoat Application:
  - 1. Mechanically apply using a rubber faced squeegee and distributor bar.
  - 2. Apply uniformly at a rate of:
    - a. 0.13 gallons per square yard SealMaster
    - b. 0.16 gallons per square yard Neyra
    - c. 0.19 gallons per square yard SealMaster Liquid Road
    - d. Application Rates Listed are considering a Rough, Medium Severity Weathered Pavement adjust 0.01 up if the pavement is in excessive rough condition, down 0.01 if in Low Weathered, and down 0.02 if no weathering.
  - 3. Apply wear coat prior to the full coatings in the areas deemed "high traffic" on the drawings using mechanical self-propelled squeegee.
  - 4. Apply first coat using a mechanical self-propelled squeegee.
  - 5. Spray apply final coat using a disturber bar.
  - 6. Apply two coats uniformly with an additional wear coat applied prior to the full coating in the areas deemed high traffic areas.
- D. Curing Time:
  - 1. Allow each underlying coat to cure for a minimum of four (4) hours under suitable dry weather before applying the following coat.
  - 2. Start each coat from a similar location allowing one location to cure for as long as possible before applying another coat.

3. If unexpected weather interrupts production or curing, discontinue work until conditions are dry and suitable to continue. Document and photograph conditions when work resumes.

### **3.3 PROTECTION**

- A. Barricade coated areas for a minimum of 48 hours.
- B. Barricades: Channelizer cones or barrels standing a minimum of 36 inches in height and have caution tape laced along the top handle. One barricade per 10 feet spanning the width of drive lanes leading into the seal coated area. Type III barricades that cover a minimum of 2/3 the drive lane is also acceptable with signage stating road closed.

### **3.4 CLEAN UP**

- A. Remove debris and excess material from the pavement and surrounding areas.
- B. Clean off/remove excess sealer from curb, sidewalks and other inadvertent surfaces.

**END OF SECTION**

## **SECTION 32 17 23**

### **PAVEMENT MARKINGS**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Provide contractor grade acrylic, striping paint for asphalt or coated asphalt.
  - 2. Provide contractor grade acrylic, latex, alkyd, or chlorinated rubber striping paint for asphalt and concrete pavements or restriping.

##### **1.2 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Sections and the following Specification Sections, apply to this Section:
  - 1. Section 32 12 16 - Asphalt Paving

##### **1.3 SUBMITTALS**

- A. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.

##### **1.4 DELIVERY, STORAGE AND HANDLING**

- A. Deliver pavement-marking materials to the Project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of materials, date of manufacture, and directions for storage.
- B. Store pavement-marking materials in a clean, dry, protected location within temperature range required by manufacturer. Protect stored materials from direct sunlight.

##### **1.5 PROJECT CONDITIONS**

- A. Environmental Requirements:
  - 1. Apply marking paint on a clean surface and in dry weather when pavement and atmospheric temperatures are 55 degrees F or above or in accordance with manufacturer's specification and not exceeding 95 degrees F and are anticipated to remain above 50 degrees F for 4 hours after completing application.
- B. For asphalt wait a minimum of 4 days before marking unless otherwise instructed by the Engineer.

#### **PART 2 PRODUCTS**

##### **2.1 EQUIPMENT**

- A. Commercial compressed air spray striping machine capable of applying an even coating at the manufacturer's recommended thickness in an even width across the stripe.



- B. Commercial airless spray striping machine capable of applying an even coating at the manufacturer's recommended thickness in an even width across the stripe.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Inspect pavement surfaces for conditions and defects that adversely affect quality of work, and which cannot be put into an acceptable condition through normal preparatory work as specified.
- B. Do not place markings over unsound pavements. If these conditions exist, notify the Engineer.
- C. Starting installation constitutes acceptance of surface as suitable for installation.

### **3.2 PREPARATION**

- A. Provide qualified technician to supervise equipment and application of marking. Layout markings using guidelines, templates and forms. Stencils and templates professionally made to industry standards. "Free hand" painting of arrows, symbols, or wording are not allowed.
- B. Thoroughly clean surfaces free of dirt, sand, gravel, oil and other foreign matter.
- C. Protect adjacent curbs, walks, fences, and other items from receiving paint.

### **3.3 APPLICATION**

- A. Parking Lots Markings Spacing: All parking layout designs shall utilize dimensional requirements.
- B. Apply marking paint at a rate of 1 gallon per 300-400 lineal feet of 4 inch wide stripes or to manufacturer's specifications.
- C. Apply stripes straight and even in accordance with schedules.
- D. Apply stripes and other markings in widths and colors previously existing or as otherwise detailed in schedule.

### **3.4 PROTECTION**

- A. Barricade marked areas during installation and until the marking paint is dried and ready for traffic.

**END OF SECTION**

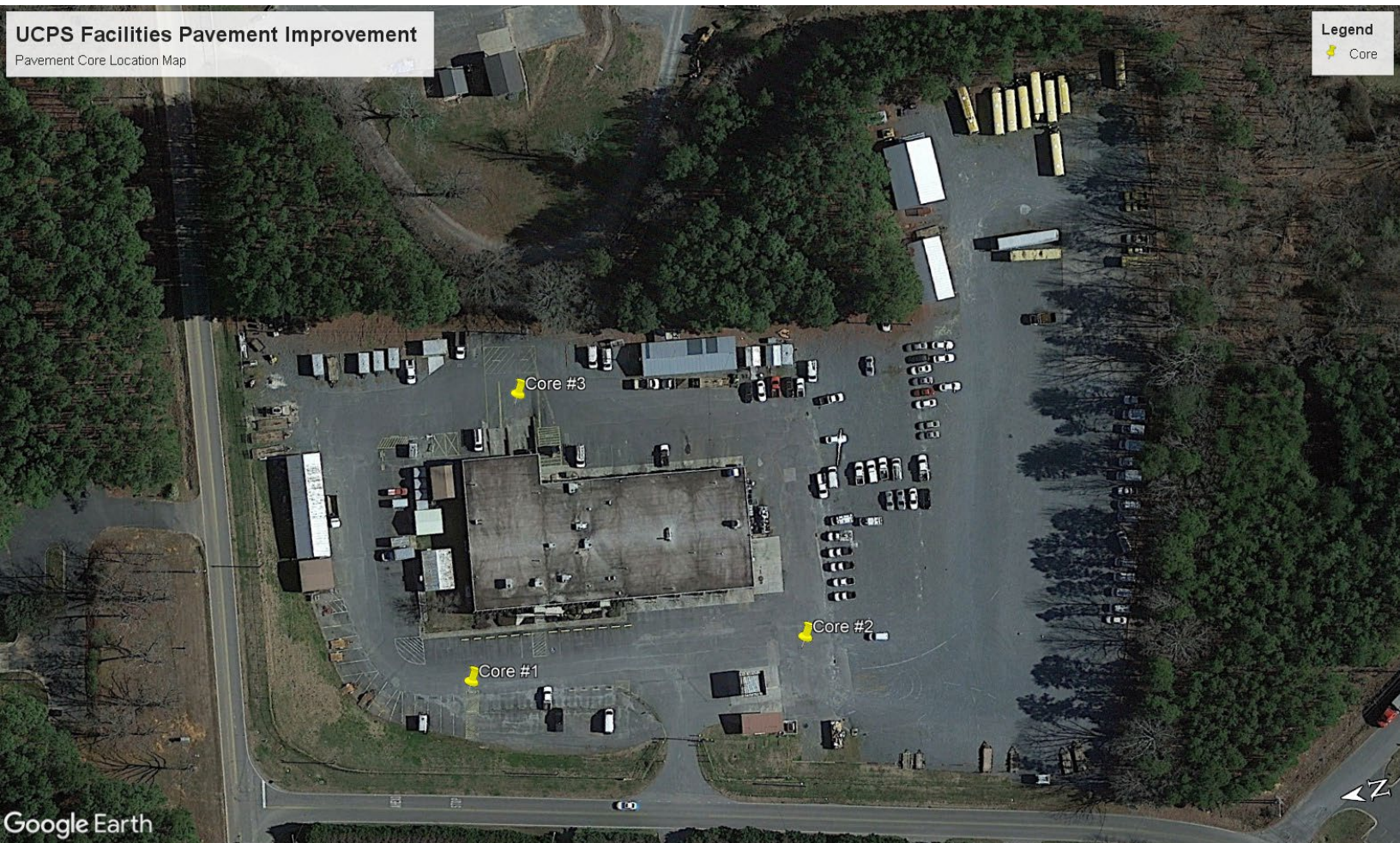
**APPENDIX A**

**PAVEMENT CORES – DCP FORM**

Project: UCPS Facilities Pavement Improvement		Date: January 24, 2025
Location: Core #1		Notes: Cored in failure. Core in pieces.
Stone Thickness: 6 3/4"	Pavement Thickness: 2"	Soil Type: Red Clay

Project: UCPS Facilities Pavement Improvement		Date: January 24, 2025
Location: Core #2		Notes: N/A
Stone Thickness: 5 1/4"	Pavement Thickness: 2"	Soil Type: Red Clay

Project: UCPS Facilities Pavement Improvement		Date: January 24, 2025
Location: Core #3		Notes: Cored in failure. Core located in front of dumpster pad
Stone Thickness: 5 1/2"	Pavement Thickness: 1 1/2"	Soil Type: Red Clay/Silt





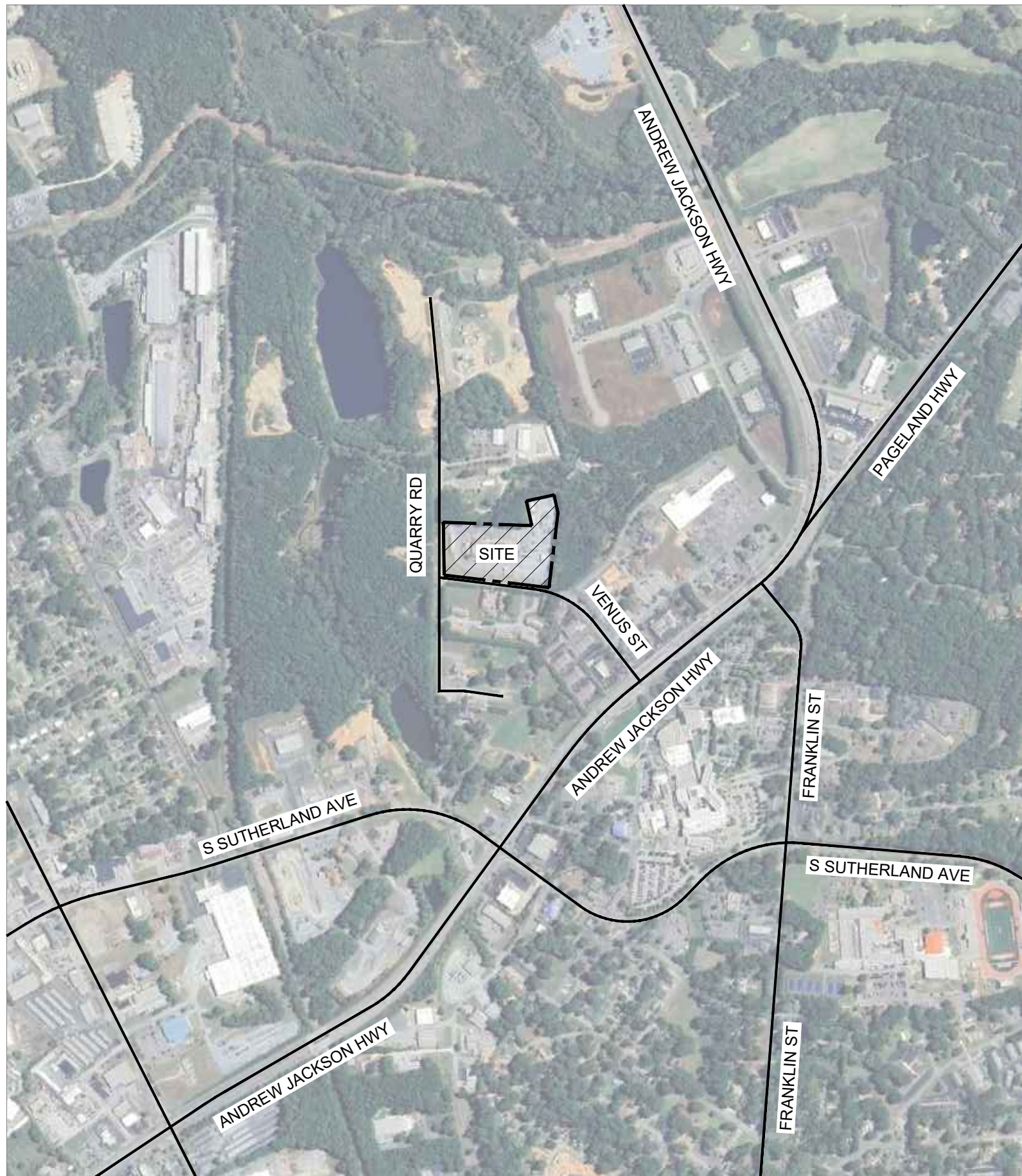
# UNION COUNTY PUBLIC SCHOOLS

## FACILITIES PAVEMENT IMPROVEMENT

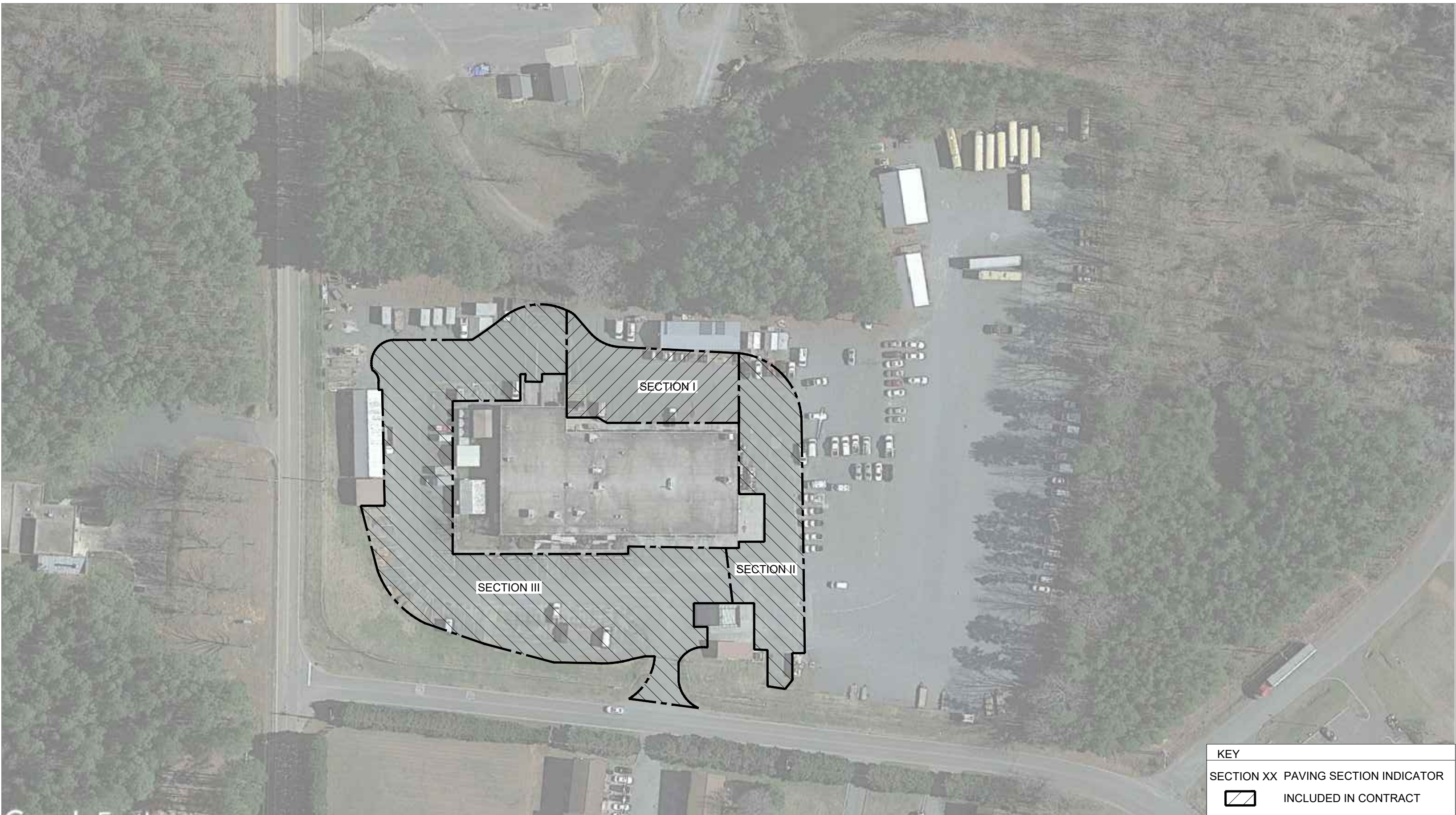
201 VENUS STREET  
MONROE, NC 28112

REI PROJECT NO. R25PVG-005

DATE: FEBRUARY 3, 2025



A VICINITY MAP  
SCALE: N.T.S.



B SITE PLAN  
SCALE: N.T.S.

GENERAL NOTES:  
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2. DIMENSIONS AND DETAIL COMPONENTS ARE FOR INFORMATION ONLY. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL INFORMATION PROVIDED.  
3. NOTES ARE INTENDED TO PROVIDE TYPICAL LOCATIONS OF WORK. IT IS THE CONTRACTORS RESPONSIBILITY TO QUANTIFY ALL LOCATIONS.  
4. THIS DRAWING IS NOT A CERTIFIED SURVEY. THE BASE DRAWING WAS CREATED USING AERIAL IMAGERY AND DATA FROM A MUNICIPAL GEOGRAPHIC INFORMATION SYSTEM (GIS) AND THEN FIELD VERIFIED.  
5. CONTRACTOR SHALL CONFIRM ALL SUBSTRATE CONDITIONS WITH THE OWNER PRIOR TO PAVING.  
6. THE LIFE CYCLE FOR THIS DESIGN WAS CALCULATED AT APPROXIMATELY 5 YEARS WITH AN 80% RELIABILITY, PER THE OWNERS REQUEST.  
DETAIL NOTES:  
1. LIGHT LINES REPRESENT EXISTING CONSTRUCTION TO REMAIN AND DARK LINES REPRESENT NEW COMPONENTS TO BE PROVIDED.  
DIMENSION NOTES:  
1. LENGTH TOLERANCES ONLY APPLIES TO ACCESSIBLE PARKING STALL WIDTHS AND ACCESSIBLE PARKING STALL SIGN HEIGHTS.  
2. DEFINED SLOPES HAVE A TOLERANCE OF  $\pm 0.5\%$ .  
3. DEFINED LENGTHS HAVE A TOLERANCE OF  $\pm 6"$ .

DRAWING INDEX:		
G-001	COVER	
C-101	SITE PLAN	
C-501	DETAILS	

ABBREVIATION LIST:		
C.B.	CATCH BASIN	
C.G.	CURB AND GUTTER	
CMP	CORRUGATED METAL PIPE	
D.I.	DROP INLET	
DS	DOWNSPOUT	
EJ	EXPANSION JOINT	
EX.	EXISTING	
EX.EL	EXISTING ELEVATION	
EX.ED	EXISTING EDGE OF PAVEMENT	
EX.SW	EXISTING EDGE OF SIDEWALK	
FFE	FINISHED FLOOR ELEVATION	
F.E.S.	FLARED END SECTION	
HDPE	HIGH DENSITY POLYETHYLENE	
MAX.	MAXIMUM	
MEE	MATCH EXISTING ELEVATION	
MIN.	MINIMUM	
N.C.	NOT IN CONTRACT	
N.T.S.	NOT TO SCALE	
O.C.	ON CENTER	
PVC	POLYVINYL CHLORIDE	
PR.ED	PROPOSED EDGE OF PAVEMENT	
PR.SW	PROPOSED EDGE OF SIDEWALK	
RCP	REINFORCED CONCRETE PIPE	
STD.	STANDARD	
TYP.	TYPICAL	

EXISTING PARKING:	
TOTAL STALL COUNT:	72
TOTAL RESERVED PARKING:	18
TOTAL ACCESSIBLE PARKING:	1
VAN ACCESSIBLE PARKING:	1

PROPOSED PARKING:	
TOTAL STALL COUNT:	72
TOTAL RESERVED PARKING:	18
TOTAL ACCESSIBLE PARKING:	1
VAN ACCESSIBLE PARKING:	1



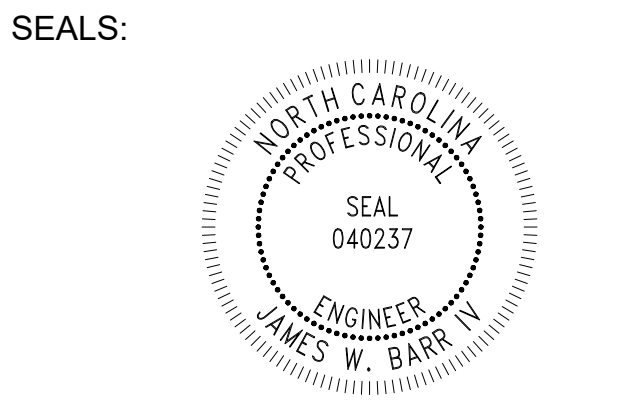
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PROJECT NAME:  
**UNION COUNTY  
PUBLIC SCHOOLS**

**FACILITIES  
PAVEMENT  
IMPROVEMENT**

201 VENUS STREET  
MONROE, NC 28112

PROJ. NO:  
**R25PVG-005**

REVISIONS:		
NO.	DATE	DESCRIPTION

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THE ORIGINAL DRAWING

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SHEET TITLE

**COVER**

DRAWING

**G-001**





ENGINEERS

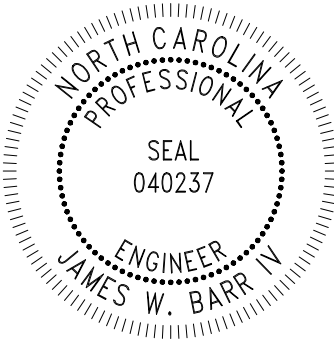
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PUBLIC SCHOOLS  
  
FACILITIES  
PAVEMENT  
IMPROVEMENT

201 VENUS STREET  
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NO.	DATE	DESCRIPTION

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SHEET TITLE

SITE PLANS

DRAWING

C-101

QUARRY ROAD

QUARRY ROAD

QUARRY ROAD

QUARRY ROAD

VENUS STREET

VENUS STREET

LOWER THE EXISTING STORM STRUCTURE APPROXIMATELY THREE INCHES (3"). FORM  
AND POUR THE CONCRETE GUTTER TO BE FLUSH WITH THE STORM GRATE WITH A SIX  
INCH CURB. TAPER THE ASPHALT TO MEET THE NEW GRATE EDGE.

BACKFILL, SEED, AND STRAW ±100 SF OF THE ERODED LANDSCAPING

INSTALL ±38 LF OF CONCRETE CURB AND GUTTER (7/C-502).  
TAPER CURB TO FLUSH ACROSS FIVE FEET (5') (TYP.)

SECTION I  
±1,305 SY  
DETAIL 1/C-501

SECTION III  
±5,650 SY  
SEAL COAT

METAL RAMP

FACILITIES

EXISTING PILLARS

VARIOUS UTILITIES

SECTION II  
±1,773 SY  
DETAIL 2/C-501

EXISTING LOW POINTS

LANDSCAPING

GRAVEL

ASPHALT

GRAVEL

GRAVEL



A SITE PLAN  
SCALE: N.T.S.



ENGINEERS

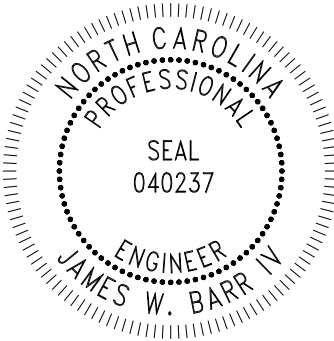
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1927 J.N. PEASE PLACE | SUITE 201  
CHARLOTTE, NC 28262

NORTH CAROLINA  
ENGINEERING FIRM  
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SEALS:



PROJECT NAME:

UNION COUNTY  
PUBLIC SCHOOLS  
  
FACILITIES  
PAVEMENT  
IMPROVEMENT

201 VENUS STREET  
MONROE, NC 28112

PROJ. NO:

R25PVG-005

REVISIONS:

NO.	DATE	DESCRIPTION

THIS LINE IS 1 INCH ON  
THE ORIGINAL DRAWING

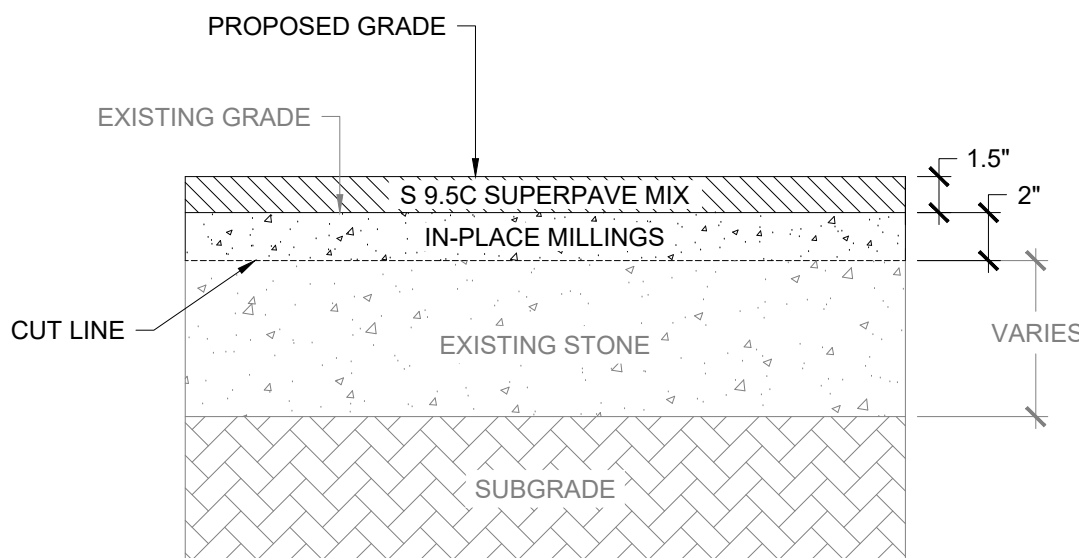
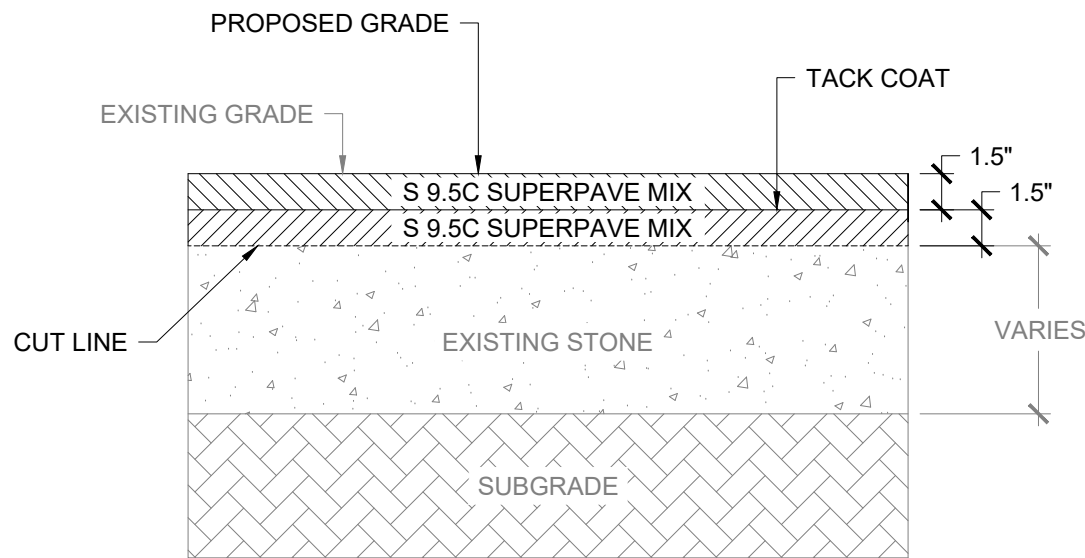
IF IT IS NOT 1 INCH ON THIS PAGE,  
SCALE DRAWING ACCORDINGLY.

SHEET TITLE

DETAILS

DRAWING

C-501



1 SECTION I PAVEMENT PLAN

SCALE: N.T.S.

2 SECTION II PAVEMENT PLAN

SCALE: N.T.S.

GENERAL NOTES:  
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2. DIMENSIONS AND DETAIL COMPONENTS ARE FOR INFORMATION ONLY. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL INFORMATION PROVIDED.  
SHEET NOTES:  
1. FOR DETAILS, LIGHT LINES REPRESENT EXISTING CONSTRUCTION TO REMAIN AND DARK LINES REPRESENT NEW COMPONENTS TO BE PROVIDED.

**Attachment A**

**Standard Terms and Conditions**

DRAFT



## **I. Standard Terms and Conditions for All Contracts**

1. Defined Terms, "Contract" means the agreement between UCBOE and Vendor which consists of the applicable Contract Documents. "Contract Documents" means: (i) any applicable purchase order between Vendor and UCBOE specifically including all terms and conditions set forth or referenced herein and on the face of a Purchase Order, (ii) any attachments hereto, (iii) any applicable solicitation documentation related to hereto (including without limitation any request for proposals or invitation for bids and Vendor's response thereto), and (iv) any other terms and conditions of a written agreement signed by Vendor and UCBOE that deals with the same subject matter. "Goods" means any supplies, materials, products or other tangible personal property provided by Vendor to UCBOE. "Purchase Order" mean any applicable purchase order issued by UCBOE. "Services" means services, specifically including without limitation construction services, design services, professional or consulting services and software as a service, "UCBOE" means the Union County Board of Education. "Vendor" means the party contracting with UCBOE and includes individual and entities that may be referred to in Contract Documents as "vendor", "seller", "service provider", or "contractor".
2. Written Agreement Signed by Both Parties; Acceptance of Purchase Order Terms and Conditions when there is not a Separate Written Agreement Signed by Both Parties. When a Contract is signed by both UCBOE and Vendor then the Purchase Order issued by UCBOE is for administrative convenience and is not part of the Contract Documents. When there is not a separate Contract signed by both UCBOE and Vendor, then Vendor's acknowledgment of the terms of any Purchase Order, without timely objection, or Vendor's shipment or performance of any part of a Purchase Order, constitutes an agreement to all terms and conditions set forth or referenced herein and on the face of the Purchase Order, together with the terms and conditions of any other applicable Contract Documents. The terms and provisions set forth in the Contract Documents shall constitute the entire agreement between Vendor and UCBOE with respect to the purchase by UCBOE of the Services and/or Goods work performed as described in the Contract Documents. In the event of any conflict between any terms and conditions of the Contract Documents, the terms and conditions most favorable to UCBOE shall control. A Purchase Order constitutes an offer by UCBOE and expressly limits acceptance to the terms and conditions stated therein. No additional or supplemental provision or provisions in variance herewith that may appear in Vendor's quotation, acknowledgment, invoice, or in any other communication from Vendor to UCBOE shall be deemed accepted by or binding on UCBOE. UCBOE hereby expressly rejects all such provisions which supplement, modify or otherwise vary from the terms of the Contract Documents, and such provisions are superseded by the terms and conditions stated in the Contract Documents, unless and until UCBOE's authorized representatives expressly assent, in writing, to such provisions. Stenographic and clerical errors and omissions by UCBOE are subject to correction.
3. Cancellation of Purchase Order. UCPS may cancel any Purchase Order or portion thereof without liability, if: (a) Vendor fails upon request to give reasonable assurance of timely performance or UCPS otherwise determines that it has reasonable grounds for insecurity regarding Vendor's performance; (b) conforming Goods or Services (including the quantities specified for delivery) are not delivered within the time specified or, if no time is specified, within a commercially reasonable time; (c) Vendor otherwise breaches the Contract and such breach is not corrected within thirty (30) days following written notice of breach; or (d) cancellation is otherwise required or allowed by law.
4. Quantities. Shipments must equal exact amounts ordered unless otherwise agreed in writing by UCBOE. The award of a term contract neither implies nor guarantees any minimum or maximum purchases. Materials received in excess of quantity specified on the purchase order , at UCBOE option's, may be returned at the Vendor's expense.
5. Prices. If Vendor's price or the regular market price of any of the Goods covered hereunder is lower than the price stated in the Contract Documents on the date of shipment of such Goods, Vendor agrees to give UCBOE the benefit of such lower price on any such Goods. In no event shall Vendor's price be higher than the price last quoted or last charged to UCBOE unless otherwise agreed in writing. No charges for transportation, boxing, crating, etc. are allowable unless such charges are included in the Contract Documents.
6. Invoices. It is understood and agreed that orders will be shipped at the established Contract prices in effect on dates orders are placed. Invoicing at variance with this provision may subject the Contract to cancellation.

Applicable North Carolina sales tax shall be invoiced as a separate item. Invoices shall be sent to UCBOE's accounts payable department with a copy to UCBOE Project Coordinator.

7. Freight on Board. All shipments of Goods are FOB destination unless otherwise stated in the Contract Documents. Any freight charges prepaid by Vendor are to be itemized on the invoice unless stated otherwise in writing by form of quote, bid, contract. In instances where Goods are shipped against this order by parties other than those specified on the Purchase Order, the third-party shipper must be instructed to list the UCBOE purchase order number on all packages, bills of lading, etc. to insure prompt identification of order.
8. Taxes. Taxes are included in the Contract Price. Applicable taxes shall be invoiced as a separate item for UCBOE's records.
9. Payment Terms. Payment terms are Net 30 days after receipt of correct invoice or acceptance of Goods, whichever is later.
10. Condition and Packaging. Unless otherwise provided by special terms and conditions or specifications, it is understood and agreed that any item offered or shipped has not been sold or used for any purpose and shall be in first class condition. All containers/packaging shall be suitable for handling, storage or shipment.
11. Safety Data Sheets. Safety Data Sheets must be provided with shipment of all chemicals."
12. Delays in Shipment. Time and date of delivery are of the essence, except when delay is due to causes beyond Vendor's reasonable control and without Vendor's fault or negligence.
13. Risk of Loss. Vendor shall have the risk of loss of and damage to the Goods subject to the Contract Documents until such Goods are delivered to the destination and accepted by UCBOE or its nominee.
14. Rejection. All Goods shall be received subject to UCBOE's inspection. Goods that are defective in workmanship or material or otherwise not in conformity with the requirements of the Contract Documents may be rejected and returned at Vendor's expense or may be accepted at a reduced price. UCBOE may require Vendor to promptly replace or correct any rejected Goods Services and, if Vendor fails to do so, UCBOE may contract with a third party to replace such Goods Services and charge Vendor the additional cost.
15. Warranties. Vendor warrants that all Goods delivered hereunder will be free from defects in materials and workmanship and will conform strictly to the specifications, drawings, or samples specified or furnished. This warranty shall survive any inspection, delivery, acceptance or payment by UCBOE of the Goods and shall run to UCBOE and any user of the Goods. This express warranty is in addition to Vendor's implied warranties of merchantability and fitness for a particular purpose which shall not be disclaimed. In addition to any other rights available at law or equity, UCBOE shall be entitled to all rights and remedies provided by the Uniform Commercial Code, Chapter 25 of the North Carolina General Statutes, for breach of express warranties and implied warranties of merchantability or fitness for a particular purpose, including but not limited to consequential and incidental damages.
16. Compliance with All Laws. Vendor warrants that all performance hereunder shall be in accordance with all applicable federal, state and local laws, regulations and orders. The right of Vendor to proceed may be terminated immediately by written notice if UCBOE determines that Vendor, its agent or another representative, has violated any provision of law.
17. Use of Federal Funds. If the source of funds for this Contract is federal funds, the following federal provisions apply pursuant to 2 C.F.R. § 200.326 and 2 C.F.R. Part 200, Appendix II (as applicable): Equal Employment Opportunity (41 C.F.R. Part 60); Davis-Bacon Act (40 U.S.C. 3141-3148); Copeland "Anti-Kickback" Act (40 U.S.C. 3145); Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708); Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387); Debarment and Suspension (Executive Orders 12549 and 12689); Byrd Anti-Lobbying Amendment (31 U.S.C. 1352); Procurement of Recovered Materials (2 C.F.R. § 200.322); and Record Retention Requirements (2 CFR § 200.324).
18. Registered Sex Offenders; Jessica Lunsford Act. Under North Carolina law, certain sex offenders are prohibited from coming onto school campuses. Vendor agrees to conduct an annual check of the N.C. Sex Offender and Public Protection Registration Program, the N.C. Sexually Violent Predator Registration Program and the National Sex Offender Registry for all of its employees whose job involves direct interaction with students as part of the job. UCBOE prohibits any personnel listed on such registries from being on any property owned or operated by UCBOE and from having any direct interaction with students. As a term of the Agreement, said checks must be performed by the Vendor and reported to UCBOE's Superintendent or designee, if Vendor's employees will be working directly with students. Under provisions set forth in the Jessica Lunsford Act under North Carolina law, the signature below certifies that neither Vendor nor any employee or agent of Vendor is

- listed as a sex offender on the N.C. Sex Offender and Public Protection Registration Program, the N.C. Sexually Violent Predator Registration Program, and/or the National Sex Offender Registry.
19. Nondiscrimination. During the performance of the Contract, Vendor shall not discriminate against or deny the Contract's benefits to any person on the basis of sexual orientation, national origin, race, ethnic background, color, religion, gender, age or disability.
  20. FERPA Electronically Stored Data Compliance: Vendor is expressly prohibited from selling or trading any education records or personally identifiable information acquired under the Agreement. Furthermore, Vendor agrees not to attempt to re-identify students from aggregated data. Further, Vendor will not use any personally identifiable information or education records to advertise or market to students of UCBOE or their parents. Any personally identifiable information and education records held by Vendor pursuant to the Agreement will be made available to UCBOE upon request. Vendor will store and process all data using appropriate administrative, physical, and technical safeguards to secure personally identifiable information and education records from unauthorized access, disclosure, and use. Vendor will conduct periodic risk assessments and remediate any identified security vulnerabilities in a timely manner. Vendor will also have a written incident response plan, to include prompt notification to UCBOE in the event of a security or privacy incident, as well as procedures for responding to a breach of data. Vendor agrees to share its incident response plan upon request. Vendor shall, for all personally identifiable data and education records in its possession and in the possession of any subcontractors, or agents to which it has transferred data as permitted herein, destroy or de-identify such data when such data is no longer needed to perform the Agreement. Vendor hereby agrees to abide by all Board of Education policies and procedures governing the confidentiality of student records and the responsible use of technology and internet safety. If Vendor experiences a security breach concerning any information covered by the Agreement, and such breach is covered by N.C.G.S. §75.61(14), then Vendor will (a) fully comply with Vendor's obligations under the N.C. Identity Theft Protection Act, (b) immediately notify UCBOE with the information listed in N.C.G.S. §75-65(d)(1-4), and (c) fully cooperate with UCBOE in carrying out its obligations under said Identity Theft Protection Act. Vendor will indemnify UCBOE for any breach of confidentiality or failure of its responsibilities to protect confidential information, and for cost of notification of affected persons as a result of its accidental or negligent release of personally identifiable information or education records provided to Vendor pursuant to the Agreement.
  21. North Carolina Public Records Law: Vendor acknowledges that UCBOE is subject to the requirements of North Carolina's Public Records Law ("NCPRL"), N.C.G.S. § 132-1, et. seq. The Agreement and any related documents, papers, letters, maps, books, photographs, films, sound recordings, magnetic or other tapes, electronic data-processing records, artifacts, or other documentary material, regardless of physical form or characteristics, made or received by UCBOE in connection with the transaction of the Agreement may be considered a "public record," subject to disclosure under the NCPRL. UCBOE is under no obligation to notify Vendor prior to its compliance of its duties under NCPRL.
  22. Conflict of Interest. Vendor represents and warrants that no member of UCBOE or any of its employees or officers who may obtain a direct benefit, personal gain or advantage for themselves or a relative or associate as a result of the Contract, subcontract or other agreement related to the Contract is in a position to influence or has attempted to influence the making of the Contract, has been involved in making the Contract, or will be involved in administering the Contract. Vendor also represents and warrants that, if the Contract is funded by any amount of federal funds, no violation of 2 C.F.R. § 200.318(c) or any other applicable federal conflict of interest law has occurred or will occur. Vendor shall cause this paragraph to be included in all Contracts, subcontracts and other agreements related to the Contract.
  23. Gratuities. Vendor represents and warrants that no member of UCBOE or any of its employees has been or will be offered or given a gratuity to an official or employee of UCBOE in violation of applicable law or policy.
  24. Kickbacks to Vendor. Vendor shall not permit any kickbacks or gratuities to be provided, directly or indirectly, to itself, its employees, subcontractors or subcontractor employees for the purpose of improperly obtaining or rewarding favorable treatment in connection with a UCBOE Contract or in connection with a subcontract relating to a UCBOE Contract. When Vendor has grounds to believe that a violation of this clause may have occurred, Vendor shall promptly report to UCBOE in writing the possible violation.
  25. Iran Divestment Act. Vendor certifies that, as of the date listed below, it is not on the Final Divestment List, as created by the State Treasurer pursuant to N.C.G.S. § 143-6A-4, in violation of the Iran Divestment Act. In compliance with the requirements of the Iran Divestment Act and N.C.G.S. § 143C-6A-5(b), Vendor shall not

utilize in the performance of the contract any subcontractor that is identified on the Final Divestment List. The Final Divestment List can be found on the State Treasurer's website at the address [www.nctreasurer.com/Iran](http://www.nctreasurer.com/Iran) and should be updated every 180 days.

26. Divestment from Companies that Boycott Israel. The Vendor certifies that it has not been designated by the North Carolina State Treasurer as a company engaged in the boycott of Israel pursuant to N.C.G.S. 147-86.81. It is the responsibility of each vendor or contractor to monitor compliance with this restriction. Contracts valued at less than \$1,000.00 are exempt from this restriction.
27. E-Verification. Vendor shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes
28. Indemnification. To the fullest extent permitted by law, Vendor shall indemnify and hold harmless UCBOE, its officers, agents, employees and assigns from and against all claims, losses, costs, damages, expenses, attorneys' fees and liability that any of them may sustain (a) arising out of Vendor's failure to comply with any applicable law, ordinance, regulation, or industry standard or (b) arising directly or indirectly out of Vendor's performance or lack of performance of the terms and conditions of the Contract. In the event that any Services and/or Goods sold and delivered or sold and performed under the Contract Documents shall be defective in any respect whatsoever, Vendor shall indemnify and save harmless UCBOE, its officers, agents, employees and assigns from all loss or the payment of all sums of money by reason of all accidents, injuries or damages to persons or property that shall happen or occur in connection with the use or sale of such Services and/or Goods and are contributed to by said condition. In the event Vendor, its employees, agents, subcontractors and or lower-tier subcontractors enter premises occupied by or under the control of UCBOE in the performance of the Contract Documents, Vendor agrees that it will indemnify and hold harmless UCBOE, its officers, agents, employees and assigns, from any loss, costs, damage, expense or liability by reason of property damage or personal injury of whatsoever nature or kind arising out of, as a result of, or in connection with such entry.
29. Insurance. Unless such insurance requirements are waived or modified by UCBOE or risk management ("DIRM"), Vendor certifies that it currently has and agrees to purchase and maintain during its performance under the Contract the following insurance from one or more insurance companies acceptable to UCBOE and authorized to do business in the State of North Carolina: Automobile - Vendor shall maintain bodily injury and property damage liability insurance covering all owned, non-owned and hired automobiles. The policy limits of such insurance shall not be less than \$1,000,000 combined single limit each person/each occurrence. Commercial General Liability - Vendor shall maintain commercial general liability insurance that shall protect Vendor from claims of bodily injury or property damage which arise from performance under the Contract. This insurance shall include coverage for contractual liability. The policy limits of such insurance shall not be less than \$1,000,000 combined single limit each occurrence/annual aggregate. Worker's Compensation and Employers' Liability Insurance - If applicable to Vendor, Vendor shall meet the statutory requirements of the State of North Carolina for worker's compensation coverage and employers' liability insurance. Vendor shall also provide any other insurance or bonding specifically recommended in writing by the DIRM or required by applicable law. Certificates of such insurance shall be furnished by Vendor to UCBOE and shall contain the provision that UCBOE be given 30 days' written notice of any intent to amend or terminate by either Vendor or the insuring company. Failure to furnish insurance certificates or to maintain such insurance shall be a default under the Contract and shall be grounds for immediate termination of the Contract.
30. Termination for Convenience. In addition to all of the other rights which UCBOE may have to cancel this Contract or an applicable Purchase Order, UCBOE shall have the further right, without assigning any reason therefore, to terminate the Contract (or applicable Purchase Order), in whole or in part, at any time at its complete discretion by providing 10 days' notice in writing from UCBOE to Vendor. If the Contract is terminated by UCBOE in accordance with this paragraph, Vendor will be paid in an amount which bears the same ratio to the total compensation as does the Services and/or Goods actually delivered or performed to the total originally contemplated in the Contract. UCBOE will not be liable to Vendor for any costs for completed Goods, Goods in process or materials acquired or contracted for if such costs were incurred prior to the date of this Contract or an applicable Purchase Order.
31. Termination for Default. UCBOE may terminate the Contract, in whole or in part, immediately and without prior notice upon breach of the Contract by Vendor. In addition to any other remedies available to UCBOE law or equity, UCBOE may procure upon such terms as UCBOE shall deem appropriate, Services and/or Goods

- substantially similar to those so terminated, in which case Vendor shall be liable to UCBOE for any excess costs for such similar goods, supplies, or services and any expenses incurred in connection therewith.
32. **Contract Funding.** It is understood and agreed between Vendor and UCBOE that UCBOE's obligation under the Contract is contingent upon the availability of appropriated funds from which payment for Contract purposes can be made. No legal liability on the part of UCBOE for any payment may arise until funds are made available to UCBOE's Finance Officer and until Vendor receives notice of such availability. Should such funds not be appropriated or allocated, the Contract shall immediately be terminated. UCBOE shall not be liable to Vendor for damages of any kind (general, special, consequential or exemplary) as a result of such termination.
  33. **Accounting Procedures.** Vendor shall comply with any accounting and fiscal management procedures prescribed by UCBOE to apply to the Contract and shall assure such fiscal control and accounting procedures as may be necessary for proper disbursement of and accounting for all project funds.
  34. **Improper Payments.** Vendor shall assume all risks attendant to any improper expenditure of funds under the Contract. Vendor shall refund to UCBOE any payment made pursuant to the Contract if it is subsequently determined by audit that such payment was improper under any applicable law, regulation or procedure. Vendor shall make such refunds within thirty (30) days after UCBOE notifies Vendor in writing that a payment has been determined to be improper.
  35. **Contract Transfer.** Vendor shall not assign, subcontract or otherwise transfer any interest in the Contract without the prior written approval of UCBOE.
  36. **Contract Personnel.** Vendor agrees that it has, or will secure at its own expense, all personnel required to provide the Services and/or Goods set forth in the Contract.
  37. **Key Personnel.** Vendor shall not substitute for key personnel (defined as those individuals identified by name or title in the Contract Documents or in written communication from Vendor) assigned to the performance of the Contract without prior written approval from UCBOE Project Coordinator (the individual at UCBOE responsible for administering the Contract).
  38. **Contract Modifications.** The Contract may be amended only by written amendment duly executed by both UCBOE and Vendor.
  39. **Relationship of Parties.** Vendor is an independent contractor and not an employee of UCBOE. The conduct and control of the work will lie solely with Vendor. The Contract shall not be construed as establishing a joint venture, partnership or any principal-agent relationship for any purpose between Vendor and UCBOE. Employees of Vendor shall remain subject to the exclusive control and supervision of Vendor, which is solely responsible for their compensation.
  40. **Advertisement.** The Contract will not be used in connection with any advertising by Vendor without prior written approval by UCBOE.
  41. **Monitoring and Evaluation.** Vendor shall cooperate with UCBOE, or with any other person or agency as directed by UCBOE, in monitoring, inspecting, auditing or investigating activities related to the Contract. Vendor shall permit UCBOE to evaluate all activities conducted under the Contract. UCBOE has the right at its sole discretion to require that Vendor remove any employee of Vendor from UCBOE Property and from providing Services and/or Goods under the Contract following provision of notice to Vendor of the reasons for UCBOE's dissatisfaction with the Services and/or Goods of Vendor's employee.
  42. **Financial Responsibility.** Vendor is financially solvent and able to perform under the Contract. If requested by UCBOE, Vendor agrees to provide a copy of its latest audited annual financial statements or other financial statements as deemed acceptable by UCBOE's Finance Officer. In the event of any proceedings, voluntary or involuntary, in bankruptcy or insolvency by or against Vendor, the inability of Vendor to meet its debts as they become due or in the event of the appointment, with or without Vendor's consent, of an assignee for the benefit of creditors or of a receiver, then UCBOE shall be entitled, at its sole option, to cancel any unfilled part of the Contract without any liability whatsoever.
  43. **Governmental Restrictions.** In the event any governmental restrictions are imposed which necessitate alteration of the material, quality, workmanship or performance of the items offered prior to their delivery, it shall be the responsibility of the Vendor to notify, in writing, the issuing purchasing office at once, indicating the specific regulation which required such alterations. UCBOE reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the Contract.
  44. **Inspection at Vendor's Site.** UCBOE reserves the right to inspect, at a reasonable time, the equipment/item, plant or other facilities of a prospective contractor prior to Contract award, and during the Contract term as

necessary for UCBOE determination that such equipment/item, plant or other facilities conform with the specifications/requirements and are adequate and suitable for the proper and effective performance of the Contract.

45. Confidential Information. All information about UCBOE provided to the Vendor or its officers, employees, agents, representatives and advisors (the "Vendor Representatives"), and all copies or other full or partial reproductions thereof and notes, memoranda or other writings related thereto created by Vendor or any Vendor Representative, regardless of whether provided before or after the date of the Contract and regardless of the manner or medium in which it is furnished, is referred to as "Confidential Information". Confidential Information does not include any information that (a) is or becomes generally available to the public other than as a result of an impermissible disclosure by Vendor, (b) was known by or available on a nonconfidential basis to Vendor before it was disclosed by UCBOE or (c) becomes available to Vendor on a nonconfidential basis from a third party whom Vendor does not know to be bound by a confidentiality agreement with, or have an obligation of secrecy to, UCBOE. Except as and to the extent required by law or order or demand of any governmental or regulatory authority, Vendor and Vendor Representatives will (x) keep all Confidential Information confidential and (y) will only disclose or reveal any Confidential Information to Vendor Representatives who must have the information to fulfill Vendor's obligations under the Contract and who agree to observe the terms of this Section. Vendor and Vendor Representatives will not use the Confidential Information for any purpose other than fulfilling Vendor's obligations under the Contract. By way of example and not limitation, Vendor shall not sell, market, or commercialize Confidential Information, create derivative products or applications based on Confidential Information. If Vendor is requested or required, pursuant to applicable law or regulation or by legal process, to disclose any Confidential Information, Vendor will provide UCBOE with prompt and timely notice of the requests or requirements so that UCBOE can seek an appropriate protective order or other remedy and will not be prejudiced by delay. If UCBOE does not obtain a protective order or other remedy, Vendor will only disclose that portion of the Confidential Information which Vendor's legal counsel determines Vendor is required to disclose. Upon termination of the Contract or otherwise upon UCBOE's request, Vendor will promptly deliver to UCBOE all Confidential Information in the possession of Vendor or the Vendor Representatives.

Student Information: If, during the course of Vendor's performance of the Contract, Vendor should obtain any information pertaining to students or students' official records, Vendor agrees to keep any such information confidential and to not disclose or permit it to be disclosed, directly or indirectly, to any person or entity. The Contract shall not be construed by either party to constitute a waiver of or to in any manner diminish the provisions for confidentiality of students' records. Additionally, pursuant to N.C.G.S. 115C-401.1, it is unlawful for a person who enters into a contract with a local board of education to sell personally identifiable information that is obtained from a student as a result of that person's performance under the Contract.

Employee Personnel Information: If, during the course of Vendor's performance of the Contract, Vendor should obtain any information pertaining to employees of UCBOE's personnel records, Vendor agrees to keep any such information confidential and to not disclose or permit it to be disclosed, directly or indirectly, to any person or entity. This section will survive the termination of this Contract.

46. Intellectual Property. Vendor agrees, at its own expense, to indemnify, defend and save UCBOE harmless from all liability, loss or expense, including costs of settlement and attorney's fees, resulting from any claim that UCBOE's use, possession or sale of the Services and/or Goods infringes any copyright, patent or trademark or is a misappropriation of any trade secret.
47. No Pre-Judgment or Post-Judgment Interest. In the event of any action by Vendor for breach of contract in connection with the Contract, any amount awarded shall not bear interest either before or after any judgment, and Vendor specifically waives any claim for interest.
48. Background Checks. At the request of UCBOE's Project Coordinator, Vendor (if an individual) or any individual employees of Vendor shall submit to UCBOE criminal background check and drug testing procedures.
49. Mediation. If a dispute arises out of or relates to the Contract, or the breach of the Contract, and if the dispute cannot be settled through negotiation, the parties agree to try in good faith to settle the dispute by mediation administered by the American Arbitration Association under its Commercial Mediation Rules before resorting to litigation.

50. No Third-Party Benefits. The Contract shall not be considered by Vendor to create any benefits on behalf of any third party. Vendor shall include in all contracts, subcontracts or other agreements relating to the Contract an acknowledgment by the contracting parties that the Contract creates no third-party benefits.
51. Force Majeure. Neither party shall be responsible to the other for any losses resulting from the failure to perform any terms or provisions of the Agreement if the party's failure to perform is attributable to war, riot or other disorder, strike or other work stoppage; fire; flood; storm; illness; pandemic, communicable disease, or any other act not within the control of the party whose performance is interfered with, and which, by reasonable diligence, such party is unable to prevent. However, UCBOE will be entitled to a refund for fees paid on account of services not rendered by Vendor including any and all deposits.
52. Ownership of Documents; Work Product. All documents created pursuant to the Contract shall, unless expressly provided otherwise in writing, be owned by UCBOE. Upon the termination or expiration of the Contract, any and all finished or unfinished documents and other materials produced by Vendor pursuant to the Contract shall, at the request of UCBOE, be turned over to UCBOE. Any technical knowledge or information of Vendor which Vendor shall have disclosed or may hereafter disclose to UCBOE shall not, unless otherwise specifically agreed upon in writing by UCBOE, be deemed to be confidential or proprietary information and shall be acquired by UCBOE free from any restrictions as part of the consideration of the Contract.
53. Strict Compliance. UCBOE may at any time insist upon strict compliance with these terms and conditions notwithstanding any previous course of dealing or course of performance between the parties to the contrary.
54. General Provisions. UCBOE's remedies as set forth herein are not exclusive. Any delay or omission in exercising any right hereunder, or any waiver of any single breach or default hereunder, shall not be deemed to be a waiver of such right or of any other right, breach, or default. If action be instituted by Vendor hereunder, UCBOE shall be entitled to recover costs and reasonable attorney's fees. Vendor may not assign, pledge, or in any manner encumber Vendor's rights under this Contract or applicable Purchase Order or delegate the performance of any of its obligations hereunder, without UCBOE's prior, express written consent.
55. Contract Situs. All matters, whether sounding in contract or tort relating to the validity, construction, interpretation and enforcement of the Contract, will be determined in Union County, North Carolina. North Carolina law will govern the interpretation and construction of the Contract.
56. Severability. Any provision of this Contract that is determined by any court of competent jurisdiction to be invalid or unenforceable will not affect the validity or enforceability of any other provision. Any provision of the Contract held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

## **II. Additional Standard Terms and Conditions for Construction Contracts**

1. Supervision and Provision for Labor and Supplies. The Vendor will supervise and direct the construction work (the "Work") and shall furnish, provide, and pay for all labor, materials, equipment, machinery, utilities, and services reasonably necessary for the execution and completion of the Work.
2. Coordination of Work and Notification of Progress. The Vendor agrees to coordinate its Work with the work of any other separate contractors or with the work of UCBOE's own forces to avoid delaying or interfering with their work. Vendor shall enforce good order and discipline among his employees and subcontractors on the Project. The Vendor further agrees to inform UCBOE on a regular basis or at UCBOE's request of the progress of the Work.
3. Provision for all Permits, Licenses, and Inspections. Unless otherwise provided, the Vendor shall secure and pay for all permits, licenses, and inspections necessary for the proper execution and completion of the Work.
4. Cleanliness. Vendor shall keep the Project reasonably free from waste materials or rubbish resulting from the Vendor's operations.
5. Additional Warranties. The Vendor warrants that the Vendor has visited the location of the Project and is familiar with all field conditions bearing upon the Vendor's performance of the Work; that the materials and equipment furnished under the Contract are of good quality and new (unless otherwise permitted); that the Work is non-negligent and meets or exceeds the standards ordinarily observed in the industry; and that the Work conforms to the requirements of the Contract and to all applicable codes, ordinances, laws, or regulations. The Vendor further warrants and promises that the Work shall be free from defects

and nonconformities in materials and workmanship for a period of one year from the later of the Date of Completion, which is the date UCBOE accepts the Work or such date as the Vendor actually completes all the Work (the "Date of Completion"). During such period, the Vendor will remedy at Vendor's expense nonconformities or defects in the Work within a reasonable time after receiving notice thereof from UCBOE.

6. Indemnity for Subcontractor Payment. In addition to the indemnification obligations contained in the attached terms and conditions to this Contract, the Vendor further agrees to defend and indemnify UCBOE from and against all claims, damages, losses, and expenses, including reasonable attorneys' fees, arising out of the Vendor's failure to pay subcontractors or materials suppliers.
7. Change Orders. The Vendor agrees that UCBOE may order changes in the general scope of the Work, including additions, deletions, and similar revisions. The parties agree to adjust the Contract Price and Date of Completion to reflect the effects of such changes, which adjustments shall be authorized only upon execution of a written change order (a "Change Order"). In case of emergency or extenuating circumstances or if a construction contingency is provided as stated below, approval of changes may be obtained verbally by telephone or field orders approved by UCBOE Project Coordinator and promptly thereafter substantiated in writing as outlined under normal procedures. The amount of any increase or decrease in the Contract Price shall be by mutual acceptance of a total amount supported by sufficient data and information to substantiate the change. Any decrease in Contract Price for a decrease in the Work will be the reasonable costs of the Work deleted, including a reasonable amount for the decrease in the Vendor's overhead.
8. Performance/Payment Bond. If required by law and/or the bidding documentation, the Vendor agrees to provide a Performance Bond and Labor and Material Payment Bond for its faithful performance in a form reasonably satisfying to UCBOE.
9. Payments Withheld. The UCBOE may withhold payment for the following reasons to the extent permitted under N.C. Gen. Stat. § 143-134.1(e): (1) defective Work not remedied; (2) third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to UCBOE is provided by the Vendor; (3) failure of the Vendor to make payments properly to subcontractors or for labor, materials or equipment; (4) reasonable evidence that the Work will not be completed with the time specified, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; (5) failure to carry out the Work in accordance with the Contract Documents; (6) failure to provide sales tax documentation in accordance with subparagraph 9.3.5; (7) failure or refusal of the Vendor to submit the required information on minority business enterprises; and (8) failure of the Vendor to comply with (a) the provisions of the Sedimentation and Pollution Control Act (N.C. Gen. Stat. § 113A-50 *et seq.*), and/or (b) any Notice of Violation issued by the North Carolina Department of Natural Resources.
10. Retainage. For public construction contracts costing an amount equal to or greater than \$100,000, the UCBOE will retain five percent of the amount of each progress payment on the project for as long as is authorized by N.C. Gen. Stat. § 143-134.1. At all times during the Project, the UCBOE may retain the maximum funds allowed by N.C. Gen. Stat. § 143-134.1. The UCBOE specifically reserves the right to withhold additional funds as authorized by this Contract and N.C. Gen. Stat. § 143-134.1. The Vendor may pay each subcontractor no later than seven days after receipt of payment from the UCBOE and in accordance with N.C. Gen. Stat. § 143-134.1 the amount to which the subcontractor is entitled, reflecting percentages actually retained from payments to the Vendor on account of the subcontractor's portion of the Work. The Vendor shall, by appropriate agreement with each subcontractor, require each subcontractor to make payments to sub-subcontractors in a similar manner and in accordance with N.C. Gen. Stat. § 143-134.1.
11. The Vendor shall use and submit applications for payment using a form reasonably satisfactory to UCBOE ("Application for Payment"). The Contractor shall submit with each Application for Payment a completed "Statement of Sales Tax Paid" and "Minority Business Enterprise" documentation in a form acceptable to UCBOE.

**III. Additional Standard Term and Condition for Designer Contracts (which include Architectural, Engineering, Surveying, and Technical Services)**



Additional Insurance. In addition to the insurance required pursuant to Section 22 of the Standard Terms and Conditions for All Contracts, the Vendor certifies that it currently has and agrees to purchase and maintain during its performance under the Contract the following insurance from one or more insurance companies acceptable to UCBOE and authorized to do business in the State of North Carolina: Professional liability insurance in commercially reasonable amounts as reasonably determined by UCBOE.

#### **IV. Additional Standard Terms and Conditions for Information Technology Contracts**

1. Definitions.

“Hardware” means the hardware the Vendor utilizes in the Hosted Environment for delivery and maintenance of the Hosted Software Services.

“Hosted Environment” means the Hardware, system software, hosting support software, network connectivity, and facility used by Vendor to support the Hosted Software Services.

“Hosted Software Services” means the application, including the Hosted Software and any applicable Third-Party Software, as run on the Hosted Environment.

“Hosted Software” means the software owned and controlled by Vendor or Vendor’s third-party contractor that supports the Hosted Software Services.

“Support Services” means application and technical support required to maintain the performance, uptime and connectivity of the Hosted Software Services for UCBOE access and use, including without limitation, telephone support, error correction, maintenance, and installation of Updates and Upgrades to the Hosted Software.

“Updates” means (i) modifications to or releases of the Hosted Software that (a) add new features, functionality, and/or improved performance, (b) operate on new or other databases, operating systems, or server platforms or (c) extend the Hosted Software functionality to take advantage of advances in coding language, hardware, network or wireless infrastructures; and (ii) deviation corrections, bug or error fixes, patches, workarounds, and maintenance releases.

“Upgrades” means any new version or new release of the Hosted Software typically provided on an annual or bi-annual basis by the Vendor that includes new features, functions, support or service that were not in place with the immediately prior version.

2. Grant of License. Vendor grants to UCBOE for the term of this Contract a non-exclusive, non-transferable license to access and use over the internet the Hosted Software (the “License”).
3. Updates and Upgrades. Vendor will make certain limited and applicable Hosted Software Updates and Upgrades available to UCBOE at no additional cost. All such Updates and Upgrades shall automatically become subject to the benefits and terms of this Contract and shall automatically be considered part of the License granted under this Contract.
4. Security. Vendor’s Hosted Environment shall maintain security measures in place to help protect against the loss, misuse, and alteration of the Hosted Software Services, and specifically the Confidential Information provided to Vendor by UCBOE.
5. Warranties. Vendor warrants the following: (a) Vendor has the full authority to grant the License; (b) the Hosted Software is free from material defects or viruses; (c) the Hosted Software contains no disabling devices; and (d) the Hosted Software conforms to all material specifications set forth in the documentation and any other written material provided to UCBOE for any purpose. Without limiting any other remedies available to UCBOE under this Contract, at law or in equity, in the event that any Hosted Software does not conform to the warranties set forth for the Hosted Software herein, Vendor shall, at UCBOE’s option, promptly correct or replace such Hosted Software and, in either case, Vendor shall perform any Support Services or other work required to restore the Hosted Software to the state that existed prior to any such breach, all at Vendor’s expense. UCBOE reserves the right to reject the Hosted Software and to hold Vendor responsible for any loss, direct or indirect, caused by any such breach of warranty. In the event Vendor is or becomes aware of a problem with any item of Hosted Software, Vendor shall notify UCBOE upon such determination. Acceptance or use of the Hosted Software shall not constitute a waiver of any claim under any warranty.
6. Effect of Termination and Orderly Transition. Upon termination or expiration of this Contract for any reason, Vendor will cooperate in good faith with UCBOE to provide for an orderly transfer of the Goods and Services

and Confidential Information to UCBOE or UCBOE's successor vendor ("Orderly Transition") and according to the terms of this section.

- a. Scope of Work for Orderly Transition. Within thirty (30) days of notification by UCBOE that it will transfer Goods and Services to itself or a successor vendor, the parties will create and execute a scope of work document detailing tasks, the responsible parties for individual tasks, and timeframes for completion of tasks necessary to complete an Orderly Transition. The final, executed Orderly Transition scope of work shall be incorporated into this Contract and become subject to its terms. Vendor's failure to (a) cooperate in developing the Orderly Transition scope of work, (b) execute an Orderly Transition scope of work, or (c) abide by the executed Orderly Transition scope of work shall be deemed a material breach of this Contract.
  - b. Time Frame. Unless otherwise mutually agreed in an executed Orderly Transition scope of work, Vendor shall continue to provide Goods and Services while UCBOE migrates its Confidential Information from Vendor's Hosted Software Services in the Orderly Transition process. Vendor agrees that, as part of the Orderly Transition process and within the specified time frame, it will transfer to UCBOE all of the Confidential Information provided to Vendor by UCBOE pursuant to this Contract. Vendor will provide the Confidential Information in commercially reasonable electronic format as agreed in the Orderly Transition scope of work at no additional cost.
  - c. Time and Material Costs Only. UCBOE will be obligated to pay for time and materials at a reasonable hourly rate of no more than \$75/hour for the Orderly Transition. No other fees will be assessed for the Orderly Transition. Fees shall be agreed upon in advance as part of developing the scope of work referenced in subsection (a) above.
  - d. Destruction of Confidential Information after Orderly Transition. Unless otherwise mutually agreed in an executed Orderly Transition scope of work, Vendor agrees that after returning all Confidential Information to UCBOE pursuant to subsection (b) above it will destroy all remaining copies of Confidential Information and back-up Confidential Information in its possession, contained in or on any medium (such as a storage area network or "SAN") or as may be stored offsite, within thirty (30) days of completion of Orderly Transition. Vendor shall provide UCBOE with a detailed summary of the destruction process and standards to be utilized by Vendor with respect to the Confidential Information, and UCBOE shall approve such process and standards prior to Vendor commencing such destruction.
7. Intellectual Property Warranty. In addition to the warranties set forth elsewhere in this Contract with respect to the Goods and Services, Vendor expressly represents, warrants and covenants that neither the furnishing of Hosted Services to UCBOE hereunder, nor does the Hosted Software, violate, in whole or in part, any provision of any law, common law or regulation concerning copyrights, trade secrets, trademarks, tradenames, service marks, patents or other provisions regulating or concerning intellectual property rights.
  8. Additional Indemnification. To the fullest extent permitted by law, Vendor shall indemnify, defend and hold harmless UCBOE, its and directors, officers, managers, employees and agents, from all suits, claims, costs, damages and other liabilities, including reasonable attorneys' fees as incurred by counsel of UCBOE's choice, relating to or arising from (a) Vendor's failure to maintain the security and integrity of Confidential Information, the Hosted Software Services and the Hosted Environment; (b) any claim for infringement of any copyright, trade secret, trademark, tradename, service mark, patent, or other law or regulation concerning intellectual and/or proprietary property rights; and (c) any claims by third party interests in the Hosted Software.
  9. Data Use. Notwithstanding the foregoing, Vendor acknowledges and agrees that all Confidential Information is proprietary to and owned exclusively by UCBOE, whether provided in tangible or electronic form and whether entered into any software or Hosted Software Services owned or licensed by Vendor (including without limitation the Hosted Software and Hosted Software Services) or otherwise provided in connection with any products provided and services performed by Vendor (including without limitation the Goods and Services) and whether to, by or through a Vendor-affiliated ASP or other Hosted Software Services. Furthermore, Vendor shall not sell, market, or commercialize Confidential Information, create derivative products or applications based on Confidential Information or otherwise use Confidential Information in any manner unrelated to the performance of Vendor's obligations under the Contract. Vendor shall not share Confidential Information with any parent or subsidiary company of Vendor or any other Vendor-affiliated entity without the express prior written consent of UCBOE detailing the scope of allowable disclosure. Vendor agrees that if it breaches this

section, UCBOE may, at its option, pursue any or all of the following remedies: (a) immediately terminate this Contract without liability to Vendor; (b) seek an injunction without posting a bond; and (c) pursue whatever other remedies may be available to it at law, in equity or pursuant to this Contract.

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**Note:** Failure to answer all of the following questions may result in disqualification. If you have any questions, contact the person listed below under "Submitted to." The State agency/institution reserves the unqualified right to reject any or all proposals and to waive informalities. The State agency/institution has developed a plan to meet or exceed goals set by GS 143-128 for the participation of minority businesses in public construction contracts. Contractors are expected to be familiar with these initiatives and to comply with program requirements.

**Due Date:**

\_\_\_\_\_

*Date*

*Time*

**Submitted to:**

\_\_\_\_\_

*Contact Name*

\_\_\_\_\_

*Agency/Institution*

\_\_\_\_\_

*Address*

\_\_\_\_\_

*City*

\_\_\_\_\_

*State*

\_\_\_\_\_

*Zip Code*

**Project Title:**

\_\_\_\_\_

**Project Description:**

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

**I. Minimum Requirements**

A. Firm's Name and Principal Office serving this project:

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

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

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_ Extension: \_\_\_\_\_

Email: \_\_\_\_\_

B. Type of Company (*check one*): \_\_\_\_ Corporation \_\_\_\_ Individual \_\_\_\_ Partnership  
\_\_\_\_ Joint Venture \_\_\_\_ Other (*please specify*): \_\_\_\_\_

C. Type of Work (*check one; file separately for each classification of work*):

\_\_\_\_ General Construction \_\_\_\_ Mechanical \_\_\_\_ Plumbing

\_\_\_\_ Electrical

Other (*please specify*): \_\_\_\_\_

# State of North Carolina

## Prequalification for Single Prime Contractors

## D. License

North Carolina License Type (*check*):   \_\_\_ General Construction   \_\_\_ Mechanical  
       \_\_\_ Plumbing      \_\_\_ Electrical   \_\_\_ Other (*please specify*):\_\_\_\_\_

North Carolina License Number: \_\_\_\_\_

License Limitations or Level: \_\_\_\_\_

State/County/City Privilege License: \_\_\_\_\_  
(attach copy)

## E. Bonding

1. Attach letter, dated within the last 30 days, from your surety company or its agent licensed to do business in North Carolina, verifying your company's capability and capacity based on your current value of work for providing sufficient performance and payment bonds for this project. Surety company bond rating shall be rated "A" or better under the A.M. Best Rating system or The Federal Treasury List.

3. Have any funds been expended by a surety company on your behalf? \_\_\_\_ Yes \_\_\_\_ No  
If yes, explain:

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4. List all surety companies that have provided bonds for your company for the past five (5) years, explanation required if more than one company.

<i>Date</i>	<i>Firm</i>
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<i>Date</i>	<i>Firm</i>
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<i>Date</i>	<i>Firm</i>
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## F. Insurance

In order to pre-qualify, firms must indicate that they can provide evidence of insurance coverage as follows, should they subsequently be the successful bidder. Evidence of insurance in the required amounts can be provided.

1. Worker's Compensation insurance as required by law and Employer's Liability Insurance coverage with minimum limits of \$100,000.

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2. General liability insurance with minimum limits of \$500,000 per occurrence for bodily injury and \$100,000 per occurrence/\$300,000 aggregate for property damage.
3. Builder's risk at the full insurable value of the entire work site.

Can your provide evidence of the above insurance? : \_\_\_\_ Yes \_\_\_\_ No

**II. General Requirements**

**A. Experience**

1. Number of years in business as a contractor under the company name listed in I.A., above: \_\_\_\_\_ years. List any other names your firm operated under previously.  
\_\_\_\_\_

2. List date, State and type of incorporation, partnership, or proprietorship establishment:

\_\_\_\_\_

<i>Date</i>	<i>State/Type (incorporation, partnership/proprietorship)</i>
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2. List names of the firm principals appropriate to the type of the firm:

Corporation – President: \_\_\_\_\_  
Vice-President: \_\_\_\_\_  
Secretary: \_\_\_\_\_  
Treasurer: \_\_\_\_\_

Partnership – Partners: \_\_\_\_\_

Proprietorship – Owner: \_\_\_\_\_

Other – (List and explain): \_\_\_\_\_

4. Has your company ever performed construction work for the State of North Carolina and/or related public agencies and/or this specific agency/institution? \_\_\_\_ Yes \_\_\_\_ No

If yes, on a separate sheet list the name of the agency, project, dollar value, owner and architect names and contact phone numbers, scheduled completion and actual completion dates for all projects completed within the last five (5) years.

5. Has your organization been pre-qualified to bid on a State agency/institution project and failed to submit a bid? \_\_\_\_ Yes \_\_\_\_ No

If yes, on a separate sheet list name of project and reason you did not submit a bid.

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**B. Size/Capacity**

1. How many full-time permanent employees work for the company? : \_\_\_\_\_
2. If the company has more than one office location, how many full-time permanent employees work for the company at the location which will serve this project? \_\_\_\_\_
3. List the annual dollar value of construction work the company has performed for each year over the last 5 calendar years:  
(1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_ (4) \_\_\_\_\_ (5) \_\_\_\_\_

**C. Office Locations**

1. If your company has multiple office locations, indicate the location of the principal place of business: \_\_\_\_\_  
(City/State/Country)
2. If your company has multiple office locations, indicate the location that will service this project: \_\_\_\_\_  
(City/State/Country)
3. How many full-time permanent positions from your company will be located in North Carolina, and have payroll taxes paid in North Carolina? : \_\_\_\_\_  
(# of positions)

**D. Workload**

1. How many projects do you currently have under contract or in progress and what is their total dollar value? : \_\_\_\_\_ projects totaling \$ \_\_\_\_\_  
(# of projects) (total \$ value)
2. List the three biggest contracts currently under contract or in progress, including the name of the project, owner and architect names and phone numbers, contract dollar values, percentage complete and currently anticipated completion dates. (*attach additional sheets if needed*)  
  
(1) Project: \_\_\_\_\_  
Owner: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_  
Architect: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_  
\$ Contract: \_\_\_\_\_ % Complete \_\_\_\_\_ Completion Date: \_\_\_\_\_  
  
(2) Project: \_\_\_\_\_  
Owner: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_  
Architect: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_  
\$ Contract: \_\_\_\_\_ % Complete \_\_\_\_\_ Completion Date: \_\_\_\_\_

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(3) Project: \_\_\_\_\_  
Owner: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_  
Architect: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_  
\$Contract: \_\_\_\_\_ % Complete \_\_\_\_\_ Completion Date: \_\_\_\_\_

**E. Quality Control/Administration**

1. Describe quality control procedures, including contractor inspection and approval processes, to be applied to this project. List the most recent project where these procedures were used, and provide owner and architect contact names and telephone numbers. *(attach additional sheet if needed)*

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2. Describe management plans for processing Requests for Information (RFI's), shop drawings, submittals, value engineering, change orders, proposals, and requests for deviations. Identify key personnel assigned to these or other special issues. Describe your approach to dispute and claims resolution. *(attach additional sheets if needed)*

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- F. Financials - Attach latest balance sheet and income statement if available, based on company type. Audited statements preferred. If not available, attach a copy of the latest annual renewal submission to the relevant licensing board. (Firm must submit financial data and may clearly indicate a request for confidentiality to avoid this item becoming part of a public record.) Indicate Dunn & Bradstreet ([www.dnb.com](http://www.dnb.com)) rating if one exists:

\_\_\_\_\_  
*Rating*

List any lines of credit, including the identification of the financial institution holding the credit line, contact name and phone number at the institution, current total line of credit, current balance available, and effective date of the stated balances (must be within the last 30 days). *(attach additional sheets if needed)*

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*Note:* As provided by statute, the [name of agency/institution] will consider keeping trade secrets which the bidder does not wish disclosed confidential. Each page shall be identified in boldface at the top and bottom as "CONFIDENTIAL" by the bidder. Cost information shall not be deemed confidential. In spite of what is labeled as a trade secret, the determination whether it is or not will be determined by North Carolina law.



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G. Litigation/Claims.

If yes, *attach a separate sheet* listing the project(s), dollar value, contact information for owner and architect, date of completion, explain the nature of the claim/delay (item 2), and attach relevant documentation.

1. Has your company ever failed to complete work awarded to it?    ☐ Yes    ☐ No
2. Has your company ever failed to substantially complete a project in a timely manner (i.e. more than 20% beyond the originally contracted, scheduled completion date)?  
     ☐ Yes    ☐ No
3. Has your company filed any claims with the North Carolina Office of State Construction within the last five years?    ☐ Yes    ☐ No
4. Has your company been involved in any suits or arbitration proceedings within the last five years?    ☐ Yes    ☐ No
5. Are there currently any judgments, claims, arbitration proceedings or suits pending or outstanding against your company, its officers, owners, or agents?    ☐ Yes    ☐ No
6. Has your present company, its officers, owners, or agents ever been convicted of charges relating to conflicts of interest, bribery, or bid-rigging?    ☐ Yes    ☐ No
7. Has your present company, its officers, owners, or agents ever been barred from bidding public work in North Carolina?    ☐ Yes    ☐ No  
If yes, explain: \_\_\_\_\_

H. Safety Record for the past three years:

1. List your company's Experience Modification Rate (EMR) \_\_\_\_\_  
rate
2. List your company's Incidence Recordable Rate (IRR) \_\_\_\_\_  
rate
3. List your company's Lost Day Case Rate (LDCR) \_\_\_\_\_  
rate
4. If these rates reflect corporate performance over a number of locations, please explain, to the extent possible, the performance experience of the location serving this project. (*attach additional sheets if needed*)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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**I. HUB Plan**

1. Does the company currently have a documented plan for engaging subcontractor participation from Historically Underutilized Businesses?    ☐ Yes    ☐ No
2. What has been your company's typical percentage level of Historically Underutilized Business participation for similar projects in this locale?     %

List an example project including name, percentage achieved and owner representative's name and telephone number. *(attach additional sheets if needed)*

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**III. Project-Specific Requirements**

- A. Project-Specific References – *[General project references were requested in section II. A. 4., based on a "Yes" response, and II. D. 2.]* Please identify at least three (3) projects most closely reflecting the size and complexity of the type of work being requested for the currently proposed project. The similar projects should be completed within the last ten (10) years and at least one of which within the last five (5) years. If this information is already reflected in responses to earlier sections, please simply identify the relevant projects and detailed information. *(attach additional sheets if needed)*

(1) Project Name: \_\_\_\_\_  
\$ Original Contract: \_\_\_\_\_ \$ Final Contract: \_\_\_\_\_  
Scheduled Completion: \_\_\_\_/\_\_\_\_/\_\_\_\_ Actual Completion: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Narrative: *(describe the project and its similarity to the proposed project)*

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Performance on this project: \_\_\_\_\_  
Performance rating or letter of commendation (attached) from the owner: \_\_\_\_\_  
Owner Contact Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_  
Architect Contact Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_

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(2) Project Name: \_\_\_\_\_

\$ Original Contract: \_\_\_\_\_ \$ Final Contract: \_\_\_\_\_

Scheduled Completion: \_\_\_\_/\_\_\_\_/\_\_\_\_ Actual Completion: \_\_\_\_/\_\_\_\_/\_\_\_\_

Narrative: *(describe the project and its similarity to the proposed project)*

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Performance on this project: \_\_\_\_\_

Performance rating or letter of commendation (attached) from the owner: \_\_\_\_\_

Owner Contact Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_

Architect Contact Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_

(3) Project Name: \_\_\_\_\_

\$ Original Contract: \_\_\_\_\_ \$ Final Contract: \_\_\_\_\_

Scheduled Completion: \_\_\_\_/\_\_\_\_/\_\_\_\_ Actual Completion: \_\_\_\_/\_\_\_\_/\_\_\_\_

Narrative: *(describe the project and its similarity to the proposed project)*

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Performance on this project: \_\_\_\_\_

Performance rating or letter of commendation (attached) from the owner: \_\_\_\_\_

Owner Contact Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_

Architect Contact Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_ - \_\_\_\_\_

**B. Staffing and Organizational Structure**

1. Provide organizational structure reflecting authority, responsibility and proportion of time dedicated to this project for all key personnel and job descriptions. As attachments, include qualifications (resumes) of the project team key personnel to be assigned to this project. For each resume, include name, length of time employed with your company, proposed position, education and training, professional registrations/ licenses, and affiliations, company and project-specific employment history.

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**Prequalification for Single Prime Contractors**

2. Project-specific Staff Experience - Project-specific employment history is requested for key personnel for similar projects performed within the last five years. Information should include project size and description, time and budget performance, position held, authority and responsibilities, contributions made to project success, and include owner/architect contacts with phone numbers. Provide evidence that the key personnel have worked together successfully as a team.
3. Staff Availability - Are key personnel also proposed on any other projects for which bidding and contracting is pending?   \_\_\_ Yes   \_\_\_ No

If yes, describe general availability and qualifications of potential substitutes.

- C. *[This section reflects any further project-specific or unique project requirements, such as clean room, hospital/medical, prison, LEED certification, construction recycling, schedule constraints, etc. DO NOT REPEAT ABOVE QUESTIONS.]*

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**State of North Carolina**  
**Prequalification for Single Prime Contractors**

**IV. Signature**

By signing this document, you are acknowledging that all answers are true to the best of your knowledge.

A. Dated this day of: "" \_\_\_\_\_

Submitted by:

\_\_\_\_\_  
*Name of Contractor's Contact*

\_\_\_\_\_  
*Company Name (as licensed in NC)*

\_\_\_\_\_  
*Address*

\_\_\_\_\_  
*City*

\_\_\_\_\_  
*State*

\_\_\_\_\_  
*Zip Code*

Phone:

( ) \_\_\_\_ - \_\_\_\_  
*Contact person's phone number*

E-mail:

\_\_\_\_\_  
*Contact person's e-mail address*

Signature:

\_\_\_\_\_  
*By Authorized Officer*

\*\*\*\*\*

\_\_\_\_\_  
*Title of Authorized officer (typed)*

**B. NOTARY CERTIFICATION**

North Carolina

\_\_\_\_\_  
County

I, a Notary Public of the County and State aforesaid, certify that \_\_\_\_\_, personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official seal, this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Official Seal or Stamp

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

My commission expires \_\_\_\_\_, 20\_\_.

## **MINORITY BUSINESS CONTRACT PROVISIONS (CONSTRUCTION)**

### **APPLICATION:**

The **Guidelines for Recruitment and Selection of Minority Businesses for Participation in State Construction Contracts** are hereby made a part of these contract documents. These guidelines shall apply to all contractors regardless of ownership. Copies of these guidelines may be obtained from the Department of Administration, State Construction Office, (physical address) 301 North Wilmington Street, Suite 450, NC Education Building, Raleigh, North Carolina, 27601-2827, (mail address) 1307 Mail Service Center, Raleigh, North Carolina, 27699-1307, phone (919) 807-4100, Website: <http://www.nc-sco.com>

### **MINORITY BUSINESS SUBCONTRACT GOALS:**

The goals for participation by minority firms as subcontractors on this project have been set at 10%.

The bidder must identify on its bid, the minority businesses that will be utilized on the project with corresponding total dollar value of the bid and affidavit (Affidavit A) listing good faith efforts **or** affidavit (Affidavit B) of self-performance of work, if the bidder will perform work under contract by its own workforce, as required by G.S. 143-128.2(c) and G.S. 143-128.2(f).

The lowest responsible, responsive bidder must provide Affidavit C, that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the applicable goal.

**OR**

Provide Affidavit D, that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, **with documentation of Good Faith Effort, if the percentage is not equal to the applicable goal.**

**OR**

Provide Affidavit B, which includes sufficient information for the State to determine that the bidder does not customarily subcontract work on this type project.

**The above information must be provided as required. Failure to submit these documents is grounds for rejection of the bid.**

## **MINIMUM COMPLIANCE REQUIREMENTS:**

All written statements, affidavits or intentions made by the Bidder shall become a part of the agreement between the Contractor and the State for performance of this contract. Failure to comply with any of these statements, affidavits or intentions, or with the minority business Guidelines shall constitute a breach of the contract. A finding by the State that any information submitted either prior to award of the contract or during the performance of the contract is inaccurate, false or incomplete, shall also constitute a breach of the contract. Any such breach may result in termination of the contract in accordance with the termination provisions contained in the contract. It shall be solely at the option of the State whether to terminate the contract for breach.

In determining whether a contractor has made Good Faith Efforts, the State will evaluate all efforts made by the Contractor and will determine compliance in regard to quantity, intensity, and results of these efforts. Good Faith Efforts include:

- (1) Contacting minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor or available on State or local government-maintained lists at least 10 days before the bid or proposal date and notifying them of the nature and scope of the work to be performed.
- (2) Making the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bid or proposals are due.
- (3) Breaking down or combining elements of work into economically feasible units to facilitate minority participation.
- (4) Working with minority trade, community, or contractor organizations identified by the Office for Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- (5) Attending any Prebid meetings scheduled by the public owner.
- (6) Providing assistance in getting required bonding or insurance or providing alternatives to bonding or insurance for subcontractors.
- (7) Negotiating in good faith with interested minority businesses and not rejecting them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- (8) Providing assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisting minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- (9) Negotiating joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- (10) Providing quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

# State of North Carolina AFFIDAVIT A – Listing of Good Faith Efforts

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

(Name of Bidder)

Affidavit of \_\_\_\_\_

I have made a good faith effort to comply under the following areas checked:

**Bidders must earn at least 50 points from the good faith efforts listed for their bid to be considered responsive.** (1 NC Administrative Code 30 I.0101)

- ☐ **1 – (10 pts)** Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government-maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed.
- ☐ **2 – (10 pts)** Made the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bids are due.
- ☐ **3 – (15 pts)** Broken down or combined elements of work into economically feasible units to facilitate minority participation.
- ☐ **4 – (10 pts)** Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- ☐ **5 – (10 pts)** Attended Prebid meetings scheduled by the public owner.
- ☐ **6 – (20 pts)** Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
- ☐ **7 – (15 pts)** Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- ☐ **8 – (25 pts)** Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- ☐ **9 – (20 pts)** Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- ☐ **10 – (20 pts)** Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

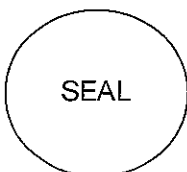
The undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the Identification of Minority Business Participation schedule conditional upon scope of contract to be executed with the Owner. Substitution of contractors must be in accordance with GS143-128.2(d) Failure to abide by this statutory provision will constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of the minority business commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

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



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

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

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



**State of North Carolina --AFFIDAVIT B-- Intent to Perform Contract  
with Own Workforce.**

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

Affidavit of \_\_\_\_\_  
(Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for the \_\_\_\_\_  
\_\_\_\_\_ contract.  
(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of the work on this project with his/her own current work forces; and

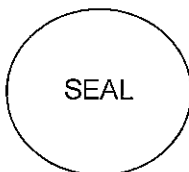
The Bidder agrees to provide any additional information or documentation requested by the owner in support of the above statement. The Bidder agrees to make a Good Faith Effort to utilize minority suppliers where possible.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

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



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

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

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



Do not submit with bid Do not submit with bid Do not submit with bid Do not submit with bid

# State of North Carolina - AFFIDAVIT C - Portion of the Work to be Performed by HUB Certified/Minority Businesses

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

(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)

If the portion of the work to be executed by HUB certified/minority businesses as defined in GS143-128.2(g) and 128.4(a),(b),(e) is equal to or greater than 10% of the bidders total contract price, then the bidder must complete this affidavit.

This affidavit shall be provided by the apparent lowest responsible, responsive bidder within **72 hours** after notification of being low bidder.

Affidavit of \_\_\_\_\_ I do hereby certify that on the  
(Name of Bidder)

(Project Name)  
Project ID# \_\_\_\_\_ Amount of Bid \$ \_\_\_\_\_

I will expend a minimum of \_\_\_\_\_% of the total dollar amount of the contract with minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below.

Attach additional sheets if required

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

\*Minority categories: Black, African American (B), Hispanic (H), Asian American (A) American Indian (I), Female (F) Socially and Economically Disadvantaged (D)

\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.

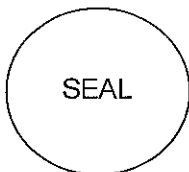
Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

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



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_

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

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

# State of North Carolina

## AFFIDAVIT D – Good Faith Efforts

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

(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)

If the goal of 10% participation by HUB Certified/ minority business **is not** achieved, the Bidder shall provide the following documentation to the Owner of his good faith efforts:

Affidavit of \_\_\_\_\_ I do hereby certify that on the  
(Name of Bidder)

Project ID# \_\_\_\_\_ (Project Name) Amount of Bid \$ \_\_\_\_\_

I will expend a minimum of \_\_\_\_\_% of the total dollar amount of the contract with HUB certified/ minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below. (Attach additional sheets if required)

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

\*Minority categories: Black, African American (B), Hispanic (H), Asian American (A) American Indian (I), Female (F) Socially and Economically Disadvantaged (D)

\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.

**Examples** of documentation that may be required to demonstrate the Bidder's good faith efforts to meet the goals set forth in these provisions include, but are not necessarily limited to, the following:

- A. Copies of solicitations for quotes to at least three (3) minority business firms from the source list provided by the State for each subcontract to be let under this contract (if 3 or more firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- B. Copies of quotes or responses received from each firm responding to the solicitation.
- C. A telephone log of follow-up calls to each firm sent a solicitation.
- D. For subcontracts where a minority business firm is not considered the lowest responsible sub-bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- E. Documentation of any contacts or correspondence to minority business, community, or contractor organizations in an attempt to meet the goal.
- F. Copy of pre-bid roster
- G. Letter documenting efforts to provide assistance in obtaining required bonding or insurance for minority business.
- H. Letter detailing reasons for rejection of minority business due to lack of qualification.
- I. Letter documenting proposed assistance offered to minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive bidder.

Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

Do not submit with the bid Do not submit with the bid Do not submit with the bid Do not submit with the bid Do not submit with the bid

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

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



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_

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

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

## APPENDIX E

### MBE DOCUMENTATION FOR CONTRACT PAYMENTS

Prime Contractor/Architect: \_\_\_\_\_

Address & Phone: \_\_\_\_\_

Project Name: \_\_\_\_\_

Pay Application #: \_\_\_\_\_ Period: \_\_\_\_\_

The following is a list of payments made to Minority Business Enterprises on this project for the above-mentioned period.

MBE FIRM NAME	* INDICATE TYPE OF MBE	AMOUNT PAID THIS MONTH	TOTAL PAYMENTS TO DATE	TOTAL AMOUNT COMMITTED

\*Minority categories: Black, African American (B), Hispanic (H), Asian American (A), American Indian (I), Female (F), Social and Economically Disadvantage (D)

Date: \_\_\_\_\_ Approved/Certified By: \_\_\_\_\_

Name

Title

Signature

**SUBMIT WITH EACH PAY REQUEST & FINAL PAYMENT**

**DOCUMENT 00 43 13  
BID SECURITY FORM**

Date of Execution of  
this bond

Name and Address of  
Principle (Bidder)

Name and Address  
of Surety

Name and Address of  
Contracting Body

THE UNION COUNTY BOARD OF EDUCATION a body corporate of the  
State of North Carolina,  
201 Venus Street Monroe, NC 28112

Amount of Bond  
Bid Amount  
and Proposal Dated:

for

KNOW ALL MEN BY THESE PRESENTS, that we the PRINCIPLE above named and SURETY above named who is duly licensed to act as SURETY in the State of North Carolina, are held and firmly bound unto THE UNION COUNTY BOARD OF EDUCATION, a body corporate of the State of North Carolina, as Obligee, in the penal sum of five percent (5%) of the amount bid in the bid and proposal described in lawful money of the United States of America, for the payment of which well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such, that if the PRINCIPLE shall be awarded the contract for which the bid and proposal above described is submitted and shall execute the contract, give bond for the faithful performance of the contract, and give bond for the payment of all persons supplying labor and materials in the prosecution of the work provided for in said contract, within ten (10) days after the award of the same to the PRINCIPLE above named, then this obligation shall be null and void; but if the PRINCIPLE above named fails to so execute such contract and give performance bond and payment bond as required by Section 129 of Chapter 143 of the General Statutes of North Carolina, as amended, the Article 3 of Chapter 44-A of the General Statutes of North Carolina, as amended, the Surety shall upon demand, forthwith pay the Obligee the amount of this bond set forth above.

IN WITNESS WHEREOF, the Principle above named and the Surety above named have executed this instrument under their several seals on the date set forth above.

WITNESS:

\_\_\_\_\_  
Principle (Name of individual, and trade  
Name, partnership, corporation, or joint  
venture)

\_\_\_\_\_  
(Proprietorship or Partnership)

BY \_\_\_\_\_ (Seal)

TITLE \_\_\_\_\_  
(Owner, Partner, Office held in  
corporation, joint venture)

(Corporate Seal)

ATTEST

BY \_\_\_\_\_  
(Corporation)

TITLE \_\_\_\_\_  
(Corporation Secretary or Assistant Secretary Only)

WITNESS:

\_\_\_\_\_  
Surety (Name of Surety Company)

BY \_\_\_\_\_

TITLE Attorney in Fact

(Corporate Seal of Surety)

\_\_\_\_\_  
(Address of Attorney in Fact)

COUNTERSIGNED:

\_\_\_\_\_  
N.C. Licensed Resident Agent



## FORM OF PERFORMANCE BOND

Date of Contract: \_\_\_\_\_

Date of Execution: \_\_\_\_\_

Name of Principal  
(Contractor) \_\_\_\_\_

Name of Surety: \_\_\_\_\_

Name of Contracting  
Body: \_\_\_\_\_

Amount of Bond: \_\_\_\_\_

Project \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS, that we, the principal and surety above named, are held and firmly bound unto the above named contracting body, hereinafter called the contracting body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind, ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the contracting body, identified as shown above and hereto attached:

NOW, THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the contracting body, with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Executed in \_\_\_\_\_ counterparts.

Witness :

\_\_\_\_\_  
Contractor: (Trade or Corporate Name)

\_\_\_\_\_  
(Proprietorship or Partnership)

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

Attest: (Corporation)

Title: \_\_\_\_\_  
(Owner, Partner, or Corp.  
Pres. or Vice Pres. only)

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

Title: \_\_\_\_\_  
(Corp. Sec. or Asst. Sec.. only)

(Corporate Seal)

\_\_\_\_\_  
(Surety Company)

Witness :

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

Title: \_\_\_\_\_  
(Attorney in Fact)

Countersigned :

\_\_\_\_\_  
(Surety Corporate Seal)

\_\_\_\_\_  
(N.C. Licensed Resident Agent)

\_\_\_\_\_  
Name and Address-Surety Agency

\_\_\_\_\_  
Surety Company Name and N.C.  
Regional or Branch Office Address

## FORM OF PAYMENT BOND

Date of Contract: \_\_\_\_\_

Date of Execution: \_\_\_\_\_

Name of Principal  
(Contractor) \_\_\_\_\_

Name of Surety: \_\_\_\_\_

Name of Contracting  
Body: \_\_\_\_\_

Amount of Bond: \_\_\_\_\_

Project \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS, that we, the principal and surety above named, are held and firmly bound unto the above named contracting body, hereinafter called the contracting body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the contracting body identified as shown above and hereto attached:

NOW, THEREFORE, if the principal shall promptly make payment to all persons supplying labor/material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Executed in \_\_\_\_\_ counterparts.

Witness :

\_\_\_\_\_  
(Proprietorship or Partnership)

Attest: (Corporation)

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

Title: \_\_\_\_\_  
(Corp. Sec. or Asst. Sec.. only)

(Corporate Seal)

Witness :

\_\_\_\_\_

Countersigned:

\_\_\_\_\_

\_\_\_\_\_  
(N.C. Licensed Resident Agent)

\_\_\_\_\_

\_\_\_\_\_  
Name and Address-Surety Agency

\_\_\_\_\_

\_\_\_\_\_  
Surety Company Name and N.C.  
Regional or Branch Office Address

\_\_\_\_\_  
Contractor: (Trade or Corporate Name)

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

Title: \_\_\_\_\_  
(Owner, Partner, or Corp.  
Pres. or Vice Pres. only)

\_\_\_\_\_  
(Surety Company)

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

Title: \_\_\_\_\_  
(Attorney in Fact)

(Surety Corporate Seal)

## UNION COUNTY PUBLIC SCHOOLS TAX FORM INSTRUCTIONS

### ***To the tax statement preparer for pay applications for Union County Public Schools:***

Please find the attached form for providing sales taxes paid on materials for Union County Public Schools. It is important that you note the following:

**Tax paid by contractors on rental equipment, tools or supplies that they use in the process of completing their contract is not refundable.** Tax statements from contractors should indicate the **amount of tax paid on materials that become part of the structure only**. Statements should indicate the vendor's name, date of invoice, invoice number, taxable amount, and sales tax amount. The statement must be "certified" by the contractor. Additionally, be sure the county tax is allocated to the correct county. As of January 1, 2002, the county is determined by the "ship to" address; therefore, if the material was shipped to your place of business instead of the job site the county name would reflect the county where your business is located.

Subcontractors performing work should also provide sales tax statements to the general contractor. It is the general contractor's responsibility to secure from the subcontractor the tax statement. (Reference Sales and Use Tax Bulletin Section 31)

If you submit a pay application upon which no sales tax was paid, **please send a blank form indicating "none this period"**. Payment may be delayed if proper sales tax accounting is not attached.

If you have any questions regarding the attached form please contact Anna Austin w/UCPS at 704-290-1541 or Chase Simpson at 704-290-1549.

**AS OF JULY 1, 2011, THE SALES TAX DISTRIBUTION FOR UNION COUNTY IS 4.75% STATE AND 2.00% COUNTY.**

Mecklenburg County has an additional ½% local transit tax. They and Wake County are the only counties with 7 ¼% rate of tax. Other counties local to Union may have 2.25% for the County Rate. For other county rates refer to Form Gen562 on the NC Department of Revenue website [www.dor.state.nc.us](http://www.dor.state.nc.us).

**PLEASE USE THE CORRECT DISTRIBUTION (NOTED ABOVE) ON ALL CONTRACTOR STATEMENTS.**

# STATE COUNTY SALES/USE TAX STATEMENT CERTIFICATION

Contractor: \_\_\_\_\_

Project Name: \_\_\_\_\_

Sheet #: \_\_\_\_\_

For Sales Taxes Paid from \_\_\_\_\_ to \_\_\_\_\_

Payment Application #: \_\_\_\_\_

	Invoice Number	Invoice Date	Vendor	Type of Materials	Taxable Amount of Invoice	County Name	NC Tax 4.75%	County Tax (2%/2.25%)	Transit Tax (1/2%)	Total Taxes
1)										
2)										
3)										
4)										
5)										
6)										
7)										
8)										
9)										
10)										
11)										
12)										
13)										
14)										
15)										
16)										
17)										
18)										
19)										
20)										
21)										
22)										
23)										
24)										
25)										
<b>Total:</b>										

We certify that the above listing includes all materials purchased by us and incorporated into the above referenced project for the period stated, became a permanent part of the project, and that the sales tax shown has been paid. The above represents a complete listing of these sales taxes paid for the pay application number.

Sworn and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

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

Notary Public: \_\_\_\_\_

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

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