NAME OF BIDDER _____

ADDRESS _____

_____

NC LICENSE NO. _____

ADVERTISEMENT, PROPOSAL, CONTRACT DOCUMENTS AND SPECIFICATIONS FOR

Supplemental Resurfacing Contract

RALEIGH DEPARTMENT OF TRANSPORTATION
TRANSPORTATION MAINTENANCE

274-TM-4-26

TRANSPORTATION DIRECTOR

222 WEST HARGETT STREET

DATE OF ADVERTISING:	May 19th, 2026
DATE OF PRE-BID MEETING:	May 26th, 2026, 9:00 a.m.
DATE OF BID OPENING:	June 18th, 2026, 1:00 p.m.
	3228 Spottswood St, Raleigh, NC, 27615
	Conference Room 536

CITY OF RALEIGH

Supplemental Resurfacing Contract

PROJECT NO. 274-TM-4-26

DATE OF ADVERTISING:	May 19th, 2026
DATE OF PRE-BID CONFERENCE:	May 26th, 2026, 9:00 a.m.
DATE QUESTIONS DUE:	June 2nd, 2026, 5:00 p.m.
DATE FOR RESPONSES BY THE CITY:	June 5th, 2026, 5:00 p.m.
DATE OF BID OPENING:	June 18th, 2026, 1:00 p.m.

NAME OF BIDDER:

ADDRESS:

NC LICENSE NO.:

BID DEPOSIT 5%:

TOTAL BID:

MWBE PERCENTAGE:

CONTRACTOR SIGNATURE:

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ADVERTISEMENT FOR BIDS

POSTED: MAY 19TH, 2026
CITY BID NUMBER: 274-TM-4-26

Project: Supplemental Resurfacing Contract

Owner: City of Raleigh, North Carolina, Transportation Department,

3228 Spottswood St, Raleigh, NC, 27615.

Contact: James E. Simmons, Street Projects Manager - james.simmons@raleighnc.gov

Sealed Bids will be received until 1:00 p.m., Thursday June 18th, 2026, at 3228 Spottswood St, Raleigh, NC, 27615, Conference Room 536, at which time and place bids will be publicly opened and read aloud for the construction of the Supplemental Resurfacing Contract project.

After Bids are opened, the Owner shall evaluate them in accordance with the methods and criteria set forth in the Instructions to Bidders. The Owner/City Council reserves the right to waive any informality or to reject any or all Bids. Unless all Bids are rejected, Award will be made to the lowest responsible and responsive Bidder, taking into consideration quality, performance and the time specified in the Bid Form for the performance of the Contract.

A mandatory Pre-Bid Meeting will be held at 9:00 a.m., day of week, May 26th, 2026 at 3228 Spottswood St, Raleigh, NC, 27615, Conference Room 536.

Requirements for pre-bid submittals of an “or-equal” are required within 10 days of the issuance of the Advertisement for Bids and in accordance with Section 00200, Instructions to Bidders.

The Project consists generally of the following major items:

- Resurfacing of approximately 6.7 centerline miles of City streets, consisting of approximately 9,505 tons of Superpave Asphalt.
- Installation of approximately 125 sidewalk access ramps.
- Approximately 98,445 square yards of asphalt milling.
- Installation of approximately 10,500 tons of Intermediate and/or Base Course Asphalt for pavement patching.
- Furnishing and placement of thermoplastic pavement markings.
- Furnishing and installation of inductive detection signal loops.
- Removal and construction of approximately 12 speed humps.
- Earthwork, erosion control, and seeding and mulching as specified in the contract.

Copies of the contract proposal may be obtained from the City of Raleigh beginning 19th day of May, 2026 for no fee, provided conditions are met as outlined in the bid documents.

With each request for Bidding Documents supply the following information: Company name, contact person, street address, phone number, and email address for Bidding point of contact; N. C. contractor’s license with limitation and classification; indicate if the firm will be a Prime bidder, Supplier or Sub-Contractor.

Bidders will be required to show evidence that they are licensed to perform the work in the Bidding Documents as required by North Carolina General Statute, Chapter 87 and the Instruction to Bidders.

Bid Security in the amount of five percent (5%) of the Bid must accompany each Bid and shall be subject to the conditions provided in the Instruction to Bidders.

Pursuant to General Statutes of North Carolina Sections 143-128.2 and 143-131, and in accordance with City policy, the City of Raleigh encourages and provides equal opportunity for certified Minority and Woman-Owned Business Enterprise (MWBE) businesses to participate in all aspects of the City’s contracting and procurement

programs to include Professional Services; Goods and Other Services; and Construction. The prime contractor will be required to identify participation of MWBE businesses in their Bid, and how that participation will be achieved.

Furthermore, the City's goal is to contract or sub-contract fifteen percent (15%) of the contract amount to certified MWBEs on construction projects over $300,000, or with contracts that include $100,000 or more in state funding.

City of Raleigh

Janet Cowell, Mayor

END OF DOCUMENT

PROPOSAL FORM

PROPOSAL FOR THE CONSTRUCTION OF PROJECT NO. 274-TM-4-26

IN THE CITY OF RALEIGH, NORTH CAROLINA

_____
DATE

CITY COUNCIL

CITY OF RALEIGH

RALEIGH, NORTH CAROLINA

Ladies and Gentlemen:

The undersigned bidder has carefully examined the Form of Contract, the Form of Contract Bonds, the General Conditions, the Special Conditions, the Plans and Specifications, all of which are acknowledged to be a part of the proposal, and the Proposal Form; and he has also carefully examined the site of the proposed work. The undersigned bidder agrees to bind himself on award to him by the City Council of the City of Raleigh under this proposal, to execute within ten (10) days, in accordance with such award, a Contract with necessary surety bonds, of which Contract this proposal and the plans and specifications shall be a part, to provide all necessary machinery, tools, labor, and other means of construction, and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said project within the time limit specified below.

In addition to all other agreements and assurances, the undersigned bidder understands and hereby agrees as follows:

1. If this Contract is awarded, the bidder must, upon completion of this Contract, or at any other time requested, furnish to the City of Raleigh an accurate itemized statement of North Carolina Sales Tax paid on materials, supplies, equipment and any other items charged to this Contract, and otherwise fully comply with the "Procedure for Reporting North Carolina Sales Tax Expenditures", attached.

2. The bidder further agrees to begin work within **10** calendar days from date of Contract Notice to Proceed.

3. The bidder represents and agrees to complete proposed work by July 1, 2027.

Submitted this _____ day of_____, 20__.

Name of bidder: _____

Address: _____

BIDDER'S CERTIFICATION

Acceptance of Terms

In submitting this Proposal, the undersigned agrees that this bid will remain in effect for a period of 60 days following the opening of the Bids, that the undersigned agrees to enter into a Contract with the Owner, if awarded, on the basis of this Proposal, and that the undersigned agrees to complete the work in accordance with the Contract Documents.

Non-Collusion in Bidding

The Bidder specifically agrees to abide by all applicable provisions of Article 3 of Chapter 133 of the North Carolina General Statutes. By submission of this Bid, each Bidder and each person signing on behalf of any Bidder certifies, and in case of a joint Bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief:

1. The prices in this Bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor,

2. Unless otherwise required by Law, the prices quoted in the Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other Bidder or to any competitor, and

3. No attempt has been made or will be made by the Bidder to induce any other person, partnership, or corporation to submit or not to submit a Bid for the purpose of restricting competition.

Type of Business

The undersigned hereby represents that it is a _____ (corporation, partnership, an individual or limited liability company). If a corporation, the undersigned further represents that it is duly qualified as a corporation under the Laws of the State of North Carolina and it is authorized to do business in this State.

_____ _____

Firm Name Date

_____ Supplemental Resurfacing Contract

Authorized Signature Name of Project

_____

Title

_____

Address of Firm

BID BOND (PENAL SUM FORM)

Bidder Name: Address *(principal place of business)*:	**Surety** Name: Address *(principal place of business)*:
Owner Name: **City of Raleigh** Address *(principal place of business)*: **222 W. Hargett Street** **Raleigh, NC 27601**	**Bid** Project: **Supplemental Resurfacing Contract** Bid Due Date:
Bond Penal Sum: Date of Bond:	
Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.	
Bidder _____ *(Full formal name of Bidder)* By: _____ *(Signature)* Name: _____ *(Printed or typed)* Title: _____ Attest: _____ *(Signature)* Name: _____ *(Printed or typed)* Title:	Surety _____ *(Full formal name of Surety) (corporate seal)* By: _____ *(Signature) (Attach Power of Attorney)* Name: _____ *(Printed or typed)* Title: _____ Attest: _____ *(Signature)* Name: _____ *(Printed or typed)* Title:
Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.	

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

INSTRUCTIONS TO CONTRACTORS

DO NOT REMOVE FROM CONTRACT

Please observe the following in executing the attached Contract:

1. The City may contract with various categories of legal entities; and the legal requirements for proper execution (signing, witnessing, etc.) differ as to each.

    A. If the Contract is with an individual, that individual should sign the agreement exactly as his name is set out.
    B. Execution on behalf of a corporation, authorized corporate officer must sign, with 2nd officer signing to attest (which is 2nd officer's verification of authority and signature authenticity), plus corporate seal affixed. The following are corporate officers allowed to sign for the corporation: president; vice-president; chairman; CEO; CFO; and Treasurer. The following officers are typically authorized to attest: secretary; vice president, trust officer; clerk to board; cashier (only for banks); and their assistants or deputies.

    A sole corporate officer may sign, accompanied with a notary's acknowledgement, using the corporate acknowledgement form.

    C. If the agreement is with a partnership (General Partnership or Limited Partnership), a general partner must sign, and his/her/its signature must be notarized.
    D. LLC "Manager" or "managing member" must sign with proper notary acknowledgement.

2. After signing the Contract, the appropriate notary's acknowledgement, either in the corporate form or individual/partnership form should be completed.

3. The Performance and Payment Bonds should be attached to the Contract package. Bonds are required by law on construction and repair contracts subject to formal bidding requirements (N.C.G.S. § 143-129 et seq. -- $300,000.00 for construction). They should be signed by the contractor, and his signature should be acknowledged with the appropriate acknowledgement form. Next, the bonds, in approved form, must be signed by the authorized agent of the Surety Company issuing the bonds, and an executed Power of Attorney document authorizing the agent to sign must accompany the bond documents. **Bonds should not be dated**. Bonds will be dated on or after the Contract date by the City. (**Performance and Payment Bonds are not to be included in your bid)**

4. The instrument should not be dated, except by the last person executing the Contract, normally the City Clerk.

5. Non-discrimination provisions should be included with the Contract, as should applicable Certificates of Insurance with proper and timely coverage indicated.

6. All modifications or deletions should be initialed or signed by representatives of both the Contractor and the City.

7. Three (3) original copies of the Contract are sent to the Contractor for execution. These three originals should be signed and returned to the City of Raleigh for final execution, after which one (1) copy will be returned to the Contractor. Alternatively, copies of the contract may be executed through the City's DocuSign process.

8. The minority business firm listing is to be completed and submitted as part of the Bid. Additional pages may be added as needed. All backup information related to solicitation of minority participation shall be copied and submitted with the Contract. **Affidavit A and B must be submitted with your bid. Affidavit C or D must be submitted depending on MWBE commitment percentage.**

NORTH CAROLINA
WAKE COUNTY

Rev.07/15/2025

CITY OF RALEIGH

CONTRACTOR'S POOR PERFORMANCE POLICY

RESOLUTION NO. (1992) 790

A RESOLUTION TO REGULATE THE PARTICIPATION IN CITY CONSTRUCTION PROJECTS BY CONTRACTORS WHO MAY NOT BE CAPABLE OF TIMELY AND PROPER COMPLETION OF CITY PROJECTS.

WHEREAS, the City of Raleigh wishes to minimize cost and inconvenience to the citizenry caused by the failure of contractors to complete projects in a timely manner in accordance with approved project schedules; and

WHEREAS, North Carolina law allows cities to award bids to responsible bidders and the inability to complete work on time is one indication of a lack of responsibility.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RALEIGH:

Section 1. That the City Manager may disqualify bidders from participation in bidding and award of contracts for city construction projects based on the following conditions existing simultaneously:

A. The dollar value of the work completed is less than the dollar value of the work which should have been completed on the basis of the contractor's approved progress schedule by more than twenty percent of the current contract amount. The dollar amount of the work completed will be the total estimate to date shown in the latest partial pay estimate. The current contract amount will be the contract estimate plus accumulated overruns and less accumulated underruns shown in the latest partial pay estimate.

B. The percentage of the work completed is less than the percentage of contract time elapsed on the work by more than twenty percent. The percentage or work completed will be the dollar value of the work completed as defined above divided by the current contract amount as defined above. The percentage of contract time elapsed will be the number of calendar days elapsed as shown in the latest partial pay estimate divided by the total contract time in calendar days.

Section 2. The City Manager shall not include any late days which are caused by the City in any of his calculations directed at determining bid status.

Section 3. All City construction project specifications shall contain a specific provision clearly outlining the policies set out in this Resolution, including the criteria for determining whether a contractor is behind schedule, and the specifications shall clearly state the City's intent to enforce the provisions of this Resolution.

Section 4. The terms of this Resolution shall apply only to contracts for which the specifications for bidders are issued after the effective date of this Resolution.

Section 5. Any contractor who wishes to contest the decision of the City Manager declaring ineligibility may appeal to the City Council by delivering a notice of appeal to the City Clerk no later than ten days after receipt of the City Manager's decision. The notice of appeal shall clearly set out the reasons why the Contractor believes that the terms of this Resolution have been inappropriately applied or the equitable arguments for not applying this Resolution's terms. When considering an appeal the City Council shall consider, among other things, the report of the City manager, the notice of appeal, and the contractor's current status on any other current City contracts and its performance on any other contracts to which the contractor and the City have been parties to within the two calendar years immediately preceding the filing of the notice of appeal.

Section 6. Bidders so disqualified shall remain disqualified for any period in which they are still in conflict with the schedule provisions of this section.

Section 7. This Resolution is effective upon adoption.

ADOPTED: 10/6/92

EFFECTIVE: 10/6/92

I have read and understand the City of Raleigh's policy as stated above.

_____
Signature

_____
Printed Name

_____
Title

_____
Date

NON-COLLUSIVE AFFIDAVIT

State of _____)
)ss.
County of _____)

First being duly sworn deposes and says that:

(1) He is the _____
(Owner, Partner, Officer, Representative or Agent)
of _____ the Bidder that has submitted the attached Bid;

(2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham Bid;

(4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm, or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted; or to refrain from bidding in connection with such Contract; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any Bidder, firm, or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit, or cost elements of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Contract;

(5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any other of its agents, representatives, owners, employees or parties in interest, including this affidavit.

BY _____

PRINTED OR TYPED NAME _____

ITS _____
(Title)

Subscribed and sworn to before me this day of _____, 20_.

_____ My commission expires _____
Notary Public

END OF AFFIDAVIT

NORTH CAROLINA
WAKE COUNTY

CONTRACT FOR CONSTRUCTION/REPAIR

THIS CONTRACT (the "Contract") is entered into by and between , hereinafter referred to as the "Contractor", and the City of Raleigh, a North Carolina municipal corporation, hereinafter referred to as the "City" for the project entitled: Supplemental Resurfacing Contract.

WITNESSETH:

WHEREAS, the City desires to procure a contractor to perform services; and

WHEREAS, the City has completed necessary steps for retention of construction/repair services under State law and applicable City policies; and

WHEREAS, the City has agreed to engage the Contractor, and the Contractor has agreed to contract with the City, for performance of services as described, and according to the further terms and conditions, set forth herein.

NOW THEREFORE, in consideration of sums to be paid to the Contractor, and other good and valuable consideration, the Contractor and City do contract and agree as follows:

1. **Description of Work**

The Contractor, at its own proper cost and expense and with skill and diligence, shall furnish all labor, tools, materials and equipment and do all things necessary for the proper construction and completion ready for use of the following improvements:

- Resurfacing of approximately 6.7 centerline miles of City streets, consisting of approximately 9,505 tons of Superpave Asphalt.
- Installation of approximately 125 sidewalk access ramps.
- Approximately 98,445 square yards of asphalt milling.
- Installation of approximately 10,500 tons of Intermediate and/or Base Course Asphalt for pavement patching.
- Furnishing and placement of thermoplastic pavement markings.
- Furnishing and installation of inductive detection signal loops.
- Removal and construction of approximately 12 speed humps.
- Earthwork, erosion control, and seeding and mulching as specified in the contract.

In strict accordance with and as shown in the specifications, schedules, drawings and other documents set forth herein or incorporated by reference as follows:

- NCDOT Standards and Specifications for Roads and Structures (Latest Edition)
- NCDOT Standard Drawings
- City of Raleigh Public Utilities Handbook
- City of Raleigh Standards and Specifications

- Guidelines for Land Disturbing Activities
- ACI Specifications
- NCDOT QMS Practices for Quality Asphalt Pavements
- United States Access Board – Public Right of Way Access Guidelines

The Contractor shall further perform in accordance with the directions (not inconsistent therewith) given from time to time during the construction by the project engineer or of such other official, employee, or other agent of the City as the City may designate.

2. General Obligations of the Contractor

The Contractor will accept the prices specified in this Contract in full compensation and satisfaction for the performance of this Contract and as consideration of this Contract. The Contractor shall be responsible for all loss and damages of every kind and nature which may arise out of or an account of the performance of the work required by this Contractor, and for all risks of every description connected with the said work; and the Contractor shall be responsible for well and faithfully completing the whole work according to all applicable plans and specifications and the terms and conditions of this Contract.

3. Time of Commencement and Completion

The entire work required by this Contract shall be commenced by the Contractor not later than 10 days after the date of Notice-to-Proceed and the entire work shall be completed not later than July 1st, 2027. Failure to complete the work by that time will result in damages due to public inconvenience, obstruction and delay to traffic, safety, and other considerations. For each consecutive calendar day in excess of the Contract time specified above, the Contractor shall have withheld monies due it, a sum of $1,000.00 per calendar day. If applicable, liquidated damages will be deducted/adjusted on a monthly basis at the time of the partial payment request, based on the Contractor's progress in comparison with the approved progress schedule. In the event the Contractor does not complete the Contract within the contract deadline, including any extensions of time for excusable delays as noted in Article 17 of the General Conditions portion of the Contract Documents, the Contractor shall have withheld monies due it based on the above noted procedure. Further, the Contractor shall have withheld monies due it a sum of $1,000.00 for each consecutive calendar day of delay, until the Contract is completed.

4. Workmanship and Quality of Services/Warranties

All work under this Contract shall be done and performed to the satisfaction of the project engineer of the City of Raleigh, or of such other official, employee, or agent of the City as may be designated by the City, and such official, employee or agent designated by the City shall in all cases of dispute determine the quantity, quality, acceptability and fitness of the work and materials and of several portions thereof which are to be paid for under this Contract and shall decide and determine all questions which may arise as to the measurements, lines, levels and dimensions of the work and all questions respecting the true construction, interpretation or meaning of the plans and specifications. In case of dispute between the Contractor and the said official, employee, or agent of the City, the decision and determination of the latter shall be taken and shall be final and conclusive.

A. The Contractor, in executing this Contract, warrants that it will be responsible for the maintenance or correction of any work completed under this Contract that may become

defective due to faulty workmanship or materials for a period of one (1) year after final acceptance of the work performed.

B. It is understood and agreed by the parties hereto that work done under this Contract shall be subject to all ordinances of the City of Raleigh relating to work done in the public streets or other public property of the City. Particularly reference is made to the provisions of Part 11, Chapter 6 of the Raleigh City Code.

5. Compensation

In consideration of the performance of this Contract and the full completion of the work required of the Contractor by the terms and conditions of this Contract, the City agrees to pay to the Contractor the not to exceed total Contract Amount of: (in written word and numerals), unless changed by a duly authorized amendment or change order.

A. Partial payments will be made to the Contractor by the City NET thirty (30) days after presentation of a true and accurate payment application to the City as certified by the Project Engineer or agent of the City.

B. All invoices must include the following Purchase Order Number_____.

C. The final amount due to the Contractor will be made within thirty (30) days after the certified completion and final acceptance of all the work required by the Contract less retainage per Section 6. Payment to the Contractor by the City of the amounts so determined to be due, in accordance with this Contract, shall relieve the City from all claims for work done and materials and equipment furnished under this Contract.

D. It is further mutually agreed between the parties that no partial payment made under this Contract shall be conclusive evidence of the performance of this Contract, either wholly or in part, and that no such payment shall be construed to be an acceptance of defective work or improper materials.

6. Retainage

This section will only apply if this public construction contract pertains to a project in which the total project costs are equal to or greater than one hundred thousand dollars ($100,000.00).

To ensure proper performance of the Contract, the City may retain five percent (5%) of the amount of each approved partial or periodic payment application until the project work is fifty percent (50%) complete, provided that the Contractor continues to perform satisfactorily, and any non-conforming work identified in writing prior to that date has been corrected by the Contractor and accepted by the construction manager.

If the City determines the Contractor’s performance is unsatisfactory, the City may reinstate retainage in the amount of five percent (5%) for each subsequent partial or periodic payment application until the Contractor’s performance becomes satisfactory. The project shall be deemed fifty percent (50%) complete when the contractor's gross project invoices, excluding the value of materials stored off-site, equal or exceed fifty percent (50%) of the value of the contract, except the value of materials stored on-site shall not exceed twenty percent (20%) of the contractor's gross project invoices for the purpose of

determining whether the project is fifty percent (50%) complete. Following fifty percent (50%) completion of the project, the City may also withhold additional retainage from any subsequent periodic payment, not to exceed five percent (5%), to allow the City to retain two and one-half percent (2 ½%) total retainage through the completion of the project.

Within sixty (60) days after the submission of a pay request, the City with written consent of the surety shall release to the Contractor all retainage on payments held by the City if (1) the City receives a certificate of substantial completion from the architect, engineer, or designer in charge of the project; or (2) the City receives beneficial occupancy or use of the project. However, the City may retain sufficient funds to secure completion of the project or corrections on any work. If the City retains funds, the amount retained shall not exceed two and one-half (2 ½) times the estimated value of the work to be completed or corrected. Any reduction in the amount of the retainage on payments shall be with the consent of the contractor's surety.

Retainer provisions contained in Contractor's subcontracts may not exceed the terms and conditions for retainage provided herein. Contractors are further required to satisfy the retainage provisions of N.C.G.S. 143-134.1(b2) with regard to subcontracts for early finishing trades (structural steel, piling, caisson, and demolition) and to coordinate the release of retainage for such trades from the retainage held by the City from the Contractor pursuant to statute. Nothing shall prevent the City from withholding payment to the Contractor in addition to the amounts identified herein for unsatisfactory job progress, defective construction not remedied, disputed work, or third-party claims filed against the City or reasonable evidence that a third-party claim will be filed.

7. Notices

Except as otherwise expressly provided in this Contract, all notices, requests for payment, or other communications arising hereunder shall be sent to the following:

City of Raleigh		Contractor
Attn:	James E. Simmons	Attn:
Title:	Street Projects Manager	Title:
Address 1:	P.O. Box 590	Address 1:
Address 2:	Raleigh, NC 27602	Address 2:
Telephone:	919-996-6819	Telephone:
E-mail:	james.simmons@raleighnc.gov	E-mail:

8. Non-Discrimination

A. To the extent permitted by North Carolina law, the Parties for themselves, their agents, officials, directors, officers, members, representatives, employees, and contractors agree not to discriminate in any manner or in any form based on actual or perceived age, mental or physical disability, sex, religion, creed, race, color, sexual orientation, gender identity or expression, familial or marital status, economic status, veteran status or national origin in connection with this Contract or its performance.

B. The Parties agree to conform with the provisions and intent of Raleigh City Code §4-1004 in all matters related to this Contract. This provision is incorporated into the Contract for the benefit of the City of Raleigh and its residents and may be enforced by

an action for specific performance, injunctive relief, or any other remedy available at law or equity. This section shall be binding on the successors and assigns of all parties with reference to the subject matter of the Contract.

9. Minority and Women Owned Business Enterprise

The City of Raleigh prohibits discrimination in any manner against any person based on actual or perceived age, race, color, creed, national origin, sex, mental or physical disability, sexual orientation, gender identity or expression, familial or marital status, religion, economic status, or veteran status. The City maintains an affirmative policy of fostering, promoting, and conducting business with women and minority owned business enterprises.

To further this policy, the City has an aspirational goal of 15% participation by certified minority and women-owned businesses in City construction and repair contracts for building projects with a cost of $300,000 or more or building projects with a cost of $100,000 or more with state funding.

10. Assignment

This Contract may not be assigned without the express written consent of the City.

11. Applicable Law

All matters relating to this Contract shall be governed by the laws of the State of North Carolina, without regard to its choice of law provisions, and venue for any action relating to this Contract shall be Wake County Civil Superior Court or the United States District Court for the Eastern District of North Carolina, Western Division.

12. Insurance

Contractor agrees to purchase at its own expense insurance coverages to satisfy the following minimum requirements. A certificate reflecting the following minimum coverages shall accompany this Contract:

A. Workers' Compensation Insurance:

Limits:	
Workers Compensation:	Statutory for the State of North Carolina
Employers Liability:	Bodily Injury by Accident $1,000,000 each accident
Bodily Injury by Disease	$1,000,000 policy limit
Bodily Injury by Disease	$1,000,000 each employee

B. Commercial General Liability:

Limits:	
Each Occurrence:	$1,000,000
Personal and Advertising Injury	$1,000,000
General Aggregate Limit	$2,000,000
Products and Completed Operations Aggregate	$2,000,000

C. The aggregate limit must apply per project. The form of coverage must be the ISO CG 00 01 policy as approved by the State of North Carolina Department of Insurance. If a

form of coverage other than the CG 00 01 is used it must be approved by the City's risk manager. Any endorsed exclusions or limitations from the standard policy must be clearly stated in writing and attached to the Certificate of Insurance. Completed Operations coverage must be maintained for the period of the applicable statute of limitations.

D. Commercial Automobile Liability:
Limits:
$1,000,000 combined single limit.

E. Additional Insured:
Contractor agrees to endorse the City as an Additional insured on the Commercial General Liability, Auto Liability and Umbrella Liability if being used to meet the minimum liability limits for General Liability and Automobile Liability.

The Additional Insured shall read 'City of Raleigh is named additional insured as their interest may appear'.

The Certificate Holder address should read:
City of Raleigh
Post Office Box 590
Raleigh, NC 27602-0590

F. Builders Risk Coverage:
Limits:
Minimum limit in the amount of total bid price. The Builder Risk policy must be endorsed to increase the limit of insurance for all change orders.

G. Policy Form:
Builder Risk coverage must be on a direct physical loss basis and contain no exclusion for theft, collapse or damage to foundations or underground structures, pipes or conduits.

H. Named Insured:
The Named Insured shall be The City of Raleigh, the Contractor, and all sub-contractors with a contractual assumption of responsibility for damage to the project.

All insurance companies must be licensed to do business in North Carolina and be acceptable to the City's risk manager. If the insurance company(s) is a permitted surplus lines insurer, the insurance company name, and NAIC number must be submitted to the City's risk manager for approval before commencing work. Contractor shall be required to provide the City no less than thirty (30) days' notice of cancellation, or any material change, to any insurance coverage required by this Contract.

I. A Certificate of Insurance (COI) must be issued by an authorized representative of the insurance carrier(s). Certificates of Insurance must have the insurance company name and NAIC number clearly identified. The acceptance of or the review of Certificates of Insurance by the City does not relieve Contractor of any requirements in the Contract to

provide specific insurance coverage required by the Contract, nor does the acceptance of or review of Certificates of Insurance covenant all insurance requirements have been met.

13. Surety Bonds

If Surety Bonds are required by the City for this project, the Contractor shall have furnished and attached hereto a performance bond and a payment bond each in the penal sum of the full Contract amount covering the faithful performance of the Contract and the payment of all obligations arising hereunder, in such form and content as the City may prescribe and with surety approved by the City. Should any surety upon the bond for the performance of this Contract become unacceptable to the City, the Contractor must promptly furnish additional security as may be required from time to time by the City to protect the interests of the City and of persons, firms and corporations supplying labor or materials in the performance of the work contemplated by the Contract.

14. Indemnity

A. To the fullest extent allowed by law, Contractor shall indemnify, defend, and hold harmless the City, its officers, officials, employees, agents, or indemnities (collectively called "Indemnified Parties") from and against those Losses, liabilities, damages, and costs proximately caused by, arising out of, or resulting from the sole negligence of the Contractor, the Contractor's agents, or the Contractor's employees.

B. In matters other than those covered by subsection 14.1. above, and to the fullest extent allowed by law, Contractor shall indemnify, defend, and hold harmless the Indemnified Parties from and against those Losses, liabilities, damages, and costs caused by, arising out of, resulting from, or in connection with the execution of the work provided for in this Agreement when the Fault of the Contractor or its Derivative Parties is a proximate cause of the Loss, liability, damage, or expense indemnified.

C. Costs and expenses shall include attorneys' fees, litigation or arbitration expenses, or court costs actually incurred by the Indemnified Parties to defend against third-party claims alleged in any court, tribunal, or alternative dispute resolution procedure required of any of the Indemnified Parties by law or by contract, only if the Fault of the Contractor or its Derivative Parties is a proximate cause of the attorney's fees, litigation or arbitration expenses, or court costs to be indemnified.

D. The Contractor's duty to indemnify, defend, and hold harmless described hereinabove shall survive the termination or expiration of this Contract.

E. Definitions:

i. For the purposes of this Section 14, the term "Loss" or "Losses" shall include, but not be limited to, fines, penalties, and/or judgments issued or levied by any local, state, or federal governmental entity.

ii. For the purposes of this Section 14, the term "Derivative Parties" shall mean any of the Contractor's subcontractors, agents, employees, or other persons or entities

for which the Contractor may be liable or responsible as a result of any statutory, tort, or contractual duty.

15. Communications

If communications to the public and/or City employees are required as part of the Contractor's scope of work under this Contract, then the Contractor shall work with the City in the development of a communications plan ("Communications Plan") that must first be approved by the City in writing before any such communications are delivered to the public and/or City employees.

For purposes of this Section 15, such written approval by the City shall be provided by electronic mail by the applicable City Communications Department employee who is responsible for reviewing and approving the Communications Plan, such electronic mail to be sent to the electronic mail address listed in Section 7, above, as part of the contact information for the Contractor representative identified in Section 7, above.

Among other things, the Communications Plan must establish whether the City or the Contractor will be responsible for sending any such communications to the public and/or City employees as required either by this Contract or the Communications Plan.The Communications Plan also shall include, but not be limited to, communications objectives, target audience, and deliverables (print, video, website, social, direct, or digital). The Contractor shall comply with the Communications Plan when communicating to the public and/or City employees pursuant to this Contract and the Communications Plan. All such communications shall comply with the City's brand and communications guidelines, as the same may be amended or modified from time to time.

The City's current brand and communications guidelines are incorporated into this Contract by reference and can be found on the City's website here: https://raleighnc.gov/doing-business/city-brand-guidance-vendors.
For purposes of this Section 15, "Communications" is defined as any public or City employee facing information presented in channels such as, but not limited to, a website, mobile applications, social media, printed materials, vehicles, billboards, and videos.

A. Communications Plan Approval:
Any materials, messaging or outreach from the Contractor related to marketing and communications of any service or effort under this Contract must first be reviewed and approved by the City's Communications Department. This is to ensure that the Communications Plan:
   i. complies with the City's brand and communication guidelines;
   ii. integrates with the City's other communications channels and digital strategy;
   iii. meets accessibility guidelines; and
   iv. conforms to communications best practices with respect to general user experience.

B. Accessibility Requirements:
For web content that the Contractor is to make accessible to the public and/or City employees as part of an approved Communications Plan that is included in the Contractor's scope of work under this Contract, all web materials including, but not limited to, tools, mobile applications, and websites, generated by, or on behalf of, the

Contractor must meet at least the mid-range conformance level, AA compliance of the current Web Content Accessibility Guidelines, as the same may be amended from time to time.

Any such web content generated by, or on behalf of the Contractor, as part of a Communications Plan associated with this Contract shall meet all standards of good cognitive web accessibility, which include the following:

i. Using proper headings and lists
ii. Using unique links
iii. Using alternative text and captions
iv. Using more white space
v. Dividing content into more manageable pieces
vi. Making forms manageable by breaking them into multiple, sequential steps
vii. Providing a logical reading order
viii. Being consistent with fonts, colors and locations of page elements
ix. Offering keyboard access
x. Offering content in multiple formats
xi. Understanding minimum contrast

C. Languages:
Digital sites/ tools that are for public use/consumption, including for use by City employees, under a Communications Plan associated with this Contract must have translation module (e.g., G-translate, Weglot) so that the service is available in all languages. At minimum, Spanish translation is required on all such digital sites/tools based on low English proficiency requirements:

i. In most cases, entities that are recipients of federal financial assistance through U.S. Department of Health and Human Services (HHS) must provide language assistance services in order to comply with their legal obligation to take reasonable steps to ensure meaningful access to their programs by persons with Limited English Proficiency (LEP).

D. Content:
For any communications content that the Contractor is required to generate, or have generated, as part of its scope of work under this Contract, the Contractor shall send such content to City Communications Department staff in raw, high-resolution format for inclusion in communications materials to be made accessible to the public and/or City employees as set forth in the Communications Plan that arises from this Contract (i.e., websites, mobile applications, printed materials collateral, and social media). PDF attachments shall be used only as a last resort and only after written approval by the City, with such written approval to be provided by the City in electronic mail format as described elsewhere in this Section 15.

i. Contractor shall only provide to the City communications materials for which the City has rights to use, with written documentation of such use rights being provided to the City as requested from time to time by the City in its sole discretion.

ii. All working files agreed upon for the specific Communications Plan shall be provided to the City Communications Department, i.e., text, graphics, charts and data, infographics, and original native files such as Illustrator, Excel, ArcGIS, etc. Following are the file format specifications:

a. Images: At least 300dpi for printing at actual size; 96dpi and at least 1920x1080px for digital/Web.
b. Video: Any video should be no less than Standard HD (1920x1080) but preferable 4k.
c. Text: Word document using accessibility best practices (heading structure, table of contents, and tables).

16. Advertising

The Contractor shall not use the existence of this Contract, or the name of the City, as part of any advertising without prior written approval of the City.

17. Acknowledgement of City Brand and Tree Logo Ownership and Restrictions

The City of Raleigh has developed proprietary branding (the "City Brand") centered around the Raleigh tree mark logo (the "Tree Logo"). The City's exclusive rights and ownership in and to the Tree Logo are protected under trademark and copyright, including U.S. Copyright Reg. No. VAu1-322-896, N.C. State Trademark Registration Reg. No. T-23070 and Federal Trademark Registration Reg. No. 5,629,347, as well as under other federal and state laws.

The Contractor acknowledges and understands that the City is not conferring any license to the Contractor under this Agreement to use or depict the Tree Logo or other aspects of the City Brand. The Contractor shall not make any use or depiction of the Tree Logo or other aspects of the City Brand without the prior express written approval of the City. In this regard, should any materials being produced by Contractor for the City under this Agreement contemplate use or depiction of the Tree Logo, including, but not limited to, printed materials, digital media, signage and/or display materials, Contractor shall proceed under the auspices and direction of the City's Communications Department and shall comply with all guidelines and restrictions governing use or depiction of the Tree Logo.

18. Force Majeure

Except as otherwise provided in any environmental laws, rules, regulations or ordinances applicable to the parties and the services performed under this Contract, neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations by an act of war, hostile foreign actions, nuclear explosion, earthquake, hurricane, tornado, or other catastrophic natural event or act of God. Either party to the Contract must take reasonable measures and implement reasonable protections when a weather event otherwise defined as a force majeure event is forecast to be eligible to be excused from the performance otherwise required under this Contract by this provision.

19. Termination

A. If the Contractor fails to perform the work described herein by the time allowances provided in Section 3 or fails to provide adequate staff and resources required to properly execute said work in a workmanlike and safe manner, the City can declare the Contractor in Default.

B. If the Contractor fails to complete the work in the provided project duration as stated in Section 3 of this Contract, or fails to meet periodic schedules describing work sequence, or fails to comply with all appropriate local, federal, or state laws, rules and regulations, then the City may, without prejudice to any other right or remedy and after giving the Contractor and its surety a maximum of seven (7) days from delivery of a written notice, declare the Contract in default, take possession of the project and of all equipment, tools, materials thereon owned by the Contractor and call upon the surety or appropriate legal recourse to finish the work by whatever method deemed expedient.

20. Laws/Safety Standards

A. The Contractor shall comply with all laws, ordinances, codes, rules, regulations, safety standards and licensing requirements that are applicable to the conduct of its business, including those of federal, state, and local agencies having jurisdiction and/or authority.

B. All manufactured items and/or fabricated assemblies subject to operation under pressure, operation by connection to an electric source, or operation involving a connection to a manufactured, natural, or LP gas source shall be constructed and approved in a manner acceptable to the appropriate state inspector which customarily requires the label or re-examination listing or identification marking of the appropriate safety standard organization, such as the American Society of Mechanical Electrical Engineers for pressure vessels; the Underwriters' Laboratories and/or National Electrical Manufacturers' Association for electrically operated assemblies; or the American Gas Association for gas operated assemblies, where such approvals of listings have been established for the type(s) of devices offered and furnished. Further, all items furnished by the Contractor shall meet all requirements of the Occupational Safety and Health Act (OSHA), and state and federal requirements relating to clean air and water pollution.

C. Contractor must comply with *North Carolina Occupational Safety and Health Standards for General Industry 13 NCAC 07F (29CFR 1910).* In addition, Contractor shall comply with all applicable occupational health and safety and environmental rules and regulations.

D. The Contractor shall effectively manage its safety and health responsibilities including:

i. Accident Prevention:
Prevent injuries and illnesses to its employees and others on or near the job site. Contractor managers and supervisors shall ensure personnel safety by strict adherence to established safety rules and procedures.

ii. Environmental Protection:
Protect the environment on, near, and around the work site by compliance with all applicable environmental regulations.

iii. Employee Education and Training:
Provide education and training to all contractor's employees before they are exposed to potential workplace or other hazards as required by specific OSHA Standards.

21. Applicability of North Carolina Public Records Law

Notwithstanding any other provisions of this Contract, this Contract and all materials submitted to the City by the Contractor are subject to the public records laws of the State of North Carolina and it is the responsibility of the Contractor to properly designate materials that may be protected from disclosure as trade secrets under North Carolina law as such and in the form required by law prior to the submission of such materials to the City. Contractor understands and agrees that the City may take any and all actions necessary to comply with federal, state, and local laws and/or judicial orders and such actions will not constitute a breach of the terms of this Contract. To the extent that any other provisions of this Contract conflict with this section, the provisions of this section shall control.

22. Miscellaneous

A. The Contractor shall be responsible for the proper custody and care of any property furnished or purchased by the City for use in connection with the performance of this Contract and will reimburse the City for the replacement value of its loss or damage. The Contractor shall keep the job sites and surrounding area reasonably free from rubbish at all times and shall remove debris from the site from time to time or when directed to do so by the City. Before final inspection and acceptance of the project, the Contractor shall thoroughly clean the job sites, and completely prepare the project and site for use by the City.

B. The Contractor shall be considered to be an independent contractor and as such shall be wholly responsible for the work to be performed and for the supervision of its employees. Nothing herein is intended or will be construed to establish any agency, partnership, or joint venture. Contractor represents that it has, or will secure at its own expense, all personnel required in performing the services under this Contract. Such employees shall not be employees of or have any individual contractual relationship with the City.

C. This Contract may be amended only by written agreement of the parties executed by their authorized representatives.

23. Right of Audit and Examination of Records

A. The City may conduct an audit of any services performed and fees paid subject to this Contract. The City, or its designee, may perform such an audit throughout the contract

period and for three (3) years after termination thereof or longer if otherwise required by law.

B. The Contractor and its agents shall maintain all books, documents, papers, accounting records, contract records and such other evidence as may be appropriate to substantiate costs incurred under this Contract. The City, or its designee, shall have the right to, including but not limited to: review and copy records; interview current and former employees; conduct such other investigation to verify compliance with Contract terms; and conduct such other investigation to substantiate costs incurred by this Contract.

C. "Records" shall be defined as data of every kind and character, including but not limited to books, documents, papers, accounting records, contract documents, information, and materials that, in the City's sole discretion, relate to matters, rights, duties or obligations of this Contract.

D. Records and employees shall be available during normal business hours upon advanced written notice. Electronic mail shall constitute written notice for purposes of this section.

E. Contractor shall provide the City or its designee reasonable access to facilities and adequate and appropriate workspace for the conduct of audits.

F. The rights established under this section shall survive the termination of the Contract, and shall not be deleted, circumvented, limited, confined, or restricted by contract or any other section, clause, addendum, attachment, or the subsequent amendment of this Contract.

G. The Contractor shall reimburse the City for any overcharges identified by the audit within ninety (90) days of written notice of the City's findings.

H. If an audit discloses overpricing or overcharges by the Contractor or Subcontractor in excess of one percent (1%) of the total contract billings, the Contractor shall reimburse the City for the cost of the audit.

I. Contractor shall ensure that all contracts with any subcontractors provide the City with an equivalent right to audit as contained herein.

J. Contractor shall, upon request, provide any records associated with this engagement to the North Carolina State Auditor that are necessary to comply with the provisions of G.S. § 147-64.7.

24. <u>Incorporation of Documents/Complete Agreement</u>

This Contract, and any documents incorporated below, represent the entire Contract between the parties and suspend all prior oral or written statements, agreements or Contracts.

A. The Contract Documents consist of this Contract and any amendments thereto; General Conditions; Supplemental Conditions; the City of Raleigh's Invitation to Bid (ITB); the Contractor's Bid Response to the ITB; the Construction Documents; Change Orders, if any, including all bulletins, addenda or other modifications of the drawings and specifications incorporated into the Construction Documents prior to their execution; the

performance bond and the payment bond for the Contract (if applicable as required by G.S. 44A-26); and the insurance certificates as required by the terms of this Contract. The Minority- and Women-Owned Business Enterprise Plan (MWBE Affidavits/documentation), if applicable as required by G.S. 143-128.2, upon approval by the City, also shall be considered part of the Contract Documents.

B. The Construction Documents are the drawings, specifications, and other plans for the project prepared by the project designer and approved in writing by the City's project representative, which define the scope of the construction work as agreed to under this Contract. In case of discrepancy or disagreement in the Construction Documents, the order of precedence shall be large-scale detail drawings and then small-scale drawings.

C. Specifically attached to this Contract, and incorporated herein by reference, are the following documents:

- ☐ City of Raleigh's Invitation to Bid (ITB) document
- ☐ Contractor's Bid Response and Documentation to the ITB
- ☐ Procedure for N.C. Sales Tax Reporting
- ☐ Performance Bond (w/Power-of-Attorney)
- ☐ Payment Bond (w/Power-of-Attorney)
- ☐ Certificate of Insurance
- ☐ General Conditions
- ☐ Special or Supplemental Conditions
- ☐ Job Specifications
- ☐ MWEB Affidavits/documentation
- ☐ Other (Describe) _____

In case of conflict between this Contract and any of the incorporated attachments or references listed above, the terms of this Contract shall prevail.

Except as otherwise provided herein, in the event of a conflict between this Contract and any of the attachments/exhibits or references recited in this Section 24, the terms of this Contract shall prevail.

25. <u>E – Verify</u>

Contractor shall comply with *E-Verify*, the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law and as in accordance with N.C.G.S. §64-25 *et seq*. In addition, to the best of Contractor's knowledge, any subcontractor employed by Contractor as a part of this contract shall be in compliance with the requirements of E-Verify and N.C.G.S. §64-25 *et seq.* In cases of conflict between this Contract and any of the above incorporated attachments or references, the terms of this Contract shall prevail.

26. <u>Iran Divestment Act Certification</u>

Contractor 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. § 147-86.55, et seq. In compliance with the requirements of the

Iran Divestment Act and N.C.G.S. § 147-86.60, Contractor shall not utilize in the performance of the Contract any subcontractor that is identified on the final divestment list.

27. <u>Companies Boycotting Israel Divestment Act Certification</u>

Contractor 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.

The remainder of this page is left blank intentionally.

IN WITNESS WHEREOF, the parties hereto have executed this Contract by digital signature, under seal, on the respective dates below, and this Contract shall be effective upon the date of the City's signature.

CONTRACTOR:

By:

_____(SEAL)
Signature

_____
Name

_____
Title

_____
Date of Signature

ATTEST:

_____
Signature

_____
Name

_____
Title

CITY:

CITY OF RALEIGH
a North Carolina municipal corporation

By:

_____
Signature

_____
Name

_____
Title

_____
Department

_____
Date of Signature

ATTEST:

_____(SEAL)
City Clerk (or designee)

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

_____
Chief Financial Officer (or designee)

AFFIDAVIT

STATE OF NORTH CAROLINA
COUNTY OF WAKE

NOW COMES Affiant, _____, being duly authorized by law and on behalf of _____ ("Contractor") after first being duly sworn hereby swears or affirms as follows:

1. Contractor has submitted a bid for contract or desires to enter into a contract with the City of Raleigh;

2. As part of his/her duties and responsibilities pursuant to said bid and/or contract, Contractor attests that he/she is aware of and in compliance with the requirements of E-Verify, the federal program operated by the United States Department of Homeland Security, and Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):

___ After hiring an employee to work in the United States, verifies the work authorization of said employee through E-Verify and retain the record of the verification of work authorization while the employee is employed and for one year thereafter; or

___ Employs less than twenty-five (25) employees in the State of North Carolina.

3. As part of his/her duties and responsibilities pursuant to said bid and/or contract, Contractor attests that to the best of his/her knowledge any subcontractors employed as a part of this bid and/or contract are in compliance with the requirements of E-Verify and Article 2 of Chapter 64 of the North Carolina General Statutes.

This the _____ day of _____, 2026.

_____
Affiant

Sworn to and subscribed before me, this the _____ day of _____, 2026.

_____
[OFFICIAL SEAL]

_____, Notary Public

My Commission Expires: _____

INFORMATION FOR BIDDERS REGARDING COMPLIANCE WITH THE CITY OF RALEIGH'S MINORITY AND WOMEN-OWNED BUSINESS ENTERPRISE (MWBE) PROGRAM

Policy

In accordance with North Carolina law, the City of Raleigh encourages and provides an equal opportunity for Certified Minority and Women-Owned Business Enterprises (MWBE) to participate in all aspects of the City's contracting and procurement programs.[1] The prime contractor or a first-tier subcontractor on a construction manager at risk (CMAR) project (collectively, "Bidder") shall be required to identify participation of MWBE businesses in its proposal, and document how that participation will be achieved. Bidders are subject to the City's MWBE subcontracting requirements (including good faith efforts as applicable), regardless if a Bidder is itself a Certified MWBE.[2]

The City has an aspirational goal of 15% of the total contract amount to be performed by MWBE businesses in contracts awarded by the City for: (i) construction and building projects of $300,000 or more; and (ii) construction and building projects of $100,000 or more that have any state funding.

Definitions

Certified Minority Business (MWBE)

A business which:

a. At least fifty-one percent (51%) is owned by one or more Minority Persons or Socially and Economically Disadvantaged Individuals; or in the case of a corporation, in which at least fifty-one percent (51%) of the stock is owned by one or more Minority Persons or Socially and Economically Disadvantaged Individuals;
b. The management and daily business operations are controlled by one or more Minority Persons or Socially and Economically Disadvantaged Individuals; and
c. Is certified in one of the MWBE categories as defined by the NC Department of Administration/Historically Underutilized Business (HUB) and the NC Department of Transportation/Disadvantaged Business Enterprise (DBE).

Minority Person

A person who is a citizen or lawful permanent resident of the United States and who is:

a. Black, that is, a person having origins in any of the black racial groups in Africa;
b. Hispanic, that is, a person of Spanish or Portuguese culture with origins in Mexico, South or Central America, or the Caribbean Islands, regardless of race;
c. Asian American, that is, a person having origins in any of the original peoples of the Far East, Southeast Asia, Asia, the Indian subcontinent, or the Pacific Islands;
d. American Indian, that is, a person having origins in any of the original peoples of North America; or
e. Non-minority Female.

Socially and Economically Disadvantaged Individual

Socially disadvantaged individuals are those who have been subjected to racial or ethnic prejudice or cultural bias because of their identity as a member of a group without regard to their individual qualities. Economically disadvantaged individuals are those socially disadvantaged individuals whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same business area who are not socially disadvantaged.[3]

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[1] See, N.C.G.S. §§ 143-128.2, 143-128.4, 143-129, and 143-131.
[2] See, City of Raleigh SOP 505-2.
[3] See, 15 U.S.C. 637.

Bidder Responsibilities
Bidders agree to comply with all the terms and conditions of the City of Raleigh's Minority and Women-Owned Business Enterprise (MWBE) Program. Bidders must use good faith efforts (if applicable) to meet participation goals through the award of subcontracts to certified MWBE businesses consistent with City policy and North Carolina law.

Pre-Bid Opening
The City's Solicitation Documents include forms that: (a) capture information about MWBEs and any other subcontractors or suppliers that a Bidder intends to use on a contract ("Identification of MWBE Participation") and (b) affidavits to be completed by the Bidder.

Identification of MWBE Participation
The "Identification of MWBE Participation" must be completed by the Bidder on the City's form and submitted with its bid. If the project work is to be self-performed by the Bidder, the Bidder must so designate by checking the appropriate box on the form. For all Bidders which will not be self-performing the project work, the "Identification of MWBE Participation" form must be completed in its entirety. The Bidder must list on the City's form all MWBE businesses which will be construction subcontractors, vendors, or suppliers (collectively, "Subcontractors") on the project, and the total dollar value of its bid that will be performed by MWBEs. The failure to complete the ‘‘Identification of MWBE Participation" form in its entirety, or the failure to submit a completed "Identification of MWBE Participation" form with its bid, will render the bid non-responsive and the Bidder's bid will not be considered for award. The City will only credit MWBE participation for those Subcontractors listed on the "Identification of MWBE Participation" form.

Affidavit A: Listing of Good Faith Efforts
If the Bidder intends to subcontract any portion of the project work on a contract, an Affidavit A must be properly executed and submitted with its bid, listing the good faith efforts the Bidder made to achieve MWBE subcontracting goals for the contract prior to submitting its bid. The Affidavit A must be completed using the City's form. A minimum of fifty (50) good faith efforts points is required, the failure to achieve at least 50 points is grounds for rejection of a bid.

Affidavit B: Intent to Perform Contract with Own Workforce
In lieu of an Affidavit A, a Bidder that intends to perform 100% of the project work on a contract with its own current workforce may submit an Affidavit B with its bid. In submitting an Affidavit B, a Bidder certifies that the Bidder does not customarily subcontract elements of this type of project, and normally performs, has the capability to perform, and will perform all elements of the project work on the contract with its own current workforce. The Affidavit B must be completed using the City's form.

The failure to submit a properly executed Affidavit A or Affidavit B with a bid will render the bid non-responsive and the bid will not be considered for award.

Bid Opening
At the project bid opening, the total MWBE participation for each bid will be recorded. Upon being named the apparent low bidder, the Bidder must comply with the following:

a. If the Bidder submitted an Affidavit B with its bid indicating its intent to perform 100% of the project work on the contract with its own current workforce, then the Bidder is not required to resubmit its Affidavit B or to submit any additional affidavits (i.e., Affidavit C or Affidavit D). The City, in its discretion, may request that the Bidder submit additional information or documentation, including, but not limited to, information relating to the Bidder's subcontracting history and its ability to perform all elements of the project work on the contract with its own current workforce.

b. If the Bidder submitted an Affidavit A with its bid and the amount of MWBE participation as a percentage of the total contract price meets or exceeds the applicable goal, then the Bidder must submit to the City an Affidavit C within three (3) business days after being notified by City Staff that it is the apparent low bidder. The Bidder must complete the Affidavit C in its entirety using the City's form.

c. If the Bidder submitted an Affidavit A with its bid and the amount of MWBE participation as a percentage of the total contract price does not meet the applicable goal, then the Bidder must submit an Affidavit D to the City within three (3) business days after being notified by City Staff that it is the apparent low bidder. The Bidder must complete Affidavit D in its entirety on the City's form. In conjunction with the Affidavit D, the Bidder must include supplemental documentation of the good faith efforts made to meet the applicable goal. The City, in its discretion, may request that the Bidder submit additional information or documentation, including, but not limited to, information or documentation relating to any good faith efforts claimed by the Bidder, and completion of the City's Good Faith Negotiation Form and Solicitation Form. Good faith efforts can be demonstrated using, among other factors, the following:

    i. Attending pre-solicitation or pre-bid meetings that are scheduled by the City to inform MWBE firms of contracting, subcontracting, and supply opportunities.

    ii. Advertising in general circulation, trade association, or minority-focus media concerning subcontracting opportunities.

    iii. Providing written notice, to a reasonable number of specific MWBE firms that their interest in the contract is being solicited, at least 10 days before bids are due, to allow MWBE firms time to participate.

    iv. Following up initial solicitation of interest by contacting MWBE firms to determine with certainty whether the MWBE firms are interested.

    v. Identifying and selecting portions of the work to be performed by MWBE firms in order to increase the likelihood of MWBE participation (including where appropriate, breaking down contracts into economically feasible units to facilitate MWBE participation).

    vi. Providing interested MWBE firms with equal access to plans, specifications, and requirements of the contract.

    vii. Negotiating fairly with interested MWBE firms, not rejecting MWBE firms as unqualified without sound reasons based on a thorough investigation of their capabilities.

    viii. Using the services of the City's MWBE office; available minority community organizations; minority contractors' groups; local, state, and federal minority business offices; and other organizations that provide assistance in the recruitment and placement of MWBE firms.

    ix. Assisting interested MWBE firms 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.

    x. Assisting interested MWBE firms in obtaining bonding, insurance, or providing alternatives to bonding or insurance for Subcontractors.

    xi. Negotiating joint venture and partnership arrangements with minority businesses to increase the opportunities for minority participation when possible.

    xii. Provide for quick pay agreements and policies to enable minority contractors and suppliers to meet cash flow demands.

For each unmet MWBE participation goal, for which an Affidavit D is submitted, a Bidder must earn at least fifty (50) good faith efforts points. The failure to achieve at least fifty (50) points is grounds for rejection of a bid. All

actions necessary to earn good faith efforts points must occur prior to bid opening. In determining whether a Bidder has made good faith efforts, the City will evaluate the efforts made by the Bidder and will determine compliance with regard to quantity, intensity, and results of these efforts prior to recommendation of award.

Post-Award

Payment

For purposes of this section the word "Contractor" means both the prime contractor and the CMAR for CMAR projects. The Contractor must submit a completed **Payment Affidavit - Subcontractor / Supplier Utilization Form** with each payment application, including periodic payments and final payment. Payment applications will not be processed by the City until a completed Payment Affidavit – Subcontractor/ Supplier Utilization Form is submitted. Within seven (7) days of receipt by the Contractor of a periodic or final payment from the City, the Contractor must pay each first-tier Subcontractor based on work completed or services provided under each subcontract. If the Contractor has made a quick pay commitment with any MWBE Subcontractor, they must comply with the provisions of their quick pay commitment.

Changing a Certified MWBE Subcontractor

If the situation arises that it becomes necessary to terminate, replace, or reduce the work of a MWBE Subcontractor counted toward a committed MWBE subcontracting goal, the Contractor must submit a completed **Request to Change MWBE Subcontractor** form to the applicable department project manager and the City's MWBE Program Manager. Any change in the work of a MWBE Subcontractor, including its termination and/or replacement, must first be approved by the City based upon good cause shown. Any further explanation or detail to the City in addition to what is identified in the Request to Change MWBE Subcontractor form must be on company letterhead. Good faith efforts shall apply to the selection of any substitute Subcontractor.

ACKNOWLEDGMENT OF MWBE POLICY
[PURSUANT TO N.C.G.S. § 143-128.2]

The City's policy is to encourage bidders in the participation of MWBE businesses. A presentation of that policy has been made at the pre-bid or pre-proposal conference. By submission of a bid or proposal in response to this solicitation, the Bidder consents to all the terms and conditions of the City of Raleigh Minority and Women-Owned Business Enterprise (MWBE) Policy. A copy of the policy may be provided upon request by the Business Engagement & Opportunities Division, or online at www.raleighnc.gov.

Bidder recognizes that the City of Raleigh encourages and provides equal opportunity for MWBE businesses to participate in all aspects of the City's contracting and procurement. The City's MWBE participation aspirational goal is at least fifteen percent (15%) of the total contract amount to MWBEs on construction projects of $300,000 or more and building related contracts of $100,000 or more that include any State funding. The Bidder on the subject Contract/Proposal must document good faith efforts to provide meaningful participation by MWBEs in the performance of the Contract. Bidder agrees that the City may reject a bid for MWBE Policy violations, including but not limited to, providing inaccurate information or for failure to provide required MWBE documentation.

The Prime Contractor will be required to identify participation of MWBE businesses and how that participation will be achieved. Bidder must identify anticipated subcontractors, including any Minority & Women-Owned Businesses, intended to be used. Bidder further agrees, if awarded a Contract, it will, upon request, submit to the City, the proper affidavit identifying the workforce actually utilized on the Contract. All MWBE related bid documents have been provided to the Bidder. MWBE information provided by the Bidder is subject to the NC Public Records Act. Bidder acknowledges that the City must be notified of any change of subcontractors, suppliers, or subconsultants.

I have read and understand the City of Raleigh's MWBE policy.

_____
Signature

_____
Printed Name and Title

_____
Company

_____
Date

IDENTIFICATION OF MWBE PARTICIPATION

Formal Contracts & Construction Contracts Equal or Exceeding $300,000

This Identification of MWBE Participation Form is for the purpose of capturing information regarding the utilization of MWBEs and other subcontractors and suppliers on Formally Bid City Contracts and Construction Contracts equal or exceeding $300,000. MWBE participation is encouraged for all City of Raleigh contracting opportunities. Please refer to the City's MWBE Policy for any contract specific requirements.
Copy this Form as needed.

BIDDER NAME			
PROJECT NAME			
PROJECT NUMBER		**CITY DEPARTMENT**	
CONTRACT TYPE	☐ Construction ☐ Services ☐ Other _____*		
☐ **PRIME IS MWBE**	Classification: _____ ☐ Certified with NCHUB ☐ Certified with NCDOT-DBE	**BID SUBMITTAL DATE**	

MWBE Classifications: American Indian (AI), Asian American (AA), Black/African-American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)
*For Professional Services Contracts, please use the Identification of MWBE Participation for Professional Services Form

☐ **WORK TO BE SELF-PERFORMED**

Check this box **only** if you intend to perform 100% of the work on this Project/Contract with your own current work forces, and you normally perform and have the capability to perform all elements of this work on this Project/Contract with your own current work forces.

MWBE SUBCONTRACTORS

Complete the chart below for all MWBE subcontractors that you intend to use on this Project/Contract regardless of dollar amount.

Company Name	MWBE Classification	Description of Services	Percentage of Total Contract*	Total Projected Utilization ($)*

MWBE Classifications: American Indian (AI), Asian American (AA), Black/African-American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)
*If the proposal is subject to an RFQ process, you may enter "N/A".

Total Estimated MWBE Utilization* $ _____

Total Proposal Amount* $ _____

Percent Estimated MWBE Utilization* _____ %

(Total Estimated MWBE Utilization divided by Total Bid Amount)

*If the proposal is subject to an RFQ process, you may enter "N/A".

AFFIDAVIT A
Listing of Good Faith Efforts (GFE)

Affidavit of_____

(Name of Bidder)

Project Name			
Project Number			
Total Project Bid		**Bid Submittal Date**	

Total Available GFE Points: **155**		Minimum Number GFE Points Required: **50**
POINTS		**GOOD FAITH EFFORT (GFE)**
☐	10	Contacted MWBE 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.
☐	10	Made construction plans, specifications and requirements available for review by prospective MWBE businesses or provided these documents at least 10 days before bids are due.
☐	15	Broken down or combined elements of work into economically feasible units to facilitate MWBE business participation.
☐	10	Worked with MWBE businesses trade, community, or contractor organizations identified by the MWBE Office and included in the bid documents that provide assistance in recruitment of MWBE businesses.
☐	10	Attended pre-bid meetings schedule by the public owner.
☐	20	Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
☐	15	Negotiated in good faith with interested MWBE businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a MWBE business based on lack of qualification should have the reasons documented in writing.
☐	25	Provided assistance to MWBE businesses 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 MWBE businesses in obtaining the same unit pricing with the bidder's suppliers in order to help MWBE businesses in establishing credit.
☐	20	Negotiated joint venture and partnership arrangements with MWBE businesses in order to increase opportunities for MWBE businesses participation on a public construction or repair project when possible.
☐	20	Provided quick pay agreements and policies to enable MWBE business contractors and suppliers to meet cash flow demands.
Total GFE Points _____		

The undersigned certifies the preceding representation is a true and accurate statement of Good Faith Efforts made toward the participation of MWBE businesses in the performance of this Project/Contract. Failure to provide accurate and truthful information is a violation of the City of Raleigh MWBE Policy and may result in the sanctions prescribed therein.

This the ___ of _____, 20 _____ _____ _____

Signature Printed Name/Title

AFFIDAVIT B
Intent to Perform Contract with Own Workforce

Affidavit of_____
(Name of Bidder)

Project Name			
Total Project Bid		**Bid Submittal Date**	
Project Number			
☐ **PRIME IS MWBE**	Classification: _____	☐ Certified with NCHUB ☐ Certified with NCDOT-DBE	

*MWBE Classifications: American Indian (AI), Asian American (AA), Black/African-American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)

The Bidder hereby certifies having read and understood the City of Raleigh MWBE Policy, and affirms that it is the intent of the Bidder to **perform 100% of the work** required for the above-named Contract.

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 work on this project** with the Bidder's own current work forces; and

The Bidder agrees to provide any additional information or documentation requested by the City of Raleigh in support of the above statement. If additional scopes of work are added after the Bidder has been awarded the Contract, then the Bidder agrees to make a Good Faith Effort to utilize Minority and Women-Owned Business Enterprises (MWBEs), as applicable, 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 North Carolina, County of _____

Subscribed and sworn to before me this _____ day of _____20___

Notary Public _____ My commission expires _____

SEAL

AFFIDAVIT C
MWBE SUBCONTRACTOR UTILIZATION COMMITMENT

This affidavit is to be provided by the Prime Contractor within three (3) business days after notification by the City of being the apparent lowest, responsible, responsive bidder (LRRB) if the portion of the work to be performed by MWBE Businesses equals or exceeds fifteen percent (15%) of the total contract price. *Copy this Form as needed*.

SECTION 1. PROJECT INFORMATION

Project Name			
Project Number		**City Department**	
Project Manager			
Phone Number		**Email Address**	
Bidder		**Contact Name**	
Phone Number		**Email Address**	
☐ **PRIME IS MWBE**	Classification: _____ ☐ Certified with NCHUB ☐ Certified with NCDOT-DBE	**Bid Submittal Date**	
Prime to Perform	**$**_____	**Prime to Perform**	_____ **%**

Total Base Bid Amount **$** _____

Total Contract Amount (including Contingency) **$** _____

Total MWBE Subcontractor / Supplier Utilization **$** _____

Percent MWBE Subcontractor Utilization (Total MWBE $ divided by Total Base Bid) _____ **%**

SECTION 2. MWBE SUBCONTRACTORS

Complete the chart below for all MWBE subcontractors to be used on this Project/Contract regardless of dollar amount.

Company Name	Contact Information (Name, Email, Phone)	MWBE Classification	Description of Services	Percentage of Total Contract	Total Projected Utilization ($)

*MWBE Classifications: American Indian (AI), Asian American (AA), Black/African-American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)

Letters of Intent Submitted Upon Notice from the City

Within three (3) Business Days after receiving a request from the City (or within such longer time as may be communicated by the City in writing), Bidders must submit a separate Letter of Intent for each MWBE listed on Affidavit C. Each Letter of Intent must be executed by both the MWBE and the Bidder. The City shall not count proposed MWBE utilization for which it has not received a Letter of Intent by this deadline.

Adding Subcontractors or Suppliers After Submitting This Form

Nothing in this Affidavit shall be deemed to preclude you from entering into subcontracting arrangements after submission of this form. However, per the City of Raleigh MWBE Policy, you must comply with the following:

- You must maintain the level of MWBE participation proposed on this Affidavit throughout the duration of the Contract, except as may be otherwise specifically allowed by the City.
- If you need to terminate or replace a MWBE, you must complete a Request to Change a MWBE Subcontractor Form.
- If the scope of work on the Contract increases, or if you elect to subcontract any portion of work not identified on this form as subcontracted, then you must comply with City of Raleigh MWBE Policy, including Good Faith Efforts.
- A Letter of Intent must also be submitted for each MWBE you add subsequent to contract award.

Signature

Your signature below indicates that the undersigned firm certifies and agrees that:

a. You have complied with all provisions of the City of Raleigh MWBE Policy;
b. The information provided is a true and accurate statement of MWBE businesses intended to be used as subcontractors, subconsultants, or suppliers in the performance of this Project/Contract; and
c. Failure to provide accurate and truthful information or to properly document such compliance in the manner and within the time periods established by the City of Raleigh MWBE Policy shall constitute a violation of the City of Raleigh MWBE Policy and may result in the sanctions prescribed therein, including rejection of your bid.

This the ___ of _____, 20 _____ _____ _____

Signature Printed Name/Title

AFFIDAVIT D

GOOD FAITH EFFORTS (GFE) AND STATEMENT OF GFE COMPLIANCE

This affidavit is to be provided by the Prime Contractor within three (3) business days after notification by the City of being the apparent lowest, responsible, responsive bidder (LRRB) if the Bidder has not fully met the established MWBE Goal (15%) for this Project. The Bidder must document it has met the GFE requirements by completing this Form. GFE Points will be calculated independently by the City.

SECTION 1. PROJECT INFORMATION

Project Name			
Project Number		**City Department**	
Project Manager			
Phone Number		**Email Address**	
Bidder		**Contact Name**	
Phone Number		**Email Address**	
☐ **PRIME IS MWBE**	Classification: _____ ☐ Certified with NCHUB ☐ Certified with NCDOT-DBE	**Bid Submittal Date**	
Prime to Perform	**$**_____	**Prime to Perform**	_____ **%**

Total Base Bid Amount **$** _____

Total Contract Amount (including Contingency) **$** _____

Total MWBE Subcontractor / Supplier Utilization **$** _____

Percent MWBE Subcontractor Utilization (Total MWBE $ divided by Total Base Bid) _____ **%**

SECTION 2. MWBE SUBCONTRACTORS

Complete the chart below for all MWBE subcontractors to be used on this Project/Contract regardless of dollar amount.

Company Name	Contact Information (Name, Email, Phone)	MWBE Classification	Description of Services	Percentage of Total Contract	Total Projected Utilization ($)

*MWBE Classifications: American Indian (AI), Asian American (AA), Black/African-American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)

SECTION 3. GOOD FAITH EFFORTS

Below is a list of Good Faith Efforts as defined in the City's MWBE Policy. To the left of each item is the number of points assigned to that item. Please place an "X" in the first column for each item you are claiming credit. Please provide any documentation, if available. Failure to achieve the minimum number of GFE points stated in the box below may constitute grounds for rejection of your bid.

NOTE: All actions necessary to earn GFE Points must be undertaken prior to Bid Opening.

Total Available GFE Points: **155**		Minimum Number GFE Points Required: **50**
POINTS		**GOOD FAITH EFFORT (GFE)**
☐	10	Contacted MWBE 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.
☐	10	Made the construction plans, specifications and requirements available for review by prospective MWBE businesses or providing these documents to them at least 10 days before the bids are due.
☐	15	Broken down or combined elements of work into economically feasible units to facilitate MWBE business participation.
☐	10	Worked with MWBE businesses trade, community, or contractor organizations identified by the MWBE Office and included in the bid documents that provide assistance in recruitment of MWBE businesses.
☐	10	Attended pre-bid meetings schedule by the public owner.
☐	20	Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
☐	15	Negotiated in good faith with interested MWBE businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a MWBE business based on lack of qualification should have the reasons documented in writing.
☐	25	Provided assistance to MWBE businesses 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 MWBE businesses in obtaining the same unit pricing with the bidder's suppliers in order to help MWBE businesses in establishing credit.
☐	20	Negotiated joint venture and partnership arrangements with MWBE businesses in order to increase opportunities for MWBE businesses participation on a public construction or repair project when possible.
☐	20	Provided quick pay agreements and policies to enable MWBE business contractors and suppliers to meet cash flow demands.
Total GFE Points (Claimed by Bidder) _____		**Total GFE Points (Assessed by City) _____**

Letters of Intent Submitted Upon Notice from the City

Within three (3) Business Days after receiving a request from the City (or within such longer time as may be communicated by the City in writing), Bidders must submit a separate Letter of Intent for each MWBE listed on this Affidavit D. Each Letter of Intent must be executed by both the MWBE and the Bidder. The City shall not count proposed MWBE utilization for which it has not received a Letter of Intent by this deadline.

Adding Subcontractors or Suppliers After Submitting This Form

Nothing in this Affidavit shall be deemed to preclude you from entering into subcontracting arrangements after submission of this form. However, per the City of Raleigh MWBE Policy, you must comply with the following:

- You must maintain the minimum level of MWBE participation proposed on this Affidavit throughout the duration of the Contract, except as may be otherwise specifically allowed by the City.
- If you need to terminate or replace a MWBE, you must complete a Request to Change a MWBE Subcontractor Form.
- If the scope of work on the Contract increases, or if you elect to subcontract any portion of work not identified on this form as subcontracted, then you must comply with City of Raleigh MWBE Policy, including Good Faith Efforts.
- A Letter of Intent must also be submitted for each MWBE you add subsequent to contract award.

Signature

Your signature below indicates that the undersigned firm certifies and agrees that:

a. You have complied with all provisions of the City of Raleigh MWBE Policy;
b. The information provided is a true and accurate statement of Certified MWBE businesses intended to be used as subcontractors, subconsultants, or suppliers in the performance of this Project/Contract; and
c. Failure to provide accurate and truthful information or to properly document such compliance in the manner and within the time periods established by the City of Raleigh MWBE Policy shall constitute a violation of the City of Raleigh MWBE Policy and may result in the sanctions prescribed therein, including rejection of your bid.

This the ___ of _____, 20 _____ _____ _____

Signature Printed Name/Title

Letter of Intent

In accordance with City of Raleigh MWBE Policy, within three (3) Business Days after receiving a request from the City (or within such longer time as may be communicated by the City in writing), a Bidder must submit **a separate** Letter of Intent for each MWBE subcontractor listed on Affidavit C or Affidavit D, as may be applicable.

Project Name	
Project Number	

Section 1: TO BE COMPLETED BY THE BIDDER					
Name of Bidder					
Address					
Contact Person					
Telephone		**E-mail**		**Fax**	

If the Bidder has entered into a Quick Pay Agreement, in association with this Letter of Intent and as defined in the City's MWBE Policy, please attach a copy of the executed Agreement with the undersigned MWBE.

Identify in complete detail the scope of work to be performed or item(s) to be supplied by the MWBE.

_____

_____

Cost of Work to be Performed by MWBE **$** _____

Section 2: TO BE COMPLETED BY MWBE SUBCONTRACTOR					
Name of MWBE					
Address					
Contact Person					
Telephone		**E-mail**		**Fax**	

Upon execution of a Prime Contract with the City for the above referenced project, the Bidder certifies that it intends to utilize the MWBE listed above, and that the description, cost and percentage of work to be performed by the MWBE as described above is accurate. The MWBE firm certifies that it has agreed to provide such work/supplies for the amount stated above.

BIDDER _____ _____

Signature Date

_____

Print Name and Title

MWBE _____ _____

Signature Date

_____

Print Name and Title

CONTRACT SUBCONTRACTOR IDENTIFICATION FORM

Building Project/Construction Contracts

(This form **MUST** be submitted within 30 days after award of the Contract)

This Final Subcontractor Identification Form is to provide a list of all subcontractors that the Contractor will use in the performance of the Contract with the City, in accordance with NCGS §143-128.2. *Copy this Form as needed.*

CONTRACTOR NAME			
PROJECT NAME			
PROJECT NUMBER		**CITY DEPARTMENT**	
☐ **PRIME IS MWBE**	Classification: _____ ☐ Certified with NCHUB ☐ Certified with NCDOT-DBE	**CONTRACT AWARD DATE**	

MWBE Classifications: American Indian (AI), Asian American (AA), Black/African American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)

☐ **WORK TO BE SELF-PERFORMED**

Check this box **only** if you intend to perform 100% of the work on this Project/Contract with your own current work forces, and you normally perform and have the capability to perform all elements of this work on this Project/Contract with your own current work forces.

ALL CONTRACT SUBCONTRACTORS

Complete the chart below for **all** subcontractors that will be used on this Contract regardless of dollar amount.

Company Name	Contact	Description of Service/Trade	Total ($)
	Name:		
☐ Certified MWBE ☐ Registered Raleigh SCS	E-mail:	Address:	
	Name:		
☐ Certified MWBE ☐ Registered Raleigh SCS	E-mail:	Address	
	Name:		
☐ Certified MWBE ☐ Registered Raleigh SCS	E-mail:	Address:	
	Name:		
☐ Certified MWBE ☐ Registered Raleigh SCS	E-mail:	Address:	
	Name:		
☐ Certified MWBE ☐ Registered Raleigh SCS	E-mail:	Address:	
	Name:		
☐ Certified MWBE ☐ Registered Raleigh SCS	E-mail:	Address:	
	Name:		
☐ Certified MWBE ☐ Registered Raleigh SCS	E-mail:	Address:	

Certification must be with NCHUB or the NCDOT-DBE. Proof of Certification may be required upon request by the City.

Total Contract Amount **$** _____

Total MWBE Utilization **$** _____

Percent MWBE Utilization

(Total MWBE Utilization divided by Total Contract Amount) _____**%**

APPENDIX E - CERTIFIED SUBCONTRACTOR / SUPPLIER PAYMENT APPLICATION FORM

Contractors must submit this form with **each** request for payment from the City of Raleigh, including any invoice or request for final payment. Requests for payment are limited to work that has been **completed and approved** for all subcontractors and suppliers in connection with the Contract. Copy this form as needed. The Contractor on the Prime Contract (i.e., Prime) is responsible for collecting and submitting this Appendix E from all subsequent lower tier contractors.

Section 1: PROJECT INFORMATION

Project Name			**Contractor Name**		
Total Contract Amount	$		**Pay App #/Contract ID #**		
Total MWBE Sub ($/%)	$	%	**Invoice Amount**	$	
Payment Period	___/___/20___ through ___/___/20___		**City Department**		
FINAL PAYMENT ☐ Check **only** when submitting Final Pay Request.			**Project Completion Date**		

Section 2: PAYMENTS TO SUBCONTRACTORS

Complete the chart below for all MWBE subcontractors used on the Project/Contract regardless of dollar amount.

Company Name	MWBE Classification	Work Performed	Percentage of Total Contract	Percent of Subcontract Completed	Payment this Period	Cumulative Payments to Date

*MWBE Classifications: American Indian (AI), Asian American (AA), Black/African-American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)

Section 3: PAYMENTS TO SUPPLIERS

All suppliers providing goods under City contracts must be listed on the Sales Tax Statement submitted with each pay request. The City may request, on a case-by-case basis, that the Contractor require certain suppliers to be registered in the Raleigh Supplier Connection System and may withhold payment of any amounts due the Contractor in the event the Contractor fails to comply with such request.

The undersigned certifies the preceding chart is a true and accurate statement of all payments that have been made to subcontractors on this Project/Contract, and that all Suppliers providing goods under this contract have been listed in the Sales Tax Statements submitted to the City in connection with this Payment Appendix E. If no subcontractors or suppliers are listed on the preceding chart or Sales Tax Statements, the undersigned certifies that no subcontractors or suppliers were used in performing the Project/Contract for the payment period indicated. Failure to provide accurate and truthful information is a violation of the City of Raleigh MWBE Policy and may result in the sanctions prescribed therein.

This _____ day of _____ 20____

Signature **Print Name and Title**

To be completed by City for FINAL PAYMENT

Total Paid to Contractor $ Proposed MWBE Amount $ MWBE Commitment:_____%

☐ Prime Contractor MWBE

Total Paid to Subcontractors $ Total to MWBE Subcontractors $ MWBE Final:_____%

REQUEST TO CHANGE A MWBE SUBCONTRACTOR

Contractors must submit this form for **any request** to change any MWBE subcontractor or supplier in connection with the Contract. The Contractor on the Prime Contract (i.e. prime) is responsible for collecting and submitting this form from all subsequent lower tier contractors.

PROJECT NAME			
PROJECT MANAGER		**CONTRACT NUMBER**	
PRIME CONTRACTOR		**CONTACT NAME**	
PHONE NUMBER		**E-MAIL ADDRESS**	
DATE OF CHANGE		**CITY DEPARTMENT**	

SECTION 1: PREVIOUS REQUESTS FOR CHANGE

☐ **NO PREVIOUS REQUEST FOR THIS PROJECT/CONTRACT.**

Complete the chart below for all previous Requests to Change a MWBE Subcontractor.

Date of Request	Subcontractor's Company Name	MWBE Classification	Request Approved: Y/N	Work Performed

MWBE Classifications: American Indian (AI), Asian American (AA), Black/African-American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)

Section 2: CURRENT MWBE SUBCONTRACTOR INFORMATION

CURRENT MWBE SUBCONTRACTOR			
SERVICE PROVIDED			
PERCENT OF TOTAL CONTRACT	_____%	**PERCENT OF SUBCONTRACT COMPLETE**	_____%
TOTAL AMOUNT OF SUBCONTRACT	$	**TOTAL AMOUNT PAID TO DATE**	$

Section 3: PROPOSED ACTION (SELECT ONE)

☐ **WORK TO BE SELF-PERFORMED**

Check this box **only** if the work previously performed by the above MWBE subcontractor will be performed with your own current work forces, and you normally perform and have the capability to perform all elements of this work on this Project/Contract with your own current work forces.

☐ **REPLACE MWBE SUBCONTRACTOR**

Section 4: REASON FOR CHANGE (SELECT AT LEAST ONE)

- ☐ The listed MWBE, after having had a reasonable opportunity to do so, fails or refuses to execute a written contract.
- ☐ The listed MWBE is bankrupt or insolvent.
- ☐ The listed MWBE fails or refuses to perform the subcontract or furnish the listed materials.

- ☐ The work performed by the listed subcontractor is unsatisfactory according to industry standards and is not in accordance with the plans and specifications.
- ☐ The subcontractor is substantially delaying or disrupting the progress of the work.
- ☐ Other - explain in detail on company letter head and attach to this Request.

Section 5: NEW SUBCONTRACTOR INFORMATION (IF APPLICABLE)

Complete the information below for the new MWBE subcontractor requested to be changed on the Project/Contract.

Company Name	Contact Person	MWBE Classification	Work to be Performed	Amount of Subcontract	Subcontractor's Percentage of Total Contract

MWBE Classifications: American Indian (AI), Asian American (AA,) Black/African-American (B), Hispanic (H), Non-Minority Female (NMF), Socially/Economic Disadvantaged (D)

If new subcontractor(s) is not MWBE, attach documentation of Good Faith Efforts (Affidavit A).

This the ___ of _____, 20 _____ **_____** **_____**

Signature **Printed Name/Title**

TO BE COMPLETED BY CITY

SIGNATURE:

Original Total Contract Amount: $_____

Original Total MWBE Participation ____ %

PRINT NAME:

New Total Contract Amount: $_____

New Total MWBE Participation ____ %

DATE:

Contract Amount Impact
Increase $_____
Decrease $_____
No Change ☐

MWBE Participation Change
Increase ____ %
Decrease ____ %
No Change ☐

☐ APPROVED

☐ REJECTED

NOTES:

Minority and Women-owned Business Enterprise Program (MWBE)

Explanation of Affidavit A

A Listing of the Good Faith Effort (GFE)

Company has made a good faith effort to recruit minority businesses in accordance with N.C. Gen. Stat. § 143-128.2 and represents that it has performed the following (**check all that apply; note that a minimum of fifty (50) points must be achieved**):

Examples of ways to satisfy requirements are given for each criterion below:

- ❑ 1. (10 points) 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.

  - ***Provide a list of potential bidders with proof of acknowledged responses (i.e. quotes)***
  - ***Provide confirmation of notification at least 10 days before bid date***
  - ***Newspaper/trade ads do not qualify as GFE notification***

- ❑ 2. (10 points) Made the construction plans, specifications and requirements available for review by prospective minority businesses, or provided these documents to them at least 10 days before the bids are due.

  - ***Provide confirmation of notification at least 10 days before bid date***
  - ***Include in the notice that plan specs are available in office/online (location/link) and at no cost to MWBEs***
  - ***Newspaper/trade ads do not qualify as GFE notification***

- ❑ 3. (15 points) Broke down or combined elements of work into economically feasible units to facilitate minority participation.

  - ***Provide confirmation of solicitation that include subcontracting opportunities (i.e. itemize or group trades such as flooring/trim or divide one sub does flooring and another sub does trim)***

- ❑ 4. (10 points) 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.

  - ***Obtain letter or other documentation from one of these organizations indicating that you are working with them in the recruitment of minority businesses – NCMWBE Coordinators Network, The Institute, NCIEDI or HCAC.***
  - ***A list of organizations can be found at www.raleighnc.gov/mwbe***

- ❑ 5. (10 points) Attended pre-bid meetings scheduled by the public owner.

  - ***Attendance is recorded (make sure you sign-in)***

- ❑ 6. (20 points) Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.

  - ***Include one of the following statements in solicitation to MWBEs as it applies:***
    - ***Bonds are not required for this project***
    - ***Bidder will assist in procuring bonds or insurance if necessary***

- ❑ 7. (15 points) 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.

  - ***"MWBE Solicitation Form" is attached to the Explanation Affidavit A Form***

    - ***Provide completed MWBE Solicitation Form to document the following:***
    - ***Did not receive low quotes from MWBEs***
    - ***Bidder accepted other low quotes from MWBEs***
    - ***Written reasons for rejection of any low quotes from MWBEs***

- ❑ 8. (25 points) 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.

  - ***Indicate in solicitation the following are available: equipment, loan capital, lines of credit, or joint pay agreements for qualified MWBEs or any other needs.***
  - ***Document recent history of doing joint pay agreements such as "in the recent past, we have done joint pay agreements (lines of credit, waiving of credit, etc.) with the following MWBEs (x company, y company, z company) and intend to offer the same on this project for qualified MWBEs"***
  - ***Provide letter from vendor/supplier indicating that they will give the same pricing to MWBEs quoting to you as vendor/supplier gives directly to you***

- ❑ 9. (20 points) 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.

  - ***Indicate in solicitation that opportunities to negotiate joint venture and partnership arrangements are available***

- ❑ 10. (20 points) Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash flow demands.

  - ***Indicate in solicitation that quick pay agreements are available for certified MWBEs to include payment terms (i.e., Net 30).***
  - ***Document recent history of doing quick pay agreements such as "in the recent past, we have done quick pay agreements with the following MWBE's (x company, y company, z company) and intend to offer the same on this project for qualified MWBE's"***

SOLICITATION FORM

Copy this Form as needed to document MWBE contacts.

The Bidder must make the required contacts no less than ten (10) Days before Bid Opening to receive credit for this Good Faith Effort. All contacts must be verifiable with supporting documentation reflecting the methods and content of the solicitation. All documentation must be submitted with this form.

A Bidder must submit this Solicitation Form within the time specified in the City Solicitation Documents. If no time period is specified in the City Solicitation Documents, the Bidder must submit this form within three (3) Business Days after the City requests it.

SECTION 1. PROJECT INFORMATION

Project Name			
Project Number		**City Department**	
Bidder		**Number MWBEs Contacted**	

SECTION 2. SOLICITATION INFORMATION

If "No" is checked for "Selected" below, the Bidder must document the reasons for rejecting each bid submitted by a MWBE on the Good Faith Negotiation Form.

MWBE FIRM			**CONTACT PERSON**	
SCOPE OF WORK				
INITIAL CONTACT	**DATE: ____/____/20___**	**METHOD** (select all used):	☐ Email ☐ Telephone ☐ Fax ☐ In-Person ☐ Mail	
FOLLOW-UP	**DATE: ____/____/20___**	**METHOD** (select all used):	☐ Email ☐ Telephone ☐ Fax ☐ In-Person ☐ Mail	
RESPONSE	☐ No Response	☐ Not Bidding	☐ Bidding ($_____)	☐ Other (Explain)
SELECTED	☐ Yes	☐ No (Explain)		

MWBE FIRM			**CONTACT PERSON**	
SCOPE OF WORK				
INITIAL CONTACT	**DATE: ____/____/20___**	**METHOD** (select all used):	☐ Email ☐ Telephone ☐ Fax ☐ In-Person ☐ Mail	
FOLLOW-UP	**DATE: ____/____/20___**	**METHOD** (select all used):	☐ Email ☐ Telephone ☐ Fax ☐ In-Person ☐ Mail	
RESPONSE	☐ No Response	☐ Not Bidding	☐ Bidding ($_____)	☐ Other (Explain)
SELECTED	☐ Yes	☐ No (Explain)		

MWBE FIRM			**CONTACT PERSON**	
SCOPE OF WORK				
INITIAL CONTACT	**DATE: ____/____/20___**	**METHOD** (select all used):	☐ Email ☐ Telephone ☐ Fax ☐ In-Person ☐ Mail	
FOLLOW-UP	**DATE: ____/____/20___**	**METHOD** (select all used):	☐ Email ☐ Telephone ☐ Fax ☐ In-Person ☐ Mail	
RESPONSE	☐ No Response	☐ Not Bidding	☐ Bidding ($_____)	☐ Other (Explain)
SELECTED	☐ Yes	☐ No (Explain)		

PERFORMANCE BOND

Contractor Name: **[Full formal name of Contractor]** Address *(as registered with Secretary of State, if applicable)*: **[Address of Contractor]**	**Surety** Name: **[Full formal name of Surety]** Address *(as registered with Secretary of State, if applicable)*: **[Address of Surety]**
Owner Name: **City of Raleigh** Mailing address: **222 W. Hargett Street** **Raleigh, NC 27601**	**Contract** Description *(name and location)*: **Supplemental Resurfacing Contract]** Contract Price: **[Amount from Contract]** Effective Date of Contract: **[Date from Contract]**

Bond

Bond Amount: **[Amount]**

Date of Bond: **[Date]**

(Date of Bond cannot be earlier than Effective Date of Contract)

Modifications to this Bond form:

☐ None ☐ See Paragraph 16

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

Contractor as Principal	Surety
_____ *(Full formal name of Contractor)*	_____ *(Full formal name of Surety) (corporate seal)*
By: _____ *(Signature)*	By: _____ *(Signature)(Attach Power of Attorney)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____
Attest: _____ *(Signature)*	Attest: _____ *(Signature)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.

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

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

14. Definitions

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

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

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

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

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

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

16. Modifications to this Bond are as follows: **None**

PAYMENT BOND

Contractor	**Surety**
Name: **[Full formal name of Contractor]** Address *(as registered w/ Secretary of State, if applicable)*: **[Address of Contractor]**	Name: **[Full formal name of Surety]** Address *(as registered w/ Secretary of State, if applicable)*: **[Address of Surety]**
Owner	**Contract**
Name: **City of Raleigh** Mailing address: **222 W. Hargett Street** **Raleigh, NC 27601**	Description *(name and location)*: **Supplemental Resurfacing Contract** Contract Price: **[Amount, from Contract]** Effective Date of Contract: **[Date, from Contract]**

Bond

Bond Amount: **[Amount]**

Date of Bond: **[Date]**

(Date of Bond cannot be earlier than Effective Date of Contract)

Modifications to this Bond form:

☐ None ☐ See Paragraph 18

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

Contractor as Principal	Surety
_____ *(Full formal name of Contractor)*	_____ *(Full formal name of Surety) (corporate seal)*
By: _____ *(Signature)*	By: _____ *(Signature)(Attach Power of Attorney)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____
Attest: _____ *(Signature)*	Attest: _____ *(Signature)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____

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

12. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

13. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

14. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.

15. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.

16. The Surety's obligations to a Claimant under this Bond will arise after the following:

    16.1. Claimants who do not have a direct contract with the Contractor

        16.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and

        16.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).

    16.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).

17. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that ~~is~~ shall be sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.

18. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

    18.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

    18.2. Pay or arrange for payment of any undisputed amounts.

    18.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

19. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.

20. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

21. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

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

23. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.

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

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

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

27. Definitions

    27.1. *Claim*—A written statement by the Claimant including at a minimum:

        27.1.1. The name of the Claimant;

        27.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;

        27.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;

        27.1.4. A brief description of the labor, materials, or equipment furnished;

        27.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;

        27.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;

        27.1.7. The total amount of previous payments received by the Claimant; and

27.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

27.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

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

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

27.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.

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

29. Modifications to this Bond are as follows: **None**

PROCEDURE FOR REPORTING NORTH CAROLINA SALES TAX EXPENDITURES ON CITY OF RALEIGH CONTRACTS

(for projects with reimbursable sales tax excluded from Bid)

1. The following procedure in handling the North Carolina Sales Tax is applicable to this project. Contractors shall comply fully with the requirements outlined hereinafter, in order that the owner may recover the amount of the tax permitted under the law. For the purposes of this section, "Sales Taxes" shall mean sales and use taxes paid to the State of North Carolina or to local governments in North Carolina.

   (a) Reimbursable Sales Taxes are to be excluded from the bid price for this project.

   (b) The City is entitled to refunds from the State of North Carolina for these reimbursable sales taxes. The Contractor that performs work under this contract is allowed to obtain a reimbursement from the City for those Sales Taxes for which the State will grant a refund to the City. The City will reimburse the Contractor, and the City later obtains a refund from the State.

   (c) It shall be the general contractor's responsibility to furnish the City documentary evidence showing the materials used and sales tax paid by the general contractor and each of his subcontractors. Any county sales tax included in the contractor's statements must be shown separately from the state sales tax. If more than one county is shown, each county shall be listed separately.

   (d) The documentary evidence shall be the attached Reimbursable Sales and Use Tax Statement. This evidence shall consist of a certified statement, by the general contractor and each of his subcontractors individually, showing total purchases of materials from each separate vendor and total sales taxes by each county paid each vendor. The certified statement must show the invoice number (s) covered and inclusive dates of such invoices. State sales tax shall be listed separately from county sales tax. If more than one county is shown, each county shall be listed separately. The invoices shall be provided to substantiate the information on the statement.

   (e) Materials used from general contractor's or subcontractor's warehouse stock shall be shown in a certified statement at warehouse stock prices.

   (f) The general contractor shall not be required to certify the subcontractor's statements. However, the subcontractor may submit for reimbursement by certifying a Reimbursable Sales and Use Tax Statement, submitting it to the general contractor for the general contractor to submit with the pay application for the properties listed on that form. The City will make the reimbursement payable to the Contractor.

   (g) The documentary evidence to be furnished to owners eligible for Reimbursable Sales Tax refunds covers sales and/or use taxes paid on building materials used by general contractors and subcontractors in the performance of contracts with churches, orphanages, hospitals not for profit, educational institutions not operated for profit and other charitable or religious institutions or organizations not operated for profit and incorporated cities, towns and counties in this State. The documentary evidence is to be submitted to the above-named institutions, organizations and governmental units to be included in claims for refunds to be prepared and submitted by them to

obtain refunds provided by G.S. 105-164.14 and is to include the purchase of building materials, supplies, fixtures and equipment which become a part of or annexed to buildings or structures being erected, altered or repaired under contracts with such institutions, organizations or governmental units.

(h) The Contractor may seek reimbursement separately from, but at the same time as, the application for payment is made for the properties that were taxed. The Contractor shall not file for reimbursement for Sales Taxes before the Contractor has the right to file an application for payment for the properties that were taxed.

2. If the State refuses to refund any such Sales Tax to the City, or if after a refund is made, the City is told to return a refund to the State, the Contractor shall upon demand repay the City for the amount of the failed refunds.

3. The contractor or contractors to whom an award is made on this project will be required to follow the procedure outlined above.

4. The contractor is advised that all requests for payment, partial or final, for work completed under this contract must include a sales tax report submitted in accordance with the procedures outlined above.

North Carolina Reimbursable Sales and Use Tax Statement

(Paid During This Estimate Period)

Project _____ Location _____ _____

County _____

Estimate No. _____

Name of Contractor Period Ending _____ _____

Date	Vendor	Type of Property Purchased	Invoice Number	Invoice Amount	State Tax 4.75%	County Tax	Total Tax 6.75%	County
TOTALS								

The undersigned individual certifies (1) that he or she is an employee or principal of the Contractor that is filing this form with the City to request reimbursement for N.C. State and local sales and use taxes that the Contractor has paid, (2) that the above listed vendors were paid sales tax upon purchases of building materials during the period covered by the construction estimate, and the property upon which such taxes were paid with or will be used in the performance of this contract,(3) that no tax on purchases or rentals of tools and/or equipment is included in the above list, (4) that all of the material above became a part of or is annexed to the

building or structure being erected, altered or repaired, and (5) that all of the information on this form, and any additional pages added to this page, if any, is true and accurate.

_____ County, North Carolina
Signed and sworn to (or affirmed) before this day by _____
_____
(name of principal) (signature of principal)

Date: _____ _____
Notary Public's Signature

_____
(Notary's printed or typed name, Notary Public) (Official Seal) My commission expires:
_____

North Carolina Reimbursable Sales and Use Tax Statement by Subcontractor

(Paid During This Estimate Period)

Project _____ Location _____ _____

County _____

Estimate No. _____

Name of Subcontractor Period Ending _____ _____

Date	Vendor	Type of Property Purchased	Invoice Number	Invoice Amount	State Tax 4.50%	County Tax	Total Tax 7.75%	County
TOTALS								

The undersigned individual certifies (1) that he or she is an employee or principal of the Subcontractor that is submitting this form with the Contractor so that the Contractor may request reimbursement for N.C. State and local sales and use taxes that the Subcontractor has paid, (2) that the above listed vendors were paid sales tax upon purchases of building materials during the period covered by the construction estimate, and the property upon which such taxes were paid with or will be used in the performance of this contract,(3) that no tax on purchases or rentals of tools and/or equipment is included in the above list, (4) that all of the

material above became a part of or is annexed to the building or structure being erected, altered or repaired, and (5) that all of the information on this form, and any additional pages added to this page, if any, is true and accurate.

_____ County, North Carolina
Signed and sworn to (or affirmed) before this day by _____

_____

(name of principal) (signature of principal)

Date: _____ _____

Notary Public's Signature

_____

(Notary's printed or typed name, Notary Public) (Official Seal)

My commission expires:

FINAL PAYMENT AFFIDAVIT

(REQUIRED AT TIME OF FINAL PAYMENT)

274-TM-4-26

Supplemental Resurfacing Contract

City of Raleigh Project No. 274-TM-4-26

State of North Carolina
County of Wake

In the State of North Carolina , County of _____, being duly sworn, deposes and says that they are _____ of _____ and that they have full and official knowledge of all and every debt and obligation for labor and materials which have entered into and become a part of the public facilities constructed under City of Raleigh Project Number 274-TM-4-26; and, acting in their official capacity, and for the specific purpose of obtaining the funds due on this final estimate, they further depose and say that all debts or obligations for such labor and materials have been fully and completely paid and discharged in good and lawful money of the United States of America or by evidence of exchange or trade acceptances endorsed and guaranteed by a solvent National or State bank, and that there are no suits for damages against the Contractor, pending, prospective or otherwise, in consequence of their operations on the said project except as follows:

In witness whereof, they have set their hand and seal,

I, _____, a notary public of the County and State aforesaid, hereby certify that _____ personally known to me to be the affiant in the foregoing affidavit, personally appeared before me this day and having been by me duly sworn, deposes and says that the facts set forth in the above affidavit are true and correct.

Witness my hand and official seal this the _____ day of _____,2026.

Notary Public _____

My Commission Expires: _____ (SEAL)

CITY OF RALEIGH

274-TM-4-26

SCHEDULE OF PRICES

Item No.	Item Description	Quantity	Unit	Unit Bid Price	Bid Amount
MOBILIZATION					
1	MOBILIZATION	1	LS	$	$
	MOBILIZATION SECTION SUBTOTAL			$	
RESURFACING					
2	ASPHALT CONCRETE SURFACE MIX S9.5B	8,340	TON	$	$
3	ASPHALT CONCRETE SURFACE MIX S9.5C	1,165	TON	$	$
4	ASPHALT BINDER	625	TON	$	$
5	TRACKLESS TACK	9,505	TON	$	$
	RESURFACTING SECTION SUBTOTAL			$	
UTILITY ADJUSTMENTS					
6	MANHOLE ADJUSTMENT (RAISE ONLY)	42	EA	$	$
7	WATER VALVE BOX ADJUSTMENT (RAISE ONLY)	44	EA	$	$
8	OVERSIZE MANHOLE ADJUSTMENT (RAISE ONLY)	1	EA	$	$
9	MANHOLE ADJUSTMENT (LOWER/RAISE)	118	EA	$	$
10	WATER VALVE BOX ADJUSTMENT (LOWER/RAISE)	122	EA	$	$
11	MILLING/CHIPPING AROUND UTILITY NOT ADJUSTED	30	EA	$	$
12	MANHOLE ADJUSTMENT - OVERSIZE (LOWER/RAISE)	2	EA	$	$
13	PROVIDE AND INSTALL MANHOLE RISER	18	EA	$	$
14	PROVIDE AND INSTALL WATER VALVE RISER	12	EA	$	$
15	PROVIDE NEW 7.5" MANHOLE FRAME & COVER	10	EA	$	$
16	PROVIDE NEW 4" MANHOLE FRAME & COVER	10	EA	$	$
	UTILITY ADJUSTMENTS SECTION SUBTOTAL			$	
SIDEWALK IMPROVEMENTS					
17	4” CONCRETE BIKEWAY	700	SY	$	$
18	SIDEWALK REMOVAL	705	SY	$	$
19	4" SIDEWALK REPLACEMENT	400	SY	$	$
20	6" SIDEWALK REPLACEMENT	20	SY	$	$
21	6" CONCRETE DRIVEWAY	25	SY	$	$
22	CURB & GUTTER REMOVAL/REPLACEMENT	3,560	LF	$	$
23	30” VALLEY CURB	90	LF	$	$
24	MONOLITHIC CONCRETE ISLAND	650	SY	$	$
25	CONCRETE SIDEWALK ACCESS RAMPS WITH DETECTABLE WARNING SURFACE	125	EA	$	$
	SIDEWALK IMPROVEMENTS SECTION SUBTOTAL			$	
MILLING					
26	MILLING (0-2") EDGE	12,595	SY	$	$
27	MILLING (0-4") FULL WIDTH	68,400	SY	$	$
28	MILLING (0-2") MILL & FILL	13,575	SY	$	$
29	INCIDENTAL MILLING	3,875	SY	$	$
	MILLING SECTION SUBTOTAL			$	
PAVEMENT PATCHING					
30	PAVEMENT PATCHING	10,500	TON	$	$
	PAVEMENT PATCHING SECTION SUBTOTAL			$	

PAVEMENT MARKINGS					
31	THERMOPLASTIC PAVEMENT MARKINGS - 4", 90 MILS	21,766	LF	$	$
32	THERMOPLASTIC PAVEMENT MARKINGS - 8", 90 MILS	1,045	LF	$	$
33	THERMOPLASTIC PAVEMENT MARKINGS - 24", 90 MILS	1,007	LF	$	$
34	THERMOPLASTIC SYMBOLS - 90 MILS	34	EA	$	$
35	SPEED HUMP SYMBOL - 90 MILS	40	EA	$	$
36	BIKE LANE ARROW - 90 MILS	9	EA	$	$
37	BIKE SYMBOL - 90 MILS	50	EA	$	$
38	BIKE SHARROW - 90 MILS	27	EA	$	$
39	GREEN THERMOPLASTIC, 24"	200	EA	$	$
40	SHARK TEETH SYMBOL, 24"	4	EA	$	$
41	FLEXIBLE DELINEATORS / TUBULAR MARKERS	75	EA	$	$
42	TEMPORARY PAINT, 4"	11,088	LF	$	$
43	TEMPORARY PAINT, 8"	960	LF	$	$
44	TEMPORARY PAINT, 24"	443	LF	$	$
45	TEMPORARY PAINT SYMBOLS	19	EA	$	$
46	THERMOPLASTIC ERADICATION, LINES (4-24")	12,180	LF	$	$
47	THERMOPLASTIC ERADICATION, SYMBOLS	32	EA	$	$
PAVEMENT MARKINGS SECTION SUBTOTAL				$	
SIGNALS & INTELLIGENT TRANSPORTATION SYSTEMS					
48	INDUCTIVE LOOP SAWCUT	1,070	LF	$	$
SIGNALS & INTELLIGENT TRANSPORTATION SYSTEMS SECTION SUBTOTAL				$	
TRAFFIC CALMING					
49	REMOVE SPEED HUMP	10	EA	$	$
50	INSTALL SPEED HUMP	12	EA	$	$
TRAFFIC CALMING SECTION SUBTOTAL				$	
TRAFFIC CONTROL					
51	TEMPORARY TRAFFIC CONTROL	1	LS	$	$
52	LAW ENFORCEMENT	40	HR	$	$
TRAFFIC CONTROL SECTION SUBTOTAL				$	
GRADING					
53	GRADING	1	LS	$	$
54	SHALLOW UNDERCUT	5	CY	$	$
55	FABRIC FOR SOIL STABILIZATION	50	SY	$	$
56	GEOGRID FOR SOIL STABILIZATION	50	SY	$	$
57	CLASS IV STONE FOR SOIL STABILIZATION	25	TON	$	$
58	INCIDENTAL ABC STONE	100	TON		
GRADING SECTION SUBTOTAL				$	
EROSION CONTROL					
59	TEMPORARY SILT FENCE / TREE PROTECTION FENCE COMBINATION, TPP-08	730	LF	$	$
60	INLET PROTECTION	40	LF	$	$
61	SILT FENCE OUTLETS	4	EA	$	$
EROSION CONTROL SECTION SUBTOTAL				$	
TOTAL BID AMOUNT				**$**	

CITY OF RALEIGH

274-TM-4-26

GENERAL INFORMATION SHEET

Street	From	To	Length (Ft)	Area (SY)	Treatment	Est. Tons	Overlay Depth	Traffic Marks	Signal Loops	Asphalt in Gutter
BLUE CORAL	CARTIER RUBY LN	SOUTHGATE DR	395	965	Edge and a Half Mill	85	1.5	No	No	No
CHELTON OAKS	SUMMERTON DR	COOPER FALLS LN	1025	2420	Edge Mill	210	1.5	No	No	No
CHURCHILL	DIXIE TR	RIDGE RD	2520	10285	Full Mill	895	1.5	Yes	No	Yes
COKESBURY	DUNN RD	RIVER BANK DR	1030	2480	Edge and a Half Mill	215	1.5	Yes	No	No
COMSTOCK	RYEGATE DR	BONA CT	1500	4080	Full Mill	350	1.5	No	No	No
COOPER FALLS	SUMMERTON DR	CHELTON OAKS PL	1010	2395	Edge Mill	205	1.5	No	No	No
DELLWOOD	CHURCHILL RD	LEWIS FARM RD	1360	3370	Full Mill	295	1.5	Yes	No	No
ELVIN	DELLWOOD DR	CDS	355	1235	Full Mill	110	1.5	No	No	No
ENTERPRISE	CLARK AVE	HILLSBOROUGH ST	990	3380	Full Mill	290	1.5	Yes	Yes	Yes
FAIRCLOTH	HILLSBOROUGH ST	WADE AVE	2635	13575	Full Mill	1165	1.5	Yes	Yes	No
FALKIRK	KILLCULLEN DR	CDS	230	915	Edge Mill	80	1.5	No	No	No
JEFFRIES	DANA DR	NORMAN PL	1395	3445	Full Mill	295	1.5	Yes	No	No
KILCULLEN	HOYLE DR	NEW HOPE CHURCH RD	3540	10105	Full Mill	870	1.5	Yes	No	No
LAKESIDE S.	BARCLAY DR	STOCKTON DR	2935	7215	Full Mill	620	1.5	No	No	No
MALTA	MERRYWOOD DR	END MAINT / PRIV PROP	720	1820	Edge Mill	160	1.5	No	No	No
NORFLEET	RYEGATE DR	CDS	120	700	Full Mill	60	1.5	No	No	No
NORMAN	STOCKTON DR	BUCK JONES RD	1985	4870	Full Mill	420	1.5	No	No	No
OLDHAM	TIPPERARY DR	CDS	185	810	Edge Mill	70	1.5	No	No	No
ORKNEY	KILCULLEN DR	CDS	135	695	Edge Mill	60	1.5	No	No	No
OXFORD	WHITE OAK RD	REAVES DR	1695	6205	Full Mill	540	1.5	No	No	Yes
RIVER BANK	FALLS RIVER AVE	COKESBURY LN	2505	5935	Edge and a Half Mill	510	1.5	Yes	No	No
RUFFIN	DIXIE TR	FAIRCLOTH ST	2320	6715	Full Mill	590	1.5	Yes	No	Yes
RYEGATE	PITTSFORD RD	CASTLEBAR DR	2010	4850	Full Mill	415	1.5	No	No	No
SAXONY	TIPPERARY DR	CDS	140	700	Edge Mill	60	1.5	No	No	No
SOUTH VALLEY	BUCK JONES RD	CDS	410	1565	Edge and a Half Mill	135	1.5	Yes	No	No
STOCKTON	S. LAKESIDE DR	NORMAN PL	975	2430	Full Mill	215	1.5	No	No	No
TIPPERARY	RYEGATE DR	PITTSFORD RD	1200	2875	Full Mill	250	1.5	No	No	No

Notes:

1. For Edge Mill streets, depth indicated is final depth of milling and asphalt at edge of pavement.
2. For Edge and a Half Mill streets, depth indicated is final depth of milling and asphalt at edge of pavement.
3. For Full Mill streets, depth indicates specific depth below curb at edge of pavement. For example, if an existing full mill street has existing asphalt 1.5” above the curb & gutter or paved into the gutter, existing asphalt shall be “full milled” to a total depth of 1.5” plus depth indicated for the street to achieve the desired final pavement elevation.
4. For Mill & Fill streets, the pavement shall be milled and paved back in continuous shift work at the depth specified.
5. All AC Adjustments shall be based upon NCDOT FOB Base Price Index of $732.50 effective May 2026.

CITY OF RALEIGH

274-TM-4-26 STREET ESTIMATE TOTALS

Item No.	Description	Unit	BLUE CORAL	CHELTON OAKS	CHURCHILL	COKESBURY	COMSTOCK
2	ASPHALT CONCRETE SURFACE MIX S9.5B	TON	85	210	895	215	350
3	ASPHALT CONCRETE SURFACE MIX S9.5C	TON	-	-	-	-	-
4	ASPHALT BINDER	TON	10	15	60	15	25
5	TRACKLESS TACK	TON	85	210	895	215	350
6	MANHOLE ADJUSTMENT (RAISE ONLY)	EA	3	4	-	5	-
7	WATER VALVE BOX ADJUSTMENT (RAISE ONLY)	EA	-	3	-	5	-
8	MANHOLE ADJUSTMENT - OVERSIZE (RAISE ONLY)	EA	-	-	-	-	-
9	MANHOLE ADJUSTMENT (LOWER/RAISE)	EA	-	-	11	-	8
10	WATER VALVE BOX ADJUSTMENT (LOWER/RAISE)	EA	-	-	17	-	6
11	MILLING/CHIPPING AROUND UTILITY NOT ADJUSTED	EA	-	-	-	-	-
12	MANHOLE ADJUSTMENT - OVERSIZE (LOWER/RAISE)	EA	-	-	-	-	-
13	PROVIDE AND INSTALL MANHOLE RISER	EA	-	-	-	-	-
14	PROVIDE AND INSTALL WATER VALVE RISER	EA	-	-	-	-	-
15	PROVIDE NEW 7.5" MANHOLE FRAME & COVER	EA	-	-	-	-	-
16	PROVIDE NEW 4" MANHOLE FRAME & COVER	EA	-	-	-	-	-
17	4" CONCRETE BIKEWAY	SY	-	-	-	-	-
18	SIDEWALK REMOVAL	SY	-	39	28	55	83
19	4" SIDEWALK REPLACEMENT	SY	-	21	15	30	45
20	6" SIDEWALK REPLACEMENT	SY	-	-	9	-	-
21	6" CONCRETE DRIVEWAY	SY	-	-	10	-	-
22	CURB & GUTTER REMOVAL/REPLACEMENT	LF	-	105	195	150	225
23	30" VALLEY CURB	LF	-	-	-	-	-
24	MONOLITHIC CONCRETE ISLAND	SY	-	-	-	-	-
25	CONCRETE SIDEWALK ACCESS RAMPS WITH DETECTABLE WARNING SURFACE	EA	-	7	5	10	15
26	MILLING (0-2") EDGE	SY	660	1,135	-	1,715	-
27	MILLING (0-4") FULL WIDTH	SY	-	-	10,285	-	4,080
28	MILLING (0-2") MILL & FILL	SY	-	-	-	-	-
29	INCIDENTAL MILLING	SY	-	150	577	281	650
30	PAVEMENT PATCHING	TON	75	270	880	305	435
31	THERMOPLASTIC PAVEMENT MARKINGS - 4", 90 MILS	LF	-	-	68	-	-
32	THERMOPLASTIC PAVEMENT MARKINGS - 8", 90 MILS	LF	-	-	-	-	-
33	THERMOPLASTIC PAVEMENT MARKINGS - 24", 90 MILS	LF	-	-	55	-	-
34	THERMOPLASTIC SYMBOLS - 90 MILS	EA	-	-	-	3	-
35	SPEED HUMP SYMBOL - 90 MILS	EA	4	-	20	-	-
36	BIKE LANE ARROW - 90 MILS	EA	-	-	-	-	-
37	BIKE SYMBOL - 90 MILS	EA	-	-	-	-	-
38	BIKE SHARROW - 90 MILS	EA	-	-	18	-	-
39	GREEN THERMOPLASTIC, 24"	EA	-	-	-	-	-
40	SHARK TEETH SYMBOL, 24"	EA	-	-	-	-	-
41	FLEXIBLE DELINEATORS / TUBULAR MARKERS	EA	-	-	-	-	-
42	TEMPORARY PAINT, 4"	LF	-	-	-	-	-
43	TEMPORARY PAINT, 8"	LF	-	-	-	-	-
44	TEMPORARY PAINT, 24"	LF	-	-	-	-	-
45	TEMPORARY PAINT SYMBOLS	EA	-	-	-	-	-
46	THERMOPLASTIC ERADICATION, LINES (4-24")	LF	-	-	-	-	-
47	THERMOPLASTIC ERADICATION, SYMBOLS	EA	-	-	-	-	-
48	INDUCTIVE LOOP SAWCUT	LF	-	-	-	-	-
49	REMOVE SPEED HUMP	EA	1	-	5	-	-
50	INSTALL SPEED HUMP	EA	1	-	5	-	-
51	LAW ENFORCEMENT	HR	-	-	-	-	-
58	INCIDENTAL ABC STONE	TON	-	-	-	-	-
59	TEMPORARY SILT FENCE / TREE PROTECTION FENCE COMBINATION, TPP-08	LF	-	-	-	-	-
60	INLET PROTECTION	LF	-	-	-	-	-
61	SILT FENCE OUTLETS	EA	-	-	-	-	-

Item No.	Description	Unit	COOPER FALLS	DELLWOOD	ELVIN	ENTERPRISE	FALKIRK
2	ASPHALT CONCRETE SURFACE MIX S9.5B	TON	205	295	110	290	80
3	ASPHALT CONCRETE SURFACE MIX S9.5C	TON	-	-	-	-	-
4	ASPHALT BINDER	TON	15	20	10	20	10
5	TRACKLESS TACK	TON	205	295	110	290	80
6	MANHOLE ADJUSTMENT (RAISE ONLY)	EA	4	-	-	-	1
7	WATER VALVE BOX ADJUSTMENT (RAISE ONLY)	EA	3	-	-	-	3
8	MANHOLE ADJUSTMENT - OVERSIZE (RAISE ONLY)	EA	-	-	-	-	-
9	MANHOLE ADJUSTMENT (LOWER/RAISE)	EA	-	6	3	6	-
10	WATER VALVE BOX ADJUSTMENT (LOWER/RAISE)	EA	-	4	3	9	-
11	MILLING/CHIPPING AROUND UTILITY NOT ADJUSTED	EA	-	-	-	-	-
12	MANHOLE ADJUSTMENT - OVERSIZE (LOWER/RAISE)	EA	-	-	-	2	-
13	PROVIDE AND INSTALL MANHOLE RISER	EA	-	-	-	-	-
14	PROVIDE AND INSTALL WATER VALVE RISER	EA	-	-	-	-	-
15	PROVIDE NEW 7.5" MANHOLE FRAME & COVER	EA	-	-	-	-	-
16	PROVIDE NEW 4" MANHOLE FRAME & COVER	EA	-	-	-	-	-
17	4" CONCRETE BIKEWAY	SY	-	-	-	-	-
18	SIDEWALK REMOVAL	SY	28	-	-	22	11
19	4" SIDEWALK REPLACEMENT	SY	15	-	-	12	6
20	6" SIDEWALK REPLACEMENT	SY	-	-	-	-	-
21	6" CONCRETE DRIVEWAY	SY	-	-	-	-	-
22	CURB & GUTTER REMOVAL/REPLACEMENT	LF	75	60	30	90	30
23	30" VALLEY CURB	LF					
24	MONOLITHIC CONCRETE ISLAND	SY					
25	CONCRETE SIDEWALK ACCESS RAMPS WITH DETECTABLE WARNING SURFACE	EA	5	-	-	4	2
26	MILLING (0-2") EDGE	SY	1,125	-	-	-	255
27	MILLING (0-4") FULL WIDTH	SY	-	3,370	1,235	3,380	-
28	MILLING (0-2") MILL & FILL	SY	-	-	-	-	-
29	INCIDENTAL MILLING	SY	-	-	-	-	-
30	PAVEMENT PATCHING	TON	190	405	160	210	55
31	THERMOPLASTIC PAVEMENT MARKINGS - 4", 90 MILS	LF	-	-	-	272	-
32	THERMOPLASTIC PAVEMENT MARKINGS - 8", 90 MILS	LF	-	-	-	64	-
33	THERMOPLASTIC PAVEMENT MARKINGS - 24", 90 MILS	LF	-	15	-	105	-
34	THERMOPLASTIC SYMBOLS - 90 MILS	EA	-	-	-	-	-
35	SPEED HUMP SYMBOL - 90 MILS	EA	-	-	-	-	-
36	BIKE LANE ARROW - 90 MILS	EA	-	-	-	-	-
37	BIKE SYMBOL - 90 MILS	EA	-	-	-	-	-
38	BIKE SHARROW - 90 MILS	EA	-	-	-	-	-
39	GREEN THERMOPLASTIC, 24"	EA	-	-	-	-	-
40	SHARK TEETH SYMBOL, 24"	EA	-	-	-	-	-
41	FLEXIBLE DELINEATORS / TUBULAR MARKERS	EA	-	-	-	-	-
42	TEMPORARY PAINT, 4"	LF	-	-	-	272	-
43	TEMPORARY PAINT, 8"	LF	-	-	-	64	-
44	TEMPORARY PAINT, 24"	LF	-	-	-	105	-
45	TEMPORARY PAINT SYMBOLS	EA	-	-	-	-	-
46	THERMOPLASTIC ERADICATION, LINES (4-24")	LF	-	-	-	-	-
47	THERMOPLASTIC ERADICATION, SYMBOLS	EA	-	-	-	-	-
48	INDUCTIVE LOOP SAWCUT	LF	-	-	-	150	-
49	REMOVE SPEED HUMP	EA	-	-	-	-	-
50	INSTALL SPEED HUMP	EA	-	-	-	-	-
51	LAW ENFORCEMENT	HR	-	-	-	10	-
58	INCIDENTAL ABC STONE	TON	-	-	-	-	-
59	TEMPORARY SILT FENCE / TREE PROTECTION FENCE COMBINATION, TPP-08	LF	-	-	-	-	-
60	INLET PROTECTION	LF	-	-	-	-	-
61	SILT FENCE OUTLETS	EA	-	-	-	-	-

Item No.	Description	Unit	FAIRCLOTH	JEFFRIES	KILCULLEN	LAKESIDE S.	MALTA
2	ASPHALT CONCRETE SURFACE MIX S9.5B	TON	-	295	870	620	160
3	ASPHALT CONCRETE SURFACE MIX S9.5C	TON	1,165	-	-	-	-
4	ASPHALT BINDER	TON	70	20	60	45	16
5	TRACKLESS TACK	TON	1,165	295	870	620	160
6	MANHOLE ADJUSTMENT (RAISE ONLY)	EA	2	-	1	-	4
7	WATER VALVE BOX ADJUSTMENT (RAISE ONLY)	EA	5	-	5	-	5
8	MANHOLE ADJUSTMENT - OVERSIZE (RAISE ONLY)	EA	-	-	-	-	-
9	MANHOLE ADJUSTMENT (LOWER/RAISE)	EA	-	4	14	15	-
10	WATER VALVE BOX ADJUSTMENT (LOWER/RAISE)	EA	-	6	16	18	-
11	MILLING/CHIPPING AROUND UTILITY NOT ADJUSTED	EA	30	-	-	-	-
12	MANHOLE ADJUSTMENT - OVERSIZE (LOWER/RAISE)	EA	-	-	-	-	-
13	PROVIDE AND INSTALL MANHOLE RISER	EA	-	-	-	-	-
14	PROVIDE AND INSTALL WATER VALVE RISER	EA	-	-	-	-	-
15	PROVIDE NEW 7.5" MANHOLE FRAME & COVER	EA	-	-	-	-	-
16	PROVIDE NEW 4" MANHOLE FRAME & COVER	EA	-	-	-	-	-
17	4" CONCRETE BIKEWAY	SY	700	-	-	-	-
18	SIDEWALK REMOVAL	SY	72	-	77	-	23
19	4" SIDEWALK REPLACEMENT	SY	39	-	42	-	18
20	6" SIDEWALK REPLACEMENT	SY	-	-	-	-	-
21	6" CONCRETE DRIVEWAY	SY	-	-	-	-	-
22	CURB & GUTTER REMOVAL/REPLACEMENT	LF	490	100	340	200	110
23	30" VALLEY CURB	LF	90	-	-	-	-
24	MONOLITHIC CONCRETE ISLAND	SY	650	-	-	-	-
25	CONCRETE SIDEWALK ACCESS RAMPS WITH DETECTABLE WARNING SURFACE	EA	13	-	14	-	2
26	MILLING (0-2") EDGE	SY	-	-	1,535	-	800
27	MILLING (0-4") FULL WIDTH	SY	-	3,445	6,745	7,215	-
28	MILLING (0-2") MILL & FILL	SY	13,575	-	-	-	-
29	INCIDENTAL MILLING	SY	400	-	385	-	-
30	PAVEMENT PATCHING	TON	780	385	915	1,115	185
31	THERMOPLASTIC PAVEMENT MARKINGS - 4", 90 MILS	LF	21,296	-	-	-	-
32	THERMOPLASTIC PAVEMENT MARKINGS - 8", 90 MILS	LF	981	-	-	-	-
33	THERMOPLASTIC PAVEMENT MARKINGS - 24", 90 MILS	LF	788	-	-	-	-
34	THERMOPLASTIC SYMBOLS - 90 MILS	EA	29	-	-	-	-
35	SPEED HUMP SYMBOL - 90 MILS	EA	-	-	16	-	-
36	BIKE LANE ARROW - 90 MILS	EA	9	-	-	-	-
37	BIKE SYMBOL - 90 MILS	EA	50	-	-	-	-
38	BIKE SHARROW - 90 MILS	EA	9	-	-	-	-
39	GREEN THERMOPLASTIC, 24"	EA	200	-	-	-	-
40	SHARK TEETH SYMBOL, 24"	EA	-	-	-	-	-
41	FLEXIBLE DELINEATORS / TUBULAR MARKERS	EA	75	-	-	-	-
42	TEMPORARY PAINT, 4"	LF	10,816	-	-	-	-
43	TEMPORARY PAINT, 8"	LF	896	-	-	-	-
44	TEMPORARY PAINT, 24"	LF	338	-	-	-	-
45	TEMPORARY PAINT SYMBOLS	EA	19	-	-	-	-
46	THERMOPLASTIC ERADICATION, LINES (4-24")	LF	12,050	-	-	-	-
47	THERMOPLASTIC ERADICATION, SYMBOLS	EA	32	-	-	-	-
48	INDUCTIVE LOOP SAWCUT	LF	920	-	-	-	-
49	REMOVE SPEED HUMP	EA	-	-	4	-	-
50	INSTALL SPEED HUMP	EA	-	-	4	-	-
51	LAW ENFORCEMENT	HR	30	-	-	-	-
58	INCIDENTAL ABC STONE	TON	100	-	-	-	-
59	TEMPORARY SILT FENCE / TREE PROTECTION FENCE COMBINATION, TPP-08	LF	730	-	-	-	-
60	INLET PROTECTION	LF	40	-	-	-	-
61	SILT FENCE OUTLETS	EA	4	-	-	-	-

Item No.	Description	Unit	NORFLEET	NORMAN	OLDHAM	ORKNEY	OXFORD
2	ASPHALT CONCRETE SURFACE MIX S9.5B	TON	60	420	70	60	540
3	ASPHALT CONCRETE SURFACE MIX S9.5C	TON	-	-	-	-	-
4	ASPHALT BINDER	TON	5	30	5	5	40
5	TRACKLESS TACK	TON	60	420	70	60	540
6	MANHOLE ADJUSTMENT (RAISE ONLY)	EA	-	-	1	3	-
7	WATER VALVE BOX ADJUSTMENT (RAISE ONLY)	EA	-	-	2	1	-
8	MANHOLE ADJUSTMENT - OVERSIZE (RAISE ONLY)	EA	-	-	-	-	-
9	MANHOLE ADJUSTMENT (LOWER/RAISE)	EA	1	10	-	-	18
10	WATER VALVE BOX ADJUSTMENT (LOWER/RAISE)	EA	1	11	-	-	6
11	MILLING/CHIPPING AROUND UTILITY NOT ADJUSTED	EA	-	-	-	-	-
12	MANHOLE ADJUSTMENT - OVERSIZE (LOWER/RAISE)	EA	-	-	-	-	-
13	PROVIDE AND INSTALL MANHOLE RISER	EA	-	-	-	-	-
14	PROVIDE AND INSTALL WATER VALVE RISER	EA	-	-	-	-	-
15	PROVIDE NEW 7.5" MANHOLE FRAME & COVER	EA	-	-	-	-	-
16	PROVIDE NEW 4" MANHOLE FRAME & COVER	EA	-	-	-	-	-
17	4" CONCRETE BIKEWAY	SY	-	-	-	-	-
18	SIDEWALK REMOVAL	SY	-	11	11	-	-
19	4" SIDEWALK REPLACEMENT	SY	-	6	6	-	-
20	6" SIDEWALK REPLACEMENT	SY	-	-	-	-	-
21	6" CONCRETE DRIVEWAY	SY	-	-	-	-	-
22	CURB & GUTTER REMOVAL/REPLACEMENT	LF	20	180	30	-	100
23	30" VALLEY CURB	LF	-	-	-	-	-
24	MONOLITHIC CONCRETE ISLAND	SY	-	-	-	-	-
25	CONCRETE SIDEWALK ACCESS RAMPS WITH DETECTABLE WARNING SURFACE	EA	-	2	2	-	-
26	MILLING (0-2") EDGE	SY	-	-	210	150	-
27	MILLING (0-4") FULL WIDTH	SY	700	4,870	-	-	6,205
28	MILLING (0-2") MILL & FILL	SY	-	-	-	-	-
29	INCIDENTAL MILLING	SY	-	-	-	-	575
30	PAVEMENT PATCHING	TON	25	670	45	50	715
31	THERMOPLASTIC PAVEMENT MARKINGS - 4", 90 MILS	LF	-	-	-	-	-
32	THERMOPLASTIC PAVEMENT MARKINGS - 8", 90 MILS	LF	-	-	-	-	-
33	THERMOPLASTIC PAVEMENT MARKINGS - 24", 90 MILS	LF	-	-	-	-	-
34	THERMOPLASTIC SYMBOLS - 90 MILS	EA	-	-	-	-	-
35	SPEED HUMP SYMBOL - 90 MILS	EA	-	-	-	-	-
36	BIKE LANE ARROW - 90 MILS	EA	-	-	-	-	-
37	BIKE SYMBOL - 90 MILS	EA	-	-	-	-	-
38	BIKE SHARROW - 90 MILS	EA	-	-	-	-	-
39	GREEN THERMOPLASTIC, 24"	EA	-	-	-	-	-
40	SHARK TEETH SYMBOL, 24"	EA	-	-	-	-	-
41	FLEXIBLE DELINEATORS / TUBULAR MARKERS	EA	-	-	-	-	-
42	TEMPORARY PAINT, 4"	LF	-	-	-	-	-
43	TEMPORARY PAINT, 8"	LF	-	-	-	-	-
44	TEMPORARY PAINT, 24"	LF	-	-	-	-	-
45	TEMPORARY PAINT SYMBOLS	EA	-	-	-	-	-
46	THERMOPLASTIC ERADICATION, LINES (4-24")	LF	-	-	-	-	-
47	THERMOPLASTIC ERADICATION, SYMBOLS	EA	-	-	-	-	-
48	INDUCTIVE LOOP SAWCUT	LF	-	-	-	-	-
49	REMOVE SPEED HUMP	EA	-	-	-	-	-
50	INSTALL SPEED HUMP	EA	-	-	-	-	-
51	LAW ENFORCEMENT	HR	-	-	-	-	-
58	INCIDENTAL ABC STONE	TON	-	-	-	-	-
59	TEMPORARY SILT FENCE / TREE PROTECTION FENCE COMBINATION, TPP-08	LF	-	-	-	-	-
60	INLET PROTECTION	LF	-	-	-	-	-
61	SILT FENCE OUTLETS	EA	-	-	-	-	-

Item No.	Description	Unit	RIVER BANK	RUFFIN	RYEGATE	SAXONY	SOUTH VALLEY
2	ASPHALT CONCRETE SURFACE MIX S9.5B	TON	510	590	415	60	135
3	ASPHALT CONCRETE SURFACE MIX S9.5C	TON	-	-	-	-	-
4	ASPHALT BINDER	TON	35	40	30	5	10
5	TRACKLESS TACK	TON	510	590	415	60	135
6	MANHOLE ADJUSTMENT (RAISE ONLY)	EA	13	-	-	1	-
7	WATER VALVE BOX ADJUSTMENT (RAISE ONLY)	EA	9	-	-	3	-
8	MANHOLE ADJUSTMENT - OVERSIZE (RAISE ONLY)	EA	-	-	-	-	1
9	MANHOLE ADJUSTMENT (LOWER/RAISE)	EA	-	6	11	-	-
10	WATER VALVE BOX ADJUSTMENT (LOWER/RAISE)	EA	-	10	7	-	-
11	MILLING/CHIPPING AROUND UTILITY NOT ADJUSTED	EA	-	-	-	-	-
12	MANHOLE ADJUSTMENT - OVERSIZE (LOWER/RAISE)	EA	-	-	-	-	-
13	PROVIDE AND INSTALL MANHOLE RISER	EA	-	-	-	-	-
14	PROVIDE AND INSTALL WATER VALVE RISER	EA	-	-	-	-	-
15	PROVIDE NEW 7.5" MANHOLE FRAME & COVER	EA	-	-	-	-	-
16	PROVIDE NEW 4" MANHOLE FRAME & COVER	EA	-	-	-	-	-
17	4" CONCRETE BIKEWAY	SY	-	-	-	-	-
18	SIDEWALK REMOVAL	SY	33	116	39	11	11
19	4" SIDEWALK REPLACEMENT	SY	18	63	21	6	6
20	6" SIDEWALK REPLACEMENT	SY	-	9	-	-	-
21	6" CONCRETE DRIVEWAY	SY	-	14	-	-	-
22	CURB & GUTTER REMOVAL/REPLACEMENT	LF	90	415	145	30	110
23	30" VALLEY CURB	LF					
24	MONOLITHIC CONCRETE ISLAND	SY					
25	CONCRETE SIDEWALK ACCESS RAMPS WITH DETECTABLE WARNING SURFACE	EA	6	21	7	2	2
26	MILLING (0-2") EDGE	SY	4,170	-	-	155	685
27	MILLING (0-4") FULL WIDTH	SY	-	6,715	4,850	-	-
28	MILLING (0-2") MILL & FILL	SY	-	-	-	-	-
29	INCIDENTAL MILLING	SY	300	468	88	-	-
30	PAVEMENT PATCHING	TON	510	920	270	30	215
31	THERMOPLASTIC PAVEMENT MARKINGS - 4", 90 MILS	LF	-	-	-	-	130
32	THERMOPLASTIC PAVEMENT MARKINGS - 8", 90 MILS	LF	-	-	-	-	-
33	THERMOPLASTIC PAVEMENT MARKINGS - 24", 90 MILS	LF	-	44	-	-	-
34	THERMOPLASTIC SYMBOLS - 90 MILS	EA	2	-	-	-	-
35	SPEED HUMP SYMBOL - 90 MILS	EA	-	-	-	-	-
36	BIKE LANE ARROW - 90 MILS	EA	-	-	-	-	-
37	BIKE SYMBOL - 90 MILS	EA	-	-	-	-	-
38	BIKE SHARROW - 90 MILS	EA	-	-	-	-	-
39	GREEN THERMOPLASTIC, 24"	EA	-	-	-	-	-
40	SHARK TEETH SYMBOL, 24"	EA	-	-	-	-	-
41	FLEXIBLE DELINEATORS / TUBULAR MARKERS	EA	-	-	-	-	-
42	TEMPORARY PAINT, 4"	LF	-	-	-	-	-
43	TEMPORARY PAINT, 8"	LF	-	-	-	-	-
44	TEMPORARY PAINT, 24"	LF	-	-	-	-	-
45	TEMPORARY PAINT SYMBOLS	EA	-	-	-	-	-
46	THERMOPLASTIC ERADICATION, LINES (4-24")	LF	-	-	-	-	130
47	THERMOPLASTIC ERADICATION, SYMBOLS	EA	-	-	-	-	-
48	INDUCTIVE LOOP SAWCUT	LF	-	-	-	-	-
49	REMOVE SPEED HUMP	EA	-	-	-	-	-
50	INSTALL SPEED HUMP	EA	-	-	-	-	-
51	LAW ENFORCEMENT	HR	-	-	-	-	-
58	INCIDENTAL ABC STONE	TON	-	-	-	-	-
59	TEMPORARY SILT FENCE / TREE PROTECTION FENCE COMBINATION, TPP-08	LF	-	-	-	-	-
60	INLET PROTECTION	LF	-	-	-	-	-
61	SILT FENCE OUTLETS	EA	-	-	-	-	-

Item No.	Description	Unit	STOCKTON	TIPPERARY
2	ASPHALT CONCRETE SURFACE MIX S9.5B	TON	215	250
3	ASPHALT CONCRETE SURFACE MIX S9.5C	TON	-	-
4	ASPHALT BINDER	TON	15	20
5	TRACKLESS TACK	TON	215	250
6	MANHOLE ADJUSTMENT (RAISE ONLY)	EA	-	-
7	WATER VALVE BOX ADJUSTMENT (RAISE ONLY)	EA	-	-
8	MANHOLE ADJUSTMENT - OVERSIZE (RAISE ONLY)	EA	-	-
9	MANHOLE ADJUSTMENT (LOWER/RAISE)	EA	2	3
10	WATER VALVE BOX ADJUSTMENT (LOWER/RAISE)	EA	3	5
11	MILLING/CHIPPING AROUND UTILITY NOT ADJUSTED	EA	-	-
12	MANHOLE ADJUSTMENT - OVERSIZE (LOWER/RAISE)	EA	-	-
13	PROVIDE AND INSTALL MANHOLE RISER	EA	-	-
14	PROVIDE AND INSTALL WATER VALVE RISER	EA	-	-
15	PROVIDE NEW 7.5" MANHOLE FRAME & COVER	EA	-	-
16	PROVIDE NEW 4" MANHOLE FRAME & COVER	EA	-	-
17	4" CONCRETE BIKEWAY	SY	-	-
18	SIDEWALK REMOVAL	SY	-	33
19	4" SIDEWALK REPLACEMENT	SY	-	18
20	6" SIDEWALK REPLACEMENT	SY	-	-
21	6" CONCRETE DRIVEWAY	SY	-	-
22	CURB & GUTTER REMOVAL/REPLACEMENT	LF	150	90
23	30" VALLEY CURB	LF	-	-
24	MONOLITHIC CONCRETE ISLAND	SY	-	-
25	CONCRETE SIDEWALK ACCESS RAMPS WITH DETECTABLE WARNING SURFACE	EA	-	6
26	MILLING (0-2") EDGE	SY	-	-
27	MILLING (0-4") FULL WIDTH	SY	2,430	2,875
28	MILLING (0-2") MILL & FILL	SY	-	-
29	INCIDENTAL MILLING	SY	-	-
30	PAVEMENT PATCHING	TON	210	210
31	THERMOPLASTIC PAVEMENT MARKINGS - 4", 90 MILS	LF	-	-
32	THERMOPLASTIC PAVEMENT MARKINGS - 8", 90 MILS	LF	-	-
33	THERMOPLASTIC PAVEMENT MARKINGS - 24", 90 MILS	LF	-	-
34	THERMOPLASTIC SYMBOLS - 90 MILS	EA	-	-
35	SPEED HUMP SYMBOL - 90 MILS	EA	-	-
36	BIKE LANE ARROW - 90 MILS	EA	-	-
37	BIKE SYMBOL - 90 MILS	EA	-	-
38	BIKE SHARROW - 90 MILS	EA	-	-
39	GREEN THERMOPLASTIC, 24"	EA	-	-
40	SHARK TEETH SYMBOL, 24"	EA	-	-
41	FLEXIBLE DELINEATORS / TUBULAR MARKERS	EA	-	-
42	TEMPORARY PAINT, 4"	LF	-	-
43	TEMPORARY PAINT, 8"	LF	-	-
44	TEMPORARY PAINT, 24"	LF	-	-
45	TEMPORARY PAINT SYMBOLS	EA	-	-
46	THERMOPLASTIC ERADICATION, LINES (4-24")	LF	-	-
47	THERMOPLASTIC ERADICATION, SYMBOLS	EA	-	-
48	INDUCTIVE LOOP SAWCUT	LF	-	-
49	REMOVE SPEED HUMP	EA	-	-
50	INSTALL SPEED HUMP	EA	-	-
51	LAW ENFORCEMENT	HR	-	-
58	INCIDENTAL ABC STONE	TON	-	-
59	TEMPORARY SILT FENCE / TREE PROTECTION FENCE COMBINATION, TPP-08	LF	-	-
60	INLET PROTECTION	LF	-	-
61	SILT FENCE OUTLETS	EA	-	-

GENERAL CONDITIONS

1. Definitions

A. The Contract documents shall consist of the Contract, the accepted Proposal, the General Conditions of the Contract, and the attached appendix, including all modifications thereof incorporated in the documents before their execution.

B. Whenever the term "Contractor" is used, it shall be understood as referring to the General Contractor, subcontractor, and all other contractors or their duly authorized agent to whom the work here described is awarded by Contract.

C. Whenever the term “Resurface” or "Resurfacing” is used, it shall be understood to mean all work associated with the Contract, including but not limited to utility adjustments, milling, patching, and asphalt overlay.

D. Whenever the term "Transportation Director" is mentioned, it is understood to mean the Transportation Director of Raleigh, North Carolina, his assistant, or duly authorized agent. The Transportation Director or his authorized agent shall make all necessary explanations as to the meaning and intent of the Specifications, Plans, Special Provisions, or Contract and may correct any errors or omissions in same which is necessary for the proper fulfillment of its intentions. The term “Transportation Director” or his authorized agent shall be synonymous or equivalent with the term “Engineer” and shall have full authority over the work as specified in Section 105-1 of the “North Carolina Department of Transportation Standard Specifications for Roads and Structures”, latest edition.

E. Whenever the term "City" is used, it is to mean the City of Raleigh, North Carolina.

F. The term "Work" of the Contractor or subcontractor includes labor or materials, or both, equipment, transportation, or other facilities necessary to complete the Contract.

G. The "North Carolina Department of Transportation Standard Specifications for Roads and Structures”, latest edition shall be considered a part of these specifications and shall be enforceable in toto.

H. The "North Carolina Department of Transportation Policies Procedures”, for 2002 accommodating utilities on highway right-of-way shall be considered a part of these specifications in instances to which they are referred.

I. The terms “Supplemental Agreement” and City Change Order” shall be understood to be synonymous.

2. Bidder’s Disqualification

A. That the City Manager may disqualify bidders from participation in bidding and award of Contracts for city construction projects based on the following conditions existing simultaneously:

i. The dollar value of the work completed is less than the dollar value of the work which should have been completed on the basis of the contractor's approved progress schedule by more than twenty percent of the current Contract amount. The dollar amount of the work completed will be the total estimate to date shown in the latest partial pay estimate.

The current Contract amount will be the Contract estimate plus accumulated overruns and less accumulated underruns shown in the latest partial pay estimate.

ii. The percentage of the work completed is less than the percentage of Contract time elapsed on the work by more than twenty percent. The percentage of work completed will be the dollar value of the work complete as defined above divided by the current Contract amount as defined above. The percentage of Contract time elapsed will be the number of calendar days elapsed as shown in the latest partial pay estimate divided by the total Contract time in calendar days.

iii. The City Manager shall not include any late days which are caused by the City in any of his calculations directed at determining bid status.

B. Any contractor who wishes to contest the decision of the City Manager declaring ineligibility may appeal to the City Council by delivering a notice of appeal to the City Clerk no later than ten days after receipt of the City Manager's decision. The notice of appeal shall clearly set out the reasons why the Contractor believes that the terms of this Resolution have been inappropriately applied or the equitable arguments for not applying this Resolution's terms. When considering an appeal the City Council shall consider, among other things, the report of the City Manager, the notice of appeal, and the Contractor's current status on any other current City Contracts and its performance on any other Contracts to which the Contractor and the City have been parties to within the two calendar years immediately preceding the filing of the notice of appeal.

C. Bidders so disqualified shall remain disqualified for any period in which they are still in conflict with the schedule provisions of this article.

3. Intent of Documents

The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work. It is not intended, however, that materials or work not covered by or properly inferable from any heading, branch, class or trade of the Specifications shall be supplied unless distinctly so noted on the drawings. Materials or work described in words which so applied have a well-known technical or trade meaning shall be held to refer to such recognized standards.

4. Detail Drawings and Instructions

The Transportation Director shall furnish with reasonable promptness, additional instructions by means of drawings or otherwise, necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the Contract documents, true developments thereof, and reasonable inferable therefrom.

The instructions and appendix have been provided with the solicitation on the North Carolina State Interactive Procurement System. If you need assistance contact Dan Callahan at 919-996-2182.

5. Progress Schedule

The Contractor shall prepare and submit for review and approval a schedule of proposed working progress. This schedule shall be submitted on forms supplied by the Engineer or in a format that is approved by the Engineer. A detailed Critical Path Method (CPM) schedule shall not be submitted to replace the progress schedule details required below.

The proposed progress schedule shall be submitted no later than 7 calendar days before the date of the project preconstruction conference and shall be approved before any payments will be processed for the project.

When the Engineer has extended the completion date or if the project overrun is anticipated to exceed 5%, the Contractor may submit a revised progress schedule to the Engineer for review and approval. If plan revisions are anticipated to change the sequence of operations in such a manner as will affect the progress but not the completion date, then the Contractor may submit a revised progress schedule for review and approval, but the completion date shall remain unchanged.

The proposed progress schedule shall contain the following items:

A. A time scale diagram with major work activities and milestones clearly labeled.

   i. For purposes of composing the progress schedule, major work activities are defined as components comprising more than 5% of the total project cost or occupying more than 10% of total contract time and shall include, if applicable, the following

      a. Asphalt Patching
      b. Utility Adjustments
      c. Sidewalk Items
      d. Other Incidental Concrete
      e. Milling Asphalt Pavement
      f. Asphalt Resurfacing
      g. Pavement Markings

   ii. For purposes of composing the progress schedule, major milestones are derived from the project construction phasing and shall include, if applicable, the following:

      a. Start of Work (May change based on NTP)
      b. Project ICTs
      c. Map Completion Dates
      d. Project Completion Date

B. A cash curve corresponding to the milestones of work and activities established in Part A above.

C. A written narrative that explains the sequence of work, the controlling operations, ICT completion dates, milestones, project phasing, anticipated work schedule and estimated resources. In addition, explain how any permit requirements, submittal tracking, and coordination with subcontractors, utility companies and other entities will be performed.

<u>Failure to Maintain Satisfactory Progress</u>

The Transportation Director will check the Contractor's progress at the time each partial pay estimate is prepared.

The City shall follow guidelines set forth in the NCDOT Standard Specifications, Latest Edition using the Article(s) referenced below.

The Contractors progress may be considered as unsatisfactory as follows:

A. The Contractor's progress is found to be less than that described in either count below:

   i. The dollar value of the work is completed, excluding material payments allowed by Article 109-5, is less than the dollar value of the work that should have been completed, on the basis of the Contractor's approved progress schedule, by more than 10% of the current contract amount. The dollar value of the work completed will be the total estimate to date shown in the latest partial pay estimate, excluding material payments allowed by Article

109-5. The current contract amount will be the total amount bid plus accumulated overruns less accumulated underruns shown in the latest partial pay estimate.

ii. The percentage of the work completed is less than the percentage of contract time elapsed on the work by more than 10%. The percentage of work completed will be the dollar value of the work completed as defined above, divided by the current contract amount as defined above. The percentage of contract time elapsed will be the number of calendar days elapsed as shown in the latest partial pay estimate divided by the total contract time in calendar days.

B. The Contractor fails to begin and pursue the work in accordance with Article 108-1 before the expiration of 5% of the original contract time after the date work was scheduled to begin based upon the approved progress schedule.

C. The Transportation Director anticipates the Contractor will not complete the work described in the contract by the intermediate contract time or the contract completion date. When the Contractor's progress is found to be unsatisfactory as described in Subarticles 108-8(A), 108-8(B) and 108-8(C) above, the Transportation Director may make written demand of the Contractor to state in writing the reason for the unsatisfactory progress and produce such supporting data as the City may require or the Contractor may desire to submit. The Transportation Director will consider the justifications submitted by the Contractor and extensions of the completion date may be allowed in accordance with Subarticle 108-10(B).

Contractor's Bi-Weekly Updates

The contractor shall provide bi-weekly updates to the progress schedule for distribution to various city departments and the general public.

6. Contractor's Understanding

It is understood and agreed that the Contractor has, by careful examination satisfied himself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of materials to be encountered, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work under this Contract. No verbal agreement or conversation with any officer, agent or employee of the City, either before or after the execution of the Contract shall affect or modify any terms or obligations herein contained.

7. Superintendence by Contractor

Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the City of Raleigh on the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and prosecution of the work.

In the event that subcontractors are used to supplement the prime contractor's forces, the prime contractor shall superintend the subcontractor and shall have his staff present at all work sites involving the subcontractor's forces.

8. Materials, Appliances and Employees

Unless otherwise specified, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation and other facilities necessary for the execution and completion of the work.

Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of good quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him.

9. **Technical Specifications and Drawings**

Anything mentioned in the Technical Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Technical Specifications shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the City of Raleigh without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

10. **Technical Specifications and Drawings**

Anything mentioned in the Technical Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Technical Specifications shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the City of Raleigh without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

11. **Royalties and Patents**

The Contractor shall pay all royalties and patent fees. He shall defend all suits or claims for infringement of any patent rights and shall save the City harmless from loss on account thereof, except that the city shall be responsible for such loss when a particular process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has information that the process or article specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Transportation Director.

12. **Permits**

Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor unless otherwise stipulated.

Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the City unless otherwise stipulated.

13. **Protection of Work and Property**

The Contractor shall continuously maintain adequate protection of all his work from damage and shall protect the City's and private property from injury or loss arising in connection with this Contract. He shall make good any such damages, injury or loss, except such as may directly be due to errors in the Contract documents or caused by agents or employees of the City.

14. **Cooperation with Utility Owners**

Prior to the beginning of construction, the City will notify all utility owners known to have facilities affected by the construction of the project. The Contractor shall coordinate the schedule with the utility owners for the necessary adjustments of all affected public or private utility facilities. The utility adjustments may be made either

before or after the beginning of construction of the project. The adjustments will be made by the utility owner or his representative or by the Contractor when such adjustments are part of the work covered by his Contract.

The Contractor shall use special care in working around and near all existing utilities that are encountered during construction, protecting them where necessary so that they will give uninterrupted service. The Contractor shall call the agency concerned for location of all utilities and shall be responsible for any damage to existing utilities and structures resulting from his work around these utilities or structures.

The Contractor shall cooperate with the utility owner, and/or the owner's representative in the adjustment or placement of utility facilities when such adjustment or placement is made necessary by the construction of the project or has been authorized by the City.

In the event that utility services are interrupted by the Contractor, the Contractor shall promptly notify the owners and shall cooperate with the owners and/or the owner's representative in the restoration of service in the shortest time possible.

Existing fire hydrants shall be kept accessible to fire department personnel at all times.

Prior to submitting his bid, the Contractor shall make his own determination as to the nature and extent of the utility facilities, including proposed adjustments, new facilities, or temporary work to be performed by the utility owner or his representative; and as to whether or not any utility work is planned by the owner in conjunction with project construction. The Contractor shall consider in his bid all the permanent and temporary utility facilities in their present or relocated positions, whether or not specifically shown on the plans or covered in the project special provisions. It will be the Contractor's responsibility to anticipate any additional costs to him resulting from such utility work and to reflect these costs in his bid for the various items in the Contract.

Where changes to utility facilities are to be made solely for the convenience of the Contractor, it shall be the Contractor's responsibility to arrange for such changes and the Contractor shall bear all costs of such changes.

15. Inspection of Work

The Transportation Director and his representatives shall at all times have access to the work wherever it is in preparation or progress and the Contractor shall provide facilities for such access and for inspection.

If the specifications, the Transportation Director's instructions, laws, or ordinances or any public authority require any work to be specially tested or approved, the Contractor shall give the Transportation Director timely notice of its readiness for inspection. Inspections by the Transportation Director shall be promptly made, and where practicable at the source of supply. If any work should be covered up without approval or consent of the Transportation Director, it must, if required by the Transportation Director, be uncovered for examination at the Contractor's expense.

The presence of the Engineer or Transportation Director or inspector at the work site shall in no way lessen the Contractor’s responsibility for conformity with the contract. Should the Engineer, Transportation Director or Inspector, at any time before final acceptance or during the contractual warranty period, fail to point out or reject materials or work that does not conform to the contract, whether from lack of discovery or for any other reason, it shall in no way prevent later rejection or corrections to the unsatisfactory materials or work when discovered. The contractor shall have no claim for losses suffered due to any necessary removals or repairs resulting from the unsatisfactory work.

16. Changes in Work

The City of Raleigh Transportation Department, without invalidating the Contract, may direct additional work, extra work or make changes by altering, adding or deducting from the work, the Contract sum being adjusted accordingly. In case the method of construction or character of any part of the work is not covered by the plans, specifications, or contract documents, these provisions shall apply.

The Contractor shall perform all work in accordance with the plans, specifications, standard drawings, and contract documents or that may be modified by written orders and shall do such additional, extra, and incidental work as may be considered necessary to complete the work to the full intent of the plans, specifications and contract provisions. Unless otherwise provided in the contract, the Contractor shall furnish all implements, machinery, tools, materials, supplies, transportation and labor necessary for the prosecution and completion of the work.

When it is necessary to make amendments to the contract to satisfactorily complete the proposed construction or to provide authorized time extensions, the Transportation Director or his agent shall have the authority to enter into a City Change Order (CCO) covering such amendments.

City Change Orders (CCOs) shall become a part of the contract when executed by the Transportation Director or his agent and an authorized representative of the Contractor.

A. Additional Work

Additional Work or alterations of the plans or details of construction shall be governed by NCDOT Specifications for Roads and Structures (Latest Edition) - Section 104-3.

B. Overruns and Underruns in Contract Quantities

Overruns and Underruns in contract quantities shall be governed by NCDOT Specifications for Roads and Structures (Latest Edition) - Section 104-5.

C. Eliminated Contract Items

Eliminated Contract Items shall be governed by NCDOT Specifications for Roads and Structures (Latest Edition) - Section 104-6.

D. Extra Work

Extra Work Items shall be governed by NCDOT Specifications for Roads and Structures (Latest Edition) - Section 104-7.

E. Compensation and Record Keeping

Compensation and Record Keeping for items of work in this section shall be governed by the NCDOT Specifications for Roads and Structures (Latest Edition) 4 Section 104-8. The following items shall be governed by section 104-8:

i. Compensation for Additional Work or Extra work.
ii. Claims for additional compensation.
iii. Claims for additional compensation for suspension of work or alleged suspension of work.

Final Determination will be made by the Transportation Director on all claims for additional compensation before payment of the final project invoice.

F. Claims for Time Extension

All claims for time extension shall be governed by the NCDOT Specifications for Roads and Structures (Latest Edition) - Section 108-10.

The value of any such extra work or change shall be determined by the unit prices named in the Contract, up to but not exceeding 25% of the original Contract total price.

For extra work which exceeds 25% of the original Contract total, the value of any such extra work or change shall be determined in one or more of the following ways:

i. By estimate and acceptance of a lump sum.

ii. By unit prices named in the Contract or subsequently agreed upon.

iii. By cost and percentage or by cost and a fixed fee.

17. Conformity with Specifications

All work performed and all materials furnished shall be in reasonably close conformity with the lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown on the appendix, or indicated in the specifications.

In the event the Transportation Director finds the materials or the finished product in which the materials are used not within reasonably close conformity with the specifications, but that reasonably acceptable work has been produced, he will then make a determination if the work is to be accepted and remain in place. If the Transportation Director agrees that the work is to be accepted, he will have the authority to make such adjustment in Contract price as he deems warranted based upon sound engineering judgment and the final estimate will be paid accordingly.

In the event the Transportation Director finds the materials or the finished product in which the materials are used or the work performed are not in reasonably close conformity with the plans and specifications and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by the Contractor at no cost to the City.

18. Liquidated Damages and Delays

A. Liquidated Damages

If the work cannot be completed within the time stipulated in the Contract, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the City of Raleigh, a fixed and agreed amount, as liquidated damages for each calendar day of delay, until the work is completed, the amount as set forth in the Contract and the Contractor and his sureties shall be liable to the City of Raleigh for the amount thereof. Liquidated damages will not be waived during completion of the final project punchlist, unless the contract time has been extended as allowed by the contract provisions.

B. Excusable Delays

The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due to:

i. Any act or omission of the City outside the scope of the Contract, including extra work; acts of God; unusually severe and abnormal weather conditions; acts of any other contractor in the performance of work for the City; or other conditions, events, or circumstances beyond the control and without the fault or negligence of the Contractor, which the Contractor could not have reasonably anticipated; or

ii. Any delay of any Subcontractor occasioned by any of the causes specified in subparagraph (i) above.

a. Provided, however, the Contractor shall provide written notice to the Transportation Director within ten (10) days from the occurrence, condition, event, or other cause which is claimed to have delayed the completion of the work. Such notice shall state what effect, if any, such occurrence, condition, event, or other cause is claimed to have upon the time for completing the Contract work, and shall state in what respects, if any, the Contract completion deadline should be revised, and the reasons therefore. No claim by the Contractor for an extension of time for completion shall be considered unless notice of such delay claim is given the City in accordance with the provisions of this subparagraph.

C. No Damages for Delays

The City shall not be obligated or liable to the Contractor for, and the Contractor hereby expressly waives any claims against the City for, any damages, costs, or expenses of any nature occasioned by delays, work disruptions or interference, changes in work sequence, work suspension or rescheduling arising from any act or omission of the City outside the scope of the Contract, acts of God, unusually severe and abnormal weather conditions, or other causes beyond the Contractor's control, it being understood and agreed that the Contractor's sole and exclusive remedy in the event of his inability to achieve completion by the Contract deadline due to claimed delays shall be an extension of the Contract schedule, but only if a claim for such extension is properly made in accordance with the provisions of subparagraph (B) above.

19. Opening Sections of Project to Traffic

The City of Raleigh, at its election, may give notice to the Contractor and place in use those sections of the improvements which have been completed, inspected and can be accepted as complying with the technical specifications; and if, in its opinion, each such section is reasonably safe, fit, and convenient for the use and accommodations for which it was intended. On such sections which are open, the Contractor shall conduct the remainder of his operations to cause the least obstruction to traffic. The Contractor shall not be relieved of his liability or responsibility, shall not receive any additional compensation due to the added cost of the work, nor shall he receive any extension of the completion date, by reason of such openings.

The Contractor shall not be responsible for any maintenance cost due directly to the use of such sections. The period of guarantee stipulated in Section 53 – Guarantee of Work, shall not begin to run until the date "of release of final inspection punch list items" for all work which the Contractor is required to construct under this Contract.

20. City's Right to Do Work

If the Contractor should neglect to prosecute the work promptly or fail to perform any provisions of the Contract, the City, after 24 hours written notice to the Contractor, may without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor.

21. Correction of Work Before Final Payment

Before issuing final payment, the Contractor shall promptly remove from the premises all materials condemned by the Transportation Director as failing to conform with the Contract, whether incorporated in the work or not, and the Contractor shall promptly replace and reexecute his own work in accordance with the Contract and without expense to the City and shall bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.

22. Final Inspection, Clean Up and Project Final Acceptance

A. Final Inspection

i. When the improvements contained in this Contract are completed, the Contractor shall notify the Transportation Director or designees in writing that the work will be ready for final inspection on a definite date which shall be stated in the notice. The notice shall be given at least ten (10) days prior to the date stated for final inspection and bear the signed concurrence of the representative of the Transportation Director having charge of the inspection. If the Transportation Director determines that the status of the improvements are accurately represented, the Transportation Director will make the arrangements necessary to have the final inspection on the date stated in the notice, or soon thereafter as is practicable. The Final Inspection Team will include the Transportation Director's representatives and the Contractor. The Final Inspection Team may also include representatives of each department of the City of Raleigh as well as a representative of the North Carolina Department of Transportation.

ii. The Final Inspection Team, on the date agreed upon above, shall make a thorough visual inspection to ensure that the project is satisfactorily completed according to the plans and specifications of the Contract and that all clean-up work is complete.

iii. The Final Inspection Team, following the final inspection, shall prepare a written list of the deficient items and clean-up work that needs to be corrected before the issuance of the Final Acceptance Document. The list shall include a reasonable period of time, agreed upon with the Contractor, allowing for the completion of the deficient items and clean-up work. A copy of the list shall be mailed to the Contractor.

B. Clean Up Work

Clean up work shall include removal of trash, stone, concrete debris and boards in the medians and right of ways. It shall also include removal of all signage and washing of streets and sidewalks as needed.

C. Project Final Acceptance

The Contractor, after finishing all clean-up work and correction of all deficient items, shall notify the appropriate party on the Inspection Team to make a final inspection of the project. If the Final

Inspection Team, during its inspection finds that the deficient items and clean-up work have been satisfactorily completed according to the terms of this Article and the contract specifications, then the Final Inspection Team recommends to the Transportation Director 's Representative to issue the Final Acceptance Document.

23. Payments to Contractor and Retainage

A. Partial Payments

i. Partial payment will be based upon progress estimates prepared by the Transportation Director once each month on the date established by the Transportation Director.

ii. Monthly or partial payments made by the City of Raleigh to the Contractor are monies advanced for the purpose of assisting the Contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the City of Raleigh. Such payments shall not constitute a waiver of the right of the City of Raleigh to require the fulfillment of all terms of the contract and the delivery of all improvements embraced in this contract complete and satisfactory to the City of Raleigh in all details.

B. Retainage

i. Retainage will be deducted in accordance with Section 6 of the Contract documents.

C. Final Payment

i. After final inspection and acceptance by the City of Raleigh and Transportation Director of all work under the contract, the Contractor shall prepare his requisition for final payment which shall be the sum of the Bid unit Prices multiplied by the quantities actually issued or this sum adjusted by approved change orders less prior payments. Final payment request must be accompanied by the Final Payment Affidavit.

ii. The City of Raleigh before paying the final estimate may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment and services to the Contractor, if the City of Raleigh deems the same necessary in order to protect its interest. The City of Raleigh, however, may, if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments so made shall in no way impair the obligations of any surety or sureties furnished under the contract.

iii. Withholding of any amount due the City of Raleigh as "Liquidated Damages", shall be deducted from payments due to the Contractor.

The City may withhold on account of subsequently discovered evidence, nullify whole or part of any certificate to such extent as may be necessary to protect itself from loss on account of:

i. Defective work not remedied.

ii. Claims filed or reasonable evidence indicating probable filing of claims.

iii. Failure of the Contractor to make payments properly to Subcontractor or for materials or labor.

iv. A reasonable doubt that the Contract can be completed for the balance unpaid.

v. Damage to another Contractor.

When the above items have been cleared to the satisfaction of the Transportation Director, payment shall be made for amounts withheld because of them.

24. City's Right to Terminate Contract

If the Contractor should be adjudged as bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of insolvency, or if he should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if he should fail to make prompt payment to Subcontractors or for material or labor, or persistently discharged laws, ordinances or the instructions of the Transportation Director, or otherwise be guilty of a substantial violation of any provision of the contract, then the City, upon the certificate of the Transportation Director that sufficient cause exists to justify such action, may without prejudice to any other right or remedy and after giving the Contractor seven days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools, appliances, there and finish the work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed the unpaid balance, the Contractor shall pay the difference to the City. The expense incurred by the owner as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Transportation Director.

25. Contractor's Right to Stop Work or Terminate Contract

If the work should be stopped under an order of any Court, or other public authority, for a period of three months, through no act or fault of the Contractor or of anyone employed by him, then the Contractor may, upon seven days written notice to the Transportation Director, stop work or terminate this contract and recover from the City payment for all work executed and loss sustained upon any plant or materials and reasonable profit and damages.

26. Liability Insurance

The Contractor shall maintain such insurance as will protect him from claims under workman's compensation acts and such other insurance as will protect him and the City from any other claims for damages for property damage and personal injury, including death, which may arise from operations under this contract whether such operations be by himself, or by any subcontractor or anyone directly or indirectly employed by either of them. Certificates of insurance shall be filed with the Transportation Director, if he so requires, and shall be subject to his approval for adequacy of protection. Policies of insurance coverage for personal liability and property damage shall be submitted.

27. Care of Work

A. The Contractor shall be responsible for all damages to person or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the City of Raleigh.

B. In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization is authorized to act at his discretion to prevent such threatened loss or injury and he shall so act. He shall likewise act if instructed to do so by the City of Raleigh. Any compensation claimed by the Contractor on account of such emergency work will be determined by the City of Raleigh as provided in Section 16 - Changes in Work under General Conditions.

C. The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations.

D. The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the improvements embraced in this contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the City of Raleigh from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the City of Raleigh may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

E. Any claim for damage arising under this contract shall be made in writing to the party liable within reasonable time of the first observance of such damage.

28. Indemnity

The Contractor shall indemnify, save harmless, and defend the City against all losses and claims, demands, payments, suits, actions, recoveries, and judgments of every nature and description brought or recovered against it by reason of any act or omission of the said Contractor, his agents and employees, in the execution of work or in the guarding of it.

29. Safety and Accident Prevention

A. General

The Contractor shall exercise proper precautions at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work. The Contractor shall abide by all applicable safety standards and regulations contained in the Occupational Safety and Health Act, for the construction industry and any other applicable Laws.

i. All excavation and trenching work shall conform to OSHA requirements under 29 CFR Part 1926 Subpart P and any other applicable requirements.

ii. The Contractor shall have an employee who is a designated competent person as described under OSHA regulations, 29 CFR Part 1926 Subpart P. The person shall be capable of identifying existing or predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

iii. The Contractor shall provide and maintain safety equipment as outlined under OSHA 29 CFR Part 1926 Subpart P and other applicable safety provisions, which include trench boxes, ladders, shoring, barricades, warning vests, gas monitors, meter for hazardous atmospheres and other necessary safety equipment to protect the employees and the job site.

B. Records

The Contractor shall maintain an accurate record of all cases of death, occupational diseases, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the contract. The Contractor shall promptly furnish the City of Raleigh with reports concerning these matters.

C. Indemnity

The Contractor shall indemnify and save harmless the City of Raleigh from any claims for damages resulting from personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this contract.

30. Bidding Process and Guaranty Bonds

A. Bidding Process

The City of Raleigh's bidding process policy is regulated by the North Carolina State GS 143 129, GS 143 131 and City of Raleigh Standard Procedure 501 3 which define Formal and Informal public contract.

i. Formal Contracts, as described by GS 143131 and City of Raleigh Standard Procedure 5013(4.1), are those contracts for construction or repair work that require expenditure of $500,000.00 or more; and for the purchase or lease purchase of apparatus, supplies, materials or equipment that require an expenditure of $90,000.00 or more.

ii. Informal Contracts, as described by GS 143131 and City of Raleigh Standard Procedure 5013(4.2), are those contracts for construction or repair work that require expenditure of $5,000.00 to $499,999.00; and for the purchase or lease purchase of apparatus, supplies, materials or equipment that require expenditure of $5,000.00 to $89,999.00.

iii. All Formal Bids as described in 29.01(a), shall be accompanied by a deposit equal to not less than 5 percent of the total amount of the Bid in the form of cash, cashier's check, a certified check or a bid bond by a surety authorized to do business in the State of North Carolina.

B. Guaranty Bonds

i. Guaranty Bonds for Formal Contracts

a. The successful bidder in a formal contract, within ten (10) days after the notice of award is received by him, at the Department of Transportation's request shall provide the City of Raleigh with a contract payment bond and a contract performance bond, each in an amount equal to 100 percent of the amount of the contract. All bonds shall be in conformance with GS 44A33. The corporate surety furnishing the bonds shall be authorized to do business in the State of North Carolina.

b. The successful bidder's failure to execute the contract and file acceptable bonds within ten (10) days after the notice of award is received by him will be just cause for the forfeiture of the bid bond or bid deposit and rescinding the award of the contract. Award may then be made to the next lowest responsible bidder or the work may be readvertised and constructed under contract, or otherwise as the City of Raleigh may decide.

ii. Guaranty Bonds for Informal Contracts

a. The successful bidder, within ten (10) days after the notice of award is received by him, shall provide a performance and payment bond in the amount of 100% of the amount of the contract.

b. No performance bond or payment bond will be required for individual construction contracts if the total cost is less than $100,000.00. A performance bond and payment bond for the full amount of the contract is required for all construction contracts over $50,000.00 if the contract is part of a project with a total cost of over $299,999.99. In place of the bonds the Contractor may deposit money, a certified check, or acceptable government securities.

31. Sanitary Facilities

The Contractor shall furnish, install, and maintain ample sanitary facilities for the workers. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and City of Raleigh. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

32. Use of Premises

A. The Contractor shall confine his equipment, storage of materials, and construction operations to the contract limits as shown on the Drawings or if no contract limits are shown, to the right-of-way shown and as prescribed by ordinances or permits or as may be directed by the City of Raleigh and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.

B. The Contractor shall comply with all reasonable instructions of the City of Raleigh and the ordinances and codes of the City of Raleigh, regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

33. Liens

Neither the final payment nor any part of the retained percentage shall become due until the Contractor, shall deliver to the City a complete release of all liens arising out of the contract, or receipts in full in lieu thereof and, if required in either case, an affidavit that so far as he has knowledge or information the releases and receipts include all labor and materials for which a lien could be filed but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Transportation Director, to indemnify the City against any lien. If any lien remains unsatisfied after all payments are made, the Contractor, shall refund to the City all monies that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

A copy of the Affidavit is included with the Payment Bond Contract and shall be submitted with the Contractor's request for final payment.

34. Working Time Restrictions

A. Intermediate Contract Time No. 1

No work on or street obstruction shall occur during the peak traffic hours of 7:00 a.m.-9:00 a.m. or 4:00 p.m.-6:00 p.m., Monday through Friday, on the following streets.

i. Any street within the City having a marked centerline or having marked lanes.

ii. All streets with five (5) or more traffic lanes at the point of work, all streets with two (2) traffic lanes in each direction divided by a median, and all streets within the Central Business District (CBD), the area bounded by East Street, West Street, South Street, and Peace Street.

Work adjacent to traffic lanes may occur during these hours if proper signage and safety precautions are affected as described in latest edition of the Manual on Uniform Traffic Control Devices.

The Contractor shall have monies withheld due to public inconvenience, obstruction and delay to traffic, safety and other considerations, for any work performed on time restricted streets during 7:00 a.m.-9:00 a.m. or 4:00 p.m.-6:00 p.m., Monday-Friday at the rate of $500.00 for every 15 minutes of violation or fraction thereof.

No traffic lane closure (through or turn lane) shall occur on **Red Alert Days**. Red Alert Days are determined by North Carolina Ozone Forecast Center, Division of Air Quality.

The Contractor shall notify the Transportation Director 48 hours in advance of any work scheduled on weekends.

B. Intermediate Contract Time No. 2

Work within school zones must be performed during hours which do not impact school vehicular and pedestrian traffic. While none of the locations identified for work under this contract are within designated school zones, the Contractor agrees to adhere to work hour restrictions as may be reasonably imposed by the Transportation Director in response to local conditions, safety concerns, or public convenience, including but not limited to the proximity of school zones or other sensitive areas. The Transportation Director shall have the discretion to modify or restrict

work hours in such cases to ensure compliance with applicable regulations or to minimize disruption to local residents and school operations.

The Contractor agrees to adhere to work hour restrictions as may be reasonably imposed by the Transportation Director in response to local conditions, safety concerns, or public convenience, including but not limited to the proximity of school zones or other sensitive areas. The Transportation Director shall have the discretion to modify or restrict work hours in such cases to ensure compliance with applicable regulations or to minimize disruption to local residents and school operations.

Work at these locations shall only be performed **when schools are not in session** or during hours that **do not interfere with student drop-off, pick-up, or school-related traffic**. The last day of the 2025 traditional school calendar is June 11th, 2026 and the first day of the 2026 traditional calendar is August 24th, 2026.

The **Transportation Director** reserves the right to impose, modify, or restrict work hours at any location based on local conditions, safety concerns, proximity to schools or other sensitive sites, and public convenience. These directives shall be considered binding and are intended to ensure public safety and minimize disruption to residents and school operations.

Failure to comply with these restrictions may result in monetary deductions. The **City shall withhold $500.00 for every 15 minutes of non-compliant work activity, or fraction thereof**, when work is performed during restricted hours that adversely impact school traffic or pedestrian safety.

C. Intermediate Contract Time No. 3

Work shall be completed by July 1st, 2027. All work exceeding this date shall result in monies being withheld at the rate of $1,000 per calendar day of violation.

D. Intermediate Contract Time No. 4

The Contractor’s operations shall be conducted in a manner that minimizes interference with traffic and public activities associated with nearby universities and special events. Streets affected include but are not limited to: Faircloth St and Enterprise St.

Due to university move-in activities and associated traffic impacts, no lane closures, road closures, detours, or operations that impede or restrict vehicular or pedestrian traffic shall be permitted from 12:00 A.M. on August 14, 2026, until 12:00 A.M. on August 17, 2026, unless otherwise approved by the Transportation Director.

In addition, due to traffic associated with the North Carolina State Fair, no lane closures, road closures, detours, or operations that impede or restrict vehicular or pedestrian traffic shall be permitted from 12:00 A.M. on October 16, 2026, until 12:00 A.M. on October 27, 2026, unless otherwise approved by the Transportation Director.

The Transportation Director reserves the right to further restrict or modify work hours and operations due to special events, public safety concerns, traffic conditions, or public convenience. For any work performed in violation of these restrictions, the Contractor shall have monies withheld due to public inconvenience, obstruction and delay to traffic, safety concerns, and other considerations at the rate of $500.00 for every 15 minutes of violation or any fraction thereof.

35. Holiday Time Restrictions

The Contractor shall not narrow or close a lane of traffic on any road, detain and/or alter the traffic flow, and/or perform any work on or during holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules without first obtaining approval from the City of Raleigh project representative:

A. For unexpected occurrence that creates unusually high traffic volumes, as directed by the Engineer.

B. For New Year's Day, between the hours of 6:00 P.M. December 31st and 7:00 A.M. January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until 7:00 A.M. the following Tuesday.

C. For Martin Luther King, Jr. Day, Between the hours of 6:00 P.M. Friday and 7:00 A.M. Tuesday.

D. For Easter, between the hours of 6:00 P.M. Thursday and 7:00 A.M. Monday.

E. For Memorial Day, between the hours of 6:00 P.M. Thursday and 7:00 A.M. Tuesday.

F. For Juneteenth, between the hours of 6:00 P.M. the day before Juneteenth and 7:00 A.M. the day after Juneteenth. If Juneteenth is on a Friday, Saturday, Sunday, or Monday, then between the hours of 6:00 P.M. the Thursday before Juneteenth and 7:00 A.M. the Tuesday after Juneteenth.

G. For Independence Day, between the hours of 6:30 A.M. the day before Independence Day and 8:00 P.M. the day after Independence Day. If Independence Day is on a Friday, Saturday, Sunday, or Monday, then between the hours of 6:30 A.M. the Thursday before Independence Day and 8:00 P.M. the Tuesday after Independence Day.

H. For Labor Day, between the hours of 6:00 P.M. Thursday and 7:00 A.M. Tuesday.

I. For Veteran's Day, between the hours of 6:00 P.M. November 10th and 7:00 A.M. November 12th. If Veteran's Day is on a Friday, Saturday, Sunday, or Monday, then between the hours of 6:30 A.M. the Thursday before Independence Day and 8:00 P.M. the Tuesday after Veteran's Day.

J. For Thanksgiving Day, between the hours of 6:00 P.M. Tuesday and 7:00 A.M. Monday.

K. For Christmas, between the hours of 6:00 P.M. the Friday before the week of Christmas Day and 7:00 A.M. the following Tuesday after the week of Christmas Day.

Holidays and holiday weekends shall include New Year's, Easter, Memorial Day, Juneteenth, Independence Day, Labor Day, Thanksgiving and Christmas. The Contractor shall schedule his work so that lane closures are not required during these periods, unless otherwise directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for lane closures according to the time restrictions stated herein and place traffic in the existing traffic pattern.

The Contractor shall have monies withheld due to public inconvenience, obstruction and delay to traffic, safety, and other considerations, for any work performed during Holiday Time Restrictions at the rate of $500.00 for every 15 minutes of violation or fraction thereof.

36. Assignment

Neither party to the contract shall assign the contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any monies due or to become due to him hereunder, without previous written consent of the City Council of the City of Raleigh.

37. Citizen Notification

The Contractor shall be responsible for notifying, in writing, all property owners/residents directly affected by this project just prior to beginning construction. A copy of this notification shall be submitted and approved by the Transportation Director prior to its issuance to the residents. This also includes all businesses whether owned, leased or rented by the property owner of record. Notices are to be mailed and/or hand delivered. Hand delivered notices shall be door-hanger type printed on card stock.

The CONTRATOR shall distribute Notice of Schedule to resurface (prior notifications) a minimum of 1 MONTH in advance of when resurfacing is planned.

The CONTRACTOR shall distribute Notice of Work to be performed a minimum of 24 HOURS but no more than 2 WEEKS prior to performing such work.

In the event resurfacing is scheduled for a weekend or holiday, the notices and signs shall be distributed a minimum of 72 HOURS prior to the resurfacing.

The Contractor shall post “No Parking” signs at least 3 feet above ground in conspicuous places facing traffic a minimum of 24 hours prior to actual resurfacing with a maximum spacing of 100’ of center required. A closer spacing may be required as directed by the Raleigh Police Department. **Parking shall not be restricted for more than 7 days on any street for specific operations unless approved by the City.** It shall be the Contractor’s responsibility to update the “No Parking” signs and work dates with any changes to the project schedule. New signs shall be required at the City’s discretion should signs be removed or become illegible.

The time of day that “No Parking” signs and Notices of Work are posted should be recorded along with the license numbers of cars parked on the street at that time and a copy made available for the Transportation Director and the Police Department if towing is necessary.

If towing is necessary, the City of Raleigh Police Department will make the final decision if the vehicles are to be towed. The time and location in which the “No Parking” signs were posted shall be documented and records provided (photos, etc.) to RPD. The times that Notices of Work were distributed will also be a considering factor for the towing of vehicles.

On the day of actual work, any towing necessary may be carried out under City of Raleigh Codes and shall be initiated by the contractor’s superintendent or their designee. Per city code, towing can be initiated under authority of Section 11-2181 and Section 12-7006, Section A, Paragraph 6. The non-emergency Police contact number is 919-829-1911.

Special permission may be required by agencies performing work within the street right-of-way under the following conditions. This permit may be required when:

A. The traveled portion of the roadway is obstructed between the hours of 7 a.m. to 9 a.m. and 4 p.m. to 6 p.m. if the street involved is marked with either painted center lines or lane lines.

B. Any street which is totally closed to through traffic.

C. Any streets within the Central Business District

The Contractor shall notify the City during distribution of citizen notifications if the street meets the above criteria. Any needed permits shall be coordinated through the Transportation Maintenance Division, Right-of-Way Services in advance. The Transportation Director has the authority to approve or deny issuance of any permit.

38. Separate Contracts

The City reserves the right to let other contracts in connection with this work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate his work with others.

39. Subcontracted Work and Subcontractors

A. The Contractor shall perform a minimum 50% of the work under the contract with his own forces. In addition, the Contractor shall perform the final resurfacing overlay on a minimum 50% of the total number of streets under the contract with his own forces. Unless otherwise stated elsewhere in the contract, the Contractor shall not subcontract more than 50% of the work stipulated in this contract.

B. The Contractor shall, as soon as practicable after the signing of the contract, notify the Transportation Director in writing of the names of subcontractors proposed for the work and shall not employ any subcontractors that the Transportation Director may within a reasonable time object to as incompetent or unfit. The Contractor agrees that he is as fully responsible to the City for the acts and omissions of his subcontractor and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relation between any subcontractor and the City.

C. The Contractor shall obtain approval of subcontractors as well as any change in subcontractors during the work on the contract from the Transportation Director. A period of seven (7) days minimum is required for the approval of a subcontractor.

40. Points and Instructions

The Contractor shall provide reasonable and necessary opportunities and facilities for setting points and making measurements. He shall not proceed until he has made timely demand upon the Transportation Director for, and has received from him, such points and instructions as may be necessary as the work progresses. The work shall be done in strict conformity with such points and instructions.

The Contractor shall carefully preserve benchmarks, reference points and stakes, and in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

41. Status of Transportation Director

The Transportation Director or his duly authorized agent shall have general supervision and direction of the work. He has authority to stop the work wherever such stoppage may be necessary to ensure proper execution of the contract. He shall also have authority to reject all work and materials which do not conform to the contract, to direct the application of force to any portion of the work, as in his judgment is required, and to order the force increased or diminished, and to decide questions which arise in the execution of the work.

42. Transportation Director's Decision

The Transportation Director shall, within a reasonable time after their presentation to him, make decisions in writing on all claims of the City or the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the contract documents. All such decisions of the Transportation Director shall be final.

43. Lands for Work

The City shall provide the lands upon which the work under this contract is to be done, except that the Contractor shall provide land required for the erection of temporary construction facilities and storage of his materials, together with right of access to same.

44. Cleaning Up

The Contractor shall, as directed by the Transportation Director or their designee, remove from the City's property and from all other public and private property, at his own expense, all temporary structures, rubbish, millings, waste asphalt, traffic control devices, equipment and other waste materials resulting from contract operations.

45. Access to Property

The Contractor shall, where necessary, provide and maintain access to and from all properties along the line of his work.

46. Safeguards

The Contractor shall, where necessary, provide and maintain access to and from all properties along the line of his work.

The Contractor shall provide, erect and maintain adequate barricades, warning signs, and lights at all excavations, closures, detours and points of danger.

47. Construction Surveying and Layout

A. The City shall furnish all surveys unless otherwise specified.

B. The Transportation Director will set sufficient points to establish alignment and grade. The Contractor shall be responsible for preserving all stakes and marks.

48. Materials Sampling and Testing

All tests of material shall be made by a recognized and approved testing laboratory designated by the Transportation Director. The expense of such tests shall be borne by the City unless otherwise specified.

The City shall also have right to test and reject materials based on current NCDOT/ACI testing standards.

The Engineer shall have the option to reject request for testing due to the Contractor's inadequate preparation of material or other reasonable causes determined by the Engineer as necessary for the delay of testing. The Contractor shall notify the Transportation Director 48 hours ahead of time for the needed test.

49. Tools, Plant and Equipment

If at any time before the commencement or during the work, tools, plant, or equipment appear to the Transportation Director to be insufficient, inefficient, or inappropriate to secure the quality of the work required or the proper rate of progress, the Transportation Director may order the Contractor to increase their efficiency, to improve their character, to augment their number, or to substitute new tools, plant or equipment as the case may be, and the Contractor must conform to such order; but the failure of the Transportation Director to give such an order shall not relieve the Contractor to secure the quality of work and the rate of progress necessary to complete the work within the time required.

50. Measurement of Quantities

The quantities of work performed will be computed by the Transportation Director on the basis of measurements taken by him or his assistants, and these measurements shall be final and binding. The specifications shall designate the manner in which the measurements of the various types of work shall be measured.

51. Working Day Defined

A day shall be counted as a working day in the opinion of the Transportation Director if conditions would permit the Contractor to do six (6) hours of work within daylight hours. Days of delay due to acts of God, strikes, court orders, and things of like nature causing delay of the work shall not be counted as a working day. The Transportation Director or their designee shall keep a daily record of working conditions and when requested to do so, they shall furnish the Contractor within a reasonable time the number of working days that have elapsed.

Unless crews are on site prior to 1:00 p.m. of any workday, the Transportation Director has the right to refuse any work that the Contractor may do. To start work after 1:00 p.m. on a workday, the Contractor must have prior permission from the Transportation Director. Should this occur, it will be counted as a working day that the Contractor should have worked. It will not be counted as a day of delay. When work is to resume, one (1) day prior notice must be given to the Transportation Director. That work will begin the next day.

Certain sidewalk locations must be removed and replaced on weekends (Saturday and Sunday) due to access, traffic, or operational constraints. Where known in advance, these locations will be identified in the Contract documents. Additional weekend work locations may be designated at the discretion of the Transportation Director. In such cases, the City will provide advance notice to the Contractor, and a mutually agreed-upon date will be scheduled for the weekend work to proceed.

52. Project Time Defined

Project time shall consist of all calendar days, including weekends and holidays, from the contract notice to proceed date through the specified number of days allowed for the completion of the project in the contract document. The Contractor has been given a project time inclusive of an anticipated amount of bad weather, be it due to the winter months or abnormal rainfall during the remainder of the calendar year.

53. Guarantee of Work

The Contractor shall guarantee his work performed under his contract against failures or trouble due to faulty workmanship or materials for a period of twelve (12) months from the date of acceptance of the work.

54. Force Account Work

Force account work shall be performed when pricing associated with changes in work in Item 15 cannot be agreed upon by the City and Contractor.

No work shall begin without the express approval of the Transportation Director or his authorized agent.

All information shall be submitted and approved along with recordkeeping performed in accordance with the North Carolina Department of Transportation Standard Specifications Article 109-3.

55. Disposal of Waste Materials from Street and any Other Types of Construction

Disposal of all waste material from construction sites shall be made in strict accordance with all City ordinances pertaining to disposal of construction waste. It shall be the responsibility of the Contractor to secure the necessary permits and provide all information required to secure said permits. The Contractor shall designate the disposal site prior to beginning construction and in the event waste material is to be disposed of on private property a letter from the property owner shall be furnished to the Transportation Director granting the Contractor or his agent such permission and listing the requirements made by the property owner or the Contractor, if any.

56. Contractor License

All invited bidders and contractors shall be advised that those who submit formal bids on this project must be licensed in the State of North Carolina whether he (they) is/are a resident or nonresident of this State, in accordance with GS 87 10 and shall be advised that they must show evidence of a license issued by the North Carolina Licensing Board for General Contractors before the bid is considered. The bidders are advised that Article 39, “Subcontracted Work and Subcontractors,” of the General Conditions shall be strictly adhered to during the term of this contract.

All contractors shall have an active unclassified or highway general contractor’s license.

57. Emergency Work Crew

The Contractor and/or the Contractor's subcontractors shall provide an emergency repair crew with adequate trucks and other equipment available when needed to make repairs, clean up, signing and other work required in connection with this contract. This repair crew shall be on call during nonworking hours and during weekends and holidays. The name, address and phone number of at least two responsible members of this crew shall be provided the Transportation Director or his representatives prior to beginning any work. The members of this crew shall be based, reside, live or stay in Wake County during the periods that they are on call. Should this "emergency" crew be unavailable for any reason when needed, the City shall have the right to have the required work performed by the quickest means available and the Contractor shall be back charged at a rate of two (2) times the total cost to the City.

58. Construction Water

A. Contractors are responsible for securing adequate construction water for their job sites.

B. All construction water usage must be metered and will be billed to the Contractor. The Contractor must contact the Public Utilities Department, Meter Services Division (919-996-3245) to make the applicable arrangements for billing the water usage. The Contractor may provide his own meter or if available upon advance notice to the Public Utilities Department, a meter will be provided. If the Contractor provides his own meter it must meet City standards for the meter and include a backflow device.

C. Construction water for all City contract projects shall be billed by the City of Raleigh, Public Utilities Department.

D. Contractors must furnish the following information for water usage.

i. Meter location and project name.

ii. Address where applicable and responsible party name.

iii. Duration of use and frequency of meter reading.

E. Contractors observed using unmetered water will be fined by the City of Raleigh, Public Utilities Department in accordance with City Code provisions.

F. Contractors are to reference the Public Utilities Handbook, Part 10, entitled Construction Specifications for Water and Sewer Mains, for additional regulations applicable to construction water usage.

59. Business Assistance Program (BAP) for Minority and Woman-Owned Business Enterprises

A. General

General contract bidders on City of Raleigh contracts are encouraged to include Minority and Woman-Owned Business Enterprises in the performance of contracts and subcontracts for construction and material supply as outlined by City Standard Procedure No. 505 2. MWBE businesses are those having at least 51% ownership by an individual or individuals classified as a racial minority or a female. The City of Raleigh has adopted a goal of 15% for participation by MWBE businesses in contracts over $5,000 awarded for construction by the City. Bidders are to become familiar with the City's BAP guidelines. A copy of these guidelines is available at the office of Business Assistance Program Coordinator.

B. Procedures

i. All bidders shall make a good faith effort in the recruitment and selection of MWBE businesses as specified in the guidelines.

ii. The low bidder shall complete the Bidders Report of Subcontractors Selection and Efforts to obtain Minority and Women-Owned Business Enterprise Subcontractors form. A copy of the form is contained elsewhere within the contract document. The form shall be submitted to the office of the Transportation Director within seventy-two (72) hours after the opening of bids.

iii. All bidders shall complete and submit with their bid the Minority and Women-Owned Business Enterprise Subcontractor/Material Supplier Documentation form. A copy of the form is contained elsewhere within the contract document.

iv. If the Contractor desires to utilize a subcontractor or material supplier who is not listed in the Business Assistance Directory or who is not approved by the NCDOT, he should contact the City's Business Assistance Program Coordinator to obtain assistance for certification of the subcontractor or material supplier.

v. A copy of the Current Business Assistance Program Directory is available from the office of the Transportation Director or the Business Assistance Program Coordinator and is free upon request.

vi. The City of Raleigh is also interested in on-the-job opportunities and training programs which expressly include minorities and women. Documentation regarding these programs

is solicited and can provide assistance in reaching the intent of the Business Assistance Program.

60. Dust Control

The Contractor shall, as directed by the Transportation Director provide adequate equipment and use other available means to control the dust during the term of this contract. Failure on the part of the Contractor to correct dust control problems as directed will result in the Transportation Director notifying the Contractor to comply with the contract provisions. In the event that the Contractor fails to begin such remedial action within 24 hours after receipt of such notice, the Transportation Director may proceed to have the work performed with other forces. The actual cost of the work so performed along with a 20% administrative fee will be deducted from monies due to the Contractor on his contract. Under adverse conditions, the Transportation Director may choose to suspend the Contractor's operations on the project until all dust control problems have been completed to his satisfaction. Such suspension will not justify an extension of contract time.

61. Traffic Control

All traffic control shall be performed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices, MUTCD, and City of Raleigh Code of Ordinances, Part 11, Chapter 2, Article L and Part 11, Chapter 6.

The contractor shall provide all traffic control devices and signs including Portable Changeable Message Signs (PCMS) in accordance with MUTCD to warn the traveling public. PCMS are required on all streets with four (4) or more marked lanes or traffic volume as designated by the City. PCMS shall be installed at least three (3) days in advance of work and maintained throughout the duration of the work.

Traffic control plans and pedestrian plans shall be required for marked streets or as directed by the Transportation Director or their designee to meet site conditions. Plans shall be approved before commencement of the work.

Two-way traffic shall be maintained at all times unless otherwise approved by the traffic control plan. Total road closures shall not be allowed.

Any work performed without traffic control per MUTCD, will not be paid for by the Owner.

62. Clearing Tree Limbs and Vegetation

It shall be the responsibility of the Contractor to remove vegetation and tree limbs less than 6” in diameter from the street right-of-way that present an obstruction to performing street maintenance on the streets listed in the Contract. No separate payment will be made for clearing tree limbs and vegetation as such work will be incidental to resurfacing.

The Contractor shall notify the City at least 30 days in advance of the scheduled work of any tree limbs 6” diameter or greater for the City to have removed.

The Contractor shall notify the City at least 30 days in advance of the scheduled work of any shrubs or ornamental trees on private property that overhang into the right-of-way and present an obstruction. The City will arrange for the obstruction to be removed.

STANDARD GENERAL PROVISIONS

All construction shall conform to pertinent OSHA requirements, City of Raleigh Standards and Specifications, and NCDOT Standard Specifications for Roads and Structures. Editions in effect at the time of the bid date shall govern.

1. Construction Progress Schedule and Monthly Meetings

The Contractor shall provide, at the pre-construction conference, a completed City of Raleigh progress schedule. The schedule shall be kept up to date and presented with each month's billing information and shall be made available at the bi-weekly progress meetings and at other times as may be deemed necessary by the Transportation Director or his representative. The Contractor will be represented at bi-weekly progress meetings during the construction of this project. The meetings will be held at the project site or in the City offices as determined by the City.

2. Contract Completion and Progress Schedule Liquidated Damages

This contract shall be completed no later than July 1st, 2027.

Failure to complete the work within the contract time will result in damages due to public inconvenience, obstruction and delay to traffic, safety and other considerations. For each consecutive calendar day in excess of the contract time specified, the Contractor shall pay, or have withheld monies due, a sum of one thousand ($1000.00) per day. See Contract Article 3, Time of Commencement and Completion.

3. Unit Bid Price

The unit bid price on the items in this contract shall include all materials, labor, equipment, and incidentals necessary to satisfactorily install said items completely in place and accepted unless otherwise mentioned in this contract document.

4. Point of Contact

The Contractor upon start of construction shall provide the Engineer or City Designee with names, addresses, and telephone numbers of two people to be contacted after office hours in case of emergency.

5. Material Tickets

The Contractor shall turn in all material tickets for the purpose of payment to the Project Inspector on a daily basis.

6. Trenches

All trenches shall be backfilled and made safe at the end of each workday. Payment for installation of utility and drainage lines that requires open cut to existing pavement shall include the cost of pavement for repairs (including pavement saw cut and removal) as incidental to the installation of the utility. No separate payment will be made for this work unless otherwise specifically mentioned in this contract.

7. Subsurface Investigation

The Contractor shall make his/her own subsurface investigations. Any information obtained by the City as a result of its own subsurface investigations will be made available upon request. This information is provided for informational purposes only and shall not relieve the Contractor of responsibility for making his own investigations.

8. Grading, Shoulders and Slopes

Shoulders and slopes shall be free of all stone and clods that exceed one inch in diameter. Fine grading (raking) shall take place just before seeding and mulching. No separate payment will be made for shoulder construction or material for shoulder construction as all work necessary to complete the work will be considered incidental to other items in the contract unless otherwise provided in the contract.

All lawns, utility strip, and other areas adjacent to the newly constructed sidewalk shall be graded back to an elevation even with the existing sidewalk and shall have a smooth tie in.

9. Traffic Control

The Contractor shall provide all traffic control devices and signs including portable changeable message signs to warn the traveling public in accordance with the latest Manual on Uniform Traffic Control Devices (MUTCD). Two-way traffic shall be maintained at all times, unless otherwise required by the traffic control plan.

Traffic Control items shall be incidental to other items of work in this contract. No direct payment will be made for traffic control.

10. Materials and Equipment Storage

When vehicles, equipment, and materials are not being actively used they shall be moved at least 30 feet away from the edge of any travel way open to traffic (or as directed by the Engineer). All debris shall be immediately moved to a location at least 30 feet from the edge of any travel way open to traffic. If vehicles, equipment, materials, and debris are protected by guardrail or barrier, a 5-foot minimum offset from the rail shall be used.

11. Personnel Parking

A. Personnel
   i. All personnel involved with construction operations shall not park their personal vehicles within the right of way of the project limits for the duration of the construction project. The Contractor shall furnish a parking area that is located off the project limits. The Contractor shall be responsible for daily transportation of all employees to and from the provided parking area and the project site.
   ii. The contractor shall not park equipment on existing sidewalk whenever possible as to limit damage to existing facilities.
   iii. There will be no direct payment for the work covered by this provision. Payment at the contract unit prices for the various items in the contract will be full compensation for all work covered by this provision.

B. Truck Parking
    i. Trucks shall park and/or stage within designated work areas or nearby streets within City of Raleigh right of way. Parking on private property is prohibited without express written permission from the property owner.

12. Sidewalk, Driveway, Curb & Gutter Removal and Replacement

Care should be taken during construction to avoid damaging the existing sidewalk, curb & gutter and pavement outside the immediate construction area. If damaged, it shall be replaced in accordance with the NCDOT Standard Specifications for Roads and Structures/City of Raleigh Standards, as determined by the Engineer, without extra cost to the City. Prior to construction, the Contractor shall inspect the site and report to the Engineer any damages existing before construction.

The Contractor shall be advised that when a portion of any area of concrete driveways, curb and gutter and pavement must be removed, all areas to be removed shall be defined by a machine-sawed joint, prior to removal. Saw cut of concrete driveway, curb & gutter and pavement are considered incidental to removal unless otherwise provided in the contract.

13. Maintenance of Mailboxes, Signs, Miscellaneous Appurtenances

The Contractor shall be required to maintain mailboxes, signs and all miscellaneous appurtenances impacted by construction activities in working order for the duration of construction as directed by the Engineer. Work on the same items shall be done in a timely manner. No separate payment for work on these items will be made as the work will be considered incidental to other items in the contract unless otherwise mentioned in the contract document.

14. Project Completion

When the project is nearing completion, the City will obtain comments from the impacted property owners concerning items that are outstanding, yet to be completed. The Engineer will determine which items have sufficient justification to be included in the final punch-list, and the Contractor will be required to complete these items with no additional payment and in a timely fashion.

15. Coordination with Utility Companies

(See Article 14 of General Conditions)

Utilities as shown on the plans are intended to represent general locations only. It shall be the responsibility of the Contractor, prior to construction, to contact appropriate utility owners and precisely locate utilities that could be affected by the proposed construction. If the utility belongs to the City, the Contractor shall dig sample holes to uncover the utility. The digging of sample holes shall be coordinated with the Engineer who will determine the number of such holes and will schedule the City Surveyor to locate utility vertical and horizontal locations. There is no line item to pay for digging work. Work is considered incidental to other pay items.

The Contractor shall be responsible for repair of any damage to the utility as well as any other damage may be caused due to the disturbance of the utility. The Contractor will not be permitted to submit any claims for delays caused by utility relocation and proposed utility construction.

The City has coordinated designs of utility relocation with private utility owner representatives. Existing utility, design and conflict resolution plans are included as a part of the contract.

The Contractor shall be responsible for coordinating concurrent construction directly with utility owner representatives. Coordination efforts and concurrent construction conflicts will be addressed and discussed during

the pre-construction meeting. The City, at the time of pre-construction conference, will provide names, addresses and telephone numbers of private utility owner representatives.

All underground utilities may not have been identified. The Contractor shall call North Carolina One Call to identify underground utilities before starting any digging and/or excavation operation.

The Contractor shall be responsible for field verifying heights and locations of power lines and will be required to maintain the distance from the power lines in accordance with local, State and Federal Safety regulations.

16. Protection of Existing Plants

The work under this item shall consist of the protection of selected trees, shrubs, or other woody plants.

The plants protective fencing shall meet the requirements of City of Raleigh Standard Drawing 50.02. Fencing shall encompass the plants to the drip-line. Deviations from this must be approved by the Engineer.

Plant protective fencing shall be installed prior to beginning any construction on this project. Plant protective fencing shall be constructed at the locations as directed by the Engineer and in accordance with City specification. The fencing shall be maintained in place until all construction operations in that particular area are complete. At completion, only light grading equipment such as small agricultural tractors shall be allowed on the plants' roots. Fill dirt no deeper than two inches shall be allowed under the limb spread of any plant.

No building materials, dirt, or equipment shall be stored inside the protective fencing. Plants that die as a result of the Contractor’s negligence shall be removed and replaced as directed by the Engineer at the Contractor’s expenses. The new plant shall be guaranteed for a year, planted in the proper season, and planted with approved arboricultural specifications.

The Contractor will be required to cooperate with other contractors, utility companies and others needing access to the project site as (approved by the engineer) to complete the work.

SECTION 1: MOBILIZATION

Description

This work consists of preparatory work and operations to mobilize personnel, materials, and equipment to the project site.

Measurement and Payment

Mobilization will be paid as the contract lump sum price when the contractor initially mobilizes. Contractor may elect to either draw fractions of the lump sum throughout project or the whole lump sum once.

SECTION 2: RESURFACING

Trackless Tack

Description

Trackless tack shall be used as the tack coat material. In the event that trackless tack is unavailable, standard tack coat material that meets NCDOT Standard Specifications shall be used. Standard tack material shall be incidental to the asphalt surface course. The trackless tack coat unit rate will be paid on a per ton basis of asphalt placed.

Weather Limitations

Apply tack coat material to existing asphalt or concrete surfaces in accordance with NCDOT Specifications. Apply tack coat only when the surface to be treated is sufficiently dry and when the atmospheric temperature in the shade away from artificial heat is 35 degrees or above. Do not apply tack coat when the weather is foggy or rainy.

Surface Preparation

Ensure that the existing asphalt or concrete surface is free of all dust and foreign material before applying the tack coat. Remove grass, dirt and other materials from the edge of the existing pavement before the placement of tack coat.

Application Rates and Temperatures

Apply tack coat uniformly across existing surface at target application rates shown in Table 605-1.

TABLE 605-1
APPLICATION RATES FOR TACK COAT

Existing Surface	Target Rate (gal/sy)
	Emulsified Asphalt
New Asphalt	0.04 ± 0.01
Oxidized or Milled Asphalt	0.06 ± 0.01
Concrete	0.08 ± 0.01

Apply tack coat at a temperature within the ranges shown in Table 605-2. Tack coat shall not be overheated during storage, transport, or at application.

TABLE 605-2
APPLICATION TEMPERATURE FOR TACK COAT

Asphalt Material	Temperature Range
Asphalt Binder, Grade PG 58-28 or PG 64-22	350 – 400°F
Emulsified Asphalt, Grade RS-1H	130 – 160°F
Emulsified Asphalt, Grade CRS-1	130 – 160°F
Emulsified Asphalt, Grade CRS-1H	130 – 160°F
Emulsified Asphalt, Grade HFMS-1	130 – 160°F
Emulsified Asphalt, Grade CRS-2	130 – 160°F

Application of Tack Coat

If public traffic is being maintained, cover the tack coat in the same day's operation. Provide safe traffic conditions. If needed, apply suitable granular material so it bonds to the tack coat. In addition, the Engineer may limit the application of tack coat in advance of the paving operation depending on traffic conditions, project location, proximity to business or residential areas or other reasons.

Take necessary precautions to limit the tracking or accumulation of tack coat on either existing or newly constructed pavements. Excessive accumulation of tack coat requires corrective measures.

Apply tack coat with a distributor spray bar that can be adjusted to uniformly coat the entire surface at the directed rate. Use a hand hose attachment only on irregular areas and areas inaccessible to the spray bar. Cover these areas uniformly and completely.

Apply tack coat as directed by and in the presence of the Engineer. Do not place any asphalt mixture until the tack coat has sufficiently cured.

Apply tack coat to all exposed transverse and longitudinal edges of each course before mixture is placed adjacent to such surfaces. Apply tack coat to contact surfaces of headers, curbs, gutters, manholes and vertical faces of old pavements.

Sand, screenings, or other environmentally safe products may be required to prevent tracking the tack coat onto adjacent streets, when directed by the Transportation Director. The sand screenings shall be minimum length in order for a haul truck tire to make one full rotation and remain in contact with the screenings. The width shall be the same as the existing roadway. The Contractor shall remove screening materials placed to eliminate tracking upon completion of paving operations each day.

Tack coat material will not be tolerated on the exposed face of curb and gutters. If this occurs, the tack shall be removed as soon as practicable. Special attention shall be utilized while paving in areas with existing granite curb and gutter.

Asphalt Concrete Plant Mix Pavements

Description

Perform the work covered by this section including, but not limited to, the construction of one or more courses of asphalt mixture placed on a prepared surface in accordance with these Specifications and in reasonably close conformity with the lines, grades, thickness and typical sections shown on the plans.

This work includes producing, weighing, transporting, placing and compacting the plant mix; furnishing aggregate, asphalt binder, anti-strip additive and all other materials for the plant mix; furnishing scales; maintaining the course until final acceptance of the project; making any repairs or corrections to the course that may become necessary; providing and conducting QC as specified in Section 609; and surface testing of the completed pavement.

Perform all activities in accordance with the NCDOT Asphalt Quality Management System (QMS) Manual in effect on the date of contract advertisement.

Asphalt Concrete Surface Course Type S9.5B or S9.5C, as directed by the Engineer, shall be used. It shall be in accordance with Section 610 of the NCDOT Standard Specifications for Roads and Structures.

Asphalt Leveling Course

Asphalt paving consisting of a leveling course may be required on specific streets. This shall be performed as determined by the Transportation Director and at the same unit price as noted in the Contract. In the event a leveling course is required, this shall be performed prior to the installation of any surface treatment applications if applicable.

Mill & Fill Operations

Streets designated as Mill & Fill shall have lanes milled, cleaned, and paved back by the end of the work shift. Traffic is not allowed to ride on the milled surface. Utility adjustments and patching, as needed, shall be performed prior to the Mill & Fill operation. Mill & Fill operations shall be performed within 7 days after patching on such streets.

Cleaning Streets

It shall be the responsibility of the Contractor to thoroughly clean the street before resurfacing. Any leaves, vegetative material, and debris shall be removed from the Public Right of Way. Depositing any debris or other material behind the curb will not be permitted. If large piles of leaves or other debris exist that in the opinion of the Transportation Director are in excess of that which is required for the Contractor to remove, they shall be removed by the Transportation Director provided adequate notice is given for this purpose.

The Contractor shall clean each street of waste materials resulting from his own operations no more than 2 days after the final overlay is complete. Should this period of time be exceeded, all resurfacing operations shall be suspended until streets are clean.

Infrastructure Damage

The Contractor shall be responsible for repairing any damage to the City of Raleigh's infrastructure. This includes damage to curb & gutter and pavement. Tack will not be tolerated on the exposed face of curbs and/or gutters. If this occurs, the tack shall be removed immediately. Special attention shall be utilized while paving in areas with existing granite curbs and gutter.

Resident Notification

The Contractor's attention is directed to Article 46, 'Safeguards' of the General Conditions. In addition to the above, it shall be the responsibility of the Contractor for notification of residents before commencement of work in accordance with the City Code. A copy of the notification will be provided to the Contractor by the Transportation Director.

Paving Lift Requirements and Time Limitations

For milling and paving lifts of 2.0 inches or less, bring all newly resurfaced lanes to the same station and elevation within 72 hours. If not brought up to the same station and elevation within 72 hours, the contractor shall place portable “Uneven Pavement” signs in advance of the uneven pavement and spaced every ½ mile along the section of uneven pavement. Once mitigated, all portable “Uneven Pavement” signs shall be removed. No additional compensation will be made for these signs or any other type of portable warning signs as these are included in the Temporary Traffic Control pay item.

For milling and paving lifts greater than 2 inches, bring all newly resurfaced lanes to the same station and elevation by the end of each work day unless the Contractor utilizes the notched wedge paving methods. Longitudinal joints 2” or greater in difference of elevation shall not be permitted within a travel lane.

AC Adjustment

Price adjustments for asphalt binder for surface course plant mix will be made in accordance with section 620 of the NCDOT Standard Specifications as modified herein.

When it is determined that the monthly selling price of asphalt binder on the first business day of the calendar month during which the last day of the partial payment period occurs varies either upward or downward from the base price index, the contract unit price for asphalt binder for plant mix will be adjusted. The adjusted contract unit price will be determined by adding the difference between the selling price and the base price index to the contract unit bid price for asphalt binder.

The adjusted contract unit price will then be applied to the theoretical quantity of asphalt binder authorized for use in the plant mix placed during the partial payment period involved, except that where recycled plant mix is used, the adjusted unit price will be applied only to the theoretical number of tons of additional asphalt binder materials required by the JMF.

Adjusted contract unit prices for all grades of asphalt binder, including additional asphalt binder materials in recycled mixtures, will be based on the average selling price and base price index for asphalt binder, grade PG 64- 22, regardless of the actual grade required by the JMF.

In determining the adjusted contract unit price for any material specified in this section the following formula will be used:

Where:

A = B + (D - C)

A = Adjusted Contract Unit Price

B = Contract Unit Price

C = Base Price Index

D = Monthly Average Terminal F.0.B. Selling Price

In the event the Department is unable to secure and F.O.B. selling price from at least 4 terminals in a given month, payment will be at the contract unit price for each ton of asphalt binder used in the work during that month.

Measurement and Payment

Asphalt Concrete Surface Course, Type 9.5B and *Asphalt Concrete Surface Course, Type 9.5C* will be measured and paid as the actual number of tons of each type of hot mix asphalt pavement incorporated into the completed and accepted work in accordance with NCDOT Standard Specifications for Roads and Structures, Article 106-7.

Trackless Tack is to be paid by the ton of Asphalt Concrete Surface Course, Type S9.5B & S9.5C placed. If standard tack is used, it shall be incidental to the placement of Asphalt Concrete Surface Course, Type S9.5B & S9.5C.

Asphalt Binder, Type PG 64-22 will be measured and paid as the theoretical number of tons required by the applicable JMF based on the actual number of tons of plant mix completed and accepted on the job.

There will be no direct payment for anti-strip additive. Payment at the contract unit prices for the various asphalt plant mix items will be full compensation for the work.

Asphalt Binder will be compensated for Asphalt Surface Course only.

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SECTION 3: UTILITY ADJUSTMENTS

Description

The work covered in this section consists of the adjustment of manholes, water valve boxes, and other utilities in the roadway. The Contractor shall complete the work in strict accordance with City of Raleigh Standards and Specifications, NCDOT Standard Specifications for Roads and Structures, and AC Specifications.

Standards for Manhole and Valve Box Adjustments

Manholes in Streets

All manhole covers installed within streets, parking lots, and other paved areas shall have only one (1) one-inch hole, which shall be off center, unless seal-down manholes are required. All covers must be domestically cast and so indicated by manufacturer name and "USA" in castings. Covers shall have "DANGER PERMIT REQUIRED - CONFINED SPACE DO NOT ENTER" cast onto the face as shown in Details W-20 and S-29.

Manhole rings and covers shall be manufactured to the dimensions shown on Details S-25, SW- IO.10, and W-20 and shall be made from Class 30 gray iron, meeting the requirements of ASTM A48-94ae I. Covers shall have the appropriate facility name cast onto the face as shown in Details S- 25, SANITARY SEWER; SW-10.10, STORM SEWER; or W-20, WATER.

All existing manholes on full-mill streets shall be retained, numbered and tracked for reuse by the contractor as a part of the utility adjustment. Existing manholes on all streets that have been determined by the Transportation Director or their designee to be damaged shall be replaced by the Contractor.

Water Valve Boxes

Adjustable water valve boxes shall be Class 35 gray cast iron and manufactured in accordance with ASTM A48 and be of the dimensions specified in Detail W-17 of these specifications. Lids shall have the word "WATER" cast into the lid. See Detail W-18. All castings must be domestically cast and so indicated by the manufacturers name and "USA" cast into all sections of the valve box. All castings must meet or exceed AASHTO H-20 load rating.

The Contractor shall provide new valve boxes and lids that are approved by the City of Raleigh Public Utilities Department. The unit rate shall include the cost of purchase and installation.

Sewer Test Station Boxes

Adjustable water valve boxes shall be Class 35 gray cast iron and manufactured in accordance with ASTM A48 and be of the dimensions specified in Detail S-20A of these specifications. Lids shall have the word "TS" cast into the lid. All castings must be domestically cast and so indicated by the manufacturers name and "USA" cast into all sections of the valve box. All castings must meet or exceed AASHTO H-20 load rating.

Adjustment of Sewer Test Stations shall be compensated as a Water Valve Box Adjustment.

Construction Methods

Adjustments on all manhole and valve boxes will not exceed a tolerance of more than ¼ inch from finished grade as measured with an 8-foot straightedge.

Manholes and valve boxes will be centered and aligned for proper access to manhole or operating nut on valves. Necessary precautions will be taken to prevent debris from falling into these structures and interfering with proper operation of said utility.

For valve boxes make a circular cut 1' from the outside edge of the valve box. Top section of each valve box shall be completely removed to allow proper tamping of materials before final adjustment is made. All material around manholes and valve boxes shall be tamped to a minimum of 95 percent compaction before placing concrete.

Floor the inside of the manhole with some material to catch any debris that may fall inside the manholes during construction.

For manholes, make a circular cut 2' from the outside edge of the manhole. With pick and shovel remove the broken debris down to a depth in accordance with City of Raleigh Standard Manhole Frame and Cover Detail Within Paved Surfaces.

Remove the ring and cover and set it off to one side. Do not try to raise or adjust the manhole with the ring in place.

Mix the mortar. Mortar shall be composed of one (1) part Portland Cement (and may contain no more than I0 percent lime, based on the volume of cement) and two (2) parts clean sand. Mortar will be mixed in a clean, tight mortar box or mechanical mixer and will be used within 45 minutes after mixing. It will be a fairly stiff mixture so it can be shaped.

Starting on a solid foundation, raise the top of the manhole with a level, solid layer of mortar or mortar and bricks. If bricks are used, they must be laid solid leaving no voids or empty spaces. The final product must be a smooth, level area so that the entire width of the flange on the bottom of the manhole ring will be sitting on a solid, uniform bearing surface.

After the manhole has been properly brought up to the desired level, set the ring back in place and fill the hole around the outside of the casting for a minimum depth of 8" with 3000 PSI ready-mix concrete having no more than a 4-inch slump.

Set and leave a reflectorized barricade equipped with a working flashing warning light over the utility until such time required for the concrete to set/harden to a point where traffic will not damage the utility.

Raised utility castings shall be painted with reflectorized fluorescent paint to warn the traveling public of this condition.

Any utility raised more than one (1) inch above the existing grade shall have asphalt or NCDOT approved manhole safety ramp placed as a wedge around such utility.

All utilities that are removed for milling shall have a steel plate of sufficient thickness to support vehicle traffic placed in the bottom of the excavation. The excavation shall be backfilled with compacted hot mix asphalt. Any debris that falls into the utility shall be removed immediately.

All utility work areas shall be maintained in satisfactory condition until the final pavement layer is placed. Final paving layer shall be placed at least 72 hours after the placement of concrete around utilities.

Utility Risers

If the decision is made by the Engineer to selectively utilize NCDOT approved risers, the Contractor shall provide and install manhole and water valve box risers immediately prior to resurfacing. No cast iron risers will be allowed for the adjustment of manholes.

Raised Utilities

No manholes or valve boxes shall be raised and left for a period of time greater than 14 days before the street is resurfaced. Should this period of time be exceeded, utility adjustments shall be suspended until the resurfacing of such streets has been completed.

Utility Adjustments for Milling

The Contractor shall be required to adjust the manhole and water valve boxes prior to milling in accordance with Construction Methods.

If the decision is made by the Engineer not to adjust (lower and raise) utilities on selected streets, asphalt shall be milled and/or chipped from around existing utilities to a depth equal to the new asphalt depth.

Chipping around utilities shall only be performed by hand operated pneumatic tools or by pick and shovel. At no time shall heavy or mini track/wheel equipment be used to chip around utilities. As an alternative, small milling heads on backhoes, track loaders, or mini excavators may be used to chip the bulk of the material, with final cleanup around the utility done by hand tools.

Utilities removed for milling shall not be removed for more than 14 days. Should this period of time be exceeded, utility adjustments and milling on all other streets shall be suspended until utilities are raised on such streets.

Manhole frames and lids removed for milling and designated for reuse shall be paired together. This may be done by labeling, numbering or other means that clearly identifies the frame and lid go together. Any manhole frames and lids returned for reuse that are not labeled appropriately will be replaced with new frames and lids at the contractor's expense.

Measurement and Payment

Manhole Adjustment (Raise Only) shall be paid by the number of manholes raised by adjustment.

Water Valve Box Adjustment (Raise Only) shall be paid by the number of water valves or test stations raised by adjustment. Payment shall include new water valve boxes and lids.

Manhole Adjustment - Oversize (Raise Only) shall be paid by the number of manholes raised by adjustment.

Manhole Adjustment (Lower/Raise), Manhole Adjustment Oversize (Lower/Raise) shall be paid by the number of utilities when the final raise adjustment has been completed.

Water Valve Box Adjustment (Lower/Raise) shall be paid by the number of water valves and test stations when the final raise adjustment has been completed. Payment shall include new water valve boxes and lids.

Milling 1' Chipping Around Utility Not Adjusted shall be paid by the number of utilities that have been left in place and milled/chipped around. Utilities on mill and fill streets shall be considered under this pay item except in cases where the utility is adjusted prior to mill and fill operations.

Provide and Install Manhole Risers and *Provide and Install Water Valve Risers* shall be paid by the number of utilities that have been left at existing grade and the Engineer has approved the use of NCDOT approved risers.

Provide New 7.5" Manhole Frame and Cover and *Provide New 4" Manhole Frame and Cover* shall be paid by the number of new manhole frames and covers typically on full mill streets and as directed by the Engineer.

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SECTION 4: SIDEWALK ACCESS RAMPS, CURB AND GUTTER, DRIVEWAY APRON AND CONCRETE BIEKWAY CONSTRUCTION

Description

The Contractor shall complete the work in this section in strict accordance with City of Raleigh Standard Details and ACI Specifications. The project consists of constructing or reconstructing identified intersections with sidewalk access ramps. The location of each facility may vary due to existing catch basins, fire hydrants, poles, or other constraints. Prior to beginning any construction, each work site shall be examined by the Contractor and the Transportation Director, at which time the Transportation Director will give specific direction as to the concrete removal limits and location of the new facility.

Sidewalk Access Ramps Construction

North Carolina General Statute 136-44.14 requires that all street curbs being constructed or reconstructed for maintenance procedures, traffic operations, repairs, corrections of utilities, or altered for any reason after September l, 1973 shall provide sidewalk access ramps for the physically handicapped at all intersections where both curb and gutter and sidewalks are provided and at the other points of pedestrian flow. In accordance with the MUTCD, an accessible detour shall be provided for pedestrian traffic during construction of sidewalk and/or sidewalk access ramps.

In addition, Section 228 of the 1973 Federal Aid Highway Safety Act requires provision of curb ramps on any curb construction after July l, 1976 whether a sidewalk is proposed initially or is planned for a future date.

The Americans with Disabilities Act (ADA) of 1990 extends to individuals with disabilities comprehensive civil rights protections similar to those provided to persons on the basis of race, sex, national origin, and religion under the civil rights act of 1964. The adopted curb ramps have been designed to comply with Title III of the ADA that became effective on January 26, 1992.

City of Raleigh standard curb ramps shall comply with the Americans with Disabilities Act (ADA) and Public Right of Way Access Guidelines (PROWAG).

Sidewalk access ramps shall be provided at locations as shown on the plans or as directed by the Transportation Director. Sidewalk access ramps shall be located as indicated in these details; however, the location may be adjusted as directed by the Transportation Director where existing light poles, fire hydrants, drop inlets, or other constraints affect placement.

Sidewalk access ramps shall be constructed in accordance with City of Raleigh Standard Details which are incorporated into the contract documents. Sidewalk access ramps shall generally be Single Type N-lA or R-1 and Double Type N-2, N-3, N-3A, or R-3 at the majority of locations. Some locations may require a shared ramp as shown in Standard Detail T-20.01.7. A shared ramp shall serve both street crossings. Pay limits are identified on the details the shaded curb and gutter shall be incidental to the ramp. The detectable warning surface width may vary and is included as part of ramp pay limits. The detectable warning surface shall be **yellow** in color, cast-in-place and approved by the North Carolina Department of Transportation. Sidewalk removal and replacement within the pay limits shall be included in the concrete sidewalk access ramp unit rate. Sidewalk removal and replacement outside the pay limits will be paid at the appropriate contract unit rate.

Subgrade Preparation: The subgrade for sidewalks and access ramps shall be formed by excavating to the required depth, shaped to the proper cross-section, and shall be thoroughly compacted by rolling or tamping before placing any concrete.

Forms: Forms used in constructing sidewalks shall be of wood or metal, of the full depth of the concrete, straight, free from warp, and of sufficient strength, and/or of a flexible material pre- approved before construction by the Transportation Director as to allow for narrowing, mounding, and curving of walks. They shall be staked securely enough to resist the pressure of the concrete without springing. If of wood, they shall be of two (2) inch surfaced plank. All forms shall be subject to the approval of the Transportation Director. All wood forms shall be thoroughly wetted, and metal forms oiled before placing concrete. All forms shall be thoroughly cleaned before re-use.

Placing Concrete: Concrete shall be NCDOT approved Class "A" concrete. No concrete shall be placed until the forms and subgrades have been approved by the Transportation Director. The subgrade shall be thoroughly wetted, and the concrete shall be placed thereon in one course to the required depth. The concrete shall be consolidated and struck off with a template to the required grade and cross section.

Joints: Contraction joints shall be provided uniformly to separate the slab and shall be cut in a straight line to a depth equal to at least one-third (1/3) of the total slab thickness. The joint shall be not less than one-eight (1/8) inch and no more than one-fourth (1/4) inch in width. Joints shall be sealed in accordance with NCDOT specifications.

Finishing: After the freshly poured concrete has been brought to at the established grade, it shall be floated to produce a surface free from irregularities. The final surface shall be obtained by troweling with a steel trowel or hand float and brushing lightly with a lightweight brush in a transverse direction so as to produce a uniform gritty surface of the proper texture. All edges and joints shall be rounded to one-fourth (1/4) of an inch.

Any brick pavers which have been machine sawed and are adjoining newly constructed sidewalk ramps shall be reset to new line and grade of the newly constructed sidewalk ramp to ensure a smooth transition from existing infrastructure to new infrastructure. Polymeric sand shall be used to lock together joints of old brick paver infrastructure. Any broken pavers shall be replaced and neatly cut or sawed to fit, no broken pieces shall be permitted to remain against new infrastructure.

Cold Weather Pouring: Concreting operations shall not be undertaken or continued when the surrounding air temperature is below 40°F or the local weather reports indicate the possibility of temperatures of 32°F or lower within the ensuing 24 hours unless provisions are made to insulate or heat the concrete in a manner satisfactory to the Transportation Director. In any event, the Contractor shall plan and protect his/her work in a manner which will assure satisfactory results. Any concrete damaged by freezing shall be removed and replaced by the Contractor at his/her own expense.

Concrete, when deposited in the forms, shall have a temperature of not less than 50°F or more than 90°F. The concrete shall be maintained at a temperature of not less than 50°F for a period of at least 72 hours in the case of normal concrete or 24 hours when high early cement is used. Concrete shall not be deposited on a frozen subgrade. The North Carolina Department of Transportation Standard Specifications for Roads and Structures, Latest Edition Section 420-7 "Placing Concrete in Cold Weather" (A), (B), and (C) will be strictly adhered to for this alternate, unless directed by the Transportation Director.

Hot Weather Concreting: The maximum allowable concrete temperature shall be limited to 95°F. Deliver and discharge concrete within 1-1/2 hours or before the truck-mixer has revolved 300 revolutions, whichever comes first.

Removal of Forms and Backfilling: After the concrete has set sufficiently the forms shall be removed and the spaces on both sides shall be immediately backfilled with suitable earth uniformly spread and compacted. The areas between the curb and sidewalk and immediately back of the sidewalk shall be left in a smooth, neat, and workmanlike condition. When necessary, the backfill material will be sloped further to account for change in slope or grade as directed by the Transportation Director.

Special attention shall be given in the seeding and mulching in the established areas. Lawn quality care shall be taken, and appropriate seed used to match existing lawn types on a lot per lot basis. Seeding, mulching, and seedbed preparation shall be approved by the Transportation Director prior to acceptance and payment. Backfilling, seeding, and mulching and/or sod is considered incidental to the completion of the sidewalk access ramp and as such no separate pay item is included. Only NCDOT approved seed mixtures shall be used for seeding operations. In cases where existing sod lawns are adjacent to newly constructed sidewalk access ramps, the contractor shall remove, reuse and/or replace sod to match adjacent lawn appearance. In cases where vegetation is not established during initial backfilling and seeding, seeding and matting (excelsior) shall be used to ensure vegetative coverage post construction.

Sidewalk access ramps shall be backfilled, landscaped, and completed no more than 3 days after construction. Should this period of time be exceeded, all sidewalk ramp construction shall be suspended until such ramps are completed.

Removal of Defective/Damaged Work: The Transportation Director shall have the authority to and shall require the removal of any sidewalk laid under these specifications which does not conform to the requirements as set forth herein or existing sidewalk damaged by the Contractor. Upon notification by the Transportation Director, the Contractor shall take immediate action to correct the faulty work, or damaged work, at the Contractor's own expense.

Construction Water: Contractors are responsible for securing adequate construction water for their job sites.

All construction water usage must be metered and will be billed to the Contractor. The Contractor must contact the Public Utilities Department, Meter Services Division (919- 996-2742) to make the applicable arrangements for billing the water usage. The Contractor may not provide his/her own meter. Upon advance notice to the Public Utilities Department, a meter equipped with a backflow device can be rented at the expense of the Contractor.

Construction water for all City contract projects shall be billed by the City of Raleigh, Public Utilities Department.

Contractors must furnish the following information for water usage.

- Meter location and project name.
- Address where applicable and responsible party name.
- Duration of use and frequency of meter reading.

Sidewalk and Access Ramp Removal

The Contractor shall be advised that when a portion of any area of concrete sidewalk or access ramp must be removed, all areas to be removed shall be defined by a machine sawed joint before removal. Any sidewalk or access ramp that is removed and not replaced shall be backfilled using suitable material free of large lumps, wood, or other undesirable material. Brick pavers within existing sidewalk ramp locations being reconstructed shall be retained and neatly stacked for pickup by City of Raleigh staff.

Disposal of all waste material from construction sites, including concrete wash out, shall be made in strict accordance with all City ordinances pertaining to disposal of construction waste. It shall be the responsibility of the Contractor to secure the necessary permits and provide all information required to secure said permits. The Contractor shall designate the disposal site prior to beginning construction, and in the event waste material

is to be disposed of on private property, a letter from the property owner shall be furnished to the Transportation Director granting the Contractor or their agent such permission and listing the requirements made by the property owner or the Contractor, if any.

The Contractor shall not use the right-of-way for storage of equipment or materials, etc.

Curb and Gutter Construction

Curb and gutter shall be constructed in accordance with City of Raleigh Standard Details for Curb Ramps and Curb and Gutter Standard Detail T-10.26.1. Curb and gutter removal and replacement in areas other than access ramps shall be of the same type as adjacent curb and gutter. Any curb and gutter that is removed and not replaced shall be backfilled using suitable material free of large lumps, wood, or other undesirable material.

Payment for this item shall include removal, disposal and replacement of new curb and gutter in accordance with the specified slopes, dimensions, etc.

Curb depressions for sidewalk access ramps may be accomplished, when applicable, by the use of a machine sawed cut, utilizing equipment which has been specifically designed for this purpose and approved by the Transportation Director. A smooth transition shall be provided between the gutter section and the curb section. All sharp edges, which were created by the cutting operations, shall be beveled.

Grinding if required shall be utilized to accomplish these items. Concrete debris shall be immediately removed from the job site. If any asphalt patching is needed due to damage during construction, the Contractor shall be responsible for repair of these items using hot plant mixed asphalt. If pavement patching is necessary, it shall be incidental to the work and not a pay item.

Subcontractors

The Contractors (bidders) are advised that subcontractors will be limited to a maximum of 50 percent (50%) of this contract. The successful bidder shall abide by the requirements set forth in Article 39 Subcontractors of the General Conditions.

Traffic Control

In addition to items set forth in the General Conditions, Articles 46 and 61, and Special Provisions Section 11, the Contractor shall provide adequate reflectorized barrels, barricades and traffic cones as directed by the Transportation Director, to protect the traveling public as well as pedestrian traffic. In addition, the Contractor shall utilize Sidewalk Closed signs at every location in which the construction activity may interfere with pedestrian traffic. Sidewalk detour signs shall be placed at designated crosswalk locations.

Granite Curb

The Contractor shall reshape the granite curb, in place, to the grade required by the detail drawings. This work will involve sawing, and or grinding to achieve the desired grade and a texture consistent with the original granite curb.

Driveway Apron Construction

Driveway aprons shall be constructed in accordance with City of Raleigh Standard Details for Driveway and Sidewalk Standard Detail T-10.01.1, T-10.01.2, and T-10.02. Driveway aprons shall match existing widths, joints, and grades to provide for positive drainage towards stormwater drainage basins.

Measurement and Payment

Sidewalk Removal will be measured and paid in square yards, measured along the surface of the actual sidewalk removed. Such price includes, but is not limited to, sawing the existing sidewalk, excavating, removal, disposal, backfilling, seeding, and mulching.

4" Sidewalk Replacement will be measured and paid in square yards, measured along the surface of the completed and accepted work. Such price includes, but is not limited to, forming, furnishing, and placing concrete, finishing, constructing, and sealing joints, backfilling, seeding, and mulching.

6" Sidewalk Replacement will be measured and paid in square yards, measured along the surface of the completed and accepted work. Such price includes, but is not limited to, forming, furnishing, and placing concrete, finishing, constructing, and sealing joints, backfilling, seeding, and mulching.

Sawcut and Removal of Concrete Curb will be measured and paid in linear feet, measured along the surface of the top of the concrete curb. Such price includes sawing the existing curb, removal of debris, and beveling or grinding sharp edges.

Sawcut and Removal of Granite Curb will be measured and paid in linear feet, measured along the surface of the top of the granite curb. Such price includes sawing the existing curb, removal of debris, and beveling or grinding sharp edges.

Curb and Gutter Removal/Replacement will be measured and paid in linear feet, accepted in place. Measurement will be made along the surface of the top of the curb. Such price includes sawing the existing curb and gutter, removal of debris, forming, furnishing, and placing concrete, finishing, constructing, and sealing joints, backfilling, seeding, and mulching.

Concrete Sidewalk Access Ramps will be measured and paid in units of each. Ramps shall be constructed in accordance with the Standard Details. Pay limits are identified on the Standard Details and in Provision 2 of this Section. Curb and gutter removal/replacement within the ramp pay limits shall be incidental to the ramp construction. Single ramps shall be paid as 1 unit, double ramps as 2 units, and shared ramps as 2 units. Such price includes, but is not limited to, sawing the existing sidewalk or driveway, removal, and disposal of sidewalk, excavating, forming, furnishing, and placing concrete, constructing, and sealing joints, backfilling, seeding, and mulching. Furnishing and installing the detectable warning surface shall be included as part of the ramp.

6" Concrete Driveway (Remove and Replace) will be measured and paid as the actual number of square yards of driveway apron removed and replaced. No additional payment will be made for curb and gutter removal and replacement within the apron radii.

SECTION 5: MILLING/ PAVEMENT REHABILITATION

Description

Perform the work covered by this section including, but not limited to, milling and re-milling the pavement at locations, depths, widths and typical sections indicated in the contract; cleaning the milled surface; loading, hauling and stockpiling the milled material for use in recycled asphalt mixtures; and disposal of any excess milled material in areas provided by the Contractor in accordance with City Ordinances pertaining to disposal of construction waste.

Construction Methods

Prior to construction, the Contractor shall carefully examine each signalized intersection for vehicle sensors. When encountered, the Contractor shall contact the City of Raleigh Transportation Operations Division, Traffic Signal Shop at 9l9-996-6020 for coordination of construction and sensors relocation.

The Contractor shall work with the City Inspections staff to identify drainage issues and assist in determining a course of action to resolve.

If milled areas are not paved back within 72 hours, the Contractor is to furnish and install portable signs to warn drivers of the conditions. These are to include, but not limited to "Rough Road" (W8-8), "Uneven Lanes" (W8-l l) with Motorcycle Plaque mounted below. These are to be dual indicated on Multi-Lane Roadways with speed limits 45 mph and greater. These portable signs are incidental to the other items of work included in the temporary traffic control pay item.

The existing pavement shall be milled in a manner which will restore the pavement surface to a uniform longitudinal profile and cross section at the locations as indicated in the schedule of provisions or at locations as directed by the Engineer where indicated the asphalt removal shall be to a specified depth and shall produce a specific cross slope. The Contractor shall mill intersections and other irregular areas as indicated in the schedule of provisions or as directed by the Engineer. The milling shall extend from curb to curb, with excess asphalt material being removed to expose the existing face of curb and gutter.

The milling equipment shall be operated in such a manner as to prevent damages to the underlying pavement structure, utilities, drainage facilities, curb and gutter, paved surfaces outside the milled area, and any other appurtenances. Any damages to the above stated areas shall be replaced or repaired at no cost to the City. The milled pavement surface shall be reasonably smooth and free of excessive scarification marks, gouges, ridges, continuous groves, or the damage as determined by the Transportation Director. All butt joints shall be straight and true. Any leveling or patching required as a result of negligence by the Contractor shall be repaired with hot bituminous plant mix at no cost to the City of Raleigh and in a manner acceptable to the Engineer. The Contractor shall coordinate the adjustment of manholes, meter boxes, and valve boxes and resurfacing with the milling operation.

Catch basins and drop inlets shall be protected from milling debris by use of filter materials or other means that will prevent debris from entering the City stormwater system. Any debris that enters catch basins and drop inlets shall be removed by the Contractor.

Wash water from milling machines shall be filtered by use of stormwater filter devices for catch basins and drop inlets. Stormwater filter devices shall be submitted for approval prior to work starting. Failure to use stormwater filter devices shall be considered an "illicit discharge" as defined in Code of Ordinances Part 13, Chapter 5.

All milled pavement surfaces shall be thoroughly cleaned of all loose aggregate particles, dust, and other objectionable material within 24 hours, by the use of an approved street sweeper. Street sweepers to be utilized shall be of the Vacuum or Regenerative Air Sweeper type with a minimum six (6) cubic yard capacity. No mechanical sweepers will be allowed, except to assist the above noted approved sweeper types. The Contractor can also utilize additional equipment as necessary for this removal. This debris shall not be allowed to accumulate on the Right-of-Way, private property, sidewalks, or driveways. If this occurs, it shall be cleaned off immediately.

Edge & Double Edge Milling

Edge milling shall be at least 4' in width. Butt joints may be required at intersecting streets. Double edge mill shall overlap 1-2' but shall not exceed 7' in width. Resurfacing shall be performed within 7 days after patching is completed on such streets.

Full Mill Operations

Streets designated as Full Mill shall have lanes milled to a depth of 0" - 4" depending on existing road cross section. Utilities shall be lowered prior to milling operations and final adjustments performed after milling is complete. Resurfacing shall be performed within 7 days after patching is completed on such streets. No separate payment will be made for additional passes to achieve plan depth and cross section.

Temporary paint shall be installed per the approved pavement marking plans.

Mill & Fill Operations

Streets designated as Mill & Fill shall have lanes milled, cleaned, and paved back by the end of the work shift. Traffic is not allowed to ride on the milled surface. Utility adjustments and patching, as needed, shall be performed prior to the Mill & Fill operation. Mill & Fill operations shall be performed within 7 days after patching is completed on such streets. Any utilities damaged during milling shall be repaired or replaced as soon as possible at no cost to the City. The Mill & Fill unit rate will be used for streets designated as such. This rate is not in addition to any other milling rate.

Temporary pavement markings shall be installed as directed in the Pavement Markings portion of this contract. The pavement markings shall be installed as soon as the milling operations will allow. The milled pavement surface shall be thoroughly cleaned of all loose aggregate particles, dust, and other objectionable material before temporary pavement markings are installed.

Equipment

Equipment shall include a self-propelled unit capable of removing the existing bituminous pavement to the depths, widths, and typical sections as indicated in the schedule or provisions or as directed by the Engineer. The equipment shall have been designed and built exclusively for pavement milling operations and shall have sufficient power, traction, and stability to accurately maintain depth of cut and slope. The milling machine shall be equipped with a grade control system, which will automatically control the longitudinal profile and cross slope of the pavement surface. The machine shall be capable of leaving a uniform surface suitable for handling traffic without excessive damage to the underlying pavement structure.

Additional equipment necessary to satisfactorily remove the pavement in the area of curb and gutter, and other obstructions shall be provided. The milling equipment shall be equipped with a means of effectively limiting the amount of dust escaping from the removal operations in accordance with local, state, and federal air pollution control laws and regulations.

Patching

The Contractor shall be responsible for pavement patching on all streets which have been milled. Milled pavement areas, in which exposed subgrade materials are present after the milling has been completed, shall be patched no later than the end of the workday.

Measurement and Payment

Milling (0-2") Edge, Milling (0-2") Double Edge, Milling (0-4") Full Width, and *Milling (0-2") Mill and Fill* to be paid for will be the actual number of square yards of pavement surface which has been milled in accordance with the requirements of this section. In measuring this quantity, the length will be the actual length milled, measured along the pavement surface. The width will be the actual width milled measured along the pavement surface, including any incidental areas which require removing, i.e., small areas adjacent to curb and gutter, etc.

Incidental milling to be paid will be the actual number of square yards of surface milled where the Contractors is required to mill butt joints, irregular areas and intersections milled as a separate operation from mainline milling and re-mill areas that are not due to the Contractor's negligence whose length is less than 100 feet. In measuring this quantity, the length will be the actual length milled, measured along the pavement surface. The width will be the width required by the plans or directed, measured along the pavement surface. Areas to be paid under these items include radius areas, butt joints and irregular areas as desired to complete the work or correct a pavement running/cross slope issue. Where the Contractor elects to make multiple cuts to achieve the final depth, no additional measurement will be made.

Compensation will be made at the contract unit price per square yard for Incidental Milling.

Pavement Patching will be paid as the actual number of tons of asphalt plant mix, complete in place, used to make completed and accepted repairs, including skim patching on exposed subgrade, except for those repairs made necessary by the contractor's negligence. The asphalt plant mix material will be measured by certified weight ticket platform scales or other certified weighing devices.

No direct payment will be made for asphalt binder associated with pavement patching.

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SECTION 6: SHALLOW UNDERCUT

The published volume entitled "North Carolina Department of Transportation, Standard Specifications for Roads and Structures", Latest Edition, with all amendments and supplements thereto, is by reference incorporated into and made part of this contract; that, except as herein modified, all the construction and work included in this contract is to be performed in accordance with the specifications contained in said volume, and amendments and supplements thereto, under the direction of the Transportation Director.

Description

All work in this section shall consist of elements to complete shallow undercut on specified sections of City streets which exhibit unsuitable soils.

Construction Methods

When shallow undercut is required to construct aggregate subgrades, undercut 12" to 24" as shown on the plans or as directed. Perform undercut excavation in accordance with Section 225. Install geotextile for soil stabilization in accordance with NCDOT Standard Specifications for Roads and Structures Article 270-3. Place Class IV subgrade stabilization (standard size no. ABC) by end dumping ABC on geotextiles. Do not operate heavy equipment on geotextiles until geotextiles are covered with Class lV subgrade stabilization. Compact ABC to 92% of AASHTO T 180 as modified by the Department or to the highest density that can be reasonably obtained. Maintain Class IV subgrade stabilization in an acceptable condition and minimize the use of heavy equipment on ABC in order to avoid damaging aggregate subgrades. Provide and maintain drainage ditches and drains as required to prevent entrapping water in aggregate subgrades.

Placement of Geotextile and GeoGrid

Geotextile and Geogrid materials shall conform to Section 1056 of NCDOT Standard Specifications. Following the shallow undercut operation, geotextile material shall be placed in the work area covering the full width and length of the excavation. Geotextile shall be overlapped a minimum of 12 inches in cases where multiple pieces or rolls are used. Geotextile shall be pinned to the subgrade.

One layer of geogrid shall be placed on top of the geotextile material prior to back filling with Class IV stone. In cases where geogrid is overlapped, follow manufacturer's recommendations.

Backfill and compact the excavation with Class IV Stone for Stabilization to within 6" of the finish pavement elevation grade. Complete the patch using the prescribed pavement detail of Il9.0C and S9.5C placed in 2 lifts.

Payment for Shallow Undercut, Geotextile / Geogrid and Class IV Stone shall be considered full payment for, but not limited to, all labor, materials, equipment, incidentals, overhead and profit associated with the work.

Measurement and Payment

Shallow Undercut will be measured and paid in cubic yards. The contract unit price for Shallow Undercut will be full compensation for excavating, hauling, and disposing of materials to construct aggregate subgrades.

Fabric for Soil Stabilization will be measured and paid in square yards. The contract unit price for Fabric for Soil Stabilization will be full compensation for providing and installing the fabric.

Geogrid for Soil Stabilization will be measured and paid in square yards. The contract unit price for Geogrid for Soil Stabilization will be full compensation for furnishing and installing the geogrid.

Class IV Stone for Soil Stabilization will be measured and paid in tons. Class IV soil stabilization will be measured by weighing material in trucks in accordance with NCDOT Standard Specifications for Roads and Structures article 106-7. The contract unit price for Class IV Stone for Soil Stabilization will be full compensation for furnishing, hauling, handling, placing, compacting, and maintaining ABC.

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SECTION 7: PAVEMENT PATCHING

Description

Perform the work covered by this section including, but not limited to, repairing of existing pavement with asphalt plant mix in order to provide a safe, passable, and convenient condition for traffic.

Perform the work by cutting the existing pavement to a neat vertical joint and uniform line; removing and disposing of pavement, base, and subgrade material as approved or directed; coating the area to be repaired with a tack coat; furnishing, placing, and compacting asphalt plant mix; and replacing of the removed material with asphalt plant mix.

Materials

Where a pavement repair detail is not shown in the plans, use an Asphalt Concrete Intermediate Course, Type I19.0C. Where a pavement repair detail is shown in the plans, the type of plant mix shall be in accordance with the pavement repair detail except where the Specifications permit the substitution of another type of plant mix or where approved.

Patching on all streets shall generally consist of milling and placing 2.5" - 4" of Asphalt Concrete Intermediate Course, Type I19.0C. In some cases, the City may elect to use B25.0C as directed. For permanent repairs associated with Raleigh Water pavement patching, contractor may be required to pave full lane width and match existing depths and mix types to meet NCDOT requirements. Patching on Mill & Fill streets shall be paid at the patching unit rate.

The Contractor will be responsible for providing, installing, and maintaining all temporary traffic control during pavement patching operations.

Construction Methods

The Contractor shall excavate in areas as directed by the Engineer to the depth directed. Excavation shall be neatly squared with clean vertical sides. All loose material shall be removed from the excavated area. If the subgrade materials are disturbed, the Transportation Director may require the subgrade materials to be recompacted utilizing compaction equipment suitable for this purpose. Existing pavement areas shall be tacked, and bituminous material shall be placed in even, uniform lifts. Bituminous material shall be compacted using steel wheeled mechanical compaction equipment, in accordance with current NCDOT standards.

The finished surface shall be smoothed and shaped to provide a final compacted surface grade consistent with the adjacent existing pavement grades. The final surface grade of the patch shall be within one-eighth inch (1/8" ±) of the adjacent existing pavement and grade. Any patch areas more than one-eighth inch (1/8" ±) above adjacent existing pavement shall be milled to proper grade at Contractor's expense.

All pavement patching areas shall be maintained in satisfactory condition until resurfacing occurs.

A minimum depth of 2 inches of patching material shall be utilized. Additional areas shall be patched as directed by the Engineer. All patching shall be performed as per the special provision section as outlined in the Pavement Patching portion of this Contract.

Measurement and Payment

Pavement Patching will be paid as the actual number of tons of asphalt plant mix, complete in place, used to make completed and accepted repairs, including skim patching on exposed subgrade, except for those repairs made necessary by the contractor's negligence. The asphalt plant mix material will be measured by weighed in trucks on platform scales or other certified weighing devices.

Any requirement included in the contract that provide for adjustments in compensation for to variations in the price of asphalt cement will not be applicable to payment for the work covered by this section.

No direct payment will be made for asphalt binder associated with pavement patching.

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SECTION 8: THERMOPLASTIC PAVEMENT MARKINGS

The project will include the furnishing and placement of Thermoplastic Alkyd/Maleic Retroreflective Pavement Markings in the form of lines and symbols of the type specified herein. The work shall be performed in strict accordance with NCDOT Standard Specifications for Roads and Structures (Latest Edition) Section 1205.

Revise the 2018 Standard Specifications as follows: Page 12-6, Sub article 1205-4(A)(l) General, lines 5-8, delete the second sentence and replace with the following:

Use application equipment that provides multiple width settings ranging from 4 inches to 12 inches and multiple thickness settings to achieve a minimum pavement marking thickness of 0.090 inch above the surface of the pavement.

Pavement Marking Notification

The City of Raleigh shall be notified 24 hours in advance of all pavement marking operations such that City inspections staff can be present during layout, premarking, final marking or punch list items for compliance with approved pavement marking plans. Any work performed without notification shall be deemed unauthorized work.

Page 12-7, Table 1205-3, THICKNESS REQUIREMENTS FOR THERMOPLASTIC, replace with the following:

TABLE 1205-3
MINIMUM THICKNESS REQUIREMENTS FOR THERMOPLASTIC

Thickness	Location
240 mils	In-lane and shoulder-transverse pavement markings (rumble strips). May be placed in 2 passes
90 mils	Center lines, skip lines, transverse bands, mini-skip lines, characters, bike lane symbols, crosswalk lines, edge lines, gore lines, diagonals, and arrow symbols

Pavement markings shall be applied within **24 hours** of resurfacing. If pavement markings are not installed within the 24-hour period, additional resurfacing shall not be permitted.

Temporary pavement markings on milled surfaces shall be installed as soon as milling operations allow. The milled pavement surface shall be thoroughly cleaned of all loose aggregate particles, dust, and other objectionable material before temporary markings are installed.

Interim marking paint shall be covered with thermoplastic pavement marking within **30 calendar days** of placement. Should this period of time be exceeded, all resurfacing operations shall be suspended until thermoplastic pavement marking material is applied and completed on such streets.

If the pavement marking plans and NCDOT standards conflict, the Transportation Director shall be notified prior to the installation of such work.

No payment will be made for final thermoplastic pavement markings until all markings have been completed on the entire street.

The Contractor shall submit Thermoplastic Pavement Marking quantities for verification in spreadsheet format identifying pavement markings on a street-by-street basis.

Removal of Pavement Markings

This work includes the removal of all types of pavement marking lines, symbols and characters including removal for long life marking preparation. This work does not include removal of removable tape pavement markings.

Remove pavement marking lines, characters and symbols by acceptable methods to the Engineer that will not materially or structurally damage the surface or the texture of the pavement. Leave the pavement surface in a condition that will not mislead or misdirect the motorist.

Where existing pavement markings are to be removed and replaced by other pavement markings, do not begin removal until adequate provisions have been made to complete the installation of the replacement markings. Remove pavement markings such that the surface is in proper condition for adequate bonding of the new markings. Promptly remove any material deposited on the pavement as a result of removing pavement markings as the work progresses by acceptable methods. Provide the equipment necessary to control dust and the accumulation of debris resulting from the removal process. The removal equipment shall provide dust control and the capture of the removed material shall be done using a separate vacuum equipped vehicle or other approved system. Perform the recovery process within the same operation as the removal. Do not let traffic use the lane where the removal is taking place until the recovery system is finished. Should the recovery system fail, cease removal operations until the recovery system is properly operating. The Contractor is responsible for all cleanup and proper disposal of all removed debris from the project site. When using a grinding method for pavement marking removal, the equipment shall have multiple heads working in tandem or have a removal head with operator dialed controls to result in a planed surface and provide adequate preparation of the surface to accept the new marking material.

Application of polyurea over existing pavement marking materials will require at least 95% of the existing pavement marking material to be removed; however, if one 15 mil application of paint was placed on asphalt pavement less than 6 months old, do not remove the existing paint pavement markings.

Thermoplastic may be installed over existing thermoplastic on asphalt. Application over existing pavement marking materials other than thermoplastic will require the existing pavement marking material to be removed so that at least 85% of the existing pavement marking surface is removed. Before applying thermoplastic pavement markings over the existing thermoplastic pavement markings, remove at least 25% of the oxidized existing thermoplastic. On newly installed failed thermoplastic that is to be removed and replaced, remove a minimum of 85% of the existing thermoplastic. However, if one 15 mil application of paint was placed on asphalt pavement less than 6 months old, do not remove the existing paint pavement markings.

Use black color #37038 in paint or tape, as determined by Contractor, to cover any remaining conflicting pavement marking after removal from asphalt pavement surfaces. Do not use black paint or tape on concrete pavement surfaces. The black paint will not have a defined shape or edges with a width not exceeding double of the existing lines.

Measurement and Payment

Thermoplastic Pavement Markings - 4", Thermoplastic Pavement Markings - 8", Thermoplastic Pavement Markings - 24", Green Thermoplastic - 24" will be measured and paid as the actual number of linear feet of placement marking lines satisfactorily placed and accepted by the Engineer. The quantity of solid lines will be the summation of the linear feet of solid line measured end-to-end of the line. The quantity of skip or broken lines will be the summation of the linear feet derived by multiplying the nominal length of a line by the number of marking lines satisfactorily placed.

Thermoplastic Symbol, Thermoplastic Character, Thermoplastic Roundabout Symbol, Speed Hump Symbol, Bike Lane Arrow, Bike Sharrow, Bike Lane Symbol, and Shark Teeth Symbol will be measured and paid as the actual number of pavement marking symbols and characters satisfactorily placed and accepted by the engineer. A character is considered to be one letter or one number of a word message.

Temporary Paint - 4", Temporary Paint - 8", and Temporary Paint - 24" will be measured and paid as the actual number of linear feet of placement marking lines satisfactorily placed and accepted by the Engineer.

Temporary Paint Symbols and Temporary Paint Characters will be measured and paid as the actual number of pavement marking symbols and characters satisfactorily placed and accepted by the engineer

Thermoplastic Eradication, Lines will be measured and paid as the actual number of linear feet of pavement markings satisfactorily removed and accepted by the Engineer. The quantity of solid lines will be the summation of the linear feet of solid line measured end-to-end of the line. The quantity of skip or broken lines will be the summation of the linear feet derived by multiplying the nominal length of a line by the number of marking lines satisfactorily removed. No payment will be made for the removal of removable pavement marking tape.

Thermoplastic Eradication, Symbol and Thermoplastic Eradication, Character will be measured and paid as the actual number of pavement markings symbols and characters satisfactorily removed and accepted by the Engineer.

Flexible Delineator will be measured and paid as the actual number of each delineator post installed.

SECTION 9: SIGNALS AND INTELLIGENT TRANSPORTATION SYSTEMS

All work associated with signals and intelligent transportation systems shall be installed in strict accordance with NCDOT Standard Specifications for Roads and Structures (Latest Edition) Division 17.

Street locations for inductive detection loops and associated work are indicated on the Pavement Markings List.

The Contractor shall notify the City's Traffic Engineering Division, Traffic Signals Section at 919-996-6020, at least 48 hours before milling an intersection with signal detection loops. After signal detection loops are installed, the Contractor shall notify the City's Traffic Signals Section for inspection at least 48 hours before resurfacing occurs. Notify Engineer one week before installing inductive detection loops.

Coordinate saw-cutting and loop placement with pavement markings. For new construction or resurfacing, install inductive detection loops before placing final lay of surface course. On unmarked pavement, pre-mark locations of stop lines and lane lines before locating inductive detection loops.

Measurement and Payment

Inductive Loop Sawcut and *Bike Count Loop Sawcut* will be measured and paid as the actual linear feet of inductive loop sawcut installed and accepted.

Detector Cards and *Junction Boxes* will be measured and paid as the actual number of detector cards and junction boxes installed and accepted.

SECTION 11: SPEED CUSHION & INSTALLATION OF RAISED CROSSWALKS

Speed Cushion Removal

Break up, remove, and satisfactorily dispose of asphalt components of an existing structure and repair pavement to match existing adjacent pavement surface.

Speed Cushion Construction

Construct speed cushion in accordance with the contract and at the locations designated in the plans or as directed by the Transportation Director or his/her representative. Speed hump locations to be marked in the field by City of Raleigh staff prior to installation.

Speed cushions shall be constructed using Asphalt Concrete Surface Course, Type S9.5C. At least 10 days prior to asphalt production, submit the asphalt mix design and Job Mix Formula (JMF) to the Transportation Director for review and approval.

Locations are to be milled an cushions installed according to Speed Cushion Detail Sheets 1 through 3. Pavement Markings shall be installed before lane is open to traffic.

Speed cushions shall be installed on newly resurfaced streets no less than 14 days and no more than 28 days from asphalt overlay completion on the street.

The Contractor shall be responsible for repairing any damage to the City of Raleigh's infrastructure. This includes damage to curb and gutter, and pavement. Tack will not be tolerated on the exposed face of curb and gutters. If this occurs, the tack shall be removed as soon as practicable. Special attention shall be utilized while paving in areas with existing granite curb and gutter.

Measurement and Payment

Speed Cushion Removal will be measured and paid for per each speed cushion removed. A speed hump will be counted as full width of road. No direct payment will be made for the following: milling, hot mix asphalt, asphalt binder, and pavement markings associated with speed hump removal.

Speed Cushion will be measured and paid for per each speed cushion installed. A speed cushion will be counted as full width of road. No direct payment will be made for the following: milling, hot mix asphalt, and asphalt binder associated with speed cushion installation.

SECTION 12: WORK ZONE TRAFFIC CONTROL

Description

Maintain traffic through work zones in accordance with these Specification, the MUTCD, NCDOT Roadway Standard Drawings, 23 CFR 630 Subparts J and K and any additional Transportation Management Plans.

Temporary Lane Closures

Operate all equipment and personnel within the designated work area during lane closures. Do not impede or stop traffic for the purpose of performing construction related work on the traffic side of the lane closure.

Install lane closures with traffic flow, beginning with devices on the upstream side of traffic. Remove lane closures against the traffic flow, beginning with devices on the downstream side of traffic.

When construction proceeds through an intersection, provide flaggers and all other necessary traffic control as required to direct the traffic through the intersection. When an intersection is signalized, place the signal in flash mode and provide law enforcement or other adequate traffic control measures to direct traffic through the intersection before beginning work in the intersection.

Detours

All detours shall be coordinated in advance and submitted with a proposed traffic control plan prior to approval. The City of Raleigh shall approve all detoL1rs using city owned or maintained streets. All detours using NCDOT roads shall require approval of NCDOT. Trucks or commercial traffic shall not be detoured using residential or local streets. Any detours that affect existing transit routes shall be coordinated with Go Raleigh in addition to Transportation Maintenance.

Traffic Control Supervision

Provide the service of at least one qualified work zone supervisor. The work zone supervisor shall have the overall· responsibility for the proper implementation of the TMP and ensure all employees working inside the NCDOT right of way have received the proper training appropriate to the job decisions each individual is required to make.

The work zone supervisor is not required to be on site at all times but shall be available to address concerns of the Engineer. The name and contact information of the work zone supervisor shall be provided to the Engineer prior to or at the preconstruction conference.

Qualification of work zone supervisors shall be done by an NCDOT approved training agency or other approved training provider. For a complete listing of these, see the Work Zone Traffic Control's webpage. Coordinate with and cooperate with work zone supervisors of adjacent or overlapping construction projects to ensure safe and adequate traffic control is maintained throughout the projects at all times including periods of construction inactivity in accordance with Article 105-7.

Vehicular Access

Maintain Continuous and safe vehicular access, including but not limited to, all residences, businesses, schools, police and fire stations, hydrants, other emergency services, hospitals and mailboxes. Conduction operations so as to limit the inconvenience to property owners.

Pedestrian Access

Maintain pedestrian access at all times. When existing pedestrian facilities are disrupted, closed or relocated, provide temporary facilities that are detectable and include accessibility features consistent with the features present in the existing pedestrian facility. The work zone supervisor is responsible for the implementation of all traffic control plans, and installation and maintenance of the pedestrian devices. The work zone shall be inspected weekly or as directed by the Engineer. When pedestrian movement through or around a work zone is necessary, provide a separate usable footpath. If the previous pedestrian facility was accessible to pedestrians with disabilities, provide a footpath during temporary traffic control that is comparable. Do not have any abrupt changes in grade or terrain that could cause a tripping hazard or could be a barrier to wheelchair use. Provide channelizing devices that are detectable to pedestrians who have visual disabilities. Provide temporary pedestrian facilities that are made of concrete, asphalt or other suitable material as approved by the Engineer, at all locations where the existing sidewalks have been removed for construction operations.

Do not sever or move pedestrian facilities for non-construction activities such as parking for vehicles and equipment. Separate pedestrian movements from both work zone activity and vehicular traffic.

Temporary Traffic Control Devices

Furnish, install, maintain, relocate, and remove temporary traffic control devices. All temporary traffic control devices furnished by the Contractor shall remain the property of the Contractor, unless otherwise specified in the contract.

Ensure all temporary traffic control devices are inspected and approved before using them on the project. Install temporary traffic control devices before construction operations begin and during the proper phase of construction. Maintain and relocate temporary traffic control devices during the time they are in use. Keep these devices in place as long as they are needed and immediately remove thereafter. When operations are performed in stages, install only those devices that apply to the present conditions.

Perform continuous maintenance and daily scheduled inspections of temporary traffic control devices. Review and maintain all traffic handling measures to ensure that adequate provisions are in place for public and workers' safety. Maintenance activities include cleaning, repair, or replacement, and prompt disposal of temporary traffic control devices that are damaged, torn, crushed, discolored, displaced or deteriorated beyond effectiveness. Replace work zone traffic control devices deemed unacceptable according to the guidelines set forth in the American Traffic Safety Service Association's (ATSSA) Quality Guidelines for Work Zone Traffic Control Devices.

Failure to maintain acceptable traffic control measures or temporary traffic control devices may result in formal notification of noncompliance. Implement remedial action immediately for imminent danger situations as directed by the Engineer. Implement remedial action within 48 hours after notification of a safety issue that is not an imminent danger.

Failure to comply may result in having the work performed with available forces and equipment. In cases of willful disregard for the safety of the public, the Engineer may proceed immediately to implement the measures necessary to provide the appropriate level of traffic control to ensure that the safety of all concerned parties is maintained.

Measurement and Payment

Payment at the contract unit price for the various Traffic control items in the contract will be full compensation for all work covered by this section unless a pay item is included for Temporary Traffic Control paid as lump sum.

If the Contractor fails to maintain acceptable traffic control measures or temporary traffic control devices and the Transportation Director implements measures necessary to provide the appropriate level of traffic control, the actual cost of performing said work will be deducted from the monies due the Contractor on the contract.

SECTION 13: TRAFFIC ISLANDS AND MEDIANS

Description

Construct traffic islands and medians of the type required by the plans. Perform the work in accordance with the contract.

Construction Methods

Construct curb and gutter in accordance with Section 4.

Uniformly grade and compact the earth or base course under any island or median to the same requirements as the surrounding material. Concrete islands shall be constructed after milling has occurred and before final resurfacing.

Construct concrete in accordance with Section 4 and give a sidewalk finish, except as otherwise provided herein. Broom concrete surfaces in medians transverse to the direction of traffic unless otherwise directed. Locate joints in island and median covers to line up with the joints in the curb and curb and gutter wherever possible. Locate joints in monolithic concrete islands and medians constructed adjacent to concrete pavement to line up with the joints in the concrete pavement wherever possible. Seal all joints. Form openings in the island or island cover to accommodate signposts.

Measurement and Payment

5" Monolithic Concrete Islands/Medians will be measured and paid in square yards of concrete island that has been placed and accepted. Measurement will be made parallel to the bottom surface of the island or median. This work includes, but is not limited to, removal of existing islands, excavation and backfilling, constructing base, furnishing and placing concrete, forming holes for signposts and constructing and sealing joints.

SECTION 14: GRADING

Description

Perform all work required to grade the project to the lines, grades, and typical sections shown in the plans. Work includes clearing and grubbing; excavation within the limits of the typical sections, including subgrade, shoulders, and ditches; excavation, removal, and disposal of silt and other unsuitable materials; loading, hauling, placement, shaping, and compaction of excavated material; and seeding and mulching of all disturbed areas.

Remove existing material necessary for construction of the concrete bikeway. Material determined suitable for shoulder borrow shall be stockpiled on site for use in backfilling the completed bikeway.

Provide all waste areas required for disposal of unsuitable material. Perform all work in accordance with the plans, these Special Provisions, and as directed by the Engineer.

Construction Methods

Dispose of all waste material and furnish any borrow material required to complete the work. Determine borrow quantities as necessary. Do not waste or remove material from the project without prior approval from the Engineer.

Shape, compact, and grade all slopes, ditches, subgrade, and shoulders to the lines, grades, and typical sections shown in the plans or as directed. Maintain roadway ditches in a clean and functional condition throughout the duration of the project. Provide adequate drainage at all times to protect the subgrade.

Grade all disturbed areas to promote positive drainage, prevent ponding, and prepare the surface for seeding and mulching.

Ensure all excavated areas are uniformly graded, well compacted, and free of debris and loose material. Excavations adjacent to existing pavement that create a drop of more than 2 inches shall not remain open overnight. Make such areas safe by placing solid material at a slope of 6:1 or flatter.

Provide and maintain all traffic control devices required to protect open excavations in accordance with the MUTCD, the Roadway Standard Drawings, and as directed by the Engineer.

Remove and dispose of all vegetation and debris within the project limits. Perform all waste disposal in compliance with applicable federal, state, and local regulations. Obtain all required permits and pay all associated fees. The City of Raleigh shall not be held liable for disposal of materials outside the project right of way.

Measurement and Payment

Grading will be paid for at the contract Lump Sum price.

Payment will be full compensation for all work including, but not limited to, complete grading operations, including clearing and grubbing, excavation, disposal, borrow, shaping, compaction, drainage maintenance, and seeding and mulching of disturbed areas.

No separate payment will be made for borrow material; it is incidental to Lump Sum Grading.

SECTION 15: EROSION CONTROL

Description

Furnish material, construct, maintain and remove temporary silt fence in locations shown in the plans or in locations that require surface drainage to be filtered.

Construction Methods

Install in locations as shown in the plans or as directed by the Engineer. Install wire and geotextile as shown in Roadway Standard Drawings. Geotextile may be used without the woven wire fence backing with a post spacing of not more than 6 feet. Install post inclined toward runoff source, at an angle of not more than 20° from vertical. Attach geotextile to the post with acceptable methods. Overlap geotextile at least 18 inches at splice joints.

Maintenance and Removal

Maintain the silt fence until the project is accepted by the Engineer or until the fence is removed. Remove and replace deteriorated or ineffective geotextile. Remove and dispose of silt accumulations when necessary or as directed by the Engineer.
Leave silt fence in place until site stabilization and remove at project completion. Removed silt fence becomes the property of the Contractor. Dress and seed and mulch all areas where silt fence is removed.

Silt fence outlets shall be install per the plans and standard drawings.

Inlet Protection shall be installed as required in the plans.

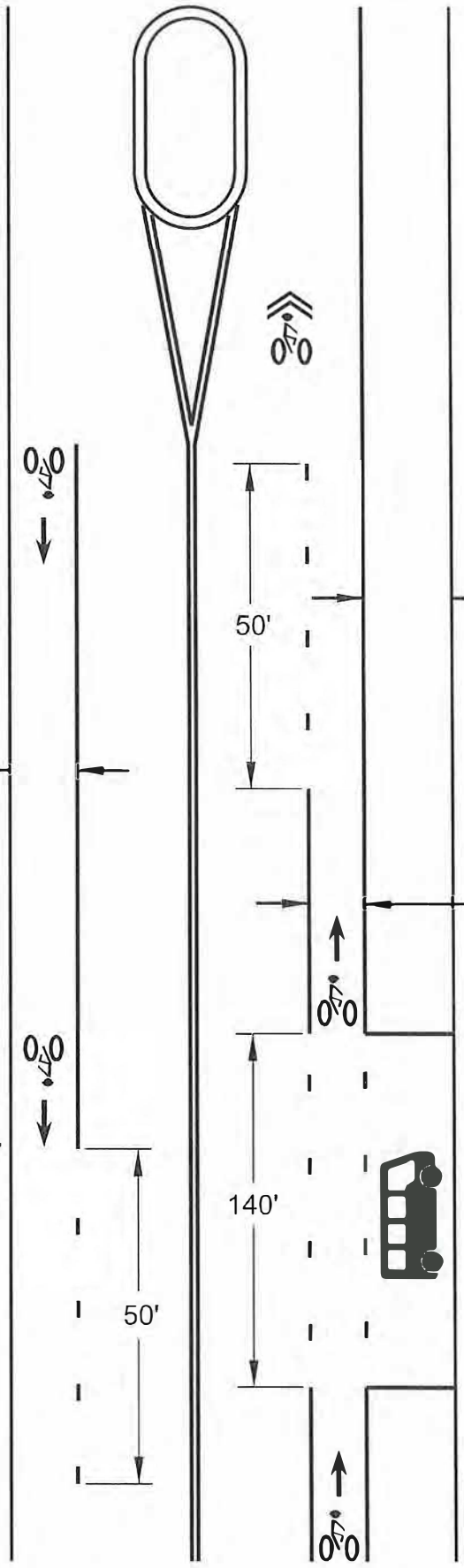
MEASUREMENT AND PAYMENT

Temporary Silt Fence will be measured and paid in linear feet, accepted in place, along the ground line of the fence.

Silt Fence Outlets will be paid per each unit installed and maintained in accordance with plans and standard drawings.

Inlet Protection Will be paid as the Linear Feet of material installed and maintained in accordance with plans and standard drawings.

APPENDIX



PLACEMENT & SPACING

PLACE BIKE LANE MARKINGS AT THE BEGINNING OF EACH BIKE LANE SEGMENT - I.E. AFTER EVERY INTERSECTION AND MAJOR DRIVEWAY AND WHERE BIKE LANES END.

CONSIDER ADDITIONAL BIKE LANE MARKINGS AS NEEDED TO CLEARLY DELINEATE THE BIKE LANE ON A CASE-BY-CASE BASIS. DESIRED SPACING IS 250' IN DOWNTOWN RALEIGH AND 500' ELSEWHERE.

MEDIAN TRANSITIONS

END BIKE LANE AND PLACE SHARED LANE MARKINGS IN THE CENTER OF THE TRAVEL LANE THROUGH A MEDIAN AREA

PARKING LANE WIDTH, W_3

THE PARKING LANE WIDTH (INCLUDING THE GUTTER PAN) SHOULD BE : 8' DESIRED
7.5' MINIMUM

BIKE LANE WIDTH, W_1

WHERE ADJACENT TO THE EDGE OF PAVEMENT, THE BIKE LANE WIDTH (EXCLUDING THE GUTTER PAN) SHOULD BE: 5' DESIRED
4' MINIMUM

BIKE LANE WIDTH, W_2

WHERE ADJACENT TO A PARKING LANE, THE BIKE LANE WIDTH SHOULD BE: 5' MINIMUM, 6' DESIRED
2' STRIPED BUFFER DESIRED

BIKE LANE SIGN

WHERE THE BIKE LANE ENDS AT MID-BLOCK LOCATIONS, PLACE "BIKE LANE ENDS" SIGNAGE AT THE BEGINNING OF THE BIKE LANE MINI-SKIPS.

BIKE LANE MINI-SKIPS

USE 2' DASHED WITH 6' GAPS TO END BIKE LANES AND INDICATE CONFLICT ZONES, E.G. AT BUS STOPS.

CITY OF RALEIGH
STANDARD DETAIL

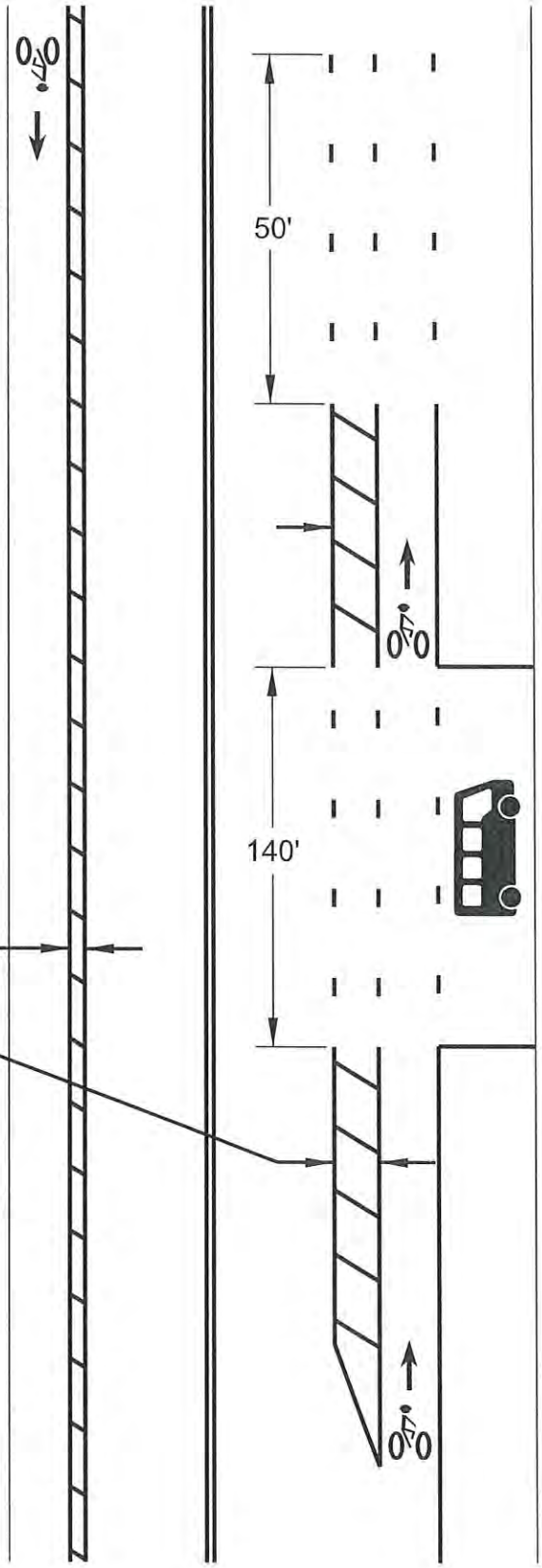
REVISIONS	DATE: 8/2020 NOT TO SCALE
	BIKE LANE SIGNS AND MARKINGS
	B-10.01

BUFFER TRANSITION

TAPER THE START OF A BIKE LANE BUFFER BY NARROWING THE TRAVEL LANE.

A TAPER IS NOT REQUIRED AT THE END OF A BIKE LANE BUFFER UNLESS THE END OCCURS ON A HORIZONTAL CURVE.

TAPERS ARE NOT REQUIRED WHEN TRANSITION TO MINI-SKIPS AT CONFLICT ZONES I.E. BUS STOPS AND MAJOR DRIVEWAYS.



BUFFER WIDTH

WHERE PAVEMENT WIDTH ALLOWS FOR A BUFFER, THE BUFFER WIDTH SHOULD BE: 3' DESIRED
2' MINIMUM

USE DIAGONAL CROSS-HATCHING IN BUFFERS.

PLACEMENT OF BUFFER FOR BIKE LANES ADJACENT TO PARKING LANES

WHERE THE BIKE LANE IS ADJACENT TO A PARKING LANE WITH LOW TURN OVER, PLACE THE BUFFER BETWEEN THE BIKE LANE AND THE TRAVEL LANE.

WHERE THE BIKE LANE IS ADJACENT TO A PARKING LANE WITH HIGH TURN OVER, PLACE THE BUFFER BETWEEN THE BIKE LANE AND THE PARKING LANE.

BIKE LANE MINI-SKIPS

USE 2' DASHED WITH 6' GAPS TO END BIKE LANES AND INDICATE CONFLICT ZONES, E.G. AT BUS STOPS.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	BIKE LANE BUFFER MARKINGS	
	B-10.02	

COMBINED LANE

WHERE PAVEMENT WIDTH DOES NOT ALLOW FOR BOTH A DEDICATED BIKE LANE AND DEDICATED RIGHT TURN LANE APPROACHING THE STOP BAR, USE OF A COMBINED BIKE LANE/RIGHT-TURN LANE IS PERMITTED.

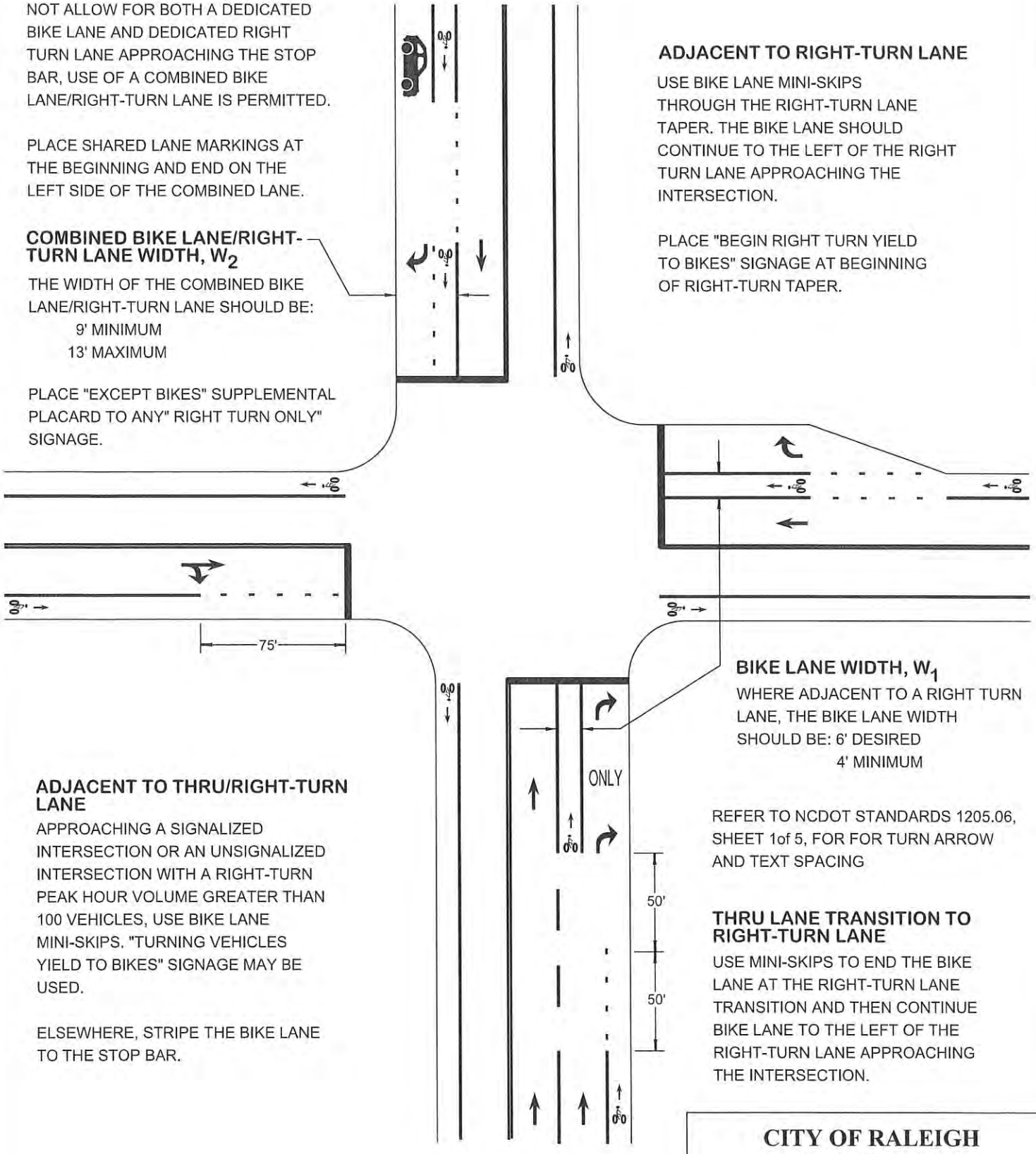
PLACE SHARED LANE MARKINGS AT THE BEGINNING AND END ON THE LEFT SIDE OF THE COMBINED LANE.

COMBINED BIKE LANE/RIGHT-TURN LANE WIDTH, W_2

THE WIDTH OF THE COMBINED BIKE LANE/RIGHT-TURN LANE SHOULD BE:

9' MINIMUM
13' MAXIMUM

PLACE "EXCEPT BIKES" SUPPLEMENTAL PLACARD TO ANY" RIGHT TURN ONLY" SIGNAGE.



ADJACENT TO RIGHT-TURN LANE

USE BIKE LANE MINI-SKIPS THROUGH THE RIGHT-TURN LANE TAPER. THE BIKE LANE SHOULD CONTINUE TO THE LEFT OF THE RIGHT TURN LANE APPROACHING THE INTERSECTION.

PLACE "BEGIN RIGHT TURN YIELD TO BIKES" SIGNAGE AT BEGINNING OF RIGHT-TURN TAPER.

BIKE LANE WIDTH, W_1

WHERE ADJACENT TO A RIGHT TURN LANE, THE BIKE LANE WIDTH SHOULD BE: 6' DESIRED
4' MINIMUM

REFER TO NCDOT STANDARDS 1205.06, SHEET 1of 5, FOR FOR TURN ARROW AND TEXT SPACING

ADJACENT TO THRU/RIGHT-TURN LANE

APPROACHING A SIGNALIZED INTERSECTION OR AN UNSIGNALIZED INTERSECTION WITH A RIGHT-TURN PEAK HOUR VOLUME GREATER THAN 100 VEHICLES, USE BIKE LANE MINI-SKIPS. "TURNING VEHICLES YIELD TO BIKES" SIGNAGE MAY BE USED.

ELSEWHERE, STRIPE THE BIKE LANE TO THE STOP BAR.

THRU LANE TRANSITION TO RIGHT-TURN LANE

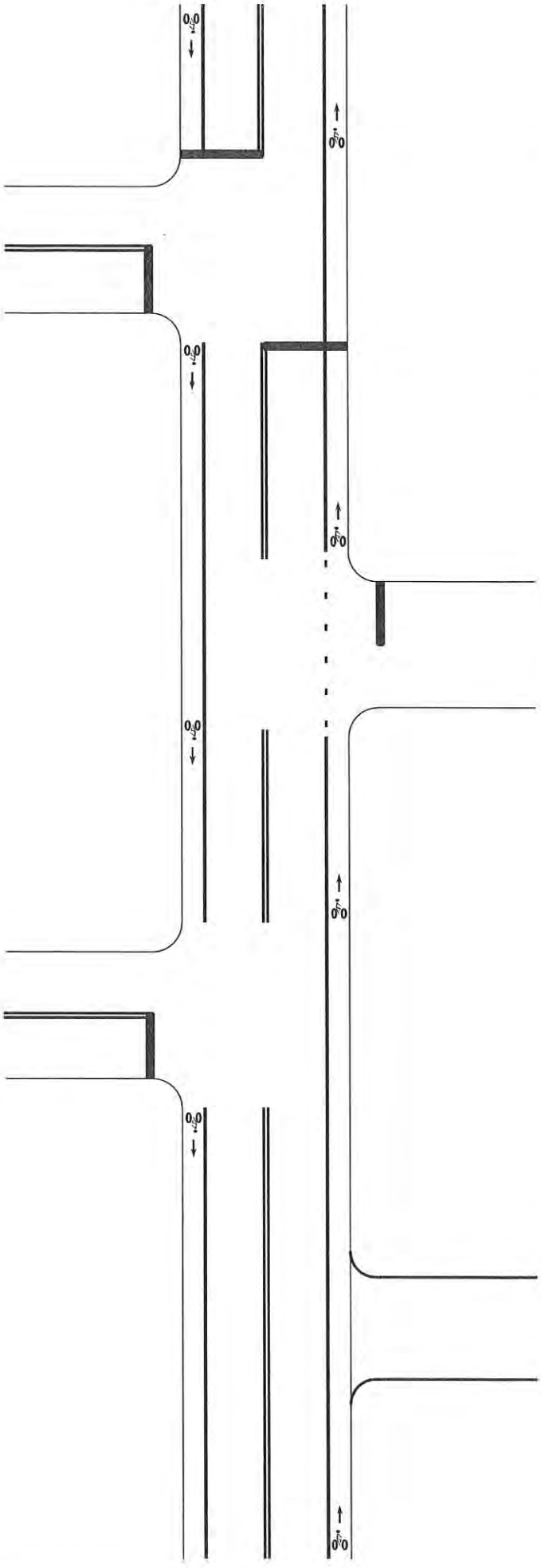
USE MINI-SKIPS TO END THE BIKE LANE AT THE RIGHT-TURN LANE TRANSITION AND THEN CONTINUE BIKE LANE TO THE LEFT OF THE RIGHT-TURN LANE APPROACHING THE INTERSECTION.

BIKE LANE MINI-SKIPS

USE 2' DASHED WITH 6' GAPS TO END BIKE LANES AND INDICATE CONFLICT ZONES.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	BIKE LANE SIGNS AND MARKINGS APPROACHING INTERSECTIONS	
	B-10.03	



INTERSECTIONS

DISCONTINUE BIKE LANE MARKINGS THROUGH SIGNALIZED AND UNSIGNALIZED INTERSECTIONS.

WHERE CONDITIONS WARRANT (LONG CROSSING DISTANCES, TRAVEL LANE OFFSETS, HIGH RIGHT-TURN VOLUMES, ETC.), MINI-SKIPS AND BIKE LANE MARKINGS MAY BE USED THROUGH THE INTERSECTION.

AT T-INTERSECTIONS, A BIKE LANE AT THE "TOP" OF THE "T" SHOULD BE STRIPED SOLID THROUGH THE INTERSECTION.

MAJOR DRIVEWAYS

USE BIKE LANE MINI-SKIPS AT HIGH-VOLUME DRIVEWAYS, E.G. RETAIL CENTERS, APARTMENTS, ETC.

MINOR DRIVEWAYS

USE SOLID BIKE LANE STRIPING AT LOW-VOLUME DRIVEWAYS, E.G. SINGLE-FAMILY HOMES, FARMS, ETC.

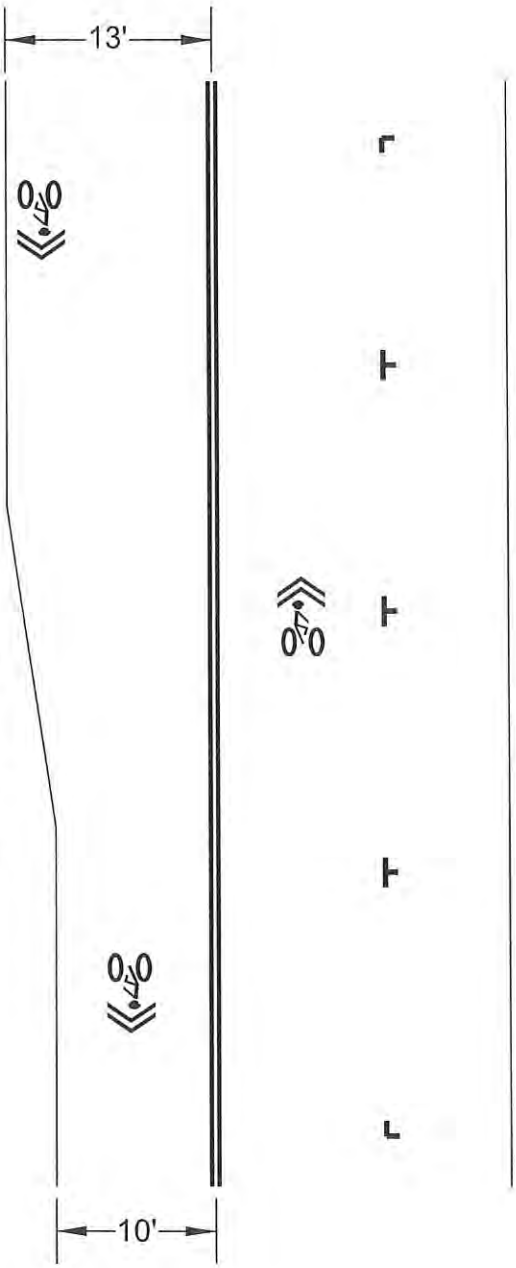
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	BIKE LANE MARKINGS THROUGH INTERSECTIONS AND DRIVEWAYS	
	B-10.04	

PLACEMENT AND SPACING

PLACE SHARED LANE MARKINGS AFTER EVERY INTERSECTION AND MAJOR HIGHWAYS.

ADDITIONALLY, PLACE SHARED LANE MARKINGS EVERY 150' IN DOWNTOWN RALEIGH AND 250' ELSEWHERE.



WIDE LANES

WHERE THE TRAVEL LANE WIDTH IS 13', PLACE SHARED LANE MARKINGS 4' FROM THE EDGE OF PAVEMENT (MEASURED FROM THE APEX OF THE CHEVRON), EXCLUDING THE GUTTER PAN.

WHERE THE TRAVEL LANE WIDTH IS 14' OR WIDER, INSTALL BIKE LANE MARKINGS.

NARROW LANES OR ADJACENT TO PARKING LANES

WHERE THE TRAVEL LANE WIDTH IS LESS THAN 13' OR WHERE ADJACENT TO PARKING LANES, PLACE SHARED LANE MARKINGS IN THE CENTER OF THE TRAVEL LANE.

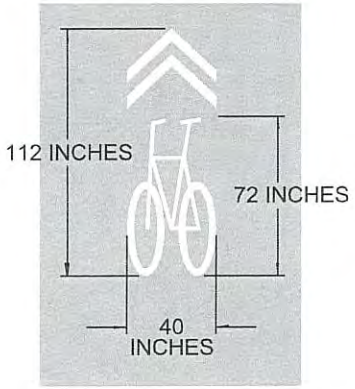
STREET CRITERIA

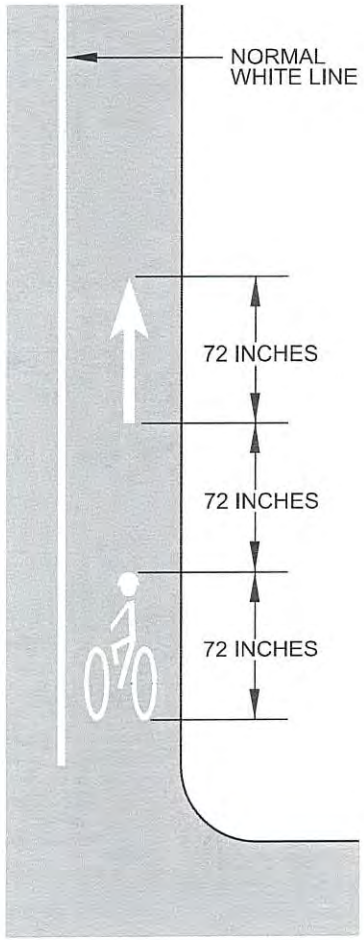
SHARED LANE MARKINGS DO NOT ESTABLISH A BICYCLE FACILITY AND SHOULD ONLY BE USED WHEN ONE OR MORE OF THE CONDITIONS APPLY:

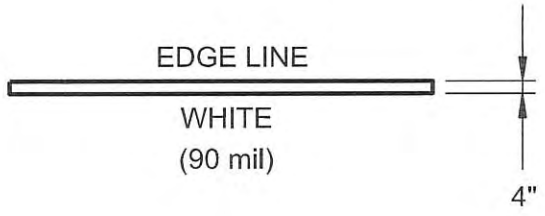
- THE POSTED SPEED LIMIT OR PREVAILING SPEED IS 25 MPH OR LESS.
- THE AVERAGE DAILY TRAFFIC VOLUME IS 4,000 VEHICLES OR LESS.
- PLACEMENT THROUGH MEDIAN AREAS OR COMBINED BIKE LANE/RIGHT-TURN LANE.
- INSTALLATION PAIRED WITH TRAFFIC CALMING MEASURES, WAYFINDING SIGNAGE, AND INTERSECTION TREATMENTS TO ESTABLISH A NEIGHBORHOOD BIKEWAY.

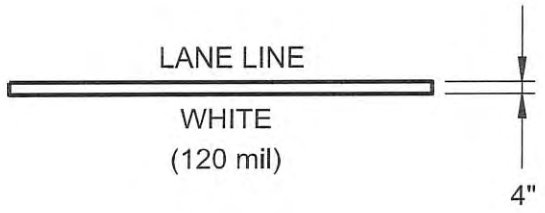
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	SHARED LANE SIGNS & MARKINGS	
	B-10.05	

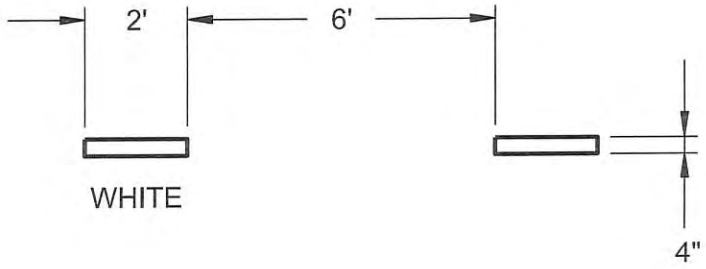








2'-6'/SP MINI-SKIP LINE



CITY OF RALEIGH
STANDARD DETAIL

REVISIONS

DATE: 8/2020

NOT TO SCALE

BICYCLE MARKING

B-10.06

CITY OF RALEIGH

DEPARTMENT OF TRANSPORTATION

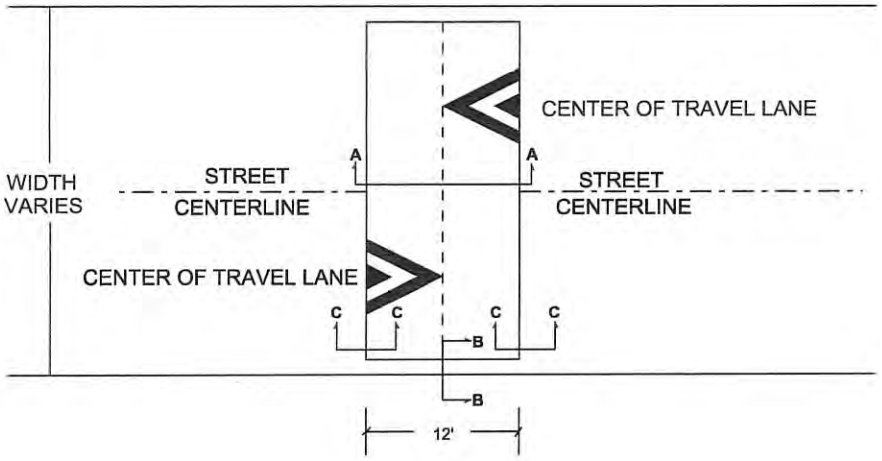
DETAIL SHEET 1

TRAFFIC CALMING PROJECT

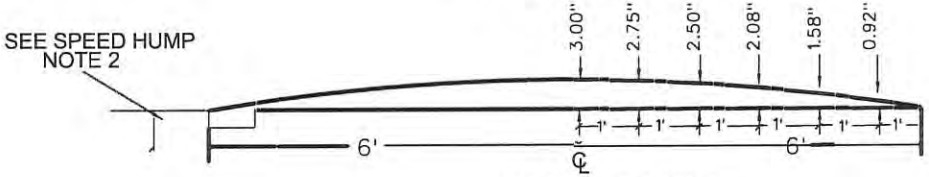
DATE:
DRAWN BY: T FIORELLO
CHECKED BY:
REVISIONS
NO. DATE

SCALES
HSCALE:
VSCALE: N/A
PROJECT
SHEET NO.
DRAWING NO.

SPEED HUMP DETAIL

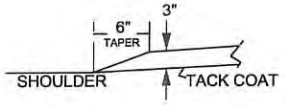


SECTION A - A

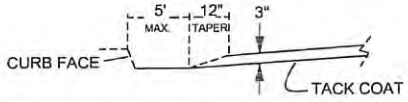


PARABOLIC CROWN

SECTION B - B



SHOULDER DETAIL FOR STREETS WITHOUT GUTTERS



GUTTER DETAIL FOR CURBED STREETS

SECTION C - C

FOOTING DETAIL

CITY OF RALEIGH

DEPARTMENT OF TRANSPORTATION

DETAIL SHEET 2

TRAFFIC CALMING PROJECT

DATE:

DRAWN BY: T FIORELLO

CHECKED BY:

REVISIONS

NO.	DATE

SCALES

HSCALE:

VSCALE: N/A

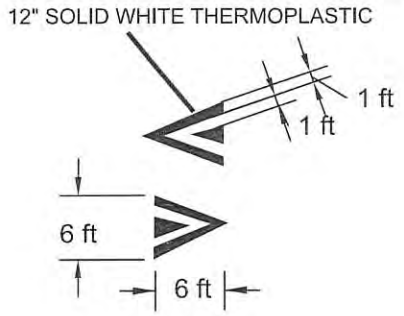
PROJECT

SHEET NO.

DRAWING NO.

STRIPING DETAIL

APPROACH ARCH STRIPING



CITY OF RALEIGH

DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

TRAFFIC CALMING PROJECT

DATE:
DRAWN BY: T FIORELLO
CHECKED BY:

REVISIONS	
NO.	DATE

SCALES

HSCALE:
VSCALE: N/A

PROJECT

SHEET NO.

DRAWING NO.

General Notes:

1. All Work To Be Done In Accordance With NCDOT and City of Raleigh Standard Specifications.
2. Property and Right-of-Way is from GIS information and not Actual Survey
3. All Traffic-Calming Treatments to be Marked in Field by City of Raleigh Staff Prior to Installation.
4. Treatments May Require Advance Striping Based on Roadway Geometry.

Speed Hump Notes:

1. All Speed Humps to be Installed Per Speed Hump Detail Shown on Detail Sheet 1.
2. Asphaltic Concrete Shall Be NCDOT Type S9.5C.
3. Grind Minimum 24" Wide By 2" Deep Keyway In Existing AC Aligned with Leading Edges of Speed Hump.
4. Maximum Tolerance on the Elevation along the Speed Hump to be Plus or Minus 1/8"

Striping Notes:

1. All Speed Hump Chevrons To Be Installed Per Approach Arch Striping Detail on Detail Sheet 2.
2. Pavement Markings Shall Be Installed Before Lane Is Open To Traffic.

GENERAL NOTES:

1. ALL WORK TO BE DONE IN ACCORDANCE WITH NCDOT AND CITY OF RALEIGH STANDARD SPECIFICATIONS.
2. PROPERTY AND RIGHT-OF-WAY IS FROM GIS INFORMATION AND NOT ACTUAL SURVEY.
3. ALL TRAFFIC-CALMING TREATMENTS TO BE MARKED IN FIELD BY CITY OF RALEIGH STAFF PRIOR TO INSTALLATION.
4. TREATMENTS MAY REQUIRE ADVANCE STRIPING BASED ON ROADWAY GEOMETRY.

SPEED HUMP NOTES:

1. ALL SPEED HUMPS TO BE INSTALLED PER SPEED HUMP DETAIL SHOWN ON DETAIL SHEET 1A, KEEPING TO THE ITE STANDARDAS CLOSELY AS POSSIBLE.
2. ASPHALTIC CONCRETE (AC) SHALL BE NCDOT TYPE S9.5C.
3. GRIND MINIMUM 24" WIDE BY 2" DEEP KEYWAY IN EXISTING AC ALIGNED WITH LEADING EDGES OF SPEED HUMP.
4. IF SPEED HUMPS EXIST THEY WILL HAVE ALL EXISTING AC REMOVED BEFORE NEW SPEED HUMPS ARE INSTALLED.
5. SPEED HUMPS TO BE PARABOLIC WITH A MAXIMUM HEIGHT OF APPROXIMATELY 3 INCHES.
6. SPEED HUMPS DEEMED OUT OF TOLERANCE MUST BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE AS REQUIRED BY THE CITY TRANSPORTATION ENGINEER.

STRIPING NOTES:

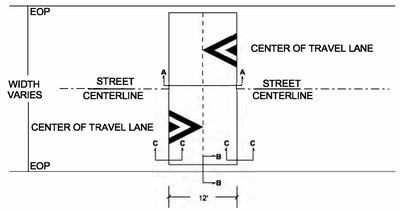
1. ALL SPEED HUMP CHEVRONS TO BE INSTALLED PER APPROACH ARCH STRIPING DETAIL ON SPEED HUMP DETAIL.
2. ALL THERMOPLASTIC PAVEMENT MARKINGS SHALL BE AT LEAST 120 MILS THICK.

SHEET 2 OF 2

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 5/2021	NOT TO SCALE
	SPEED HUMP GENERAL NOTES	

SPEED HUMP DETAIL

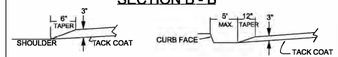


SECTION A - A

SECTION C - C

FOOTING DETAIL

SECTION B - B



SHOULDER DETAIL FOR STREETS WITHOUT GUTTERS

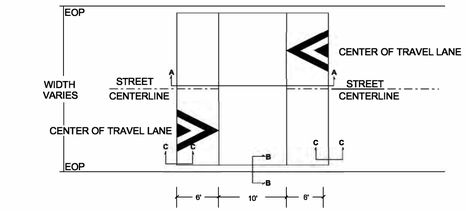
GUTTER DETAIL FOR CURBED STREETS

SHEET 1 OF 2

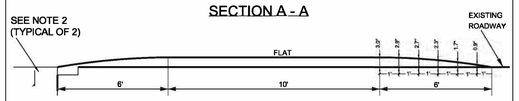
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 5/2021	NOT TO SCALE
	SPEED HUMP	

ASPHALT SPEED TABLE DETAIL



SECTION A - A



SECTION C - C

FOOTING DETAIL

SECTION B - B

SHOULDER DETAIL FOR STREETS WITHOUT GUTTERS

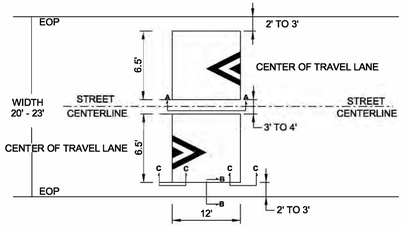
GUTTER DETAIL FOR CURBED STREETS

SHEET 1 OF 2

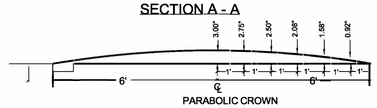
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 5/2021	NOT TO SCALE
	SPEED TABLE	

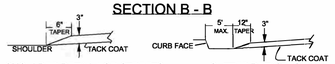
SPEED CUSHION DETAIL



SECTION A - A



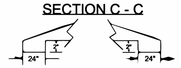
SECTION B - B



SHOULDER DETAIL FOR STREETS WITHOUT GUTTERS

GUTTER DETAIL FOR CURBED STREETS

SECTION C - C



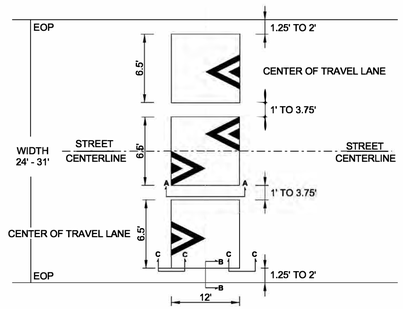
FOOTING DETAIL

SHEET 1 OF 3

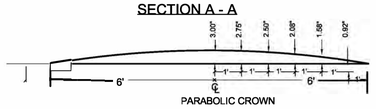
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE:	NOT TO SCALE
	SPEED CUSHION	

SPEED CUSHION DETAIL



SECTION A - A



SECTION B - B

SHOULDER DETAIL FOR STREETS WITHOUT GUTTERS

GUTTER DETAIL FOR CURBED STREETS

SECTION C - C

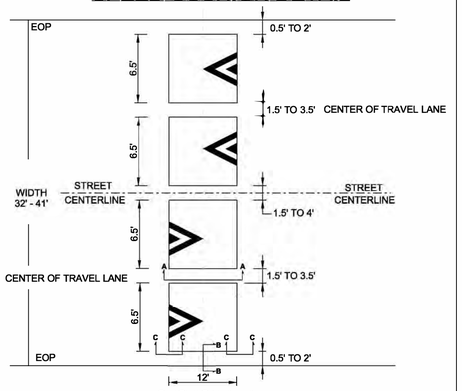
FOOTING DETAIL

SHEET 2 OF 3

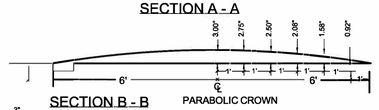
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE:	NOT TO SCALE
	SPEED CUSHION	

SPEED CUSHION DETAIL



SECTION A - A



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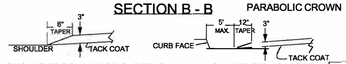
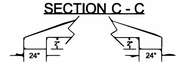


SHOULDER DETAIL FOR STREETS WITHOUT GUTTERS

GUTTER DETAIL FOR CURBED STREETS

SECTION C - C



FOOTING DETAIL

SHEET 3 OF 3

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE:	NOT TO SCALE
	SPEED CUSHION	

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

STANDARD DETAILS

TRAFFIC CALMING PROJECTS

1-2-2021
NORTH CAROLINA PROFESSIONAL SEAL 031438 ENGINEER JACOB M. FENEGER

DATE:

CADD TECH:

CHECKED BY:

REVISIONS

NO.	DATE

SCALES
HSCALE
VSCALE N/A

SHEET NO.
1A

SPEED CUSHION SIZING GUIDE

B-B	Curb	EOP-EOP	Curb
41	2.5	36	2.5
36	2.5	31	2.5
31	2.5	26	2.5
27	2.5	22	2.5

Cushion Width
6.5

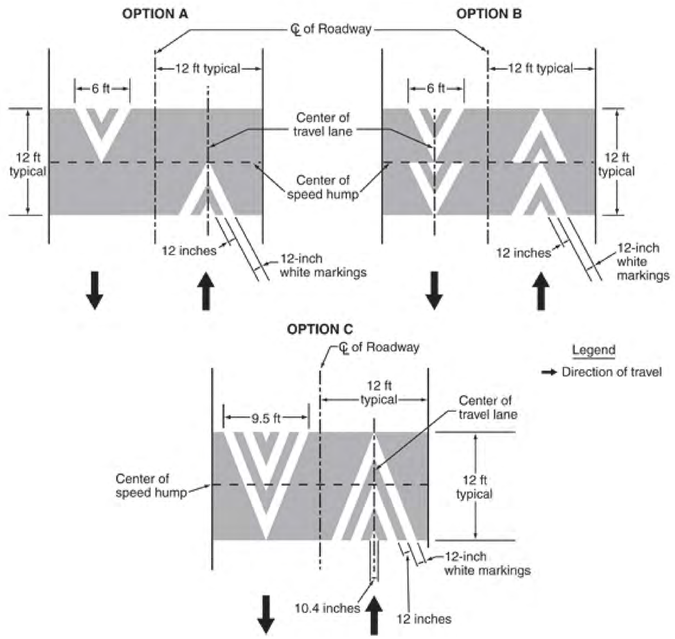
Standard Street Sizes

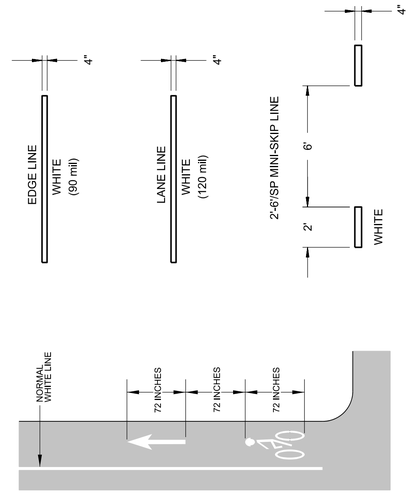
B-B	EOP		Gap	Cushion	Gap	Cushion	Gap	Cushion	Gap	Cushion	Gap
41	36		1.5	6.5	2	6.5	3	6.5	2	6.5	1.5
B-B	EOP		Gap	Cushion	Gap	Cushion	Gap	Cushion	Gap		
36	31		2	6.5	1.75	6.5	1.75	6.5	2		
B-B	EOP		Gap	Cushion	Gap	Cushion	Gap	Cushion	Gap		
31	26		1.5	6.5	1.75	6.5	1.75	6.5	1.5		
B-B	EOP		Gap	Cushion	Gap	Cushion	Gap				
27	22		3	6.5	3	6.5	3				

Sizing Chart for Non-Standard Streets

Range	B-B	EOP-EOP		Gap	Cushion	Gap	Cushion	Gap	Cushion	Gap	Cushion	Gap
32-41 EOP	46	41		2	6.5	3.5	6.5	4	6.5	3.5	6.5	2
	45	40		2	6.5	3	6.5	4	6.5	3	6.5	2
	44	39		2	6.5	3	6.5	3	6.5	3	6.5	2
	43	38		1.5	6.5	3	6.5	3	6.5	3	6.5	1.5
	42	37		1.5	6.5	2.5	6.5	3	6.5	2.5	6.5	1.5
	41	36		1.5	6.5	2	6.5	3	6.5	2	6.5	1.5
	40	35		1.5	6.5	2	6.5	2	6.5	2	6.5	1.5
	39	34		1	6.5	2	6.5	2	6.5	2	6.5	1
	38	33		0.5	6.5	2	6.5	2	6.5	2	6.5	0.5
	37	32		0.75	6.5	1.5	6.5	1.5	6.5	1.5	6.5	0.75
24-31 EOP	B-B	EOP-EOP		Gap	Cushion	Gap	Cushion	Gap	Cushion	Gap		
	36	31		2	6.5	3.75	6.5	3.75	6.5	2		
	35	30		2	6.5	3.25	6.5	3.25	6.5	2		
	34	29		2	6.5	2.75	6.5	2.75	6.5	2		
	33	28		2	6.5	2.25	6.5	2.25	6.5	2		
	32	27		1.75	6.5	2	6.5	2	6.5	1.75		
	31	26		1.5	6.5	1.75	6.5	1.75	6.5	1.5		
	30	25		1.25	6.5	1.5	6.5	1.5	6.5	1.25		
	29	24		1.25	6.5	1	6.5	1	6.5	1.25		
20-23 EOP	B-B	EOP-EOP		Gap	Cushion	Gap	Cushion	Gap				
	28	23		3	6.5	4	6.5	3				
	27	22		3	6.5	3	6.5	3				
	26	21		2.5	6.5	3	6.5	2.5				
	25	20		2	6.5	3	6.5	2				

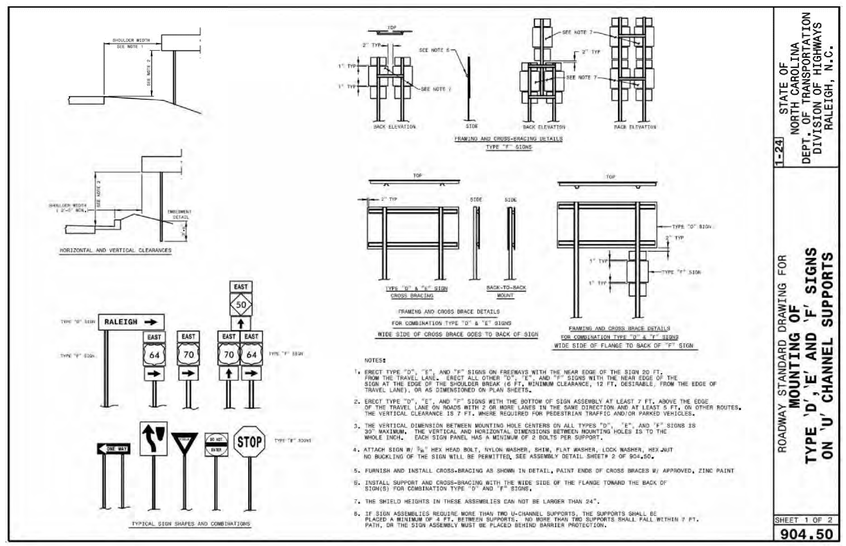
CHEVRON MARKING DETAIL





CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	BICYCLE MARKING	
	B-10.06	



NOTES:

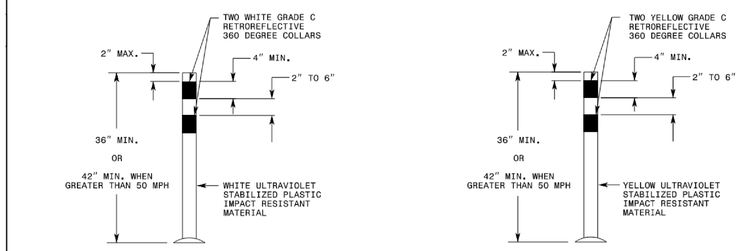
1. ERECT TYPE "D", "E", AND "F" SIGNS ON FREEWAYS WITH THE NEAR EDGE OF THE SIGN 20 FT. FROM THE TRAVEL LANE. ERECT ALL OTHER TYPE "D", "E", AND "F" SIGNS WITH THE NEAR EDGE OF THE SIGN IN THE EDGE OF THE SHOULDER BREAK IS FT. MINIMUM CLEARANCE, 12 FT. DESIRABLE, FROM THE EDGE OF TRAVEL LANE), OR AS DIMENSIONED ON PLAN SHEETS.
2. ERECT TYPE "D", "E", AND "F" SIGNS WITH THE BOTTOM OF SIGN ASSEMBLY AT LEAST 7 FT. ABOVE THE EDGE OF THE TRAVEL LANE ON ROADS WITH 2 OR MORE LANES IN THE SAME DIRECTION AND AT LEAST 5 FT. ON OTHER ROUTES. THE VERTICAL CLEARANCE IS 7 FT., WHERE REQUIRED FOR PEDESTRIAN TRAFFIC AND/OR PARKED VEHICLES.
3. THE VERTICAL DIMENSION BETWEEN MOUNTING HOLE CENTERS ON ALL TYPES "D", "E", AND "F" SIGNS IS 30" MAXIMUM. THE VERTICAL AND HORIZONTAL DIMENSIONS BETWEEN MOUNTING HOLES IS TO THE WHOLE INCH. EACH SIGN PANEL HAS A MINIMUM OF 2 BOLTS PER SUPPORT.
4. ATTACH SIGN W/ 3/8" HEX HEAD BOLT, NYLON WASHER, SHIM, FLAT WASHER, LOCK WASHER, HEX NUT NO BUCKLING OF THE SIGN WILL BE PERMITTED, SEE ASSEMBLY DETAIL SHEETS 2 OF 904.26.
5. FURNISH AND INSTALL CROSS-BRACING AS SHOWN IN DETAIL, PAINT ENDS OF CROSS BRACES W/ APPROVED, ZINC PAINT
6. INSTALL SUPPORT AND CROSS-BRACING WITH THE WIDE SIDE OF THE FLANGE TOWARD THE BACK OF SIGN(S) FOR COMBINATION TYPE "D" AND "F" SIGNS.
7. THE SHIELD HEIGHTS IN THESE ASSEMBLIES CAN NOT BE LARGER THAN 24".
8. IF SIGN ASSEMBLIES REQUIRE MORE THAN TWO U-CHANNEL SUPPORTS, THE SUPPORTS SHALL BE PLACED A MINIMUM OF 4 FT. BETWEEN SUPPORTS. NO MORE THAN TWO SUPPORTS SHALL FALL WITHIN 7 FT. PATH, OR THE SIGN ASSEMBLY MUST BE PLACED BEHIND BARRIER PROTECTION.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.
1-24

ROADWAY STANDARD DRAWING FOR
MOUNTING OF TYPE 'D','E' AND 'F' SIGNS ON 'U' CHANNEL SUPPORTS

SHEET 1 OF 2
904.50

TUBULAR MARKER ASSEMBLY



GENERAL NOTES:

1- USE TUBULAR MARKERS THAT ARE CIRCULAR IN SHAPE AND HAVE A MINIMUM HEIGHT OF 36" WITH A BROADENED BASED.

2- USE TUBULAR MARKERS THAT HAVE A MINIMUM HEIGHT OF 42" ON ROADWAYS WITH POSTED SPEED LIMITS GREATER THAT 50 MPH.

3- SPACING OF TUBULAR MARKERS SHALL BE DETERMINED BY THE ENGINEER ON A CASE BY CASE BASIS.

4- SECURE/INSTALL TUBULAR MARKERS TO THE PAVEMENT SURFACE USING EPOXY OR OTHER APPROVED TYPES OF ADHESIVES.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.
1-18

ROADWAY STANDARD DRAWING FOR
RAISED PAVEMENT MARKERS
TUBULAR MARKERS

SHEET 1 OF 1
1266.01

CITY OF RALEIGH
ENGINEERING SERVICES
DEPARTMENT

1-2-2024
NORTH CAROLINA PROFESSIONAL SEAL 031438 ENGINEER JED JACOB WIFFENBERGER

STANDARD DETAILS
TRAFFIC CALMING PROJECTS

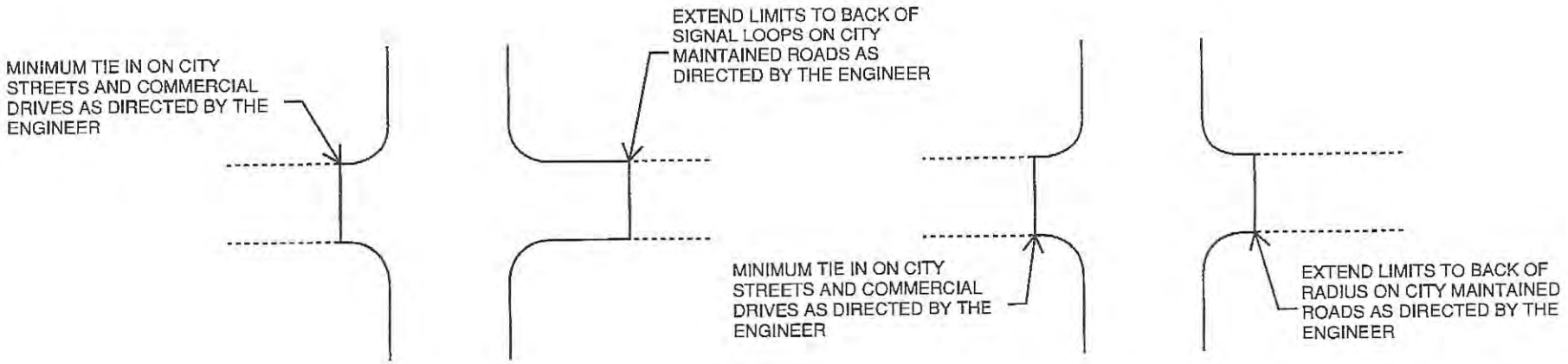
DATE:
CADD TECH:
CHECKED BY:

REVISIONS

NO.	DATE

SCALES
HSCALE
VSCALE N/A

SHEET NO.
2A

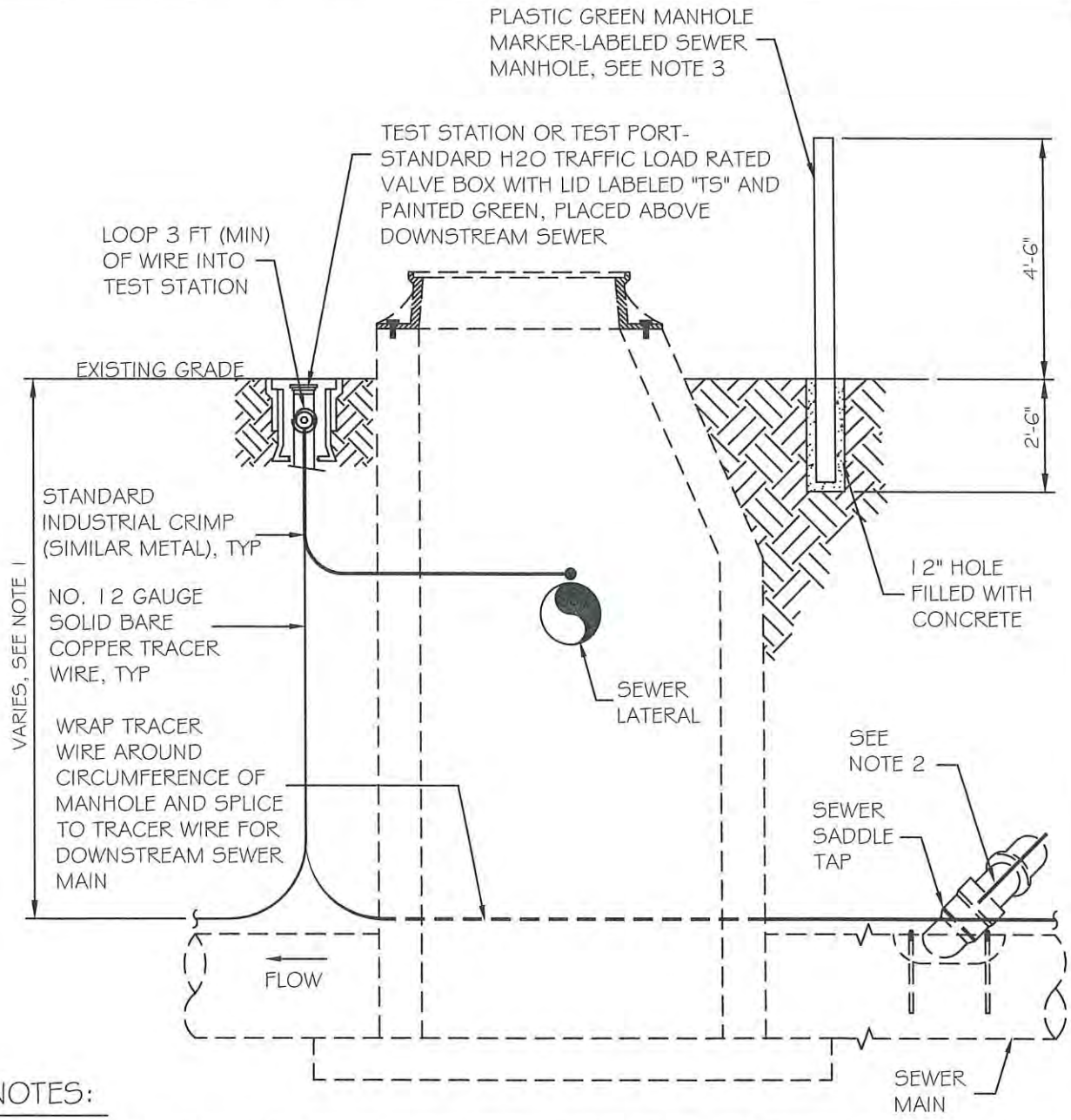


DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES

DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

NOTES:
1. Y-LINE STREETS SHALL NOT BE PULLED AS PART OF THE MAIN-LINE STREET RESURFACING OPERATION. ALL Y-LINE STREETS SHALL BE RESURFACED AFTER THE MAIN STREET.

RESURFACING LIMITS AT Y-LINES AND COMMERCIAL DRIVES



NOTES:

1. THE TRACER WIRE SHALL BE CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. FOR GRAVITY MAIN AND OR LATERAL INSTALLATIONS LESS THAN 8 FT, THE TRACING WIRE SHALL BE ATTACHED TO THE PIPE. TRACER WIRE SHALL BE LAID FLAT AND SECURELY AFFIXED TO THE PIPE AT 10 FOOT INTERVALS. FOR GRAVITY MAIN AND OR LATERAL INSTALLATION DEEPER THAN 8 FT, THE TRACING WIRE SHALL BE INSTALLED AT A DEPTH OF 7-8 FT. THE WIRE SHALL BE PROTECTED FROM DAMAGE DURING THE EXECUTION OF THE WORK. NO BREAKS OF CUTS IN THE TRACER WIRE SHALL BE PERMITTED.
2. WHERE LATERAL TAPS ARE MADE BY SERVICE SADDLES, THE TRACER WIRE SHALL NOT BE ALLOWED TO TO BE PLACED BETWEEN THE SADDLE AND MAIN.
3. MANHOLE MARKERS SHALL BE PLACED ADJACENT TO MANHOLES AT THE DISCRETION OF OWNER OR OWNER'S REPRESENTATIVE.

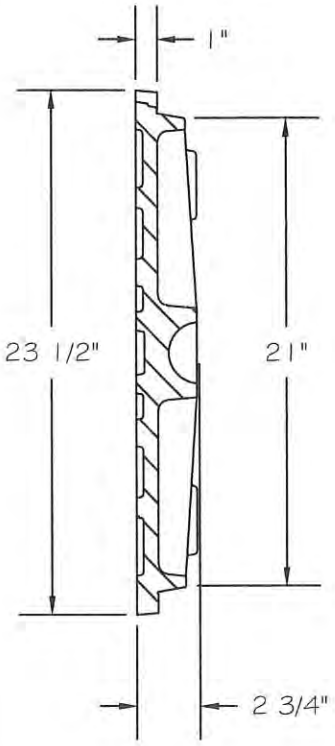
CITY OF RALEIGH

DEPARTMENT OF PUBLIC UTILITIES

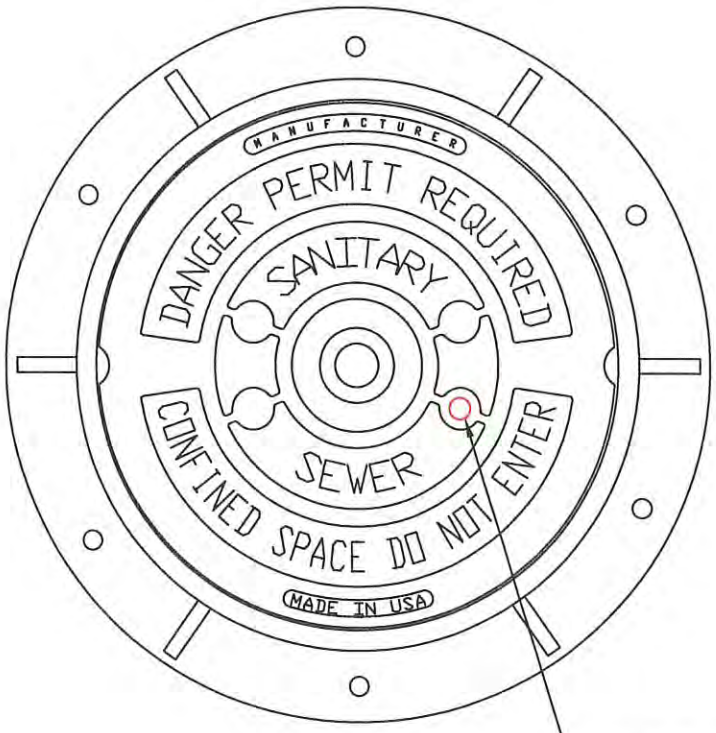
GRAVITY SEWER MAIN TRACER WIRE AND MANHOLE MARKER

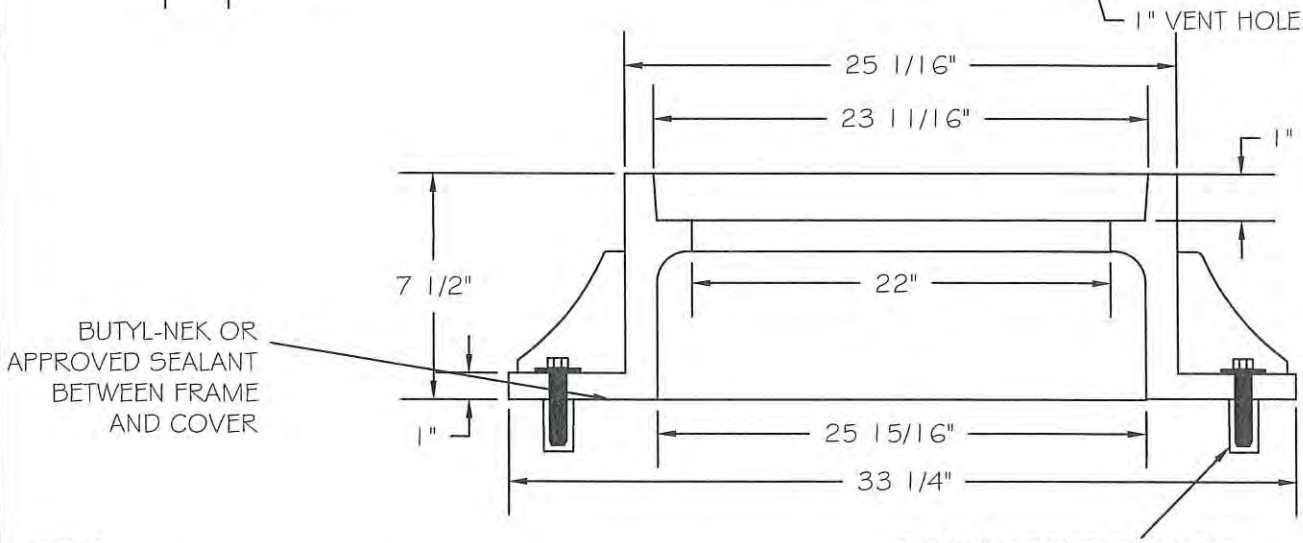
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-20A	WKD	09-14		

COVER 120 LBS. MINIMUM



MANHOLE FRAME AND COVER





NOTES:
1) ALL MANHOLE FRAMES SHALL BE DOMESTICALLY CAST.
2) FRAME SHALL BE A MINIMUM WEIGHT OF 182 LBS. WITHIN PUBLIC ROW AND 160 LBS. WITHIN EASEMENTS.
3) COVER SHALL WEIGH A MIN. OF 120 LBS.
4) ALL MANHOLE FRAMES OUTSIDE OF PAVED SURFACES SHALL BE BOLTED TO THE CONE SECTION OR RING WITH A MINIMUM OF 4 BOLTS PER FRAME.

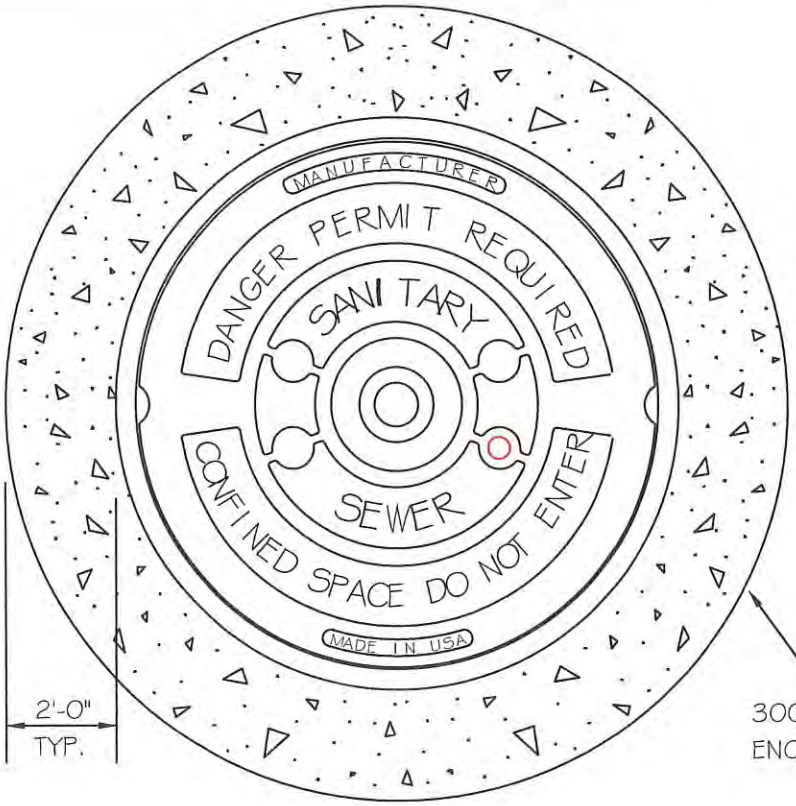
5/8"X3" LAGSHIELD IN HOLE DRILLED INTO CONE OR RING WITH ANCHOR SUNK TO DESIGN DEPTH, AND 3/8"X3" HOT DIPPED GALVANIZED LAG BOLT AND WASHER.

CITY OF RALEIGH

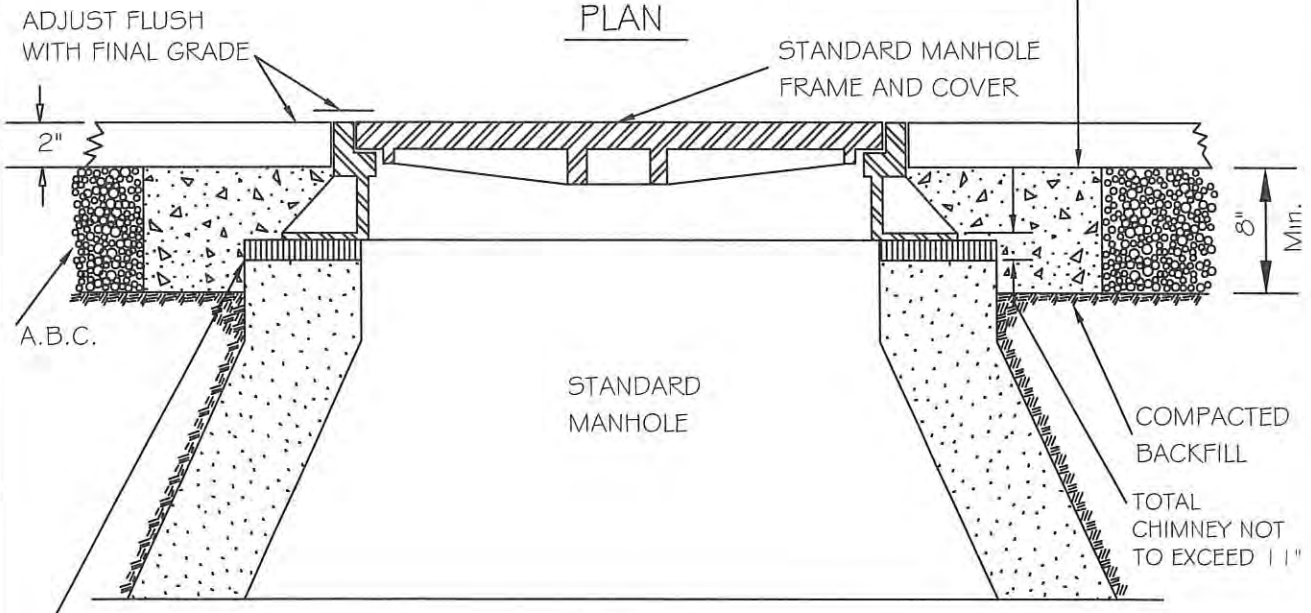
DEPARTMENT OF PUBLIC UTILITIES

STANDARD MANHOLE COVER

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-25	3-1-87	3-1-87	A.B.B.	2-9-05
	RRH	3-30-00	D.H.L.	6-18-08



PLAN



SECTION

PRECAST CONCRETE SPACER (DONUT RINGS) IN TRAFFIC AREAS ONLY. DONUT RINGS NOT ALLOWED IN EASEMENTS.

CITY OF RALEIGH

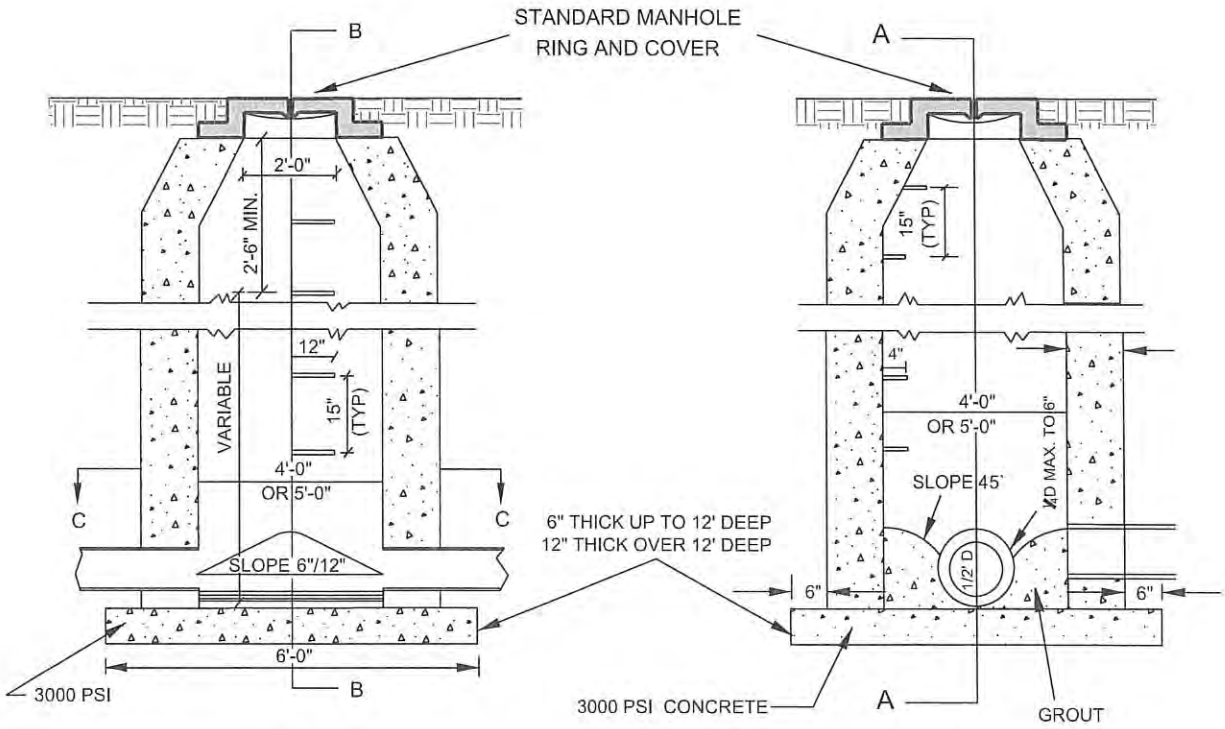
DEPARTMENT OF PUBLIC UTILITIES

STANDARD MANHOLE FRAME AND COVER DETAIL WITHIN PAVED SURFACES

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-29	Y.C.A.	12-31-91	ABB	9-20-04
	RRH	3-30-00	DHL	11-29-07

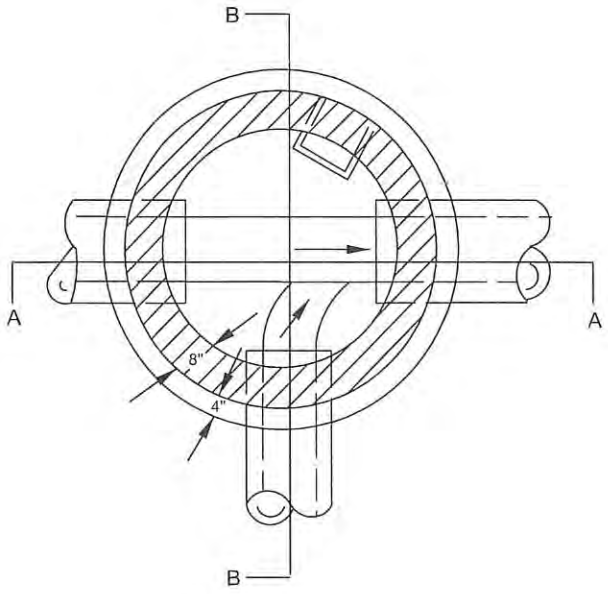
TYPICAL MH FOR STORM SEWER

PIPE SIZE	MH DIAMETER
12-24"	4'-0"
30-42"	5'-0"
48"	6'-0"
54"	8'-0"



SECTION A-A

SECTION B-B



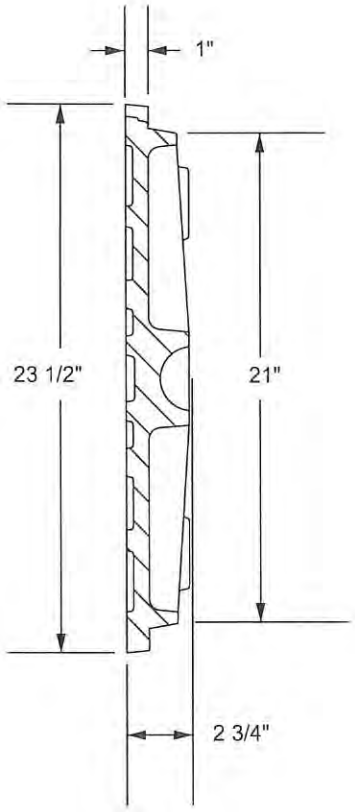
TYPE A
SECTION C-C

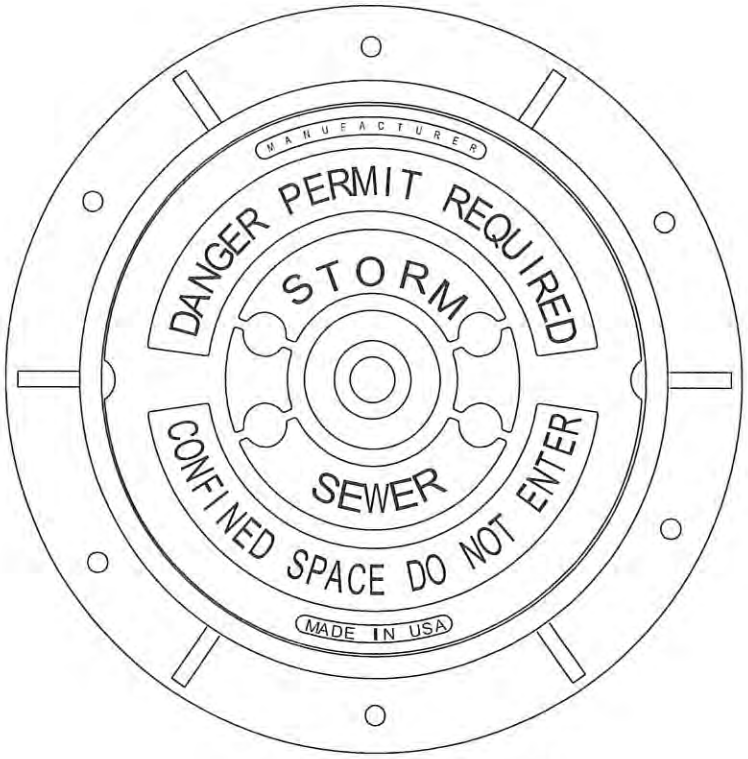
NOTES:

1. DEPTH MEASURED FROM TOP OF CASTING TO INVERT OF MANHOLE.
2. PRECAST MANHOLE COMPONENTS SHALL MEET ASTM-C-478 REQUIREMENTS.
3. SEE STANDARD. SW-10.10 FOR MANHOLE COVER DETAIL.
4. DOMESTIC CASTINGS REQUIRED WITHIN STREET RIGHT-OF-WAY.

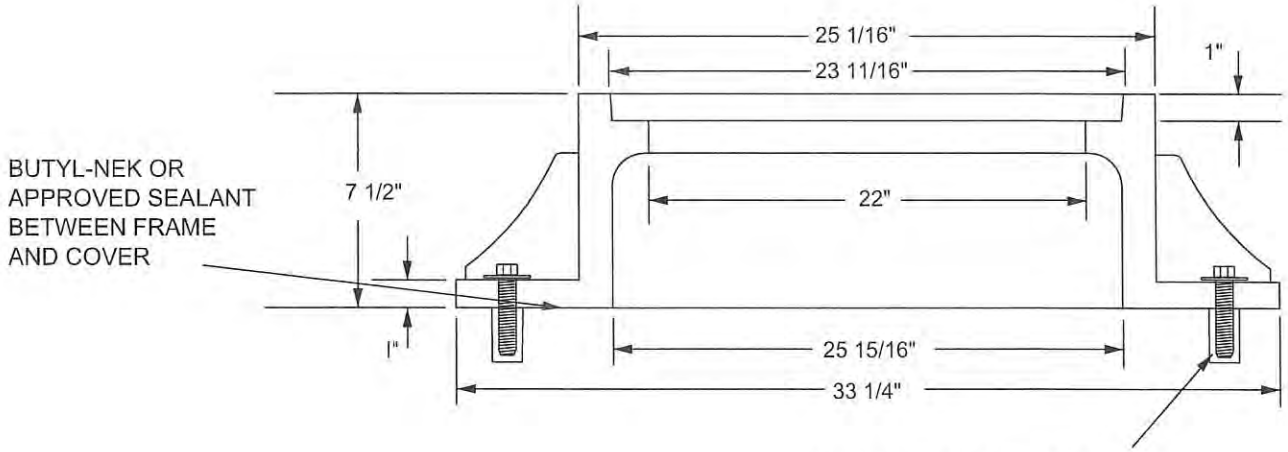
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	STANDARD CLASS "A" MANHOLE	
	SW-10.05	





COVER 120 LBS. MINIMUM

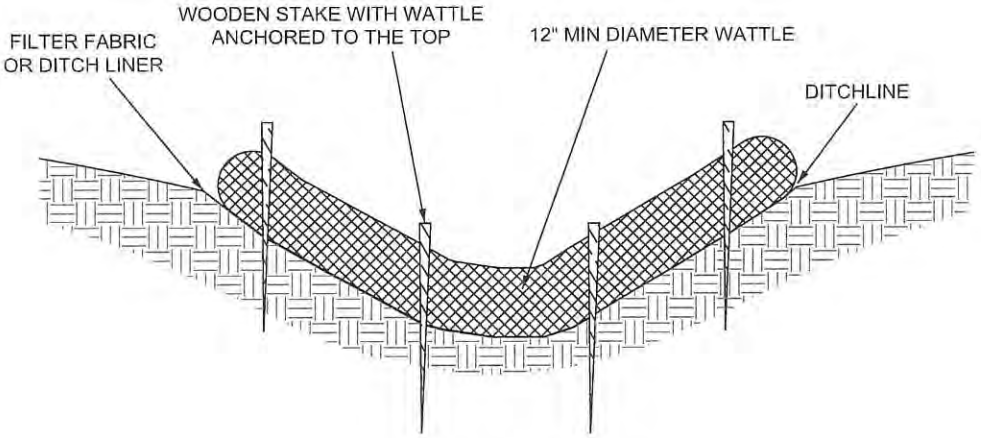


NOTES:

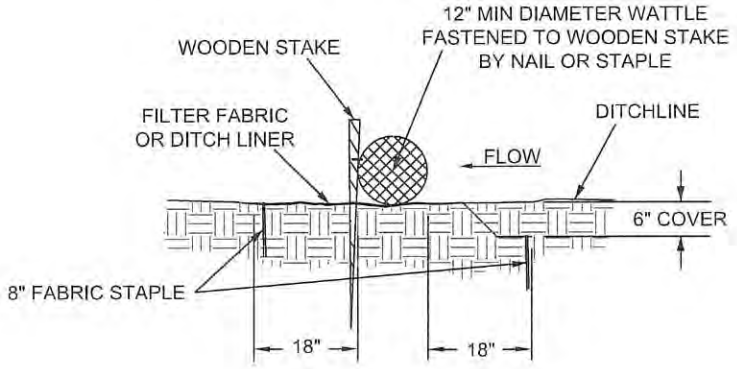
1. ALL MANHOLE FRAMES SHALL BE DOMESTICALLY CAST.
2. FRAME SHALL BE A MINIMUM WEIGHT OF 182 LBS. WITHIN PUBLIC ROW AND 160 LBS. WITHIN EASEMENTS.
3. COVER SHALL WEIGH A MINIMUM OF 120 LBS.
4. ALL MANHOLE FRAMES OUTSIDE OF PAVED SURFACE SHALL BE BOLTED TO THE CONE SECTION OR RING WITH A MINIMUM OF 4 BOLTS PER FRAME.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	STANDARD STORM MANHOLE COVER	
	SW-10.10	

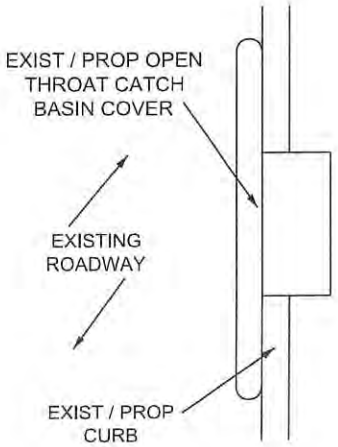


PROFILE VIEW

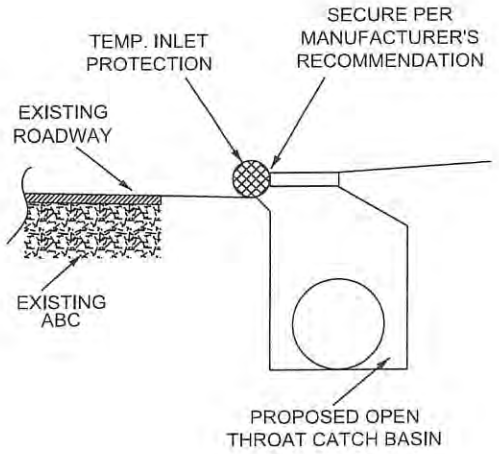


NOTES:

1. WATTLES SHALL BE FILLED WITH STRAW OR OTHER APPROVED MATERIAL.
2. SPACING FOR WATTLES SHALL BE DETERMINED BY THE SITE ENGINEER.
3. WATTLES MAY BE USED FOR PROTECTION OF CATCH BASINS AND DROP INLETS WITH APPROVAL BY THE STORMWATER PROGRAM MANAGER OR DESIGNEE.
4. FOR USE OF WATTLE IN A DITCH, GRADE OF DITCH MUST BE <2.5%.



PLAN W / INLET
INLET PROTECTION - COR BOX



CROSS SECTION

CITY OF RALEIGH
STANDARD DETAIL

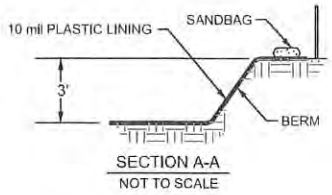
REVISIONS

DATE: 8/2020

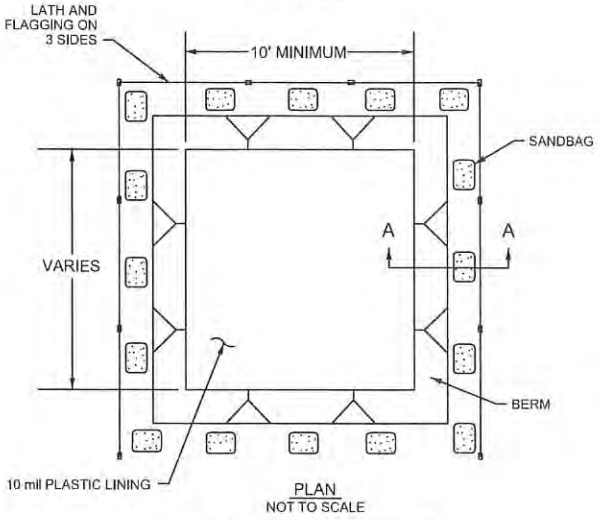
NOT TO SCALE

WATTLE / INLET
PROTECTION DETAIL

SW-20.23

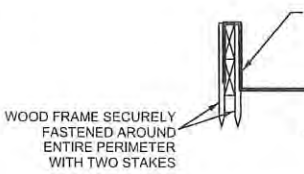


SECTION A-A
NOT TO SCALE

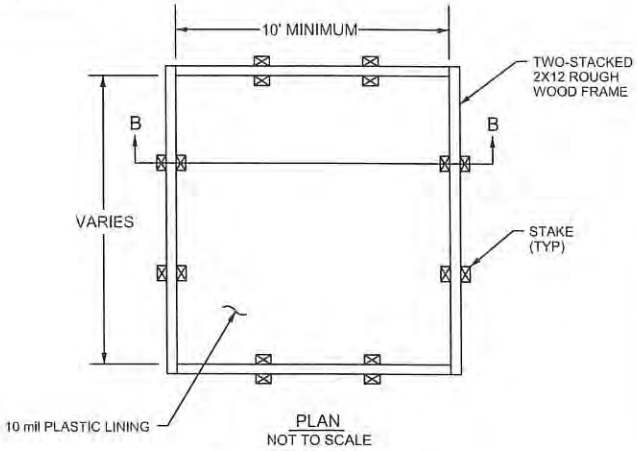


PLAN
NOT TO SCALE

TYPE "BELOW GRADE"

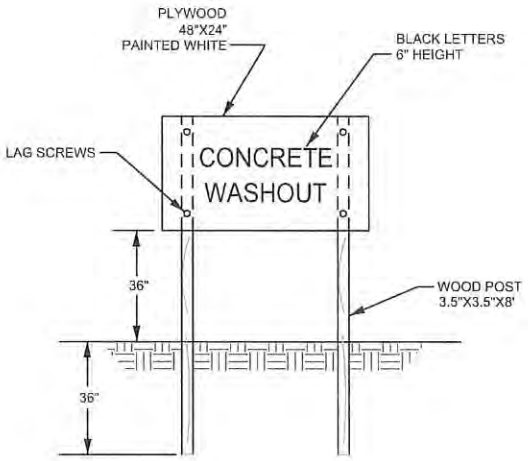


SECTION B-B
NOT TO SCALE

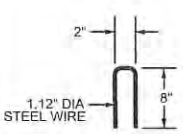


PLAN
NOT TO SCALE

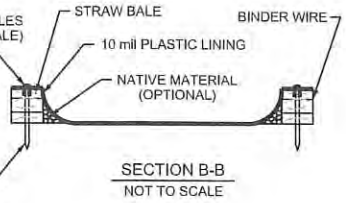
TYPE "ABOVE GROUND"
WITH WOOD PLANKS



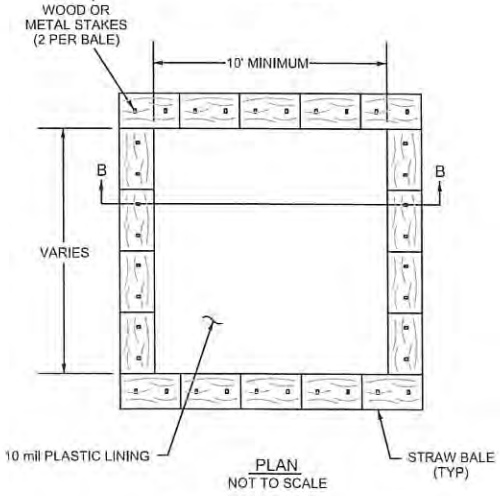
CONCRETE WASHOUT
SIGN DETAIL
(OR EQUIVALENT)



STAPLE
DETAIL



SECTION B-B
NOT TO SCALE



PLAN
NOT TO SCALE

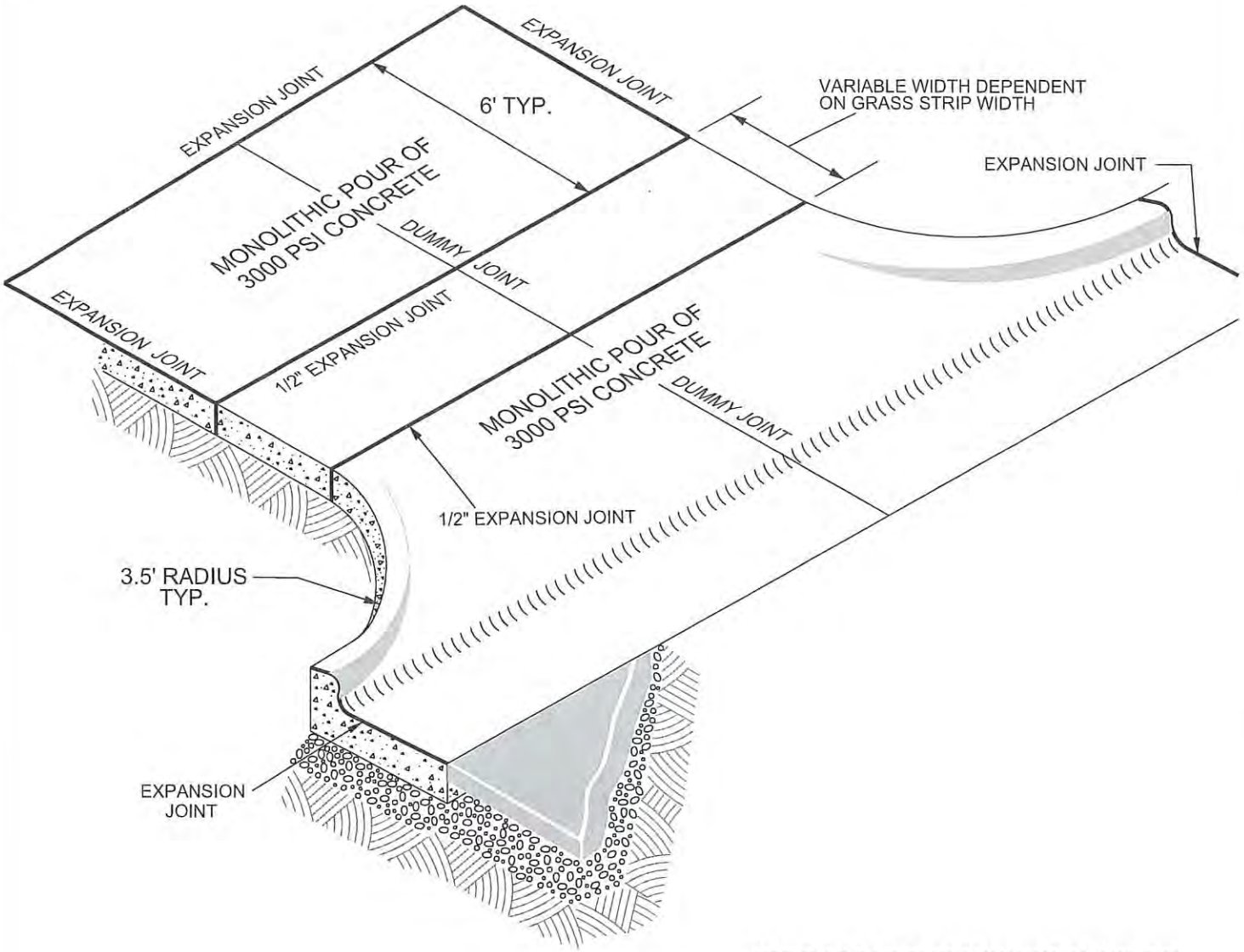
TYPE "ABOVE GRADE"
WITH STRAW BALES

NOTES:

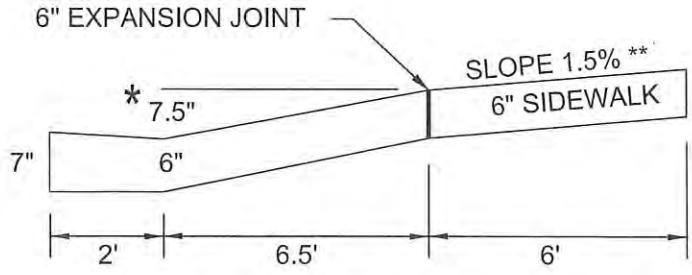
1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.
5. MUST BE LOCATED >50 FT AWAY FROM INLETS/WATERWAYS UNLESS THERE IS NO OTHER PRACTICAL ALTERNATIVE.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	CONCRETE WASHOUT	
	SW-20.25	



SEE T-10.01.2 FOR ADDITIONAL NOTES

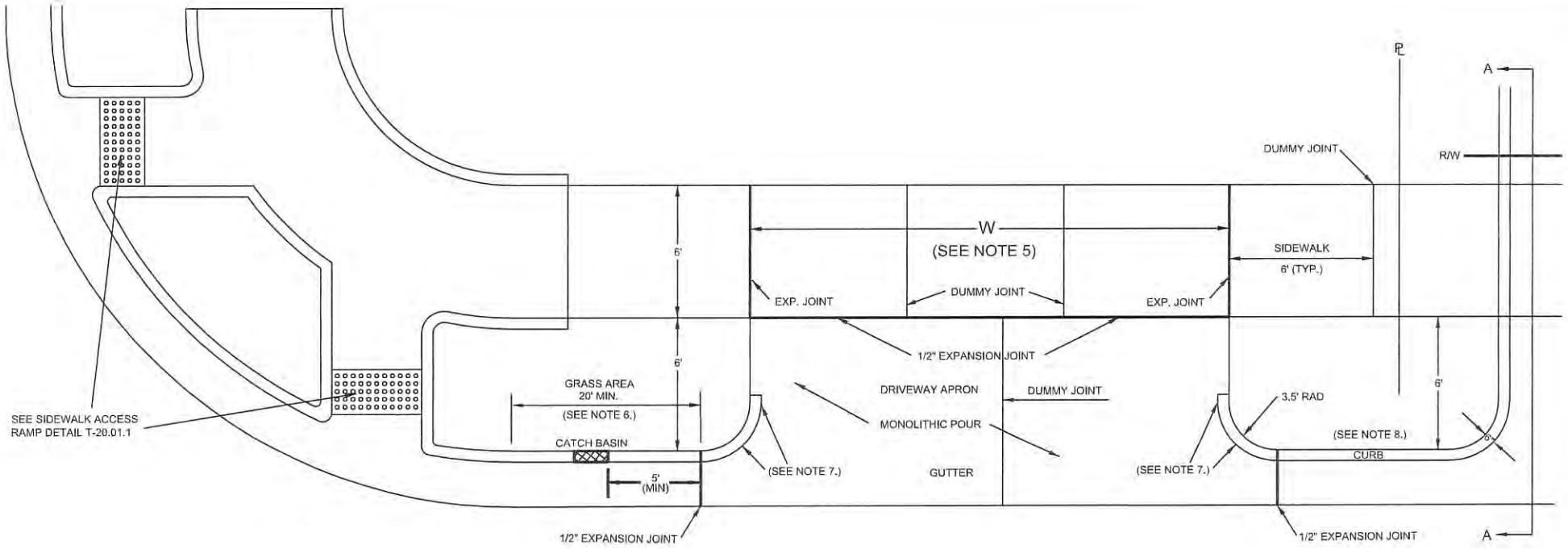


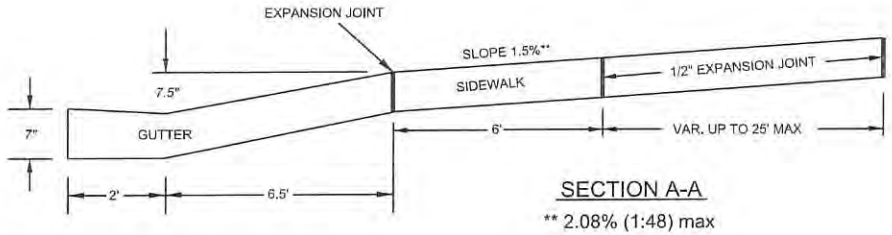
* USE 6.5" WHEN DRIVEWAY IS USED IN LIEU OF A WHEELCHAIR RAMP TO ACCOMMODATE 12:1 MAXIMUM SLOPE (ADA COMPLIANT), SUCH AS IN A CUL-DE SAC.

** 2.08% (1:48) max

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	DRIVEWAY AND SIDEWALK DETAIL	
	T-10.01.1	





SECTION A-A

** 2.08% (1:48) max

NOTES:

1. WHEN A DRIVEWAY IS TO BE CONSTRUCTED WHERE FINAL LAYER OF ASPHALT HAS BEEN PLACED, THE CURB CAN BE SAW CUT IN A STRAIGHT LINE AND REMOVED. IF THE FINAL LAYER HAS NOT BEEN PLACED, THE ENTIRE CURB AND GUTTER SHALL BE REMOVED AND THE DRIVEWAY SHALL BE A MONOLITHIC POUR USING 3000 PSI ,MAX. 4" SLUMP CONCRETE.
2. EXPANSION MATERIAL SHALL EXTEND THE FULL DEPTH OF THE CONCRETE. 1/2" EXPANSION JOINTS ALONG SIDEWALK SHALL BE LOCATED AT NOT MORE THAN 40' INTERVALS & DUMMY CONSTRUCTION JOINTS AT 6' INTERVALS. DUMMY JOINTS SHALL BE AT LEAST 1/3 THE SLAB THICKNESS IN DEPTH.
3. SLOPE ON UNPAVED AREAS BETWEEN BACK OF CURB & SIDEWALK SHALL BE 1/4" PER FT.
4. NO EXPOSED AGGREGATE OR OTHER SPECIAL SURFACE TREATMENTS IN ROW.
5. W-DIMENSION AS SHOWN ON PLAN VIEW SHALL BE AS FOLLOWS: 10' MINIMUM, 18' MAXIMUM FOR RESIDENTIAL DRIVEWAYS 36' MAXIMUM FOR COMMERCIAL DRIVEWAYS
6. THE DISTANCE FROM THE END OF A STREET CURB RADIUS TO THE BEGINNING OF THE DRIVEWAY RADIUS SHOULD BE MINIMUM OF 20 FT.
7. CURB RADIUS TO BE DISSIPATED BETWEEN LIMITS NOTED ABOVE.
8. 7' MIN. BETWEEN DRIVEWAYS ON ADJACENT LOTS. 45' MIN. BETWEEN DRIVEWAYS ON SAME LOT.
9. NO RADIUS ENCROACHMENT SHALL BE ALLOWED ACROSS AN ADJOINING PROP. FRONTAGE. THIS IS DETERMINED BY EXTENDING A LINE FROM THE PROPERTY CORNER PERPENDICULAR TO THE R/W TO THE CURB AND GUTTER LOCATION.
10. ALL CONCRETE MUST BE POURED ON SAME DAY AS INSPECTION OR RE-INSPECTION IS REQUIRED.
11. FINISH THE SURFACE TO GRADE AND CROSS SECTION WITH A FLOAT, TROWEL SMOOTH AND FINISH WITH A BROOM
12. DRIVEWAY RADIUS SHALL BE A MINIMUM OF 5' FROM ANY CATCH BASIN.
13. WHERE UTILITY BOXES/VAULTS MUST BE LOCATED IN THE SIDEWALK, THEY SHALL HAVE A MINIMUM 3" WIDE FRAME OF CONCRETE AROUND THEM.

CITY OF RALEIGH
STANDARD DETAIL

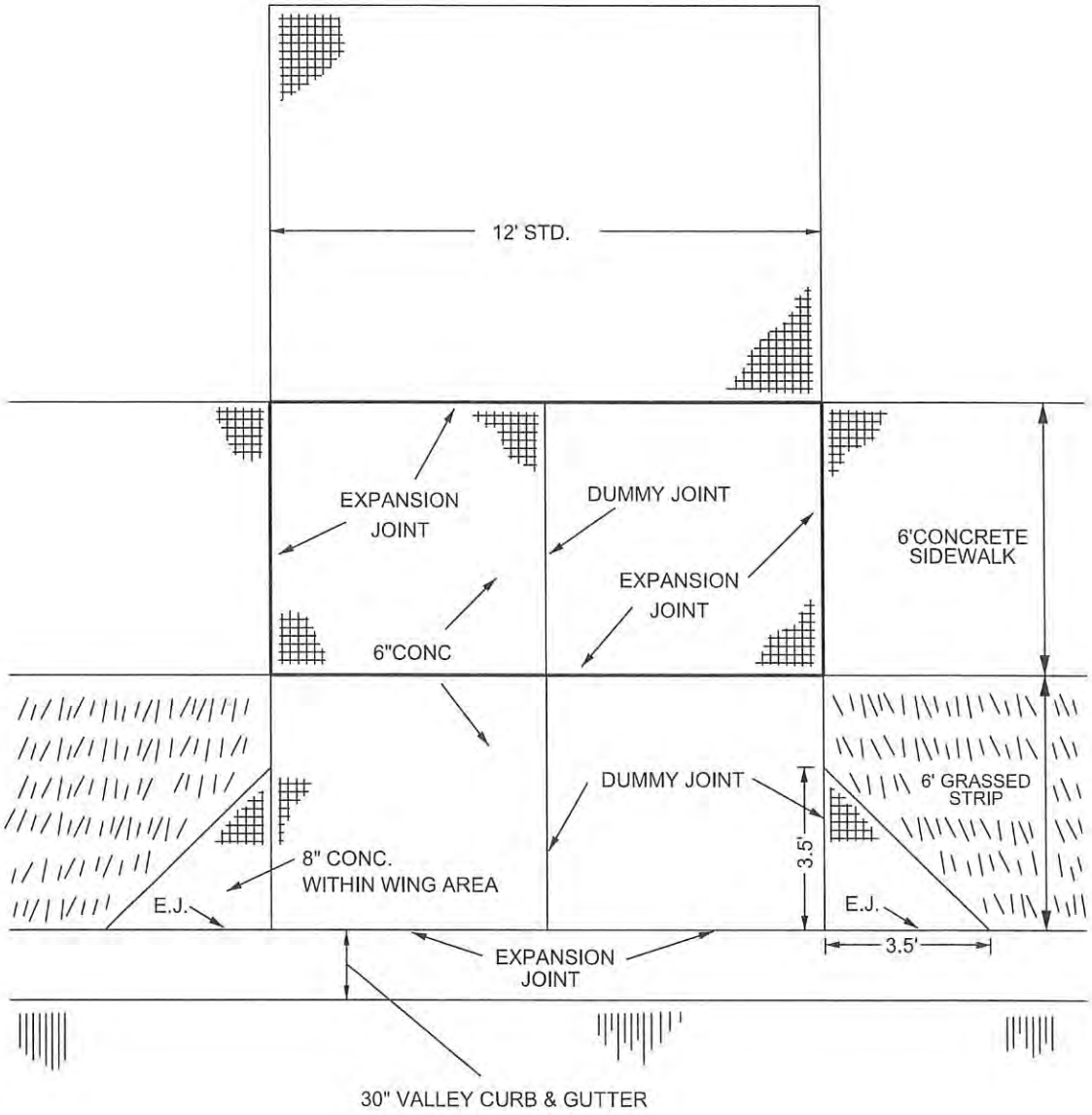
REVISIONS	DATE: 8/2020
DATE: 12/2022	
DATE: 08/2023	

NOT TO SCALE

DRIVEWAY AND SIDEWALK DETAIL

T-10.01.2

SHEET 2 OF 4

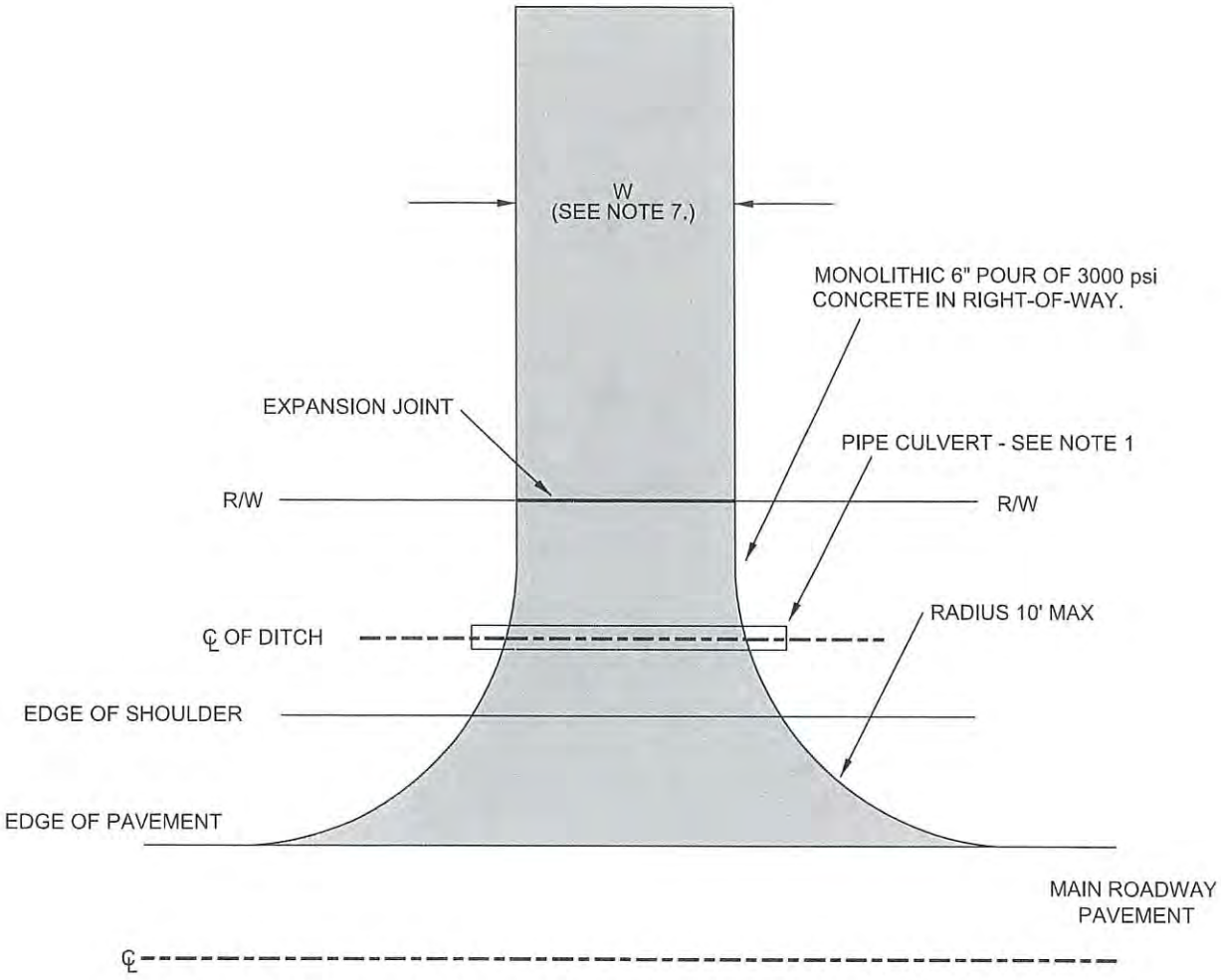


NOTES:

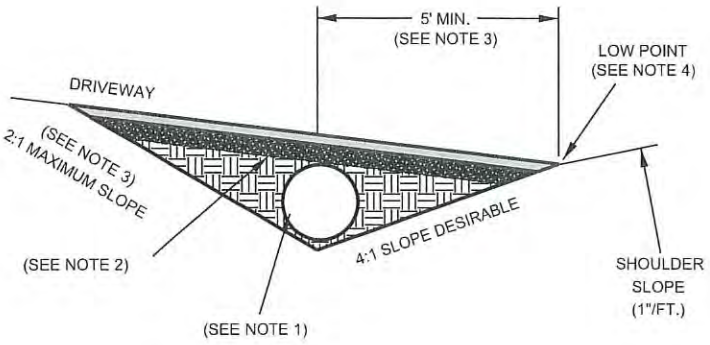
1. SEE STANDARD DETAIL T-10.26.1 FOR CURB AND GUTTER DETAILS.
2. EXPANSION MATERIAL SHALL EXTEND THE FULL DEPTH OF THE CONCRETE.
3. ALL CONCRETE SHALL BE 3000 PSI (MIN.).

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	DRIVEWAY FOR VALLEY TYPE CURB & GUTTER	
	T-10.02	



WITH UNPAVED ROADSIDE DITCH



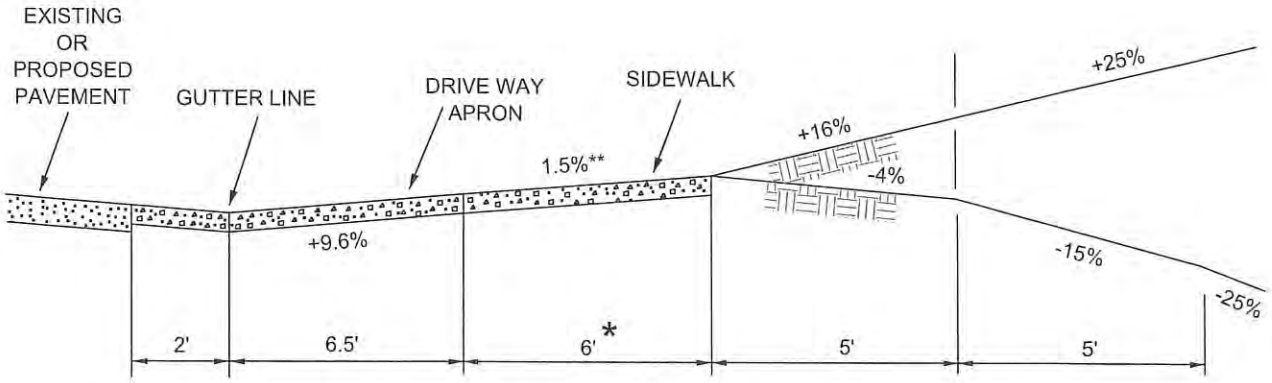
NOTES:

1. PIPE TO BE RCP OR HDPE AND SIZED TO CARRY THE DESIGN FLOW OF THE DITCH FOR A 10-YEAR, 24-HOUR STORM EVENT; THE MINIMUM ACCEPTABLE PIPE SIZE IS 15" IF THE DESIGN FLOW WOULD REQUIRE A SMALLER PIPE. PIPE TO BE EXTENDED TO ALLOW ACCEPTABLE COVER AND SLOPES.
2. 12" MINIMUM COVER OVER PIPE MEASURED FROM TOP OF PAVEMENT.
3. STEEPER SLOPES CAN BE ALLOWED WHERE SPECIAL STABILIZATION IS PROVIDED IN ACCORDANCE WITH EROSION AND SEDIMENTATION CONTROL ORDINANCE.
4. USE 5' VERTICAL CURVE FOR TRANSITION.
5. SEE CITY OF RALEIGH STREET DESIGN MANUAL FOR COMMERCIAL DRIVEWAYS.
6. NO EXPOSED AGGREGATE OR OTHER SPECIAL SURFACE TREATMENTS IN RIGHT OF WAY.
7. W-DIMENSION AS SHOWN ON PLANS SHALL BE AS FOLLOWS; 10' MINIMUM, 18' MAXIMUM FOR RESIDENTIAL DRIVEWAYS.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020 NOT TO SCALE
	RESIDENTIAL DRIVEWAY INSTALLATION ON NON CURB & GUTTERED STREETS
	T-10.03

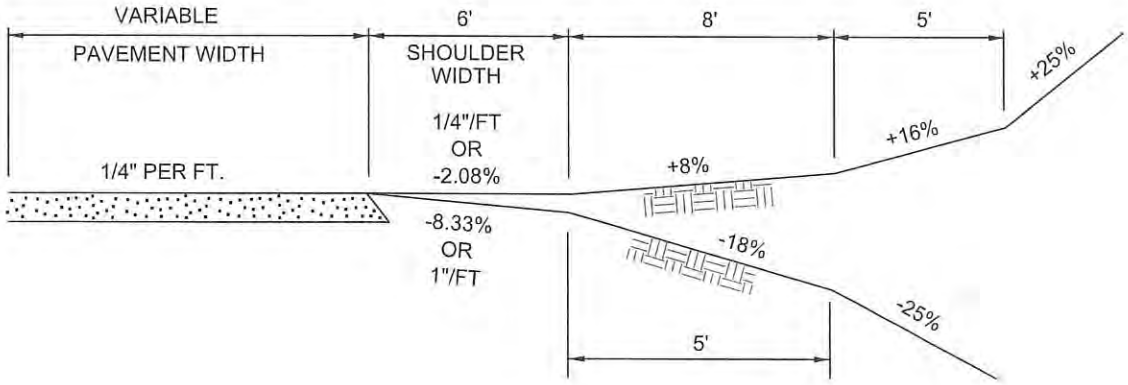
DRIVEWAY GRADES



* 5' FOR SENSITIVE AREA AVENUE
AND SENSITIVE AREA RESIDENTIAL STREET

** 2.08% (1:48) max

A. CURB & GUTTER , SIDEWALK SECTION



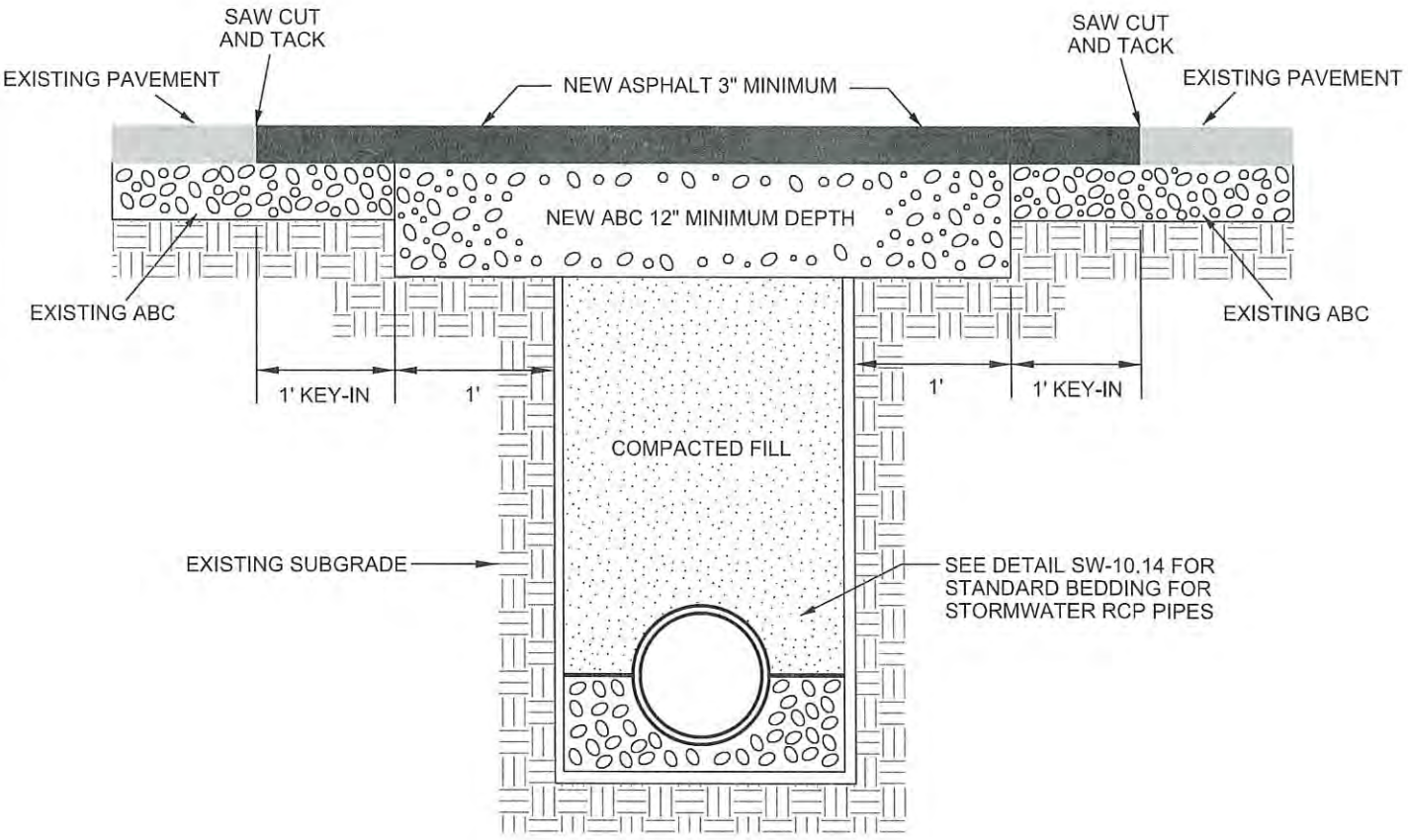
B. SHOULDER SECTION

NOTES:

IF THE SLOPE BETWEEN THE TOP OF CURB AND GUTTER AND A POINT 30 FEET FROM THE CURB AND GUTTER EXCEEDS 20%, THIS SLOPE SHALL BE ADJUSTED TO A MAXIMUM OF 8.33% (1"/FT) UP OR 4.17% (1/2" /FT) DOWN.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	DRIVEWAY GRADES	
	T-10.04	

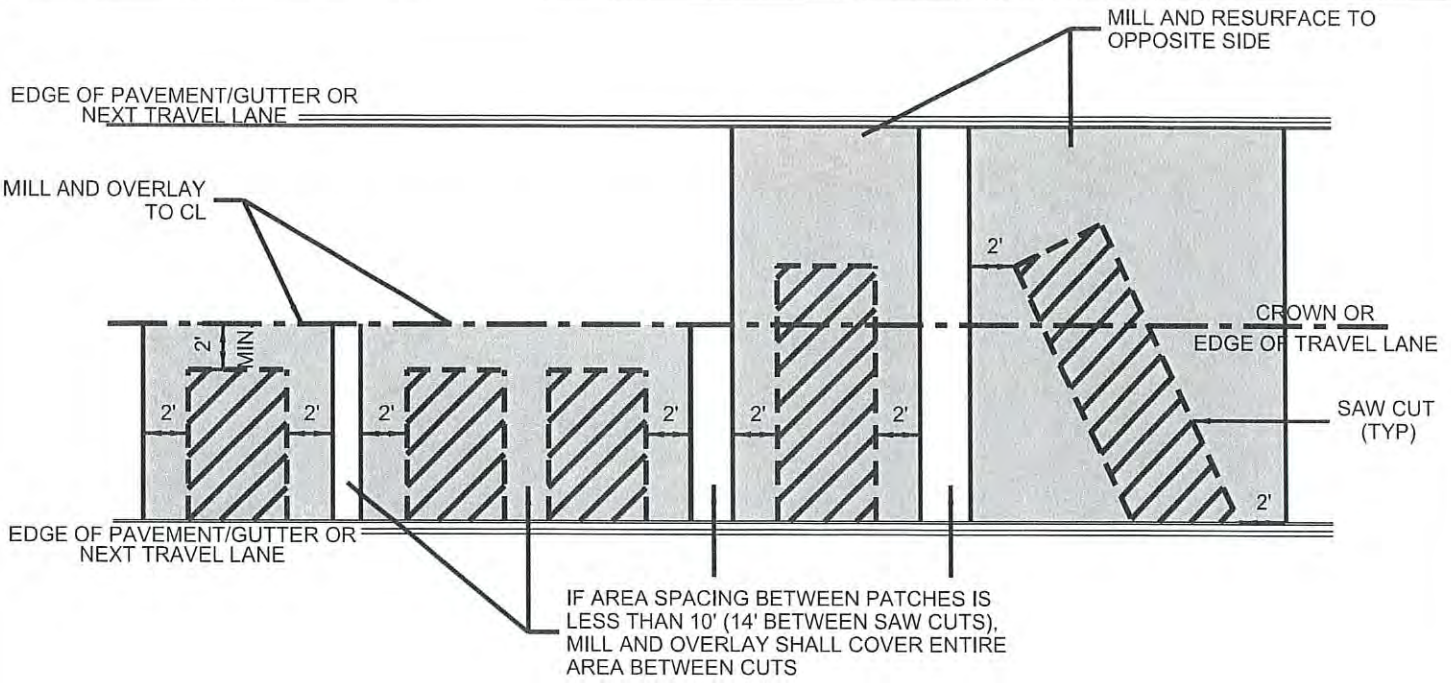


NOTES:

1. THE PAVEMENT EDGE SHALL BE DEFINED BY A STRAIGHT EDGE FORMED BY A MACHINED SAW CUT.
2. THE TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NCDOT.
3. THE FINAL 1' OF FILL SHALL CONSIST OF ABC MATERIAL COMPACTED TO A DENSITY EQUAL TO 100% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-80 AS MODIFIED BY NCDOT. BITUMINOUS BASE OR BINDER MAY BE SUBSTITUTED IF APPROVED BY TRANSPORTATION DIRECTOR OR DESIGNEE.
4. THE ENTIRE THICKNESS/VERTICAL EDGE OF THE CUT SHALL BE TACKED.
5. THE SAME DEPTH OF PAVEMENT MATERIAL WHICH EXISTS SHALL BE REINSTALLED, BUT IN NO CASE SHALL THE ASPHALT BE LESS THAN 3" THICK.
6. THE ASPHALT PAVEMENT MATERIAL SHALL BE INSTALLED AND COMPACTED THOROUGHLY AND ROLLED WITH A SMOOTH DRUM ROLLER TO ACHIEVE A SMOOTH, LEVEL PATCH.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 08/2023	ASPHALT PAVEMENT PATCH AND RCP PIPE BACKFILL	
	T-10.05.1	

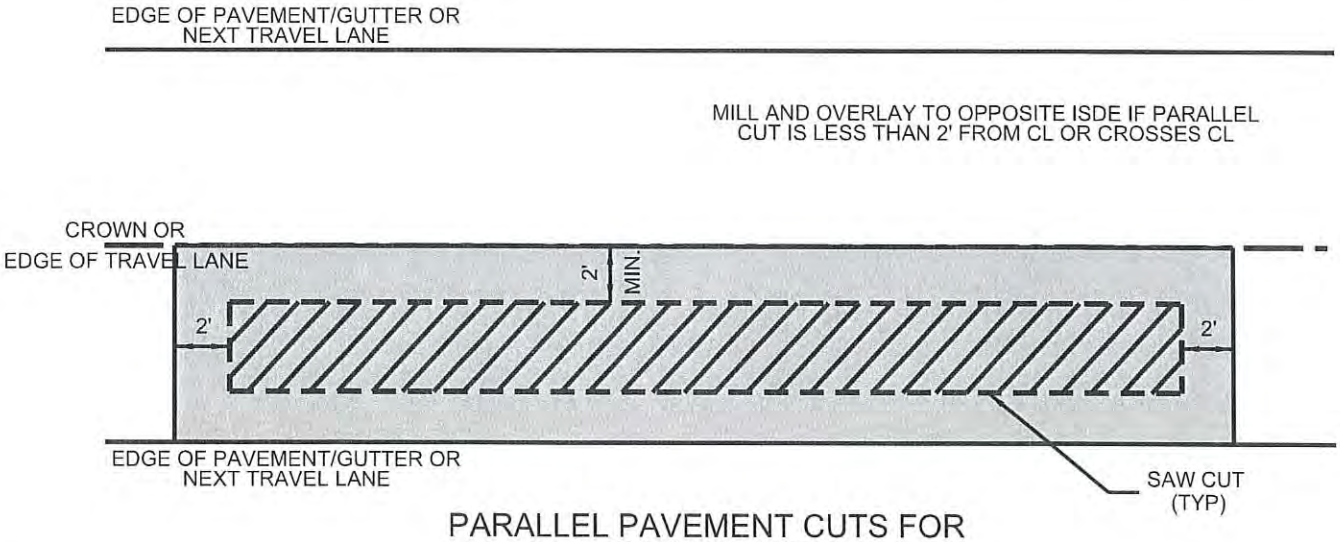


LATERAL PAVEMENT CUTS FOR UTILITY SERVICE

PAVEMENT PATCH (W-2 OR S-3)

MILL AND RESURFACE

MILL AND RESURFACE 1" - 1.5" MIN SURFACE COURSE OR FULL DEPTH REPAIR



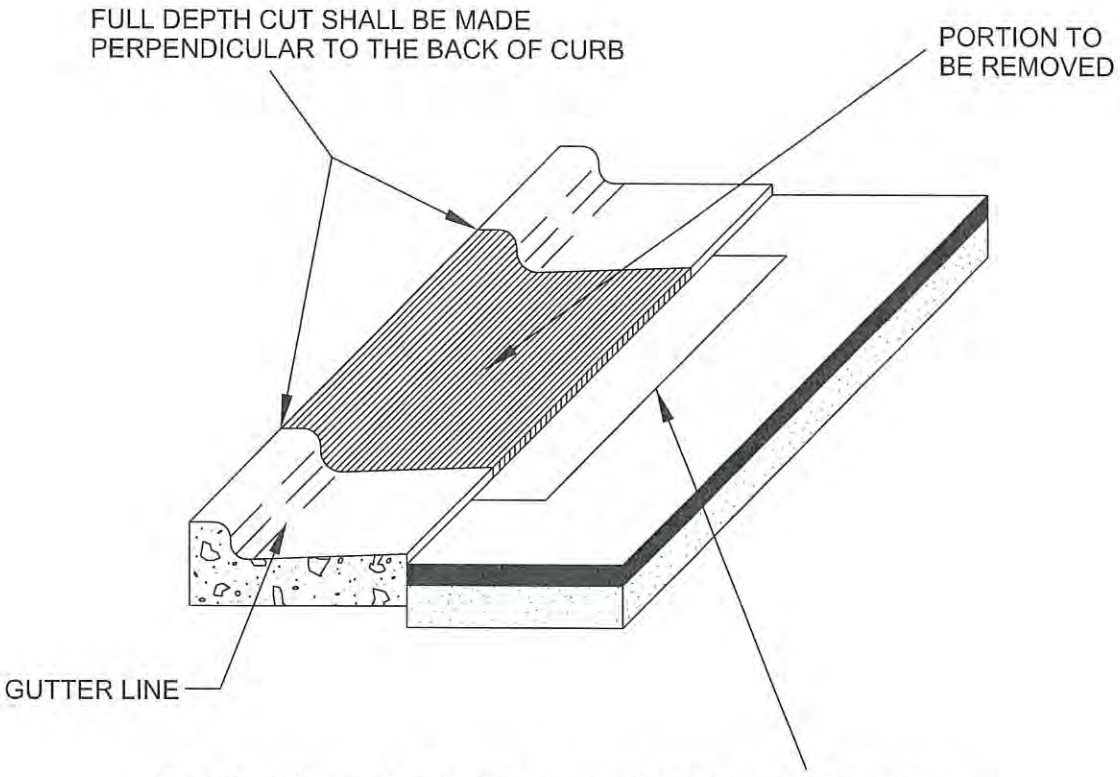
PARALLEL PAVEMENT CUTS FOR UTILITY SERVICE

NOTES:

1. THE PAVEMENT EDGES SHALL BE DEFINED BY A STRAIGHT EDGE FORMED BY A MACHINED SAW CUT OR MILLIING MACHINE
2. THE TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NCDOT
3. THE FINAL 1" OF FILL SHALL CONSIST OF ABC MATERIAL COMPCATED TO A DENSITY EQUAL TO 100% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-80 AS MODIFIED BY NCDOT
4. THE ENTIRE THICKNESS/VERTICAL EDGE OF THE CUT SHALL BE TACKED
5. THE SAME DEPTH OF PAVEMENT MATERIAL WHICH EXISTS SHALL BE REINSTALLED, BUT IN NO CASE SHALL THE ASPHALT BE LESS THAN 3" THICK
6. THE ASPHALT PAVEMENT MATERIAL SHALL BE INSTALLED, COMPACTED THOROUGHLY AND ROLLED WITH A SMOOTH DRUM ROLLER TO LEVEL PATCH

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2023	NOT TO SCALE
	ASPHALT PAVEMENT PATCH AND RCP PIPE BACKFILL	
	T-10.05.2	



IF THE FINAL LIFT OF ASPHALT HAS BEEN INSTALLED AND IS DAMAGED DURING CURB REMOVAL, A ONE FOOT WIDE SECTION OF ASPHALT SHOULD BE SAWCUT AND REMOVED FOR FORMS TO BE USED TO KEEP A STRAIGHT EDGE ON THE DRIVEWAY APRON. REINSTALL HOT MIX SURFACE ASPHALT PATCH S9.5B.

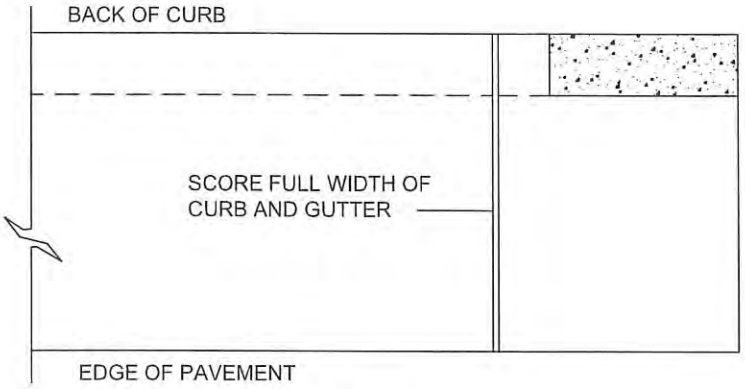
IF THE FINAL LIFT OF ASPHALT HAS NOT BEEN INSTALLED, THE ASPHALT IN FRONT OF THE APRON CAN REMAIN IN PLACE.

NOTES:

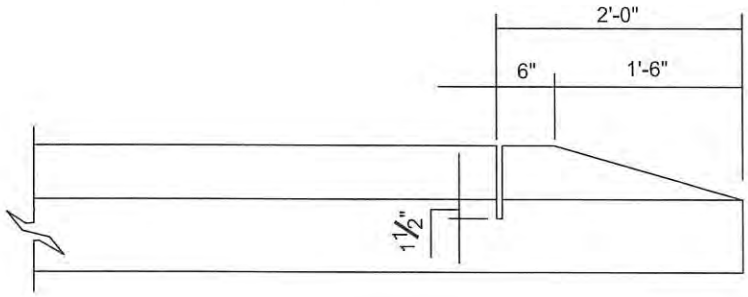
1. CURB AND GUTTER SECTION SHALL BE REMOVED IN ACCORDANCE WITH DRIVEWAY WIDTH APPROVED BY THE CITY.
2. IF PERPENDICULAR CUT IS LESS THAN 5' FROM NEXT JOINT, THEN THE PARALLEL CUT SHALL BE MADE TO THAT JOINT.
3. THIS METHOD IS NOT ALLOWED IN NEW ROADWAY CONSTRUCTION.

CITY OF RALEIGH
STANDARD DETAIL

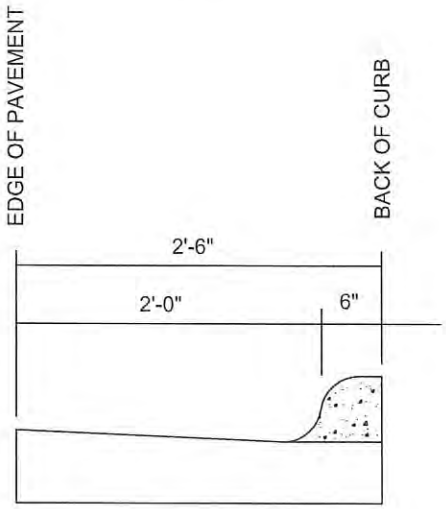
REVISIONS	DATE: 8/2020	NOT TO SCALE
	STANDARD METHOD OF REMOVING EXISTING CURB (FOR A DRIVEWAY APRON INSTALLATION)	
	T-10.24	



PLAN

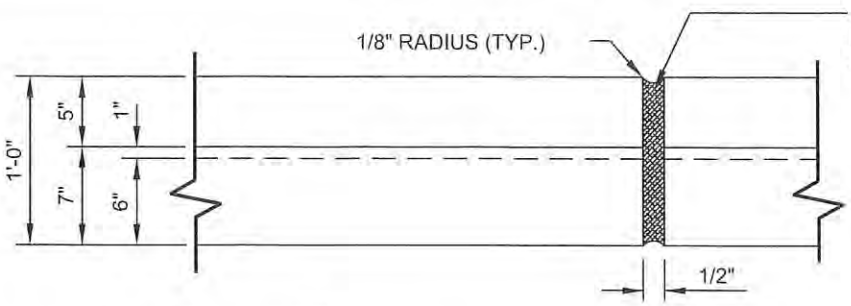


FRONT

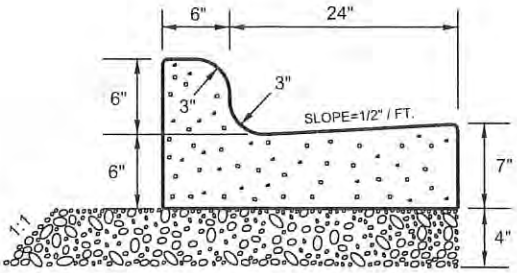


END

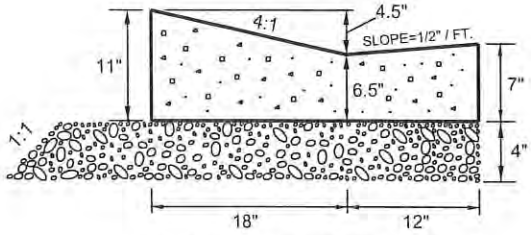
CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
	STANDARD METHOD OF ENDING CURB AND GUTTER	
	T-10.25	



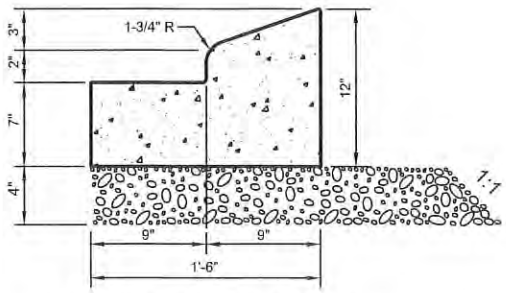
FRONT ELEVATION
TRANSVERSE EXPANSION JOINT



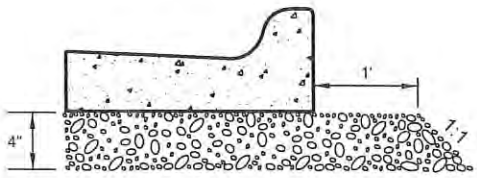
1. 30" CURB & GUTTER



2. 30" VALLEY TYPE GUTTER

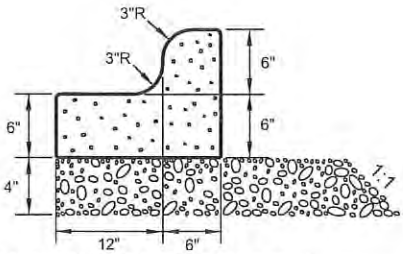


MEDIAN CURB AND GUTTER
SIDE ELEVATION

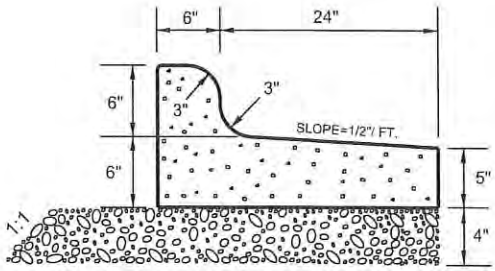


4" COMPACTED A.B.C. UNDER STANDARD CURB & GUTTER (MIN)

NO VALLEY CURB SHALL BE USED
AT INTERSECTIONS, HYDRANTS, ETC.



MEDIAN CURB AND GUTTER
(NON-MOUNTABLE)



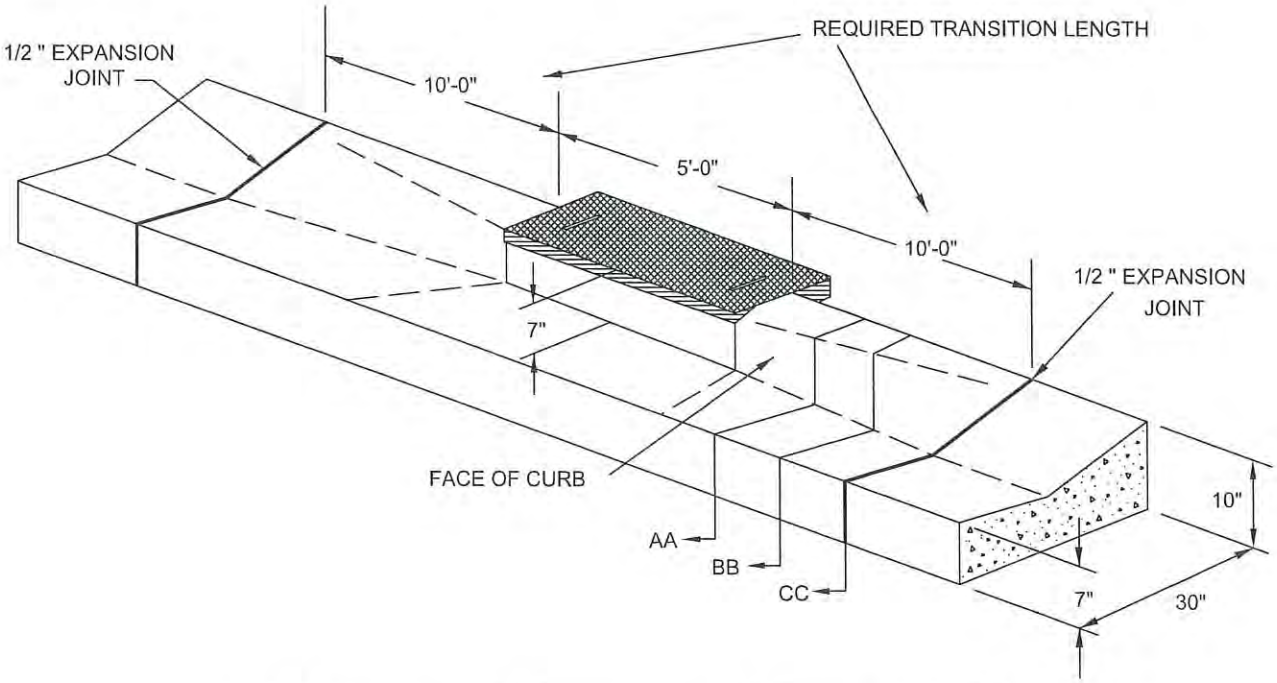
SPILL CURB DETAIL

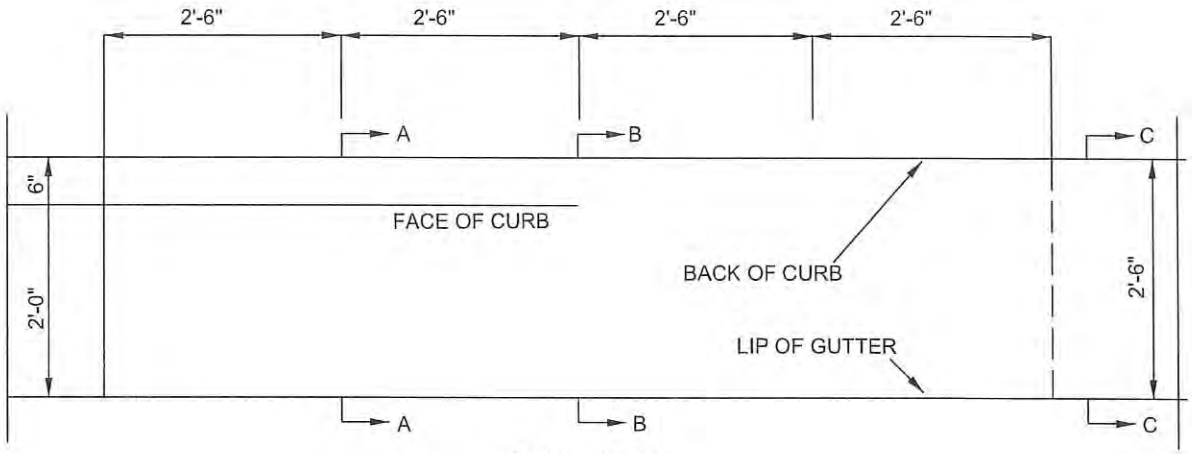
NOTES:

1. 10' MAXIMUM BETWEEN DUMMY JOINTS.
   15' MAXIMUM BETWEEN DUMMY JOINTS ON MACHINE POURS.
2. 1/2" EXPANSION JOINT EVERY 50'.
3. 3000 PSI CONCRETE MINIMUM, 4" SLUMP MAXIMUM.
4. LIQUID MEMBRANE CURING COMPOUND SHALL MEET THE REQUIREMENTS OF SECTION 1026-2 OF NCDOT STANDARDS & SPECIFICATIONS FOR ROADS AND STRUCTURES.
5. ALL CONSTRUCTION JOINTS SHALL BE FILLED WITH JOINT FILLER AND SEALER IN ACCORDANCE WITH NCDOT ROADWAY STANDARD DETAIL 846.01 THE JOINT MATERIAL SHALL CONFORM TO SECTION 1028-2 OF NCDOT STANDARD & SPECIFICATIONS FOR ROADS AND STRUCTURES.
6. REFER TO NCDOT DETAIL 846.01 FOR CURB AND GUTTER SUPERELEVATION RATES.

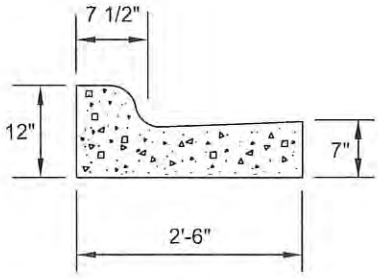
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	CURB AND GUTTER	
	T-10.26.1	

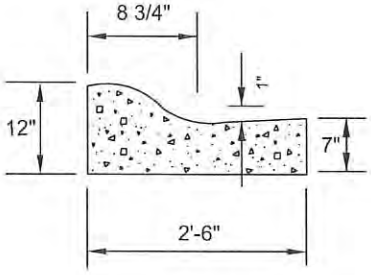




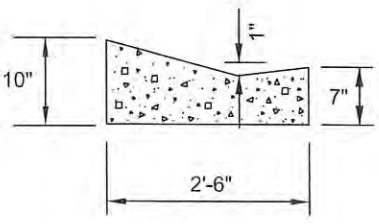
PLAN VEIW



SECTION A-A



SECTION B-B



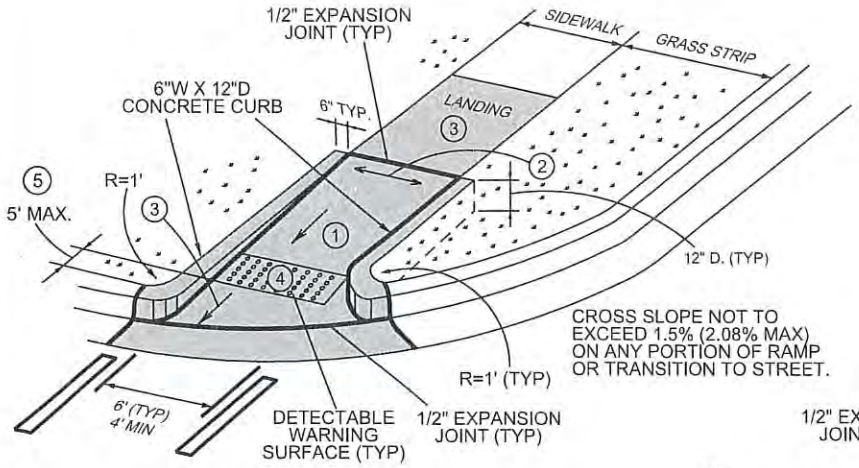
SECTION C-C

NOTES:
TRANSITION NOT TO BE LOCATED WITHIN THE CURB RADIUS.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	CURB TRANSITION TO 2'- 6" VALLEY GUTTER	
	T-10.26.2	

PAY LIMITS FOR CURB RAMP

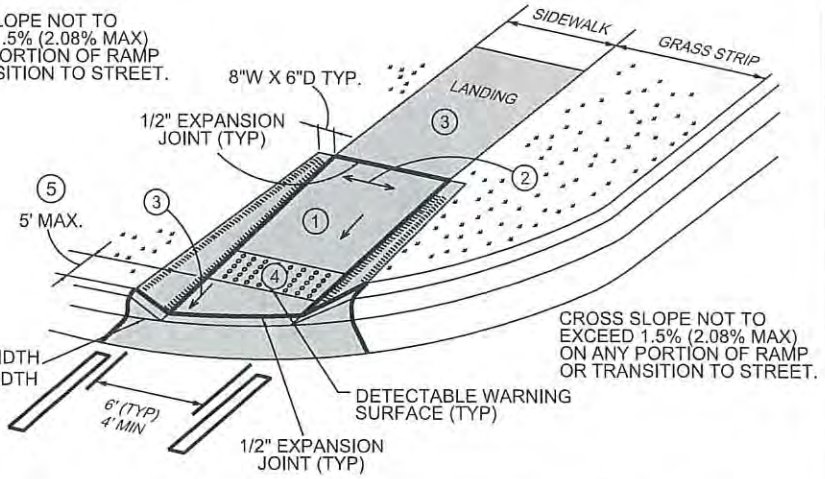


CONCRETE DEPTH	
RAMP / FLARE	6"
LANDING	4"

CROSS SLOPE NOT TO EXCEED 1.5% (2.08% MAX) ON ANY PORTION OF RAMP OR TRANSITION TO STREET.

TYPE N-1 (CURB TYPE)

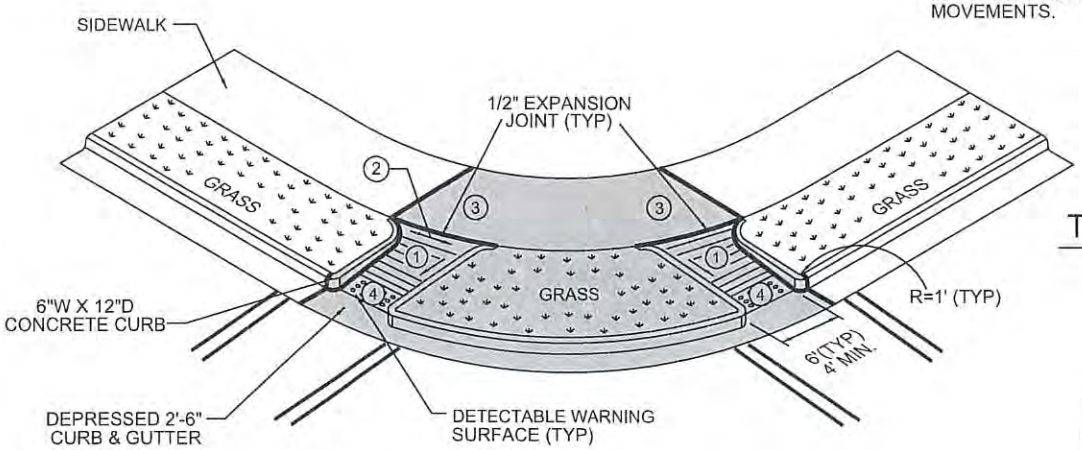
1. 7.5%; 8.33% (1:12) MAX RAMP SLOPE
2. 1.5%; 2.08% (1:48) MAX CROSS SLOPE
3. CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 1.5% (2.08% MAX) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.
4. RAMPS AND DOMES SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.
5. IF LENGTH EXCEEDS 5', TRUNCATED DOMES SHALL BE INSTALLED ALONG THE BACK OF THE CURB COVERING THE FULL WIDTH OF THE RAMP.



CROSS SLOPE NOT TO EXCEED 1.5% (2.08% MAX) ON ANY PORTION OF RAMP OR TRANSITION TO STREET.

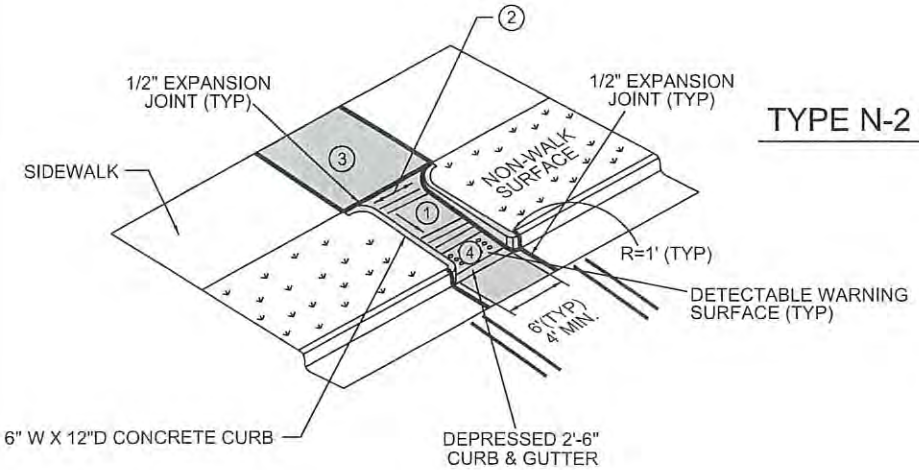
TYPE N-1A (FLARE TYPE)

NOTE: USE SMALL FLARES ONLY WHEN A CURB TYPE DIRECTLY CONFLICTS WITH APPROACHING VEHICULAR TURNING MOVEMENTS.



TYPE N-2 (RADIUS)

CONCRETE DEPTH	
RAMP / FLARE	6"
LANDING	4"

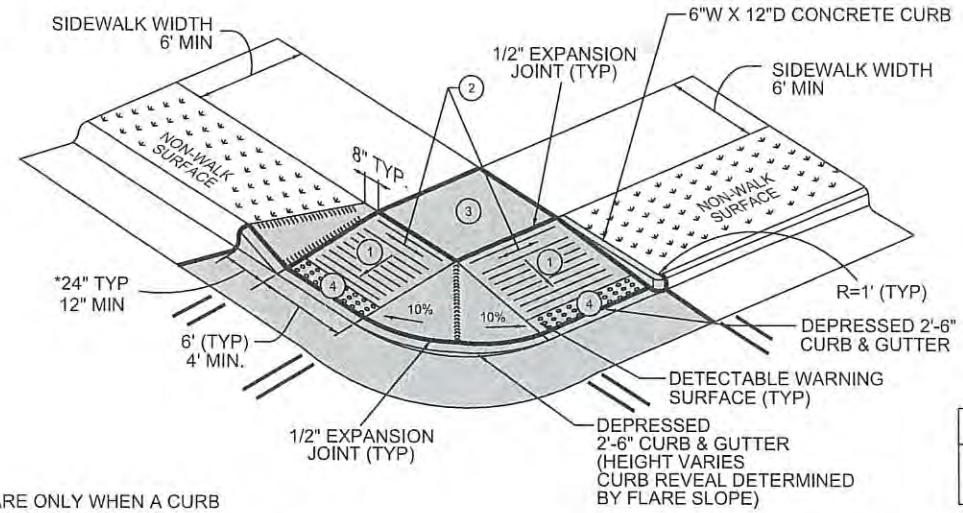


TYPE N-2 (TEE INTERSECTION)

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	CURB RAMPS (NEW DEVELOPMENT)	
	T-20.01.2	

PAY LIMITS FOR CURB RAMP



CONCRETE DEPTH	
RAMP / FLARE	6"
LANDING	4"

NOTE: * USE SMALL FLARE ONLY WHEN A CURB WOULD DIRECTLY CONFLICT WITH APPROACHING VEHICLE TURNING MOVEMENTS.

TYPE N-3

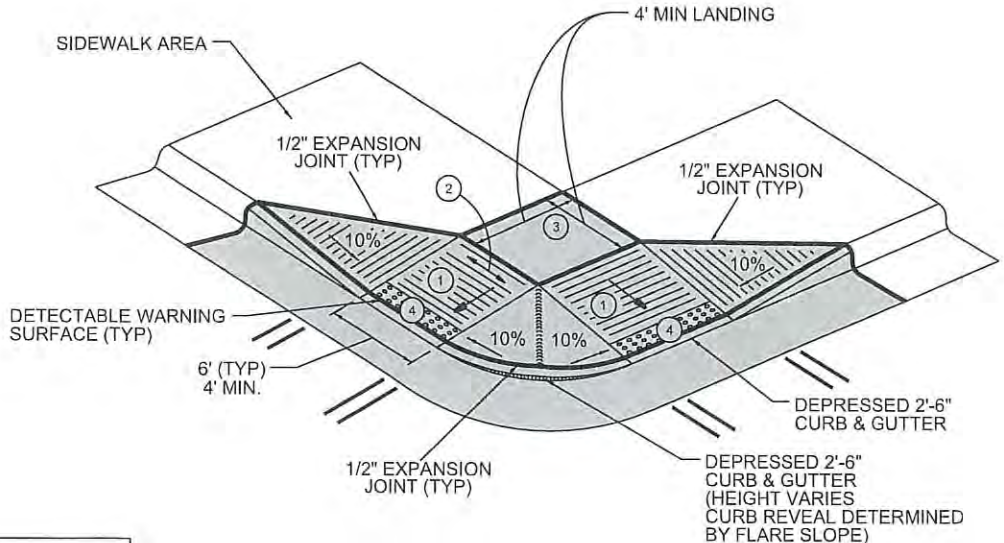
CROSS SLOPE NOT TO EXCEED 1.5% (2.08% MAX) ON ANY PORTION OF RAMP OR TRANSITION TO STREET.

(1) 7.5%; 8.33% (1:12) MAX RAMP SLOPE

(2) 1.5%; 2.08% (1:48) MAX CROSS SLOPE

(3) CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 1.5% (2.08% MAX) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

(4) RAMPS AND DOMES SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.



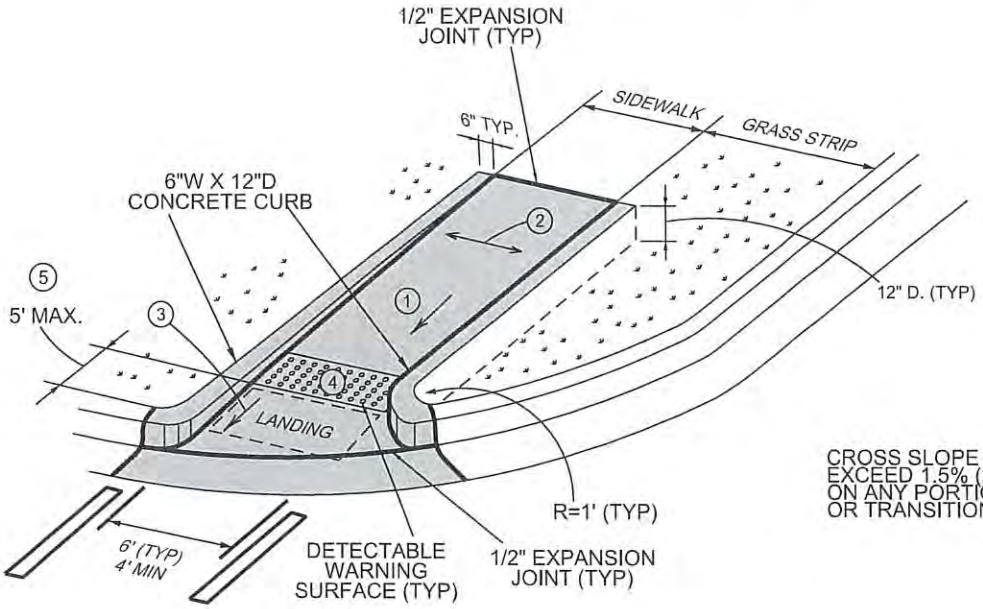
CONCRETE DEPTH	
RAMP / FLARE	6"
LANDING	4"

TYPE N-3A
(COMMERCIAL/RETAIL USE)

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	CURB RAMPS (NEW DEVELOPMENT)	
	T-20.01.3	

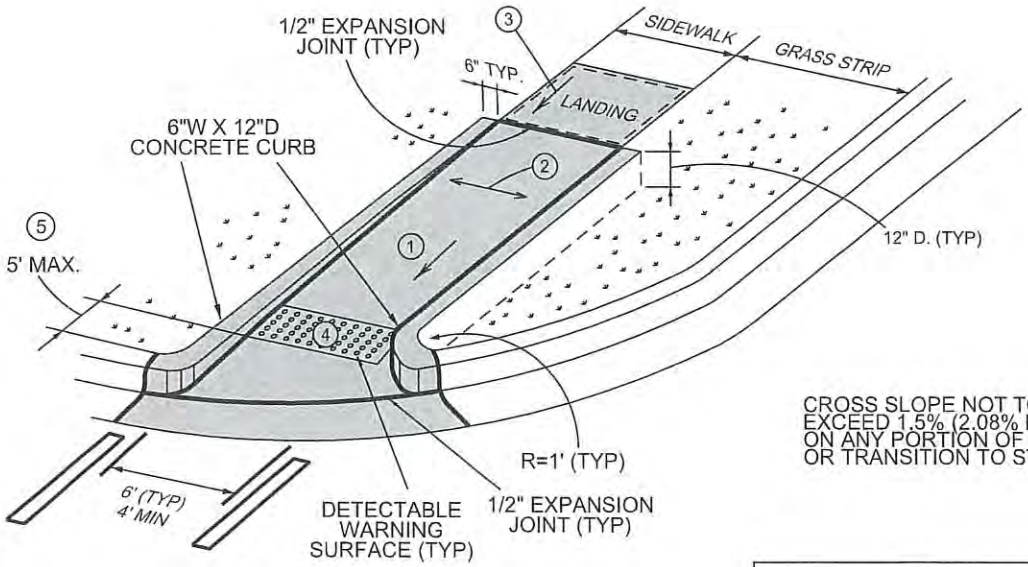
PAY LIMITS FOR CURB RAMP



TYPE N-4

1. 7.5%; 8.33% (1:12) MAX RAMP SLOPE
2. 1.5%; 2.08% (1:48) MAX CROSS SLOPE
3. CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 1.5% (2.08% MAX) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.
4. RAMPS AND DOMES SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.
5. IF LENGTH EXCEEDS 5', TRUNCATED DOMES SHALL BE INSTALLED ALONG THE BACK OF THE CURB COVERING THE FULL WIDTH OF THE RAMP.

CONCRETE DEPTH	
RAMP	6"
LANDING	4"

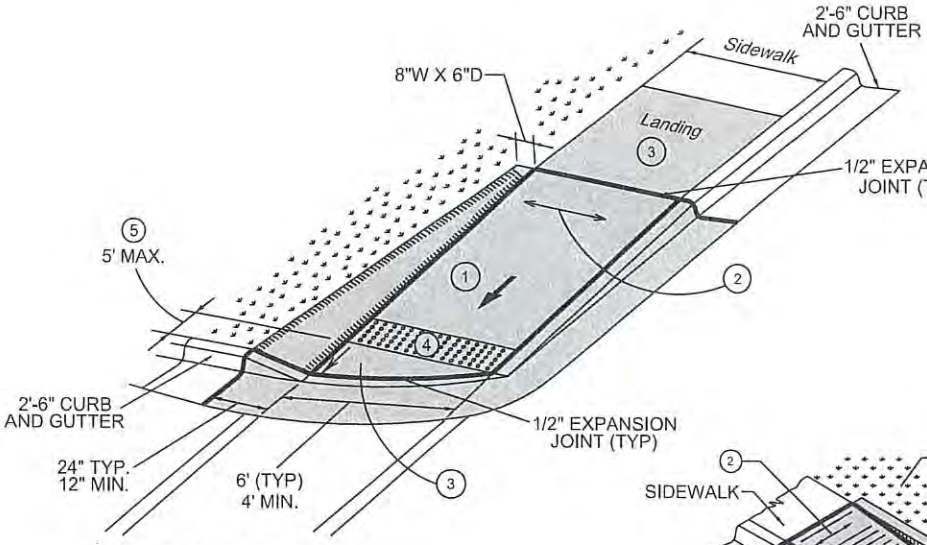


TYPE N-4A

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020 NOT TO SCALE
DATE: 12/2022	CURB RAMPS (NEW DEVELOPMENT)
	T-20.01.4

PAY LIMITS FOR CURB RAMP

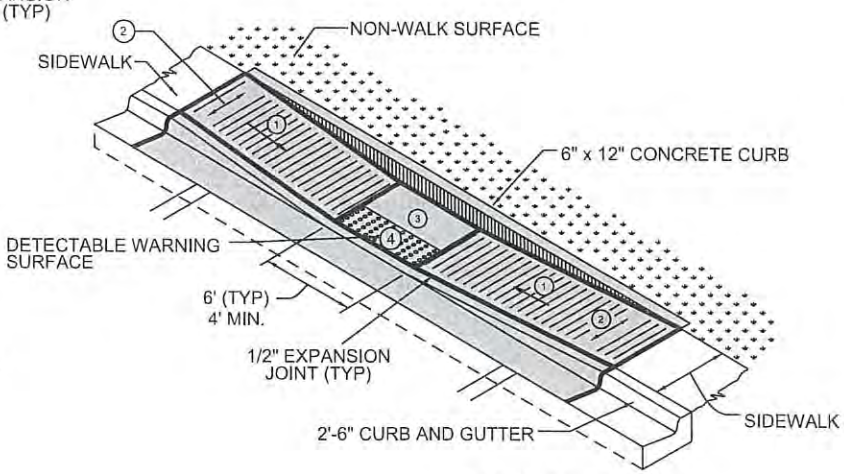


TYPE R-1

CONCRETE DEPTH	
RAMP / FLARES	6"
LANDING	4"

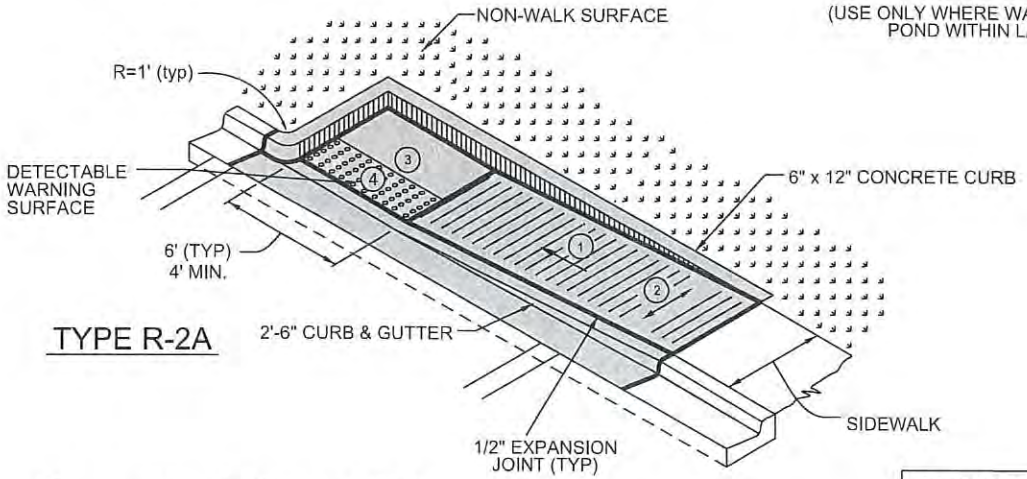
CROSS SLOPE NOT TO EXCEED 1.5% (2.08% MAX) ON ANY PORTION OF RAMP OR TRANSITION TO STREET.

1. 7.5%; 8.33% (1:12) MAX RAMP SLOPE
2. 1.5%; 2.08% (1:48) MAX CROSS SLOPE
3. CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 1.5% (2.08% MAX) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.
4. RAMPS AND DOMES SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.
5. IF LENGTH EXCEEDS 5', TRUNCATED DOMES SHALL BE INSTALLED ALONG THE BACK OF THE CURB COVERING THE FULL WIDTH OF THE RAMP.



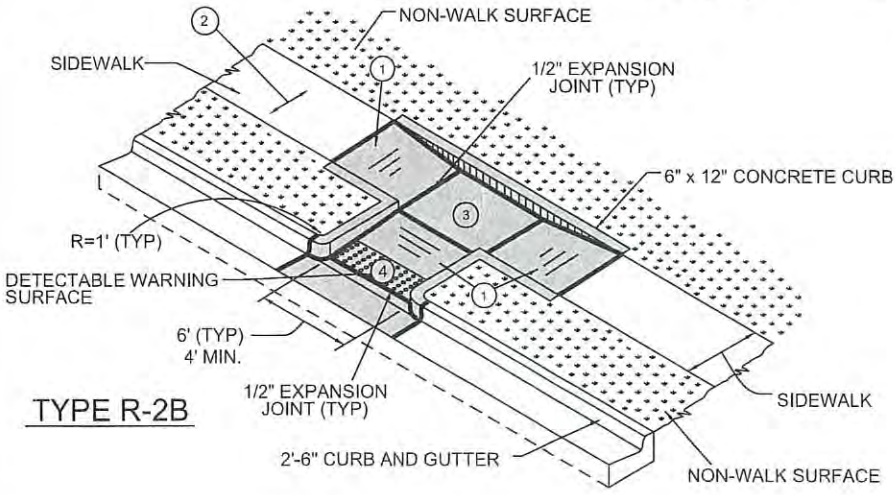
TYPE R-2

(USE ONLY WHERE WATER WILL NOT POND WITHIN LANDING)



TYPE R-2A

CONCRETE DEPTH	
RAMP / FLARES	6"
LANDING	4"

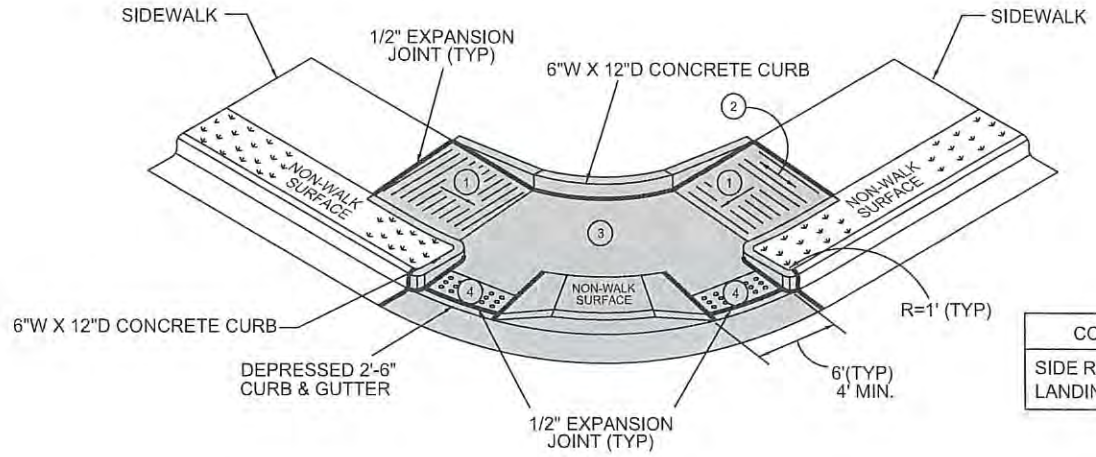


TYPE R-2B

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	CURB RAMPS (RETROFIT)	
	T-20.01.5	

PAY LIMITS FOR CURB RAMP

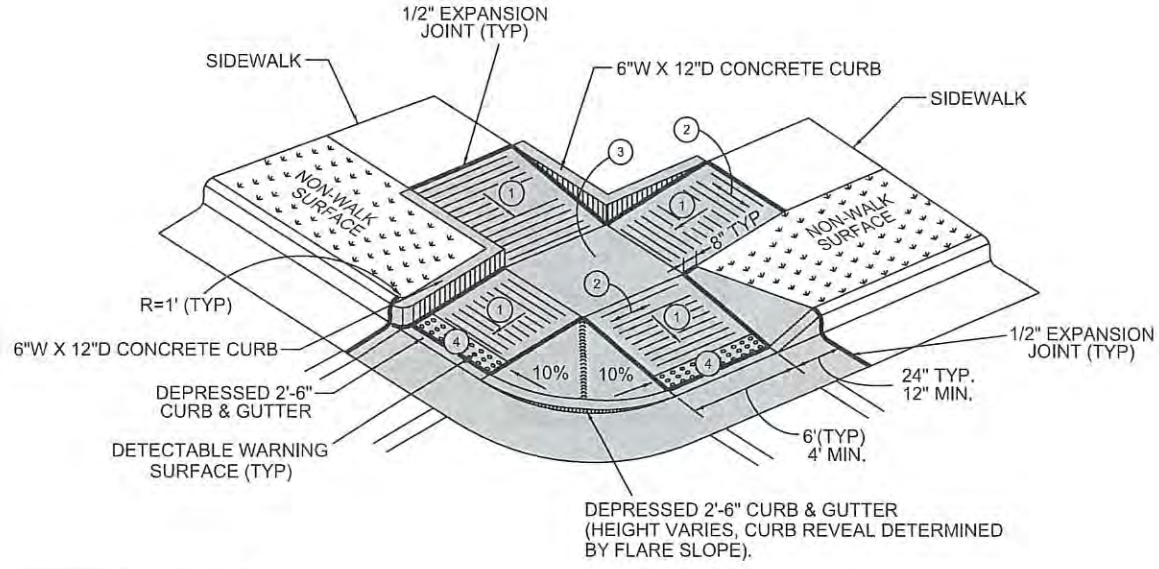


CONCRETE DEPTH	
SIDE RAMPS	4"
LANDING & OPENINGS	6"

TYPE R-3

CROSS SLOPE NOT TO EXCEED 1.5% (2.08% MAX) ON ANY PORTION OF RAMP OR TRANSITION TO STREET.

1. 7.5%; 8.33% (1:12) MAX RAMP SLOPE
2. 1.5%; 2.08% (1:48) MAX CROSS SLOPE
3. CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 1.5% (2.08% MAX) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.
4. RAMPS AND DOMES SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.



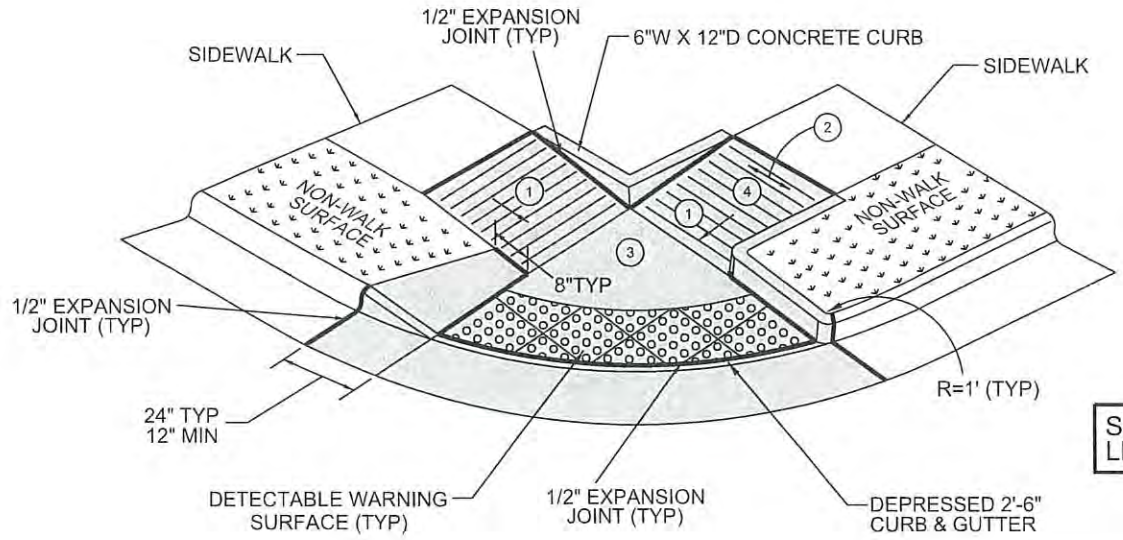
CONCRETE DEPTH	
SIDE RAMPS	4"
LANDING & CURB RAMPS	6"

TYPE R-4

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	CURB RAMPS (RETROFIT)	
	T-20.01.6	

PAY LIMITS FOR CURB RAMP



SMALL RADIUS LESS THAN 15'

CONCRETE DEPTH	
SIDE RAMPS	4"
LANDING & CURB RAMPS	6"

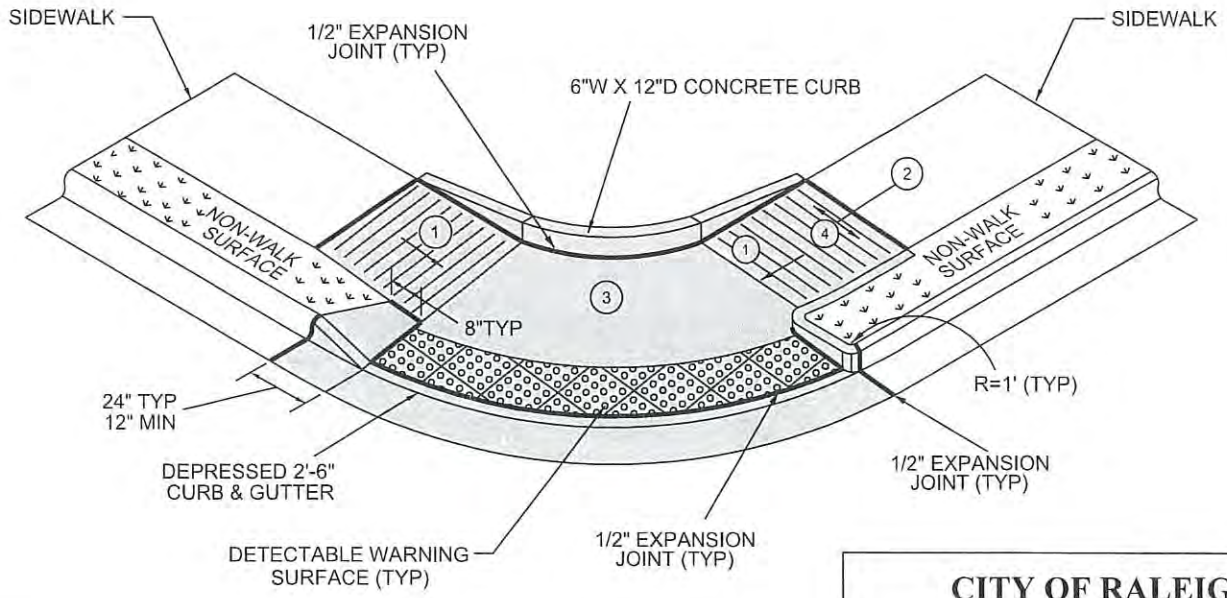
(1) 7.5%; 8.33% (1:12) MAX RAMP SLOPE

(2) 1.5%; 2.08% (1:48) MAX CROSS SLOPE

(3) CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 1.5% (2.08% MAX) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

(4) RAMPS AND DOMES SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.

CROSS SLOPE NOT TO EXCEED 1.5% (2.08% MAX) ON ANY PORTION OF RAMP OR TRANSITION TO STREET.



LARGER RADIUS 15' OR GREATER

ONLY TO BE USED WITH CITY OF RALEIGH APPROVAL.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	SHARED CURB RAMP/FLARE (RETROFIT)	
	T-20.01.7	

CITY OF RALEIGH
CURB RAMPS
GENERAL NOTES

1. CITY OF RALEIGH STANDARD CURB RAMPS HAVE BEEN DEVELOPED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND PUBLIC RIGHT OF WAY ACCESS GUIDELINES (PROWAG).

2. CURB RAMPS SHALL BE PROVIDED AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. SIDEWALK ACCESS RAMPS SHALL BE LOCATED AS INDICATED IN THE DETAIL, HOWEVER, THE LOCATION MAY BE ADJUSTED IN COORDINATION WITH THE CITY OF RALEIGH WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT.

3. DOUBLE WHEELCHAIR RAMPS ARE TO BE INSTALLED AT ALL PUBLIC STREET INTERSECTIONS WHERE SIDEWALK IS REQUIRED.

4. THE WALKING SURFACE SHALL BE SLIP RESISTANT. THE COLOR FOR THE DETECTABLE WARNING AREA SHALL BE YELLOW FOR CONTRAST.

5. NO SLOPE ON THE SIDEWALK ACCESS RAMP SHALL EXCEED 1"/FT (12:1) IN RELATIONSHIP TO THE GRADE OF THE STREET.

6. IN NO CASE SHALL THE WIDTH OF THE SIDEWALK ACCESS RAMP BE LESS THAN 48" ALL RAMPS SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.

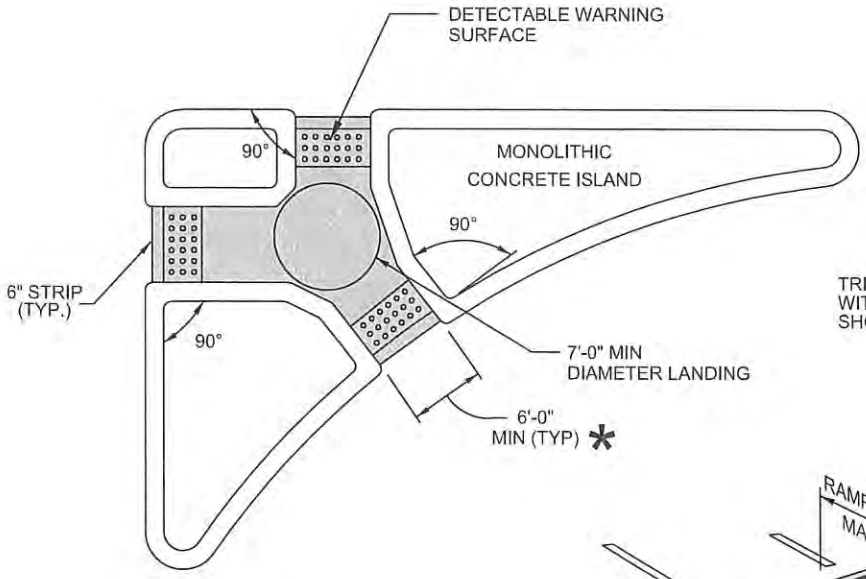
7. USE CLASS A (3000 PSI) CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NONSKID SURFACE.

8. A 1/2" EXPANSION JOINT INSTALLED FULL DEPTH WILL BE REQUIRED WHERE THE CONCRETE SIDEWALK ACCESS RAMP JOINS THE CURB AND ALSO WHERE NEW CONCRETE ABUTS EXISTING CONCRETE.

9. CURB RAMPS SHOULD BE PLACED PARALLEL TO THE DIRECTION OF TRAVEL.

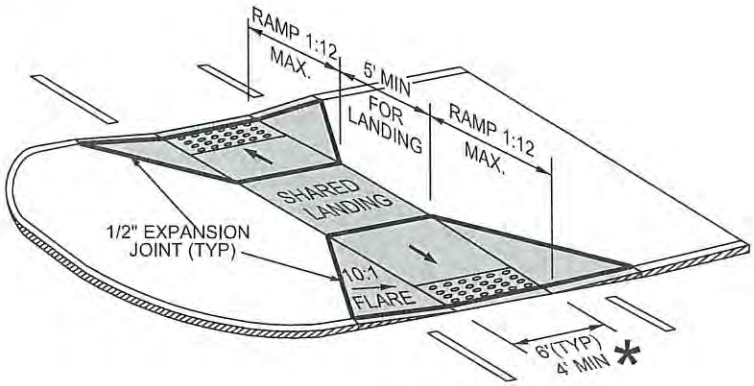
CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
	CURB RAMP NOTES	
	T-20.01.8	

PAY LIMITS FOR CURB RAMP



TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY 2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE ROADWAY PLANS.

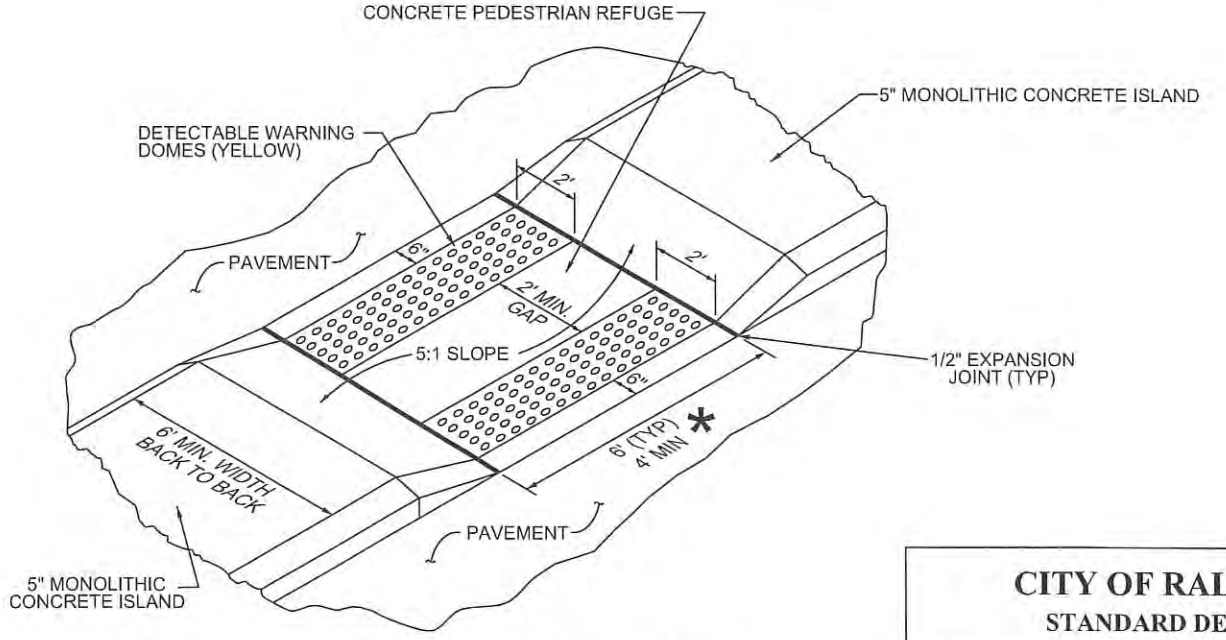
TRIANGULAR ISLAND WITH CUT THROUGH



* 10'-0" MIN AT SHARED PEDESTRIAN AND BICYCLE CROSSINGS (TYP)

MEDIAN ISLAND CURB RAMPS

(MEDIANS WIDER THAN 20')



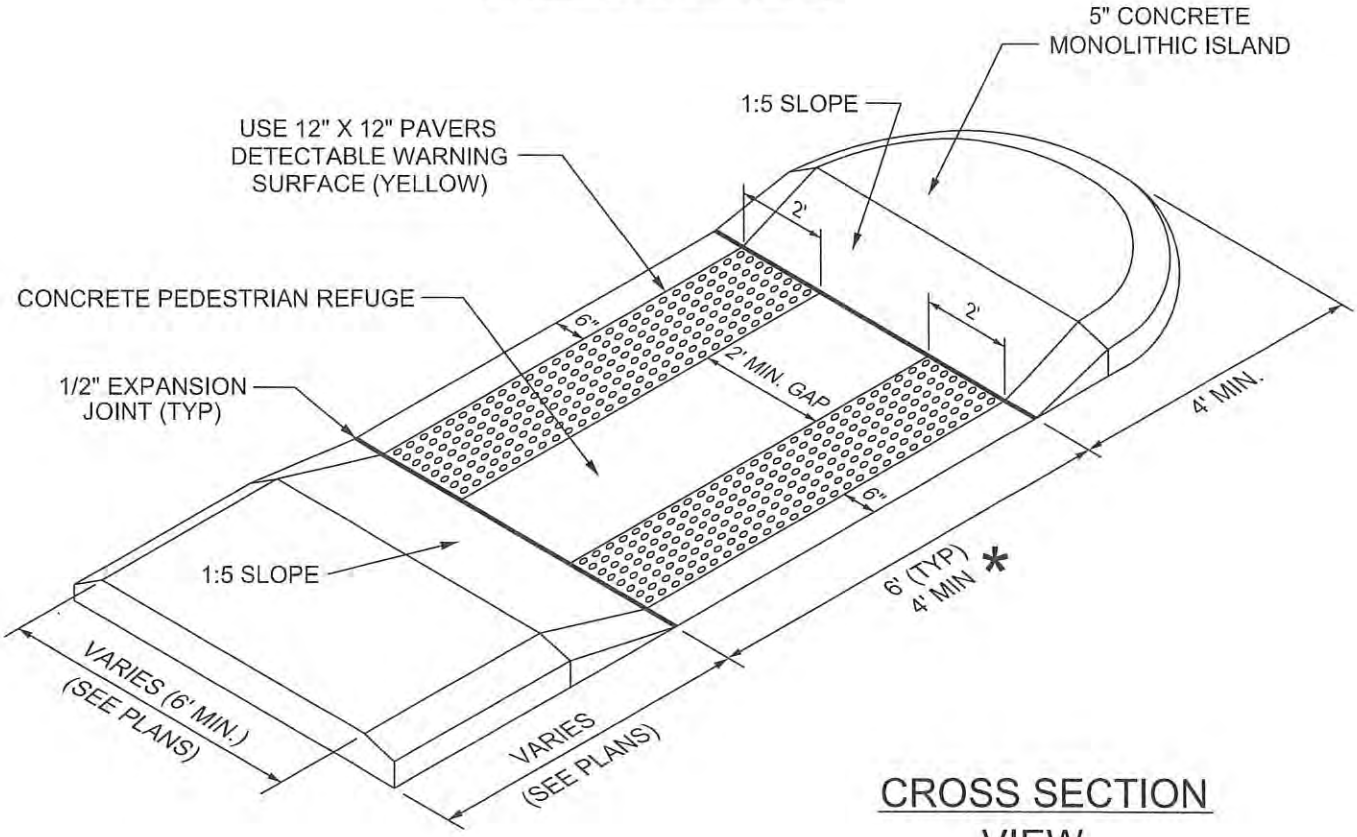
MEDIAN ISLAND WITH CUT THROUGH

(MEDIANS ≤ 20')

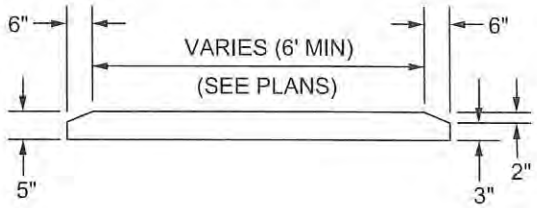
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	MEDIAN ISLAND CURB RAMPS/CUT THROUGHS	
	T-20.02	

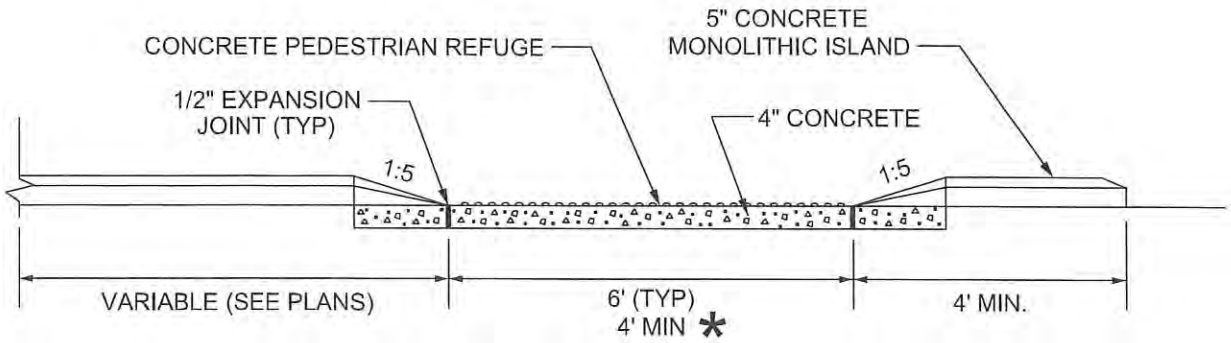
ISOMETRIC VIEW



CROSS SECTION VIEW



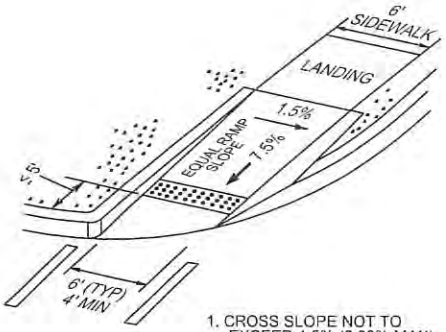
* 10'-0" MIN AT SHARED PEDESTRIAN AND BICYCLE CROSSINGS (TYP)



PROFILE VIEW

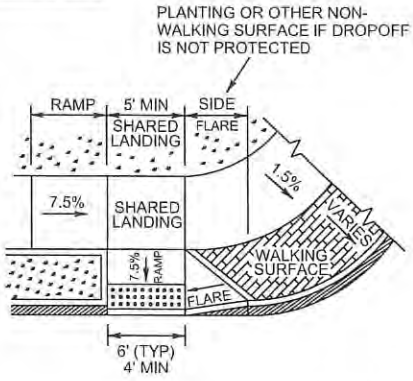
CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	PEDESTRIAN REFUGE	
	T-20.03	

TYPE N-1, N-1A & R-1



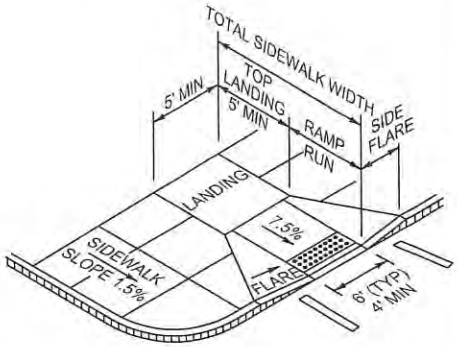
1. CROSS SLOPE NOT TO EXCEED 1.5% (2.08% MAX) ON ANY PORTION OF RAMP OF TRANSITION TO STREET.
2. RUNNING SLOPE NOT TO EXCEED 7.5% (8.33% MAX)

TYPE N-2 & N-3



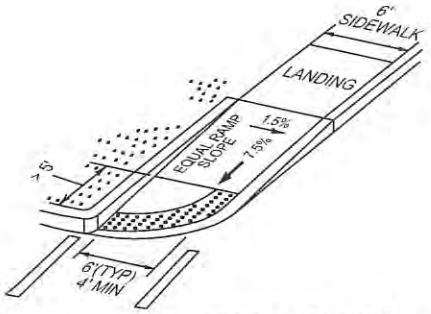
1. CROSS SLOPE NOT TO EXCEED 1.5% (2.08% MAX) ON ANY PORTION OF RAMP OF TRANSITION TO STREET.
2. RUNNING SLOPE NOT TO EXCEED 7.5% (8.33% MAX)

TYPE N-3A



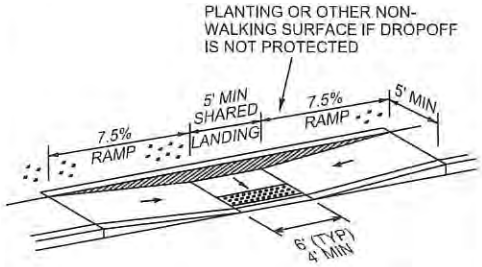
1. CROSS SLOPE NOT TO EXCEED 1.5% (2.08% MAX) ON ANY PORTION OF RAMP OF TRANSITION TO STREET.
2. RUNNING SLOPE NOT TO EXCEED 7.5% (8.33% MAX)

TYPE R-1A



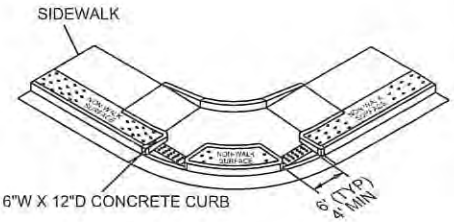
1. CROSS SLOPE NOT TO EXCEED 1.5% (2.08% MAX) ON ANY PORTION OF RAMP OF TRANSITION TO STREET.
2. RUNNING SLOPE NOT TO EXCEED 7.5% (8.33% MAX)

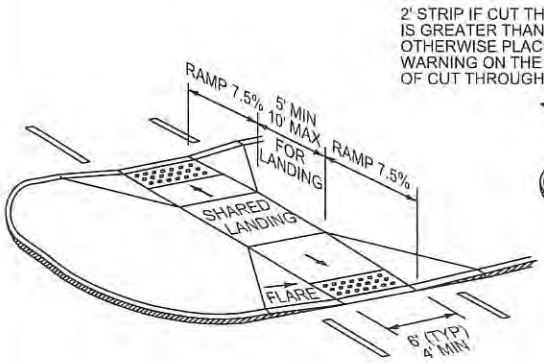
TYPE R-2

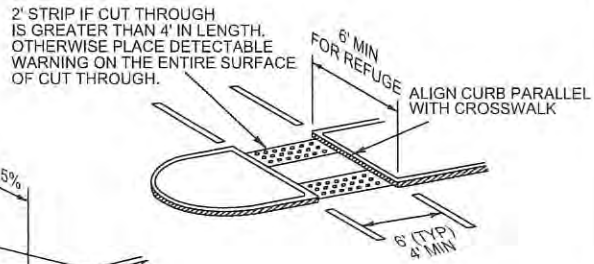


PARALLEL CURB RAMP

TYPE R-3

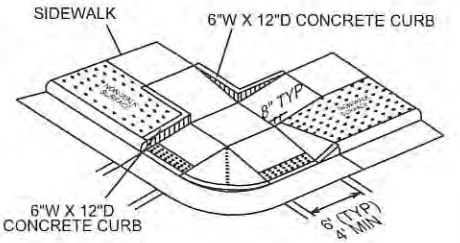


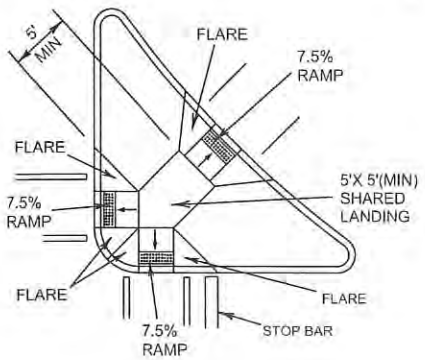




CURB RAMPS AT MEDIAN ISLANDS

TYPE R-4





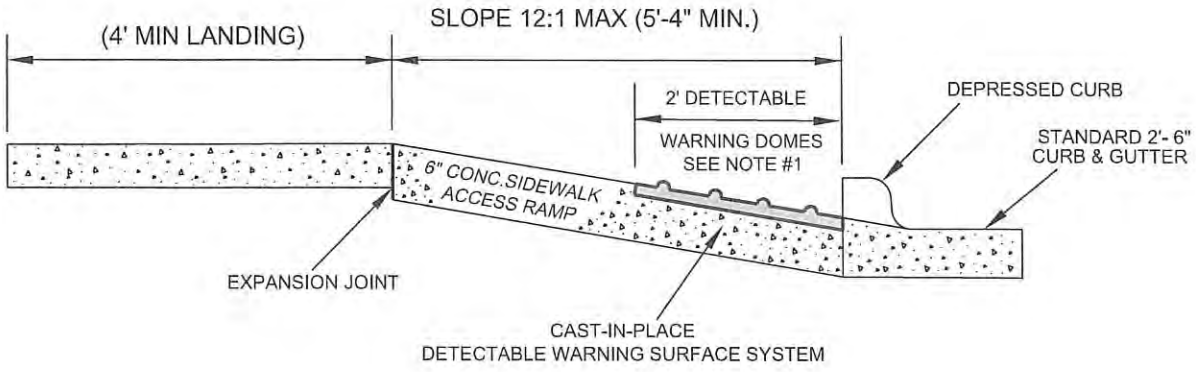
DETECTABLE WARNING SURFACE SHALL EXTEND FULL WIDTH OF SIDEWALK OR RAMP

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	DETECTABLE WARNING SURFACE PLACEMENT	
	T-20.04.1	

RAMP SECTION

WITH DETECTABLE WARNING SURFACE
CAST-IN-PLACE SYSTEM



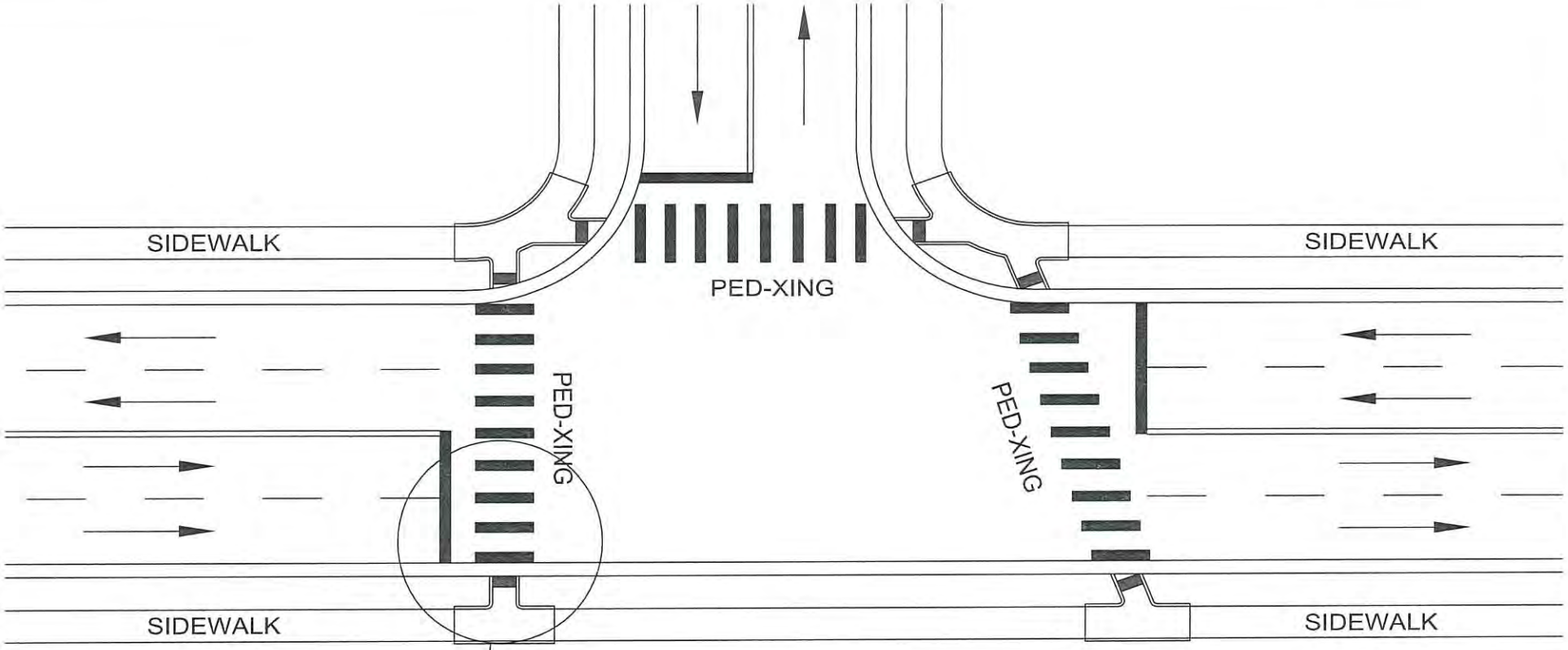
NOTES:

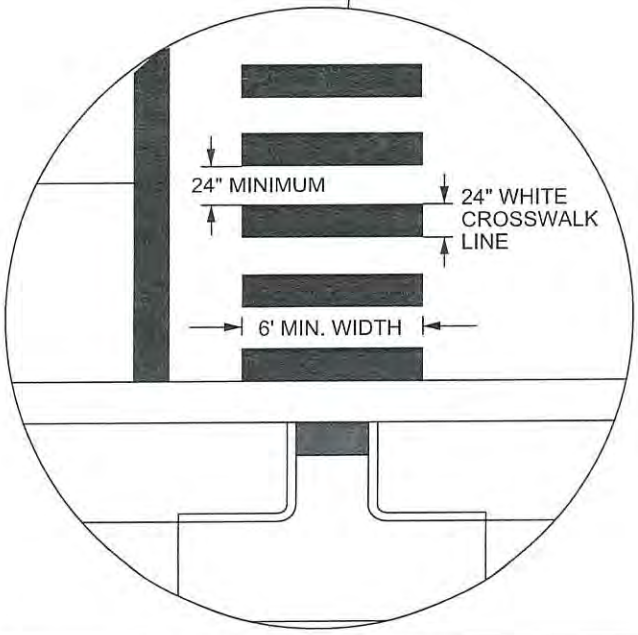
1. DETECTABLE WARNING DOMES SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON DETAIL.

2. THE COLOR FOR THE DETECTABLE WARNING AREA SHALL BE YELLOW FOR CONTRAST.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	DETECTABLE WARNING CAST-IN-PLACE	
	T-20.04.4	





NOTES:

1. HI-VISIBILITY CROSSWALKS SHOULD ONLY BE USED AT CROSSINGS WHERE THE INTERSECTION IS SIGNALIZED OR UN-CONTROLLED BY ANY TRAFFIC CONTROL DEVICE (e.g. STOP SIGN).
2. THE CROSSWALK LINE SHOULD BE PLACED AT THE ANGLE OF THE TRAVEL LANES AND TRAVERSE THE PEDESTRIAN CROSSING.
3. A CROSSWALK LINE SHOULD BE PLACED TO AVOID WHEEL PATHS. THIS IS IDEALLY DONE BY CENTERING THE LINES AT THE EDGE OF EACH TRAVEL LANE AND IN THE CENTER OF EACH TRAVEL LANE. DUE TO VARYING LANE WIDTHS THIS IS SOMETIMES NOT POSSIBLE.
4. PLACE STOP BARS A MINIMUM OF 4 FEET FROM NEAREST CROSSWALK LINE. STOP BARS AT SIGNALIZED INTERSECTIONS SHOULD BE COORDINATED WITH THE CITY OF RALEIGH TRANSPORTATION OPERATIONS DIVISION OR AS DIRECTED BY THE ENGINEER.
5. CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE TO THE LATEST CITY OF RALEIGH STANDARD DRAWINGS.

CITY OF RALEIGH
STANDARD DETAIL

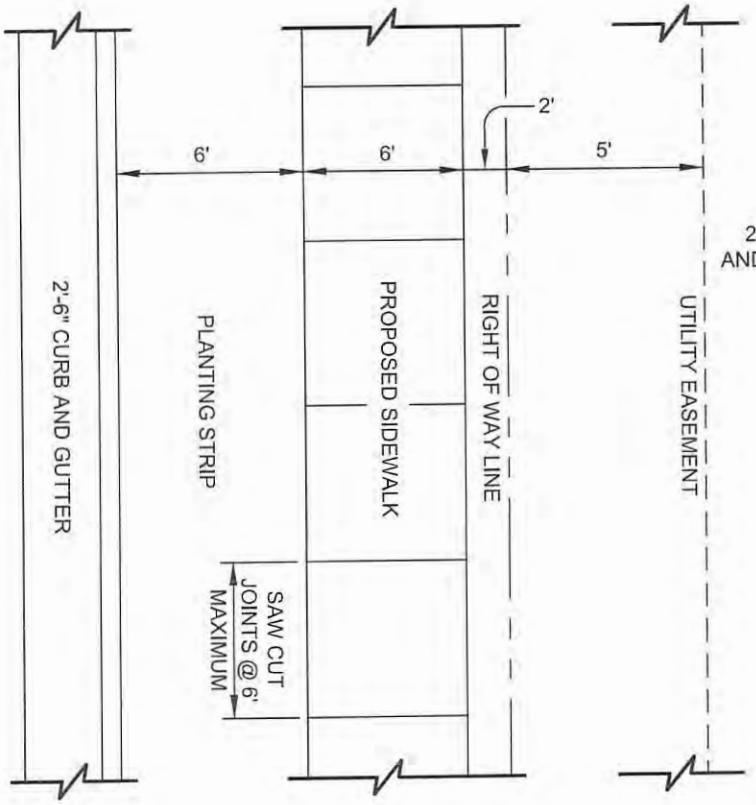
REVISIONS

DATE: 8/2020

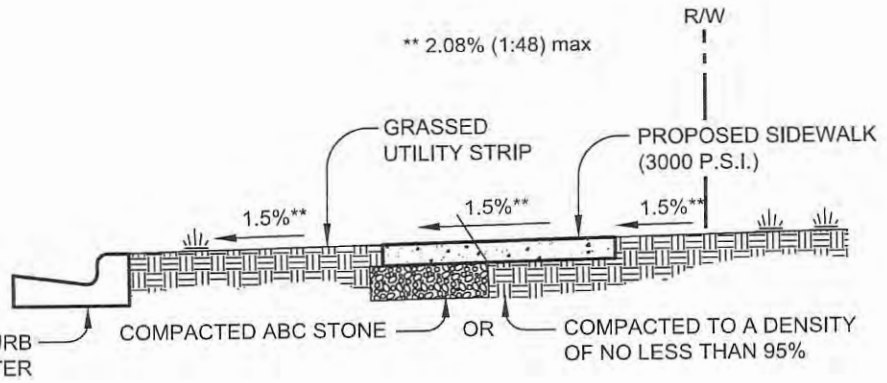
NOT TO SCALE

PAVEMENT MARKINGS
HI-VISIBILITY
PEDESTRIAN CROSSWALK

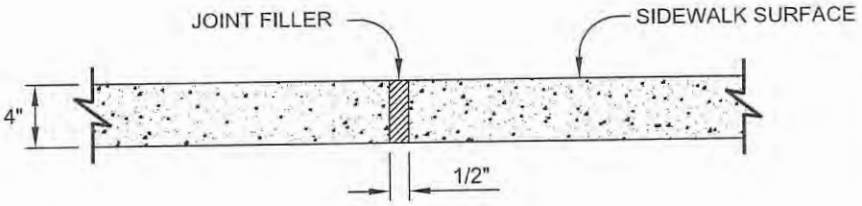
T-20.05



PLAN VIEW



TYPICAL SECTION



TRANSVERSE EXPANSION JOINT

NOTES:

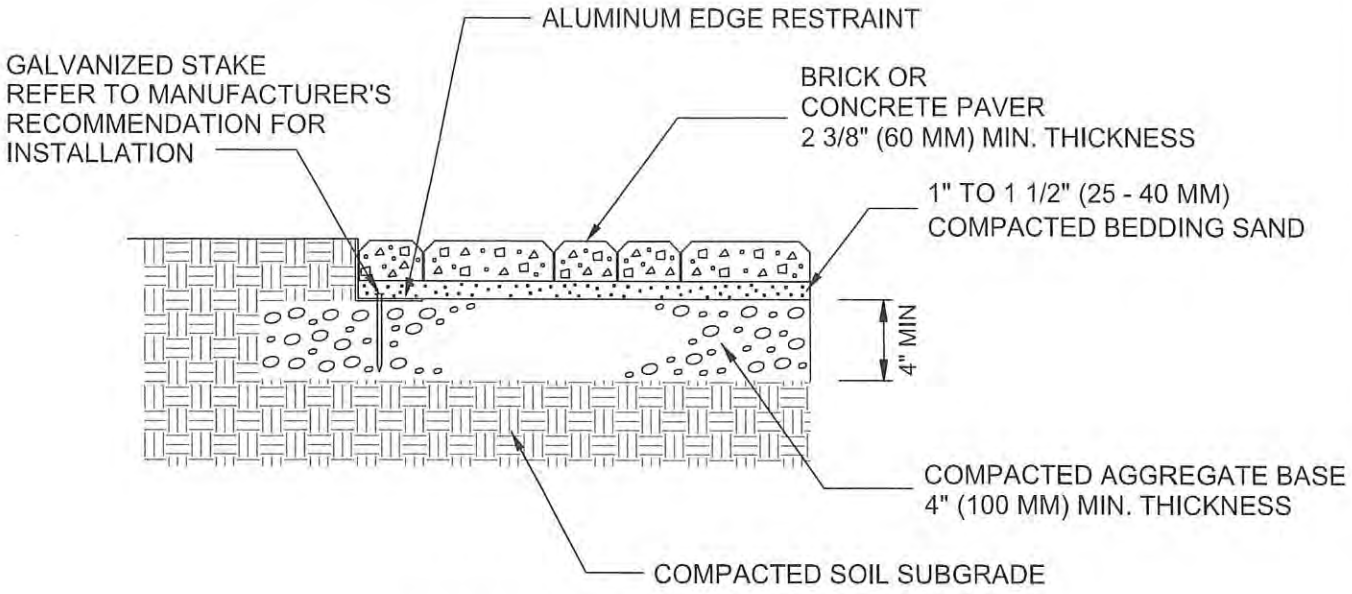
1. TRANSVERSE EXPANSION JOINTS TO BE A MAXIMUM OF 50 FEET.
2. ALL CONCRETE TO BE 3000 PSI AND FINISHED WITH CURING COMPOUND.
3. A 6 INCH DEPTH IS REQUIRED AT LOCATIONS OF DRIVEWAY CROSSINGS, AT STREET INJTERSECTIONS (ALONG THE LENGTH OF RADIUS CURB RETURNS), AND IN THE HANDICAP RAMPS.
4. COMPACTED ABC STONE MAY BE REQUIRED AS SUBGRADE AT THE DISCRESTION OF THE INSPECTOR
5. SURFACE SHALL BE FINISHED TO GRADE AND CROSS SECTION WITH A FLOAT, TROWEL SMOOTH AND FINISH WITH A BROOM
6. WHERE UTILITY BOXES/VAULTS MUST BE LOCATED IN THE SIDEWALK, THEY SHALL HAVE A MINIMUM 3" WIDE FRAME OF CONCRETE AROUND THEM

CITY OF RALEIGH
STANDARD DETAIL

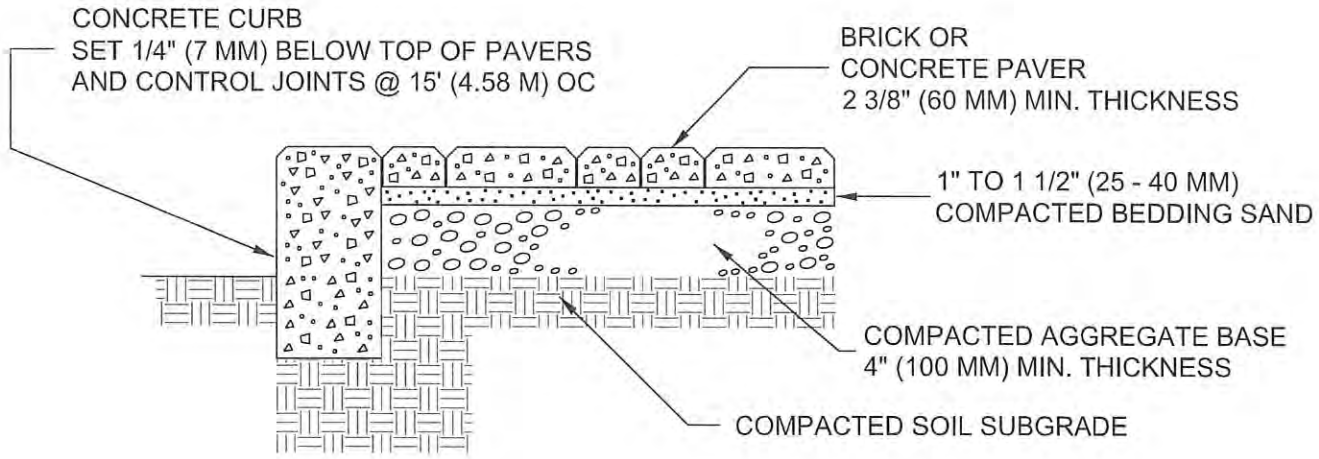
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022		
DATE: 08/2023		

CONCRETE SIDEWALK

T-30.01.1



SECTION 1



SECTION 2

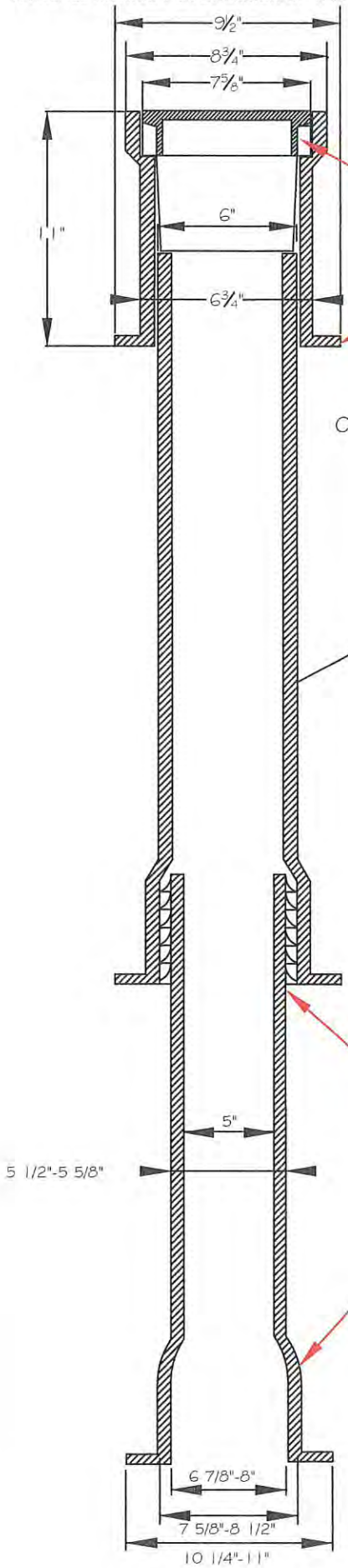
NOTES:

1. BRICK OR CONCRETE PAVERS ALLOWED ONLY UNDER SPECIAL CONDITIONS.
2. THICKNESS OF BASE MAY VARY WITH SUBGRADE/TRAFFIC CONDITIONS.
3. SCATTER SAND OR SCREENINGS OVER COMPLETE WORK AND SWEEP INTO CRACKS.
4. CONCRETE PAVERS SHOULD CONFORM TO REQUIREMENTS OF ASTM C-1319. BRICK PAVERS SHOULD CONFORM TO REQUIREMENTS OF ASTM C902-95
5. SEE CITY OF RALEIGH CODE SECTION 10-7001 (D) FOR CONDITIONS UNDER WHICH CONCRETE / BRICK PAVERS ARE ALLOWED.

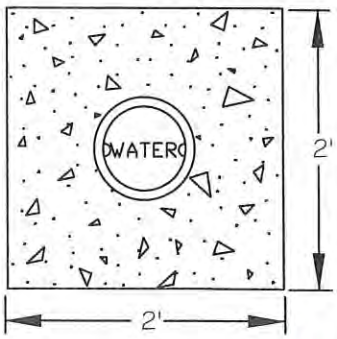
CITY OF RALEIGH
STANDARD DETAIL

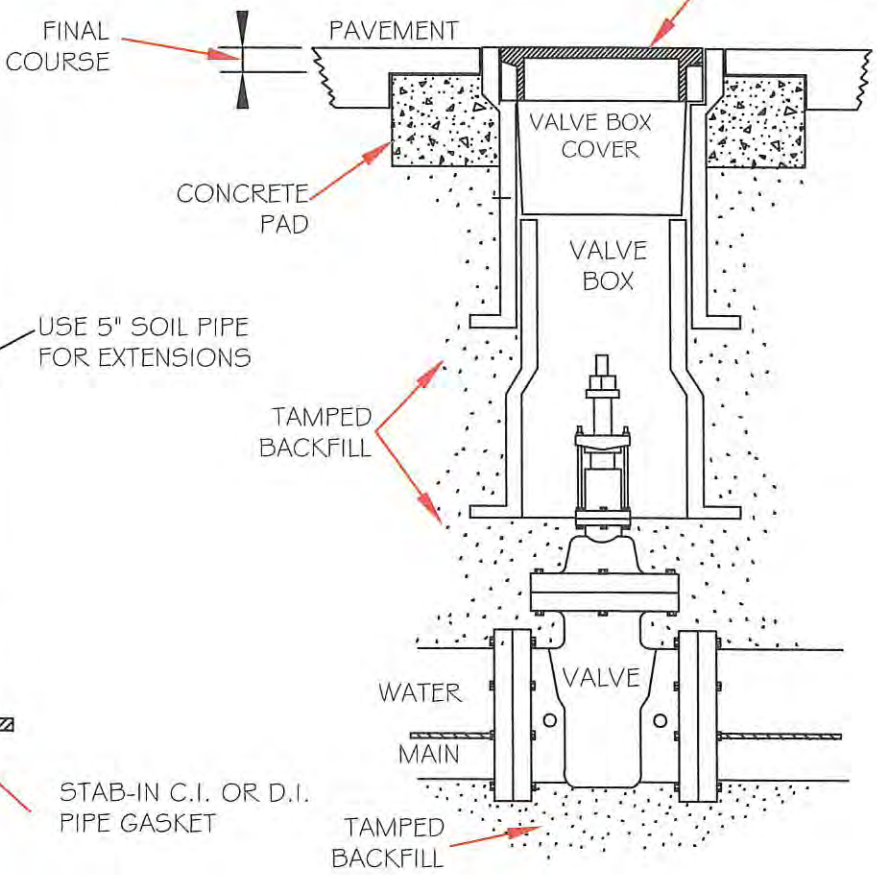
REVISIONS	DATE: 8/2020 NOT TO SCALE
	CONCRETE/BRICK PAVER SIDEWALK DETAIL
	T-30.03

APPROVED METHOD FOR EXTENSION OF VALVE BOX



NOTE: 2'x 2'x 6" CONCRETE PAD REQUIRED ON ALL VALVES. NO PRECAST CONCRETE DOUGHNUT ALLOWED.



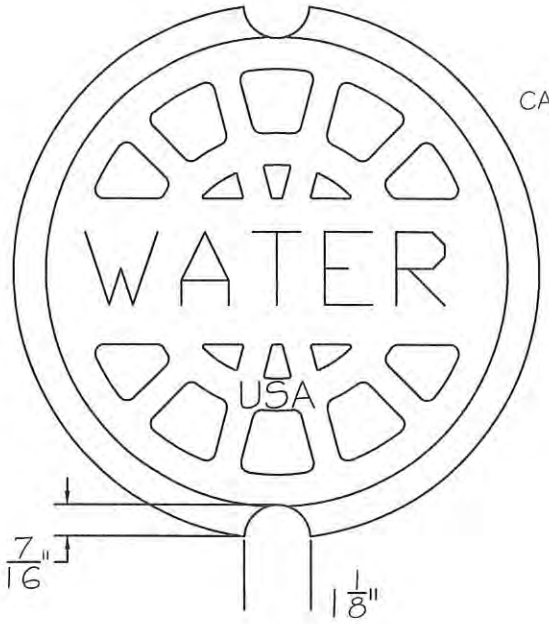


NOTES:
1) VALVE BOX NOT TO CONTACT WATER MAIN
2) ALL TRAFFIC CASTINGS MUST BE CLASS 35 OR GREATER.
3) FOR ANY VALVES OVER 10' DEEP, A VALVE STEM EXTENSION MUST BE USED TO BRING TO A DEPTH OF NO MORE THAN 5', EXTENSION MUST BE A MINIMUM OF 1" SOLID STOCK.
4) TOTAL VALVE BOX WEIGHT: MINIMUM OF 85 LBS.

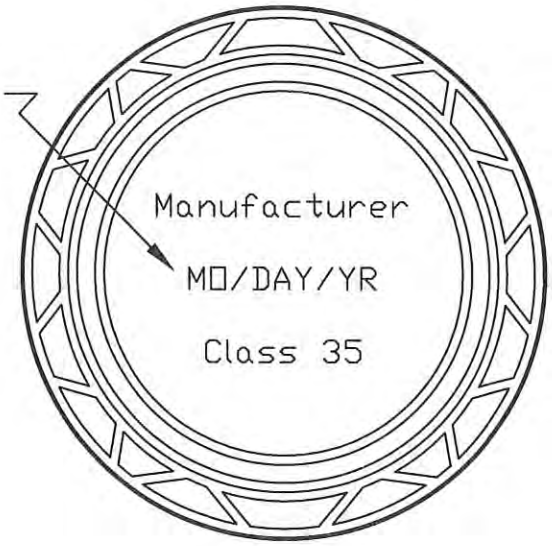
CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

VALVE BOX INSTALLATION AND EXTENSION DETAIL

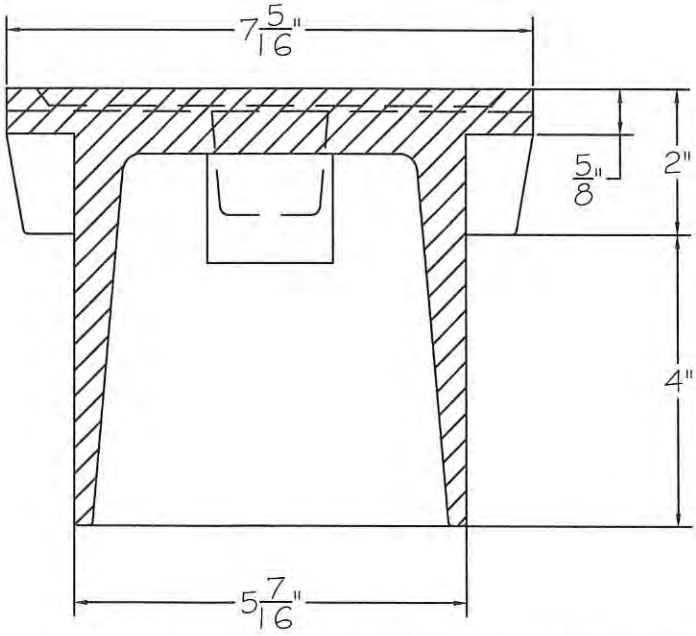
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-17	D.W.C.	9-7-99	A.B.B.	4-15-04
	RRH	3-31-00	DHL	8-16-07



PLAN VIEW



BOTTOM VIEW



SECTION VIEW

NOTE 1 - "WATER" LETTERING MUST BE 1" RAISED (RECESSED FLUSH)
NOTE 2 - VALVE COVER SHALL BE DOMESTICALLY CAST.
NOTE 3 - COVER MUST HAVE A MINIMUM WEIGHT OF 25 POUNDS.
NOTE 4 - COVER MUST BE CLASS 35 OR GREATER.
NOTE 5 - COVER MUST MEET OR EXCEED AASHTO H-20 LOAD REQUIREMENTS.

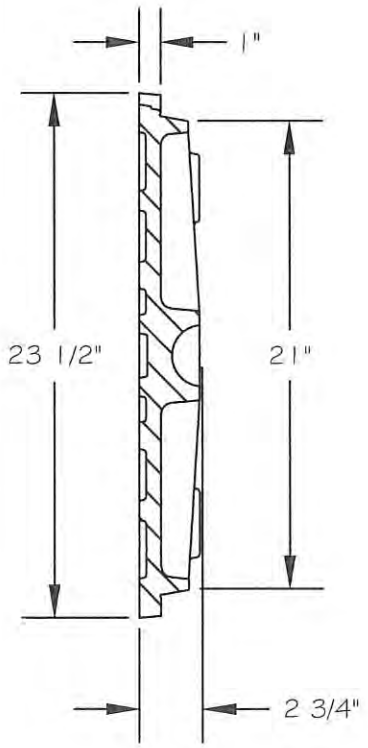
CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

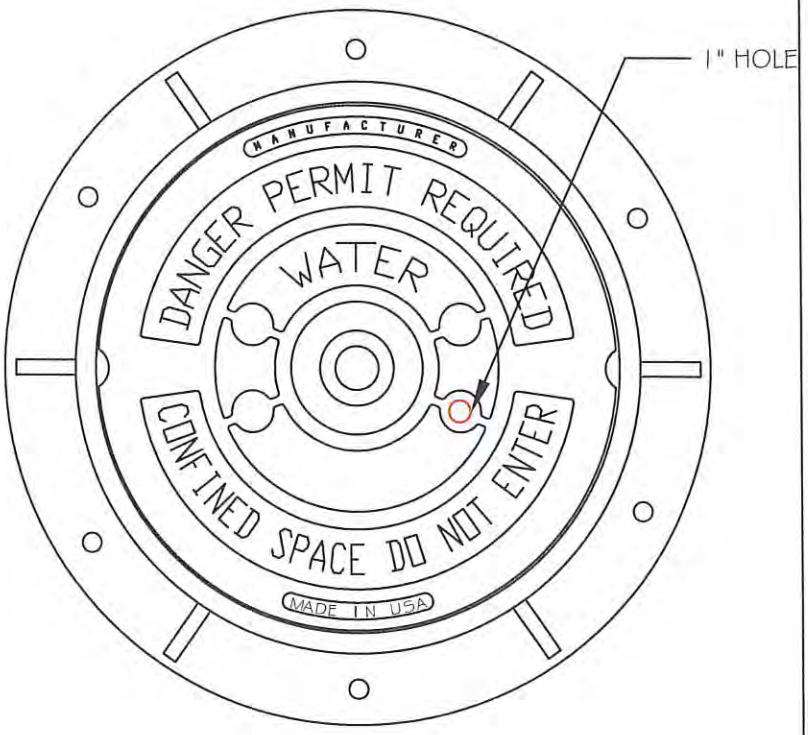
5 1/4" VALVE BOX DROP LID WITH 4" SKIRT

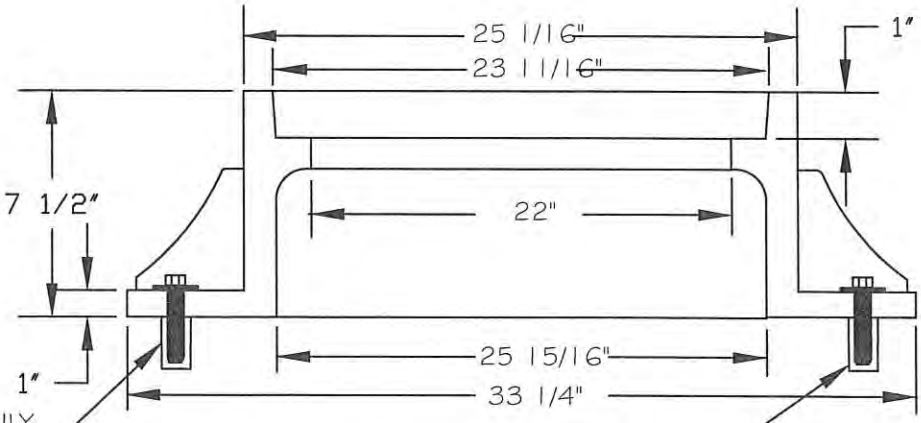
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-18				

MANHOLE FRAME AND COVER

COVER 120 LBS. MINIMUM







LAGSHIELDS MAY ONLY BE USED IN ROADWAY APPLICATIONS.

5/8"X3" LAGSHIELD IN HOLE DRILLED INTO CONE OR RING WITH ANCHOR SUNK TO DEPTH RECOMMENDED BY MANUFACTURER, AND 3/8"X3" HOT DIPPED GALVANIZED LAG BOLT AND WASHER.

NOTES:

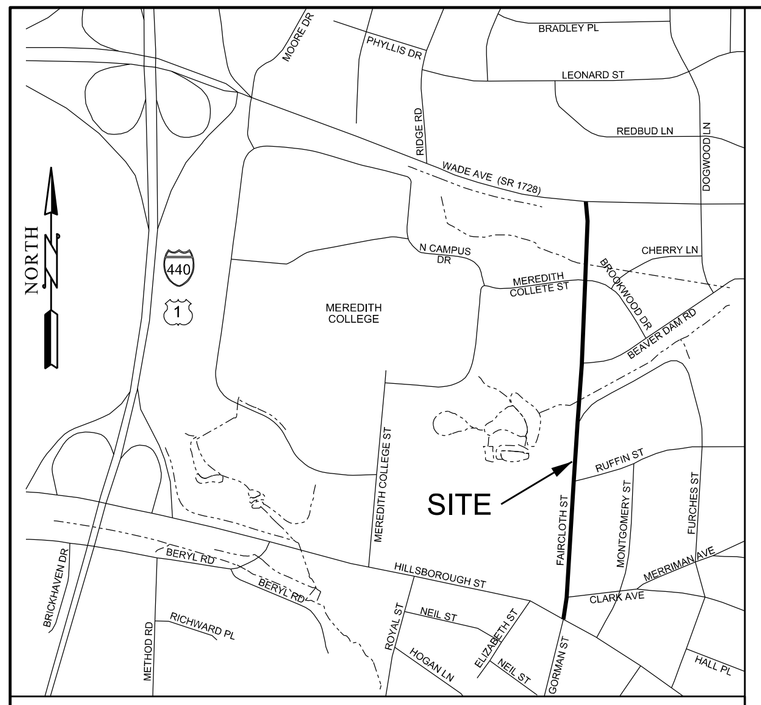
1) ALL MANHOLE FRAMES SHALL BE BE DOMESTICALLY CAST
2) FRAME SHALL BE A MINIMUM WEIGHT OF 182 LBS.
3) COVER SHALL WEIGH A MIN. OF 120 LBS.
4) MANHOLES WITHIN PAVED SURFACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH S-29.

CITY OF RALEIGH

DEPARTMENT OF PUBLIC UTILITIES

STANDARD MANHOLE COVER

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-20	A.B.B.	4-8-04		
	D.H.L.	6-18-08		



VICINITY MAP
NOT TO SCALE

PROJECT DESIGN ENGINEER
EDDY MUMPASI

SENIOR PROJECT ENGINEER
MUKUND R. MOGHE, PE

GRAPHIC SCALE

20 10 0 20

GRAPHIC SCALE 1"=20'

PLANS

THE CITY OF RALEIGH

ENGINEERING SERVICES DEPARTMENT

MARCHELL ADAMS-DAVID
CITY MANAGER

JANET COWELL
MAYOR

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOGHE

ATTENTION CONTRACTORS

THE ***CONSTRUCTION CONTRACTOR*** RESPONSIBLE FOR THE EXTENSION OF WATER, SEWER, AND/OR REUSE, AS APPROVED IN THESE PLANS, IS RESPONSIBLE FOR ***CONTACTING*** THE ***ENGINEERING SERVICES DEPARTMENT*** AT ***(919) 996-2409***, AND THE ***PUBLIC UTILITIES DEPARTMENT*** AT ***(919) 996-4540*** AT LEAST ***TWENTY FOUR HOURS*** PRIOR TO BEGINNING ANY OF THEIR CONSTRUCTION.

FAILURE TO NOTIFY BOTH ***CITY DEPARTMENTS*** IN ADVANCE OF BEGINNING CONSTRUCTION, WILL RESULT IN THE ISSUANCE OF ***MONETARY FINES***, AND REQUIRE REINSTALLATION OF ANY WATER OR SEWER FACILITIES NOT INSPECTED AS A RESULT OF THIS NOTIFICATION FAILURE.

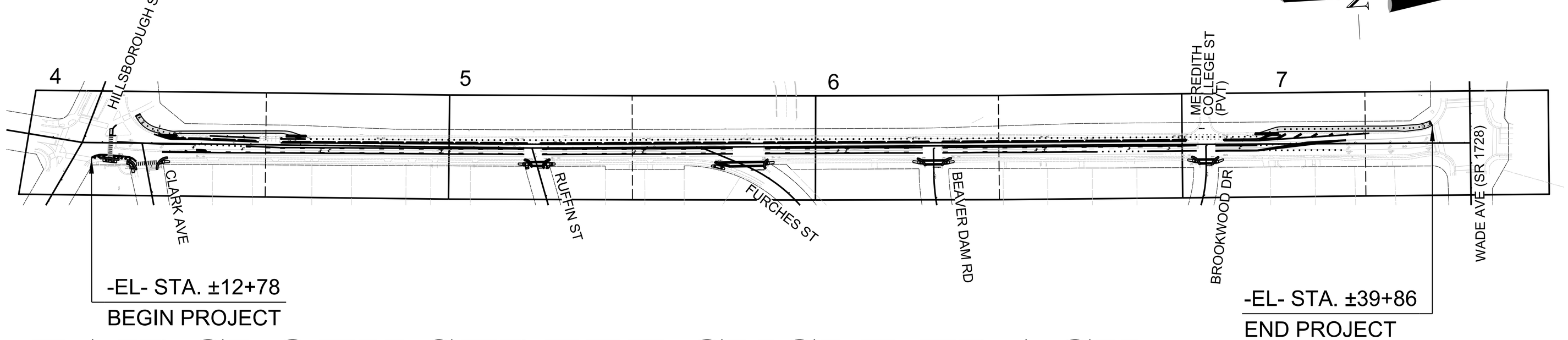
FAILURE TO CALL FOR ***INSPECTION***, ***INSTALL A DOWNSTREAM PLUG***, HAVE ***PERMITTED PLANS*** ON THE ***JOBSITE***, OR ANY OTHER ***VIOLATION*** OF ***CITY OF RALEIGH STANDARDS*** WILL RESULT IN A ***FINE AND POSSIBLE EXCLUSION*** FROM FUTURE WORK IN THE ***CITY OF RALEIGH.***

TRAFFIC CONTOL AND PEDESTRIAN PLAN (TCPED) NOTES:

- Prior to any work that impacts the right-of-way, closing or detouring of any street, lane, or sidewalk, the contractor must apply for a permit with Right-of-Way Services. Please direct any questions to rightofwayservices@raleighnc.gov.
- The street, lane, sidewalk, closure permit is required for any closure on city streets and all NCDOT streets within Raleigh's Jurisdiction.
- A permit request with a TCPED Plan shall be submitted to Right-of-Way Services through the City of Raleigh Permit and Development Portal.
- Prior to the start of work, the Client shall schedule a Pre-Construction meeting with the Engineering Inspections Coordinator to review the specific components of the approved plan, and ensure all permits are issued.
- All TCPED Plans shall comply with all Local, State, and Federal requirements and standards, including but not limited to:
  - Manual on Uniform Traffic Control (MUTCD);
  - Public Rights-of-Way Accessibility Guidelines (PROWAG);
  - American Disability Act (ADA) requirements;
  - Raleigh Street Design Manual (RSDM).
- All public sidewalks must be accessible to pedestrians who are visually impaired and/or people with mobility concerns. Existing and alternative pedestrian routes during construction shall be required to be compliant with the Public Rights of Way Accessibility Guidelines (PROWAG), the ADA Standards for Accessible Design and the Manual on Uniform Traffic Control Devices (MUTCD).
- All permits must be available and visible on site during the operation.

INFRASTRUCTURE INSPECTIONS QUANTITIES TABLE

PHASE NUMBER(S)	0
NUMBER OF LOT(S)	0
LOT NUMBER(S) BY PHASE	0
NUMBER OF UNITS	0
LIVABLE BUILDINGS	0
OPEN SPACE?	NO
NUMBER OF OPEN SPACE LOTS	0
PUBLIC WATER (LF)	0
PRIVATE WATER (LF)	0
PUBLIC SEWER (LF)	0
PUBLIC FORCE MAIN (LF)	0
PRIVATE SEWER (LF)	0
PUBLIC STREET (LF) - FULL	0
PUBLIC STREET (LF) - PARTIAL	0
PUBLIC SIDEWALK (LF) - FULL	0
PUBLIC SIDEWALK (LF) - PARTIAL	0
MULTI-USE PATH (LF)	704
PUBLIC STORM DRAIN (LF)	0
STREET SIGNS (LF)	0
WATER SERVICE STUBS	0
SEWER SERVICE STUBS	0



FAIRCLOTH STREET CYCLE TRACK ROADWAY IMPROVEMENT PROJECT SPR-0072-2025

LOCATION: FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

TYPE OF WORK: GRADING, PAVING, MULTI-USE PATH, CURB AND GUTTER, PAVEMENT MARKING AND SIGNAGE

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
	COVER SHEET
1A	INDEX OF SHEETS, LEGEND, AND TYPICAL SECTIONS
1B	GENERAL NOTES
2A THRU 2C	STANDARDS DETAILS
4 THRU 7	PLAN SHEETS
PMP-1 THRU PMP-2	PAVEMENT MARKING STANDARD DRAWINGS, INDEX OF SHEETS, AND LEGEND
PMP-3 THRU PMP-6	PAVEMENT MARKING AND SIGNAGE SHEETS
EC-1 THRU EC-2	EROSION CONTROL NOTES, AND LEGEND
EC-3 THRU EC-6	EROSION CONTROL PLANS

PAVEMENT SCHEDULE

C1	PROPOSED 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
J1	PROP. 6" AGGREGATE BASE COARSE
R1	2'-6" CONCRETE VALLEY GUTTER.

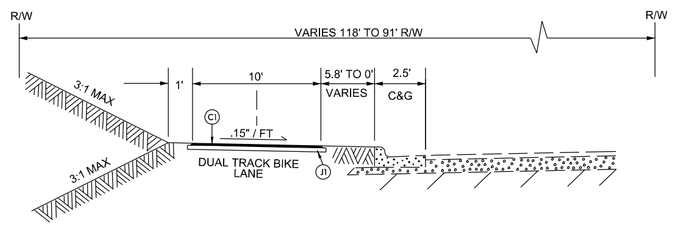
LEGEND

	EXISTING EDGE OF PAVEMENT	MN	EXISTING MONUMENT		PROPOSED EDGE OF PAVEMENT
	EXISTING CURB & GUTTER	EIP	EXISTING IRON PIN		PROPOSED CURB & GUTTER
	EXISTING GRAVEL OR SOIL		EXISTING SHRUB		PROPOSED ASPHALT DRIVEWAY
	EXISTING SIDEWALK / MULTI -PURPOSE PATH		EXISTING TREE		PROPOSED CONCRETE DRIVEWAY
	EXISTING EASEMENT		EXISTING ROCK / BOULDER		PROPOSED GRAVEL DRIVEWAY
	EXISTING UTILITY EASEMENT	TRANS	EXISTING TRANSFORMER		PROPOSED DRIVEWAY APRON (TYP)
PDE PDE	EXISTING PERMANENT DRAINAGE EASEMENT	SIG BOX	EXISTING SIGNAL BOX		PROPOSED 6' SIDEWALK (TYP)
	EXISTING RIGHT OF WAY	PP	EXISTING POWER POLE		PROPOSED 8' MULTI -PURPOSE PATH (TYP)
	EXISTING PROPERTY	GW	EXISTING GUY WIRE		PROPOSED SINGLE ADA RAMP (TYP)
X X X X X X	EXISTING FENCE	POW PED	EXISTING POWER PEDESTAL		EXISTING PAVEMENT REMOVAL
OHL	EXISTING OVERHEAD POWER LINE	PM	EXISTING POWER METER		PROPOSED RIGHT OF WAY
P	EXISTING UNDERGROUND POWER LINE	MHP	EXISTING POWER MANHOLE	C C F F	PROPOSED SLOPE LIMITS (C = CUT, F= FILL)
SS	EXISTING UNDERGROUND SAN SEWER LINE	LP	EXISTING LIGHT POLE		PROPOSED INTERMEDIATE CONTOURS
W	EXISTING UNDERGROUND WATER LINE	GLT	EXISTING GROUND LIGHT		PROPOSED MAJOR CONTOURS
G	EXISTING UNDERGROUND GAS LINE	FOM	EXISTING FIBER OPTIC MARKER	PDE PDE	PROPOSED PERMANENT DRAINAGE EASEMENT
TV	EXISTING UNDERGROUND TELEPHONE LINE	SN / MB	EXISTING SIGN / MAILBOX	PSE PSE	PROPOSED PERMANENT SLOPE EASEMENT
BZ 1	EXISTING RIPARIAN BUFFER ZONE 1 LINE	PO	EXISTING POST	DWE DWE	PROPOSED TEMPORARY DRIVEWAY EASEMENT
BZ 2	EXISTING RIPARIAN BUFFER ZONE 2 LINE	TELE PED	EXISTING TELEPHONE PEDESTAL	TCE TCE	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
AEFW	EXISTING FLOODWAY LINE	MHT	EXISTING TELEPHONE MANHOLE		
AE	EXISTING 100 YEAR FLOOD LINE	CATV	EXISTING CABLE TV PEDESTAL		
X500	EXISTING 500 YEAR FLOOD LINE	FH	EXISTING FIRE HYDRANT		
15"	EXISTING PIPE	WV	EXISTING WATER VALVE		
	EXISTING WOODS LINE	WM	EXISTING WATER METER		
	EXISTING PLANTED / LANDSCAPED AREA	MHW	EXISTING WATER MANHOLE		
	EXISTING BUILDING LINE	SPH	EXISTING SPRINKLER HEAD		
	EXISTING WALL LINE	IV	EXISTING IRRIGATION VALVE		
	EXISTING INTERMEDIATE CONTOURS	CO	EXISTING SAN SEWER CLEANOUT STUB		
	EXISTING MAJOR CONTOURS	MH	EXISTING SAN SEWER MANHOLE		
		FES	EXISTING FLARED END SECTION		
		UB	EXISTING UTILITY BOX		
		CB	EXISTING CATCH BASIN		
		DI	EXISTING DROP INLET		
		MHST	EXISTING STORMWATER MANHOLE		
		GV	EXISTING GAS VALVE		
		GM	EXISTING GAS METER		

FAIRCLOTH ST
TYPICAL SIDEWALK SECTION BEHIND THE CURB CYCLE TRACK

NOT TO SCALE

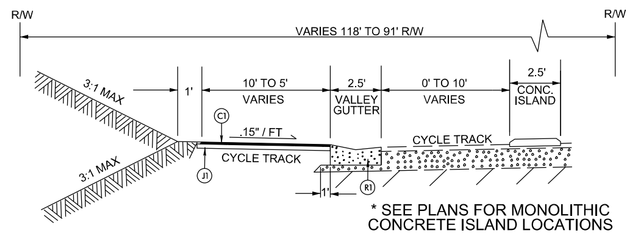
-EL STA. 13+66.01 TO STA. 14+19.70
-EL STA. 36+68.80 TO STA. 39+85.49



FAIRCLOTH ST
TYPICAL SIDEWALK SECTION TRANSITION FROM BEHIND THE CURB TO INSIDE CURB

NOT TO SCALE

-EL STA. 14+19.70 TO STA. 14+44.71
-EL STA. 17+77.18 TO STA. 17+05.55
-EL STA. 36+33.32 TO STA. 36+68.80

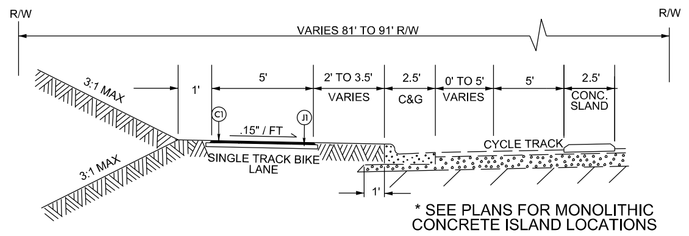


* SEE PLANS FOR MONOLITHIC CONCRETE ISLAND LOCATIONS

FAIRCLOTH ST
TYPICAL SIDEWALK SECTION SPLIT CYCLE TRACK

NOT TO SCALE

-EL STA. 14+44.71 TO STA. 16+77.18
-EL STA. 16+77.18 TO STA. 17+05.55

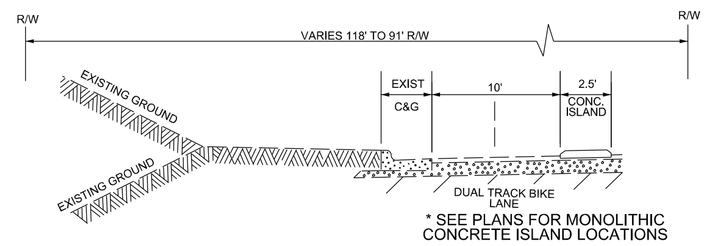


* SEE PLANS FOR MONOLITHIC CONCRETE ISLAND LOCATIONS

FAIRCLOTH ST
TYPICAL SIDEWALK SECTION INSIDE THE CURB CYCLE TRACK

NOT TO SCALE

-EL STA. 17+05.55 TO STA. 36+33.32



* SEE PLANS FOR MONOLITHIC CONCRETE ISLAND LOCATIONS

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOORE

INDEX OF SHEETS, LEGEND, AND TYPICAL SECTIONS

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

DATE:	XXX2023
CADD TECH:	EMM
CHECKED BY:	BAP

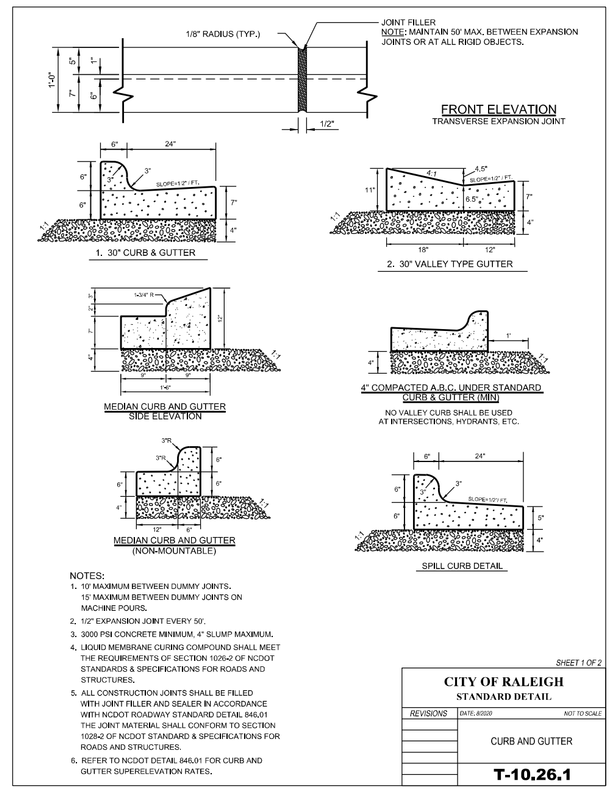
REVISIONS

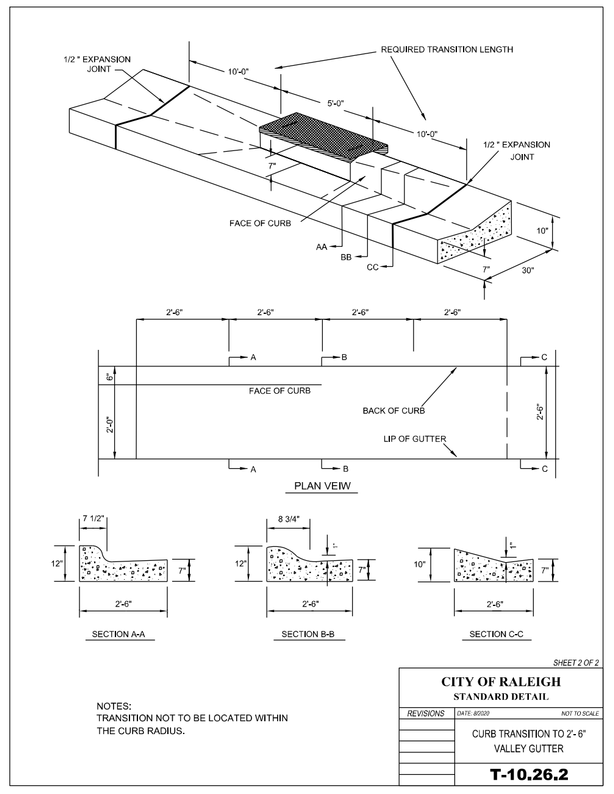
NO.	DATE

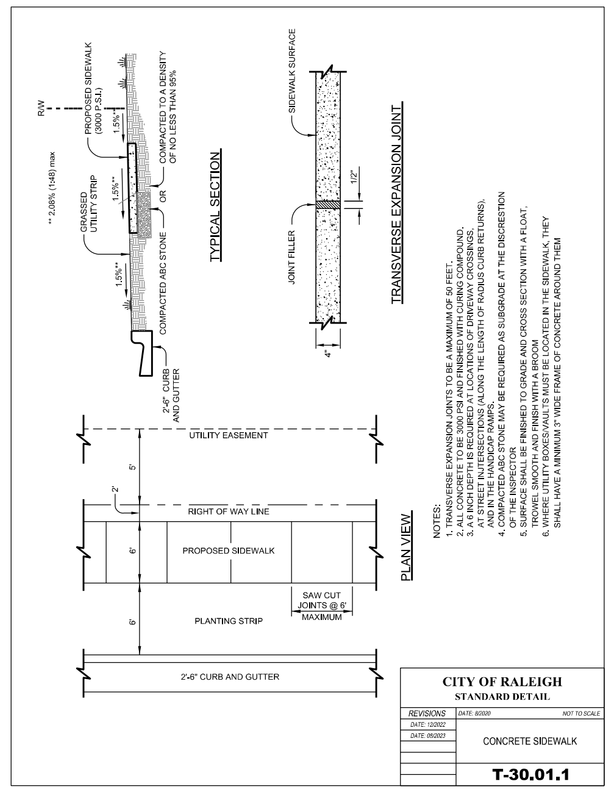
SCALES
HSCALE N/A
VSCALE N/A

SHEET NO.

1A



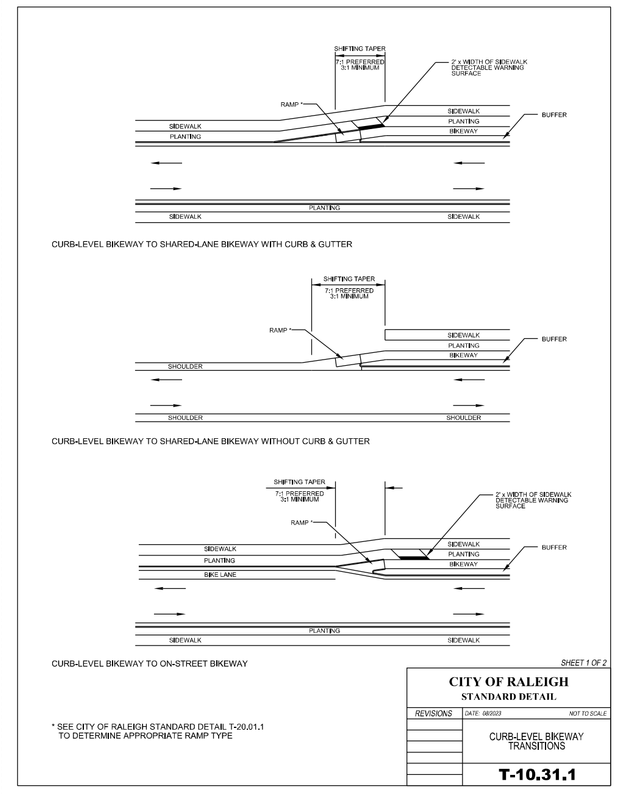




CITY OF RALEIGH CURB RAMPS GENERAL NOTES

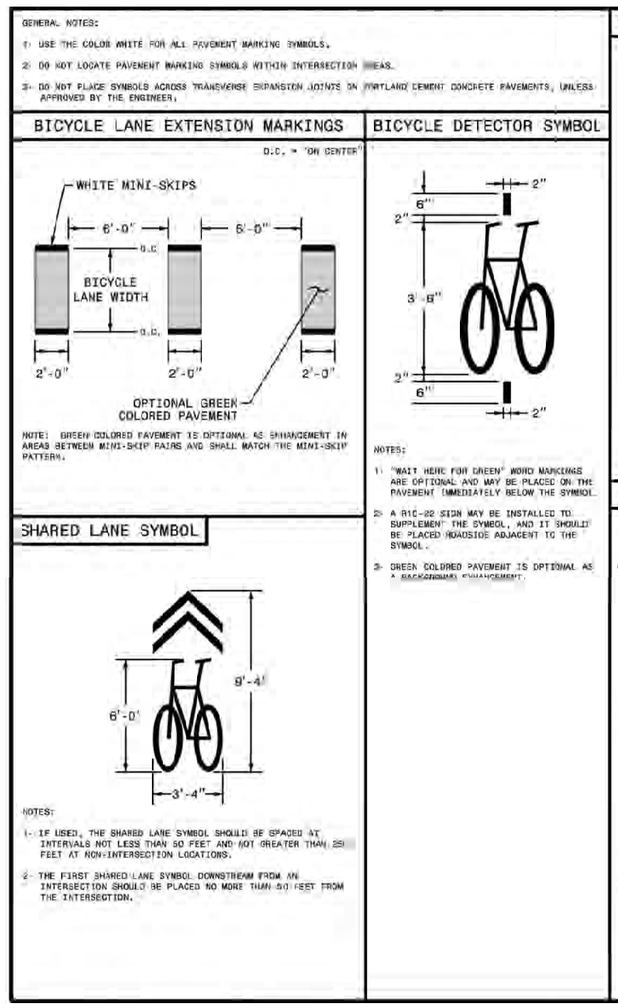
1. CITY OF RALEIGH STANDARD CURB RAMPS HAVE BEEN DEVELOPED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND PUBLIC RIGHT OF WAY ACCESS GUIDELINES (PROWAG).
2. CURB RAMPS SHALL BE PROVIDED AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. SIDEWALK ACCESS RAMPS SHALL BE LOCATED AS INDICATED IN THE DETAIL, HOWEVER, THE LOCATION MAY BE ADJUSTED IN COORDINATION WITH THE CITY OF RALEIGH WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT.
3. DOUBLE WHEELCHAIR RAMPS ARE TO BE INSTALLED AT ALL PUBLIC STREET INTERSECTIONS WHERE SIDEWALK IS REQUIRED.
4. THE WALKING SURFACE SHALL BE SLIP RESISTANT. THE COLOR FOR THE DETECTABLE WARNING AREA SHALL BE YELLOW FOR CONTRAST.
5. NO SLOPE ON THE SIDEWALK ACCESS RAMP SHALL EXCEED 1"/FT (12:1) IN RELATIONSHIP TO THE GRADE OF THE STREET.
6. IN NO CASE SHALL THE WIDTH OF THE SIDEWALK ACCESS RAMP BE LESS THAN 48" ALL RAMPS SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.
7. USE CLASS A (3000 PSI) CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NONSKID SURFACE.
8. A 1/2" EXPANSION JOINT INSTALLED FULL DEPTH WILL BE REQUIRED WHERE THE CONCRETE SIDEWALK ACCESS RAMP JOINS THE CURB AND ALSO WHERE NEW CONCRETE ABUTS EXISTING CONCRETE.
9. CURB RAMPS SHOULD BE PLACED PARALLEL TO THE DIRECTION OF TRAVEL.

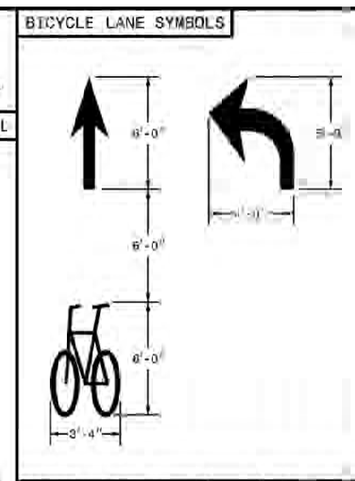
SHEET 1 OF 9
CITY OF RALEIGH STANDARD DETAIL
REVISIONS | DATE: 8/2020 | NOT TO SCALE
CURB RAMP NOTES
T-20.01.8

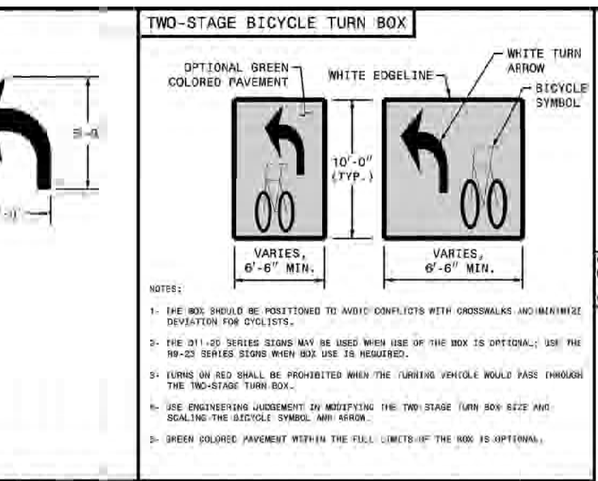


* SEE CITY OF RALEIGH STANDARD DETAIL T-20.01.1 TO DETERMINE APPROPRIATE RAMP TYPE

SHEET 1 OF 2
CITY OF RALEIGH STANDARD DETAIL
REVISIONS | DATE: 8/2020 | NOT TO SCALE
CURB-LEVEL BIKEWAY TRANSITIONS
T-10.31.1





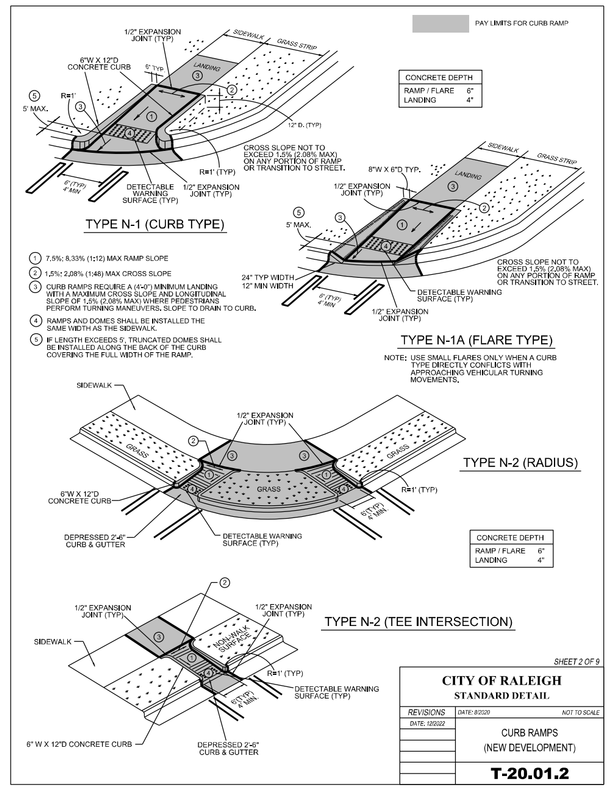


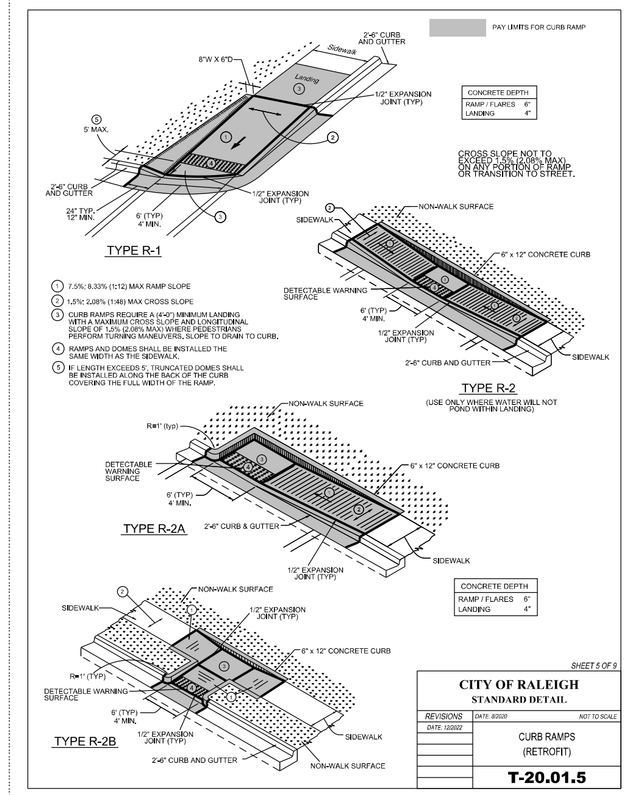
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

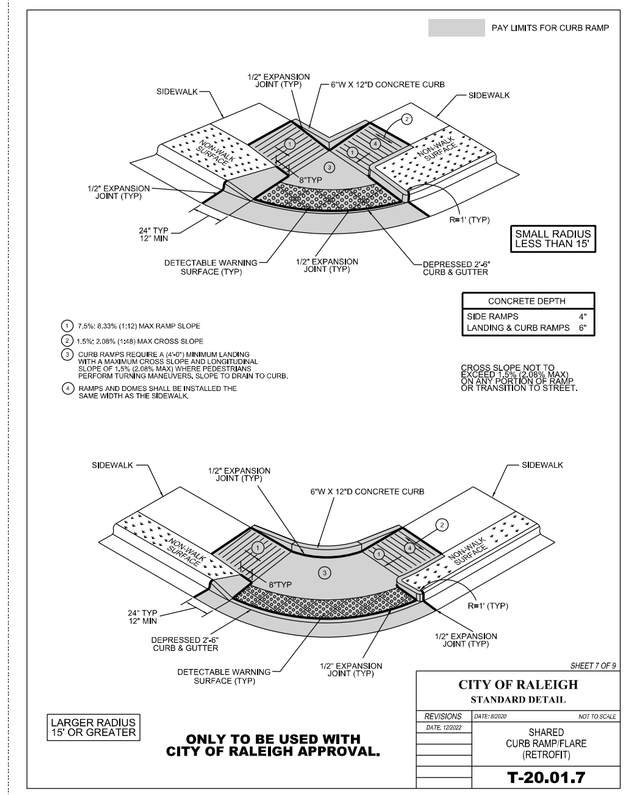
1-24

ROADWAY STANDARD DRAWING FOR **BICYCLE FACILITIES** SYMBOLS AND DETAILS

SHEET 2 OF 9
1205.16







ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOORE

STANDARD DRAWINGS

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

DATE:	XXX2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE N/A
VSCALE N/A

SHEET NO.
2A

CONSTRUCTION NOTES:

1. EXCAVATION AND CONSTRUCTION SHALL PROCEED ACCORDING TO THE LATEST OSHA REGULATIONS.
2. LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES ON THE PLANS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES BEFORE CONSTRUCTION BEGINS AND COORDINATE WITH THE ENGINEER FOR CHANGES.
3. CONTRACTOR SHALL COORDINATE WITH UTILITY OWNERS FOR LOCATION OF EXISTING UTILITIES AND WORK WITH THEM TO REMOVE CONFLICTS.
4. NOT ALL EXISTING UTILITIES ARE SHOWN ON THE PLAN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATION OF ALL EXISTING UNDERGROUND UTILITIES. **"CALL NORTH CAROLINA ONE CALL" (TEL# 1-800-632-4949) 48 HOURS PRIOR TO ANY EXCAVATION WORK ON THE SITE.**
5. CONTRACTOR SHALL INSTALL TRAFFIC CONTROL DEVICES AS PER MUTCD.
6. ALL MATERIALS FURNISHED AND WORK PERFORMED SHALL CONFORM TO CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.
7. THE CONTRACTOR SHALL RECONSTRUCT DRIVEWAYS IN SUCH A MANNER AS TO PROVIDE A SMOOTH TRANSITION TO EXISTING.
8. CONTRACTOR TO COORDINATE WORK IN THE VICINITY OF TRAFFIC SIGNAL / SIGNAL LOOPS WITH NCDOT DIVISION 5 TRAFFIC ENGINEER BEFORE MILLING OF ROADWAY.

GENERAL NOTES:

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED IN THE CONTRACT.

SIDE ROAD:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS IN PLANS USING 3.5' RADII OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

CURB RAMPS:

CURB RAMPS ARE SHOWN ON THE PLANS AT EXACT LOCATIONS. THE CONSTRUCTION OF ALL CURB RAMPS SHALL BE IN ACCORDANCE WITH THE PLANS AND MAY BE MODIFIED IN FIELD BY CITY OF RALEIGH STAFF AS NEEDED.

UTILITIES:

ALL WATER METERS AND FIRE HYDRANTS IN CONFLICT WITH CONSTRUCTION WITHIN THE LIMITS OF THE PROJECT SHALL BE RELOCATED TO THE RIGHT OF WAY LINE. HYDRANTS INSTALLED BEFORE 1985 SHALL BE REPLACED ACCORDING TO CURRENT STANDARD.

ANY CLEANOUTS (OR ADDITIONAL WATER METERS) UNCOVERED IN THE FIELD AND FOUND TO BE IN CONFLICT WITH CONSTRUCTION SHALL BE RELOCATED.

ANY WATER SERVICES BEING RELOCATED SHALL BE BROUGHT TO CURRENT CODE AND INCLUDE A CURB STOP. IF GALVANIZED SERVICES ARE ENCOUNTERED, NOTIFY PUBLIC UTILITIES OF THE ADDRESS AS THEY WILL NEED TO BE REPLACED.

TIME RESTRICTIONS:

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
ALL ROADS	MON - FRI 6:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 7:00 P.M.

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME

ALL ROADS

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 4:00 P.M. DECEMBER 31ST TO 9:00 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 9:00 A.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 4:00 P.M. THURSDAY AND 9:00 A.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 4:00 P.M. FRIDAY TO 9:00 A.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 4:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 9:00 A.M. THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 4:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 9:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 4:00 P.M. FRIDAY AND 9:00 A.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 4:00 P.M. TUESDAY TO 9:00 A.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 4:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
ALL ROADS	MON - FRI 6:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 7:00 P.M.

D) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME DURATION AND RESTRICTIONS OPERATION
ALL ROADS	MON - FRI 6:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 7:00 P.M.

E) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

F) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING NCDOT ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING NCDOT ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING NCDOT ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

I) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY,CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, NCDOT ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

J) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

K) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE CITY.

L) THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY OBSTRUCTION PERMIT FOR ANY WORK WHICH REQUIRES THE OBSTRUCTION OF A SIDEWALK, TRAVEL LANE, OR FULL STREET FROM THE RIGHT-OF-WAY SERVICES PERMITTING COORDINATOR AT 919-996-5760 OR HTTPS://RALEIGHNC.SEAMLESSDOCS.COM/F/EMERGENCYCLOSURE NO LESS THAN FORTY-EIGHT (48) HOURS IN ADVANCE OF LANE CLOSURES, AND NO LESS THAN TWO (2) WEEKS IN ADVANCE OF STREET CLOSURE.

SIGNING:

M) INSTALL MUTCD COMPLIANT ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 4 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

TRAFFIC CONTROL DEVICES:

N) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON- CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

OTHER NOTES:

O) INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL BUSINESSES AND DWELLINGS ON THE PROJECT. SPECIAL ATTENTION SHALL BE PAID TO NOT BLOCK FIRE HYDRANTS.

P) CONTRACTOR SHALL FURNISH ALL PERMANENT SIGNING. CONTRACTOR SHALL INSTALL ALL PERMANENT SIGNING.

Q) SIDEWALK CLOSURES SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST ADA STANDARDS. ANY WORK RELATED TO SIDEWALK CLOSURES SHALL BE INCIDENTAL TO THE CONTRACT LINE ITEMS ASSOCIATED WITH THE WORK.

R) THE CONTRACTOR SHALL SUBMIT FOR THE ENGINEER'S CONSIDERATION A METHOD FOR HANDLING TRAFFIC. ALL CONSTRUCTION TRAFFIC CONTROL SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE NCDOT "STANDARD SPECIFICATION FOR ROADWAY STRUCTURES". NCDOT "ROADWAY STANDARD DRAWINGS MANUAL", MUTCD, AND NCDOT SUPPLEMENT TO THE MUTCD.

GIS DATA DISCLAIMER:

THE RIPARIAN BUFFER ZONES, FLOOD PLAINS, FLOOD PRONE SOIL LIMITS, AND THE WATERLINES WERE PLOTTED FROM CITY OF RALEIGH GEOGRAPHIC INFORMATION DATA AND SHOULD BE CONSIDERED APPROXIMATE ONLY. CITY OF RALEIGH GEOGRAPHIC INFORMATION SERVICES SHALL NOT BE HELD LIABLE FOR ANY ERROR IN THIS DATA. THIS INCLUDES ERRORS OF OMISSION, COMMISSION, ERRORS CONCERNING CONTENT OF THE DATA, AND RELATIVE ACCURACY OF THE DATA. THIS DATA SHALL NOT BE CONSTRUED TO BE A LEGAL DOCUMENT. PRIMARY DATA SOURCES FROM WHICH THIS DATA WAS COMPILED MUST BE CONSULTED FOR THE VERIFICATION OF THE INFORMATION CONTAINED IN THIS DATA.

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES
DEPARTMENT

CITY OF RALEIGH NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOORE

GENERAL NOTES
CONSTRUCTION NOTES
TRAFFIC CONTROL NOTES

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

DATE:	XXX2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

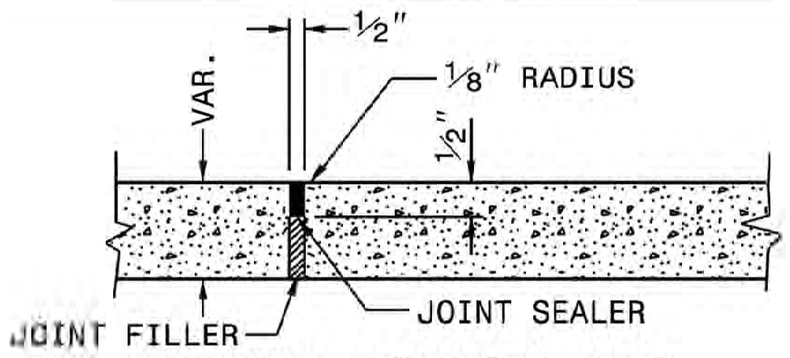
NO.	DATE

SCALES

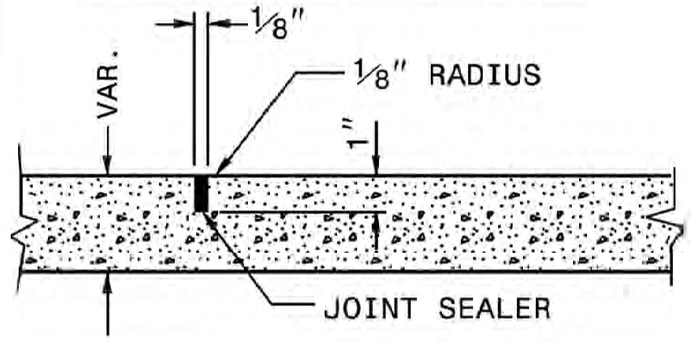
HSCALE	N/A
VSCALE	N/A

SHEET NO.

1B



SHOWING EXPANSION JOINT



SHOWING GROOVED JOINT

PARTIAL LONGITUDINAL SECTIONS OF PAVED ISLANDS

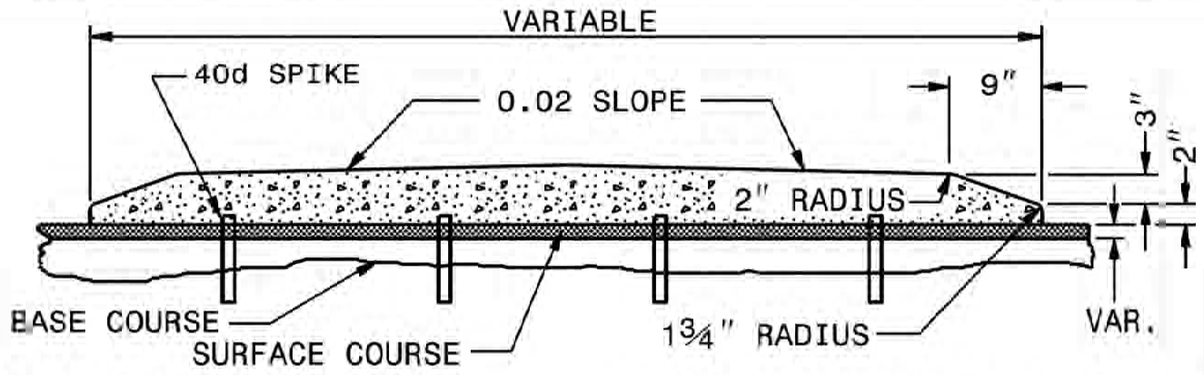
NOTE:

WHEN MONOLITHIC CONCRETE ISLAND IS ON TOP OF SURFACE COURSE, DRIVE 40d SPIKES INTO SURFACE UNDER MONOLITHIC CONCRETE ISLAND. STAGGER SPIKES ON 2' CENTERS EACH WAY.

IN THE CONCRETE PAVEMENT (ISLAND) AND CONCRETE ISLAND (MONOLITHIC) PLACE ½" EXPANSION JOINTS AT 30' INTERVALS AND GROOVED JOINTS 1" DEEP AT 10' INTERVALS BETWEEN EXPANSION JOINTS.

LINE UP THE JOINTS IN THE CONCRETE PAVEMENT (ISLAND) WITH THE JOINTS IN THE CURB OR CURB AND GUTTER. FILL AND SEAL THE TOP ½" OF THE EXPANSION JOINTS AND THE ENTIRE DEPTH OF GROOVED JOINTS WITH JOINT SEALER.

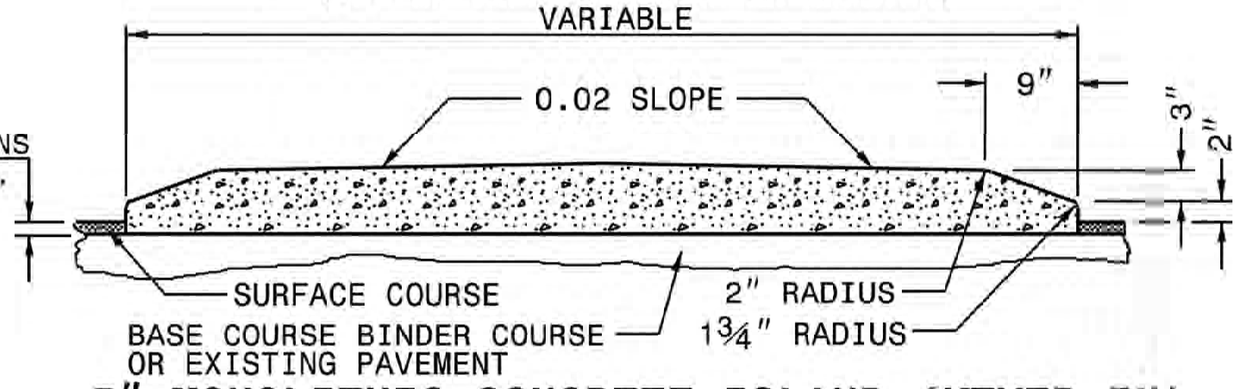
FOR JOINTS IN THE CURB AND/OR CURB AND GUTTER, SEE STANDARD NO. 846.01



5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED) ON ASPHALT CONCRETE PAVEMENT

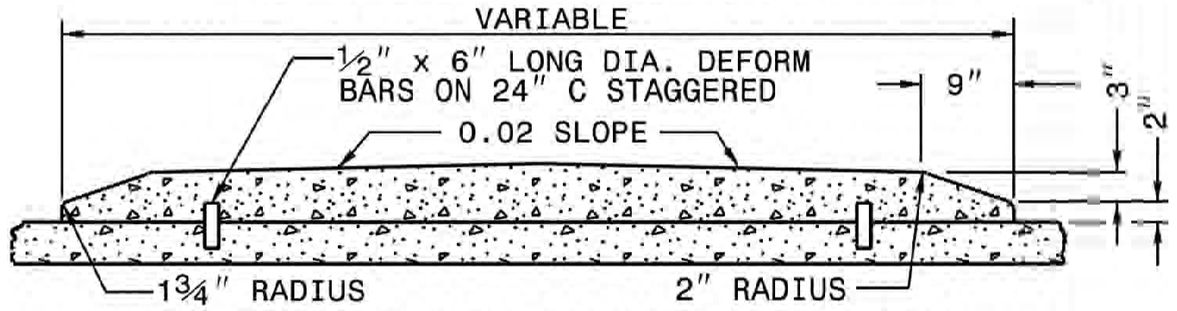
(USE ON ISLAND 4' WIDE OR GREATER)

SEE TYPICAL SECTIONS FOR PAVEMENT DEPTH, KEY IN ON THE LAST LAYER OF PAVEMENT SURFACE COURSE

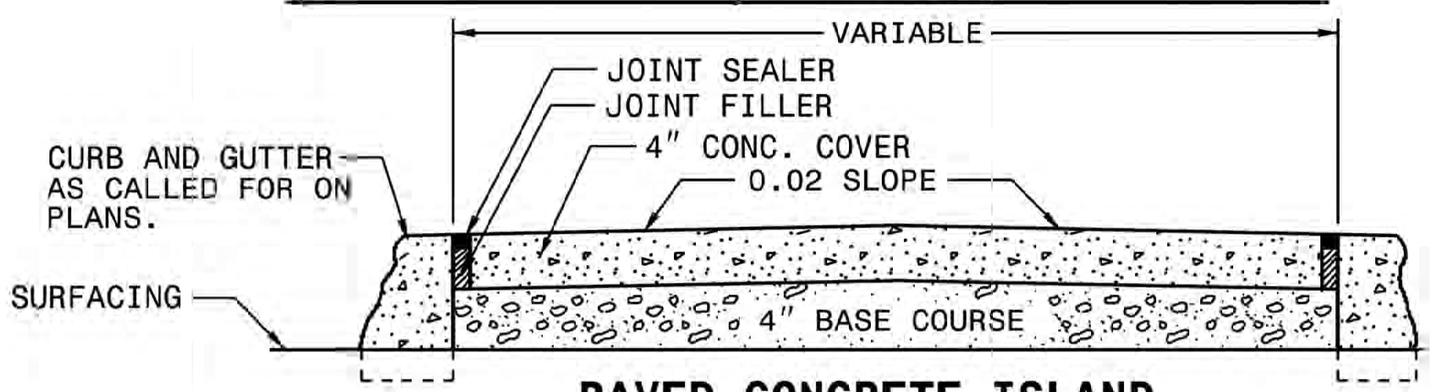


5" MONOLITHIC CONCRETE ISLAND (KEYED IN) ON ASPHALT CONCRETE PAVEMENT

(USE ON ISLAND LESS THAN 4' WIDE)



5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED) ON CONCRETE PAVEMENT



PAVED CONCRETE ISLAND

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR

CONCRETE ISLANDS

SHEET 1 OF 1

852.01

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES
DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOORE

STANDARD DRAWINGS

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

DATE:	XXX2023
CADD TECH:	EMM
CHECKED BY:	BAP

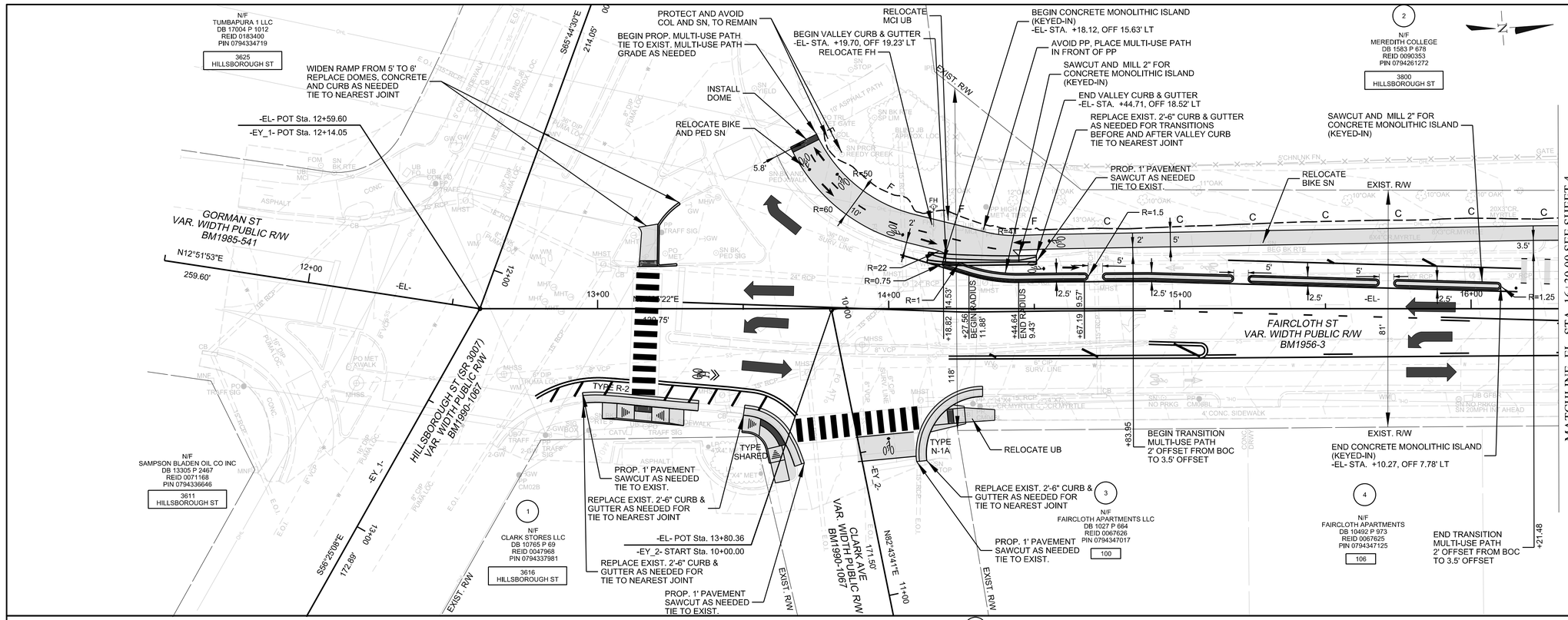
REVISIONS

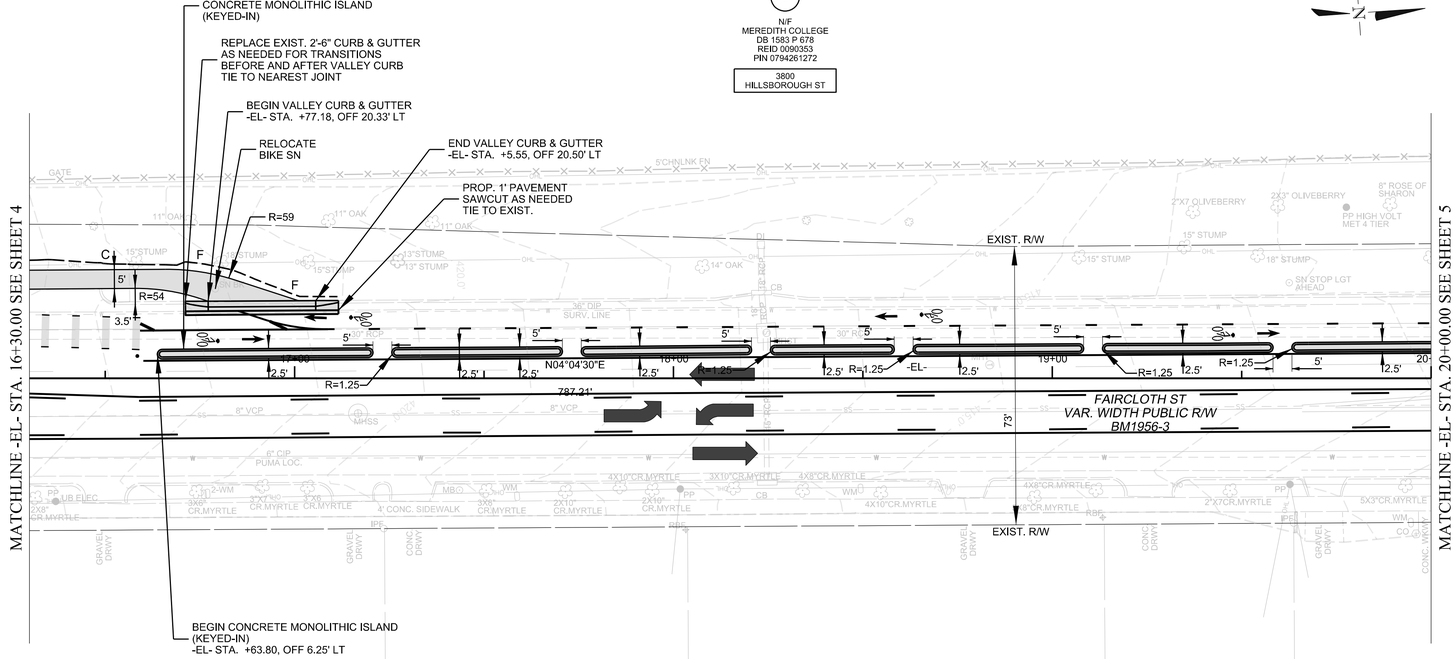
NO.	DATE

SCALES
HSCALE N/A
VSCALE N/A

SHEET NO.

2B





20 10 0 20 40
GRAPHIC SCALE 1"=20'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOGHE

PLAN SHEET

FAIRCLOTH STREET
CYCLE TRACK
FROM HILLSBOROUGH STREET
TO WADE AVENUE (SR 1728)

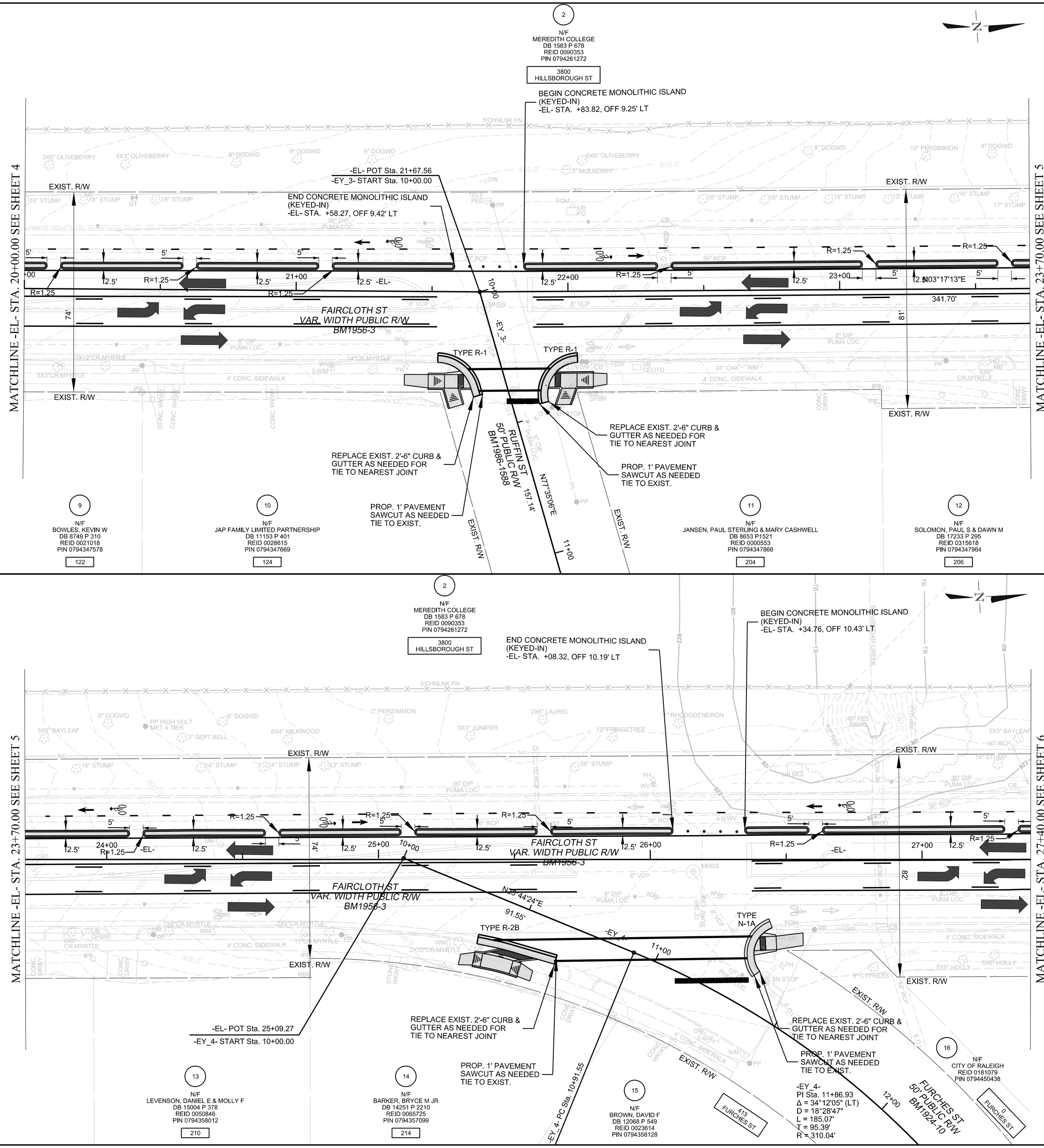
DATE:	XXX\2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE 1"=20'
VSCALE

SHEET NO.
4



20 10 0 20 40
GRAPHIC SCALE 1"=20'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MODE

PLAN SHEET

FAIRCLOTH STREET CYCLE TRACK

FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

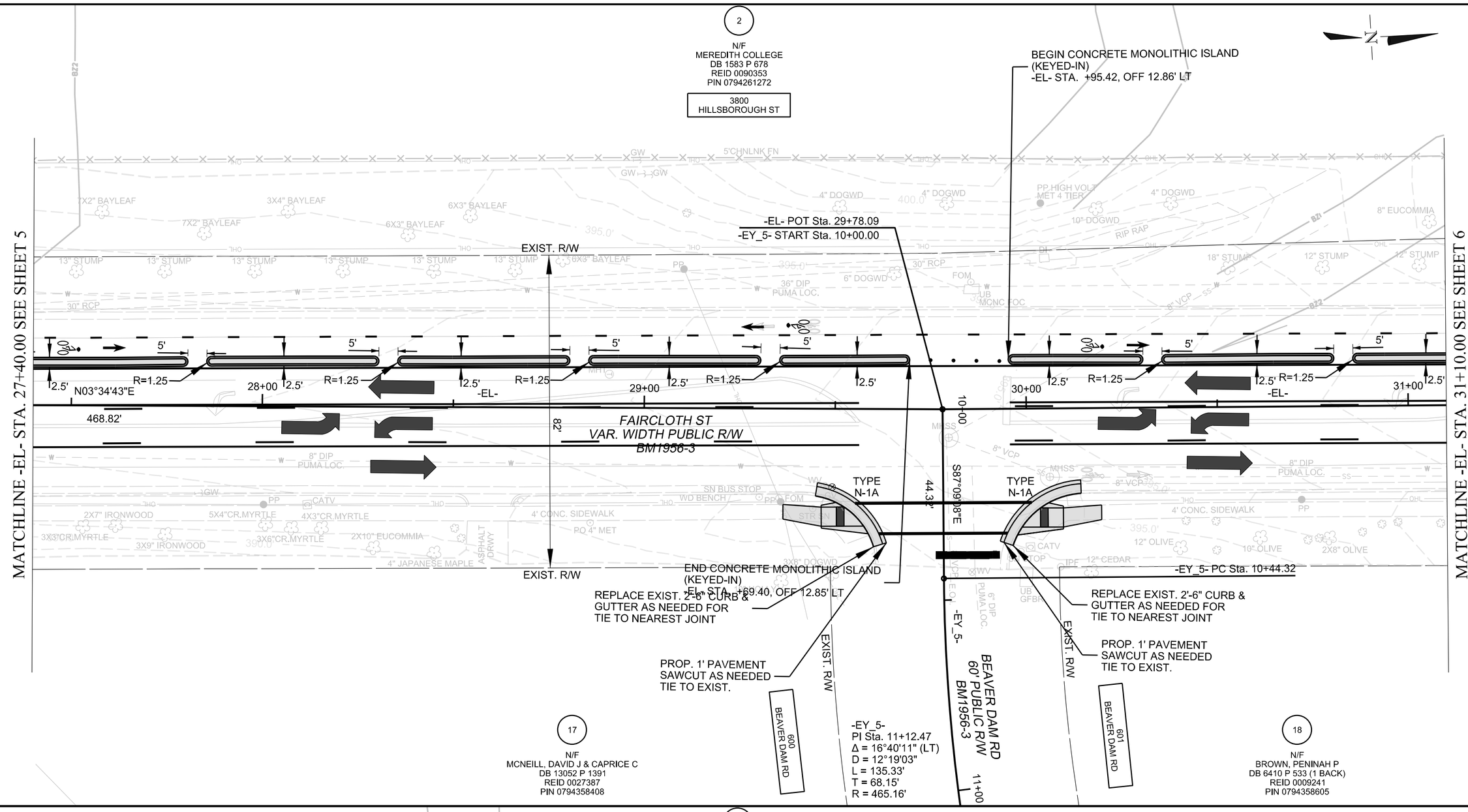
DATE:	XXX/2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE 1"=20'
VSCALE

SHEET NO.
5



20 10 0 20 40
GRAPHIC SCALE 1"=20'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOGHE

PLAN SHEET

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

DATE:	XX\X\2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE 1"=20'
VSCALE

SHEET NO.
6

FAIRCLOTH STREET CYCLE TRACK

FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

PLAN SHEET

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 038342 MICHAEL R. MOORE

CITY OF RALEIGH

ENGINEERING SERVICES DEPARTMENT

DATE:	XXX/2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES

HSCALE 1"=20'

VSCALE

SHEET NO.

7

PLAN FOR PROPOSED
PAVEMENT MARKING PLAN

INDEX

SHEET NO.:	DESCRIPTION:
PMP-1	NOTES, DETAILS AND SCHEDULE SHEET
PMP-2	PAVEMENT MARKING DETAILS
PMP-3 THRU PMP-6	PAVEMENT MARKING PLAN

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
FAIRCLOTH STREET	THERMOPLASTIC AND HEATED-IN-PLACE THERMOPLASTIC	NONE

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.

D) STOP LOCATION AT NOT-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.

E) ALL BICYCLE LANE SYMBOLS SHALL BE HEATED-IN-PLACE THERMOPLASTIC. SYMBOLS SHALL BE PAID FOR USING THE HEATED-IN-PLACE PAY ITEM.

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD.NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - THRU LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	PAVEMENT MARKER SPACING

PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
T1	WHITE EDGELINE (4", 90 MIL) THERMOPLASTIC
T2	WHITE SOLID LANE LANE (4", 90 MIL) THERMOPLASTIC
T4	3 FT. - 9 FT. / SP. WHITE MINISKIP (4", 90 MIL) THERMOPLASTIC
T4-M	3 FT. - 9 FT. / SP. YELLOW MINISKIP (4", 90 MIL) THERMOPLASTIC (MODIFIED)
T5	2 FT. - 6 FT. / SP. WHITE MINISKIP (4", 90 MIL) THERMOPLASTIC
T10	YELLOW EDGELINE (4", 90 MIL) THERMOPLASTIC
T11	YELLOW SINGLE CENTERLINE (4", 90 MIL) THERMOPLASTIC
T12	10 FT. YELLOW SKIP (4", 90 MIL) THERMOPLASTIC
T13	YELLOW DOUBLE CENTER (4", 90 MIL) THERMOPLASTIC
T41	WHITE DIAGONAL (8", 90 MIL) THERMOPLASTIC
T42	YELLOW DIAGONAL (8", 90 MIL) THERMOPLASTIC
T46	WHITE CROSSWALK LINE (8", 90 MIL) THERMOPLASTIC
T61	WHITE STOPBAR (24", 90 MIL) THERMOPLASTIC
T62	WHITE CROSSWALK LINE (24", 90 MIL) THERMOPLASTIC
T70	LEFT TURN ARROW (90 MIL)
T90	BICYCLE SYMBOL, HEATED-IN-PLACE (90 MIL) THERMOPLASTIC
T91	BICYCLE STRAIGHT ARROW, HEATED-IN-PLACE (90 MIL) THERMOPLASTIC
T94	SHARROW, HEATED-IN-PLACE (90 MIL) THERMOPLASTIC
T103	24" YIELD LINE TRIANGLE (90 MIL)THERMOPLASTIC
TG	24" GREEN BIKE LANE MARKING THERMOPLASTIC

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOGHE

PAVEMENT MARKING STANDARD DRAWINGS, INDEX OF SHEETS AND LEGEND

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

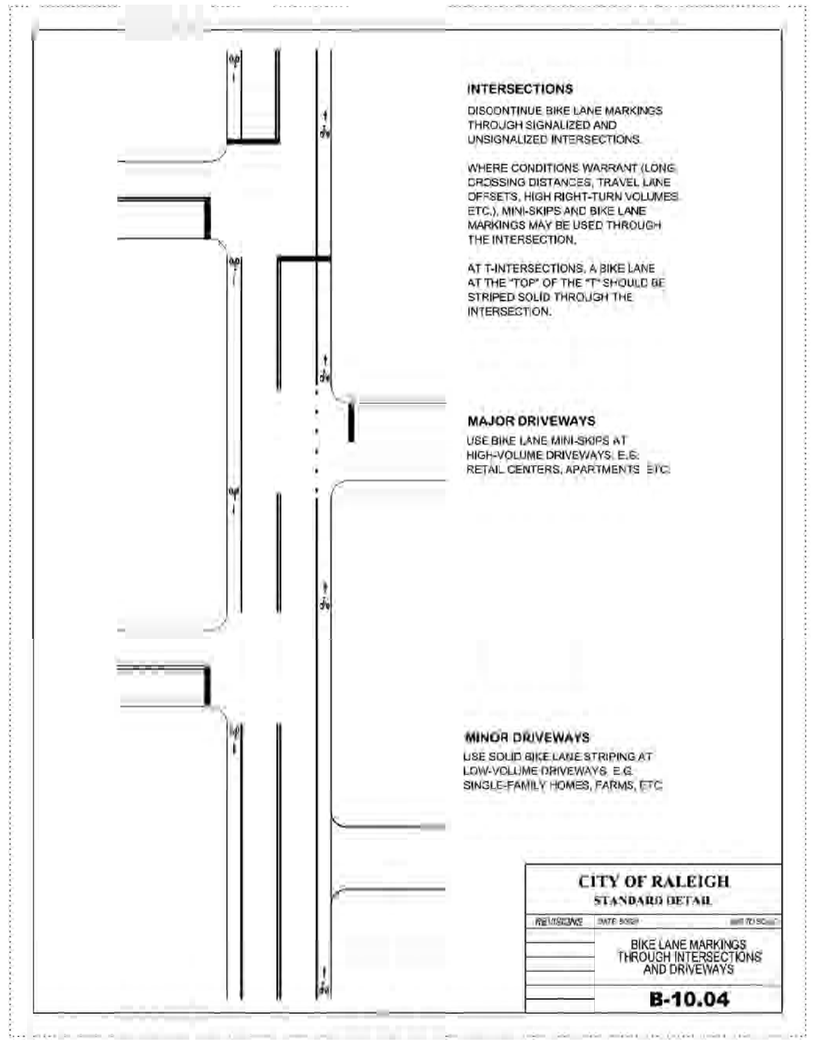
DATE:	XXX2023
CADD TECH:	EMM
CHECKED BY:	BAP

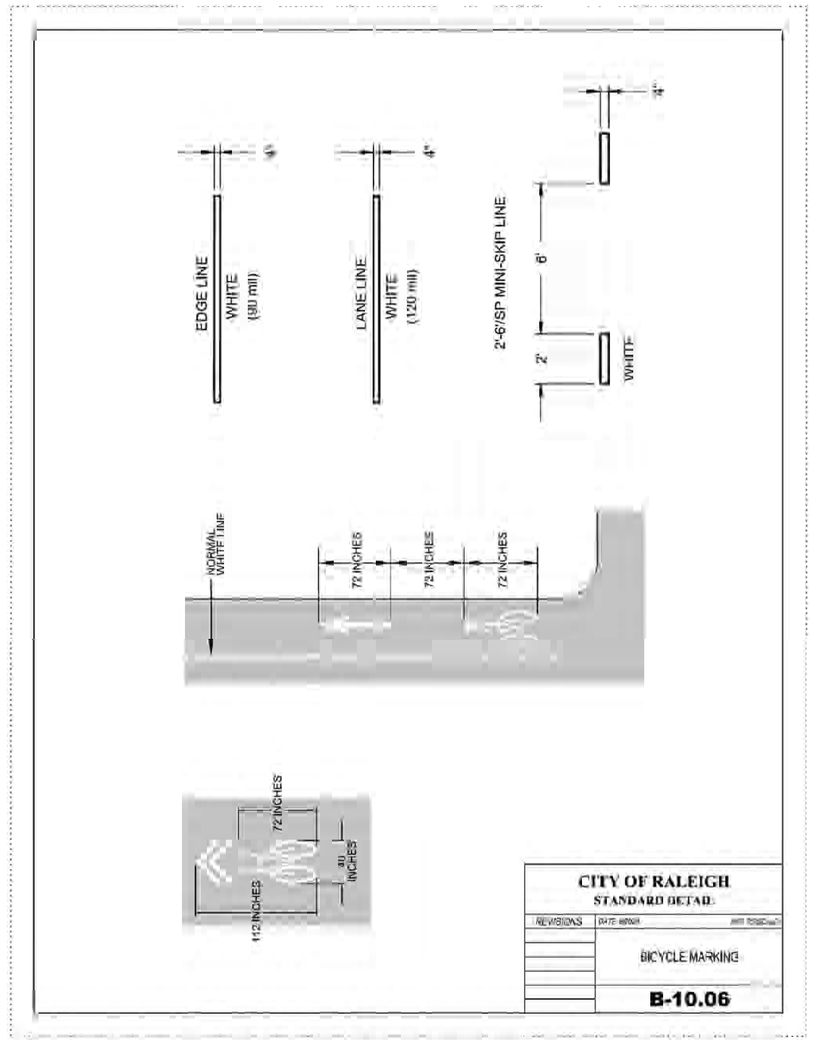
REVISIONS

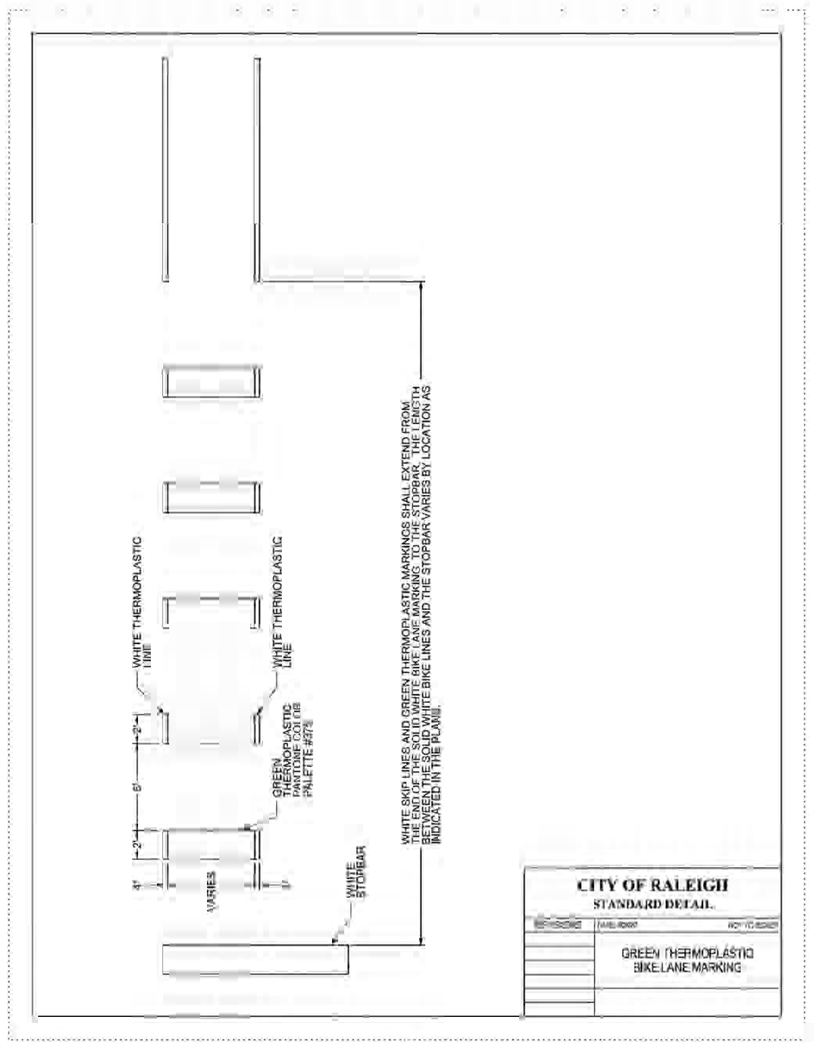
NO.	DATE

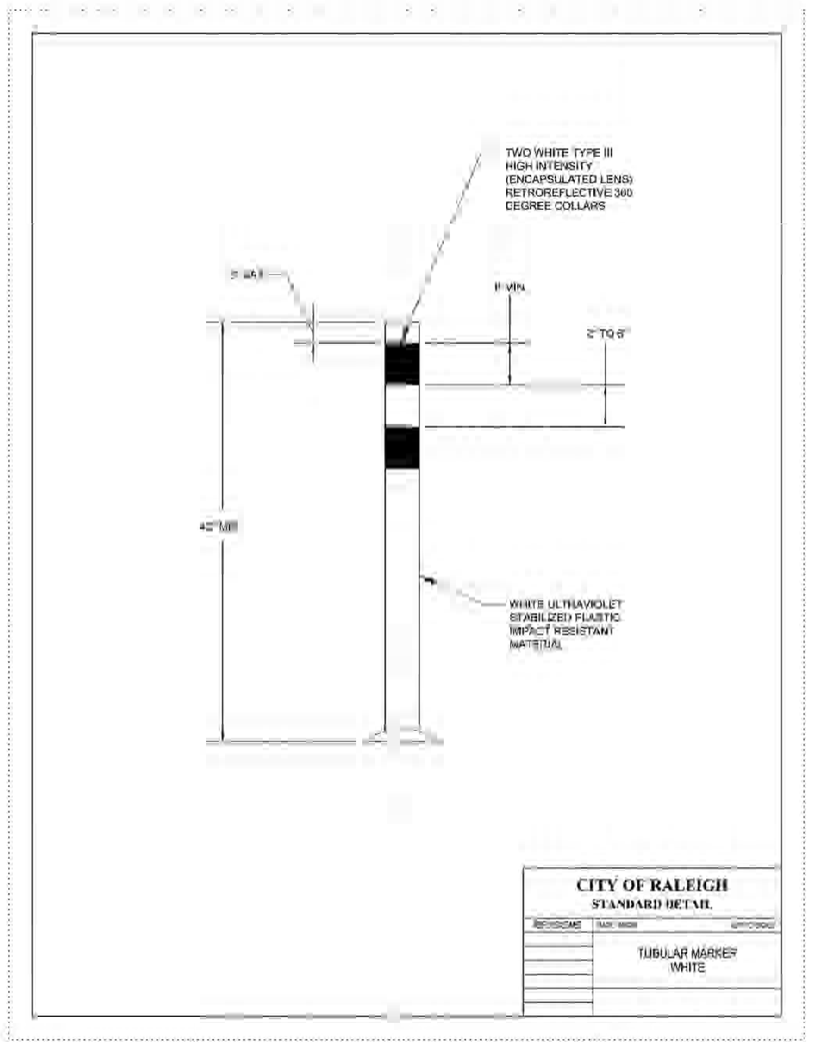
SCALES
HSCALE N/A
VSCALE N/A

SHEET NO.
PMP-1









ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOGHE

PAVEMENT MARKING STANDARD DRAWINGS

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

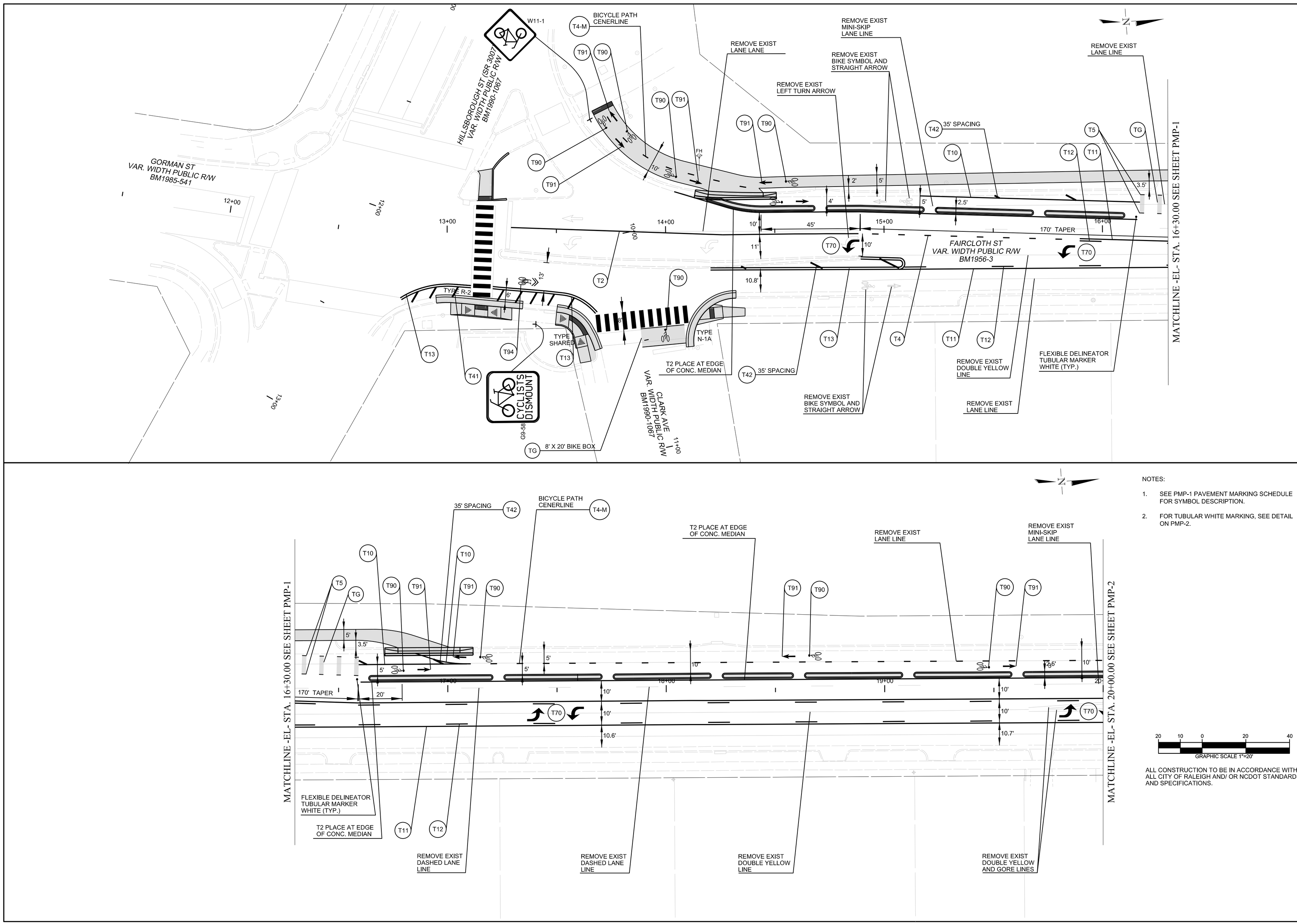
DATE:	XXX/2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE N/A
VSCALE N/A

SHEET NO.
PMP-2



NOTES:

1. SEE PMP-1 PAVEMENT MARKING SCHEDULE FOR SYMBOL DESCRIPTION.
2. FOR TUBULAR WHITE MARKING, SEE DETAIL ON PMP-2.

GRAPHIC SCALE 1"=20'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOGHE

PAVEMENT MARKING AND SIGNING SHEET

FAIRCLOTH STREET
CYCLE TRACK
FROM HILLSBOROUGH STREET
TO WADE AVENUE (SR 1728)

DATE:	XXX2023
CADD TECH:	EMM
CHECKED BY:	BAP

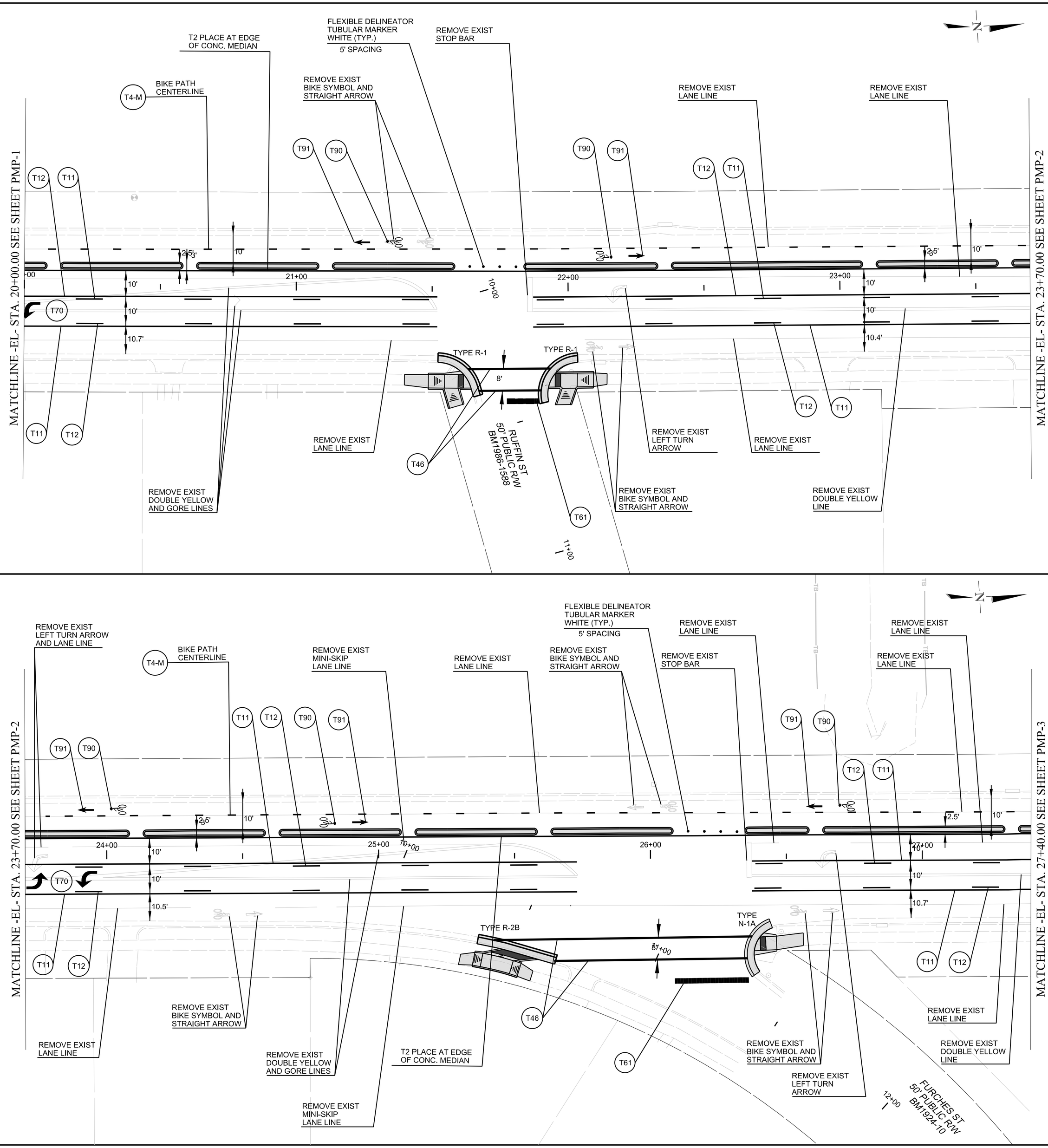
REVISIONS

NO.	DATE

SCALES
HSCALE 1"=20'
VSCALE

SHEET NO.

PMP-3



NOTES:

1. SEE PMP-1 PAVEMENT MARKING SCHEDULE FOR SYMBOL DESCRIPTION.
2. FOR TUBULAR WHITE MARKING, SEE DETAIL ON PMP-2.

20 10 0 20 40
GRAPHIC SCALE 1"=20'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOGHE

PAVEMENT MARKING AND SIGNING SHEET

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

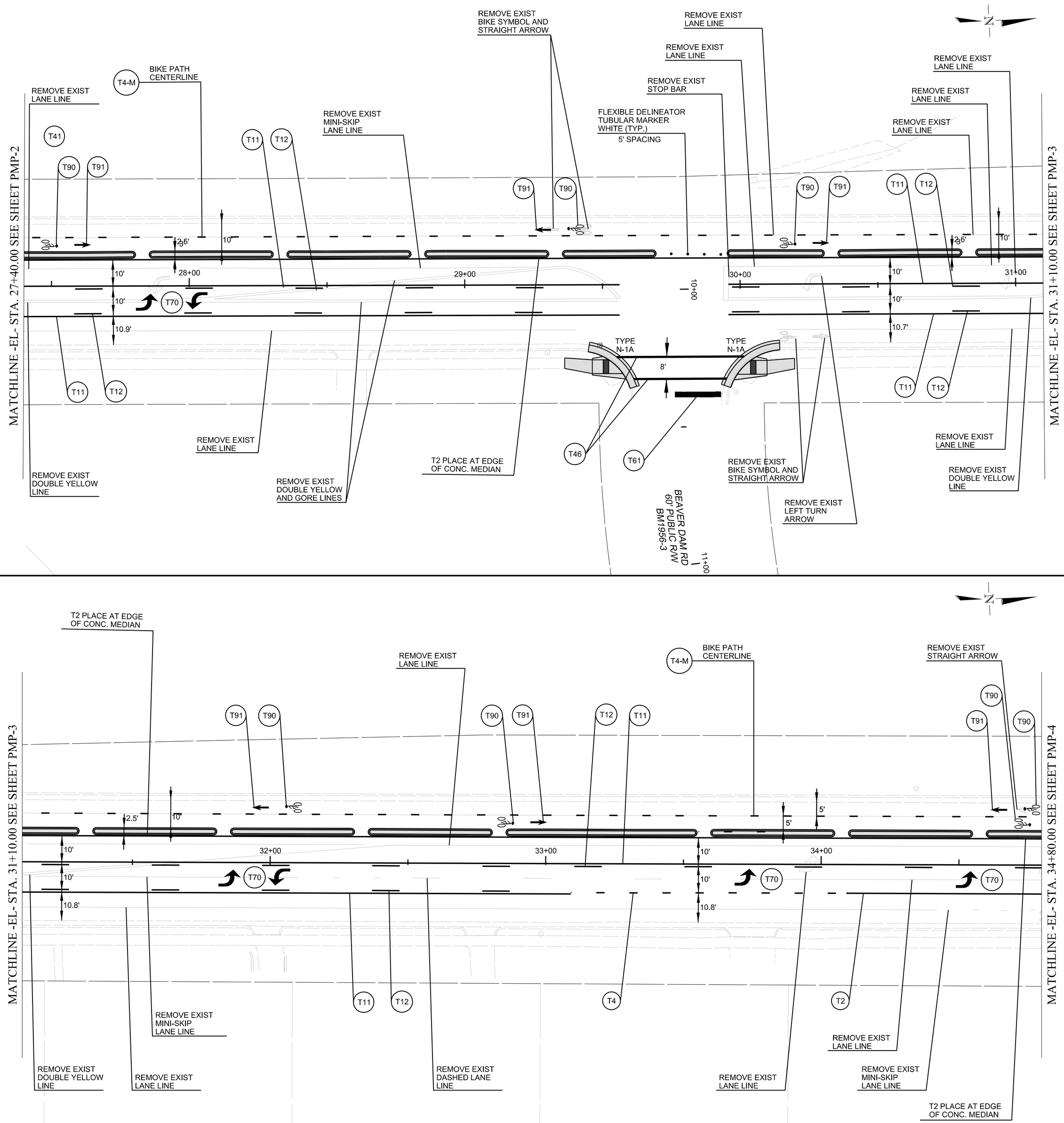
DATE:	XX\\2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE 1"=20'
VSCALE

SHEET NO.
PMP-4



NOTES:

1. SEE PMP-1 PAVEMENT MARKING SCHEDULE FOR SYMBOL DESCRIPTION.
2. FOR TUBULAR WHITE MARKING, SEE DETAIL ON PMP-2.

20 10 0 20 40
GRAPHIC SCALE 1"=20'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOGHE

PAVEMENT MARKING AND SIGNING SHEET

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

DATE:	XXX2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE 1"=20'
VSCALE

SHEET NO.

PMP-5

NOTES:

1. SEE PMP-1 PAVEMENT MARKING SCHEDULE FOR SYMBOL DESCRIPTION.
2. FOR TUBULAR WHITE MARKING, SEE DETAIL ON PMP-2.

GRAPHIC SCALE 1"=20'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

SCALES
HSCALE 1"=20'
VSCALE
SHEET NO. PMP-6

REVISIONS

NO.	DATE

DATE: XXX/2023
CADD TECH: EMM
CHECKED BY: BAP

FAIRCLOTH STREET CYCLE TRACK

FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

PAVEMENT MARKING AND SIGNING SHEET

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 038342 MUKUND R. MOGHE

CITY OF RALEIGH

ENGINEERING SERVICES DEPARTMENT

PLAN FOR PROPOSED GRADING AND EROSION CONTROL

EROSION CONTROL NOTES

CONSTRUCTION SEQUENCE:

1. CONTACT STORMWATER INSPECTIONS BY CALLING THE REGIONAL INSPECTOR, STEPHEN LEISCHNER AT (919) 278-6461. CONTRACTOR SHALL BE RESPONSIBLE TO SCHEDULE PRE AND POST CONSTRUCT ON STORMWATER INSPECTION.
2. ATTEND PRE- CONSTRUCTION MEETING AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION.
3. HAVE THE PROJECT CLEARING LIMITS FLAGGED.
4. CONTRACTOR SHALL INSTALL REQUIRED TREE PROTECTION FENCE ON FAIRCLOTH STREET AS SHOWN ON SHEETS EC-3 TO EC-6 AND HAVE IT INSPECTED BY CITY STAFF BEFORE PROCEEDING WITH ADDITIONAL WORK. LIMIT CLEARING AND LAND DISTURBING ACTIVITY TO ONLY THE AREA NECESSARY TO INSTALL THE PERMITTED MEASURES.TAKE PRECAUTION TO AVOID CAUSING ROOT DAMAGE TO TREES JUST OUTSIDE OF THE CLEARING LIMITS. IF ROOT DAMAGE TO A TREE OUTSIDE OF THE CLEARING LIMITS IS UNAVOIDABLE, CONSULT WITH THE ENGINEER TO DETERMINE THE NEED TO REMOVE IT. THIS WILL BE CONSIDERED INCIDENTAL TO THE LUMP SUM GRADING AND / OR CLEARING AND GRUBBING.
5. CONTACT STORMWATER INSPECTIONS AT PERMIT AND DEVELOPMENT PORTAL OF RALEIGH.GOV BY SUBMITTING INSPECTION REQUEST AT WEBSITE permitportal.raleigh.gov. CONTRACTOR SHALL BE RESPONSIBLE TO SCHEDULE A STORMWATER SITE INSPECTION.
6. UPON APPROVAL OF THE STORMWATER SITE INSPECTION, COMMENCE PERMITTED LAND DISTURBING ACTIVITY - CLEARING AND GRUBBING.
7. BEGIN GRADING WORK AND SITE IMPROVEMENTS.
8. MAINTAIN EROSION CONTROL MEASURES AS WORK PROGRESSES.
9. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED, IF NEEDED, AT LEAST ONCE PER WEEK AND AFTER EVERY RAINFALL EVENT.
10. COMPLETE THE GRADING, CURBING AND SIDEWALK AND STABILIZE ALL SLOPES AS REQUIRED WHILE MAINTAINING PROPER PEDESTRIAN TRAFFIC. THIS MAY INCLUDE, BUT IS NOT LIMITED TO, LIMITING THE WORK AREA TO ONE SIDE OF THE ROAD OR WITHIN A SINGLE QUADRANT OF AN INTERSECTION. WORK IN THESE AREAS SHALL BE FULLY COMPLETED PRIOR TO BEGINNING THE OTHER SIDE OR ANOTHER QUADRANT WITHIN THE SAME INTERSECTION. ANY SUBSTANTIAL CHANGE TO THE EROSION CONTROL PLAN REQUIRES SUBMITTAL OF A REVISED EROSION CONTROL PLAN TO THE ENGINEER, OR THE LAND QUALITY SECTION. IF STATE EROSION CONTROL PLAN REQUIRED.
11. THE CONTRACTOR SHALL DEVELOP A PHASING PLAN AND SCHEDULE TO BE APPROVED BY THE ENGINEER PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL ADHERE TO THE APPROVED PHASING PLAN AND SCHEDULE UNLESS OTHERWISE APPROVED BY THE ENGINEER. ALL ASPECTS OF CONSTRUCTION SHOULD BE CONSIDERED WITHIN THE PROPOSED PHASING PLAN AND SCHEDULE.
12. STABILIZATION IS REQUIRED WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING OR INACTIVITY ON PROJECT SITE.
13. SITE STABILIZATION IS REQUIRED PRIOR TO FINAL APPROVAL OF GRADING PERMIT. GRASS UTILIZED AS PERMANENT GROUND COVER MUST BE AT A MOWABLE HEIGHT THAT GENERALLY PROVIDES AT LEAST 80% COVERAGE THOUGH OUT THE SITE, WITH NO LARGE BARE PATCHES OR EVIDENCE OF EROSION.
14. INSTALL PERMANENT VEGETATION AND MULCH AS SHOWN IN PLANS IN EACH AREA PRIOR TO MOVING TO NEXT AREA.
15. AFTER SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON ANY REMAINING DISTURBED AREAS. THE CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL OF ANY WASTE SOIL FROM THE PROJECT TO ANOTHER SITE INCLUDING APPROVED EROSION AND SEDIMENTATION CONTROL PLAN FOR THE DISPOSED MATERIAL.
16. CONTACT STORMWATER INSPECTIONS AT PERMIT AND DEVELOPMENT PORTAL OF RALEIGH.GOV BY SUBMITTING INSPECTION REQUEST AT WEBSITE permitportal.raleighnc.gov. CONTRACTOR SHALL BE RESPONSIBLE TO SCHEDULE A STORMWATER FINAL INSPECTION. NO TEMPORARY MEASURES SHOULD BE INSTALLED WITHOUT PERMISSION FROM STORMWATER INSPECTOR.

EROSION CONTROL NARRATIVE:

THE CITY OF RALEIGH PROPOSES TO INSTALL SIDEWALK ALONG THE APPROVED SIDEWALK IMPROVEMENTS PROJECTS AREA ALONG INTERSECTING STREETS. THE PROJECT INCLUDES GRADING, PAVING, CURB AND GUTTER, SIDEWALK, RAMPS AND PAVEMENT MARKINGS. THE CONTRACTOR SHALL FAITHFULLY FOLLOW THE CONSTRUCTION SEQUENCE AND MAINTAIN ALL EROSION CONTROL MEASURES AND DEVICES. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE ENGINEER OR THE INSPECTOR, IF WARRANTED. SEDIMENT RUNOFF IS TO BE CONTROLLED BY SILT FENCE, BLOCK AND GRAVEL INLET PROTECTION AND CHECK DAMS WHERE NEEDED OR AS SHOWN ON THE PLANS. WETLAND AREAS SHALL NOT BE CLEARED, DRAINED, FILLED OR OTHERWISE IMPACTED EXCEPT AS PERMITTED BY NCDENR AND U.S. ARMY CORPS OF ENGINEERS.

EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AT ANY AREAS USED FOR MATERIALS LAYDOWN, SPOIL OR WASTE AREAS. ALL SEDIMENT MEASURES MUST BE MAINTAINED UNTIL ALL UPGRADE DRAINAGE AREAS HAVE BEEN STABILIZED WITH THE ESTABLISHMENT OF PERMANENT VEGETATION. ANY DEWATERING OF SEDIMENT CONTAINMENT DEVICES FOR MAINTENANCE, REMOVAL OR CONVERSION PURPOSES IS TO BE DONE THROUGH A SILT BAG.

EROSION CONTROL NOTES:

1. ALL LAND DISTURBING ACTIVITIES SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH STANDARD SPECIFICATIONS AND DETAILS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL DEVICES SHOWN ON THE APPROVED PLAN.
3. SLOPES SHALL BE NO STEEPER THAN 3:1 PER STORMWATER DESIGN MANUAL 2.3.3, PREFERABLE FLATTER, FOR VEGETATIVE COVER.
4. THE CONTRACTOR SHALL FAITHFULLY MAINTAIN ALL SEDIMENTATION CONTROL DEVICES AND TAKE ANY PRECAUTIONARY MEASURES TO ENSURE THAT SILT DOES NOT ENTER ANY NATURAL STREAM CHANNEL LOCATED WITHIN THE SITE (IF ANY). DRAINAGE CHANNELS MUST BE CLEANED OF SEDIMENT AND STABILIZED BEFORE THE PROJECT IS RELEASED.
5. RECEIVING WATERCOURSE: BEAVERDAM CREEK AND CRABTREE CREEK.
6. NO 100 YEAR FLOOD LIMITS ARE LOCATED WITHIN PROJECT LIMITS. FEMA FIRM PANEL # 3720079400K AND EFFECTIVE DATE, 7/19/2022.
7. CONTRACTOR SHALL CONSTRUCT DIVERSION DITCHES AS NECESSARY TO ENSURE THAT ALL SEDIMENT IS DIRECTED INTO EROSION CONTROL MEASURES.
8. PER NCG010000 NPDES PERMIT,STABILIZE DISTURBED AREAS ON THE PERIMETER AND ON SLOPES GREATER THAN 3:1 WITHIN 7 DAYS. STABILIZE ALL OTHER AREAS WITHIN 14 DAYS. IF NO NPDES PERMIT REQUIRED FOLLOW UDO SECTION 9.4.4.
9. ALL STREETS ADJACENT TO THIS PROJECT MUST REMAIN CLEAN AT ALL TIMES OR A WASH STATION MAY BE REQUIRED.
10. TOPSOIL STOCKPILING SHALL OCCUR AT A SITE APPROVED BY THE CITY OF RALEIGH OR WASTED OFF-SITE.
11. TO MINIMIZE DAMAGE TO EXISTING TREES, THE CONTRACTOR SHALL CUT MINIMUM 2' TRENCHES ALONG THE LIMITS OF DISTURBANCE SO AS TO CUT, RATHER THAN TEAR THE ROOTS.
12. A COPY OF THE APPROVED EROSION CONTROL PLAN, THE CERTIFICATE OF APPROVAL, LETTER OF APPROVAL, NPDES PERMIT AND AT LEAST 30 DAYS OF SELF-INSPECTION FORMS SHALL BE KEPT ON-SITE AND AVAILABLE AT ALL TIMES IN A WEATHER-PROOF PERMITS ENCLOSURE. SELF-INSPECTION FORMS MAY BE DOWNLOADED FROM: http://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control/forms

GENERAL NOTES:

1. EXISTING TOPOGRAPHY AND AS-BUILT INFORMATION FROM FIELD SURVEY PROVIDED BY CITY OF RALEIGH.
2. TO MINIMIZE DAMAGE TO EXISTING TREES, THE CONTRACTOR SHALL CUT MINIMUM 2' TRENCHES ALONG THE LIMITS OF DISTURBANCE, SO AS TO CUT, RATHER THAN TEAR THE ROOTS.
3. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULE.
4. LAND USE FOR ALL SURROUNDING AREAS CONSIST OF RESIDENTIAL AND INSTITUTIONAL.

EROSION CONTROL MAINTENANCE PLAN:

1. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RAINFALL PRODUCING RUNOFF BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL MEASURES AS DESIGNED.
2. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 6-INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT. DAMAGED SILT FENCE SHALL BE REPLACED AND GRAVEL SHALL BE CLEANED OR REPLACED WHEN INLET NO LONGER DRAINS PROPERLY.
4. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED.

LEGEND

- LIMITS OF DISTURBED AREA
- STANDARD CATCH BASIN INLET PROTECTION
- TEMPORARY INLET PROTECTION LOG
- WATTLE
- TREE REMOVAL
- TREE REMOVAL ON PRIVATE PROPERTY
- TEMPORARY TREE PROTECTION AND SILT FENCING
- TEMPORARY SILT FENCE
- TPF — TPF — TEMPORARY TREE PROTECTION FENCE

GIS DATA DISCLAIMER:

THE RIPARIAN BUFFER ZONES, FLOOD PLAINS, FLOOD PRONE SOIL LIMITS, AND THE WATERLINES WERE PLOTTED FROM CITY OF RALEIGH GEOGRAPHIC INFORMATION DATA AND SHOULD BE CONSIDERED APPROXIMATE ONLY. CITY OF RALEIGH GEOGRAPHIC INFORMATION SERVICES SHALL NOT BE HELD LIABLE FOR ANY ERROR IN THIS DATA. THIS INCLUDES ERRORS OF OMISSION, COMMISSION, ERRORS CONCERNING CONTENT OF THE DATA, AND RELATIVE ACCURACY OF THE DATA. THIS DATA SHALL NOT BE CONSTRUED TO BE A LEGAL DOCUMENT. PRIMARY DATA SOURCES FROM WHICH THIS DATA WAS COMPILED MUST BE CONSULTED FOR THE VERIFICATION OF THE INFORMATION CONTAINED IN THIS DATA.

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOORE

GRADING AND EROSION CONTROL NOTES AND LEGEND

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

DATE:	XXX2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE N/A
VSCALE N/A

SHEET NO.

EC-1

SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO 6 INCH DEPTH.
3. REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBJECTIONS LEAVING SURFACES REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW*).
5. CONTINUE TILLAGE UNTIL A WELL PULVERIZED, FIRM , REASONABLYUNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP.
6. SEED A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 70% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZATION AND SEEDING RATES.
9. CONSULT CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

*APPLY: AGRICULTURAL LIMESTONE - 2 TONS/ACRE
(3 - 4 TONS/ACRE ON CLAY SOILS)
FERTILIZER - 1,000 LBS/ACRE - 10-10-10
SUPERPHOSPHATE - 500 LBS/ACRE - 20%
MULCH - 2 TONS/ACRE - SMALL GRAIN STRAW
ANCHOR - ASPHALT EMULSION @ 400 GAL./ACRE

TREE REMOVAL SUMMARY					
Tree No.	Alignment	Station	Offset	Side	Tree Size / Specimen
T1	-EL-	14+12.17	37.95'	LT	12" Oak
T2	-EL-	14+42.72	37.45'	LT	12" Oak
T3	-EL-	14+70.02	29.06'	LT	13" Oak
T4	-EL-	15+57.63	37.53'	LT	10" Oak
T5	-EL-	15+69.75	27.64'	LT	6x4" Crepe Myrtle
T6	-EL-	15+87.80	29.28'	LT	8x3" Crepe Myrtle
T7	-EL-	16+00.09	38.31'	LT	10" Oak
T8	-EL-	16+09.54	29.65'	LT	20x3" Crepe Myrtle
T9	-EL-	16+58.16	30.61'	LT	15" stump
T10	-EL-	16+80.66	30.61'	LT	18" stump
T11	-EL-	38+94.57	32.13'	LT	8" Cherry

TREE IMPACTS ANALYSIS

Sheet #	Tree Number	Alignment	Station	Offset	LT/RT	Tree Size (IN)	Tree Type	Construction Impact	Root Zone Impact	Root Zone Impact (%)	Root Zone Size (SF)	Root Zone Impact (SF)
4	CR21	L	14+42.72	37.45	LT	12	OAK		Y	36.8%	706.86	260.00
4	CR22	L	14+59.18	37.81	LT	10	OAK		Y	26.1%	490.87	128.00
4	CR23	L	14+87.33	37.71	LT	10	OAK		Y	28.7%	490.87	141.00
4	CR24	L	15+05.74	40.81	LT	11	OAK		Y	25.4%	593.96	151.00
4	CR25	L	15+57.63	37.53	LT	10	OAK		Y	36.1%	490.87	177.00
4	CR26	L	15+82.97	39.01	LT	10	OAK		Y	31.0%	490.87	152.00
4	CR27	L	16+00.09	38.31	LT	10	OAK		Y	36.1%	490.87	177.00
5	CR28	L	16+72.51	41.50	LT	11	OAK		Y	29.1%	593.96	173.00

TREE REMOVAL NOTES:

1. TREE DIAMETER IS MEASURED AT CHEST HEIGHT.
2. ALL VEGETATION UNDER 3" SHALL BE REMOVED UNDER CLEARING AND GRUBBING ITEM.
3. CONTRACTOR SHALL REMOVE ALL TREES WITHIN RIGHT-OF-WAY AND EASEMENTS, EXCEPT WHERE TREE PROTECTION MEASURES ARE INDICATED ON THE PLANS.
4. ADDITIONAL CITY TREES MAY REQUIRE REMOVAL OR PROTECTION MEASURES AT THE DISCRETION OF URBAN FORESTER, OR DESIGNEE.
5. CONTRACTOR SHALL INSTALL REQUIRED TREE PROTECTION FENCE AS SHOWN ON THE APPROVED PLAN AND HAVE IT INSPECTED BY CITY STAFF BEFORE PROCEEDING WITH ADDITIONAL WORK.
6. THE CONTRACTOR SHALL REFRAIN FROM ADDITIONAL CONSTRUCTION ACTIVITIES ON CITY-OWNED OR CONTROLLED PROPERTY UNTIL A SATISFACTORY INSPECTION HAS BEEN COMPLETED BY THE CITY OF THE REQUIRED TREE PROTECTION FENCING AS APPROVED. DISTURBANCE WITHIN THE REQUIRED TREE PROTECTION AREAS WILL RESULT IN THE ISSUANCE OF A STOP WORK ORDER AND MAY REQUIRE MITIGATION INCLUDING BUT NOT LIMITED TO MONETARY PENALTIES, PRUNING, TREE REMOVAL AND REPLANTING AS DETERMINED BY THE CITY.
7. ADDITIONAL TREES MAY BE REQUIRED TO BE REMOVED ON CITY-OWNED OR CONTROLLED PROPERTY AT THE DISCRETION OF THE URBAN FORESTER.

SEEDING SCHEDULE

SHOULDERS, SIDE DITCHES, SLOPES (MAX. 3:1)

DATE	TYPE	PLANTING RATE
AUG 15 - NOV 1	TALL FESCUE	300 LBS/ACRE
NOV 1 - MAR 1	TALL FESCUE AND ABRUZZIE RYE	300 LBS/ACRE 25 LBS/ACRE
MAR 1 - APR 15	TALL FESCUE	300 LBS/ACRE
APR 15 - JUN 30	HULLED COMMON BERMUDA GRASS	25 LBS/ACRE
JUL 15 - AUG 15	TALL FESCUE AND ***BROWNTOP BILLET	120 LBS/ACRE 35 LBS/ACRE

SHOULDERS, SIDE DITCHES, SLOPES (3:1 TO 2:1)

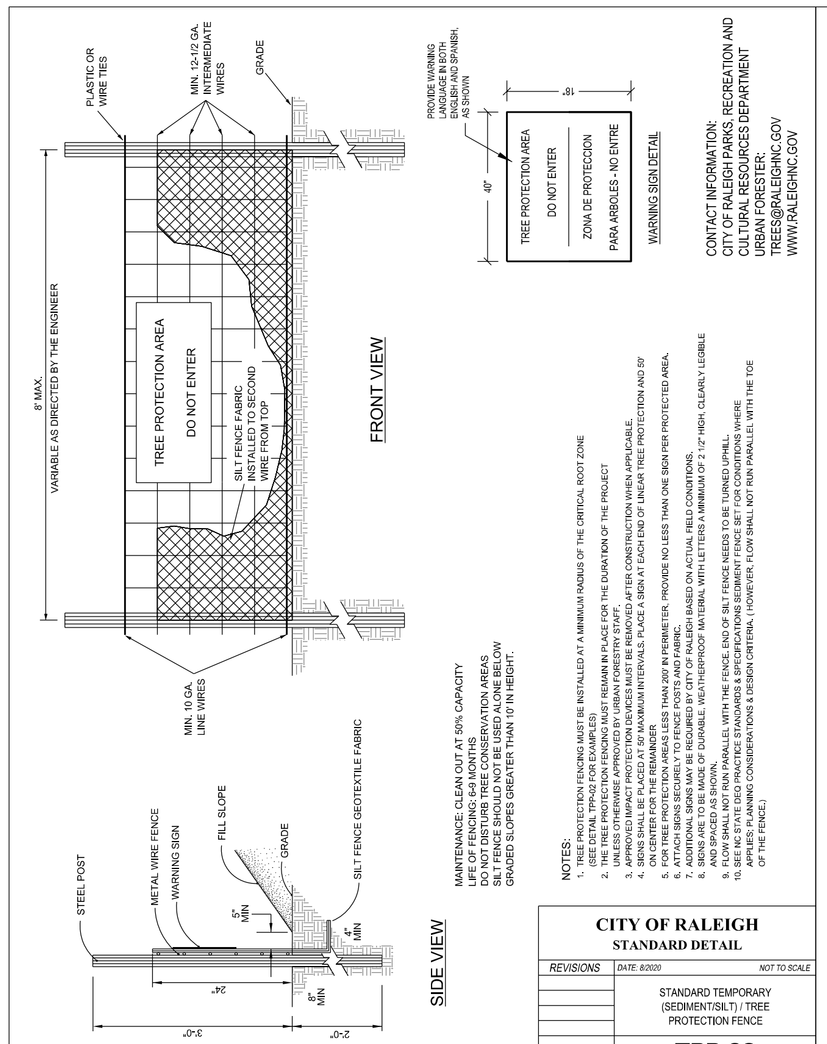
DATE	TYPE	PLANTING RATE
MAR 1 - JUN 1	SERICEA LESPEDEZA (SCARIFIED) AND	50 LBS/ACRE
(MAR 1 - APR 15)	ADD TALL FESCUE	120 LBS/ACRE
(MAR 1 - JUN 30)	OR ADD WEEPING LOVEGRASS	10 LBS/ACRE
JUN 1 - SEP 1	***TALL FESCUE AND ***BROWNTOP MILLET	120 LBS/ACRE 35 LBS/ACRE
SEP 1 - MAR 1	SERICEA LESPEDEZA (UNHULLED-UNSCARIFIED) AND TALL FESCUE	70 LBS/ACRE 120 LBS/ACRE
(NOV 1 - MAR 1)	ADD ABRUZZIE RYE	25 LBS/ACRE

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OR DENUDED AREAS. THE ABOVE VEGETATION ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

SEEDING MIX SHALL BE APPROVED BY THE ENGINEERING SERVICES DIRECTOR BEFORE SEEDING OF THE PROJECT STARTS.

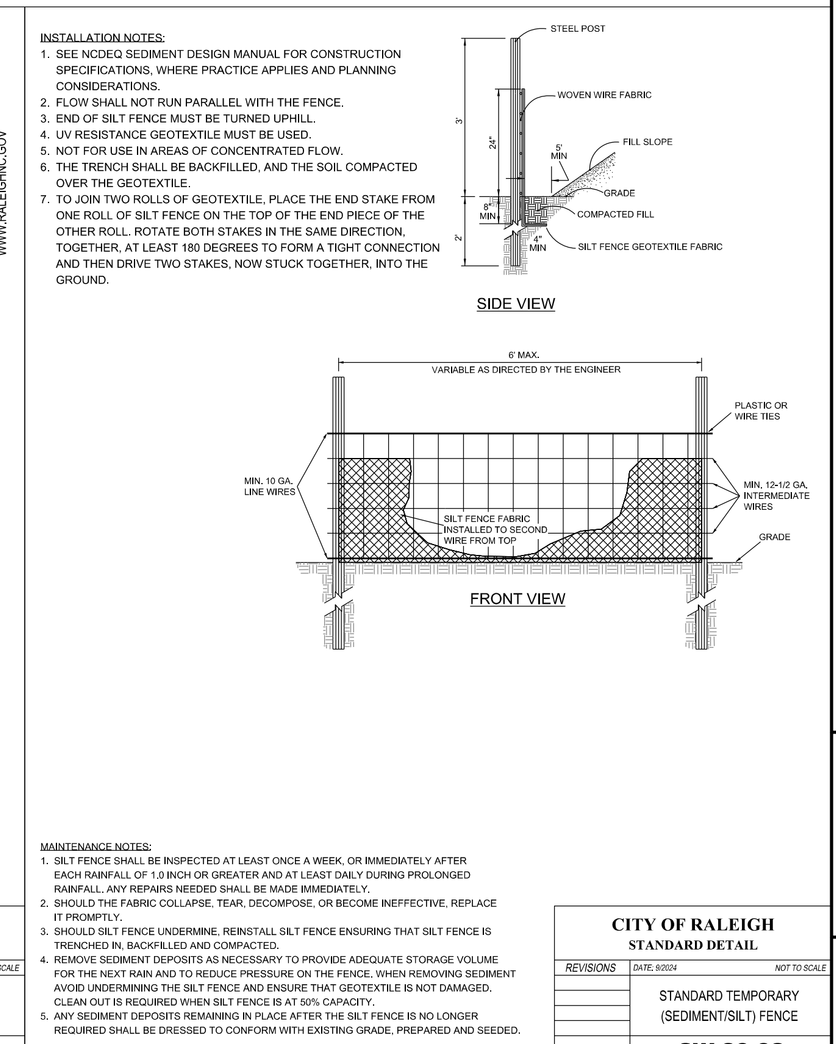
***TEMPORARY - RE-SEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.

NOTE: IN LAWN AREAS THE CONTRACTOR IS TO PLANT GRASS OF THE SAME TYPE AS THE REMAINDER OF THE LAWN.



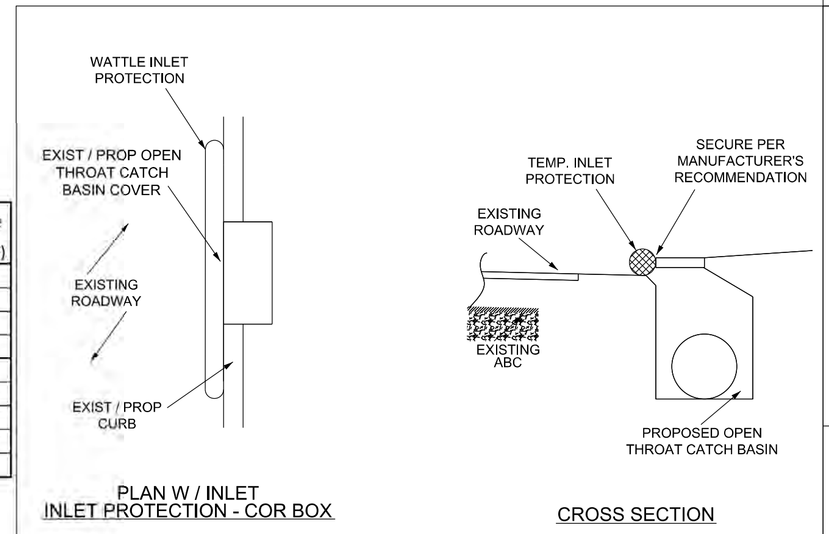
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	STANDARD TEMPORARY (SEDIMENT/SILT) / TREE PROTECTION FENCE	
	TPP-08	



CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2024	NOT TO SCALE
	STANDARD TEMPORARY (SEDIMENT/SILT) FENCE	
	SW-20.02	

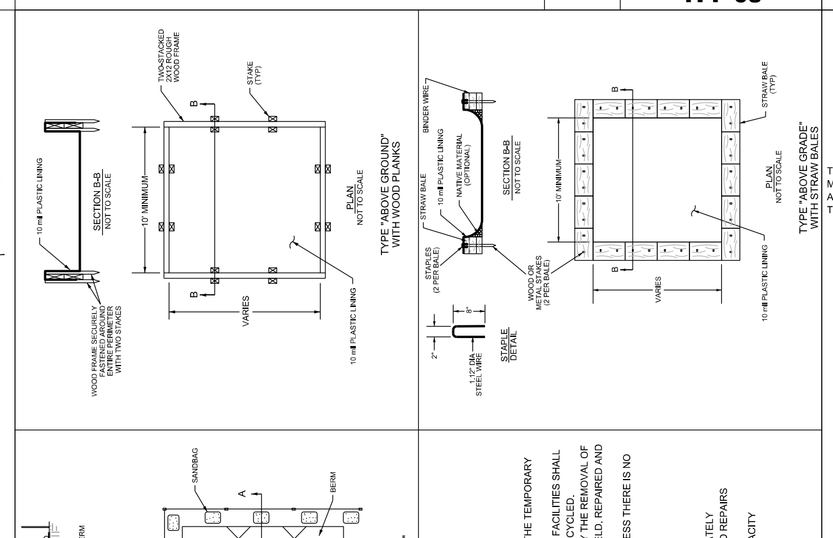


INSTALLATION NOTES:
1. WATTLES SHALL BE FILLED WITH STRAW OR OTHER APPROVED MATERIAL.

MAINTENANCE NOTES:
1. MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK OR IMMEDIATELY AFTER EACH RAINFALL OF 1.0 INCH OR GREATER. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2. REMOVE ACCUMULATED SEDIMENT OR DEBRIS.
3. WATTLES MUST BE REPLACED IF CLOGGED OR TORN OR IF WATER DOES NOT APPEAR TO BE DRAINING THROUGH THE WATTLE.
4. REINSTALL IF DAMAGED OR DISLODGED. IF THE WATTLE FALLS INTO THE STORM DRAIN REMOVE IMMEDIATELY AND REINSTALL.
5. IF PONDING BECOMES EXCESSIVE, THE WATTLE MAY NEED TO BE REPLACED WITH A LARGER DIAMETER OR A DIFFERENT MEASURE.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2024	NOT TO SCALE
	WATTLE / INLET PROTECTION DETAIL	
	SW-20.20	

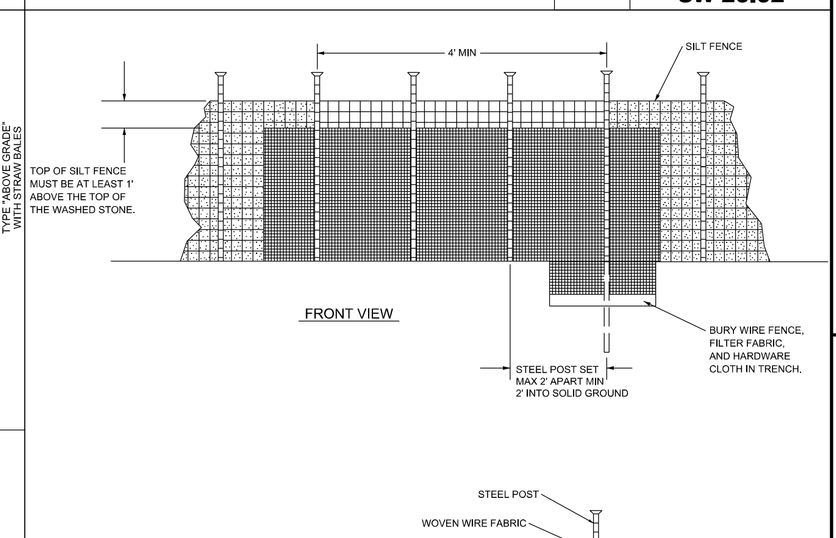


INSTALLATION NOTES:
1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
2. CONCRETE WASHOUT SHALL BE INSTALLED WITHIN 20 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF WHEN THEY ARE NO LONGER REQUIRED BY THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED AND STABILIZED TO PREVENT EROSION.
4. HOLES, DEPRESSIONS, OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED AND STABILIZED TO PREVENT EROSION.
5. MUST BE LOCATED AT LEAST 50 FEET FROM INLETS/WATERWAYS UNLESS THERE IS NO OTHER PRACTICAL ALTERNATIVE.

MAINTENANCE NOTES:
1. MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK OR IMMEDIATELY AFTER EACH RAINFALL OF 1.0 INCH OR GREATER. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2. REMOVE LIQUID AND/OR SOLID MATERIAL WHEN IT REACHES 75% CAPACITY
3. DO NOT ALLOW WASHOUT TO OVERFLOW.
4. REPLACE STRUCTURAL COMPONENTS AS NEEDED.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2024	NOT TO SCALE
	CONCRETE WASHOUT	
	SW-20.27	



INSTALLATION NOTES:
1. HARDWARE CLOTH AND GRAVEL SHOULD OVERLAY THE SILT FENCE A MINIMUM OF 12 INCHES.
2. STONE OUTLETS SHOULD BE PLACED ON LOW ELEVATION AREAS OF SILT FENCE AND BASED ON FIELD CONDITIONS.

MAINTENANCE NOTES:
1. MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK OR IMMEDIATELY AFTER EACH RAINFALL OF 1.0 INCH OR GREATER. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2. KEEP HARDWARE CLOTH FREE OF DEBRIS TO PROVIDE ADEQUATE FLOW.
3. FRESHEN STONE WHEN SEDIMENT ACCUMULATION EXCEEDS 6 INCHES.
4. REMOVE SEDIMENT AND REPLACE WITH NEW STONE WHEN HALF OF THE STONE OUTLET IS COVERED.
5. REPLACE STONE AS NEEDED TO FACILITATE DEWATERING.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2024	NOT TO SCALE
	STANDARD SILT FENCE OUTLET	
	SW-20.04	

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOORE

GRADING AND EROSION CONTROL NOTES AND STANDARD DRAWINGS

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

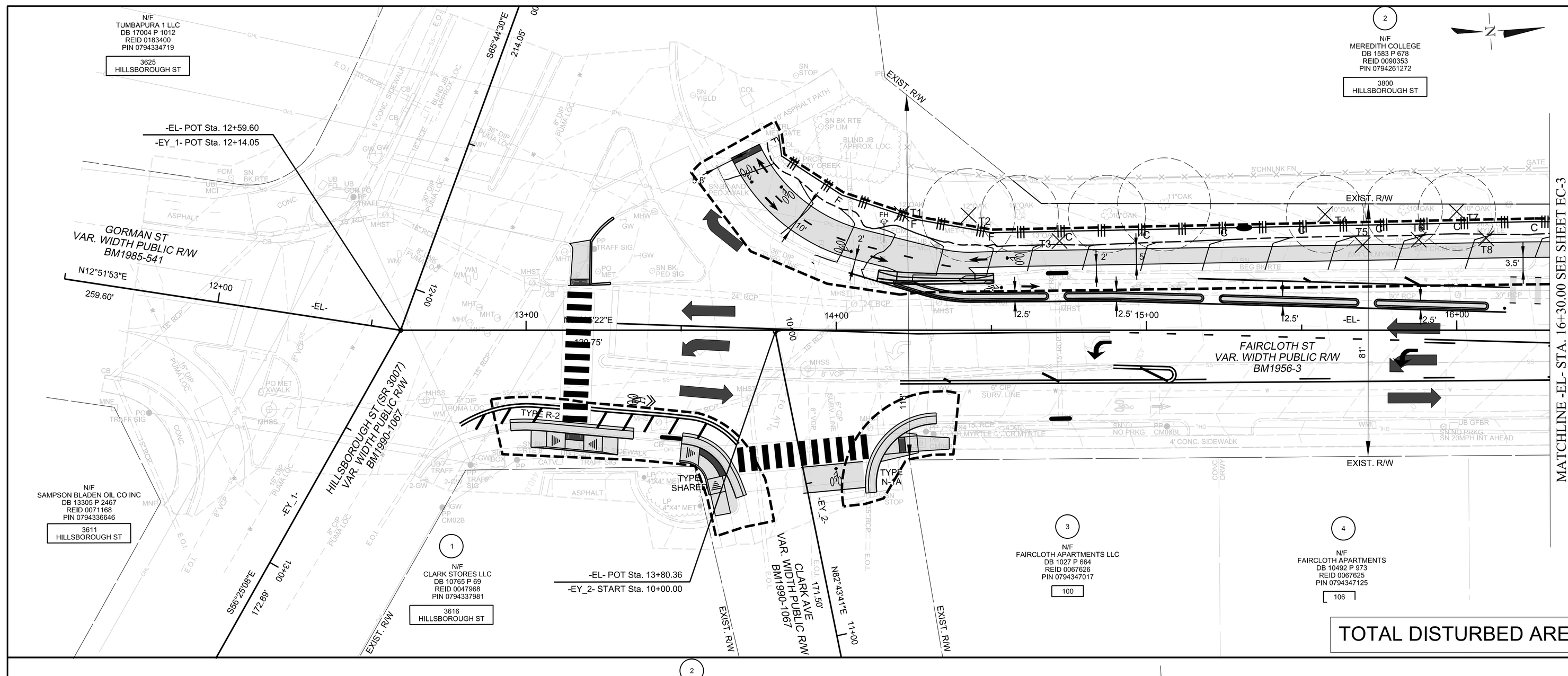
DATE:	XXX/2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE N/A
VSCALE N/A

SHEET NO.
EC-2



LEGEND

- LIMITS OF DISTURBED AREA
- TEMPORARY CONCRETE WASHOUT
- STANDARD CATCH BASIN INLET PROTECTION
- TEMPORARY INLET PROTECTION LOG
- WATTLE
- TREE REMOVAL
- TEMPORARY TREE PROTECTION AND SILT FENCING
- TEMPORARY SILT FENCE
- TEMPORARY TREE PROTECTION FENCE
- TEMPORARY SILT FENCE OUTLET

20 10 0 20 40
GRAPHIC SCALE 1"=20'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOGHE

EROSION CONTROL PLAN

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

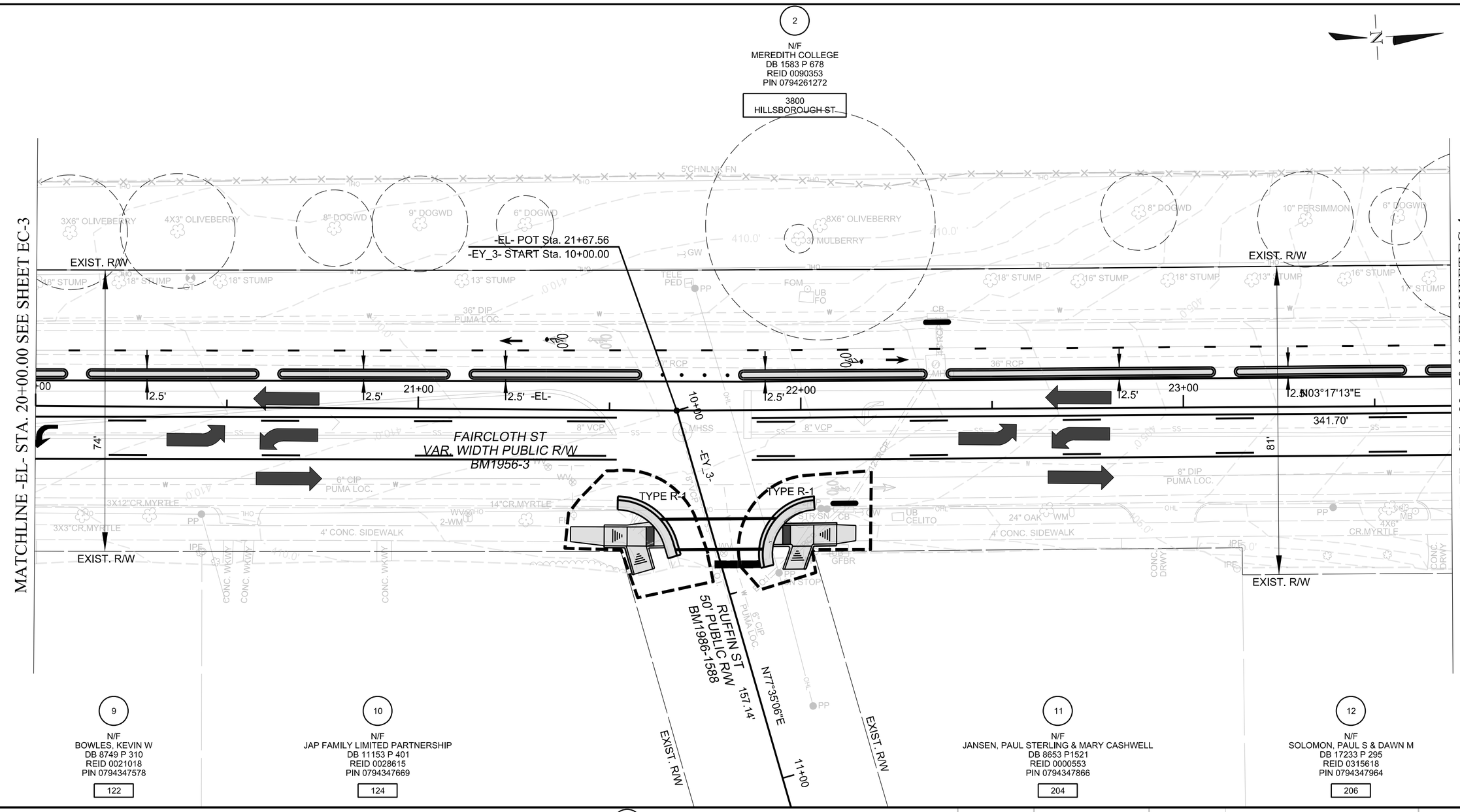
DATE:	XXX\2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

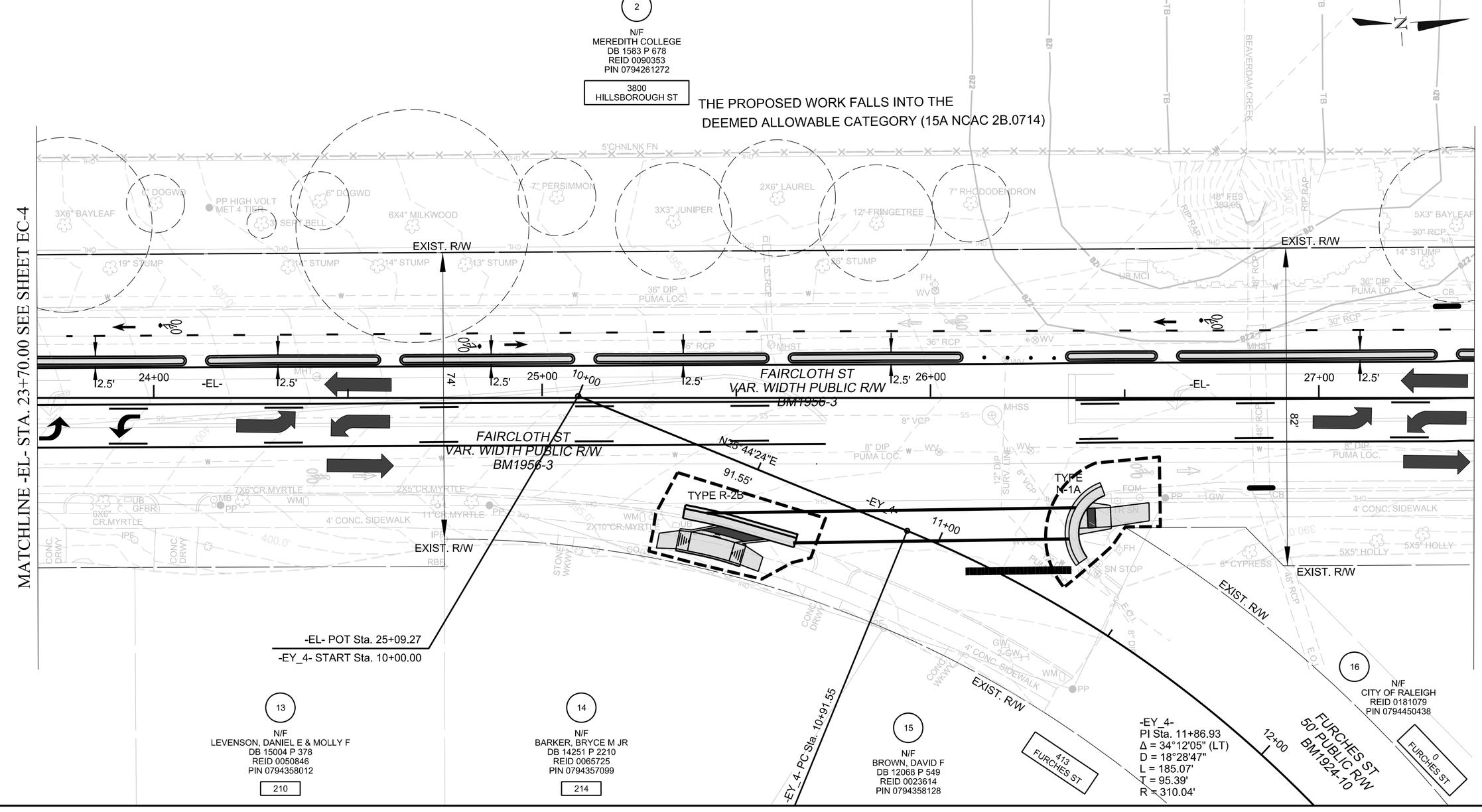
NO.	DATE

SCALES
HSCALE 1"=20'
VSCALE

SHEET NO.
EC-3



THE PROPOSED WORK FALLS INTO THE
DEEMED ALLOWABLE CATEGORY (15A NCAC 2B.0714)



20 10 0 20 40
GRAPHIC SCALE 1"=20'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOOSHE

EROSION CONTROL PLAN

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

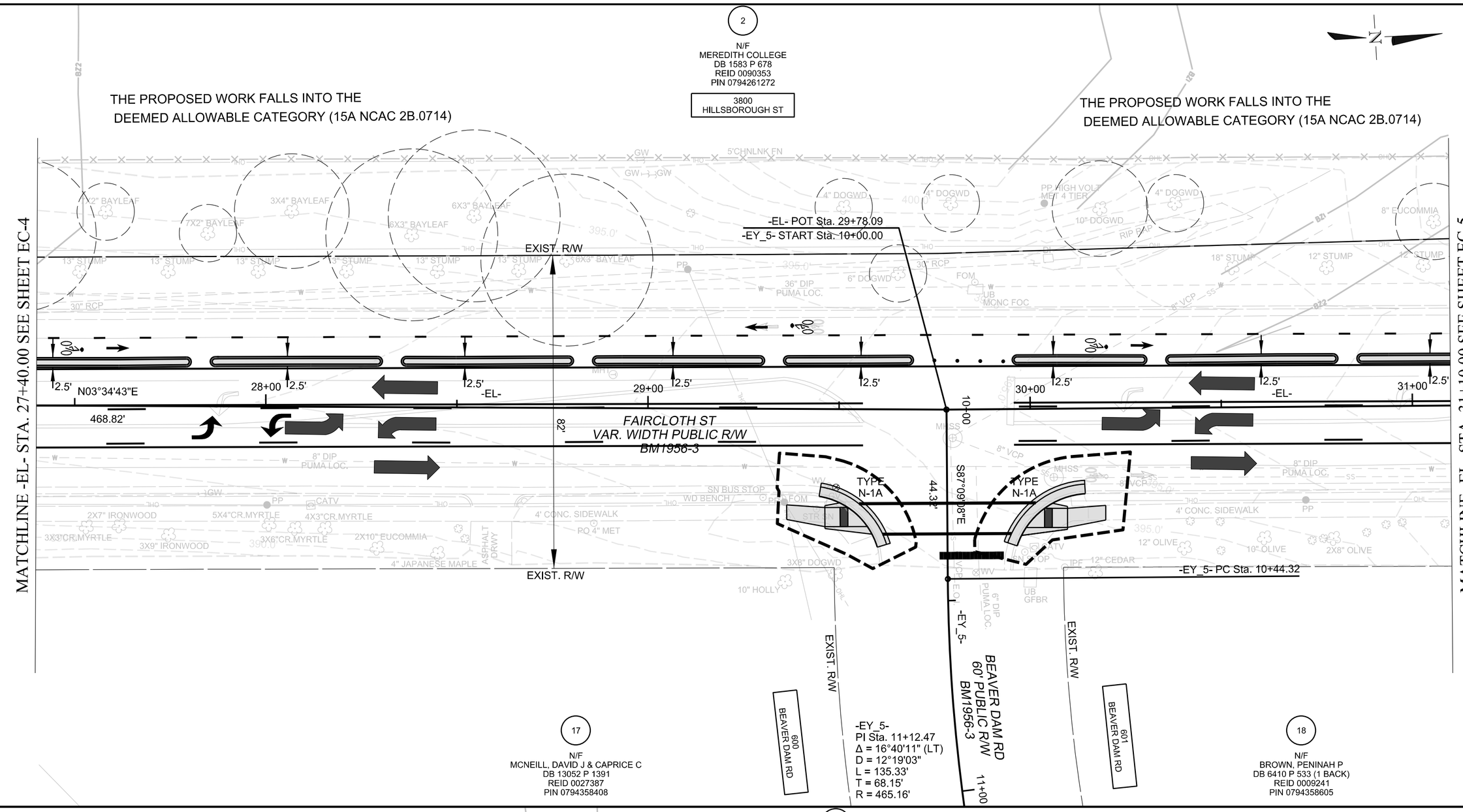
DATE:	XXX/2023
CADD TECH:	EMM
CHECKED BY:	BAP

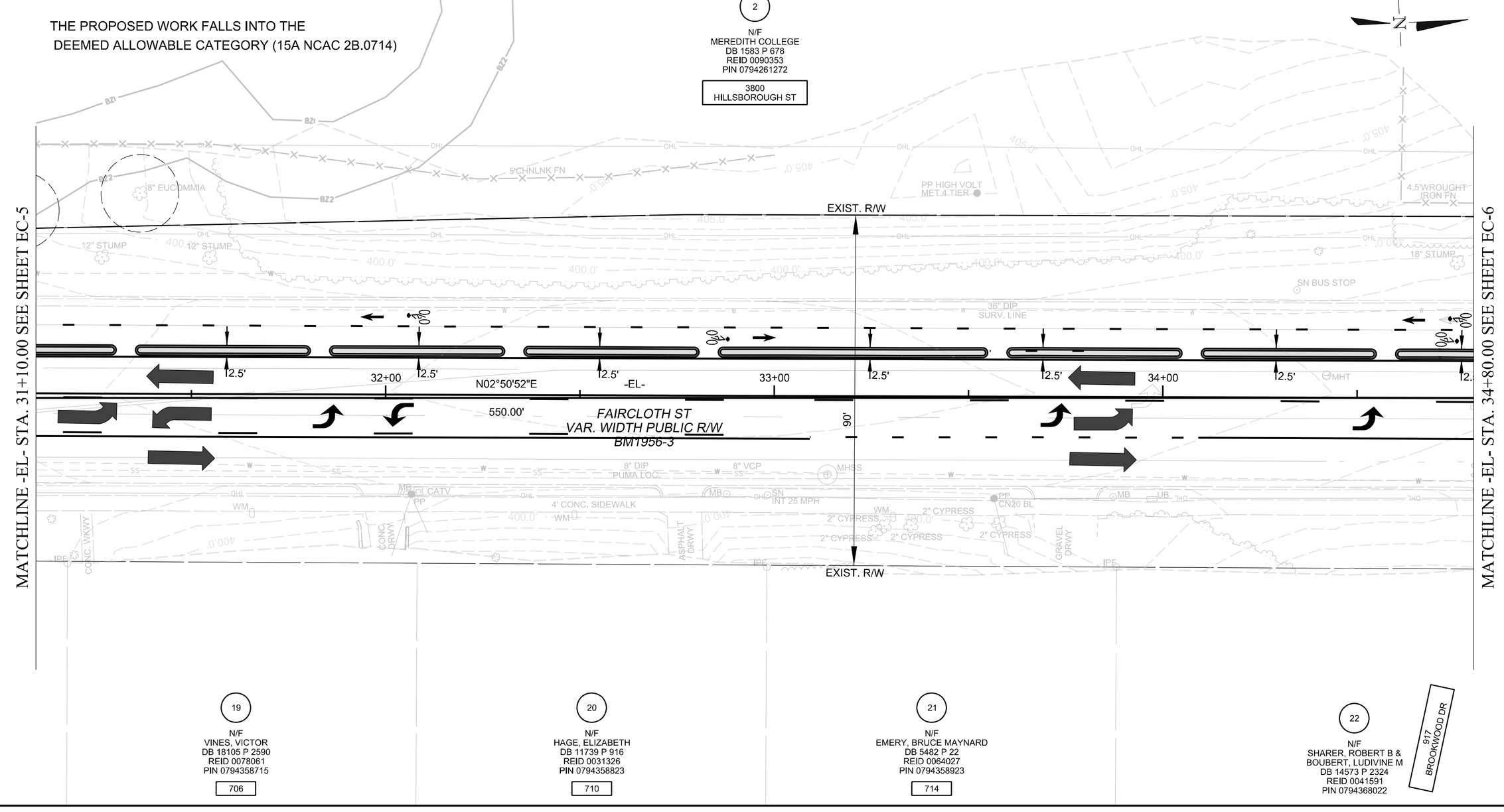
REVISIONS

NO.	DATE

SCALES
HSCALE 1"=20'
VSCALE

SHEET NO.
EC-4





LEGEND

- LIMITS OF DISTURBED AREA
- STANDARD CATCH BASIN INLET PROTECTION
- TEMPORARY INLET PROTECTION LOG
- WATTLE
- TREE REMOVAL
- TREE REMOVAL ON PRIVATE PROPERTY
- TEMPORARY TREE PROTECTION AND SILT FENCING
- TEMPORARY SILT FENCE
- TPF — TPF TEMPORARY TREE PROTECTION FENCE
- TEMPORARY SILT FENCE OUTLET

GRAPHIC SCALE 1"=20'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOORE

EROSION CONTROL PLAN

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

DATE:	XXX/2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE 1"=20'
VSCALE

SHEET NO.
EC-5

THE PROPOSED WORK FALLS INTO THE
DEEMED ALLOWABLE CATEGORY (15A NCAC 2B.0714)

2
N/F
MEREDITH COLLEGE
DB 1583 P 678
REID 0090353
PIN 0794261272
3800
HILLSBOROUGH ST

MATCHLINE -EL- STA. 34+80.00 SEE SHEET EC-5

MEREDITH COLLEGE ST
PRIVATE DRIVE

EXIST. R/W

5'
2'
5'
10'

35+00
36+00
37+00
38+00
-EL-

N02°50'52"E
533.64'

FAIRCLOTH ST
VAR. WIDTH PUBLIC R/W
BM1956-3

MATCHLINE -EL- STA. 38+50.00 SEE SHEET EC-6

-EY_6- PC Sta. 10+43.31

TYPE N-1A
TYPE N-1A

80.60'
43.31'
10.00'

-EY_6- POT Sta. 35+28.09
-EY_6- START Sta. 10+00.00

BROOKWOOD DRIVE
50' PUBLIC R/W
BM1956-3

-EY_6-
PI Sta. 11+24.23
Δ = 33°17'39" (LT)
D = 21°10'11"
L = 157.27'
T = 80.93'
R = 270.65'

23
N/F
DAVIS, JONATHAN B
DB 11320 P 2348
REID 0071657
PIN 0794368139
800

24
N/F
KIEFER, VICTORIA A
DB 17840 P 1353
REID 0003793
PIN 0794368259
806

25
N/F
THORNHILL, FREDERICK H & FABIAN G
DB 12744 P 2254
REID 0061165
PIN 0794368377
810

LEGEND

- LIMITS OF DISTURBED AREA
- TEMPORARY CONCRETE WASHOUT
- STANDARD CATCH BASIN INLET PROTECTION
- TEMPORARY INLET PROTECTION LOG
- WATTLE
- TREE REMOVAL
- TEMPORARY TREE PROTECTION AND SILT FENCING
- TEMPORARY SILT FENCE
- TPF — TPF TEMPORARY TREE PROTECTION FENCE
- TEMPORARY SILT FENCE OUTLET

2
N/F
MEREDITH COLLEGE
DB 1583 P 678
REID 0090353
PIN 0794261272
3800
HILLSBOROUGH ST

MATCHLINE -EL- STA. 38+50.00 SEE SHEET EC-6

EXIST. R/W

10'
2'
0'

39+00
40+00
-EL-

WADE AVE (SR 1728)
VAR. WIDTH PUBLIC R/W
BM2012-580

S87°21'39"E
159.46'
150.28'

11+00
12+00
-EY_7-

-EL- END Sta. 40+61.73
-EY_7- POT Sta. 11+59.46

26
N/F
BLUEDOT1 LLC
DB 16827 P 1510
REID 0030792
PIN 0794368475
814

27
N/F
HUFFY PROPERTY 3425 LLC
DB 18753 P 1899
REID 0055703
PIN 0794368574

3425
WADE AVE

3428
WADE AVE

3514
WADE AVE

N/F
COLUMBIA II RIDGEWOOD LLC
DB 17239 P 2137
REID 0015220
PIN 0794372031

N/F
ALLISON, GRAYSON & BETHANY
DB 17905 P 21
REID 0010743
PIN 0794368890

20 10 0 20 40
GRAPHIC SCALE 1"=20'

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CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOORE

EROSION CONTROL PLAN

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

DATE:	XXX2023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE

SCALES
HSCALE 1"=20'
VSCALE

SHEET NO.
EC-6

INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
	COVER SHEET
1A	INDEX OF SHEETS, LEGEND, AND TYPICAL SECTIONS
1B	GENERAL NOTES
2A THRU 2C	STANDARDS DETAILS
4 THRU 7	PLAN SHEETS
PMP-1 THRU PMP-2	PAVEMENT MARKING STANDARD DRAWINGS, INDEX OF SHEETS, AND LEGEND
PMP-3 THRU PMP-6	PAVEMENT MARKING AND SIGNAGE SHEETS
EC-1 THRU EC-2	EROSION CONTROL NOTES, AND LEGEND
EC-3 THRU EC-6	EROSION CONTROL PLANS

LEGEND

- EXISTING EDGE OF PAVEMENT
- EXISTING CURB & GUTTER
- EXISTING GRAVEL OR SOIL
- EXISTING SIDEWALK / MULTI -PURPOSE PATH
- EXISTING EASEMENT
- EXISTING UTILITY EASEMENT
- PDE — PDE — EXISTING PERMANENT DRAINAGE EASEMENT
- EXISTING RIGHT OF WAY
- EXISTING PROPERTY
- EXISTING FENCE
- OHL — EXISTING OVERHEAD POWER LINE
- P — EXISTING UNDERGROUND POWER LINE
- SS — EXISTING UNDERGROUND SAN SEWER LINE
- W — EXISTING UNDERGROUND WATER LINE
- G — EXISTING UNDERGROUND GAS LINE
- TV — EXISTING UNDERGROUND TELEPHONE LINE
- BZ 1 — EXISTING RIPARIAN BUFFER ZONE 1 LINE
- BZ 2 — EXISTING RIPARIAN BUFFER ZONE 2 LINE
- AEF# — EXISTING FLOODWAY LINE
- AE — EXISTING 100 YEAR FLOOD LINE
- X500 — EXISTING 500 YEAR FLOOD LINE
- 15" — EXISTING PIPE
- EXISTING WOODS LINE
- EXISTING PLANTED / LANDSCAPED AREA
- EXISTING BUILDING LINE
- EXISTING WALL LINE
- EXISTING INTERMEDIATE CONTOURS
- EXISTING MAJOR CONTOURS

- MN — EXISTING MONUMENT
- EIP — EXISTING IRON PIN
- EXISTING SHRUB
- EXISTING TREE
- EXISTING ROCK / BOULDER
- TRANS — EXISTING TRANSFORMER
- SIG BOX — EXISTING SIGNAL BOX
- PP — EXISTING POWER POLE
- GW — EXISTING GUY WIRE
- POW PED — EXISTING POWER PEDESTAL
- PM — EXISTING POWER METER
- MHP — EXISTING POWER MANHOLE
- LP — EXISTING LIGHT POLE
- GLT — EXISTING GROUND LIGHT
- FOM — EXISTING FIBER OPTIC MARKER
- SN / MB — EXISTING SIGN / MAILBOX
- PO — EXISTING POST
- TELE PED — EXISTING TELEPHONE PEDESTAL
- MHT — EXISTING TELEPHONE MANHOLE
- CATV — EXISTING CABLE TV PEDESTAL
- FH — EXISTING FIRE HYDRANT
- WV — EXISTING WATER VALVE
- WM — EXISTING WATER METER
- MHW — EXISTING WATER MANHOLE
- SPH — EXISTING SPRINKLER HEAD
- IV — EXISTING IRRIGATION VALVE
- CO — EXISTING SAN SEWER CLEANOUT STUB
- MH — EXISTING SAN SEWER MANHOLE
- FES — EXISTING FLARED END SECTION
- UB — EXISTING UTILITY BOX
- CB — EXISTING CATCH BASIN
- DI — EXISTING DROP INLET
- MHST — EXISTING STORMWATER MANHOLE
- GV — EXISTING GAS VALVE
- GM — EXISTING GAS METER

- PROPOSED EDGE OF PAVEMENT
- PROPOSED CURB & GUTTER
- PROPOSED ASPHALT DRIVEWAY
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED GRAVEL DRIVEWAY
- PROPOSED DRIVEWAY APRON (TYP)
- PROPOSED 6' SIDEWALK (TYP)
- PROPOSED 8' MULTI -PURPOSE PATH (TYP)
- PROPOSED SINGLE ADA RAMP (TYP)
- EXISTING PAVEMENT REMOVAL
- PROPOSED RIGHT OF WAY
- C — C — F — F PROPOSED SLOPE LIMITS (C = CUT, F= FILL)
- PROPOSED INTERMEDIATE CONTOURS
- PROPOSED MAJOR CONTOURS
- PDE — PDE PROPOSED PERMANENT DRAINAGE EASEMENT
- PSE — PSE PROPOSED PERMANENT SLOPE EASEMENT
- DWE — DWE PROPOSED TEMPORARY DRIVEWAY EASEMENT
- TCE — TCE PROPOSED TEMPORARY CONSTRUCTION EASEMENT

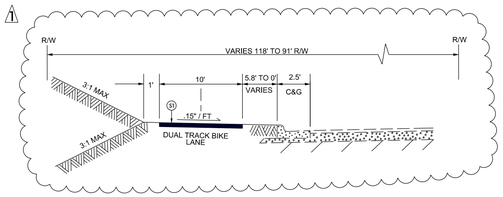
PAVEMENT SCHEDULE

S1	4" CONCRETE(BLACK DYED)
R1	2'-6" CONCRETE VALLEY GUTTER.

FAIRCLOTH ST
TYPICAL SIDEWALK SECTION
BEHIND THE CURB CYCLE TRACK

NOT TO SCALE

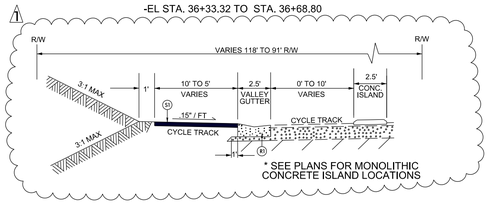
-EL STA. 13+66.01 TO STA. 14+19.70
-EL STA. 36+68.80 TO STA. 39+85.49



FAIRCLOTH ST
TYPICAL SIDEWALK SECTION
TRANSITION FROM BEHIND THE CURB
TO INSIDE CURB

NOT TO SCALE

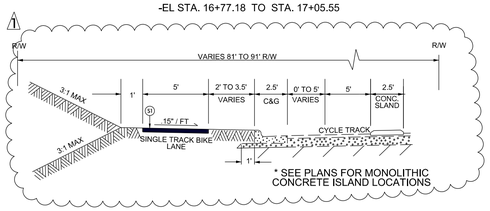
-EL STA. 14+19.70 TO STA. 14+44.71
-EL STA. 17+77.18 TO STA. 17+05.55
-EL STA. 36+33.32 TO STA. 36+68.80



FAIRCLOTH ST
TYPICAL SIDEWALK SECTION
SPLIT CYCLE TRACK

NOT TO SCALE

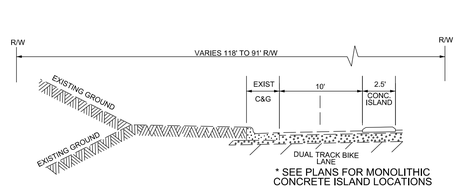
-EL STA. 14+44.71 TO STA. 16+77.18
-EL STA. 16+77.18 TO STA. 17+05.55



FAIRCLOTH ST
TYPICAL SIDEWALK SECTION
INSIDE THE CURB CYCLE TRACK

NOT TO SCALE

-EL STA. 17+05.55 TO STA. 36+33.32



ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOORE

INDEX OF SHEETS, LEGEND, AND TYPICAL SECTIONS

FAIRCLOTH STREET CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

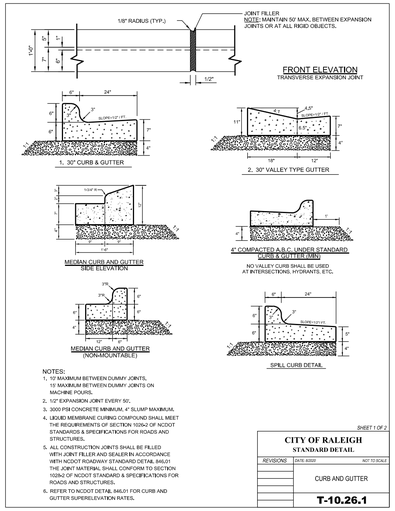
DATE:	XXX2023
CADD TECH:	EMM
CHECKED BY:	BAP

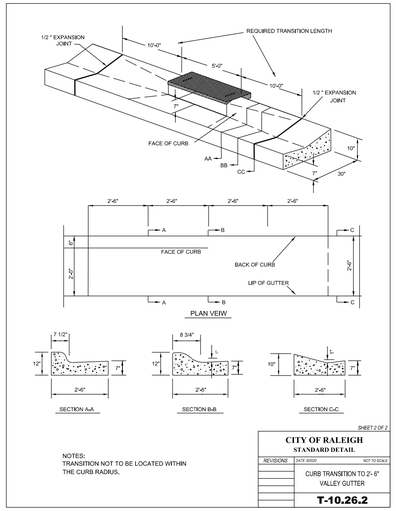
REVISIONS

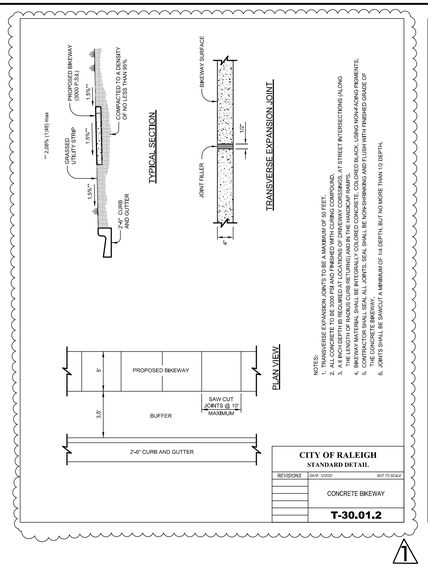
NO.	DATE
1	4/14/26

SCALES
HSCALE N/A
VSCALE N/A

SHEET NO.
1A



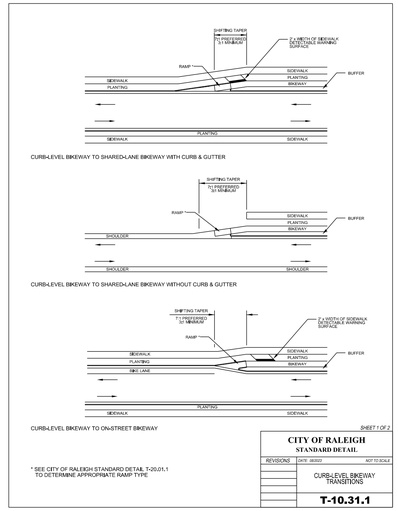




CITY OF RALEIGH
CURB RAMPS
GENERAL NOTES

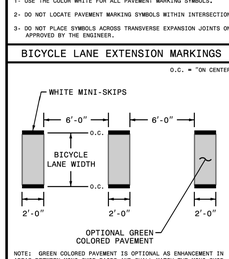
1. CITY OF RALEIGH STANDARD CURB RAMPS HAVE BEEN DEVELOPED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND PUBLIC RIGHT OF WAY ACCESS GUIDELINES (PROWAG).
2. CURB RAMPS SHALL BE PROVIDED AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. SIDEWALK ACCESS RAMPS SHALL BE LOCATED AS INDICATED IN THE DETAIL, HOWEVER, THE LOCATION MAY BE ADJUSTED IN COORDINATION WITH THE CITY OF RALEIGH WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT.
3. DOUBLE WHEELCHAIR RAMPS ARE TO BE INSTALLED AT ALL PUBLIC STREET INTERSECTIONS WHERE SIDEWALK IS REQUIRED.
4. THE WALKING SURFACE SHALL BE SLIP RESISTANT. THE COLOR FOR THE DETECTABLE WARNING AREA SHALL BE YELLOW FOR CONTRAST.
5. NO SLOPE ON THE SIDEWALK ACCESS RAMP SHALL EXCEED 1"/FT (12:1) IN RELATIONSHIP TO THE GRADE OF THE STREET.
6. IN NO CASE SHALL THE WIDTH OF THE SIDEWALK ACCESS RAMP BE LESS THAN 48" ALL RAMPS SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.
7. USE CLASS A (3000 PSI) CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NONSKID SURFACE.
8. A 1/2" EXPANSION JOINT INSTALLED FULL DEPTH WILL BE REQUIRED WHERE THE CONCRETE SIDEWALK ACCESS RAMP JOINS THE CURB AND ALSO WHERE NEW CONCRETE ABUTS EXISTING CONCRETE.
9. CURB RAMPS SHOULD BE PLACED PARALLEL TO THE DIRECTION OF TRAVEL.

SHEET 1 OF 3
CITY OF RALEIGH
STANDARD DETAIL
REVISIONS | DATE: 8/2020 | NOT TO SCALE
CURB RAMP NOTES
T-20.01.8



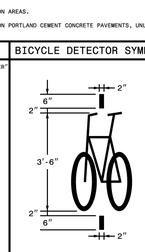
GENERAL NOTES:
1- USE THE COLOR WHITE FOR ALL PAVEMENT MARKING SYMBOLS.
2- DO NOT LOCATE PAVEMENT MARKING SYMBOLS WITHIN INTERSECTION AREAS.
3- DO NOT PLACE SYMBOLS ACROSS TRANSVERSE EXPANSION JOINTS ON PORTLAND CEMENT CONCRETE PAVEMENTS, UNLESS APPROVED BY THE ENGINEER.

BICYCLE LANE EXTENSION MARKINGS



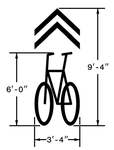
NOTE: GREEN COLORED PAVEMENT IS OPTIONAL AS ENHANCEMENT IN AREAS BETWEEN MINI-SKIP PAIRS AND SHALL MATCH THE MINI-SKIP PATTERN.

BICYCLE DETECTOR SYMBOL



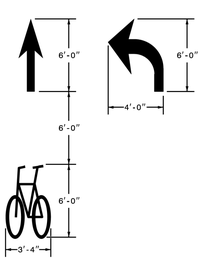
NOTES:
1- "WAIT HERE FOR GREEN" WORD MARKINGS ARE OPTIONAL AND MAY BE PLACED ON THE PAVEMENT IMMEDIATELY BELOW THE SYMBOL.
2- A R10-22 SIGN MAY BE INSTALLED TO SUPPLEMENT THE SYMBOL, AND IT SHOULD BE PLACED ROADSIDE ADJACENT TO THE SYMBOL.
3- GREEN COLORED PAVEMENT IS OPTIONAL AS A BACKGROUND ENHANCEMENT.

SHARED LANE SYMBOL

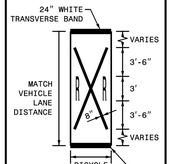


NOTES:
1- IF USED, THE SHARED LANE SYMBOL SHOULD BE SPACED AT INTERVALS NOT LESS THAN 50 FEET AND NOT GREATER THAN 250 FEET AT NON-INTERSECTION LOCATIONS.
2- THE FIRST SHARED LANE SYMBOL DOWNSTREAM FROM AN INTERSECTION SHOULD BE PLACED NO MORE THAN 50 FEET FROM THE INTERSECTION.

BICYCLE LANE SYMBOLS

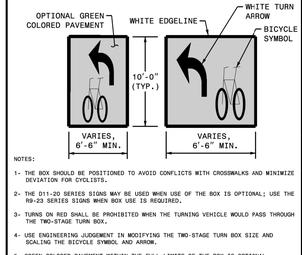


BICYCLE RXR SYMBOL



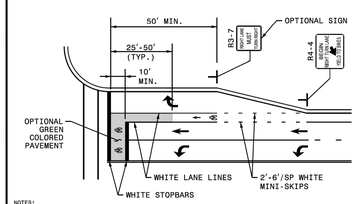
NOTE: REFER TO ROADWAY STANDARD DRAWING 1205.08 FOR MORE RAILROAD RXR SYMBOL GUIDANCE.

TWO-STAGE BICYCLE TURN BOX



NOTES:
1- THE BOX SHOULD BE POSITIONED TO AVOID CONFLICTS WITH CROSSWALKS AND MINIMIZE DEVIATION FOR CYCLISTS.
2- THE D11-2D SERIES SIGNS MAY BE USED WHEN USE OF THE BOX IS OPTIONAL; USE THE R9-23 SERIES SIGNS WHEN BOX USE IS REQUIRED.
3- TURNS ON RED SHALL BE PROHIBITED WHEN THE TURNING VEHICLE WOULD PASS THROUGH THE TWO-STAGE TURN BOX.
4- USE ENGINEERING JUDGMENT IN MODIFYING THE TWO-STAGE TURN BOX SIZE AND SCALING THE BICYCLE SYMBOL AND ARROW.
5- GREEN COLORED PAVEMENT WITHIN THE FULL LIMITS OF THE BOX IS OPTIONAL.

BICYCLE BOX



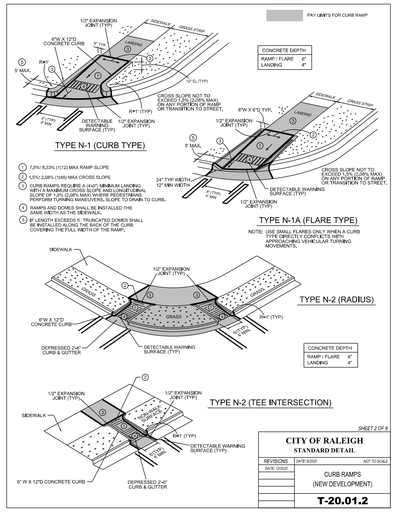
NOTES:
1- WHERE A BICYCLE BOX IS PROVIDED ACROSS MULTIPLE LANES OF AN APPROACH, COUNTDOWN PEDESTRIAN SIGNALS SHALL BE PROVIDED FOR THE CROSSWALK ACROSS THE APPROACH ON WHICH THE BICYCLE BOX IS LOCATED.
2- TURNS ON RED SHALL BE PROHIBITED FROM THE LANE IN WHICH A BICYCLE BOX IS LOCATED.
3- AT LEAST ONE BICYCLE SYMBOL MARKING SHALL BE USED IN THE BICYCLE BOX.

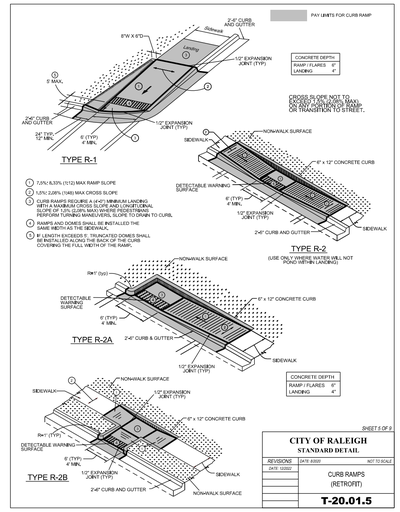
ROADWAY STANDARD DRAWING FOR
BICYCLE FACILITIES
SYMBOLS AND DETAILS

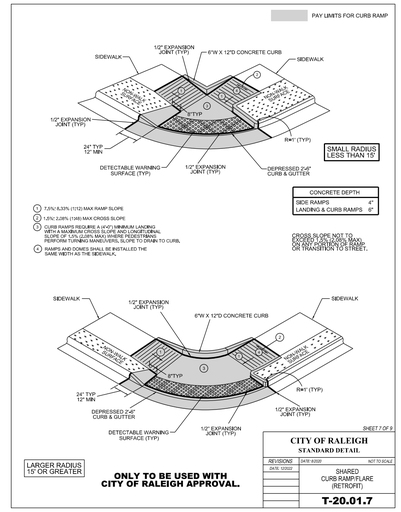
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-24

SHEET 2 OF 9
1205.16







ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/ OR NCDOT STANDARDS AND SPECIFICATIONS.

CITY OF RALEIGH
ENGINEERING SERVICES DEPARTMENT

NORTH CAROLINA PROFESSIONAL SEAL 038342 ENGINEER MUKUND R. MOORE

STANDARD DRAWINGS

FAIRCLOTH STREET
CYCLE TRACK
FROM HILLSBOROUGH STREET TO WADE AVENUE (SR 1728)

DATE:	XXX12023
CADD TECH:	EMM
CHECKED BY:	BAP

REVISIONS

NO.	DATE
1	4/14/26

SCALES
HSCALE N/A
VSCALE N/A

SHEET NO.
2A