



ADVERTISEMENT FOR BID

Single prime sealed bids will be received by Buncombe County at the Board Room located at 30 Valley St, Asheville, NC 28801 on July 14, 2022, no later than 2:00 PM, for the Countywide Parking Lot Improvements project. At that time and place, bids will be opened and read aloud.

An open pre-bid conference is scheduled for 2:30 PM on Wednesday, June 22, 2022, at the Board Room located at 30 Valley St, Asheville, NC 28801. Attendance at the pre-bid conference is not mandatory.

Construction documents, a bid form, MWBE documents and other information for this project can be found below. Questions pertaining to the project can be submitted to GeneralServices@buncombecounty.org.

Buncombe County reserves the right to reject any or all bids.

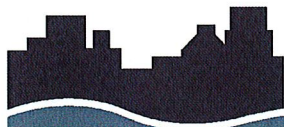
Advertisement for bid authorized by:
Mike Mace, Director
Buncombe County General Services
40 McCormick Place
Asheville, NC 28801



BID DOCUMENTS

PARKING LOT IMPROVEMENTS
COUNTYWIDE PROJECTS

BUNCOMBE COUNTY, NORTH CAROLINA



Davis CivilSolutions, PA

JUNE 2022
20140



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DIVISION 0

BIDDING AND CONTRACT REQUIREMENTS

**SECTION BP
BID PROPOSAL**

Date: _____

Gentlemen:

In compliance with your Advertisement for Bids, the undersigned hereby proposes to furnish all labor, equipment and materials and to perform all work for the construction of improvements referred to herein as:

**PARKING LOT IMPROVEMENTS
COUNTYWIDE PROJECTS**

BUNCOMBE COUNTY, NORTH CAROLINA

in strict accordance with the Contract Documents and in consideration of the amounts shown on the Bid Schedule (printed on yellow paper) attached hereto and totaling:

\$ _____ (\$ _____).
(words) (numbers)

The undersigned hereby agrees that, upon written acceptance of this Bid, he will within **10** days of receipt of such notice execute a formal Contract agreement with the Owner, and that he will provide any bonds or guarantees required by the Contract Documents.

The undersigned agrees that, if awarded the Contract, he will commence the work within **10** calendar days after the date of receipt of written Notice to Proceed, and that he will complete the work within **75** calendar days thereafter.

The undersigned acknowledges receipt of the following addenda:

Respectfully submitted,

Firm Name

Business Address

(Seal)

By: _____

ATTEST: _____

Title: _____

END OF SECTION

SECTION BS
BID SCHEDULE

(ATTACH TO BID PROPOSAL)

THE UNIT PRICE PROVIDED FOR EACH ITEM SHALL BE THE SAME FOR ALL LOCATIONS
 PRICING FOR ALL ITEMS SHALL INCLUDE CLEANUP AFTER INSTALLATION, REMOVAL OF ALL DEBRIS, AND RESTORATION
 OF ALL SURROUNDING SURFACES, COMPLETE
 UNIT PRICES PROVIDED SHALL BE USED FOR ALL QUANTITY ADJUSTMENTS, ADDED OR DELETED
 THE OWNER RESERVES THE RIGHT TO CONTRACT ALL OF THE PROJECTS BELOW OR A SELECTION OF PROJECTS AS
 DETERMINED IN THE BEST INTERESTS OF THE COUNTY

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	EXTENSION	
ENKA LIBRARY					
1	MILL EXISTING ASPHALT (2")	13,000	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	650	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH INCL. RESEEDING EDGES	13,000	SF		
6	CONCRETE PARKING BUMPERS	14	EA		
7	STRIPING, PARKING LINES, 18'	274	LF		
8	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	2	EA		
9	STRIPING, NON-H'CAP AISLE, COMPLETE, MATCH EXISTING	1	EA		
10	SYMBOL PAINTING (ARROWS, WORDS), MATCH EXISTING	3	EA		
				SUBTOTAL	\$
NORTH BRANCH LIBRARY					
1	MILL EXISTING ASPHALT (2")	9,300	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	450	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH INCL. RESEEDING EDGES	9,300	SF		
6	CONCRETE PARKING BUMPERS	9	EA		
7	STRIPING, PARKING LINES, 18'	414	LF		
8	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	1	EA		
				SUBTOTAL	\$
WEAVERVILLE LIBRARY					
1	MILL EXISTING ASPHALT (2")	0	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	240	SF		
4	CABC, LEVELING COURSE AFTER MILLING	15	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	2,400	SF		
6	CONCRETE PARKING BUMPERS	3	EA		
7	STRIPING, PARKING LINES, 18'	80	LF		
				SUBTOTAL	\$

52 COXE AVENUE					
1	MILL EXISTING ASPHALT (2")	16,000	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	800	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	16,000	SF		
6	STRIPING, PARKING LINES, 18'	840	LF		
7	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	1	EA		
8	STRIPING, NON-H'CAP AISLE, COMPLETE, MATCH EXISTING	1	EA		
				SUBTOTAL	\$
94 COXE AVENUE					
1	MILL EXISTING ASPHALT (2")	11,000	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	2,200	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	11,000	SF		
6	STRIPING, PARKING LINES, 18'	414	LF		
7	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	1	EA		
8	SYMBOL PAINTING (ARROWS, WORDS), MATCH EXISTING	5	EA		
				SUBTOTAL	\$
50 APAC DRIVE, A					
1	MILL EXISTING ASPHALT (2")	21,600	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	2,200	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	21,600	SF		
6	STRIPING, PARKING LINES, 18'	876	LF		
7	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	1	EA		
8	SYMBOL PAINTING (ARROWS, WORDS), MATCH EXISTING	4	EA		
9	LONGITUDINAL LANE STRIPING	725	LF		
10	SEEDING, COMPLETE INCLUDING STRAW MATTING	750	SF		
11	REMOVE, RELOCATE EXISTING STONE SIGN, APPURTENCES	1	LS		
12	REMOVE EXIST. LANDSCAPING (TREES, BUSHES, BLDR., ETC.)	1	LS		
				SUBTOTAL	\$

50 APAC DRIVE, B & C					
1	MILL EXISTING ASPHALT (2")	33,600	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	5,000	SF		
4	CABC, LEVELING COURSE AFTER MILLING	20	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	33,600	SF		
6	LONGITUDINAL LANE STRIPING	1,590	LF		
7	REMOVE, REPLACE EXIST. RIPRAP DITCH, INCL. INSTALL NEW FABRIC AND STONE BASE, RESHAPE RIPRAP AROUND INLETS, RESHAPE/INSTALL WASHED STONE SHOULDER, RESEED DISTURBED BARE AREAS, COMPLETE	1,300	LF		
8	2' WIDE X 3' LONG CONCRETE CHUTE, INCL. STONE BASE	6	EA		
9	MISC. CLASS B RIPRAP, INSTALLED	125	TN		
10	MISC. WASHED STONE, INSTALLED	100	TN		
				SUBTOTAL	\$

50 APAC DRIVE, D					
1	MILL EXISTING ASPHALT (2")	41,200	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	2,200	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	41,200	SF		
6	4"X4" EXTRUDED ASPHALT CURBING, LANDSCAPED ISLANDS	310	LF		
7	CONCRETE PARKING BUMPERS	59	EA		
8	STRIPING, PARKING LINES, 18'	1,800	LF		
9	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	1	EA		
10	STRIPING, CROSSWALK	1	EA		
11	LONGITUDINAL LANE STRIPING	148	LF		
				SUBTOTAL	\$

50 APAC DRIVE, E					
1	MILL EXISTING ASPHALT (2")	73,400	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	3,000	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	73,400	SF		
6	CONCRETE PARKING BUMPERS	205	EA		
7	STRIPING, PARKING LINES, 18'	3,528	LF		
8	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	3	EA		
9	SYMBOL PAINTING (ARROWS, WORDS), MATCH EXISTING	3	EA		
10	STRIPING, CROSSWALK	1	EA		
11	LONGITUDINAL LANE STRIPING	258	LF		
				SUBTOTAL	\$

50 APAC DRIVE, F					
1	MILL EXISTING ASPHALT (2")	78,000	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	7,800	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	78,000	SF		
6	4"X4" EXTRUDED ASPHALT CURBING, LANDSCAPED ISLANDS	840	LF		
7	CONCRETE PARKING BUMPERS	75	EA		
8	STRIPING, PARKING LINES, 18'	1,840	LF		
9	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	3	EA		
10	LONGITUDINAL LANE STRIPING	440	LF		
				SUBTOTAL	\$

OWEN PARK					
1	MILL EXISTING ASPHALT (2")	9,500	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	CABC, LEVELING COURSE AFTER MILLING	3	TN		
4	INSTALL SF9.5C ASPHALT 2" DEPTH INCL. RESEEDING EDGES	9,500	SF		
5	BASKETBALL COURT STRIPING	1	LS		
				SUBTOTAL	\$

59 WOODFIN PLACE					
1	MILL EXISTING ASPHALT (2")	35,700	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	2,200	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	35,700	SF		
6	CONCRETE PARKING BUMPERS	87	EA		
7	STRIPING, PARKING LINES, 18'	1,512	LF		
8	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	4	EA		
9	SYMBOL PAINTING (ARROWS, WORDS), MATCH EXISTING	24	EA		
10	REINSTALL ASPHALT WATER BREAKS, MATCH EXISTING	2	EA		
11	29'X18'X6" 4000 PSI CONCRETE PAD, INCL. 6" CABC BASE, REINFORCEMENT, COMPLETE	1	LS		
				SUBTOTAL	\$

200 COLLEGE STREET					
1	MILL EXISTING ASPHALT (2") BASKETBALL COURT	9,500	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	50	SF		
4	CABC, LEVELING COURSE AFTER MILLING	2	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	9,500	SF		
6	CONCRETE PARKING BUMPERS	18	EA		
7	STRIPING, PARKING LINES, 18'	360	LF		
8	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	2	EA		
				SUBTOTAL	\$

SOUTH BUNCOMBE LIBRARY					
1	MILL EXISTING ASPHALT (2")	10,400	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	50	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	10,400	SF		
6	CONCRETE PARKING BUMPERS	18	EA		
7	STRIPING, PARKING LINES, 18'	360	LF		
8	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	1	EA		
				SUBTOTAL	\$
HOMINY PARK, A					
1	MILL EXISTING ASPHALT (2")	18,100	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	900	SF		
4	CABC, LEVELING COURSE AFTER MILLING	5	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	18,100	SF		
6	STRIPING, PARKING LINES, 18'	532	LF		
7	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	1	EA		
8	SYMBOL PAINTING (ARROWS, WORDS), MATCH EXISTING	6	EA		
9	LONGITUDINAL LANE STRIPING	175	LF		
				SUBTOTAL	\$
HOMINY PARK, B					
1A	MILL EXISTING ASPHALT (2") - BASKETBALL COURT	10,500	SF		
1B	MILL EXISTING ASPHALT (2") - DRIVE	1,740	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	100	SF		
4A	CABC, LEVELING COURSE AFTER MILLING	2	TN		
4B	CABC, LEVELING COURSE PARKING LOT	100	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	12,240	SF		
6	CONCRETE PARKING BUMPERS	18	EA		
7	STRIPING, PARKING LINES, 18'	583	LF		
8	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	1	EA		
9	SYMBOL PAINTING (ARROWS, WORDS), MATCH EXISTING	2	EA		
10	BASKETBALL COURT STRIPING	1	LS		
11	ASPHALT SPEED BUMPS, MATCH EXISTING	2	EA		
				SUBTOTAL	\$

FEDERAL ALLEY					
1	MILL EXISTING ASPHALT (2")	10,400	SF		
2	PROOF ROLL REMAINING SUBGRADE	1	LS		
3	UNDERCUT, REMOVE EXISTING STONE & SUBGRADE UPON MOVEMENT, 12" DEPTH MIN., CABC FULL DEPTH REPAIR	100	SF		
4	CABC, LEVELING COURSE AFTER MILLING	2	TN		
5	INSTALL SF9.5C ASPHALT 2" DEPTH	10,400	SF		
6	STRIPING, PARKING LINES, 18'	500	LF		
7	STRIPING, H'CAP AISLE, COMPLETE, INCL. STRIPES & SYMBOLS	1	EA		
8	SYMBOL PAINTING (ARROWS, WORDS), MATCH EXISTING	3	EA		
				SUBTOTAL	\$
				TOTAL BID	

BIDDER SHALL LIST THE JUNE, 2022 NCDOT LIQUID ASPHALT INDEX \$ _____ PER LIQUID TON

**SECTION NA
NOTICE OF AWARD**

TO:

Project Description: **PARKING LOT IMPROVEMENTS, COUNTYWIDE PROJECTS
BUNCOMBE COUNTY, NORTH CAROLINA**

The Owner has considered the Bid Proposal submitted by you for the above-described Project in response to its receipt of Bids _____, and the Instruction to Bidders.

You are hereby notified that your Bid Proposal has been accepted in the amount of _____ **Dollars and __ Cents (\$_____.** __).

You are required by the Instructions to Bidders to execute the Agreement and furnish the required Contractor's Performance Bond, Payment Bonds and Certificates of Insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said Bonds with ten (10) days from the date of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid Proposal as abandoned and as a forfeiture of your Bid Proposal. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the Owner.
Dated this ____ **day of** _____, **2022**.

**BUNCOMBE COUNTY
OWNER**

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged this ____ day of _____, **2022**.

CONTRACTOR

By: _____

Title: _____

END OF SECTION

SECTION CC
FORM OF CONSTRUCTION CONTRACT

THIS AGREEMENT, made the ____ day of _____ in the year of 2022 by and between _____, hereinafter called the Party of the First Part (the “Contractor”), and Buncombe County, a body politic and corporate organized under the laws of the state of North Carolina, hereinafter called the Party of the Second Part (the “Owner”).

WITNESSETH:

That the Party of the First Part and the Party of the Second Part for the consideration herein named agree as follows:

1. Scope of Work: This agreement concerns _____ to be performed by The Party of the First Part. The Party of the First Part shall furnish and deliver all materials, and perform all of the work in the manner and form as provided by the approved design drawings and specifications from the preconstruction phase, and those items not on the approved design to ensure the project is functional and complete. These plans, specifications and documents to be titled “Parking Lot Improvements, Countywide Projects” are attached hereto and made a part hereof as if fully contained herein (*such documents may include: advertisements; Instructions to Bidders; General Conditions; Supplementary General Conditions; specifications; accepted proposal; contract; performance bond; payment bond; power of attorney; workmen’s compensation; public liability; property damage and builder’s risk insurance certificates*):
 - i. **Scope of Work**
 - ii. **Buncombe County Construction Contract General Conditions of the Contract**
 - iii. **Buncombe County’s Invitation for Construction Bids**
 - iv. **Responsive Bid Bond**
 - v. **RFP Bidder Info Workbook**
 - vi. **Certificate of Insurance**
 - vii. **Performance and Payment Bonds**

Project Name: **PARKING LOT IMPROVEMENTS, COUNTYWIDE PROJECTS**

2. That the Party of the First Part shall commence work to be performed under this agreement on a date to be specified in a written order of the Party of the Second Part and shall fully complete all work hereunder within **10** consecutive calendar days from said date. For each day in excess thereof, liquidated damages shall be as stated in General and Supplementary General Conditions. The Party of the First Part, as one of the considerations for the awarding of this contract, shall furnish to the Party of the Second Part a construction schedule setting forth planned progress of the project broken down by the various divisions or part of the work and by calendar days as outlined in Article 14 of the General Conditions of the Contract.

3. The Party of the Second Part hereby agrees to pay to the Party of the First Part for the faithful performance of this agreement, subject to additions and deductions as provided in the specifications or proposal, in lawful money of the United States as follows:

_____ Dollars and ___/100 Dollars (\$_____)

4. In accordance with Article 31 and Article 32 of the General Conditions of the Contract, the Party of the Second Part shall review, and if approved, process the Party of the First Party's pay request within 30 days upon receipt. The Party of the Second Part, after reviewing and approving said pay request, shall make payments to the Party of the First Part on the basis of a duly certified and approved estimate of work performed during the preceding calendar month by the First Party, less five percent (5%) of the amount of such estimate which is to be retained by the Second Party until all work has been performed strictly in accordance with this agreement and until such work has been accepted by the Second Party. The Second Party may elect to waive retainage requirements after 50 percent of the work has been satisfactorily completed on schedule as referred to in Article 31 of the General Conditions.
5. The Party of the First Part shall perform the work associated with this Agreement in such a manner as not to void any warranties, including those for labor, materials, or parts, that are held by the Owner and/or schools systems, colleges, and/or their respective governing bodies, and/or that are applicable to the property on which any activities under this contract occur, and/or that remain in effect on any of the locations at which the Party of the First Part is performing work associated with this Agreement. The Owner and/or schools systems, colleges, and/or their respective governing bodies upon whose property any activities under this contract occur, may allow for the issuer of any such warranties to inspect the drawings, specifications, and/or the work performed by the Party of the First Part to ensure that any such warranties remain valid for their remaining term. The Owner of the property on which the work is being performed shall be responsible for providing notice to the issuers of any warranties, unless such property is occupied by a schools system, college, and/or its respective governing body, in which case the school system, college, or its respective governing bodies for which the work is being performed shall be responsible for providing such notice.
6. Upon submission by the First Party of evidence satisfactory to the Second Party that all payrolls, material bills and other costs incurred by the First Party in connection with the construction of the work have been paid in full, final payment on account of this agreement shall be made within thirty (30) days after the completion by the First Party of all work covered by this agreement and the acceptance of such work by the Second Party.
7. It is further mutually agreed between the parties hereto that if at any time after the execution of this agreement and the surety bonds hereto attached for its faithful performance, the Second Party shall deem the surety or sureties upon such bonds to be unsatisfactory, or if, for any reason, such bonds cease to be adequate to cover the performance of the work, the First Party shall, at its expense, within five (5) days after the receipt of notice from the Second Party so to do, furnish an additional bond or bonds in such form and amount, and with such surety or sureties as shall be satisfactory to the Second Party. In such event no

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further payment to the First Party shall be deemed to be due under this agreement until such new or additional security for the faithful performance of the work shall be furnished in manner and form satisfactory to the Second Party.

- 8. The Party of the First Part attests that it and all of its subcontractors have fully complied with all requirements of NCGS 64 Article 2 in regards to E-Verification as required by Section 2.(c) of Session Law 2013-418, codified as N.C. Gen. Stat. § 143-129(j).

NOW THEREFORE, the parties hereby make, agree, and execute this Contract by the below signatures of duly authorized officials or agents.

CONTRACTOR

By: _____
(Signature)

(Printed Name)

(Title)

(Date)

STATE OF _____
COUNTY OF _____

I, _____, a Notary Public of the county and State aforesaid, do hereby certify that _____ personally appeared before me this day and voluntarily acknowledged the due execution of the foregoing instrument.

Witness my hand and notarial seal this _____ day of _____, 20_____

My commission expires: _____

Notary Public

DAVIS CIVILSOLUTIONS, PA

BUNCOMBE COUNTY

By: _____
 (Signature)

 (Printed Name)

 (Title)

 (Date)

STATE OF _____
 COUNTY OF _____

I, _____, a Notary Public of the county and State aforesaid, do hereby certify that _____ personally appeared before me this day and voluntarily acknowledged the due execution of the foregoing instrument.

Witness my hand and notarial seal this _____ day of _____, 20_____

My commission expires: _____

 Notary Public

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

 Buncombe County Finance Director

SECTION PB
FORM OF PERFORMANCE BOND

Date of Contract: _____

Date of Execution: _____

Name of Principal (Contractor): _____

Name of Surety: _____

Name of Contracting Body: Buncombe County, a body politic and Corporate

Amount of Bond: _____

Project: **PARKING LOT IMPROVEMENTS, COUNTYWIDE PROJECTS**

KNOW ALL MEN BY THESE PRESENTS, that we, the principal and surety, a surety company authorized to do business in North Carolina, above named, are held and firmly bound unto the above named contracting body, hereinafter called the contracting body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind, ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the contracting body, identified as shown above and hereto attached:

NOW, THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the contracting body, with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

{Signature Pages Follow}

NOW THEREFORE, the parties hereby make, agree, and execute this Performance Bond by the below signatures of duly authorized officials or agents.

CONTRACTOR

WITNESS

By: _____
(Signature)

(Printed Name)

(Title)

(Date)

(Signature)

(Printed Name)

(Title)

(Date)

SURETY COMPANY

WITNESS

_____,
A Company Licensed to do Business in N.C.

By: _____
(Signature)

(Printed Name)

(Title)

(Date)

(Signature)

(Printed Name)

(Title)

(Date)

(Surety Corporate Seal)

REGISTERED AGENT

(An authorized agent of the Surety Company who is licensed to do business in North Carolina must Countersign)

(Signature)

(Printed Name)

(Title)

(Date)

DAVIS CIVILSOLUTIONS, PA

SECTION IC
ATTACH INSURANCE CERTIFICATES

Identification of HUB Certified/ Minority Business Participation

I, _____,
 (Name of Bidder)

do hereby certify that on this project, we will use the following HUB Certified/ minority business as construction subcontractors, vendors, suppliers or providers of professional services.

Firm Name, Address and Phone #	Work Type	*Minority Category	**HUB Certified (Y/N)

*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**** HUB Certification with the state HUB Office required to be counted toward state participation goals.**

The total value of minority business contracting will be (\$)_____.

State of North Carolina AFFIDAVIT A – Listing of Good Faith Efforts

County of _____

(Name of Bidder)

Affidavit of _____

I have made a good faith effort to comply under the following areas checked:

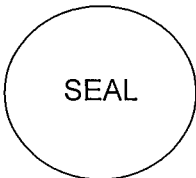
Bidders must earn at least 50 points from the good faith efforts listed for their bid to be considered responsive. (1 NC Administrative Code 30 I.0101)

- 1 – (10 pts)** Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed.
- 2 --(10 pts)** Made the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bids are due.
- 3 – (15 pts)** Broken down or combined elements of work into economically feasible units to facilitate minority participation.
- 4 – (10 pts)** Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- 5 – (10 pts)** Attended prebid meetings scheduled by the public owner.
- 6 – (20 pts)** Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
- 7 – (15 pts)** Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- 8 – (25 pts)** Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- 9 – (20 pts)** Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- 10 - (20 pts)** Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

The undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the Identification of Minority Business Participation schedule conditional upon scope of contract to be executed with the Owner. Substitution of contractors must be in accordance with GS143-128.2(d) Failure to abide by this statutory provision will constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of the minority business commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____
Signature: _____
Title: _____



State of _____, County of _____
Subscribed and sworn to before me this _____ day of _____ 20____
Notary Public _____
My commission expires _____

State of North Carolina --AFFIDAVIT B-- Intent to Perform Contract with Own Workforce.

County of _____

Affidavit of _____

(Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for the _____

_____ contract.

(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of the work on this project with his/her own current work forces; and

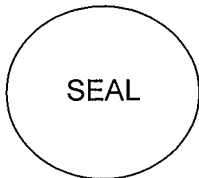
The Bidder agrees to provide any additional information or documentation requested by the owner in support of the above statement. The Bidder agrees to make a Good Faith Effort to utilize minority suppliers where possible.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: _____ Name of Authorized Officer: _____

Signature: _____

Title: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of _____ 20__

Notary Public _____

My commission expires _____

State of North Carolina - AFFIDAVIT C - Portion of the Work to be Performed by HUB Certified/Minority Businesses

County of _____

(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)

If the portion of the work to be executed by HUB certified/minority businesses as defined in GS143-128.2(g) and 128.4(a),(b),(e) is equal to or greater than 10% of the bidders total contract price, then the bidder must complete this affidavit.
 This affidavit shall be provided by the apparent lowest responsible, responsive bidder within **72 hours** after notification of being low bidder.

Affidavit of _____ I do hereby certify that on the _____
 (Name of Bidder)

Project ID# _____ (Project Name) _____
 Amount of Bid \$ _____

I will expend a minimum of _____% of the total dollar amount of the contract with minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below. Attach additional sheets if required

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**** HUB Certification with the state HUB Office required to be counted toward state participation goals.**

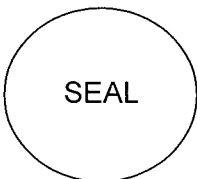
Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____

Signature: _____

Title: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of _____ 20____

Notary Public _____

My commission expires _____

State of North Carolina AFFIDAVIT D – Good Faith Efforts

County of _____

(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)

If the goal of 10% participation by HUB Certified/ minority business **is not** achieved, the Bidder shall provide the following documentation to the Owner of his good faith efforts:

Affidavit of _____ I do hereby certify that on the _____
(Name of Bidder)

Project ID# _____ (Project Name) Amount of Bid \$ _____

I will expend a minimum of _____% of the total dollar amount of the contract with HUB certified/ minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below. (Attach additional sheets if required)

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**** HUB Certification with the state HUB Office required to be counted toward state participation goals.**

Examples of documentation that may be required to demonstrate the Bidder's good faith efforts to meet the goals set forth in these provisions include, but are not necessarily limited to, the following:

- A. Copies of solicitations for quotes to at least three (3) minority business firms from the source list provided by the State for each subcontract to be let under this contract (if 3 or more firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- B. Copies of quotes or responses received from each firm responding to the solicitation.
- C. A telephone log of follow-up calls to each firm sent a solicitation.
- D. For subcontracts where a minority business firm is not considered the lowest responsible sub-bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- E. Documentation of any contacts or correspondence to minority business, community, or contractor organizations in an attempt to meet the goal.
- F. Copy of pre-bid roster
- G. Letter documenting efforts to provide assistance in obtaining required bonding or insurance for minority business.
- H. Letter detailing reasons for rejection of minority business due to lack of qualification.
- I. Letter documenting proposed assistance offered to minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive bidder.

Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

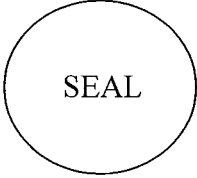
Do not submit with the bid Do not submit with the bid Do not submit with the bid Do not submit with the bid Do not submit with the bid

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____

Signature: _____

Title: _____



State of _____, County of _____

Subscribed and sworn to before me this _____ day of _____ 20_____

Notary Public _____

My commission expires _____

**SECTION NP
NOTICE TO PROCEED**

TO:

DATE: _____, 2022

**PROJECT: PARKING LOT IMPROVEMENTS, COUNTYWIDE PROJECTS
BUNCOMBE COUNTY, NORTH CAROLINA**

You are hereby notified to commence WORK in accordance with the Agreement dated, _____, 2022 on or before _____, 2022, and you are to complete the Work within 75 consecutive calendar days thereafter. The date of completion of all Work is therefore _____, 2022.

**BUNCOMBE COUNTY
OWNER**

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by _____ this the _____ day of _____, 2022.

CONTRACTOR

By: _____

Title: _____

END OF SECTION

**SECTION AP
APPLICATION FOR PAYMENT**

PROJECT: **PARKING LOT IMPROVEMENTS, COUNTYWIDE PROJECTS
BUNCOMBE COUNTY, NORTH CAROLINA**

Application Number: _____
Date Notice To Proceed: _____
Completion Date: _____
Days Remaining in Contract: _____
Percent Complete: _____

ENGINEER: Davis CivilSolutions, P.A.
Asheville, North Carolina 28803

CONTRACTOR:
Contractor's Address:

Federal ID # _____

CONTRACT: ORIGINAL CONTRACT AMOUNT
APPROVED CHANGE ORDER AMOUNT
REVISED CONTRACT AMOUNT

\$ _____
\$ _____
\$ _____

SUMMARY: TOTAL WORK COMPLETED TO DATE
TOTAL MATERIALS STORED ON SITE
TOTAL EARNED THIS APPLICATION
LESS ____% RETAINAGE
SUBTOTAL
LESS PREVIOUS APPLICATIONS FOR PAYMENT
CURRENT PAYMENT DUE

\$ _____
\$ _____
\$ _____
\$ _____
\$ _____
\$ _____
\$ _____

SIGNATURE:
CONTRACTOR:

Name Title Date

VERIFICATION:

IN ACCORDANCE WITH THE CONTRACT AND THIS APPLICATION FOR PAYMENT, THE CONTRACTOR HAS COMPLETED THE WORK STATED ABOVE AND IS ENTITLED THE FULL PAYMENT IN THE AMOUNT SHOWN.

ENGINEER: **DAVIS CIVILSOLUTIONS, P.A.**

Name Title Date

APPROVAL:

THIS APPLICATION IS HEREBY APPROVED FOR PAYMENT:

OWNER: **BUNCOMBE COUNTY**

Name Title Date

END OF SECTION

GENERAL CONDITIONS OF THE CONTRACT

STANDARD FORM FOR SINGLE PRIME CONSTRUCTION PROJECTS

**NORTH CAROLINA
COUNTY OF BUNCOMBE**

GENERAL CONDITIONS OF THE CONTRACT

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ARTICLE 1 - DEFINITIONS

- a. The **contract documents** consist of the Request for Proposal (RFP); General Contractor's formal response to the RFP; General Conditions of the Contract; special conditions if applicable; the drawing and specifications, including all bulletins, addenda or other modifications of the drawings and specifications incorporated into the documents prior to their execution; the contract; the performance bond; the payment bond; insurance certificates. All of these items together form the contract.
- b. The **Owner** is Buncombe County Government.
- c. The **designer** or **project designer** means the firm or firms of architects or engineers or both (and their consultants) which have undertaken to design the project pursuant to a contract with the Owner, (hereinafter, the "design contract").
- d. Intentionally left blank for sequential numbering purposes.
- e. A **subcontractor**, as the term is used herein, shall be a trade contractor, a general, mechanical, electrical, plumbing, specialty contractor, or a trade contractor, who has entered into a direct contract with a GC, and includes one who furnishes materials worked to a special design in accordance with plans and specifications covered by the contract, but does not include one who only sells or furnishes materials not requiring work so described or detailed.
- f. **Written notice** shall be defined as notice in writing delivered in person to the contractor, or to a partner of the firm in the case of a partnership, or to a member of the contracting organization, or to an officer of the organization in the case of a corporation, or sent to the last known business address of the contracting organization by registered mail.
- g. **Work**, as used herein as a noun, is intended to include materials, labor, and workmanship of the appropriate contractor as supervised by the GC.
- h. The **project** is the total construction work to be performed under the contract documents.
- i. Intentionally left blank for sequential numbering purposes.
- j. **Change order**, as used herein, shall mean a written order to the GC subsequent to the signing of the contract authorizing a change in the contract. The change order shall be signed by the GC, designer and the Owner, in that order (Article 19).
- k. **Field Order**, as used herein, shall mean a written approval for the GC to proceed with the work requested by Owner prior to issuance of a formal Change Order. The field order shall be signed by the GC, designer, and Owner.
- l. **Field Change**, as used herein shall mean a written approval from the Owner for the GC to proceed with work requested by the Owner.

- m. **Time of Completion**, as stated in the contract documents, is to be interpreted as consecutive calendar days measured from the date established in the written Notice to Proceed, or such other date as may be established herein (Article 23).
- n. **Liquidated damages**, as stated in the contract documents, is an amount reasonably estimated in advance to cover the consequential damages associated with the Owner's economic loss in not being able to use the Project for its intended purposes at the end of the contract's completion date as amended by change order, if any, by reason of failure of the GC to complete the work within the time specified. Liquidated damages does not include the Owner's extended contract administration costs (including but not limited to additional fees for architectural and engineering services, testing services, inspection services, commissioning services, etc.), such other damages directly resulting from delays caused solely by the GC, or consequential damages that the Owner identified in the bid documents that may be impacted by any delay caused solely by the GC (e.g., if a multi-phased project-subsequent phases, delays in start of other projects that are dependent on the completion of this Project, extension of leases and/or maintenance agreements for other facilities).
- o. **Surety**, as used herein, shall mean the bonding company or corporate body which is bound with and for the GC, and which engages to be responsible for the GC and his acceptable performance of the work.
- p. **Routine written communications between the Designer and the General Contractor** are any communication other than a "request for information" provided in letter, memo, or transmittal format, sent by mail, courier, electronic mail, or facsimile. Such communications cannot be identified as "request for information".
- q. **Clarification or Request for information (RFI)** is a request from the GC seeking an interpretation or clarification by the Designer relative to the contract documents. The RFI, which shall be labeled (RFI), shall clearly and concisely set forth the issue or item requiring clarification or interpretation and why the response is needed. The RFI must set forth the GC's interpretation or understanding of the contract documents requirements in question, along with reasons for such an understanding.
- r. **Approval** means written or imprinted acknowledgement that materials, equipment or methods of construction are acceptable for use in the work.
- s. **Inspection** shall mean examination or observation of work completed or in progress to determine its compliance with contract documents.
- t. **"Equal to" or "approved equal"** shall mean materials, products, equipment, assemblies, or installation methods considered equal by the bidder in all characteristics (physical, functional, and aesthetic) to those specified in the contract documents. Acceptance of equal is subject to approval of the designer and owner.
- u. **"Substitution" or "substitute"** shall mean materials, products, equipment, assemblies, or installation methods deviating in at least one characteristic (physical, functional, or aesthetic) from those specified, but which in the opinion of the bidder would improve

competition and/or enhance the finished installation. Acceptance of substitution is subject to the approval of the designer and owner.

- v. **Provide** shall mean furnish and install complete in place, new, clean, operational, and ready for use.
- w. **Indicated and shown** shall mean provide as detailed, or called for, and reasonably implied in the contract documents.
- x. **Special inspector** is one who inspects materials, installation, fabrication, erection or placement of components and connections requiring special expertise to ensure compliance with the approved construction documents and referenced standards.
- y. **Commissioning** is a quality assurance process that verifies and documents that building components and systems operate in accordance to the owner's project requirements and the project design documents.
- z. **Designer Final Inspection** is the inspection performed by the design team to determine the completeness of the project in accordance with approved plans and specifications. This inspection occurs prior to final inspection.
- aa. left blank for numbering purposes
- bb. **Beneficial Occupancy** is requested by the owner and is occupancy or partial occupancy of the building after all life safety items have been completed as determined by the local Authority Having Jurisdiction (AHJ). Life safety items include but not limited to fire alarm, sprinkler, egress and exit lighting, fire rated walls, egress paths and security.
- cc. **Final Acceptance** is the date in which the Owner accepts the construction as totally complete. This includes the local AHJ and certification by the designer that all punch lists are completed.

ARTICLE 2 - INTENT AND EXECUTION OF DOCUMENTS

- a. The drawings and specifications are complementary, one to the other. That which is shown on the drawings or called for in the specifications shall be as binding as if it were both called for and shown. The intent of the drawings and specifications is to establish the scope of all labor, materials, transportation, equipment, and any and all other things necessary to provide a complete job. In case of discrepancy or disagreement in the contract documents, the order of precedence shall be: Form of Contract, specifications, large-scale detail drawings, small- scale drawings.
- b. The wording of the specifications shall be interpreted in accordance with common usage of the language except that words having a commonly used technical or trade meaning shall be so interpreted in preference to other meanings.
- c. The GC shall execute each copy of the response to RFP, contract, performance bond and payment bond as follows:

- 1 If the documents are executed by a sole Owner, that fact shall be evidenced by the word "Owner" appearing after the name of the person executing them.
- 2 If the documents are executed by a partnership, that fact shall be evidenced by the word "Co-Partner" appearing after the name of the partner executing them.
- 3 If the documents are executed on the part of a corporation, they shall be executed by either the president or the vice president and attested by the secretary or assistant secretary in either case, and the title of the office of such persons shall appear after their signatures. The seal of the corporation shall be impressed on each signature page of the documents.
- 4 If the documents are made by a joint venture, they shall be executed by each member of the joint venture in the above form for sole Owner, partnership or corporation, whichever form is applicable to each particular member.
- 5 All signatures shall be properly witnessed.
- 6 If the General Contractor's license is held by a person other than an Owner, partner or officer of a firm, then the licensee shall also sign and be a party to the contract. The title "Licensee" shall appear under his/her signature.
- 7 The bonds shall be executed by an attorney-in-fact. There shall be attached to each copy of the bond a certified copy of power of attorney properly executed and dated.
- 8 Each copy of the bonds shall be countersigned by an authorized individual agent of the bonding company licensed to do business in North Carolina. The title "Licensed Resident Agent" shall appear after the signature.
- 9 The seal of the bonding company shall be impressed on each signature page of the bonds.
- 10 The GC's signature on the performance bond and the payment bond shall correspond with that on the contract.

ARTICLE 3 - CLARIFICATIONS AND DETAIL DRAWINGS

- a. In such cases where the nature of the work requires clarification by the designer, such clarification shall be furnished by the designer with reasonable promptness by means of written instructions or detail drawings, or both. Clarifications and drawings shall be consistent with the intent of contract documents, and shall become a part thereof.
- b. The GC and the Designer shall prepare, if deemed necessary, a schedule fixing dates upon which foreseeable clarifications will be required. The schedule will be subject to addition or change in accordance with progress of the work. The Designer shall furnish drawings or clarifications in accordance with that schedule. The GC shall not proceed with the work without such detail drawings and/or written clarifications.

ARTICLE 4 - COPIES OF DRAWINGS AND SPECIFICATIONS

The Designer or owner shall furnish free of charge to the GC electronic copies of plans and specifications. If requested by the GC, up to 3 paper copies of plans and specifications will be provided free of charge, plus a clean set of black line prints on white paper of all appropriate drawings, upon which the GC shall clearly and legibly record all work-in-place that is at variance with the contract documents. Additional sets shall be furnished at cost, including mailing, to the GC at the request of the GC.

ARTICLE 5 - SHOP DRAWINGS, SUBMITTALS, SAMPLES, DATA

- a. Within fifteen (15) consecutive calendar days of the notice to proceed, a schedule for anticipated submission of all shop drawings, product data, samples, and similar submittals shall be prepared by the GC and provided to the designer. This schedule shall indicate the items, relevant specification sections, other related submittal data, and the date when these items will be furnished to the designer.
- b. The GC shall review, approve and submit to the Designer all Shop Drawings, Coordination Drawings, Product Data, Samples, Color Charts, and similar submittal data required or reasonably implied by the Contract Documents. Required Submittals shall bear the GC's stamp of approval, any exceptions to the Contract Documents shall be noted on the submittals, and copies of all submittals shall be of sufficient quantity for the Designer to retain up to three (3) copies of each submittal for his own use plus additional copies as may be required by the GC. Submittals shall be presented to the Designer in accordance with the schedule submitted in paragraph (a) so as to cause no delay in the activities of the Owner.
- c. The Designer shall review required submittals promptly, noting desired corrections if any, and retaining three (3) copies (1 for the Designer, 1 for the owner) for his use. The remaining copies of each submittal shall be returned to the GC not later than twenty (20) days from the date of receipt by the Designer, for the GC's use or for corrections and resubmittal as noted by the Designer. When resubmittals are required, the submittal procedure shall be the same as for the original submittals.
- d. Approval of shop drawings by the designer shall not be construed as relieving the GC from responsibility for compliance with the design or terms of the contract documents nor from responsibility of errors of any sort in the shop drawings, unless such error has been called to the attention of the designer in writing by the GC.

ARTICLE 6 - WORKING DRAWINGS AND SPECIFICATIONS AT THE JOB SITE

- a. The GC shall maintain, in readable condition at his job office, one complete set of working drawings and specifications for his work including all shop drawings. Such drawings and specifications shall be available for use by the Designer or his authorized representative, and the owner.

- b. The GC shall maintain at the job office, a day-to-day record of work-in-place that is at variance with the contract documents. Such variations shall be fully noted on project drawings by the GC and submitted to the designer upon project completion and no later than thirty (30) days after acceptance of the project.
- c. The contractor shall maintain at the job office a record of all required tests that have been performed, clearly indicating the scope of work inspected and the date of approval or rejection.

ARTICLE 7 - OWNERSHIP OF DRAWINGS AND SPECIFICATIONS

All drawings and specifications are instruments of service and remain the property of the Owner. The use of these instruments on work other than this contract without permission of the Owner is prohibited. All copies of drawings and specifications other than contract copies shall be returned to the Owner upon request after completion of the work.

ARTICLE 8 - MATERIALS, EQUIPMENT, EMPLOYEES

- a. The GC shall, unless otherwise specified, supply and pay for all labor, transportation, materials, tools, apparatus, scaffolding and incidentals necessary for the completion of his work, and to install, maintain and remove all equipment of the construction, other utensils or things, and be responsible for the safe, proper and lawful construction, maintenance and use of same. The GC shall construct in the best and most workmanlike manner, a complete job and everything incidental thereto, as shown on the plans, stated in the specifications, or reasonably implied there from, all in accordance with the contract documents.
- b. All materials shall be new and of quality specified, except where reclaimed material is authorized herein and approved for use. Workmanship shall at all times be of a grade accepted as the best practice of the particular trade involved, and as stipulated in written standards of recognized organizations or institutes of the respective trades except as exceeded or qualified by the specifications.
- c. Upon notice, the GC shall furnish evidence as to quality of materials.
- d. Products are generally specified by ASTM or other reference standard and/or by manufacturer's name and model number or trade name. When specified only by reference standard, the GC may select any product meeting this standard, by any manufacturer. When several products or manufacturers are specified as being equally acceptable, the GC has the option of using any product and manufacturer combination listed. However, the GC shall be aware that the cited examples are used only to denote the quality standard of product desired and that they do not restrict bidders to a specific brand, make, manufacturer or specific name; that they are used only to set forth and convey to bidders the general style, type, character and quality of product desired; and that equivalent products will be acceptable. The GC shall be responsible for reviewing all substitution requests from their subcontractors prior to submission to the Project Designer and Owner and shall track & monitor all such requests. Requests for substitution of materials, items, or equipment shall be submitted to the Project Designer for approval or disapproval; such approval or disapproval shall be made by the designer prior to the opening of bids. Alternate materials

may be requested after award if it can clearly be demonstrated that it is an added benefit to the owner and the designer and the owner approves.

- e. The GC shall obtain written approval from the designer for the use of products, materials, equipment, assemblies or installation methods claimed as equal to those specified. Such approvals must be obtained as soon after contract awards as possible and before any materials are ordered.
- f. The Designer is the judge of equality for proposed substitution of products, materials or equipment.
- g. If at any time during the construction and completion of the work covered by these contract documents, the conduct of any workman of the various crafts be adjudged a nuisance to the Owner or Designer, or if any workman be considered detrimental to the work, the GC shall order such parties removed immediately from grounds.

ARTICLE 9 - ROYALTIES, LICENSES AND PATENTS

It is the intention of the contract documents that the work covered herein will not constitute in any way infringement of any patent whatsoever unless the fact of such patent is clearly evidenced herein. The GC shall protect and save harmless the Owner against suit on account of alleged or actual infringement. The GC shall pay all royalties and/or license fees required on account of patented articles or processes, whether the patent rights are evidenced hereinafter.

ARTICLE 10 - PERMITS, INSPECTIONS, FEES, REGULATIONS

- a. The GC shall give all notices and comply with all laws, ordinances, codes, rules and regulations bearing on the conduct of the work under this contract. If the GC observes that the drawings and specifications are at variance therewith, he shall promptly notify the Designer in writing. Any necessary changes required after contract award shall be made by change order in accordance with Article 19. If the GC performs any work or authorizes any work to be performed knowing it to be contrary to such laws, ordinances, codes, rules and regulations, and without such notice to the designer, he shall bear all cost arising there from. Additional requirements implemented after bidding will be subject to equitable negotiations.
- b. All work under this contract shall conform to the North Carolina State Building Code and other State, local and national codes as are applicable. The cost of all required inspections and permits shall be the responsibility of the GC unless otherwise specified.
- c. Projects constructed by Buncombe County or a subdivision thereof are subject to inspection by appropriate county or municipal authorities and building codes. The GC shall cooperate with the county and/or municipal authorities by obtaining building permits. Permits shall be obtained at GC's cost.
- d. Projects involving local funding (Community Colleges) are also subject to county and municipal building codes and inspection by local authorities. The GC shall pay the cost of these permits and inspections unless otherwise specified.

ARTICLE 11 - PROTECTION OF WORK, PROPERTY AND THE PUBLIC

- a. The GC shall be responsible for the entire site and the building or construction of the same and provide all the necessary protections, as required by the Owner or designer, and by laws or ordinances governing such conditions. The GC shall be responsible for any damage to the Owner's property or of that of others on the job, by them, their personnel, or their subcontractors, and shall make good such damages. The GC shall be responsible for and pay for any damages caused to the Owner. The GC shall have access to the project at all times.
- b. The GC shall be responsible to cover and protect all portions of the structure when the work is not in progress, provide and set all temporary roofs, covers for doorways, sash and windows, and all other materials necessary to protect all the work on the building. Any work damaged through the lack of proper protection or from any other cause, shall be repaired or replaced without extra cost to the Owner.
- c. No fires of any kind will be allowed inside or around the operations during the course of construction without special permission from the Designer.
- d. The GC shall ensure that all trees and shrubs designated to remain in the vicinity of the construction operations are protected in accordance with the requirements of the plans and specifications. All walks, roads, etc., shall be barricaded as directed by the designer to keep the public away from the construction. All trenches, excavations or other hazards in the vicinity of the work shall be well barricaded and properly lighted at night.
- e. The GC shall develop and implement a project safety plan that provides all necessary safety measures for the protection of all persons on the job, including the requirements of the A.G.C. *Accident Prevention Manual in Construction*, as amended, and shall fully comply with all state laws or regulations and North Carolina State Building Code requirements to prevent accident or injury to persons on or about the location of the work. The GC shall clearly mark or post signs warning of hazards existing, and shall barricade excavations, elevator shafts, stairwells and similar hazards. The GC shall insure that protection is provided against damage or injury resulting from falling materials and that all protective devices and signs be maintained throughout the progress of the work.
- f. The GC shall adhere to the rules, regulations and interpretations of the North Carolina Department of Labor relating to Occupational Safety and Health Standards for the Construction Industry (Title 29, Code of Federal Regulations, Part 1926, published in Volume 39, Number 122, Part II, June 24, 1974, *Federal Register*), and revisions thereto as adopted by N.C.G.S. 95-126 through 155.
- g. The GC shall designate a responsible person of his organization as safety officer/inspector to inspect the project site for unsafe health and safety hazards, to report these hazards to the contractor for correction, and whose duties also include accident prevention on the project, and to provide other safety and health measures on the project site as required by the terms and conditions of the contract. The name of the safety inspector shall be made

known to the designer and owner at the time of the preconstruction conference and in all cases prior to any work starting on the project.

- h. In the event of an emergency affecting the safety of life, the protection of work, or the safety of adjoining properties, the GC is hereby authorized to act at his own discretion, without further authorization from anyone, to prevent such threatened injury or damage. Any compensation claimed by the GC on account of such action shall be determined as provided for under Article 19(b).
- i. Any and all costs associated with correcting damage caused to adjacent properties of the construction site or staging area shall be borne by the contractor. These costs shall include but not be limited to flooding, mud, sand, stone, debris, and discharging of waste products.

ARTICLE 12 - SEDIMENTATION POLLUTION CONTROL ACT OF 1973

- a. Any land-disturbing activity performed by the GC in connection with the project shall comply with all erosion control measures set forth in the contract documents and any additional measures which may be required in order to ensure that the project is in full compliance with the Sedimentation Pollution Control Act of 1973, as implemented by Title 15, North Carolina Administrative Code, Chapter 4, Sedimentation Control, Subchapters 4A, 4B and 4C, as amended (15 N.C.A.C. 4A, 4B and 4C).
- b. Upon receipt of notice that a land-disturbing activity is in violation of said act, the GC shall be responsible for ensuring that all steps or actions necessary to bring the project in compliance with said act are promptly taken.
- c. The GC shall be responsible for defending any legal actions instituted pursuant to N.C.G.S. 113A-64 against any party or persons described in this article.
- d. To the fullest extent permitted by law, the GC shall indemnify and hold harmless the Owner, the designer and the agents, consultants and employees of the Owner and designer, from and against all claims, damages, civil penalties, losses and expenses, including, but not limited to, attorneys' fees, arising out of or resulting from the performance of work or failure of performance of work, provided that any such claim, damage, civil penalty, loss or expense is attributable to a violation of the Sedimentation Pollution Control Act. Such obligation shall not be construed to negate, abridge or otherwise reduced any other right or obligation of indemnity which would otherwise exist as to any party or persons described in this article.

ARTICLE 13 - INSPECTION OF THE WORK

- a. It is a condition of this contract that the work shall be subject to inspection during normal working hours by the designer, designated official representatives of the Owner and those persons required by state law to test special work for official approval. The GC shall therefore provide safe access to the work at all times for such inspections.

- b. All instructions to the GC will be made only by or through the designer or his designated project representative. Observations made by official representatives of the Owner shall be conveyed to the designer for review and coordination prior to issuance to the GC.
- c. The GC shall perform quality control inspections on the work of Principal Trade and Specialty Contractors to guard the Owner against defects and deficiencies in the work and shall coordinate this activity with the on-site duties of the Project Designer. The GC shall advise the Project Designer of any apparent variation and/or deviation from the intent of the Contract Documents and shall take the necessary action to correct such variations and deviations.
- d. All work shall be inspected by designer, special inspector prior to being covered by the contractor. The GC shall give a minimum of two week notice unless otherwise agreed to by all parties. If inspection fails, after the first re-inspection all costs associated with additional re-inspections shall be borne by the GC.
- e. Where special inspection or testing is required by virtue of any state laws, instructions of the designer, specifications or codes, the GC shall give adequate notice to the Project Designer of the time set for such inspection or test, if the inspection or test will be conducted by a party other than the Project Designer. Such special tests or inspections will be made in the presence of the Project Designer, or his authorized representative, and it shall be the GC's responsibility to serve ample notice of such tests.
- f. All laboratory tests shall be paid by the Owner unless provided otherwise in the contract documents except the GC shall pay for laboratory tests to establish design mix for concrete and for additional tests to prove compliance with contract documents where materials have tested deficient except when the testing laboratory did not follow the appropriate ASTM testing procedures.
- g. Should any work be covered up or concealed prior to inspection and approval by the Project Designer such work shall be uncovered or exposed for inspection, if so requested by the Project Designer in writing. Inspection of the work will be made promptly upon notice from the GC. All cost involved in uncovering, repairing, replacing, recovering and restoring to design condition, the work that has been covered or concealed will be paid by the GC.

ARTICLE 14 - CONSTRUCTION SUPERVISION AND SCHEDULE

- a. On-site representatives of the GC shall manage the work and coordinate the work with the activities of the Owner and Project Designer to complete the project with the Owner's objectives of cost, time and quality. Throughout the progress of the work, the GC shall maintain a competent and adequate full-time staff approved by the Owner and Project Designer. It is understood that the designated and approved on-site representative of the GC will remain on the job and in responsible charge as long as those persons remain employed by the GC unless otherwise requested or agreed to by the Owner. The GC shall establish an on-site organization with appropriate lines of authority to act on behalf of the GC. Instructions, directions or notices given to the designated on-site authority shall be as

binding as if given to the GC. However, directions, instructions, and notices shall be confirmed in writing.

- b. The GC shall examine and study the drawings and specifications and fully understand the project design, and shall provide constant and efficient supervision to the work. Should he discover any discrepancies of any sort in the drawings or specifications, he shall report them to the designer without delay. He will not be held responsible for discrepancies in the drawings and/or specifications, but shall be held responsible to report them should they become known to him.
- c. The GC shall call and preside over monthly job site progress conferences. The GC shall require attendance from other subcontractors and material suppliers who can contribute toward maintaining required job progress. It shall be the principal purpose of these meetings, or conferences, to effect coordination, cooperation and assistance in every practical way toward the end of maintaining progress of the project on schedule and to complete the project within the specified contract time. The GC shall be prepared to assess progress of the work and to recommend remedial measures for correction of progress as may be appropriate. The GC with assistance from the Designer shall be the coordinator of the conferences and shall preside as chairman. The GC shall turn over a copy of his daily reports to the Designer and Owner at the job site progress conference. Owner will determine daily report format.
- d. The GC, if necessary, shall employ an engineer or a land surveyor licensed in the State of North Carolina to lay out the work and to establish a bench mark nearby in a location where same will not be disturbed and where direct instruments sights may be taken.
- e. Intentionally left blank for sequential numbering purposes.
- f. The CPM schedule shall be a complete computer generated network analysis showing the complete sequence of construction activities, identifying the work of separate stages and other logically grouped activities, indicating early and late start and early and late finish dates, float duration and a complete logic. Monthly updates will show the estimated completion of each activity.
- g. Intentionally left blank for sequential numbering purposes.
- h. The GC shall maintain the project CPM schedule, making monthly adjustments, updates, corrections, etc., which are necessary to finish the project within the time allotted by the contract. In doing so, the GC shall keep the designer fully informed as to all changes and updates to the schedule. The GC shall submit to the Project Designer a monthly report of the status of all work activities. The monthly status report shall show the actual work completed to date in comparison with the original amount of work scheduled. If the work is behind schedule, the GC must indicate in writing what measures are being taken to bring the work back on schedule and ensure that the contract completion date is not exceeded. If the work is greater than thirty (30) days behind schedule and no legitimate requests for time extensions are in process, then the GC shall prepare and submit to the Project Designer a recovery schedule for review and approval. Failure of the GC to abide by the directives

in this paragraph will give the Owner cause to exercise the remedies set forth in Article 29 of the General Conditions and pursue any other legal remedies allowed it by law.

ARTICLE 15 – {NOT USED}

ARTICLE 16 – {NOT USED}

ARTICLE 17 – {NOT USED}

ARTICLE 18 - DESIGNER'S STATUS

- a. The Project Designer shall provide liaison and necessary inspection of the work to ensure compliance with plans and specifications. He is the agent of the Owner only for the purpose of constructing this work and to the extent stipulated in the contract documents. He has authority to stop work or to order work removed, or to order corrections of faulty work where such action may be necessary to assure successful completion of the work.
- b. The Project Designer is the impartial interpreter of the contract documents, and, as such, he shall exercise his powers under the contract to enforce faithful performance by both the Owner and the GC, taking sides with neither.
- c. Should the Project Designer cease to be employed on the work for any reason whatsoever, then the Owner shall employ a competent replacement who shall assume the status of the former Project Designer.
- d. The Project Designer will make periodic inspections of the project at intervals appropriate to the stage of construction. He will inspect the progress, the quality and the quantity of the work.
- e. The Project Designer and the Owner shall have access to the work whenever it is in preparation and progress during normal working hours. The GC shall provide facilities for such access so the Designer may perform his functions under the contract documents.
- f. Based on the Project Designer's inspections and evaluations of the project, the Project Designer shall issue interpretations, directives and decisions as may be necessary to assist the GC in the administration of the project. His decisions relating to artistic effect and technical matters shall be final, provided such decisions are within the limitations of the contract. The GC's decisions, however, relating to means and methods, and administration of the contracts the GC holds are final.

ARTICLE 19 - CHANGES IN THE WORK

- a. The Owner may have changes made in the work covered by the contract. These changes will not invalidate and will not relieve or release the GC from any guarantee given by him pertinent to the contract provisions. These changes will not affect the validity of the guarantee bond and will not relieve the surety or sureties of said bond. All extra work shall be executed under conditions of the original contract.

- b. Except in an emergency endangering life or property, no change shall be made by the contractor except upon receipt of approved change order or written field order from the designer, countersigned by the owner authorizing such change. No claim for adjustments of the contract price shall be valid unless this procedure is followed.

A field order, transmitted by email, fax, or hand delivered, may be used where the change involved impacts the critical path of the work. A formal change order shall be issued as expeditiously as possible.

In the event of emergency endangering life or property, the County may direct the GC to proceed on a time and material basis whereupon the GC shall proceed and keep accurately on such form as may be required, a correct account of costs together with all proper invoices, payrolls and supporting data. Upon completion of the work the change order will be prepared as outlined under either Method "c(1)" or Method "c(2)" or both.

- c. In determining the values of changes, either additive or deductive, the GC is restricted to the use of the following methods:

- 1 Where the extra work involved is covered by unit prices quoted in the proposal, the value of the change shall be computed by application of unit prices based on quantities estimated or actual as agreed of the items involved, except in such cases where a quantity exceeds the estimated quantity allowance in the contract by one hundred percent (100%) or more. In such cases, either party may elect to proceed under subparagraph c2 herein. If neither party elects to proceed under c2, then unit prices shall apply.
- 2 The contracting parties shall negotiate and agree upon the equitable value of the change prior to issuance of the change order, and the change order shall stipulate the corresponding lump sum adjustment to the contract price.

- d. Under Paragraph "b" and Methods "c(2)" above, the allowances for overhead and profit combined for a Principal Trade or Specialty Contractor and all multi-tier subcontractors shall not exceed fifteen percent (15%) of **net cost** of the work. In the case of deductible change orders, under Method "c(2)" and Paragraph (b) above, the contractor shall include no less than five percent (5%) profit, but no allowances for overhead.

- e. The term "net cost" as used herein shall mean the difference between all proper cost additions and deductions. The "cost" as used herein shall be limited to the following:

- 1 The actual costs of materials and supplies incorporated or consumed as part of the project;
- 2 The actual costs of labor expended on the project site;
- 3 The actual costs of labor burden, limited to the costs of social security (FICA) and Medicare/Medicaid taxes; unemployment insurance costs; health/dental/vision insurance premiums; paid employee leave for holidays, vacation, sick leave, and/or petty leave, not to exceed a total of 30 days per year; retirement contributions;

worker's compensation insurance premiums; and the costs of general liability insurance when premiums are computed based on payroll amounts; the total of which shall not exceed thirty percent (30%) of the actual costs of labor;

- 4 The actual costs of rental for tools, excluding hand tools; equipment; machinery; and temporary facilities required for the project;
 - 5 The actual costs of premiums for bonds, insurance, permit fees and sales or use taxes related to the project. Overtime and extra pay for holidays and weekends shall not be incurred by the Owner as a cost item or otherwise.
- f. Should concealed conditions be encountered in the performance of the work below grade, or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the contract documents, the contract sum and time for completion may be equitably adjusted by change order upon claim by either party made within thirty (30) days after the condition has been identified. The cost of such change shall be arrived at by one of the foregoing methods. All change orders shall be supported by a breakdown showing method of arriving at net cost as defined above.
- g. In all change orders, the procedure will be for the Project Designer to request proposals for the change order work in writing. The Project Designer shall verify correctness. Within fourteen (14) days after receipt of the GC's proposal, the Project Designer shall prepare the change order and forward to the GC for his signature or otherwise respond, in writing, to the GC's proposal. Within seven (7) days after receipt of the change order executed by the GC, the Project Designer shall, certify the change order by his signature, and forward the change order and all supporting data to the Owner for the Owner's signature. The Owner shall execute the change order for final approval, within seven (7) days of receipt. Copies will be sent to the Project Designer for distribution to the GC and the surety. In case of emergency or extenuating circumstances, approval of changes may be obtained verbally by telephone or field orders approved by all parties, then shall be substantiated in writing as outlined under normal procedure.
- h. At the time of signing a change order, the GC shall be required to certify as follows:
- "I certify that my bonding company will be notified forthwith that my contract has been changed by the amount of this change order, and that a copy of the approved change order will be mailed upon receipt by me to my surety."
- i. A change order, when issued, shall be full compensation, or credit, for the work included, omitted or substituted. It shall show on its face the adjustment in time for completion of the project as a result of the change in the work.
- j. If, during the progress of the work, the Owner requests a change order and the GC's terms are unacceptable, the Owner, may require the GC to perform such work on a time and material basis in accordance with paragraph "b" above. Without prejudice, nothing in this paragraph shall preclude the Owner from performing or to have performed that portion of the work requested in the change order.

ARTICLE 20 - CLAIMS FOR EXTRA COST AND DISPUTE RESOLUTION

- a. Should the GC consider that as a result of any instructions given in any form by the designer, he is entitled to extra cost above that stated in the contract, he shall give written notice thereof to the designer within seven (7) days without delay. The written notice shall clearly state that a claim for extra cost is being made and shall provide a detailed justification for the extra cost. The GC shall not proceed with the work affected until further advised, except in emergency involving the safety of life or property, which condition is covered in Article 19(b) and Article 11(h). No claims for extra compensation will be considered unless the claim is so made. The Designer shall render a written decision within seven (7) days of receipt of claim.
- b. The GC shall not act on instructions received by him from persons other than the Project Designer, and any claims for extra compensation or extension of time on account of such instruction will not be honored. The Project Designer will not be responsible for misunderstandings claimed by the GC of verbal instructions which have not been confirmed in writing, and in no case shall instructions be interpreted as permitting a departure from the contract documents unless such instruction is confirmed in writing and supported by a properly authorized change order.
- c. To prevent disputes and litigation, it is agreed by the parties that any claim or dispute between the Owner and the Design Consultant, that any claim, dispute, or other matter in question arising out of or related to this Agreement shall be subject to voluntary non-binding mediation as a condition precedent to the institution of legal or equitable proceedings by either party. If the parties are unable to agree upon a certified mediator to hear their dispute, the President of the Buncombe County Bar Association shall name a mediator to hear the matter. During the pendency of any dispute and after a determination thereof, the parties to the dispute shall act in good faith to mitigate any potential damages including utilization of construction schedule changes and alternate means of construction. The costs of the process shall be divided equally between the parties to the dispute.
- d. The mediation session shall be private and shall be held in Buncombe County, North Carolina or in another North Carolina County agreed upon by both parties. Mediation under this Article 11 shall not be the cause for a delay of the Project which is the focus of the dispute.
- e. If, as a result of mediation, a voluntary settlement is reached and the parties to the dispute agree that such settlement shall be reduced to writing, the Mediator shall be deemed appointed and constituted an arbitrator for the sole purpose of signing the mediated settlement agreement. Such agreement shall be, and shall have the same force and effect as an arbitration award, and judgment may be entered upon it in accordance with applicable law in any court of competent jurisdiction.
- f. If the disputed issue cannot be resolved in mediation or either party disagrees with the results of the mediation, the parties may seek resolution in the General Court of Justice in the County of Buncombe and the State of North Carolina. If a party fails to comply in strict accordance with the requirements of this Article, the non-complying party specifically

waives all of its rights provided hereunder, including its rights and remedies under State law.

ARTICLE 21 - MINOR CHANGES IN THE WORK

The Project Designer will have the authority to order minor changes in the work not involving an adjustment in the contract sum or time for completion, and not inconsistent with the intent of the contract documents. Such changes shall be effected by written order, and shall be binding on the Owner and the GC.

ARTICLE 22 - UNCORRECTED FAULTY WORK

Should the correction of faulty or damaged work be considered inadvisable or inexpedient by the Owner and the Project Designer, the Owner shall be reimbursed by the GC. A change order will be issued to reflect a reduction in the contract sum.

ARTICLE 23 - TIME OF COMPLETION, DELAYS, EXTENSION OF TIME

- a. The final completion date will be as determined by the Owner, Designer and GC during the pre-construction phase of the project and will be incorporated into the contract for construction services between the Owner and the GC.
- b. The GC shall commence work to be performed under this agreement on a date to be specified in a written Notice to Proceed from the Project Designer and shall fully complete all work hereunder within the time of completion specified. For each day in excess of the above number of days, the GC shall pay the Owner the sum stated as liquidated damages reasonably estimated in advance to cover the losses to be incurred by the Owner by reason of failure of the GC to complete the work within the time specified, such time being in the essence of this contract and a material consideration thereof.
- c. If the GC is delayed at any time in the progress of his work by any act or negligence of the Owner or the Project Designer, or by any employee of either; by changes ordered in the work; by labor disputes at the project site; by abnormal weather conditions not reasonably anticipated for the locality where the work is performed; by unavoidable casualties; by any causes beyond the contractor's control; or by any other causes which the designer and Owner determine may justify the delay, then the contract time may be extended by change order for the time which the designer and Owner may determine is reasonable.

Time extensions will not be granted for rain, wind, snow or other natural phenomena of normal intensity for the locality where work is performed. For purpose of determining extent of delay attributable to unusual weather phenomena, a determination shall be made by comparing the weather for the contract period involved with the average of the preceding five (5) year climatic range during the same time interval based on the National Oceanic and Atmospheric Administration National Weather Service statistics for the locality where work is performed and on daily weather logs kept on the job site by the GC reflecting the effect of the weather on progress of the work and initialed by the designer's representative. No weather delays shall be considered after the building is dried in unless work claimed to be delayed is on the critical path of the baseline schedule or approved

updated schedule. Time extensions for weather delays, acts of God, labor disputes, fire, delays in transportation, unavoidable casualties or other delays which are beyond the control of the Owner do not entitle the Contractor to compensable damages for delays. Any contractor claim for compensable damages for delays is limited to delays caused solely by the owner or its agents. Contractor caused delays shall be accounted for before owner or designer caused delays in the case of concurrent delays.

- d. Request for extension of time shall be made in writing to the designer, copies to the owner, within twenty (20) days following cause of delay. In case of continuing cause for delay, the GC shall notify the designer copies to the owner, of the delay within twenty (20) days of the beginning of the delay and only one claim is necessary.
- e. The GC shall notify his surety in writing of extension of time granted.
- f. No claim shall be allowed on account of failure of the Project Designer to furnish drawings or instructions until twenty (20) days after demand for such drawings and/or instructions. See Article 5c. Demand must be in written form clearly stating the potential for delay unless the drawings or instructions are provided. Any delay granted will begin after the twenty (20) day demand period is concluded.

ARTICLE 24 - PARTIAL UTILIZATION/BENEFICIAL OCCUPANCY

- a. The Owner may desire to occupy or utilize all or a portion of the project when the work is substantially complete.
- b. Should the owner request a utilization of a building or portion thereof, the designer shall perform a designer final inspection of area after being notified by the contractor that the area is ready for such. After the contractor has completed designer final inspection punch list and the designer has verified, then the designer shall schedule a beneficial occupancy inspection at a time and date acceptable to the owner and contractor(s). If beneficial occupancy is granted, in such areas the following will be established:
 - 1. The beginning of guarantees and warranties period for the equipment necessary to support in the area.
 - 2. The owner assumes all responsibilities for utility costs for entire building.
 - 3. Contractor will obtain consent of surety.
 - 4. Contractor will obtain endorsement from insurance company permitting beneficial occupancy.
 - 5. The Owner shall have the right to exclude the GC from any part of the project which the Project Designer has so certified to be substantially complete, but the Owner will allow the GC reasonable access to complete or correct work to bring it into compliance with the contract.

6. Occupancy by the Owner under this article will in no way relieve the GC from his contractual requirement to complete the project within the specified time. The contractor will not be relieved of liquidated damages because of beneficial occupancy. The designer may prorate liquidated damages based on the percentage of project occupied.

ARTICLE 25 - FINAL INSPECTION, ACCEPTANCE, AND PROJECT CLOSEOUT

- a. Upon notification from the GC that the project is complete and ready for inspection, the Project Designer shall make a designer final inspection to verify that the project is complete and ready for final inspection. Prior to final inspection, the GC shall ensure that all items requiring corrective measures noted at the designer final inspection are complete. The Project Designer shall schedule a final inspection at a time and date acceptable to the Owner and the GC.
- b. At the final inspection, the designer and his consultants shall, if job conditions warrant, record a list of items that are found to be incomplete or not in accordance with the contract documents. At the conclusion of the final inspection, the designer and Owners' representative shall make the following determinations:
 1. That the project is completed and accepted.
 2. That the project is accepted subject to the correction of the list of discrepancies (punch list). All punch list items must be completed within thirty (30) days of final inspection or the Owner may invoke Article 28, Owner's Right to Do Work.
 3. That the project is not complete and another date for a final inspection will be established.
- c. Within fourteen (14) days of acceptance per Paragraph b1 or within fourteen (14) days after completion of punch list per Paragraph b2 above, the Project Designer shall certify the work and issue applicable certificate(s) of compliance.
- d. Any discrepancies listed or discovered after the date of final inspection and acceptance under Paragraphs b1 or b2 above shall be handled in accordance with Article 42.
- e. The date of acceptance will establish the following:
 1. The beginning of guarantees and warranties period.
 2. The date on which the GC's insurance coverage for public liability, property damage and builder's risk may be terminated.
 3. That no liquidated damages (if applicable) shall be assessed after this date.
 4. The termination date of utility cost to the GC (if applicable).

- f. **Prior to issuance of final acceptance date, the contractor shall have his authorized representatives visit the project and give full instructions to the designated personnel regarding operating, maintenance, care, and adjustment of all equipment and special construction elements. In addition, the contractor shall provide to the owner a complete instructional video (media format acceptable to the owner) on the operation, maintenance, care and adjustment of all equipment and special construction elements.**

ARTICLE 26 - CORRECTION OF WORK BEFORE FINAL PAYMENT

- a. Any work, materials, fabricated items or other parts of the work which have been condemned or declared not in accordance with the contract by the designer shall be promptly removed from the work site by the GC, and shall be immediately replaced by new work in accordance with the contract at no additional cost to the Owner. Work or property of the Owner, damaged or destroyed by virtue of such faulty work, shall be made good at the expense of the GC.
- b. Correction of condemned work described above shall commence within twenty-four (24) hours after receipt of notice from the Project Designer, and shall make satisfactory progress until completed.
- c. Should the GC fail to proceed with the required corrections, then the Owner may complete the work in accordance with the provisions of Article 28.

ARTICLE 27 - CORRECTION OF WORK AFTER FINAL PAYMENT

See Article 35, Performance Bond and Payment Bond, and Article 42, Guarantee. Neither the final certificate, final payment, occupancy of the premises by the Owner, nor any provision of the contract, nor any other act or instrument of the Owner, nor the Project Designer, shall relieve the GC from responsibility for negligence, or faulty material or workmanship, or failure to comply with the drawings and specifications. The GC shall correct or make good any defects due thereto and repair any damage resulting therefrom, which may appear during the guarantee period following final acceptance of the work except as stated otherwise under Article 42, Guarantee. The Owner will report any defects as they may appear to the GC and establish a time limit for completion of corrections by the GC. The Owner will be the judge as to the responsibility for correction of defects.

ARTICLE 28 - OWNER'S RIGHT TO DO WORK

If, during the progress of the work or during the period of guarantee, the GC fails to prosecute the work properly or to perform any provision of the contract, the Owner, after seven (7) days written notice sent by certified mail, return receipt requested, to the GC from the designer, may perform or have performed that portion of the work. The cost of the work may be deducted from any amounts due or to become due to the GC, such action and cost of same having been first approved by the Project Designer. Should the cost of such action of the Owner exceed the amount due or to become due the GC, then the GC or his surety, or both, shall be liable for and shall pay to the Owner the amount of said excess.

ARTICLE 29 - ANNULMENT OF CONTRACT

If the GC fails to begin the work under the contract within the time specified, or the progress of the work is not maintained on schedule, or the work is not completed within the time above specified, or fails to perform the work with sufficient workmen and equipment or with sufficient materials to ensure the prompt completion of said work, or shall perform the work unsuitably or shall discontinue the prosecution of the work, or if the GC shall become insolvent or be declared bankrupt or commit any act of bankruptcy or insolvency, or allow any final judgment to stand against him unsatisfied for a period of forty-eight (48) hours, or shall make an assignment for the benefit of creditors, or for any other cause whatsoever shall not carry on the work in an acceptable manner, the Owner may give notice in writing, sent by certified mail, return receipt requested, to the GC and his surety of such delay, neglect or default, specifying the same, and if the GC within a period of seven(7) days after such notice shall not proceed in accordance therewith, then the Owner shall, declare this contract in default, and, thereupon, the surety shall promptly take over the work and complete the performance of this contract in the manner and within the time frame specified. In the event the surety shall fail to take over the work to be done under this contract within seven(7) days after being so notified and notify the Owner in writing, sent by certified mail, return receipt requested, that he is taking the same over and stating that he will diligently pursue and complete the same, the Owner shall have full power and authority, without violating the contract, to take the prosecution of the work out of the hands of said GC, to appropriate or use any or all contract materials and equipment on the grounds as may be suitable and acceptable and may enter into an agreement, either by public letting or negotiation, for the completion of said contract according to the terms and provisions thereof or use such other methods as in his opinion shall be required for the completion of said contract in an acceptable manner. All costs and charges incurred by the Owner, together with the costs of completing the work under contract, shall be deducted from any monies due or which may become due said GC and surety. In case the expense so incurred by the Owner shall be less than the sum which would have been payable under the contract, if it had been completed by said GC, then the said GC and surety shall be entitled to receive the difference, but in case such expense shall exceed the sum which would have been payable under the contract, then the GC and the surety shall be liable and shall pay to the Owner the amount of said excess.

ARTICLE 30 – GENERAL CONTRACTOR’S RIGHT TO STOP WORK OR TERMINATE THE CONTRACT

- a. Should the work be stopped by order of a court having jurisdiction, or by order of any other public authority for a period of three months, due to cause beyond the fault or control of the GC, or if the Owner should fail or refuse to make payment on account of a certificate issued by the designer within forty-five (45) days after receipt of same, then the GC, after fifteen (15) days' written notice sent by certified mail, return receipt requested, to the Owner and the designer, may suspend operations on the work or terminate the contract.
- b. The Owner shall be liable to the GC for the cost of all materials delivered and work performed on this contract plus ten (10) percent overhead and profit and shall make such payment. The designer shall be the judge as to the correctness of such payment.

ARTICLE 31 - REQUEST FOR PAYMENT

- a. Not later than the fifth day of the month, the GC shall submit to the designer a request for payment for work done during the previous month. The request shall be in the form agreed upon between the GC and the designer, but shall show substantially the value of work done and materials delivered to the site during the period since the last payment, and shall sum up the financial status of the contract with the following information:
 1. Total of contract including change orders.
 2. Value of work completed to date.
 3. Less five percent (5%) retainage, provided however, that after fifty percent (50%) of the GC's work has been satisfactorily completed on schedule, with approval of the owner and written consent of the surety, further requirements for retainage will be waived only so long as work continues to be completed satisfactorily and on schedule.
 4. Less previous payments.
 5. Current amount due.
- b. Prior to submitting the first payment request, the GC shall prepare a schedule showing a breakdown of the contract price. This schedule of values will be submitted to & approved by the designer and Owner within 30 days of the Notice to Proceed. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the designer and Owner may require.
- c. Applications for payment shall be in a form agreed upon by the GC, designer and Owner and shall be prepared and supported by such data to substantiate the accuracy of the request as the designer may require.
- d. Intentionally left blank for sequential numbering purposes.
- e. Intentionally left blank for sequential numbering purposes.
- f. When payment is made on account of stored materials and equipment, such materials must be stored on the owner's property, and the requests for payments shall be accompanied by invoices or bills of sale or other evidence to establish the owner's title to such materials and equipment. Such payments will be made only for materials that have been customized or fabricated specifically for this project. Raw materials or commodity products including but not limited to piping, conduit, CMU, metal studs and gypsum board may not be submitted. Responsibility for such stored materials and equipment shall remain with the GC regardless of ownership title. Such stored materials and equipment shall not be removed from the owner's property. Should the space for storage on-site be limited, the GC, at his option, shall be permitted to store such materials and/or equipment in a suitable space off-site. Should the GC desire to include any such materials or equipment in his application for payment, they must be stored in the name of the owner in an independent, licensed, bonded warehouse approved by the designer and owner and located as close to the site as possible. The warehouse selected must be approved by the GC's bonding and

insurance companies; the material to be paid for shall be assigned to the owner and shall be inspected by the designer. Upon approval by the designer and owner of the storage facilities and materials and equipment, payment therefore will be certified. Responsibility for such stored materials and equipment shall remain with the GC. Such stored materials and equipment shall not be moved except for transportation to the project site. Under certain conditions, the designer may approve storage of materials at the point of manufacture, which conditions shall be approved by the designer and the owner prior to approval for the storage and shall include an agreement by the storing party which unconditionally gives the County absolute right to possession of the materials at any time. Bond, security and insurance protection shall continue to be the responsibility of the GC.

- g. In the event of beneficial occupancy, retainage of funds due the GC may be reduced with the approval of the Owner to an equitable amount to cover the list of items to be completed or corrected. Retainage may not be reduced to less than two and one-half (2 1/2) times the estimated value of the work to be completed or corrected. Reduction of retainage must be with the consent and approval of the GC's bonding company.

ARTICLE 32 - CERTIFICATES OF PAYMENT AND FINAL PAYMENT

- a. Within five (5) days from receipt of request for payment from the GC, the designer shall issue and forward to the Owner a certificate for payment. This certificate shall indicate the amount requested or as approved by the designer. If the certificate is not approved by the designer, he shall state in writing to the GC and the Owner his reasons for withholding payment.
- b. No certificate issued or payment made shall constitute an acceptance of the work or any part thereof. The making and acceptance of final payment shall constitute a waiver of all claims by the Owner except:
 - 1. Claims arising from unsettled liens or claims against the GC.
 - 2. Faulty work or materials appearing after final payment.
 - 3. Failure of the contractor to perform the work in accordance with drawings and specifications, such failure appearing after payment.
 - 4. As conditioned in the performance bond and payment bond.
- c. The making and acceptance of final payment shall constitute a waiver of all claims by the GC except those claims previously made and remaining unsettled (Article 20(c)).
- d. Prior to submitting request for final payment to the designer for approval, the GC shall fully comply with all requirements specified in the "project closeout" section of the specifications. These requirements include but not limited to the following:
 - 1. Submittal of Product and Operating Manuals, Warranties and Bonds, Guarantees, Maintenance Agreements, As-Built Drawings, Certificates of Inspection or

Approval from agencies having jurisdiction. (The designer must approve the Manuals prior to delivery to the Owner).

2. Transfer of required attic stock material and all keys in an organized manner.
 3. Record of Owner's training.
 4. Resolution of any final inspection discrepancies.
 5. Granting access to Contractor's records, if Owner's internal auditors have made a request for such access pursuant to Article 52.
- e. The GC shall forward to the designer, the final application for payment along with the following documents:
1. List of minority business subcontractors and material suppliers showing breakdown of contracts amounts and total actual payments to subcontractors and material suppliers.
 2. Affidavit of Release of Liens.
 3. Affidavit from GC of payment to material suppliers and subcontractors. (See Article 36).
 4. Consent of Surety to Final Payment.
 5. Certificates of state agencies required by state law.
- f. The designer will not authorize final payment until the work under contract has been certified by Project Designer, certificates of compliance issued, and the GC has complied with the closeout requirements. The designer shall forward the GC's final application for payment to the Owner along with respective certificate(s) of compliance required by law.

ARTICLE 33 - PAYMENTS WITHHELD

- a. The designer may withhold payment for the following reasons:
1. Faulty work not corrected.
 2. The unpaid balance on the contract is insufficient to complete the work in the judgment of the designer.
 3. To provide for sufficient contract balance to cover liquidated damages that will be assessed against the GC.
- b. The Owner may authorize the withholding of payment for the following reasons:
1. Claims filed against the GC or evidence that a claim will be filed.

2. Evidence that subcontractors have not been paid.
- c. Intentionally left blank for sequential numbering purposes.
- d. When grounds for withholding payments have been removed, payment will be released. Delay of payment due the GC without cause will make owner liable for payment of interest to the GC in accordance with G.S. 143-134.1. As provided in G.S.143-134.1(e) the owner shall not be liable for interest on payments withheld by the owner for unsatisfactory job progress, defective construction not remedied, disputed work, or third-party claims filed against the owner or reasonable evidence that a third-party claim will be filed.

ARTICLE 34 - MINIMUM INSURANCE REQUIREMENTS

GC agrees their insurance policies shall be endorsed evidencing the minimum insurance coverage and limits set forth below prior to the County's signing of this Agreement. The insurance coverage and limits set forth below shall be deemed minimum coverage limits and shall not be construed in any way as a limitation on GC's duty to carry adequate insurance. All policies of insurance shall be on a primary basis, non-contributory with any other insurance coverages and/or self-insurance carried by the County. The minimum insurance coverage which the GC shall procure and maintain at its sole cost and expense during the term of the Agreement is as follows:

Worker's Compensation. Coverage at the statutory limits in compliance with applicable State and Federal laws. GC shall ensure that any subcontractors also have workers compensation coverage at the statutory limits.

Employer's Liability. Coverage with minimum limits of \$1,000,000 each employee accident and \$1,000,000 each employee disease.

Commercial General Liability. Insurance covering all operations performed by the GC with a minimum limit of \$5,000,000 per occurrence with a \$10,000,000 aggregate. Coverage shall not contain any endorsement(s) excluding nor limiting Product/Completed Operations or Contractual Liability. Buncombe County shall be named as an additional insured under the policy.

Commercial general liability coverage shall not restrict coverage under such policy with respect to the escape or release of pollutants at or from a site owned or occupied by or rented or loaned to County. This policy shall not limit the scope of coverage for liability arising from pollution, explosion, collapse, underground property damage or damage to the work.

Professional Liability. Insurance covering GC for acts, errors, or omissions in performance of the Agreement with a minimum limit of \$1,000,000 per claim with a \$2,000,000 aggregate. Policy is to be on a primary basis if other professional liability is carried. This policy shall remain in effect three (3) years after project completion.

Contractor's Pollution Liability. If GC's commercial general liability policy referenced above does not include an endorsement including the Limited Pollution Liability Extension, GC will be required to purchase a Pollution Liability policy with limits of \$1,000,000 per loss and \$1,000,000 aggregate. GC shall keep this policy in effect 3 years after completion of the project. Buncombe

County shall be named as an additional insured with respect to liability and defense of suits arising out of the activities performed by, or on behalf of GC, including completed operations.

Business Automobile Liability. Insurance covering all owned, non-owned, and hired vehicles used in performance of this Agreement. The minimum combined single limit per occurrence shall be \$1,000,000 and shall include uninsured/underinsured motorist coverage per N.C. Gen. Stat. § 20-279.21.

Umbrella/Excess Liability. If the underlying liability policy limits are less than those required, GC may provide an excess or umbrella policy to meet the required limits of insurance. The excess or umbrella policy shall extend coverage over the underlying general liability policy. Any additional insured under any policy of the underlying insurance will automatically be an additional insured under this insurance.

Builder's Risk. GC shall purchase and maintain property insurance (Builder's Risk) in the amount of the initial contract plus values of subsequent modification, change orders, and loss of materials supplied or installed by others comprising the value of the entire project at the site on a replacement cost basis (subject to such deductible amounts as may be required by laws and regulations). Such builder's risk insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed to in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made or until no person or entity other than Buncombe County has insurable interest in the property to be covered, whichever is earlier. This insurance shall include the interests of the Owner, Contractor, Subcontractors, Owner's Representatives and Owner's Representative's Consultants in the Work.

The Builders' Risk Coverage shall be written on a Special Covered Cause of Loss form and shall include theft, vandalism, malicious mischief, collapse, false-work, temporary buildings, transit, debris removal including demolition, increased cost of construction, architect's fees and expenses, soft costs, flood (including water damage), earthquake, and if applicable, all below and above ground structures, piping, foundations including underground water and sewer mains, piling including the ground on which the structure rests and excavation, backfilling, filling, and grading. Insured property shall include portions of the work located away from the site but intended for use at the site, and shall also cover portions of the work in transit. The policy shall cover the cost of removing debris, including demolition as may be made legally necessary by the operation of any law, ordinance or regulation.

Contractors engaged in modifications of existing structures are required to secure a Beneficial Occupancy Endorsement to enable the County to occupy the facility during construction.

Additional Insurance Provisions.

If GC maintains higher limits than the minimums shown above, the County requires and shall be entitled to coverage for the higher limits maintained by GC. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the County.

GC shall provide the County with certificates of insurance listing County as the certificate holder and evidencing the above amounts. Buncombe County shall be named as additional insured under the commercial general liability policy and if applicable, GC's Pollution Liability policy. Before

commencing work and for any subsequent renewals, GC shall furnish the County with certificates of insurance on an approved form.

Each insurance policy required above shall state that coverage shall not be canceled, except with written notice to the County, delivered in accordance with the policy provisions. All insurance shall be procured from reputable insurers authorized and qualified to do business in North Carolina with a rating of A- or better as determined by A. M. Best Company and shall be in a form acceptable to the County.

GC shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and GC shall ensure that Buncombe County is an additional insured on insurance required from subcontractors.

Waiver of Subrogation: GC hereby grants to County a waiver of any right to subrogation which any insurer of said Contractor may acquire against the County by virtue of payment of any loss under such insurance. GC agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation.

Providing and maintaining adequate insurance coverage is a material obligation of GC and is of the essence of this contract. GC may meet its requirements of maintaining specified coverage and limits by demonstrating to the County that there is in force insurance with equivalent coverage and limits that will offer at least the same protection to the County. GC shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or this contract. The limits of coverage under each insurance policy maintained by GC shall not be interpreted as limiting the contractor's liability and obligations under the contract.

Nothing in this section is intended to affect or abrogate Buncombe County's governmental immunity.

ARTICLE 35 - PERFORMANCE BOND AND PAYMENT BOND

- a. The GC shall furnish a performance bond and payment bond executed by a surety company authorized to do business in North Carolina. The bonds shall be in the full contract amount, for the entire project. Bonds shall be executed in the form bound with the specifications.
- b. All bonds shall be countersigned by an authorized agent of the bonding company who is licensed to do business in North Carolina.

ARTICLE 36 - CONTRACTOR'S AFFIDAVIT

The final payment of retained amount due the GC on account of the contract shall not become due until the GC has furnished to the Owner through the designer an affidavit signed, sworn and notarized to the effect that all payments for materials, services or subcontracted work in connection with his contract have been satisfied, and that no claims or liens exist against the GC in connection with this contract.

ARTICLE 37 - ASSIGNMENTS

The GC shall not assign any portion of this contract nor subcontract in its entirety. Except as may be required under terms of the performance bond or payment bond, no funds or sums of money due or become due the GC under the contract may be assigned.

ARTICLE 38 - USE OF PREMISES

- a. The GC shall confine his apparatus, the storage of materials and the operations of his workmen to limits indicated by law, ordinances, permits or directions of the designer and shall not exceed those established limits in his operations.
- b. The GC shall not load or permit any part of the structure to be loaded with a weight that will endanger its safety.
- c. The GC shall enforce the designer's and owner's instructions regarding signs, advertisements, fires and smoking.
- d. No firearms, any type of alcoholic beverages or drugs (other than those prescribed by a physician) will be permitted at the job site.

ARTICLE 39 - CUTTING, PATCHING AND DIGGING

- a. The GC shall ensure that all cutting, fitting or patching that may be required to make the work come together properly and fit it to receive or be received by work of other contractors shown upon or reasonably implied by the drawings and specifications for the completed structure, as the designer may direct.
- b. Any cost brought about by defective or ill-timed work shall be borne by the party responsible therefor.
- c. No subcontractor shall endanger any work of another such contractor by cutting, digging or other means, nor shall he cut or alter the work of any other such contractor without the consent of the designer and the affected contractor(s).

ARTICLE 40 - UTILITIES, STRUCTURES, SIGNS

- a. The GC shall provide necessary and adequate facilities for water, electricity, gas, oil, sewer, and other utility services, which may be necessary and required for completion of the project. If the Owner specifies that the GC is to pay all utilities, any permanent meters installed shall be listed in the GC's name until his work is fully accepted by the Owner. The Owner may: (1) pay utilities cost directly, (2) require the GC to pay all utilities cost, (3) or reimburse the GC for the actual cost of utilities. The Owner or GC, as applicable, may recover actual costs of metered utilities from the responsible party should delays occur

in project completion. Coordination of the work of the utility companies during construction is the sole responsibility of the GC.

- b. If applicable Meters shall be relisted in the Owner's name on the day following completion and acceptance of the GC's work, and the Owner shall pay for services used after that date.
- c. Prior to the operation of permanent systems, the GC will provide temporary power, lighting, water, and heat to maintain space temperature above freezing, as required for construction operations.
- d. The GC shall ensure that the permanent building systems are in sufficient readiness for furnishing temporary climatic control at the time a building is enclosed and secured. The HVAC systems shall maintain climatic control throughout the enclosed portion of the building sufficient to allow completion of the interior finishes of the building. A building shall be considered enclosed and secured when windows, doorways (exterior, mechanical, and electrical equipment rooms), and hardware are installed; and other openings have protection, which will provide reasonable climatic control. The appropriate time to start the mechanical systems and climatic condition shall be jointly determined by the GC and the designer. Use of the equipment in this manner shall in no way affect the warranty requirements of the GC.
- e. The GC shall coordinate the work so that the building's permanent power wiring distribution system shall be in sufficient readiness to provide power as required by the HVAC contractor for temporary climatic control.
- f. The GC shall coordinate the work so that the building's permanent lighting system shall be ready at the time interior painting and finishing begins and shall provide adequate lighting in those areas where interior painting and finishing is being performed.
- g. The GC shall be responsible for his permanently fixed service facilities and systems in use during progress of the work. The following procedures shall be strictly adhered to:
 - 1. Prior to acceptance of work by the Designer and Owner, the GC shall coordinate the removal and replacement of any parts of the permanent building systems damaged through use during construction.
 - 2. Temporary filters as recommended by the equipment manufacturer in order to keep the equipment and ductwork clean and free of dust and debris shall be installed in each of the heating and air conditioning units and at each return grille during construction. New filters shall be installed in each unit prior to the Owner's acceptance of the work.
 - 3. Extra effort shall be maintained to keep the building and the site adjacent to the building clean and under no circumstances shall air systems be operated if finishing and site work operations are creating dust in excess of what would be considered normal if the building were occupied.

4. It shall be understood that any warranty on equipment presented to the Owner shall extend from the day of final acceptance by the Owner. The cost of warranting the equipment during operation in the finishing stages of construction shall be borne by the contractor whose system is utilized.
5. The GC shall ensure that all lamps are in proper working condition at the time of final project acceptance.
- h. The GC shall provide, if required and where directed, a shed for toilet facilities and shall furnish and install in this shed all water closets required for a complete and adequate sanitary arrangement. These facilities will be available to other subcontractors on the job and shall be kept in a neat and sanitary condition at all times. Chemical toilets are acceptable.
- i. The GC shall, if required by Owner and where directed, erect a temporary field office, complete with lights, telephone, heat and air conditioning. A portion of this office shall be partitioned off, of sufficient size, for the use of a resident inspector, should the designer so direct.
- j. On multi-story construction projects, the GC shall either provide or ensure that temporary elevators, lifts, or other necessary special equipment is available for the general use of all contractors. The cost for such elevators, lifts or other special equipment and the operation thereof shall be included in the GC bid.
- k. The GC will erect one sign on the project if required. The sign shall be of sound construction, and shall be neatly lettered with black letters on white background. The sign shall bear the name of the project, and the GC's name, and the name of the designer and consultants. Directional signs may be erected on the Owner's property subject to approval of the Owner with respect to size, style and location of such directional signs. Such signs may bear the name of the contractor and a directional symbol. No other signs will be permitted except by permission of the Owner.

ARTICLE 41 - CLEANING UP

- a. The GC shall ensure that the building and surrounding area is reasonably free from rubbish at all times, and shall remove debris from the site on a timely basis or when directed to do so by the designer. The GC shall provide an on-site refuse container(s) for the use of all subcontractors. The GC shall ensure that each subcontractor removes their rubbish and debris from the building on a daily basis. The GC shall ensure that the building is broom cleaned as required to minimize dust and dirt accumulation.
- b. The GC shall provide and maintain suitable all-weather access to the building.
- c. Before final inspection and acceptance of the building, the GC shall ensure that all portions of the work are clean, including glass, hardware, fixtures, masonry, tile and marble (using no acid), clean and wax all floors as specified, and completely prepare the building for use by the Owner, with no cleaning required by the Owner.

ARTICLE 42 - GUARANTEE

- a. The GC shall unconditionally guarantee materials and workmanship against patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve (12) months following the date of final acceptance of the work or beneficial occupancy and shall replace such defective materials or workmanship without cost to the Owner.
- b. Where items of equipment or material carry a manufacturer's warranty for any period in excess of twelve (12) months, then the manufacturer's warranty shall apply for that particular piece of equipment or material. The GC shall replace such defective equipment or materials, without cost to the Owner, within the manufacturer's warranty period.
- c. Additionally, the Owner may bring an action for latent defects caused by the negligence of the GC, which is hidden or not readily apparent to the Owner at the time of beneficial occupancy or final acceptance, whichever occurred first, in accordance with applicable law.
- d. Guarantees for roof, equipment, materials, and supplies shall be stipulated in the specifications sections governing such roof, equipment, materials, or supplies.

ARTICLE 43 - CODES AND STANDARDS

Wherever reference is given to codes, standard specifications or other data published by regulating agencies including, but not limited to, national electrical codes, North Carolina State Building Codes, federal specifications, ASTM specifications, various institute specifications, etc., it shall be understood that such reference is to the latest edition including addenda published prior to the date of the contract documents.

ARTICLE 44 - INDEMNIFICATION

To the fullest extent permitted by law, the GC shall indemnify and hold harmless the Owner, the designer and the agents, consultants and employees of the Owner and designer, from and against all claims, damages, losses and expenses, including, but not limited to, attorneys' fees, arising out of or resulting from the performance or failure of performance of the work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom, and (2) is caused in whole or in part by any negligent act or omission of the GC, the GC's subcontractor, or the agents of either the GC or the GC's subcontractor. Such obligation shall not be construed to negate, abridge or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this article.

ARTICLE 45 - TAXES

- a. Federal excise taxes do not apply to materials entering into local government work.

- b. Federal transportation taxes do not apply to materials entering into local government work (Internal Revenue Code, Section 3475(b) as amended).
- c. North Carolina sales tax and use tax, as required by law, do apply to materials entering into local government work and such costs shall be included in the bid proposal and contract sum.
- d. Local option sales and use taxes, as required by law, do apply to materials entering into local government work as applicable and such costs shall be included in the bid proposal and contract sum.
- e. Accounting Procedures for Refund of County Sales & Use Tax Amount of county sales and use tax paid per GC's statements:

GC's performing contracts for local government agencies shall ensure that they and all subcontractors will provide information to give the local government agency for whose project the materials, supplies, fixtures and/or equipment was purchased a signed statement containing the information listed in N.C.G.S. 105-164.14(e).

The Department of Revenue has agreed that in lieu of obtaining copies of sales receipts from contractors, an agency may obtain a certified statement from the contractors setting forth the date, the type of property and the cost of the property purchased from each vendor, the county in which the vendor made the sale and the amount of local sales and use taxes paid thereon. If the property was purchased out-of-state, the county in which the property was delivered should be listed. The contractor should also be notified that the certified statement may be subject to audit.

In the event the contractors make several purchases from the same vendor, such certified statement must indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices, the counties, and the county sales and use taxes paid thereon.

Name of taxing county: The position of a sale is the retailer's place of business located within a taxing county where the vendor becomes contractually obligated to make the sale. Therefore, it is important that the county tax be reported for the county of sale rather than the county of use.

When property is purchased from out-of-state vendors and the county tax is charged, the county should be identified where delivery is made when reporting the county tax.

Such statement must also include the cost of any tangible personal property withdrawn from the contractor's warehouse stock and the amount of county sales or use tax paid thereon by the GC.

Contractors are not to include any tax paid on supplies, tools and equipment which they use to perform their contracts and should include only those building materials,

supplies, fixtures and equipment which actually become a part of or annexed to the building or structure.

ARTICLE 46 - EQUAL OPPORTUNITY CLAUSE

The non-discrimination clause contained in Section 202 (Federal) Executive Order 11246, as amended by Executive Order 11375, relative to equal employment opportunity for all persons without regard to race, color, religion, sex or national origin, and the implementing rules and regulations prescribed by the Secretary of Labor, are incorporated herein.

ARTICLE 47 - EMPLOYMENT OF INDIVIDUALS WITH DISABILITIES

The GC agrees not to discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant is qualified. The GC agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices.

ARTICLE 48 - ASBESTOS-CONTAINING MATERIALS (ACM)

The State of North Carolina has attempted to address all asbestos-containing materials that are to be disturbed in the project. However, there may be other asbestos-containing materials in the work areas that are not to be disturbed and do not create an exposure hazard. General Contractors are reminded of the requirements of instructions under General Conditions of the Contract, titled Examination of Conditions. Statute 130A, Article 19, amended August 3, 1989, established the Asbestos Hazard Management Program that controls asbestos abatement in North Carolina.

ARTICLE 49 - MINORITY BUSINESS PARTICIPATION

N.C.G.S. 143-128.2 establishes a ten percent (10%) goal for participation by minority businesses in total value of work for each State building project and requires documentation of good faith efforts for meeting that goal. The document, *Guidelines for Recruitment and Selection of Minority Businesses for Participation in State Construction Contracts* including Affidavits and Appendix F are hereby incorporated into and made a part of this contract.

ARTICLE 50 – CONTRACTOR EVALUATION

The GC's overall work performance on the project shall be fairly evaluated in accordance with the State Building Commission policy and procedures, for determining qualifications to compete for future capital improvement projects for institutions and agencies of the State of North Carolina. In addition to final evaluation, interim evaluation may be prepared during the progress of project. The document, General Contractor Evaluation Procedures, is hereby incorporated and made a part of this contract. The Owner may request the GC's comments to evaluate the designer.

ARTICLE 51 – GIFTS

Pursuant to N.C. Gen. Stat. § 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, General Contractor, design professional, engineer, subcontractor, supplier,

vendor, etc.), to make gifts or to give favors to any County employee. This prohibition covers those vendors and contractors who: (1) have a contract with a governmental agency; or (2) have performed under such a contract within the past year; or (3) anticipate bidding on such a contract in the future. For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review G.S. Sec. 133-32.

During the construction of the Project, the Contractor is prohibited from making gifts to any of the Owner's employees, Owner's project representatives (architect, engineers, General Contractor and their employees), employees of the County that may have any involvement, influence, responsibilities, oversight, management and/or duties that pertain to and/or relate to the contract administration, financial administration and/or disposition of claims arising from and/or relating to the Contract and/or Project.

ARTICLE 52 – AUDITING-ACCESS TO PERSONS AND RECORDS

In accordance with N.C. General Statute 147-64.7, the State Auditor shall have access to Contractor's officers, employees, agents and/or other persons in control of and/or responsible for the Contractor's records that relate to this Contracts for purposes of conducting audits under the referenced statute. The Owner's internal auditors shall also have the right to access and copy the Contractor's records relating to the Contract and Project during the term of the Contract and within two years following the completion of the Project/close-out of the Contract to verify accounts, accuracy, information, calculations and/or data affecting and/or relating to Contractor's requests for payment, requests for change orders, change orders, claims for extra work, requests for time extensions, and related claims for delay/extended general conditions costs, claims for lost productivity, claims for loss efficiency, claims for idle equipment or labor, claims for price/cost escalation, pass-through claims of subcontractors and/or suppliers, and/or any other type of claim for payment or damages from Owner and/or its project representatives.

ARTICLE 53 – LEFT BLANK FOR NUMBERING PURPOSES

ARTICLE 54 – TERMINATION FOR CONVENIENCE

- a. Owner may at any time and for any reason terminate GC's services and work at Owner's convenience. Upon receipt of such notice, GC shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities and supplies in connection with the performance of this Agreement.
- b. Upon such termination, GC shall be entitled to payment only as follows: (1) the actual cost of the work completed in conformity with this Agreement; plus, (2) such other costs actually incurred by GC as are permitted by the prime contract and approved by Owner; (3) plus ten percent (10%) of the cost of the work referred to in subparagraph (1) above for overhead and profit. There shall be deducted from such sums as provided in this subparagraph the amount of any payments made to GC prior to the date of the termination of this Agreement. GC shall not be entitled to any claim or claim of lien against Owner for any additional compensation or damages in the event of such termination and payment.

**SECTION NCOC
MEET NORTH CAROLINA ONE-CALL CENTER**

North Carolina One-Call is a Corporation formed and funded by participating utility companies and municipalities in the interest of community and job safety and improved service through damage reduction to the utilities.

A one-call toll free number, **1-800-632-4949 (811)**, provides an avenue to all of the participating members from any point within the State of North Carolina.

Anyone proposing to excavate, dig, bore, tunnel, blast or disturb the earth in any manner in which buried utilities may be damaged is requested to call the toll-free number between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday, forty-eight hours before starting the proposed work.

Within minutes of your telephone call, the participating members will be made aware of your plans and will be given pertinent information that has been provided by you about your planned work. You will be told the names of the participating members from whom you can expect a response. If there are buried facilities in the path of your activity, the route of the utilities will be staked and/or marked at no expense to you. If there are no facilities in the area of the planned work, you will be called or notified by a representative of the participating company accordingly.

Should a non-participating utility operator be serving your area, we recommend that you call them on an individual basis. All utility operators, whether company or municipality, will be provided an opportunity to become a member of North Carolina One-Call.

Naturally, knowing the route of the utilities, the excavator is expected to exercise caution and to avoid damage as the project progresses.

Damage prevention does not just happen - it is a planned and orderly process through which each of us can participate - **Yes, we can and will dramatically reduce damages to the utilities in the State of North Carolina! Thanks for your help.**

**BEFORE YOU DIG
IN THE INTEREST OF COMMUNITY AND JOB SAFETY
AND IMPROVED SERVICE
CALL NORTH CAROLINA ONE-CALL**

**1-800-632-4949
(811)**

END OF SECTION

DIVISION 1

GENERAL REQUIREMENTS

**SECTION 10 0100
SUPPLEMENTAL CONSTRUCTION REQUIREMENTS**

PART 1 - GENERAL

1.1 SUMMARY OF WORK

The project generally consists of the milling, proofrolling of subgrade, installation of compacted aggregate base course (CABC), paving, striping, removal and reinstallation of riprap ditches, restoration of adjacent surfaces, seeding, site clean-up, and other related items as indicated on the Contract Drawings

1.2 PROJECT MEETINGS

A. PRECONSTRUCTION CONFERENCE

A preconstruction conference will be scheduled by the Engineer after issuance of the Notice of Award. The Contractor and his major subcontractors shall attend the meeting, which will be chaired by the Engineer or his representative. The purpose of the pre-construction conference will be to discuss administration of the Contract and the execution of work, and to answer any questions relative to performance of work under these Contract Documents. All decisions, instructions, and interpretations made at this conference shall be binding and conclusive. The proceedings of this conference will be recorded and copies of the proceeding minutes will be issued to the Contractor for his use and distribution to his subcontractors.

B. PROGRESS MEETINGS

The Contractor and any subcontractors, material suppliers or vendors whose presence is necessary or requested shall attend meetings, referred to as Progress Meetings, when requested by the Engineer or his representative for the purpose of discussing the execution of the Work. Each meeting will be held at the time and place designated by the Engineer or his representative. Any decisions, instructions, and interpretations made at these meetings shall be binding and conclusive on the Contractor and such decisions, instructions, and interpretations will be confirmed in writing by the Engineer or his representative. The proceedings of these meetings will be recorded and the Contractor will be furnished with a reasonable number of copies for his use and for his distribution to the subcontractors, material suppliers, and vendors involved.

1.3 PROJECT PAYMENTS AND RETAINAGE

A. The Owner may retain a portion of the amount otherwise due the Contractor. Except as provided elsewhere, the amount retained by the Owner shall be limited to the following:

1. Withholding of not more than 10% of the payment claimed until work is 50% complete.
2. When the work is 50% complete, reduction of the withholding to 5% of the dollar value of all work satisfactorily completed to date, provided that the Contractor is making satisfactory progress and there is not specific cause for greater withholding. The Owner may reinstate up to 10% withholding if the Owner determines, at his discretion, that the Contractor is not making satisfactory progress or there is other specific cause for such withholding.
3. When the work is substantially complete (operational or beneficial occupancy), withholding shall be further reduced below 5% to only that amount necessary to assure completion provided that amount is less than 5%.

4. The Owner may accept securities negotiable without recourse, conditions or restrictions; a release of retainage bond; or an irrevocable letter of credit provided by the Contractor in lieu of all or part of the cash retainage.
- B. For unit price projects, the Contractor may use the "Unit Bid Item Summary" form included in "Section 10 0150 Recommended Standard Forms", or a similar form that provides the required information.
- C. SALES TAX STATEMENT

When requested by the Owner, each request for progress payment submitted by the Contractor shall include a sales tax reimbursement statement. The Contractor shall utilize the "Sales Tax Reimbursement Form" included in "Section 10 0150 Recommended Standard Forms", or a similar form that provides the required information and certification.

1.4 SUBMITTALS

A. GENERAL

All transmittals from the Contractor shall be accompanied by a transmittal cover form that includes pertinent information related to the Project and the particular transmittal.

B. CONSTRUCTION SCHEDULE

The Contractor shall, within ten (10) days after receipt of the Notice of Award, prepare and submit to the Engineer for approval a practicable construction schedule for the required Site Work showing the order in which the Contractor proposes to carry on the Work, the date on which he will start the several salient features, and the contemplated dates for completing such salient features. The schedule shall be in the form required by the Contract Documents and shall maintain current with each submittal for progress payment, at least the following information:

1. The various classes and area of work broken down into times projected for submittals, approvals, and procurement; times for installation and erection; and times for testing and inspection.
2. The work completed and the work remaining to complete the Project.
3. Any items of work which will delay the start or completion of other major items of work so as to delay completion of the whole Project.

C. NOT USED

D. MATERIAL SUPPLIERS AND SUBCONTRACTOR LISTINGS

As soon as possible, but in no case more than fifteen (15) days after receipt of the Notice of Award, the Contractor shall supply the names and addresses of all major material suppliers and subcontractors to the Engineer.

E. SHOP DRAWINGS AND SAMPLES

The Contractor shall submit shop drawings for all material items to be utilized in the construction of the Project. The Contractor shall submit shop drawings accompanied by the "Submittal and Routing Form" included in "Section 10 0150 Recommended Standard Forms".

F. RECORD DOCUMENTS

The Contractor shall keep a complete and accurate record of changes and/or deviations from the Contract Documents and shop drawings, indicating the Work as actually installed. Changes shall be neatly and correctly shown on the respective portion of the affected document, using prints of the Drawings affected, with appropriate supplementary notes. The record set of marked-up Drawings and shop drawings shall be kept at the job site during construction and be available for inspection by the Engineer. These marked prints shall be included in the package of final documentation, and shall be submitted before final payment is released.

1.5 TYPES AND LIMITS OF INSURANCE

A. CERTIFICATES OF INSURANCE

Satisfactory certificates of insurance shall be filed with the Owner through the Engineer prior to starting any construction work on this Contract. The Owner and Bank will be named as additional insureds on all policies of insurance and all certificates shall contain a thirty (30) day Notice of Cancellation. All such insurance shall meet all laws of the State of North Carolina and shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. In connection with the provisions set forth in the General Conditions Article 2.7, the Notice to Proceed will not be issued until satisfactory certificates of insurance are filed.

The Contractor shall purchase and maintain at his own cost and expense the insurance requirements as outlined in "Section CC Form of Construction Contract".

B. HOLD HARMLESS

To the fullest extent permitted by laws and regulations, the Contractor covenants and agrees that it shall protect, indemnify, and save harmless the Owner and its officials, agents, and employees, and the Bank from and against any and all liability, claims, demands, damages, losses, suits, actions, judgments and costs, including attorneys fees, for personal injury including death, property damage, or both, sustained or claimed to have been sustained by any person, firm or corporation in the performance of this Contract or the actions of the Contractor or its officials, employees, or contractors under this Contract or under contracts entered into by the Contractor in connection with this Contract. This indemnification shall survive the termination of the Contract.

1.6 DELIVERY, STORAGE AND HANDLING

- A. The Contractor shall be responsible for delivery, storage, and handling of all materials and equipment, unless otherwise noted.

1.7 NOT USED

PART 2 - PRODUCTS

2.1 EQUIPMENT AND MATERIAL STANDARDS

- A. All equipment and materials of construction described in this specification shall meet the more stringent requirements of the applicable codes listed below:
1. OSHA - Occupational Safety and Health Administration.
 2. ASTM - American Society for Testing Materials.
 3. ANSI - American National Standards Institute.
 4. NCDOT – North Carolina Department of Transportation.

2.2 NOT USED

PART 3 - EXECUTION

3.1 SPECIAL REQUIREMENTS

A. LIMITS OF CONSTRUCTION

The Contractor shall confine all operations and personnel to the limits of construction as shown on the Plans. There shall be no disturbance whatsoever of any areas outside the limits of construction nor shall the workmen be allowed to travel at will through the surrounding private or school property.

B. CONSTRUCTION SUPERINTENDENT

The Contractor shall place in charge of the Work a competent and reliable superintendent, who shall have the authority to act for the Contractor and who shall be accountable to the Engineer. The Contractor shall, at all times, employ labor and equipment sufficient to accomplish the several classes of work to full completion in the manner and time specified.

C. SITE CONDITIONS

1. The Contractor shall maintain the Work and the project grounds free from rubbish, debris, and waste materials during all phases of the Work.
2. Immediately upon completion of the Work and prior to final acceptance, the Contractor shall remove all rubbish, debris, temporary structures, equipment, excess or waste materials and shall leave the Work and project grounds in a neat and orderly condition that is satisfactory to the Engineer.
3. All vegetation outside the limits of construction (shrubs, trees, landscaping, etc.) not scheduled to be removed shall be protected during construction. Any damage to such vegetation shall be restored or properly replaced to the satisfaction of the property owner, at the Contractor's expense.
4. All existing storm drainage facilities (including but not limited to catch basins, drop inlets, pipes, rocks or concrete slabs covering pipe inlets, headwalls, etc.) shall be protected from damage during construction. Adequate erosion control measures shall be implemented during construction to prevent sedimentation into the storm drainage system and receiving watercourses.
5. Normal hours of operation for the Contractor shall be 8 AM in the morning to 7 AM in the evening, Monday through Friday. Any work outside those hours must be pre-approved by the Engineer and Owner. Work on Saturday or Sunday is allowed with the prior notification to the Owner. The Owner and the Engineer shall be provided a schedule prior to beginning the work indicating the hours and days anticipated for the work of the project.
6. All Contractor personnel shall be properly dressed properly for work, included but not limited to, shirts worn at all times, hard hats, and safety vests. All personnel must carry proper credentials which identify them as employees of the Contractor. All personnel shall limit their activities to the limits of construction and work areas and shall not trespass onto adjacent properties unless approved by the County.
7. Personal vehicles will be allowed to park in the project area, only as long as they do not interfere with business or public parking and as otherwise approved by the Owner and Engineer.
8. The locations of portable toilet facilities for the Contractor's use shall be approved by the Owner and Engineer prior to their placement, and shall be moved as construction progresses.

9. The Contractor shall be responsible for repairs to utilities damaged during construction, at the Contractor's own expense.
10. Any replacement of a publicly owned utility shall be inspected by personnel from the local agency having jurisdiction over the utility prior to and during construction. All utility construction must be performed in accordance with the latest specifications of the utility owner.
11. The Engineer will schedule progress meetings during the project as required to maintain communications, discuss schedules, resolve construction issues, or address Owner issues.
12. Stockpile of materials on-site shall be allowed only on the approval of the Construction Manager and Engineer.
13. In **ABSOLUTELY NO CASE** shall the work site be left open overnight or at any time the Contractor is not on site.
14. The Contractor shall backfill, landscape, and perform all final cleanup and restoration as the Work progresses.
15. The Contractor shall confirm the existing site information provided in the Contract Drawings **PRIOR** to construction of the Project and shall carefully study and compare the Contract Documents with each other. Discrepancies, errors, inconsistencies, or omissions shall be brought to the attention of the Engineer immediately, **BEFORE** disturbing the site. The Contractor shall be liable (at his own expense) for any damage resulting from such if the Contractor recognizes or should have recognized such and failed to report it to the Engineer before executing the Work.
17. By executing this Agreement, the Contractor represents that it has investigated, examined, inspected, and thoroughly familiarized himself with the Contract Documents, the site, and the adjoining premises and facilities, and that he has thoroughly informed himself and the Engineer of any difficulties in connection therewith. Commencement of the Work or any portion thereof by the Contractor shall be conclusive evidence that the jobsite, or any part thereof at which the Work is being performed, is in proper condition for the reception and installation of the Work.
17. Digital files will be made available to the Contractor for layout of the Project. Dimensions shall **NOT** be scaled from the Drawings, nor shall grid coordinates be utilized for the layout of storm drainage facilities or structures, curbing and pavements, and all related items, unless specifically provided on the Contract Drawing
19. The Contractor shall provide for safe passage of work personnel, Owner's staff, and the like requiring entrance to the building or facilities on the grounds. The Contractor shall coordinate the use these facilities with the Owner.

D. RIGHT OF ENTRY

The Engineer and his representative shall at all times have access to the Work. In addition, authorized representatives and agents of any participating Federal, State, or local agency shall be permitted to inspect all work, materials, and other relevant data and records.

E. TEMPORARY CONSTRUCTION SERVICES AND FACILITIES

The Contractor shall obtain all necessary permits, licenses, etc. and shall pay all costs incidental to the furnishing, installation, and maintenance of temporary utility services and facilities required for the duration of the Work.

F. CONTROL OF EROSION, SILTATION, AND POLLUTION

1. The Contractor shall take whatever measures are necessary to minimize soil erosion and siltation, water pollution, and air pollution caused by his operations.

The Contractor shall also comply with the applicable regulations of all legally constituted authorities relating to pollution prevention and control. The Contractor shall keep himself fully informed of all such regulations which in any way affect the conduct of the Work, and shall at all times observe and comply with all such regulations. In the event of conflict between such regulations and the requirements of the Specifications, the more restrictive requirements shall apply.

2. Erosion control is field performance based and additional silt fence, temporary sediment basins, check dams, and other measures may need to be added to the approved plan and installed on the site as necessary. Measures indicated on the approved plans may be adjusted as necessary to assure maximum protection of the site. The Engineer, Construction Manager, or regulatory agencies having jurisdiction shall have the right to require additional measures if, in their opinion, individually or collectively, the installed measures are performing inadequately. Fines resulting from the Contractor not following approved plans shall be the sole responsibility of the Contractor.
3. The Contractor shall control dust throughout the life of the Project within the Project area and at all other areas affected by the construction of the Project, including, but not specifically limited to, unpaved roads or drives, milled areas, and related areas of construction. Dust control shall not be considered effective where the amount of dust creates a potential or actual unsafe condition, public nuisance, or condition endangering the value, utility, or appearance of any property.
4. The Contractor shall not be directly compensated for any dust control measures necessary.

G. DISPOSAL OF MATERIALS

Debris and waste materials, including all combustibles, shall be removed by the Contractor from the construction area unless otherwise approved in writing by the Construction Manager or his Representative.

H. QUANTITIES OF ESTIMATE

The estimated quantities of work to be done and materials to be furnished under this Contract shown in any of the documents, including the proposal, are given for use in comparing bids and to indicate **approximately** the total amount of the Contract; and the right is especially reserved, except as herein otherwise specifically limited to, to increase or diminish the quantities as may be reasonably necessary or desirable by the Owner to complete the Work contemplated by this Contract.

I. UTILITY COORDINATION

The Contractor shall make all necessary arrangements with private and public utility companies to avoid any possible damage to or interruption of utility equipment or service. The Contractor shall be responsible for all inquiries concerning locations of utility lines. Repair of any damage to public or private utilities resulting from this Work shall be the responsibility of the Contractor.

J. CONSTRUCTION SURVEYING

All Work shall be constructed in accordance with the lines, grades and elevations shown on the Plans or as given by the Engineer in the field. The Contractor shall be fully responsible for maintaining alignment and grade. All principal controlling points and base lines for locating the principal components of the Work together with a suitable number of benchmarks adjacent to the Work will be provided by the Contractor.

K. LAYING OUT WORK

1. It is imperative that the Contractor work within the shown limits of construction and property boundaries at all times, unless approved otherwise by the Engineer.
2. The Contractor shall provide competent engineering survey services where required and shall provide and maintain accurate, detailed, survey work.
3. The Plans and supplementary Drawings shall NOT be scaled and the Contractor must verify all dimensions and elevations at the site prior to proceeding with the Work. The Contractor shall also verify existing and proposed utility locations prior to purchasing materials affected by these locations.
4. Digital files will be made available to the Contractor for layout of the Project. Utility and storm drainage facilities or structures, curbing and pavements, and all related items, shall NOT be installed by utilizing grid coordinates taken from the Plans, unless those coordinates are specifically provided.

L. RIGHT TO STOP WORK

The Owner or his authorized representative has the authority to stop the Contractor from further work progress if, during the construction, the Owner or his authorized representative deems the work being performed is not in compliance with these Contract Documents.

M. OMITTED

N. USE OF CHEMICALS

All chemicals used during project construction, whether herbicide, pesticide, disinfectant, polymer, reactant or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in conformance with instructions.

O. SAFETY AND HEALTH REGULATIONS

1. The Contractor shall comply with all Federal, State and Local Safety and Health Regulations including the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (P.L. 91 - 596) and under Section 107 of the Contract Work Hours and Safety Standards Act (P.L. 91-54).
2. The Contractor shall provide continuous, safe access to all properties, both public and private, along the project in all cases where such access will be provided by the completed facility and shall conduct his operations in such a manner that inconvenience to the property owners will be held to a minimum.

P. EQUIPMENT AND MATERIAL STORAGE

The Contractor shall plan his activities so that all materials and equipment can be stored within the Project Limits or at sites indicated above. There shall be no disturbance whatsoever of any areas outside the Project Limits without the prior approval of the Engineer.

Q. DISTURBED AREAS

All areas disturbed as a result of the work of the Contractor shall be restored to the original or better condition. Reasonable care shall be taken during construction to avoid damage to the project property or that of any adjacent property owner(s).

R. OMITTED

S. TEMPORARY SANITARY FACILITIES

The Contractor shall be solely responsible for furnishing and maintaining temporary sanitary facilities during the construction period. Such facilities shall include but not be limited to, potable water supply and toilet facilities. Such facilities shall be in compliance with all applicable state and local laws, codes, and ordinances and shall be placed convenient to work stations and secluded from public observation. Once the project is completed all temporary sanitary facilities shall be removed by the Contractor.

T. TRAFFIC MAINTENANCE

1. The Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient warning lights, danger signals, and signs, shall provide a sufficient number of flagmen to direct the traffic where necessary and shall take all necessary precautions for the protection of the work and the safety of the public.
2. All barricades and obstructions or hazardous conditions shall be illuminated as necessary to provide for safe traffic conditions.
3. Warning and caution signs shall be posted throughout the length of any portion of the project where traffic flow is restricted.

U. OMITTED

V. OMITTED

W. OMITTED

X. OMITTED

3.2 WEATHER DELAYS

A. EXTENSIONS OF CONTRACT TIME FOR DOCUMENTED ABNORMAL WEATHER

1. If the basis exists for an extension of time in accordance with the pertinent article of the Standard General Conditions of the Construction Contract, an extension of time on the basis of Abnormal Weather may be granted only for the number of Weather Delay Days in excess of the number of days listed as the Standard Baseline for the period of the Contract.
2. In the event adverse weather other than those conditions described in the Section entitled "Adverse Weather and Rain Delay Days", delays construction activity, such as temperature extremes as one (1) example, the baseline must be adjusted to reflect the number of expected days as described in the Section entitled "Development of Adverse Weather Baseline".
3. The Contractor shall maintain a rain gauge on site to determine precipitation at the Contract Site. The rain gauge shall be read daily and documentation of Adverse Weather Days shall be coordinated with the Engineer or his Representative. Adverse Weather Days shall not be allowed unless properly documented and reported.

B. STANDARD BASELINE FOR AVERAGE CLIMACTIC RANGE

1. Weather data available from the National Oceanic and Atmospheric Administration (NOAA) has been used to determine a Standard Baseline of average climatic range for the City of Asheville, North Carolina and is provided below. In the event that the standard baseline for the construction site differs significantly from the Asheville, North Carolina Standard Baseline, or if the Contractor disagrees with the standard

baseline provided below, it shall be the Contractor's responsibility to provide documentation of said differences.

2. The Standard Baseline shall be regarded as the normal and anticipatable number of calendar days for each month during which construction activity shall be expected to be prevented and suspended by cause of adverse weather. Suspension of construction activity for the number of days each month as listed in the Standard Baseline is included in the Work and is not eligible for extension of Contract Time.
3. The Standard Baseline is as follows:

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
8	6	6	7	5	8	7	5	6	3	5	7

C. ADVERSE WEATHER AND RAIN DELAY DAYS

1. Adverse Weather is defined as the occurrence of one or more of the following conditions which prevent exterior construction activity or access to the site within twenty-four (24) hours:
 - a. Precipitation (rain, snow, and/or ice) in excess of two-tenths (0.20) inch liquid measure.
 - b. Standing snow in excess of one (1.00) inch.
2. Adverse Weather may include, if appropriate, "dry-out" or "mud" days for rain days above the standard baseline:
 - a. Only if there is a hindrance to site access or site work such as excavation, backfill, footings: and,
 - b. At a rate no greater than one (1) make-up day for each day or consecutive days of rain beyond the standard baseline that total one (1.0) inch or more, liquid measure, unless specifically recommended otherwise by the Engineer.
3. A Weather Delay Day may be counted if adverse weather prevents work on the project for fifty (50) percent or more of the Contractor's scheduled work day, including a weekend day or holiday if the Contractor has scheduled construction activity for that day.

D. DEVELOPMENT OF ADVERSE WEATHER BASELINE

1. Development of Adverse Weather Data – This is the process of collecting, compiling, and analyzing the raw weather data (NOAA and other sources) that forms the baseline for estimating anticipated delays and project durations and determining the occurrence of unusually severe weather. The following actions make up the development process:
 - a. Analyze the project scope and site geography to determine which weather parameters (temperature, precipitation, wind, etc.) are applicable. The parameters selected should present adverse conditions that could potentially delay construction activities.
 - b. Review the technical specifications to determine the numerical values that will be assigned to each parameter in order to establish the anticipated adverse weather. Usually when two (2) or more construction phases are affected by the same parameter, the less severe numerical value should be used (i.e. if the first phase of work is delayed by temperatures below 40 degrees F and the second phase of work is delayed by temperatures below 32 degrees F, the numerical value used to define adverse weather should be 40 degrees F unless some other factor renders the first phase insignificant in terms of schedule criticality).

- c. Compile the number of days per month that the anticipated weather is expected to be adverse by analysis of NOAA or other weather data. The last ten (10) years of consecutive data shall be used to establish the baseline. However, in the absence of ten (10) years of data, a shorter period may be used. It may be necessary to extrapolate the number of calendar days that the temperature is expected to fall below the selected numerical value (say, 40 degrees F) from raw data.
- d. Adverse weather data must be periodically updated in order to reflect changes in the ten-year averages and incorporate any necessary corrections derived from actual field experience. It is recommended that data used for establishing adverse weather baselines be reviewed annually.

3.03 PROJECT CLOSEOUT

A. FINAL DOCUMENTATION

Prior to final payment, and before the issuance of a Final Certificate for Payment in accordance with the provisions of the General Conditions, the Contractor shall file with the Engineer the documents listed hereinafter:

1. Guarantees - The Contractor's one (1) year guarantee required by the General Conditions and all other guarantees stated in the Specifications.
2. Affidavit and Waiver of Liens - As required by General Conditions. The Contractor shall utilize the form included in "Section 10-0150 Recommended Standard Forms".
3. Consent of Surety Company to Final Payment.
4. Certified Final Sales Tax Statement (as required)
5. Certified Payroll Records (as required)

B. OMITTED

C. OMITTED

END OF SECTION

UNIT BID ITEM SUMMARY

Project Location _____

ITEM #	DESCRIPTION	UNIT MEAS.	CONTRACT BID QUAN.	CONTR. UNIT BID	TOTAL WORK LAST APPL.	WORK THIS APPL.	TOTAL WORK TO DATE	PAYMENT EARNED
A	B	C	D	E	F (H FROM LAST APPL.)	G	H (F&G)	I (EXH)

(Provide Summary for Each Location)

SALES TAX REIMBURSEMENT FORM

PROJECT PARKING LOT IMPROVEMENTS, COUNTYWIDE PROJECTS
 OWNER BUNCOMBE COUNTY
 CONTRACTOR _____ FOR PERIOD _____

VENDOR	ADDRESS	INVOICE	DATE	AMOUNT	N.C. TAX	COUNTY TAX	COUNTY NAME

I, _____, being duly sworn, certify that the foregoing statement of sales tax paid in connection with the referenced contract does not contain sales or use taxes paid on purchases of tangible personal property purchased by such contractors for use in performing the contract which does not annex to, affix to or in some manner become a part of the building or structure being erected, altered or repaired for the governmental entities as defined by G.S. 105-164.14(c) and is to the best of his/her belief, true and correct.

Signature

Title

Sworn to before me this _____ day of _____, 2022

My commission expires _____

Notary Public

TRANSMITTAL FORM

- Shop Drawings
- Printed Materials
- Other

Transmittal Date: _____

Return Date: _____

REFERENCE: **PARKING LOT IMPROVEMENTS, COUNTYWIDE PROJECTS**

FOR: Transmittal Only

Project

BUNCOMBE COUNTY

Approval

Owner

**40 McCORMICK PLACE
ASHEVILLE, NC 28801**

Approved as noted

Address

COUNTYWIDE LOCATIONS

Revise & Resubmit

Location

FROM: _____

TO: _____

Name

Name

Company

Davis CivilSolutions, P.A.

Address

Company

135-A Charlotte Hwy., Asheville, NC 28803

Telephone/fax

Address

(828)299-9449

Telephone/fax

Log #	Description	Copies	Sheet/Drawing #	Status

Project Ref. No. _____

By: _____

Signature

**ATTENTION: CONSTRUCTION ADMINISTRATION
SUBMITTAL AND ROUTING FORM**

(TO BE USED WITH EACH INDIVIDUAL PLAN SUBMITTAL OR SHOP DRAWING)

SUBMITTAL AND APPROVAL (Contractor to complete)			
Project Name:	PARKING LOT IMPROVEMENTS, COUNTYWIDE PROJECTS	DCSPA Project #:	20140
Contractor:	_____	Submittal #:	_____
Contract For:	_____	Specification Section:	_____
Submittal Title:	_____		
Sheet/Item Numbers:	_____		
Subcontractor:	_____	Supplier:	_____
Date:	_____	Date Needed:	_____
Change From Contract Documents?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Attached Documentation:	_____
Complete Submittal?	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____	
<p>The Contractor must review and approve this submittal for all requirements and conformance to Contract documents prior to submittal to Davis CivilSolutions, P.A. Submittals forwarded without the Contractor's approval will be returned without review or comment.</p>			
Reviewed By:	_____	Date:	_____

DAVIS CIVILSOLUTIONS, P.A. SUBMITTAL ROUTING (DCSPA to complete)				
Date Received:	_____	Logged By:	_____	To: _____ Return by: _____
REVIEW CODES: 1 = <u>Approved</u>; 2 = <u>Approved as Noted</u>; 3 = <u>Revise & Resubmit</u>; 4 = <u>Not Approved</u>				
Reviewed By (in order)	Review Code	COMMENTS	Date	Initials
Project Engineer's Approval: _____			Date: _____	

CONTRACTOR'S FINAL AFFIDAVIT AND WAIVER OF LIEN

PROJECT: PARKING LOT IMPROVEMENTS OWNER: BUNCOMBE COUNTY
COUNTY WIDE PROJECTS 40 McCORMICK PLACE
BUNCOMBE COUNTY, NORTH CAROLINA ASHEVILLE, NORTH CAROLINA 28801

CONTRACTOR: _____

CONTRACT AMOUNT: _____
 STATE OF: _____
 COUNTY OF: _____

CONTRACT DATE: _____
 DATE: _____

This is to certify that all claims for labor, material, services and any other just claims arising out of the performance of this Contract have been satisfied, except for payment to subcontractors to be made out of retainage presently being held by the Owner, and that no claims or liens exist against this Contractor in connection with this contract; that to the best of our knowledge no claims or liens exist, and if any such claims or liens appear after payment of the retained amount due on the Contract, this Contractor shall save the Owner harmless on account thereof. After payment of the retained amount the undersigned does hereby waive, release and relinquish any and all claims or rights of lien presently held or hereafter accruing upon the above project.

CONTRACTOR: _____
 BY: _____
 TITLE: _____

Sworn to and subscribed before me this
 _____ day of _____ 20 22

 (Notary Public)

My Commission expires: _____

END OF SECTION

DIVISION 2

NOT USED

DIVISION 3

SITE WORK

**SECTION 31 2100
BORROW**

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The work of this Section consists of furnishing, loading, hauling, and placing of borrow material for the construction of embankments or ditches or the work of other Sections as shown and specified.

PART 2 - PRODUCTS

2.1 MATERIALS

A. GENERAL

1. Borrow material shall be selected to meet the requirements and conditions of the particular fill for which its use is intended. Sand-clay soils shall be capable of being readily shaped and compacted to the required densities, and shall be free of roots, trash, and other deleterious material. Unless specifically provided, no borrow shall be obtained within the limits of the project site without written approval. Borrow shall meet the requirements listed below.
2. Borrow shall consist of material obtained from sources provided by the Contractor and approved by the Engineer, and shall meet the requirements of the classifications in accordance with Universal Soil Classification (USCS) listed below:
 - a. Acceptable Classifications: GW, GP, GM, GC, SW, SP, SC, SM, ML, and CL.
 - b. Unacceptable Classifications: PT, OH, OL, CH, AND MH.

B. COHESIONLESS MATERIALS

Cohesionless materials include poorly and well-graded gravels (GP and GW) and poorly and well-graded sands (SP and SW). Cohesionless soils are generally regarded as free draining.

C. COHESIVE MATERIALS

Clayey gravels (GC), clayey sands (SC), lean clays (CL), fat clays (CH), silts (ML and MH), and organic (GM) and silty sands (SM) will be considered cohesionless only when the fines have a plastic index of 0. Otherwise they will be considered cohesive.

PART 3 - EXECUTION

3.1 INSTALLATION

A. GENERAL

The Contractor shall place only borrow material that has been specifically identified as acceptable for this Section, unless otherwise directed by the Engineer.

END OF SECTION

**SECTION 31 2200
WASTE MATERIAL DISPOSAL**

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this Section consists of the disposal of waste and debris in accordance with the requirements of these Specifications. Waste will be considered to be all excavated, grubbed, or removed materials which are not utilized in the construction of the project.

PART 2 - NOT USED

PART 3 - EXECUTION

3.1 GENERAL REQUIREMENTS

- A. Waste shall be disposed of in areas that are outside of the project area and provided by the Contractor, unless otherwise required by the plans or special provisions, or unless otherwise permitted by the Engineer.
- B. Concrete that is painted must be disposed of in accordance with requirements and regulations of the North Carolina Department of Environment and Natural Resources (NCDENR) Solid Waste Section. Prior to disposal of painted concrete, the Contractor shall submit a written certification to NCDENR that the paint on the concrete is **not** lead-based. Certification that paint on concrete is not lead-based paint is required prior to management as inert debris. Lead-based paint is defined by federal statute (Title X of the Housing and Community Development Act and the Toxic Substances Control Act, by reference). Concrete that is painted with lead-based paint, or paint that has not been certified to the satisfaction of the North Carolina Department of Environment and Natural Resources Solid Waste Section to be below the federal standard to be considered lead-based paint, must be disposed of at a properly permitted construction and demolition landfill or a permitted municipal solid waste landfill.
- C. The Contractor shall maintain the earth surfaces of all waste areas, both during the work and until the completion of all seeding and mulching or other erosion control measures specified, in a manner which will effectively control erosion and siltation.
- D. The following requirements shall also be applicable to all waste or disposal areas other than active public waste or disposal areas:
1. Rock waste shall be shaped to contours which are comparable to and blend in with the adjacent topography where practical, and shall be covered with a minimum six (6) inch thick layer of earth material either from the project waste or from borrow.
 2. Earth waste shall be shaped to contours which are comparable to and blend in with the adjacent topography where practicable, but in no case will slopes steeper than 2:1 be permitted.
 3. Construction debris, grubbed debris and milled and all broken pavement and masonry shall be covered with a minimum six (6) inch thick layer of earth waste material from the project or borrow. The completed waste area shall be shaped as required above for disposal of earth waste.
 4. Seeding and mulching shall be performed over all earth or earth covered waste areas. The work of seeding and mulching shall be performed in accordance with the appropriate sections of the Contract Specifications.
 5. Where the Engineer has granted permission to dispose of waste and debris within the project, the Engineer shall have the authority to establish whatever additional requirements may be necessary to insure the satisfactory appearance of the completed project.

- E. Disposal of waste or debris in active public waste or disposal areas will not be permitted without prior approval by the Engineer. Such disposal will not be permitted when, in the opinion of the Engineer, it will result in excessive siltation or pollution.

END OF SECTION

**SECTION 31 2300
EXCAVATION AND BACKFILL**

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. GENERAL

1. The work covered by this Section shall consist of furnishing all materials, labor, equipment, and services for the excavation and backfill of trenches and structures. Work is limited to the areas of construction, and includes (but is not necessarily limited to) stockpiling of topsoil; site grading; excavation of footings, foundations, piping, and trenches; filling; backfilling; compaction; finish grading; spreading of topsoil; disposal of waste material; and proof rolling.
2. All excavation, dewatering, sheeting, bracing, and backfilling shall be performed in such a manner as to eliminate all possibility of undermining or disturbing the foundations of existing structures.
3. All work shall be performed in compliance with applicable requirements of governing authorities having jurisdiction.
4. Excavations shall provide adequate working space and clearances for the work to be performed therein, and for installation and removal of concrete forms, utility appurtenances or other items to facilitate the work. In no case shall excavation faces be undercut for extended footings.
5. Subgrade surfaces shall be made clean and free of loose material of any kind before concrete is placed thereon.
6. Backfilling during freezing weather shall not be performed except by permission of the Engineer. No backfill, fill, or embankment materials shall be installed on frozen surfaces, nor shall frozen materials, snow, or ice be placed in any backfill, fill, or embankment material.

1.2 QUALITY ASSURANCE

A. REFERENCED STANDARDS

Unless otherwise indicated, all referenced standards shall be the latest edition available at the time of bidding. Any requirements of these Specifications shall in no way invalidate the minimum requirements of the referenced standards. The Contractor shall comply with the provisions of the following codes and standards, except as otherwise shown or specified.

1. ASTM D698: Standard Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 5.5 lb. Rammer and 12" Drop.
2. ASTM D3282: Standard Recommended Practice for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes.
3. Standard Specifications for Roadways and Structures, North Carolina Department of Transportation, latest edition.
4. Erosion and Sediment Control Planning and Design Manual, North Carolina Department of Environment and Natural Resources, Land Quality Section, latest edition.

B. OMITTED

C. EXISTING UTILITIES

1. The Contractor shall locate all existing underground utilities in the area of work. If utilities are to remain in place, adequate means of protection shall be provided during construction.
2. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, the Contractor shall consult the Engineer immediately for

directions as to procedure. The Contractor shall cooperate with the Construction Manager and utility companies in keeping respective services and facilities in operation and shall repair damaged utilities to the satisfaction of the utility companies.

1.3 SITE CONDITIONS

A. SUBSURFACE INFORMATION

No subsurface information is available for this project. The Contractor at his own sole expense, may undertake additional test borings and other exploratory operations, provided such operations are acceptable to the Owner. The Contractor shall be responsible for verifying the location of any existing utilities or other underground facilities or materials.

PART 2 - PRODUCTS

2.1 MATERIALS

A. CLASSIFICATION OF EXCAVATED MATERIALS

1. Satisfactory Subgrade Soil Materials: Soils complying with ASTM D3282, soil classification Groups A-1, A-2-4, A-2-5, and A-3.
2. Unsatisfactory Subgrade Soil Materials: Soils described in ASTM D3282, soil classification groups A-2-6, A-2-7, A-4, A-5, A-6, and A-7; also peat and other highly organic soils, unless otherwise acceptable to the Engineer.
3. Cohesionless Soil Materials: Gravels, sand-gravel mixtures, sands, and gravelly-sands.
4. Cohesive Soil Materials: Clayey and silty gravels, sand-clay mixtures, gravel-silt mixtures, clayey and silty sands, sand-silt mixtures, clays, silts, and very fine sands.
5. Rock: Sandstone, limestone, flint, graphite, quartzite, slate, hard shale, or similar material that cannot be excavated with a Caterpillar Model 225, or equal minimum 25-ton hydraulic excavator equipped with rock teeth on a 24-inch wide bucket, and which requires systematic drilling and blasting.
6. Backfill and Fill Materials: Satisfactory soil materials free of masonry, rock, or gravel larger than four (4) inches in any dimension, and free of metal, gypsum, lime, debris, waste, frozen materials, vegetable, and other deleterious matter. Only excavated material that has been sampled, tested, and certified as satisfactory soil material shall be used.
7. Select Backfill: Backfill and fill material that is transported to the site from **outside** the Project Limits, and which meets the soil requirements specified above under "Backfill and Fill Materials". Material excavated in conjunction with the construction of this project cannot be considered as "select backfill" for payment purposes.
8. Pipe Bedding: Crushed stone or crushed gravel meeting the requirements of ASTM C33, Gradation 67 or standard size No. 57.
9. Inundated Sand: Clean sand with not more than 25% retained on a No. 4 sieve and not more than 7% passing a No. 200 sieve having an effective size between 0.10 mm and 0.30 mm. Sand shall be deposited in, or placed simultaneously with, application of water so that the sand shall be compacted by a mechanical probe type vibrator. Inundated sand shall be compacted to 70% relative density as determined by ASTM D4253 and D4254.
10. Graded Gravel: Gravel for compacted backfill shall conform to the following gradation:

Sieve Size	Percent Passing by Weight
1"	100

3/4"	85 - 100
3/8"	50 - 80
No. 4	35 - 60
No. 40	15 - 30
No. 200	05 - 10

The gravel mixture shall contain no clay lumps or organic matters. The fraction passing the No. 4 sieve shall have a liquid limit not greater than 25 and a plasticity index not greater than 5. Gravel backfill shall be deposited in uniform layers not exceeding 12" in uncompacted thickness. The backfill shall be compacted by a suitable vibratory roller or platform vibrator to not less than 70% relative density as determined by ASTM D4253 and D4254.

2.2 EQUIPMENT

A. MECHANICAL EXCAVATION

1. The use of mechanical equipment will not be permitted in locations where its operation would cause damage to trees, buildings, culverts, or other existing property, utilities, or structures above or below ground. In all such locations, hand-excavating methods shall be used.
2. Mechanical equipment used for trench excavation shall be of a type, design, and construction and shall be controlled, such that uniform trench widths and vertical sidewalls are obtained at least from an elevation one (1) foot above the top of the installed pipe to the bottom of the trench, and that trench alignment is such that pipe, when accurately laid to specified alignment, will be centered in the trench with adequate clearance between the pipe and sidewalls of the trench. Undercutting the trench sidewall to obtain clearance shall not be permitted.

PART 3 - EXECUTION

3.1 PREPARATION

A. DEWATERING

1. The Contractor shall provide, and maintain, adequate dewatering equipment to remove and dispose of all surface and subsurface water entering excavations, trenches, or other parts of the Work. Each excavation shall be kept dry during subgrade preparation and continually thereafter until the structure to be built, or the pipe to be installed therein, is completed to the extent that no damage from hydrostatic pressure, flotation, or other cause will result.
2. All excavations for structures or trenches which extend down to or below groundwater shall be dewatered by lowering and keeping the groundwater level twelve (12) inches or more beneath such excavations.
3. Surface water shall be diverted or otherwise prevented from entering excavated areas or trenches to the greatest extent practicable without causing damage to adjacent property.
4. The Contractor shall be responsible for the condition of any pipe or conduit which may be used for drainage purposes.
5. Where trench sheeting is left in place, such sheeting shall not be braced against the pipe, but shall be supported in a manner which will preclude concentrated loads or horizontal thrusts on the pipe. Cross braces installed above the pipe to support sheeting may be removed after pipe embedment has been completed.

B. STABILIZATION

1. Subgrades for structures and trench bottoms shall be firm, dense, and thoroughly compacted and consolidated; free from mud and muck; and sufficiently stable to remain firm and intact under the feet of the workmen.
2. Subgrades for structures or trench bottoms, which are otherwise solid but which become mucky on top due to construction operations, shall have muck removed to sound subgrade. Material removed shall be replaced with one (1) or more layers of crushed rock or gravel, spread and compacted to a depth of not more than four (4) inches. If the required depth exceeds four (4) inches, the material shall be furnished and installed as specified for granular fills. Not more than one-half (1/2) inch depth of mud or muck shall be allowed to remain on stabilized trench bottoms when the pipe bedding material is placed thereon. The finished elevation of stabilized subgrades for structures shall not be above subgrade elevations indicated on the drawings.

C. CUTTING CONCRETE OR ASPHALT SURFACE

1. All pavement cutting and repair shall be done in accordance with local ordinances. Cuts in concrete and asphalt pavements shall be no larger than necessary to provide adequate working space for proper installation of pipe and appurtenances. Cutting shall be performed with appropriate equipment (approved by the Engineer) in a manner which will provide a clean groove for the full depth of the concrete or asphalt structure along each side of the trench and along the perimeter of cuts for structures.
2. Concrete and asphalt over trenches excavated for pipelines shall be removed so that a shoulder not less than twelve (12) inches in width at any point is left between the cut edge of the surface and the top edge of the trench. Trench width at the bottom shall not be greater than at the top and no undercutting will be permitted. Pavement cuts shall be made to and between straight or accurately marked curved lines which, unless otherwise required, shall be parallel to the centerline of the trench.
3. Pavement or other surfaces removed for connections to existing lines or structures shall not be of greater extent than that necessary for the installation.
4. Where the trench parallels the length of concrete walks and the trench location is all or partially under the walk, the entire walk shall be removed and replaced. Where the trench crosses drives, walks, curbs, or other surface construction, the surface construction shall be removed and replaced between existing joints or between saw cuts as specified for payment.

D. SITE GRADE

1. General: Areas within limits of grading under this Section, including adjacent transition areas, shall be uniformly graded. Surfaces shall be smooth finished within specified tolerances, and compacted with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.
2. Ground Surface Preparation: Vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials shall be removed from ground surface prior to placement of fills. Sloped surfaces steeper than one (1) vertical to four (4) horizontal shall be plowed, stripped, or broken up so that fill material will bond with existing surface. Subgrade shall be shaped as indicated on the Drawings by forking, furrowing, or plowing so that the first layer of new material placed thereon will be well bonded to it. Fill placement shall be in accordance with Section 31 2000 of these Specifications.

3.2 FIELD MEASUREMENTS

A. ALIGNMENT, GRADE, AND MINIMUM COVER

1. Vertical and horizontal alignment of pipes, and maximum joint deflection used in connection therewith, shall be in conformity with the requirements of the Section covering installation of pipe.
2. Where pipe grades or elevations are not definitely fixed by the Contract Drawings, trenches shall be excavated to a depth sufficient to provide a minimum depth of backfill cover over the top of the pipe in accordance with the pipe manufacturer's instructions. Additional cover depths may be necessary on vertical curves, or to provide necessary clearance beneath existing pipes, conduits, drains, drainage structures, or other obstructions encountered at normal pipe grades. Measurement of pipe cover depth shall be made vertically from the outside top of pipe to finished ground or pavement surface elevation except where future surface elevations are indicated on the Drawings.

3.3 PROTECTION

A. TEMPORARY PROTECTION

1. The Contractor shall protect adjacent structures, utilities, sidewalks, pavements, and other facilities from damages caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
2. Dirt excavated from the trench shall be placed no closer than two (2) feet from the edge of the trench or retaining structure.

B. SHEETING AND BRACING

1. All excavations shall be made in accordance with the rules and regulations promulgated by the Department of Labor, Occupational Safety, and Health Administration (OSHA) Regulations for Construction. The Contractor shall furnish, install, and maintain such sheeting, bracing, etc., as may be necessary to support the sides of the excavation and to prevent any movement of earth which could in any way diminish the width of the excavation to less than that necessary for proper construction, or could otherwise result in personal injury, delay the work, or endanger adjacent structures, roads, utilities, or other improvements.
2. All trenches over four (4) feet in depth, at trench depths prescribed by OSHA, or in poor supporting soils shall have sheeting and bracing. No sheeting and bracing shall be removed until all workers are out of the trench.

C. BLASTING

Blasting will not be allowed on this Project.

D. CARE AND RESTORATION OF PROPERTY

1. Trunks of trees adjacent to the work which are to remain shall be enclosed with protective fencing. No material shall be piled or equipment stored or operated within the drip line of trees to remain. Work within the drip line of the trees shall only be performed as approved by the Engineer. Excavating machinery and cranes of suitable type shall be operated with care to prevent injury to remaining tree trunks, roots, branches, and limbs.
2. Branches, limbs, and roots shall not be cut except by permission of the Engineer, and shall be cut smoothly and neatly without splitting or crushing. In case of unavoidable cutting or injury to branches, limbs, or trunks of trees, the injured portions shall be neatly trimmed and covered with an application of tree healing paint as directed.
3. All cultivated hedges, shrubs, and plants which might be injured by the Contractor's operations shall be protected. Any such trees or shrubbery necessary to be removed and replanted shall be properly heeled in. Heeling in and replanting shall be performed under the direction of a licensed and experienced nurseryman engaged by the Contractor at the Contractor's own

expense. All removed shrubbery and trees shall be replanted in their original position after construction operations have been substantially completed and cared for until growth is re-established.

4. Cultivated hedges, shrubs, and plants injured to such a degree as to affect their growth or diminish their beauty or usefulness, shall be replaced by items of kind and quality at least equal to the kind and quality existing at the start of the work. Replacement shall be at the Contractor's own expense.
5. Tractors, bulldozers, or other power-operated equipment shall not be operated on paved surfaces if the treads or wheels of the equipment are so shaped as to cut or otherwise injure the surfaces.
6. All surfaces, including lawns, grassed, and planted areas that have been injured by the Contractor's operations, shall be restored at the Contractor's own expense, to a condition at least equal to that in which they were found immediately before the work was begun. Suitable materials and methods shall be used for such restoration. All restored plantings shall be maintained by cutting, trimming, fertilizing, etc., until acceptance. Existing property or structures shall be restored as promptly as practicable and shall not be left until the end of construction period.

E. OMITTED

F. AIR POLLUTION

1. The Contractor shall comply with all pollution control rules, regulations, ordinances, and statutes which apply to any work performed under the Contract, including any air pollution control rules, regulations, ordinances and statutes, or any municipal regulations pertaining to air pollution.
2. During the progress of the Work, the Contractor shall maintain the area of activity, including the sweeping and sprinkling of streets as necessary, so as to minimize the creation and dispersion of dust. If the Engineer decides that it is necessary to use calcium chloride or more effective dust control, the Contractor shall furnish and spread the material, as directed, and without additional compensation.

G. BRIDGING TRENCHES

1. The Contractor shall provide suitable and safe bridges and other crossings where required for the accommodation of travel and/or access to private property during construction and shall remove said structures and restore all disturbed areas thereafter.
2. The Contractor shall bridge or backfill trenches in any portion of the travel lanes of public or private roads or drives, at the end of each day's operation to provide for safe travel. No additional compensation will be made for this work.

3.4 TRENCH EXCAVATION

A. LENGTH OF TRENCH

1. No more trench shall be opened in advance of pipe laying than is necessary to expedite the work. One hundred (100) feet shall be the maximum length of trench on any line under construction which may be left open prior to testing, backfill, landscaping, and cleanup. Additional length requires the Engineer's approval.
2. Trench length shall be limited to a length in which workers, at all times, are at a minimum distance from the trench exits as required by safety regulations.

B. TRENCH EXCAVATION

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1. General: All excavation of every description and of whatever substance encountered shall be performed so that the pipe can be laid to the alignment and depth shown on the Drawings.
2. All trenches, where required, shall be braced and shored in accordance with the rules and regulations promulgated by the Department of Labor, Occupation Safety and Health Administration (OSHA), "Safety and Health Regulations for Construction".
3. All excavations shall be by open cut unless otherwise specified or indicated on the Drawings.
4. Width of Trenches: Trenches shall be excavated sufficiently wide to allow proper installation of pipe, fittings and other materials, and not more than eighteen (18) inches clear of pipe on either side at any point. Trenches shall not be widened by scraping or loosening materials from the sides.
5. Trench Excavation in Earth: Earth excavation includes all excavation of whatever substance encountered. In locations where pipe is to be bedded in earth-excavated trenches, the Contractor shall fine grade the bottoms of such trenches to allow firm bearing for the bottom of the pipe on undisturbed earth. Where any part of the trench has been excavated below the grade of the pipe, the part excavated below such grade shall be filled with pipe bedding material and compacted at the Contractor's expense.
6. Trench Excavation in Fill: If pipe is to be laid in embankments or other recently filled material, the fill material shall be placed to the finish grade or to a height of at least one (1) foot above the top of the pipe, whichever is the lesser. Particular care shall be taken to ensure maximum consolidation of material under the pipe location. The pipe trench shall be excavated as though in undisturbed material.
7. Trench Bottom in Poor Soil: Unstable or unsuitable soils shall be excavated and removed to a width and depth as directed by the Engineer, and refilled with thoroughly compacted gravel bedding.
8. Bell Holes: Bell holes shall be provided at each joint to permit the joint to be made properly and to provide a continuous bearing and support for the pipe.

C. TRENCH BACKFILL

1. General: Unless otherwise specified or indicated on the Drawings, suitable material which was removed in the course of making the construction excavations shall be used for backfill. Frozen material shall not be used for the backfill and backfill shall not be placed on frozen material. Previously frozen material shall be removed before new backfill is placed. Backfilling shall begin as soon as practicable after pipes have been laid, or structures have been built and are structurally adequate to support the loads, including construction loads to which they will be subjected, and shall proceed until its completion.
2. With the exception mentioned below in this paragraph, trenches at pipe joints shall not be backfilled until after that section of the pipeline has successfully passed any specified tests required. Should the Contractor wish to minimize the maintenance of lights, and barricades, and the obstruction of traffic, he may, at his own risk, backfill the entire trench as soon as practicable after installation of pipe, and the related structures have acquired a suitable degree of strength. The Contractor shall, however, be responsible for removing and later replacing such backfill, at his own expense, should he be ordered to do so in order to locate and repair or replace leaking or defective joints or pipe.
3. Material: The nature of the materials will govern both their acceptability for backfill and the methods best suited for their placement and compaction in the backfill. Both are subject to the approval of the Engineer. Stone or rock fragments larger than four (4) inches in greatest dimension shall not be placed in the backfill. Large masses of backfill material shall not be placed into the trench in such a manner as to endanger the pipeline. Bituminous pavement shall be excluded from the backfill unless their use is expressly permitted.
4. Zone Around Pipe: Bedding material shall be placed to the level shown on the Drawings and material worked carefully around the pipe to insure that all voids

are filled, particularly in bell holes. For backfill up to a level of two (2) feet over the top of the pipe, only selected materials containing no rock, clods, or organic materials shall be used. Backfill shall be placed and compacted thoroughly under the pipe haunches and up to the mid-line of the pipe in layers not exceeding six (6) inches in depth. Each layer shall be placed and tamped carefully and uniformly so as to eliminate the possibility of lateral displacement. Backfill shall be placed in the remainder of the zone around the pipe and to a height of one (1) foot above the pipe in layers not exceeding six (6) inches and shall be compacted to a maximum density of at least 100 % as determined by ASTM D698.

5. Tamping: Backfill materials shall be deposited and spread in uniform, parallel layers not exceeding eight (8) inches in thickness before compaction. Each layer shall be tamped before the next layer is placed to obtain a thoroughly compacted mass. An adequate number of power driven tampers, each weighing at least 20 pounds, shall be furnished and used for this purpose. Material adjacent to the bank, as well as in all other portions of the trench, shall be thoroughly compacted. When the trench width and the depth to which backfill has been placed are sufficient to make it feasible, and it can be done effectively and without damage to the pipe, backfill may, on approval, be compacted by the use of suitable rollers or similarly powered equipment instead of by tamping. For compaction by tamping (or rolling), the rate at which backfill material is deposited in the trench shall not exceed that permitted by the equipment for its spreading, leveling and compacting, as furnished by the Contractor.
6. Trench Moisture: Backfill material shall be moistened by sprinkling, if necessary, to insure proper compaction by tamping (or rolling). No compaction shall be performed by tamping (or rolling) when the material is too wet, either from rain or applied water, to be compacted properly.
7. Trench Compaction: Backfill in pipe trenches above the initial one (1) foot over the top of the pipe shall be compacted to the maximum density as shown on the Drawings, or as listed in Section 3.7 of this Specification, with moisture content within the range of values of maximum density as indicated by the moisture-density relationship curve.

3.5 SITE GRADE

A. PLACEMENT AND COMPACTION

1. Backfill and fill material shall be placed in layers not exceeding eight (8) inches in loose depth. Before compaction, each layer shall be moistened or aerated as necessary to provide the optimum moisture content. Each layer shall be compacted to the required percentage of maximum density for each area classification. No backfill or material may be placed on surfaces that are muddy, frozen, or contain frost or ice.
2. In areas not accessible to rollers or compactors, mechanical hand tampers shall be used. If the mixture is excessively moistened by rain, the material shall be aerated by means of blade graders, harrows, or other approved equipment, until the moisture content of the mixture is satisfactory. The surface of the layer shall be finished by blading or rolling with a smooth roller, or a combination thereof, and shall be left smooth and free from waves and inequalities.
3. Backfill and fill materials shall be placed evenly adjacent to structures, to the required elevations. The Contractor shall take care to prevent wedging action of backfill against structures. The material shall be placed uniformly around all parts of structures to approximately the same elevation in each lift.
4. When the existing ground surface has a density less than that specified under the Section 3.07 of this Specification for the particular area classification, the ground surface shall be broken up, pulverized, moisture-conditioned to the optimum moisture content, and compacted to the required depth and percentage of maximum density.

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B. PLANTING AREAS

Areas to receive topsoil shall be finished to within not more than one-tenth (0.01) foot above or below the required subgrade elevations, compacted as specified, and free from irregular surface changes.

C. PROTECTION OF GRADED AREAS

Newly graded areas shall be protected from traffic and erosion, and kept free of trash and debris. Grades in settled, eroded, and rutted areas shall be repaired and re-established to specified tolerances.

D. RECONDITIONING COMPACTED AREAS

Where completed compacted areas are disturbed by subsequent construction operations or adverse weather prior to acceptance of the Work, the areas shall be scarified, reshaped, and recompactd to required density prior to further construction.

E. UNAUTHORIZED EXCAVATION

1. Unauthorized excavation consists of the removal of materials beyond indicated elevations without the specific direction of the Engineer. Under footings, foundations, bases, etc., unauthorized excavation shall be filled by extending the indicated bottom elevation of the concrete to the bottom of the excavation, without altering the required top elevation. Lean concrete fill may be used to bring elevations to proper position only when acceptable to the Engineer. The required additional concrete shall be provided and placed at the Contractor's own expense.
2. Elsewhere, unauthorized excavations shall be backfilled and compacted to the required grades and elevations as specified for authorized excavations of the same classification, unless otherwise directed by the Engineer.

3.6 OMITTED

3.7 COMPACTION

A. GENERAL

Soil compaction shall be controlled during construction, providing at least the minimum percentage of density specified for each area classification.

B. PERCENTAGE OF MAXIMUM DENSITY REQUIREMENTS

After compaction, all fill shall be tested in accordance with Method "C" of ASTM D698, unless specified otherwise. Except as noted otherwise for the zone around pipe, not less than the following percentages of maximum density of soil material, compacted at optimum moisture content, for the actual density of each layer of soil material placed, shall be provided:

UNPAVED AREAS	Compact Full Depth to 95%
DRIVES AND PARKING	Compact Full Depth to 95% (100% for Top 18")

C. MOISTURE CONTROL

Where subgrade or layer of soil material must be moisture conditioned before compaction, the Contractor shall uniformly apply water to surface of subgrade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations. Soil material that is too wet to permit compaction to specified

density shall be removed and replaced, or scarified and air dried. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Discing, harrowing or pulverizing shall be performed as necessary to reduce moisture content to a satisfactory value, as determined by moisture-density relation tests.

D. DISPOSAL OF SURFACE MATERIAL

Upon approval of the Engineer, haul all surplus materials not needed or acceptable for backfill and dispose of at location approved by the Engineer.

3.8 FIELD QUALITY CONTROL

A. SOIL TESTING AND INSPECTION SERVICE:

1. Compaction tests of all fill areas shall be made by an independent testing laboratory. The services of qualified soils testing personnel may be engaged by the Construction Manager for the making of tests to determine moisture-density relationships; relative densities; plastic and liquid limits; suitability of materials for compaction; and for inspection and control of the site preparation including selection, placing, and compaction of the fill. Such tests will be provided and paid for by the Construction Manager, except that **all succeeding tests after the first test for the same area, which reveal non-conformance with the Specifications and all succeeding tests for the same area, until conformance with the Specifications is established, shall be at the expense of the Contractor.** The Construction Manager will be responsible for paying for only the successful tests and for only the first test in an area which reveals non-conformance. A copy of the testing personnel's daily field report including results of in-place density and moisture content tests should be forwarded to the Construction Manager and the Engineer at the end of each working day.
2. The Contractor shall cooperate with the testing personnel so as to permit proper inspection and control of the work without unnecessary delays.

B. NUMBER OF TESTS (The following represents a minimum only.)

1. Under paved areas, no less than one (1) density test per horizontal layer per 5,000 square feet of subgrade shall be made.
2. Under unpaved areas, no less than one (1) density test per horizontal layer per 10,000 square feet shall be made.
3. Under curb and gutter, no less than one (1) density test per every 300 linear feet.
4. Above pipe placed in areas under pavement, one (1) density test per every 300 linear feet.

C. PROOF ROLLING

1. The Contractor shall proof roll the subgrade of all curb and gutter, paved areas, and on the base of all paved areas where designated by the Engineer. Proof rolling shall take place after all underground utilities are installed and backfilled. The operation shall consist of rolling the subgrade or base with a fully loaded ten (10) wheeled dump truck. A full load shall consist of ten (10) to twelve (12) cubic yards of soil or rock. The dump truck shall be capable of traveling at a speed of two (2) to five (5) miles per hour and be in sound mechanical shape with no exhaust leaks or smoking from burning oil. The Engineer shall determine the number of passes and areas rolled.

END OF SECTION

**SECTION 31 2500
SUBGRADE**

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this Section consists of the preparation, shaping, and compaction of that portion of the roadbed upon which base or pavement, including base and paving for shoulders, is to be placed.

PART 2 - NOT USED

PART 3 - EXECUTION

3.1 CONSTRUCTION

- A. The subgrade shall be shaped to the lines, grades, and typical sections shown on the plans. All unsuitable material, boulders, and all vegetative matter shall be removed and replaced with suitable material. Suitable material, when not available from the subgrade work, shall be taken from roadway excavation or borrow pits.
- B. Material excavated in preparing the subgrade shall be stored or stockpiled in such a manner as to not interfere with proper drainage or any of the subsequent operations of placing base or pavement.
- C. The subgrade shall be compacted at a moisture content which is approximately that required to produce the maximum density. The Contractor shall dry or add moisture to the subgrade when required to provide a uniformly compacted and acceptable subgrade.

3.2 QUALITY CONTROL

- A. A tolerance of plus or minus one-half (1/2) inch from the established grade will be permitted after the subgrade has been graded to a uniform surface.
- B. Ditches and drains shall be provided and maintained where required to satisfactorily drain the subgrade. Where previously approved subgrade is damaged by natural causes, by hauling equipment, or by other traffic, the Contractor shall restore the subgrade to the required lines, grades, and typical sections and to the required density at no cost to the Owner.

END OF SECTION

**SECTION 32 1100
RESTORATION OF SURFACES**

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. This Section covers the furnishing of all labor, equipment and materials necessary for the proper restoration of existing surfaces disturbed or damaged as a result of construction operations which are not specifically scheduled or specified for topsoil and seeding, paving, landscaping or other surfacing.
- B. In general, the types of replacement included in this Section are seeding along pipelines, concrete sidewalks, driveways, roadways, ditches, lawns and landscaped areas, curb and gutter.
- C. Any damage to existing structures shall be repaired using materials and workmanship equal to those of original construction.

PART 2 - NOT USED

PART 3 - EXECUTION

3.1 RESTORATION OF SURFACES

A. SEEDING ALONG PIPELINES

- 1. All ground surfaces along pipelines, which are not classified as lawns, landscaped areas, or pavement areas, but would be classified as open fields, shall be raked smooth and seeded in accordance with the section entitled Seeding, Fertilizing and Mulching. Large rocks, clumps of earth and excessive spoil material shall be removed from the area prior to seeding.
- 2. Shoulders of all roads shall be restored as specific for lawns and landscaped areas.
- 3. Omitted

B. ROADWAY REPLACEMENT

- 1. Bituminous or Asphaltic pavements shall include all areas paved with blacktop; built-up pavements or oil and stone, tar and stone and similar pavements constructed with a bituminous or asphalt and stone materials.
- 2. If, in the opinion of the Engineer, the area adjacent to the milling or excavation has not been damaged to the extent that the base course need to be replaced, restoration may consist of a surface course of sufficient thickness to meet the existing pavement.
- 3. Portland cement concrete walkways or roadways shall be replaced with Class B Concrete and shall have equal thickness and reinforcing steel as the original roadway. An aggregate of six (6) inches shall be placed prior to the placing of concrete.
- 4. Differential settlement of restored pavements shall be corrected immediately.
- 5. The Contractor shall repair and restripe any traffic markings that were damaged, removed or covered during construction. All work shall be done in accordance with NCDOT requirements and specifications.
- 6. Omitted

E. DITCHES

Ditches shall be regraded to the original grade and line. The surface of all ditches shall be returned to the same condition as found before commencing work.

F. LAWNS AND LANDSCAPED AREAS

1. Lawns and landscaped areas shall be regraded and replaced as follows:
 - a. Grading shall be to the grade existing before construction of the work under this Contract.
 - b. Lawn replacement shall be in accordance with the section entitled Landscaping. Topsoiled areas shall be replaced with topsoil of equal quality and quantity.
2. Landscaped areas shall be replaced with shrubs, hedges, ornamental trees, flowers, or other items to original condition.

G. DAMAGE TO STRUCTURES

Any damage to existing structures shall be repaired of materials and workmanship equal to those of original construction. Extensively damaged structures, where the structural stability has been affected or which cannot be repaired in a suitable fashion shall be replaced entirely. Replacement shall not commence until approval of the plan of replacement has been given by the Engineer. Replacement costs shall be responsibility of the Contractor.

END OF SECTION

**SECTION 32 1200
MILLING BITUMINOUS PAVEMENTS**

PART 1: GENERAL

1.01 SCOPE OF WORK

- A. The work covered by this Section consists of milling bituminous pavement at locations, depths, widths, and typical sections indicated in the Plans and Special Provisions or as directed by the Engineer.

The work also includes transporting and stockpiling milled material at the asphalt plant; disposing of excess milled material; and cleaning the milled pavement surface.

The milled material shall become the property of the Contractor. All milled material shall be disposed of by the Contractor in areas provided by him which are outside the right-of-way, except where the milled material is used in the work.

PART 2: PRODUCTS

2.01 EQUIPMENT

- A. Equipment shall include a self propelled unit capable of removing the existing bituminous pavement to the depths, widths and typical sections shown in the Plans. The equipment shall have been designed and built exclusively for pavement milling operations and shall have a past history of satisfactory performance. The machine shall be equipped with a grade control system which will automatically control the longitudinal profile and cross slope of the milled surface by the use of one or more skid sensors moving along 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. The milling machine and other loading equipment shall be capable of loading milled material to be used in other parts of the work without excessive segregation.

Additional equipment necessary to satisfactorily remove the pavement in the area of manholes, water valves, 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 operation in accordance with local, State, and Federal air pollution control laws and regulations.

PART 3: EXECUTION

3.01 SURFACE PREPARATION

- A. CONSTRUCTION REQUIREMENTS

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 and in accordance with typical sections shown in the Plans. Where indicated in the Plans or Project Special Provisions, removal shall be to a specified depth and shall produce a specified cross slope.

The Contractor may elect to make multiple cuts to achieve the required depth of cut or cross slope required by the Plans.

The longitudinal profile of the milled surface shall be established by a mobile string line on the side of the cut nearest the centerline of the road. The cross slope of the milled surface shall be established by an automatic cross slope control mechanism or by a second skid sensing device located on the outside edge of the cut. The Engineer may

waive the requirement for automatic grade and cross slope controls where conditions warrant.

The milling equipment shall be operated in such a manner as to prevent damage to the underlying pavement structure, utilities, drainage facilities, curb and gutter, paved surfaces outside the milled area, and any other appurtenances. The milled pavement surface shall be reasonably smooth and free of excessive scarification marks or other damage as determined by the Engineer. 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 Owner and in a manner acceptable to the Engineer. The Contractor shall coordinate the adjustment of manholes, meter boxes and valves boxes with the milling operation.

The Engineer may require remilling any area where surface laminations or defects resulting from the Contractor's operations cause a non-uniform surface to occur.

The milled pavement surface shall be thoroughly cleaned of all loose aggregate particles, dust and other objectionable material by the use of power brooms, power blowers, power vacuums or other means. Disposal or wasting of oversize pieces of pavement or loose aggregate material will not be permitted within the right-of-way.

The pavement removal operations shall be conducted in such a manner as to effectively minimize the amount of dust being emitted. The operation shall be planned and conducted so that it is safe for persons and property adjacent to the work including the traveling public.

END OF SECTION

**SECTION 32 1215
BITUMINOUS PAVING**

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this Section shall consist of the construction, production, delivery, and placement of bituminous plant mix base and surface courses properly laid on a prepared aggregate base course, in accordance with these Specifications and in conformity with the lines, grades, thickness, and typical sections shown on the Plans.

1.2 QUALITY ASSURANCE

- A. When required by the Engineer, the automatic weighing and recording system shall be checked by weighing a truckload of mix with an approved set of platform scales. Other means of checking the automatic weighing and recording system will be designated by the Engineer if such checking becomes necessary.
- B. The Contractor will not be permitted to use mixture delivered to the site which is not accompanied by a load ticket signed by the weigh man or an automatic printout ticket in accordance with the above requirements.
- C. The original of all tickets, including any voided tickets or tickets for rejected mixture, shall become the property of the Engineer.
- D. Omitted

1.3 SUBMITTALS

- A. In all cases, the Contractor shall furnish copies of certified weight tickets for all bituminous base and surface course installed on the Project.
- B. The Contractor shall submit a certification that all bituminous production is performed under the exact requirements and specifications used by the North Carolina Department of Transportation (NCDOT). If required by the Engineer, the Contractor shall arrange for an inspection of the production facilities.

1.4 OMITTED

1.5 REFERENCES

- A. All work and materials required under this Section of the Specifications shall conform to the applicable sections of the latest editions of the North Carolina Department of Transportation, Division of Highways, Standard Specifications for Roads and Structures and the North Carolina Department of Transportation Pavement Construction Section Superpave Hot Mix Asphalt / Quality Management System.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. All bituminous paving materials shall conform to the following standards, latest edition.
 - 1. North Carolina Department of Transportation Standard Roadway Specifications, Section 1012 Aggregate for Asphalt Pavements.
 - 2. North Carolina Department of Transportation Standard Roadway Specifications, Section 1020 Asphalt Materials.

ALL STANDARDS AND REQUIREMENTS, AS LISTED IN THE ABOVE REFERENCED NCDOT DOCUMENTS, SHALL SUPERCEDE THOSE LISTED WHERE THERE IS CONFLICT UNLESS OTHERWISE INDICATED BELOW.

B. COMPOSITION OF MIXTURES

1. The job mix formula for each mixture shall be in effect until modified in writing by the Engineer.
2. All mixtures furnished for the Work shall conform to the job mix formula within the tolerance ranges specified for the particular mix involved as specified herein.
3. Should a change in sources of aggregate materials be made, a new job mix formula will be required before the new mixture is produced.
4. When unsatisfactory results or other conditions make it necessary, the Engineer may establish a new job mix formula.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. **PREPARATION OF SUBGRADE:** The work covered under this Section of this Specifications shall be performed in strict accordance with Section 500 or Section 505 whichever is applicable, of the North Carolina Department of Transportation Division of Highways Standard Specifications for Road and Structures, latest edition.
- B. **APPLICATION OF AGGREGATE BASE COURSE:** The work covered under this Section of these Specifications shall be performed in strict accordance with Section 520 of the North Carolina Department of Transportation Division of Highways Standard Specifications for Road and Structures, latest edition.
1. The aggregate base course shall be compacted to a density of at least 100% of the maximum theoretical dry density using the Standard Proctor method of moisture-density relationship test.
- C. **BITUMINOUS PLANT MIX – GENERAL:** The work covered under this Section of this Specifications shall be performed in strict accordance with Section 600, Section 605, Section 610, and Section 620 of the North Carolina Department of Transportation Division of Highways Standard Specifications for Road and Structure, latest edition and Sections 2 through 6 and Section 9 of the Superpave Hot Mix Asphalt / Quality Management System of the North Carolina Department of Transportation Pavement Construction Section, with the exception that recycled products are not permitted.
1. Pavement repairs shall be performed in accordance with Section 654 of the Superpave Hot Mix Asphalt / Quality Management System of the North Carolina Department of Transportation Pavement Construction Section, latest edition.
- D. OMITTED
- E. OMITTED
- F. OMITTED
- G. **BITUMINOUS BINDER COURSE (TYPE I 19.0B):** The work covered under this Section of this Specification shall be performed in strict accordance with Section 4 of the Superpave Hot Mix Asphalt / Quality Management System of the North Carolina Department of Transportation Pavement Construction Section, latest edition.

- H. BITUMINOUS SURFACE COURSE (TYPE SF 9.5B AND S 9.5C): The work covered under this Section of this Specification shall be performed in strict accordance with Section 4 of the Superpave Hot Mix Asphalt / Quality Management System of the North Carolina Department of Transportation Pavement Construction Section, latest edition.
- I. TRAFFIC MARKINGS: The Contractor shall repair and restripe any traffic markings that were damaged, removed or covered during construction. All work shall be performed in strict accordance with the North Carolina Department of Transportation requirements and specifications.
- J. OMITTED
- K. COMPACTION:
 - 1. Immediately after the bituminous mixture has been spread, struck off, and surface and edge irregularities adjusted, it shall be thoroughly and uniformly compacted. The degree of compaction required shall be in accordance with the applicable Section of the Specifications for the type of mixture being placed.
 - 2. Omitted
 - 3. The use of rolling equipment which results in excessive crushing of the aggregate or excessive displacement of the mixture shall not be permitted.
 - 4. In areas inaccessible to equipment, the mixture shall be thoroughly compacted by the use of hand tampers or hand operated mechanical tampers.
- L. OMITTED
- M. WEATHER AND TEMPERATURE LIMITATIONS:
 - 1. Bituminous mixtures shall not be produced or placed during rainy weather, when the subgrade or base course is frozen, or when the moisture on the surface to be paved would prevent proper bond. Bituminous material shall not be placed when the air temperature, measured in the shade away from artificial heat at the location of the paving operations, is less than the following temperatures:

Table
Weather and Temperature Limitations

Material	Thickness Of Layer Being Placed	Air Temperature
Bituminous Concrete Binder or Base Course	1-1/2" or Greater	40°F
Bituminous Concrete Binder or Base Course	Less Than 1-1/2"	40°F
Surface Course Materials	1" or Greater	40°F (except final layer)
Surface Course Materials	1" or Greater	40°F for Final Layer except 50°F Between Nov. 1 & April 1
Surface Course Materials	Less Than 1"	50°F, except 60°F Between Nov. 1 & April 1

- 2. As an exception to the above, when in any day's operations the placement of a layer of bituminous base course material or binder material 1-1/2" or greater in thickness has started, it may continue until the temperature drops to 32° F.

3.2 QUALITY CONTROL AND TESTING

A. TESTING

1. All of the above work will be subject to thickness and compaction tests as deemed necessary by the Engineer and shall conform to Section 10 of the Superpave Hot Mix Asphalt / Quality Management System of the North Carolina Department of Transportation Pavement Construction Section.
2. Such tests will be provided and paid for by the Construction Manager, except that **tests which reveal non-conformance with the Specifications and all succeeding tests for the same area until conformance with the Specifications is established shall be at the expense of the Contractor.** The Construction Manager will be responsible for paying for **only** the successful tests.

B. OMITTED

C. SURFACE REQUIREMENTS

1. The surface of the plant mix base or pavement after compaction shall be smooth and true to the required cross section and grade. Any defective areas shall be corrected with satisfactory material which shall be immediately compacted to conform with the surrounding area. Any area showing an excess of asphalt cement shall be removed and replaced.
2. The surface will be tested at all joints and at other selected locations using a ten (10) foot straightedge. The variation of the surface from the testing edge of the straightedge, when applied parallel to the centerline of the surface, shall not exceed one-eighth (1/8) inch between any two (2) contact points. Areas found to exceed this tolerance shall be corrected by the Contractor by removal of the defective work and replacement with new material unless other corrective measures are permitted by the Engineer. The work and materials required in the correction of defective work shall be provided by the Contractor at **no** cost to the Construction Manager.
3. The Contractor shall repaint and restripe any traffic markings that were damaged, removed, or covered during construction. All work shall be performed in accordance with the latest NCDOT requirements and specifications.
4. All existing manhole and valve covers shall be raised by the Contractor as necessary prior to paving so that the tops of the covers are flush with the final surface. Adjustments shall be made just prior to the placing of the final asphalt course.

END OF SECTION

**SECTION 32 1225
AGGREGATE BASE COURSE**

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this Section consists of the construction of a base composed of an approved aggregate material hauled to the site, placed on the site, compacted, and shaped to conform to the lines, grades, depths, and typical sections shown on the Plans or established by the Engineer.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Aggregate base course materials shall consist of crushed stone or uncrushed gravel, or other similar material having hard, strong, durable particles free of adherent coatings.
- B. All aggregate base course materials shall conform to the following standards, latest edition.
 - 1. North Carolina Department of Transportation Standard Roadway Specifications, Division 5, Aggregate Base Course.

ALL STANDARDS AND REQUIREMENTS, AS LISTED IN THE ABOVE REFERENCED NCDOT DOCUMENTS, SHALL SUPERCEDE THOSE LISTED WHERE THERE IS CONFLICT UNLESS OTHERWISE INDICATED BELOW.

- C. The Contractor shall furnish aggregate base course material produced in accordance with the requirements indicated herein for Type A aggregate unless otherwise specified in the special provisions.
- D. All aggregates shall be from approved sources. Sources will not be approved unless the material has satisfactory soundness and satisfactory resistance to abrasion. Satisfactory soundness will be considered to be a weighted average loss of not greater than 15% when subjected to five (5) alternations of the sodium sulfate soundness test in accordance with AASHTO T104. Satisfactory resistance to abrasion will be considered to be a percentage of wear of not greater than 55% when tested in accordance with AASHTO T96.
- E. Aggregates shall be handled in such a manner as to minimize segregation.
- F. Sites for aggregate stockpiles shall be grubbed and cleaned prior to storing aggregates, and the ground surface shall be firm, smooth, and well drained. A cover of at least three (3) inches of aggregate shall be maintained over the ground surface in order to avoid the inclusion of soil or foreign material. Stockpiles shall be built in such a manner as to minimize segregation. When it is necessary to operate trucks or other equipment on a stockpile in the process of building the stockpile, it shall be done in a manner approved by the Engineer.
- G. Stockpiles of different types or sizes of aggregates shall be spaced far enough apart, or else separated by suitable walls or partitions, to prevent the mixing of the aggregates.
- H. Any method of stockpiling aggregates which allows the stockpile to become contaminated with foreign matter or causes excessive degradation of the aggregate will not be permitted. Excessive degradation will be determined by sieve tests of samples taken from any portion of the stockpile over which equipment has been operated, and failure of such samples to meet all grading requirements for the aggregate will be considered cause for discontinuance of such stockpiling procedure.

- I. All standard sizes of aggregates shall meet the gradation requirements when tested in accordance with AASHTO T27.

PART 3 - EXECUTION

3.1 CONSTRUCTION OF STONE BASE

- A. APPLICATION OF AGGREGATE BASE COURSE: The work covered under this Section of these Specifications shall be performed in strict accordance with Division 5, Section 520 of the North Carolina Department of Transportation Division of Highways Standard Specifications for Road and Structures, latest edition.
 1. The aggregate base course shall be compacted to a density of at least 100% of the maximum theoretical dry density using the Standard Proctor method of moisture-density relationship test.
- B. The aggregate material shall be spread on the subgrade to a uniform loose depth and without segregation.
- C. Where the required compacted thickness of base is eight (8) inches or less the base material may be spread and compacted in one (1) layer. Where the required compacted thickness of base is more than eight (8) inches, the base material shall be spread and compacted in two (2) or more approximately equal layers. The minimum compacted thickness of any one layer shall be approximately four (4) inches.
- D. The minimum compaction for each layer shall be 100% Standard Proctor.
- E. Each layer of material shall have been sampled, tested, compacted, and approved prior to placing succeeding layers of base material or pavement. Such tests will be provided and paid for by the Construction Manager, except that **all succeeding tests after the first test for the same area, which reveal non-conformance with the Specifications, until conformance with the Specifications is established, shall be at the expense of the Contractor.** The Construction Manager will be responsible for paying for only the successful tests and for only the first test in an area which reveals non-conformance.
- F. No base material shall be placed on frozen subgrade or base. Hauling equipment shall not be operated on subgrade or a previously completed layer of base material soft enough to rut or weave beneath the equipment.
- G. The maximum speed of trucks hauling or traveling over any part of the subgrade or base shall be five (5) miles per hour.
- H. The Contractor shall utilize methods of handling, hauling, and placing which will minimize segregation and contamination. If segregation occurs, the Engineer may require that changes be made in the Contractor's methods to minimize segregation, and may also require mixing on the road which may be necessary to correct any segregated material. No additional compensation will be allowed for the work of road mixing as may be required under this provision. Aggregate which is contaminated with foreign materials to the extent the base course will not adequately serve its intended use shall be removed and replaced by the Contractor at no additional cost to the Construction Manager. The above requirements will be applicable regardless of the type of aggregate placed and regardless of prior acceptance.
- I. No aggregate base course shall be placed on contaminated base course material. Prior to placing new aggregate over existing aggregate base course, the Contractor shall contact the Engineer for approval to place the new material. The Engineer shall make the sole final determination as to whether or not the existing material is "contaminated".

In most locations within parking lots the existing aggregate base course will require removal of the top one (1) inch to two (2) inches of existing aggregate to accommodate the proposed paving. The Contractor shall prepare the surface to the level to accept the proposed asphalt. The Contractor shall contact the Engineer prior to placing the asphalt to determine the acceptability of the prepared subgrade aggregate. No asphalt shall be placed without the Engineer's approval.

All contaminated aggregate base course material shall be removed to a minimum depth of two (2) inches or to the depth as directed by the Engineer. New material shall be placed as described above. Material contaminated by the Contractor's operations shall be removed and replaced at the Contractor's own expense.

- J. **The Engineer or the Construction Manager's representative shall have the right to require that any portion of the work be done in his presence and if the work is covered up after such instruction, it shall be exposed by the Contractor for observation at no additional expense to the Construction Manager.**

3.2 QUALITY CONTROL

A. TOLERANCES

1. After final shaping and compaction of the base, the Engineer will check the surface of the base for conformance to grade and typical section and will determine the base thickness.
2. The thickness of the base shall be within a tolerance of plus or minus one-half (1/2) inches of the base thickness required by the plans.

B. MAINTENANCE

1. Where the base material is placed in a trench section, the Contractor shall provide adequate drainage through the shoulders to protect the subgrade and base until such time as the shoulders are completed. The Contractor shall maintain the surface of the base by watering, machining, and rolling or dragging when necessary to prevent damage to the base by weather or traffic.

END OF SECTION

**SECTION 32 1350
MISCELLANEOUS SITE CONCRETE**

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The work of this Section includes cast-in-place concrete for miscellaneous site concrete such as pavements, slabs, and stairs as shown on Drawings, and as specified herein. In general, this work includes providing cast-in-place concrete consisting of Portland Cement, fine and coarse aggregate, selected admixtures, mixing, transporting, steel and/or wire reinforcing, placing, finishing, curing and all related activities and appurtenances as herein specified to provide complete installation of miscellaneous site concrete. This section further includes related items of quality control, testing, and evaluation of concrete strength.

1.02 SUBMITTALS

- A. The Contractor shall submit the proposed design mix for each class of concrete specified herein in accordance with the requirements herein. Design mixes shall be submitted two (2) weeks prior to placement of concrete.

1.03 QUALITY ASSURANCE

- A. If the average strength of the laboratory control cylinders shows the concrete to be below the specified design strength, the aggregate proportions and water content may be changed by the Engineer, who, in addition to such changes, may require core tests. Tests confirming concrete strengths on hardened concrete which was poured without testing shall be paid for by the Contractor.
- B. Design mixes shall be prepared for each class of concrete used in accordance with ACI 311.1. The Contractor shall pay for all design mix costs. Written reports shall be submitted to the Engineer for each proposed mix for each class of concrete prior to start of work. Concrete production shall not begin until mixes have been reviewed by the Engineer.

1.04 REFERENCES

- A. Some products and execution are specified in this section by reference to published specifications or standards of the following with respect abbreviations used.

- 1. American Concrete InstituteACI
- 2. The American Society for Testing and MaterialsASTM

B. STANDARD REFERENCES

The current edition of the following standard references shall apply to the work of this Section as indicated. Suffixes indicating issue date are omitted from reference numerals elsewhere in the text. Concrete work shall comply with the following standards and codes except as indicated otherwise on the Drawings or herein.

- 1. Publications of the North Carolina Department of Transportation Standard Roadway Specifications
 - a. Division 7 Section 700 Portland Cement Concrete Production and Delivery.
 - b. Division 7 Section 710 Concrete Paving.
- 2. ACI 301 "Specifications for Structural Concrete"

3. ACI 304 "Recommended Practice for Measuring, Mixing Transporting, and Placing Concrete"
4. ACI 305 "Recommended Practice for Hot Weather Concreting"
5. ACI 306 "Recommended Practice for Cold Weather Concreting"
6. ACI 308 "Recommended Practice for Curing Concrete"
7. ACI 309 "Recommended Practice for Consolidation of Concrete"
8. ACI 311 "Recommended Practice for Concrete Inspection"
9. ACI 214 "Recommended Practice for Evaluation of Compressive Test Results of Field Concrete"
10. ACI 211.1 "Recommended Practice for Selecting Proportions 70 for Normal Weight Concrete"
11. ACI 212 "Guide for Use of Admixtures in Concrete"
12. ACI 214 "Recommended Practice for Evaluation of Compression Test Results of Field Concrete"

PART 2: PRODUCTS

2.01 MATERIALS

- A. All cast-in-place concrete shall conform to the following standards, latest edition:
1. North Carolina Department of Transportation Standard Roadway Specifications, Section 1000 Portland Cement Concrete Production and Delivery.
 2. North Carolina Department of Transportation Standard Roadway Specifications, Section 1014 Aggregate for Portland Cement Concrete.
 3. North Carolina Department of Transportation Standard Roadway Specifications, Section 1024 Materials for Portland Cement Concrete.
 4. North Carolina Department of Transportation Standard Roadway Specifications, Section 1026 Portland Cement Concrete Curing Agents.
 5. North Carolina Department of Transportation Standard Roadway Specifications, Section 1028 Portland Cement Concrete Joint Filler.
 6. North Carolina Department of Transportation Standard Roadway Specifications, Section 1070 Portland Cement Concrete Reinforcing Steel.

ALL STANDARDS AND REQUIREMENTS, AS LISTED IN THE ABOVE REFERENCED NCDOT DOCUMENTS, SHALL SUPERCEDE THOSE LISTED WHERE THERE IS CONFLICT UNLESS OTHERWISE INDICATED BELOW.

- B. PORTLAND CEMENT shall be fresh stock of an approved standard brand meeting the requirements of ASTM C-150, of Type II. Only one (1) brand of cement shall be used except when otherwise approved by the Engineer, and the Contractor shall inform the Engineer of the brand name of the cement proposed for use. The Contractor shall submit a copy of mill test reports on all cement delivered to the job seven (7) days prior to use of the cement. Cube strength from mill tests shall have a tolerance of ± 600 psi. The fineness of cement used shall not have more than 10% retained on a #325 mesh screen when tested in accordance with ASTM C-430.
- B. FLY ASH shall have a high fineness and low carbon content and shall exceed the requirements of ASTM C-618. Specifications for Fly Ash and Raw or Calcined Natural for use in Portland Cement Concretes for Class 7, except that the loss of ignition shall be less than 3%, and all fly ash shall be a classified processed material. Fly ash shall be obtained from one (1) source for the concrete delivered to the Project. Complete chemical and physical analysis of each carload of fly ash shall be submitted to the Engineer ten (10) days prior to use of each carload delivered. Concrete mixes proportioned with fly ash shall contain not less than 10% nor more than 20% by weight of cement of fly ash.

- C. CONCRETE AGGREGATE for stone concrete shall consist of clean crushed stone or gravel having hard, strong, uncoated particles free from injurious amounts of soft, thin, elongated or laminated pieces, alkali, organic or other deleterious matter. Maximum aggregate size shall be 3/4" for slabs, etc., or as required by the applicable NCDOT specifications. The maximum permissible percentage of elongated particles shall not exceed 5% by weight. Elongated particles are those defined as having a length equal to or greater than five (5) times the width. Samples of coarse aggregate shall be submitted to the testing laboratory for testing and approval prior to use. The fineness modulus of the coarse aggregate shall not vary for more than $\pm 0.3\%$.
- D. FINE AGGREGATE shall consist of sand, stone screenings, or other inert materials with similar characteristics having clean, strong, durable, uncoated grains and free from lumps, soft or flaky particles, clay, shale, alkali, organic matter or other deleterious substances. Fine aggregate shall be submitted for testing and approval to the testing laboratory. The laboratory shall verify that fine aggregate conforms to ASTM standards by making standard colormetric, sediment, and comparative tensile tests, and by sieve analysis. The fineness modulus of the sand shall not vary by more than $\pm 0.2\%$. Color shall be standard as determined from colormetric tests.
- E. CONCRETE ADMIXTURES, when required or permitted shall conform to the appropriate specification listed. Do not use admixtures which have not been incorporated and tested in the accepted mixes unless otherwise authorized in writing by the Engineer. Air-entraining admixtures shall exceed the requirements of ASTM C-260, "Specifications for Air-Entraining Admixtures for Concrete". Water reducing admixtures shall be hydroxolated polymer type exceeding the requirements of ASTM C-494, Type A.
- F. PREMOLDED EXPANSION JOINT FILLERS shall conform to ASTM D1751.
- G. LIQUID CURING MATERIAL for concrete shall exceed the requirements of ASTM C-309, Type I. Products acceptable shall provide water retention not exceeding a loss of 0.020 grams per sq. cm. when tested at a coverage of 200 sq. ft. per gallon and tested in accordance with ASTM C-156. Submit test data verifying these requirements for approval.
- H. BURLAP shall be free of sizing or any substance that is injurious to cement or can cause discoloration. Burlap shall be rinsed in water prior to use. Burlap shall be sufficient thickness to retain water without requiring wetting.
- I. VAPOR BARRIER where required shall be Moistop as manufactured by the St. Regis Co., or an approved equal.
- J. JOINT SEALING COMPOUND shall be a two-part mineral filled epoxy polyurethane, and shall be used for all exposed joints in exterior paving slabs, sidewalks, and in exposed joints in slabs on grade.
- K. SURFACE COATING for all exposed concrete where indicated shall be "Thoroseal" as manufactured by the Standard Dry Wall Co., or an approved equal.

2.02 AIR ENTRAINMENT

Air-entraining admixtures shall be used for all concrete exposed to freezing and thawing or subjected to hydraulic pressure. Entrained air shall conform to the air control limits of Table 3.4.1 of ACI 301. The water-cement ratio for all air-entrained concrete exposed to freezing and thawing shall not exceed 0.53.

Air contents shall be as follows:

Maximum Aggregate Size
1 ½ inches

Percent Air
5 ½ percent plus 2 or minus 1 percent

¾ to 1 inch

6 percent plus 2 or minus 1 percent

2.03 SLUMPS

All concrete shall be proportioned and produced to have a maximum slump of four (4) inches and a minimum slump of two (2) inches.

2.04 CONCRETE MIXING

A. Concrete shall be mixed at batch plants or it may be transit mixed as specified herein. Concrete batch plants must comply with the requirements of ASTM C-94 and ACI-304 with sufficient capacity of producing concrete of the quantity and quality as specified herein. All plant facilities are subject to inspection by the Engineer. Ready-mix concrete shall comply with requirements of ASTM C-94, and as specified herein, unless otherwise noted. During hot weather or under conditions contributing to rapid setting of concrete, a shorter mixing time than specified in ASTM C-94 will be required as follows:

1. When air temperatures are between 80°F and 90°F, reduce the mixing and delivery time from 1-1/2 hours to 1 hour
2. When outside air temperatures are above 90°F, reduce the mixing and delivery time from 1-1/2 hours to 45 minutes.

B. Addition of water at the site for concrete mix with insufficient slumps, slumps less than the maximum specified herein, will not be permitted. Concrete delivered to the project with slump less than the minimum or greater than the maximum specified shall be rejected and discarded off site.

C. Batch tickets for each load of concrete shall be submitted to the Engineer. The following information shall be provided on each batch ticket:

1. Design mix designation
2. Exact time cement, water and aggregate were discharged into the mix
3. Compressive strength of mix
4. Amount of water added to the mix

D. Equipment shall be maintained in proper operating condition, with drums cleaned before charging of each batch. Delivery of trucks shall be scheduled in order to prevent delay of placing after mixing.

E. *CONCRETE TYPE AND STRENGTHS

Location	Maximum Size Aggregate	*28 Day Compressive Strength
Slabs on Grade	¾"	4000 psi

*Twenty-eight day strength shall be as determined from concrete sampled in accordance with ASTM C-172 and standard 6" x 12" molded cylinders tested in accordance with ASTM C-31 and C-39.

**See notes on Plans for required concrete strengths where indicated.

Minimum flexural strength (third point loading) shall be 550 psi with a minimum compressive strength of 4000 psi at 28 days.

PART 3: EXECUTION

3.01 PREPARATION

Before placing concrete, all equipment for mixing and transporting and placing concrete shall be cleaned, all debris and ice removed from spaces to be occupied by the concrete, forms thoroughly cleaned of soil, ice, or other coatings which will prevent proper bond, reinforcement shall be securely tied in place and expansion joint material, anchors, and other embedded items shall be securely positioned. Hardened concrete and foreign materials shall be removed from the conveying equipment.

3.02 CONCRETE PLACEMENT

- A. **All concrete shall be placed in accordance in accordance with the requirements of North Carolina Department of Transportation Standard Roadway Specifications, Section 700 Portland Cement Concrete Paving and Section 710 Concrete Pavement, latest editions, and all related specifications and requirements.**
- B. Concrete shall be place in compliance with the practices and recommendations of ACI 304 and applicable section of the NCDOT specifications or as herein specified. Concrete shall be handled from the mixer to the place of final deposit as rapidly as practical by methods which will prevent separation or loss of ingredients and in a manner which will assure that the required quality concrete is obtained. Conveying equipment shall be of size and design to insure a continuous flow of concrete at the delivery end.
- B. Concrete shall be deposited continuous, or in layers of such thickness that no concrete will be deposited on concrete which has hardened sufficiently to cause the formation of seams or planes of weakness within the section. If a section cannot be placed continuously, construction joints shall be located at points as provided for in the drawings or as approved. Placing shall be carried on at such a rate that the concrete which is being integrated with fresh concrete is still plastic. Concrete shall be deposited as nearly as possible to its final location to avoid segregation due to rehandling or flowing. Concrete shall not be subjected to any procedure which will cause segregation.
- C. Concrete shall not be allowed to "freedfall" a distance greater than 3'-0". All concrete shall be placed through a tremie with the bottom or outlet of the tremie being held at maximum of 3'-0" above the surface where concrete is being placed.
- D. Screed concrete which is to receive other construction to the proper level to avoid excessive skimming or grouting.
- E. Concrete shall not be used which has become non-plastic and unworkable or does not meet the required quality control limits, or which has become contaminated by foreign material. Rejected concrete shall be removed from the Project site and disposed of in an acceptable location. Concrete shall be consolidated by mechanical vibrating equipment supplemented by hand-spading, rodding, and tamping. Vibration of forms and reinforcing steel will not be permitted.
- F. Vibrators shall be inserted and withdrawn vertically at uniformly spaced locations not further than the visible effectiveness of the vibrator. Vibrators shall not be inserted into lower levels of concrete that have begun to set. At each insertion, the duration of vibration shall be limited to the time necessary to consolidate the concrete and complete embedment of reinforcing and other embedded items without causing segregation of the mix.
- G. Concrete shall be deposited and consolidated in a continuous operation, within the limits of construction joints until the placing of the entire section is complete.

- H. Surfaces shall be brought to the correct elevations with a straight edge and struck off. The surfaces shall be free of lumps and hollows.
- I. Concrete placed by pumping shall conform to the recommendations of ACI Publication, "Placing Concrete by Pumping Methods."

3.03 CONSTRUCTION JOINTS

- A Joints not shown on the Drawings shall be made at locations that will least impair the strength of the structure and shall be approved by the Engineer.

3.04 COLD WEATHER PLACING AND CURING REQUIREMENTS

- A. All concrete placed in temperatures 40°F. or below or exposed to temperatures 40°F. or below within five (5) days after the concrete is placed, shall conform to the requirements of ACI 306, "Recommended Practice for Winter Concreting", unless otherwise specifically specified herein.
- B. The following protection requirements for concrete placed, protected, and cured in temperature 40°F. or less shall be considered the minimum acceptable standards.
 - 1. Slabs on Grade - Cover top with insulating blankets. Blankets shall remain in place for a minimum period of five days.
 - 2. Temperature of concrete at placement shall not be less than 55°F.

3.05 HOT WEATHER PLACING

An approved admixture designed to retard the rate of set shall be used for all concrete placed when temperatures exceed 75°F. Set retarding admixtures shall conform to ASTM C-494, Type D, water reducing and retarding. Wet forms thoroughly before placing. Cool reinforcing by wetting sufficiently so that steel temperatures will be nearly equal to the ambient air temperature. Provide wind breaks around the perimeter of the area where concrete is being placed. Fresh concrete with temperatures 90°F or above shall be discarded off site. The amount of cement used in the job is computed for the temperature indicated on the approved design mix. For higher concrete mix temperature, the weight of the cement shall be increased at the rate of 12 lbs. per cubic yard for each 10°F. above the concrete mix temperature.

3.06 CURING AND PROTECTION

- A. Freshly placed concrete shall be protected from premature drying and excessive cold or hot temperatures, and maintained without drying at a relatively constant temperature for the period of time necessary for hydration of the cement and proper hardening of the concrete.
- B. Curing for all horizontal slab surfaces, except those to receive a bonded finish material, during periods when the outside air temperature does not exceed 60°F shall be provided by applying a membrane-forming curing compound to concrete surfaces as soon as the final troweling or floating operation has been completed. Curing compound shall be applied uniformly at a rate not to exceed 200 sq. ft. per gallon. Curing for all horizontal surfaces during period when the outside air temperature will exceed 60°F shall be provided by covering the entire surface with burlap. The burlap shall be lapped 1/2 width in order to provide a double thickness of burlap. Immediately following the placement of the burlap, the entire surface shall be maintained continuously wet for a period of seven (7) days. Surfaces shall not be permitted to dry at any period during the required curing period.
- C. Formed surfaces shall be cured by moist curing with the forms in place for the full curing period, or until forms are removed.

- D. During the curing period, the concrete shall be protected from damaging mechanical disturbances, including load stresses, shocks, excessive vibration and from change caused by subsequent construction operations.

3.07 SURFACE REPAIRS

- A. Defective areas shall be repaired immediately after removal of forms as directed by the Engineer.

3.08 SLABS ON GRADE:

A. PREPARATION OF SUBGRADE

The subgrade shall be well drained and of adequate and uniform loadbearing nature. The in-place density of the subgrade soils shall be at least the minimum required in the Specifications. The subgrade shall be free of frost before concrete placing begins.

B. JOINTS

All exposed construction joints in the slabs on grade shall have the edges tooled and the crack and groove formed by the edging tool filled with a polyurethane joint sealant. No kold-key or metal form joints will be permitted.

3.09 FINISHES

A. STANDARD FINISH FOR EXPOSED SURFACES

Provide an applied surface finish of "Thoroseal" or an approved equal to all exposed interior and exterior concrete finishes unless otherwise noted. Interior faces of walls of water retaining structures, including areas which are normally submerged, are considered to be exposed surfaces and shall receive the specified standard finish for exposed surfaces. The surface finish shall consist of chopping and/or grinding down all high spots removing grinding of all burrs and/or other projections, filling all voids 3/8" and larger, and cutting out all unsound concrete and patching as specified herein. Before applying the finish, wet and clean the surface of all grease, oils, efflorescence, and other foreign material. Dampen surface immediately ahead of application. Apply the finish coat with a tampico fiber brush by laying the finish coat on the wall in a thick coat of a minimum of 2 lbs. per sq. yard, and brush to a uniform level surface. Do not apply in temperatures 40°F or below, or when temperatures are likely to fall below 40°F within 24 hours after application. The finish coat shall be mixed in strict accordance with the manufacturer's written instructions. After the finish coat has cured, apply a finish coat of "Quick Seal" at a minimum of 12 lb. per sq. yd. The Thoroseal shall be applied by trained technicians.

B. SLAB FINISHES

1. Floated Finish

After the concrete has been placed, consolidated, struck off, and leveled, the concrete shall not be worked further until ready for floating. Floating shall begin when the water sheen has disappeared and when the surface has stiffened sufficiently to permit the operation. During or after the first floating, planeness of surface shall be checked with a 10'-0" straight edge applied at not less than two different angles. All high spots shall be cut down and all low spots filled during this procedure to produce a surface with Class B tolerance throughout. This slab shall then be floated immediately to a uniform sandy texture.

2. Broom Finish

Immediately after the concrete has received a float finish as specified in Section B, it shall be given a coarse transverse scored texture by drawing a broom or burlap belt across the surface. A broom finish shall be applied to all parking surfaces, exterior concrete walks, and concrete slabs, unless otherwise stated in the Project Plans or Details.

3.10 FINISHING TOLERANCES

Individual deviations shall not exceed 0.3 inches over any 25-foot section tested.

3.11 OMITTED

3.12 OMITTED

3.13 INSPECTION

Before placing concrete, the formwork installation, reinforcing steel, and items to be embedded or cast-in must be complete. The Contractor shall notify the Engineer upon completion of installation of all reinforcing and other items in ample time to permit inspection of the work. Earthen foundation is subject to testing laboratory as directed by the Engineer.

3.14 TESTING AND QUALITY CONTROL

- A. The Construction Manager shall employ a concrete testing laboratory to provide all laboratory testing services on the Project and a concrete technician to perform all quality control tests on concrete and materials used to batch concrete. The testing agency employed shall meet the requirement of "Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction", (ASTM E-329).
- B. Such tests will be provided and paid for by the Construction Manager, except that **tests which reveal non-conformance with the Specifications and all succeeding tests for the same area until conformance with the Specifications is established shall be at the expense of the Contractor.** The Construction Manager will be responsible for paying for **only** the successful tests.
- C. The Contractor shall provide and maintain adequate facilities on the Project for the testing laboratory to locate the required testing equipment and for safe storage area for test cylinders. The Contractor shall provide at his own expense all casual labor needed to assist the concrete technician in obtaining samples of concrete and concrete materials and moving and transporting cylinders and materials which are being tested.
- D. The following services shall be performed by the designated testing agency:
 - 1. Review and/or check-test the Contractor's proposed materials for compliance with the specifications.
 - 2. Review and/or check-test the Contractor's proposed mix design as required by the Engineer.
 - 3. Secure production samples of materials at plants or stock-piles during the course of the Work and test for compliance with the Specifications.
 - 4. Conduct strength tests of the concrete during construction in accordance with the procedures outlined in the above referenced NCDOT Standards.

3.15 EVALUATION AND ACCEPTANCE OF CONCRETE STRUCTURES

- A. The concrete quality control testing as specified will be evaluated by the following criteria:

1. Compressive strength tests for laboratory-cured cylinders will be considered satisfactory if the averages of all sets of three consecutive compressive strength test results equal or exceed the 28-day design compressive strength of the type of class of concrete. If compressive strength tests fail to meet these requirements, the concrete represented by these tests will be considered deficient and subject to additional testing and/or removal.
2. Concrete work which does not conform to the specified requirements, including strength, tolerance and finishes, shall be corrected as directed at the Contractor's expense, without extension of time. The Contractor shall also be responsible for the cost of corrections to any other work affected by or resulting from correction to the concrete work. Core tests, if required, shall be evaluated in accordance with the requirements of ACI 318-77.
3. The testing agency shall further provide quality control inspection and testing of materials used in concrete. The following inspection and tests shall be on all equipment and materials on a random basis:
 - a. Fineness modulus and gradation of sand
 - b. Fineness modulus and gradation of coarse aggregate.
 - c. Colorimetric of sand.
 - d. Weight per cu. ft. and percent of voids on a dry rodded basis of the coarse aggregate.
 - e. Check of aggregate stock piles for contamination or intermingling of aggregates.
 - f. Check of mixing equipment and trucks for compliance with ASTM C-94.
 - g. Absorption of stone and sand.

END OF SECTION

**SECTION 32 1725
PAVEMENT MARKINGS**

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The work under this Section shall consist of furnishing all labor, equipment, materials and services for the proper placement and installation of all pavement markings in accordance with the requirements shown on the Plans and the provisions of these Specifications.

1.2 DELIVERY, STORAGE, AND HANDLING

- A. The Contractor shall deliver paint to site in sealed and labeled containers. Upon the Engineer's request, the Contractor shall make containers available for inspection to verify acceptance of the product. Paint shall be stored at a minimum ambient temperature of 45°F and a maximum of 90°F in well ventilated areas, unless required otherwise by the manufacturer's instructions.

1.3 RELATED DOCUMENTS

- A. All pavement markings shall be in accordance with latest edition of the "Manual of Uniform Traffic Control Devices (MUTCD)" published by the Federal Highway Administration and the North Carolina Supplement to the MUATCD.

PART 2 - PRODUCTS

2.1 MATERIALS

A. STANDARDS

1. All pavement markings shall conform to the North Carolina Department of Transportation Standard Roadway Specifications, Section 1087 Pavement Markings, latest edition.
2. The following are minimum requirements and shall govern except all local, state and/or federal highway or transportation department standard specifications shall govern when their requirements are in excess thereof.

B. PAINT

Paint shall be chlorinated rubber-alkyd type meeting the requirements of AASHTO M 248 (FS TT-P-II5), Type III factory mixed, quick drying and non-bleeding.

C. TRAFFIC AND LINE MARKINGS

1. Unless otherwise noted, paint for traffic and line markings shall be white in color.
2. Dimensions and spacing of markings shall be in accordance with MUTCD and as indicated in the pavement markings detail included in the Contract Drawings.

PART 3 - EXECUTION

3.1 SURFACE PREPARATION

- A. The Contractor shall insure that the pavement surface to be painted shall be clean and dry before application. All surface contamination such as oil, grease, dirt, foreign matter, or other deleterious materials shall be removed by the Contractor prior to the application of paint.

3.2 INSTALLATION

- A. No paint shall be applied when the atmospheric, surface, or material temperature is less than 40°F or when the relative humidity is greater than 85%.
- B. No paint shall be applied until the layout and placement has been verified by the Engineer.
- C. Paint shall be applied with mechanical equipment to produce uniform straight edges in strict compliance with the manufacturer's instructions. Paint shall be applied in two (2) coats at the manufacturer's recommended rates.

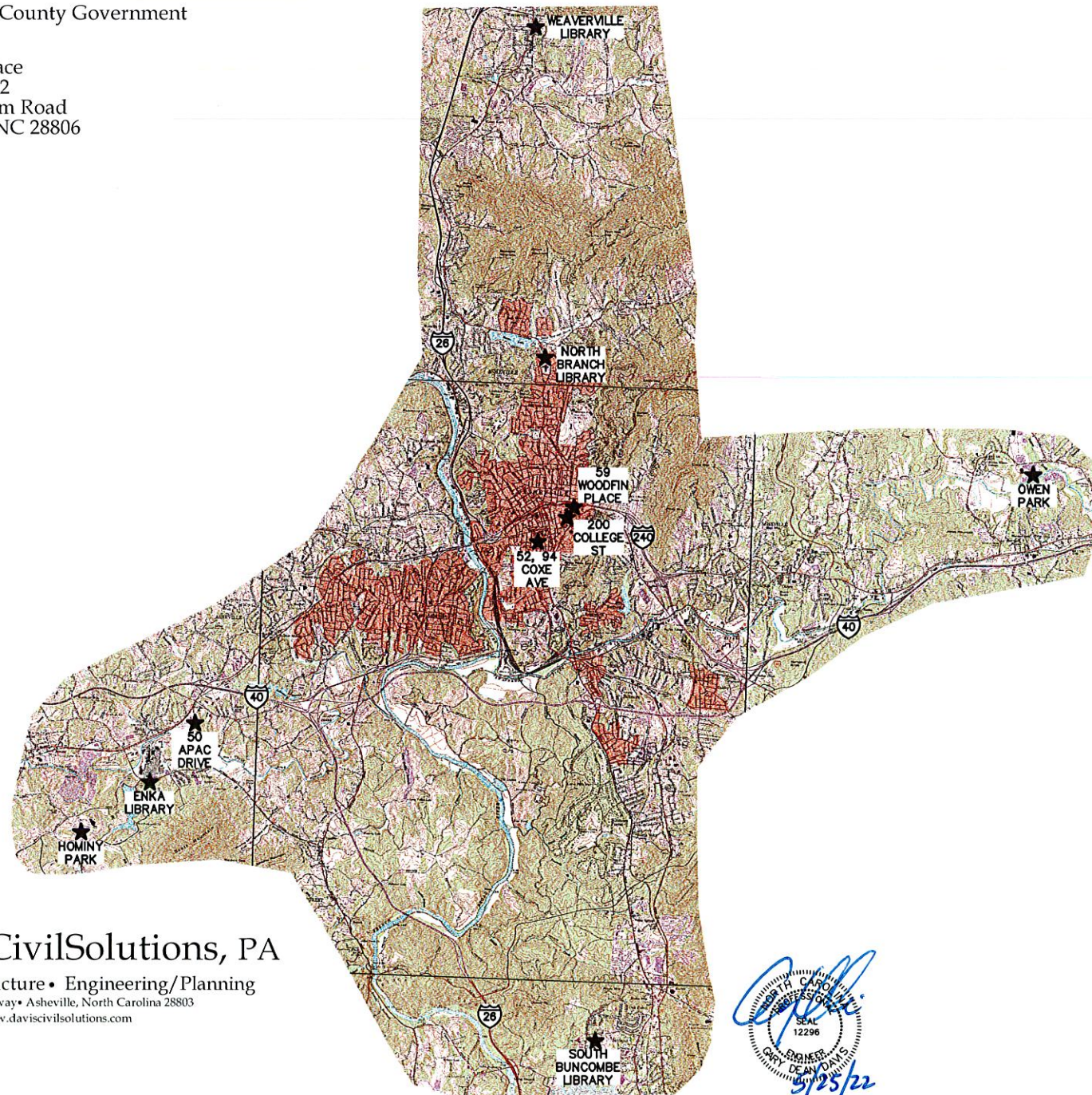
END OF SECTION

Parking Lot Improvements Countywide Projects

Buncombe County, North Carolina

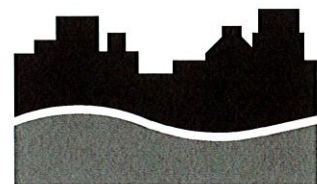
Owner/Developer: Buncombe County Government

Contact: Michael Mace
828.250.4242
175 Bingham Road
Asheville, NC 28806



Index of Drawings

- | | |
|-----------------------------|-----------------------------|
| G1. Cover Sheet | C12. 59 Woodfin Place |
| C1. Enka Library | C13. 200 College Street |
| C2. North Branch Library | C14. South Buncombe Library |
| C3. Weaverville Library | C15. Hominy Park - Overall |
| C4. 52 Coxe Avenue | C16. Hominy Park |
| C5. 94 Coxe Avenue | C17. Hominy Park |
| C6. 50 Apac Drive - Overall | C18. Federal Alley |
| C7. 50 Apac Drive | D1. Details |
| C8. 50 Apac Drive | D2. Details |
| C9. 50 Apac Drive | D3. Details |
| C10. 50 Apac Drive | D4. Details |
| C11. Owen Park | D5. Details |



Davis CivilSolutions, PA
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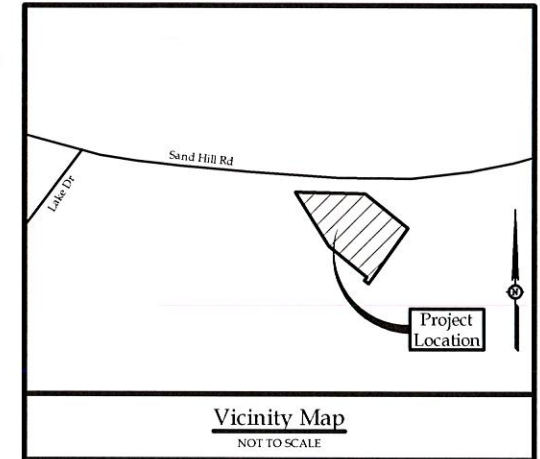
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May 25, 2022

Revision	Date	Description

NOTE:
BOUNDARY INFORMATION SHOWN FOR REFERENCE ONLY, TAKEN
FROM BUNCOMBE COUNTY GIS.



DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9617-31-8004
PHYSICAL ADDRESS:	1404 SAND HILL SCHOOL ROAD CANDLER, NC 28715
PROPERTY SIZE:	0.77 AC.

NOTES:
ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE INSTALLATION OF SILT FENCE IS NECESSARY DURING CONSTRUCTION, COORDINATE WITH ENGINEER.

HATCHED AREA REPRESENTS AREAS OF MILLING AND NEW ASPHALT INSTALLATION.

MILL 2" MIN., OR TO EXISTING ASPHALT DEPTH, AND INSTALL 2" S9.5B ASPHALT, OR MATCH EXISTING THICKNESS, WHICHEVER IS LESS.

PROOF ROLL AFTER REMOVAL IN PRESENCE OF ENGINEER OR COUNTY INSPECTOR. IN AREAS OF MOVEMENT, REMOVE EXISTING STONE AND SUBGRADE (12" MIN.). REPAIR AREAS OF MOVEMENT WITH FULL DEPTH CABG (12" MIN.).

TOTAL ASPHALT AREA APPROX. 13,000 SF

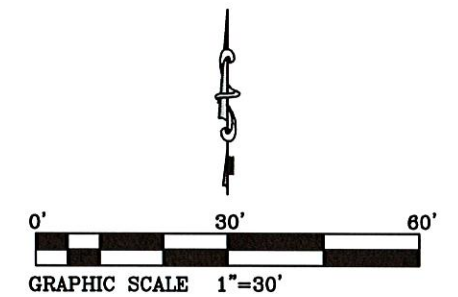
NEW STRIPING, INCLUDING BUT NOT LIMITED TO, PARKING SPACES, ACCESS AISLES, NO PARKING ZONES, CROSSWALKS, ETC., SHALL BE REINSTALLED TO THAT OF THE GENERAL SITE CONDITIONS THAT EXISTED PRIOR TO CONSTRUCTION, AFTER NEW ASPHALT HAS BEEN INSTALLED.

TYPICAL PARKING SPACE IS 9'x18'. TYPICAL HANDICAPPED PARKING SPACE IS 8'x18' WITH ACCESS AISLE, EITHER VAN ACCESSIBLE, 8'x18', OR NOT VAN ACCESSIBLE, 5'x18'.

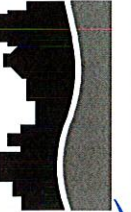
SEE PLAN FOR TOTAL EXISTING PARKING COUNT.

ANY PARKING BUMPERS LOCATED WITHIN A PARKING SPACE REMOVED FOR THE INSTALLATION OF NEW ASPHALT SHALL BE REINSTALLED AFTER PAVING HAS BEEN COMPLETED.

ANY CURBING OR CURB AND GUTTER, IF EXISTING, SHALL REMAIN.



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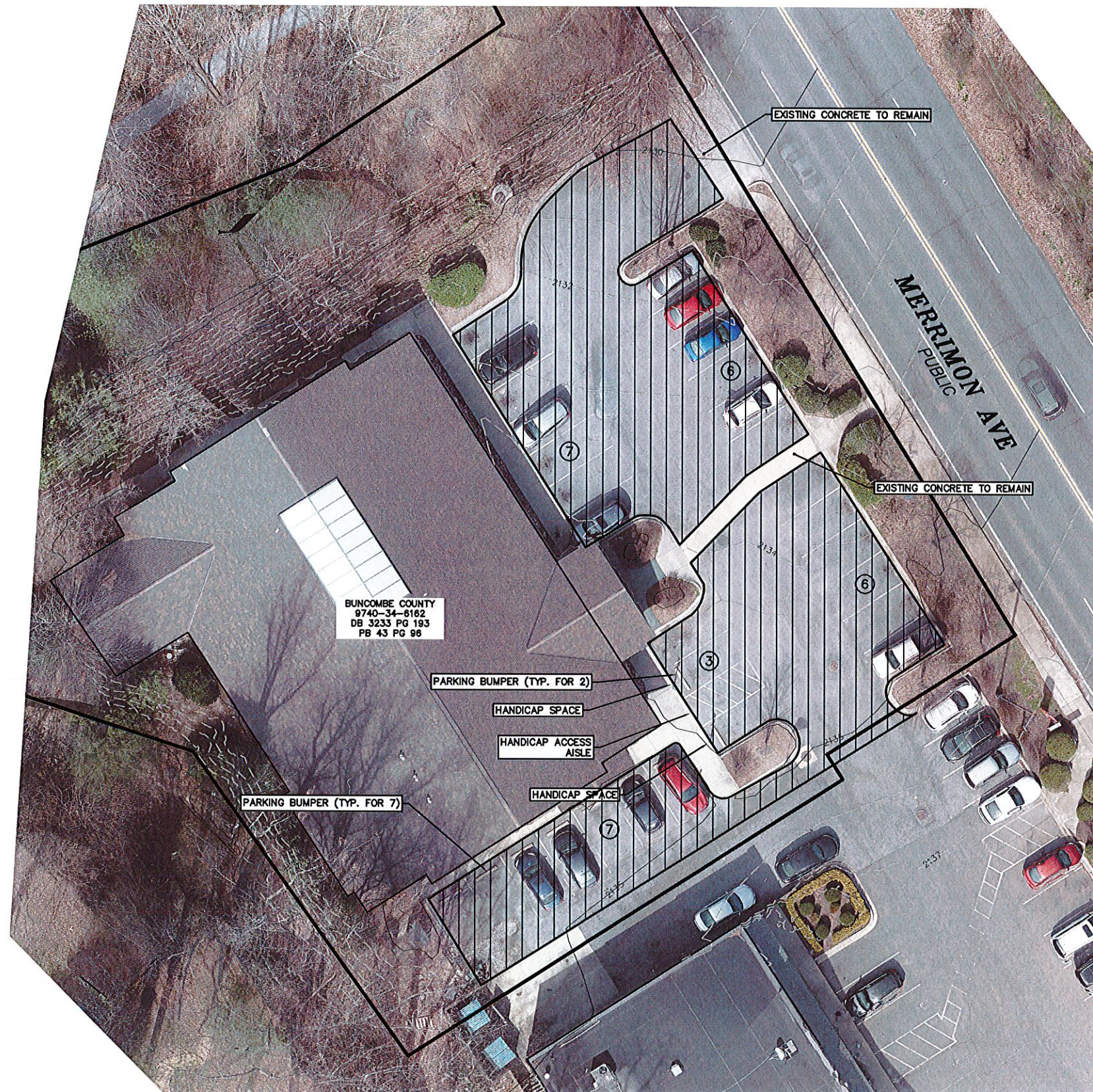
Parking Lot Improvements
Countywide Projects
Enka Branch Library
BUNCOMBE COUNTY, NORTH CAROLINA

Job No.: 20140
Date: May 25, 2022
Scale: 1"=30'
Revision:

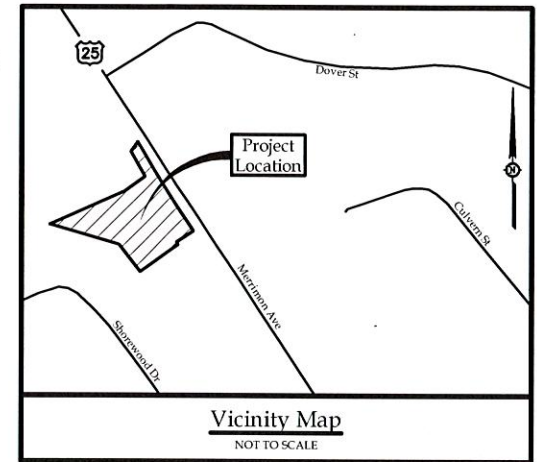
Site Plan

Sheet
C1

NOTE:
BOUNDARY INFORMATION SHOWN FOR REFERENCE ONLY, TAKEN
FROM BUNCOMBE COUNTY GIS.



BUNCOMBE COUNTY
9740-34-8162
DB 3233 PG 193
PB 43 PG 96



DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9740-34-6162
PHYSICAL ADDRESS:	1030 MERRIMON AVENUE ASHEVILLE, NC 28804
PROPERTY SIZE:	106 AC.

NOTES:
ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING CONSTRUCTION
SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE INSTALLATION OF
SILT FENCE IS NECESSARY DURING CONSTRUCTION, COORDINATE WITH ENGINEER.

HATCHED AREA REPRESENTS AREAS OF MILLING AND NEW ASPHALT INSTALLATION.

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MATCH EXISTING THICKNESS, WHICHEVER IS LESS.

PROOF ROLL AFTER REMOVAL IN PRESENCE OF ENGINEER OR COUNTY INSPECTOR. IN
AREAS OF MOVEMENT, REMOVE EXISTING STONE AND SUBGRADE (12" MIN.). REPAIR
AREAS OF MOVEMENT WITH FULL DEPTH CABG (12" MIN.).

TOTAL ASPHALT AREA APPROX. 9,300 SF

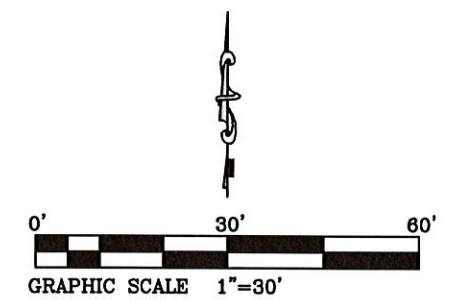
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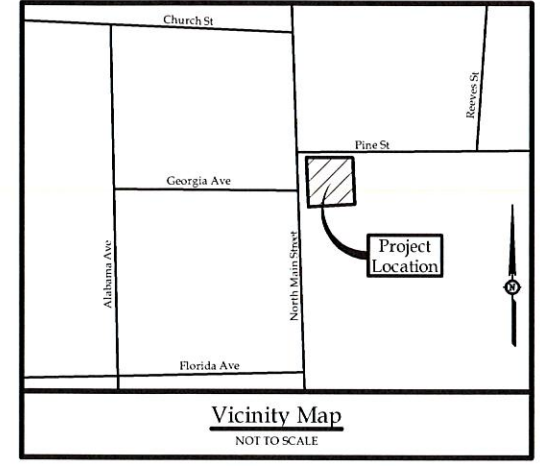
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INSTALLATION OF NEW ASPHALT SHALL BE REINSTALLED AFTER PAVING HAS BEEN
COMPLETED.

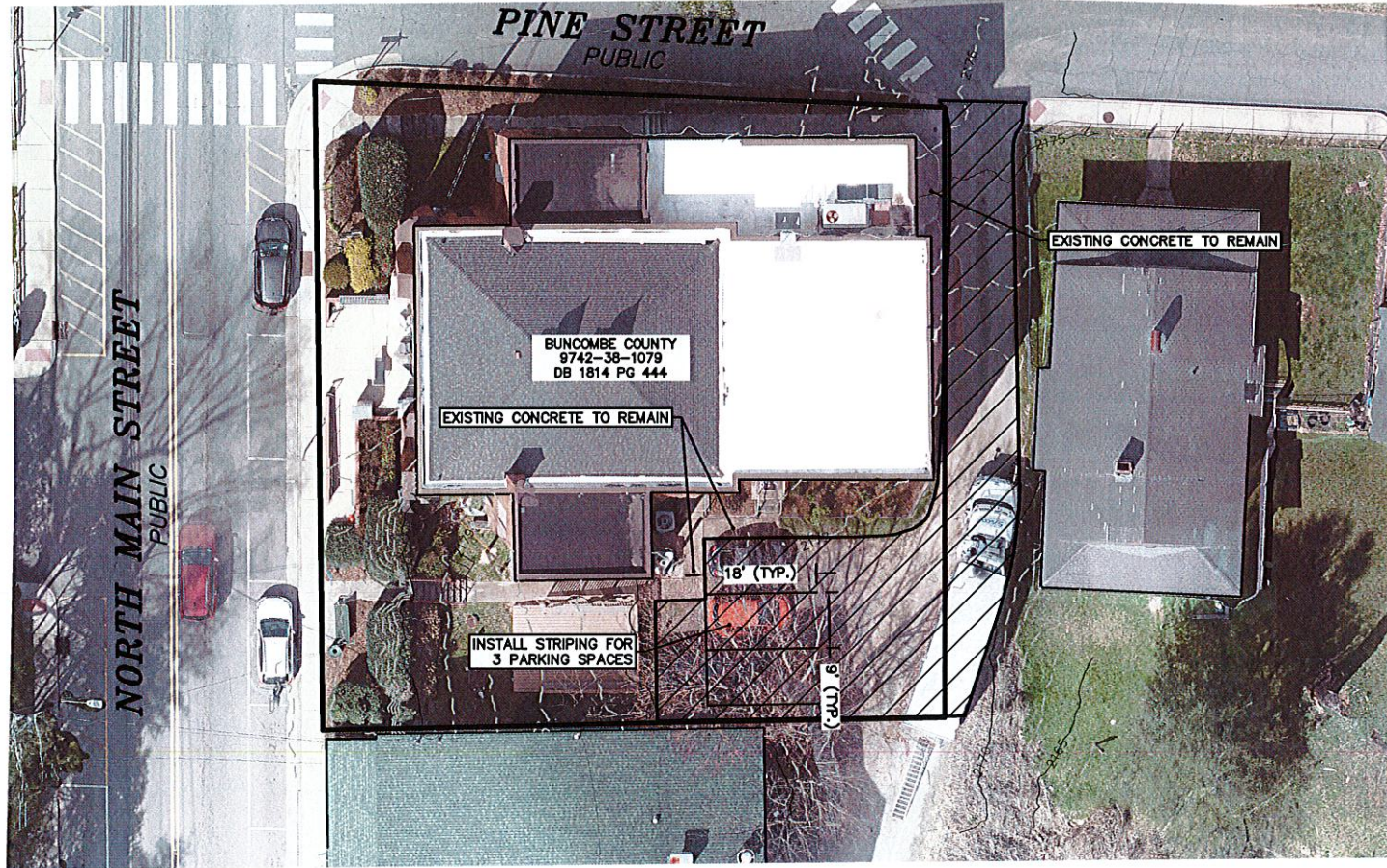
ANY CURBING OR CURB AND GUTTER, IF EXISTING, SHALL REMAIN.



NOTE:
BOUNDARY INFORMATION SHOWN FOR REFERENCE ONLY, TAKEN
FROM BUNCOMBE COUNTY GIS.



DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9742-38-1079
PHYSICAL ADDRESS:	41 NORTH MAIN STREET WEAVERVILLE, NC 28787
PROPERTY SIZE:	0.24 AC.



NOTES:
ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE INSTALLATION OF SILT FENCE IS NECESSARY DURING CONSTRUCTION, COORDINATE WITH ENGINEER.

HATCHED AREA REPRESENTS AREA OF NEW ASPHALT INSTALLATION.

NO EXISTING ASPHALT EXISTS. CONTRACTOR SHALL PROOF ROLL EXISTING STONE AND INSTALL 2" S9.5B ASPHALT.

PROOF ROLL IN PRESENCE OF ENGINEER OR COUNTY INSPECTOR. IN AREAS OF MOVEMENT, REMOVE EXISTING STONE (12" MIN.). REPAIR AREAS OF MOVEMENT WITH FULL DEPTH CABC (12" MIN.).

TOTAL ASPHALT AREA APPROX. 2,400 SF

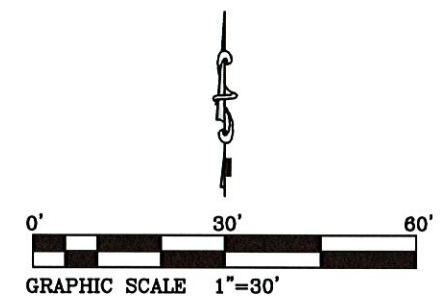
EXISTING PARKING IS NOT DELINEATED. CONTRACTOR SHALL INSTALL NEW STRIPING FOR 3 PARKING SPACES.

TYPICAL PARKING SPACE IS 9'x18'. TYPICAL HANDICAPPED PARKING SPACE IS 8'x18' WITH ACCESS AISLE, EITHER VAN ACCESSIBLE, 8'x18', OR NOT VAN ACCESSIBLE, 5'x18'.

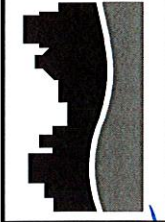
SEE PLAN FOR TOTAL EXISTING PARKING COUNT.

ANY PARKING BUMPERS LOCATED WITHIN A PARKING SPACE REMOVED FOR THE INSTALLATION OF NEW ASPHALT SHALL BE REINSTALLED AFTER PAVING HAS BEEN COMPLETED.

ANY CURBING OR CURB AND GUTTER, IF EXISTING, SHALL REMAIN.



Davis CivilSolutions, PA
 Site / Infrastructure • Engineering / Planning
 135-A Charlotte Highway Asheville, North Carolina 28807
 828.259.9449 P114 www.daviscivilsolutions.com



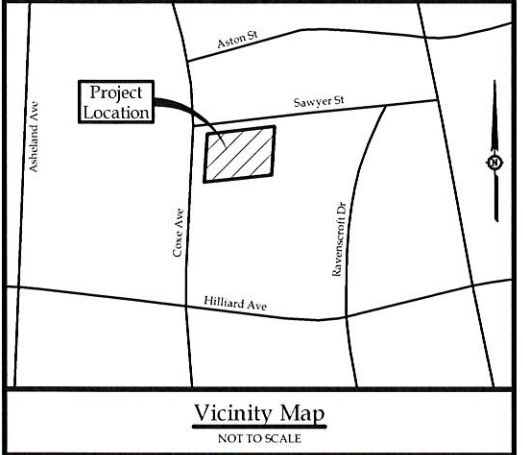
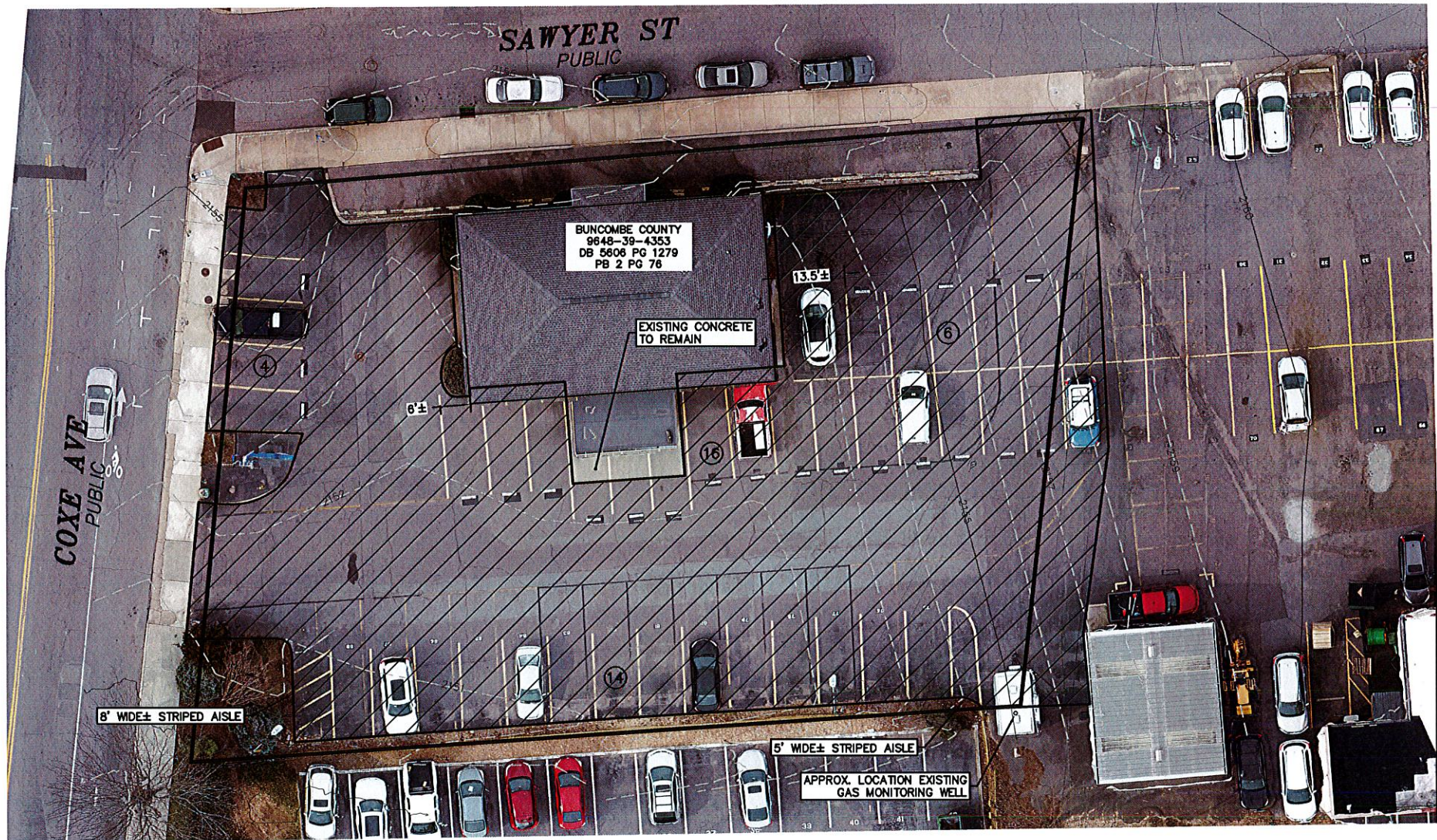
Parking Lot Improvements
 Countywide Projects
Weaverly Library
 BUNCOMBE COUNTY, NORTH CAROLINA

DB No: 20130
 Date: May 25, 2022
 Scale: 1"=30'
 Revision:

Site Plan

Sheet
C3

NOTE:
BOUNDARY INFORMATION SHOWN FOR REFERENCE ONLY, TAKEN
FROM BUNCOMBE COUNTY GIS.



DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9648-39-4353
PHYSICAL ADDRESS:	52 COXE AVENUE ASHEVILLE, NC 28801
PROPERTY SIZE:	0.16 AC.

NOTES:
ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE INSTALLATION OF SILT FENCE IS NECESSARY DURING CONSTRUCTION, COORDINATE WITH ENGINEER.

HATCHED AREA REPRESENTS AREAS OF MILLING AND NEW ASPHALT INSTALLATION.

MILL 2" MIN., OR TO EXISTING ASPHALT DEPTH, AND INSTALL 2" S9.5B ASPHALT, OR MATCH EXISTING THICKNESS, WHICHEVER IS LESS.

PROOF ROLL AFTER REMOVAL IN PRESENCE OF ENGINEER OR COUNTY INSPECTOR. IN AREAS OF MOVEMENT, REMOVE EXISTING STONE AND SUBGRADE (12" MIN.). REPAIR AREAS OF MOVEMENT WITH FULL DEPTH CABG (12" MIN.).

TOTAL ASPHALT AREA APPROX. 16,000 SF

NEW STRIPING, INCLUDING BUT NOT LIMITED TO, PARKING SPACES, ACCESS AISLES, NO PARKING ZONES, CROSSWALKS, ETC., SHALL BE REINSTALLED TO THAT OF THE GENERAL SITE CONDITIONS THAT EXISTED PRIOR TO CONSTRUCTION, AFTER NEW ASPHALT HAS BEEN INSTALLED.

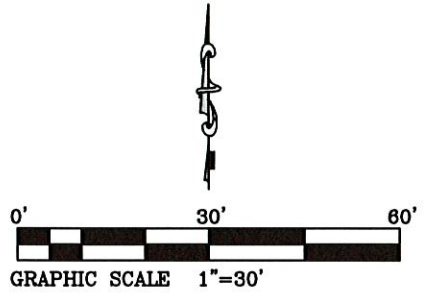
TYPICAL PARKING SPACE IS 9'x18'. TYPICAL HANDICAPPED PARKING SPACE IS 8'x18' WITH ACCESS AISLE, EITHER VAN ACCESSIBLE, 8'x18', OR NOT VAN ACCESSIBLE, 5'x18'.

SEE PLAN FOR TOTAL EXISTING PARKING COUNT.

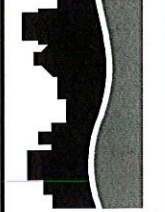
ANY PARKING BUMPERS LOCATED WITHIN A PARKING SPACE REMOVED FOR THE INSTALLATION OF NEW ASPHALT SHALL BE REINSTALLED AFTER PAVING HAS BEEN COMPLETED.

ANY CURBING OR CURB AND GUTTER, IF EXISTING, SHALL REMAIN.

BUNCOMBE COUNTY TO INSTALL PARKING STALL NUMBERS AND LETTERING UPON PROJECT COMPLETION.



Davis CivilSolutions, PA
Site/Infrastructure • Engineering/Planning
135-A Charlotte Highway, Asheville, North Carolina 28803
828.299.9449 P1 • www.daviscivilsolutions.com



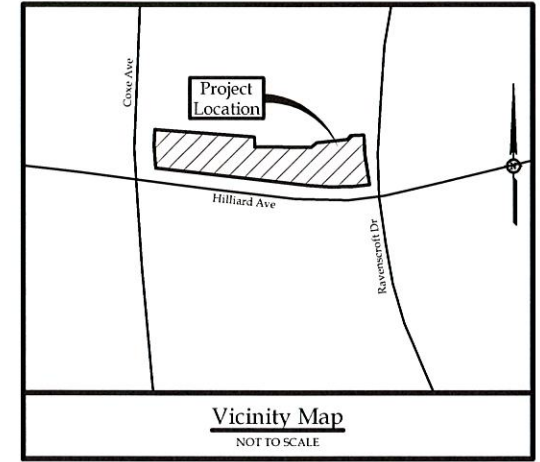
Parking Lot Improvements
Countywide Projects
52 Coxe Avenue
BUNCOMBE COUNTY, NORTH CAROLINA

DB No: 20140
Date: May 25, 2022
Scale: 1"=30'
Revision:

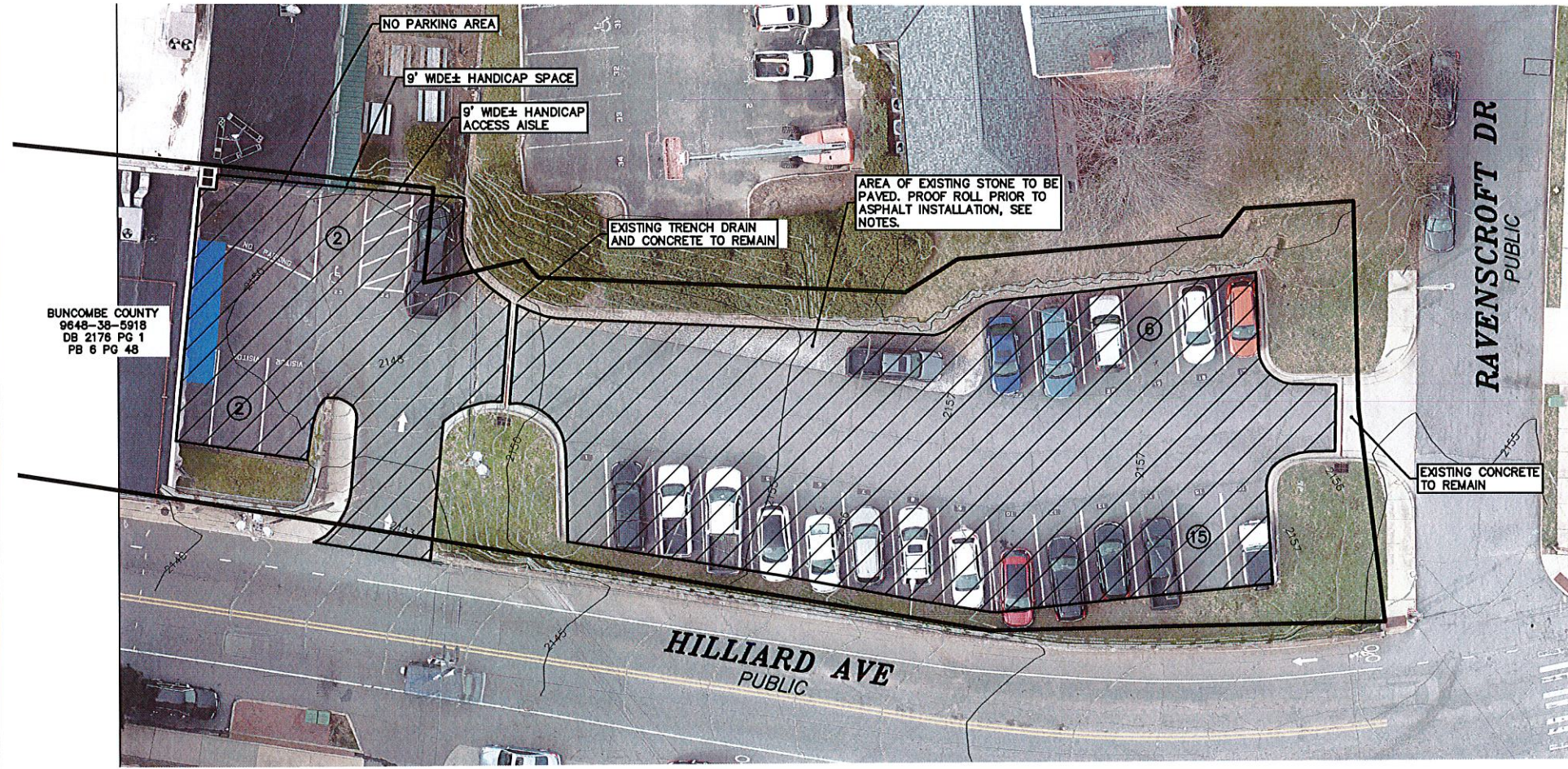
Site Plan

Sheet
C4

NOTE:
BOUNDARY INFORMATION SHOWN FOR REFERENCE ONLY, TAKEN FROM BUNCOMBE COUNTY GIS.



DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9648-38-5918
PHYSICAL ADDRESS:	94 COXE AVENUE ASHEVILLE, NC 28801
PROPERTY SIZE:	0.48 AC.



NOTES:
ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE INSTALLATION OF SILT FENCE IS NECESSARY DURING CONSTRUCTION, COORDINATE WITH ENGINEER.

HATCHED AREA REPRESENTS AREAS OF MILLING AND NEW ASPHALT INSTALLATION.

MILL 2" MIN., OR TO EXISTING ASPHALT DEPTH, AND INSTALL 2" S9.5B ASPHALT, OR MATCH EXISTING THICKNESS, WHICHEVER IS LESS.

PROOF ROLL AFTER REMOVAL IN PRESENCE OF ENGINEER OR COUNTY INSPECTOR. IN AREAS OF MOVEMENT, REMOVE EXISTING STONE AND SUBGRADE (12" MIN.). REPAIR AREAS OF MOVEMENT WITH FULL DEPTH CABG (12" MIN.).

TOTAL ASPHALT AREA APPROX. 11,000 SF

NEW STRIPING, INCLUDING BUT NOT LIMITED TO, PARKING SPACES, ACCESS AISLES, NO PARKING ZONES, CROSSWALKS, ETC., SHALL BE REINSTALLED TO THAT OF THE GENERAL SITE CONDITIONS THAT EXISTED PRIOR TO CONSTRUCTION, AFTER NEW ASPHALT HAS BEEN INSTALLED.

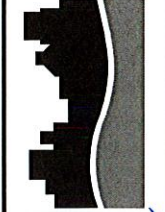
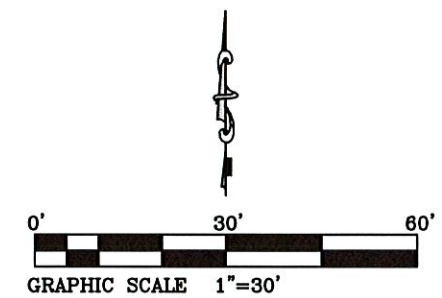
TYPICAL PARKING SPACE IS 9'x18'. TYPICAL HANDICAPPED PARKING SPACE IS 8'x18' WITH ACCESS AISLE, EITHER VAN ACCESSIBLE, 8'x18', OR NOT VAN ACCESSIBLE, 5'x18'.

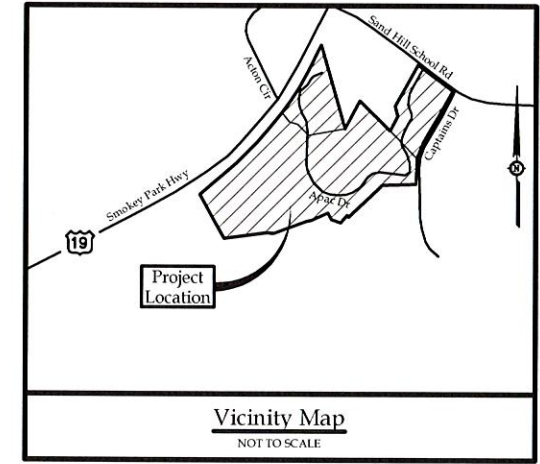
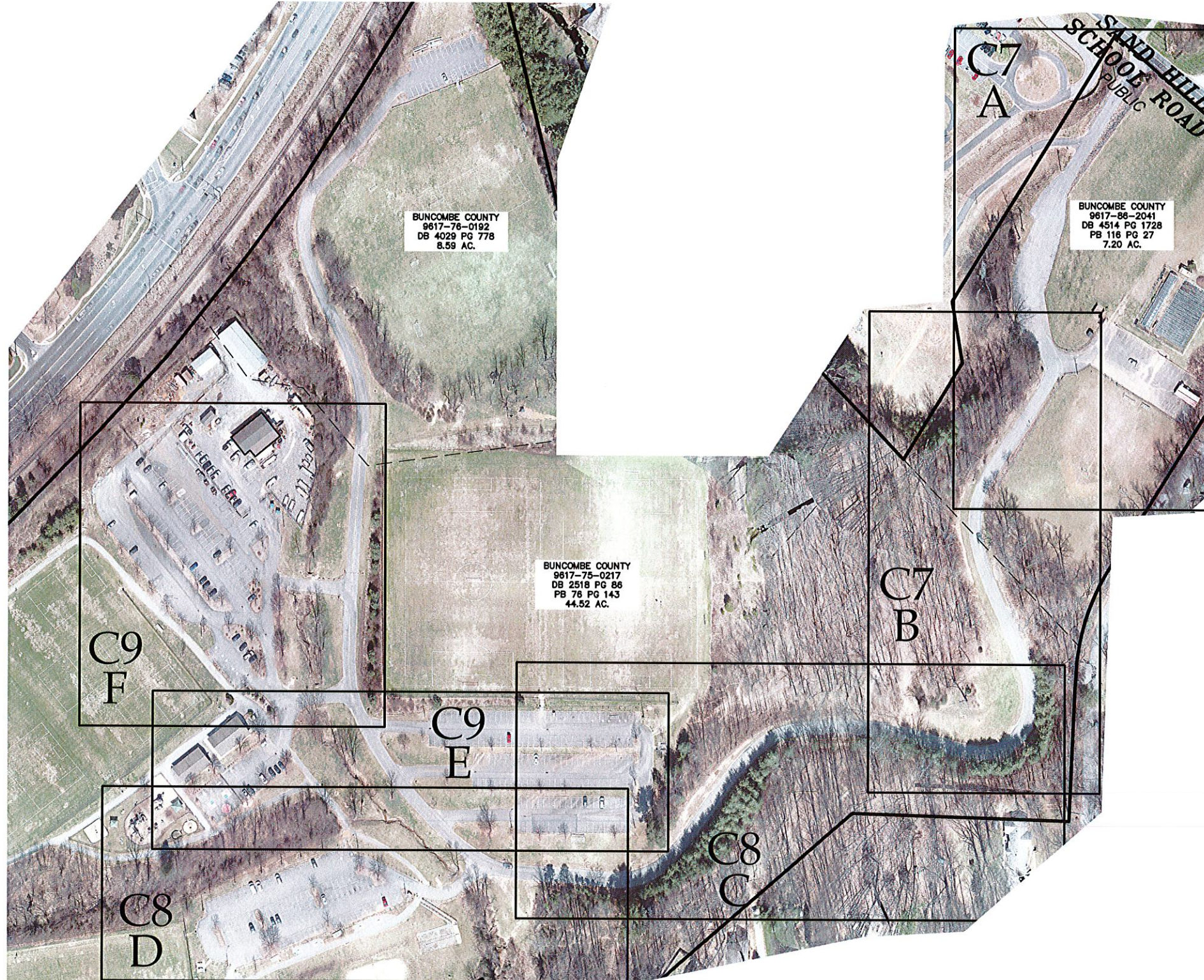
SEE PLAN FOR TOTAL EXISTING PARKING COUNT.

ANY PARKING BUMPERS LOCATED WITHIN A PARKING SPACE REMOVED FOR THE INSTALLATION OF NEW ASPHALT SHALL BE REINSTALLED AFTER PAVING HAS BEEN COMPLETED.

ANY CURBING OR CURB AND GUTTER, IF EXISTING, SHALL REMAIN.

BUNCOMBE COUNTY TO INSTALL PARKING STALL NUMBERS AND LETTERING UPON PROJECT COMPLETION.

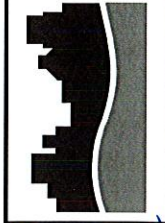
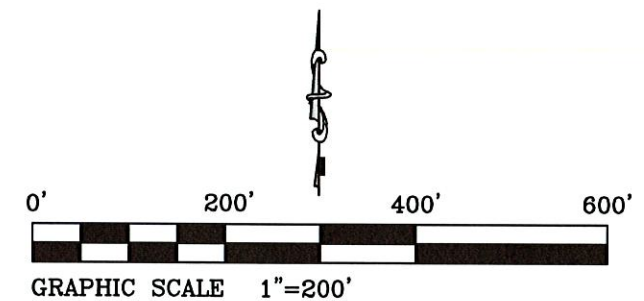




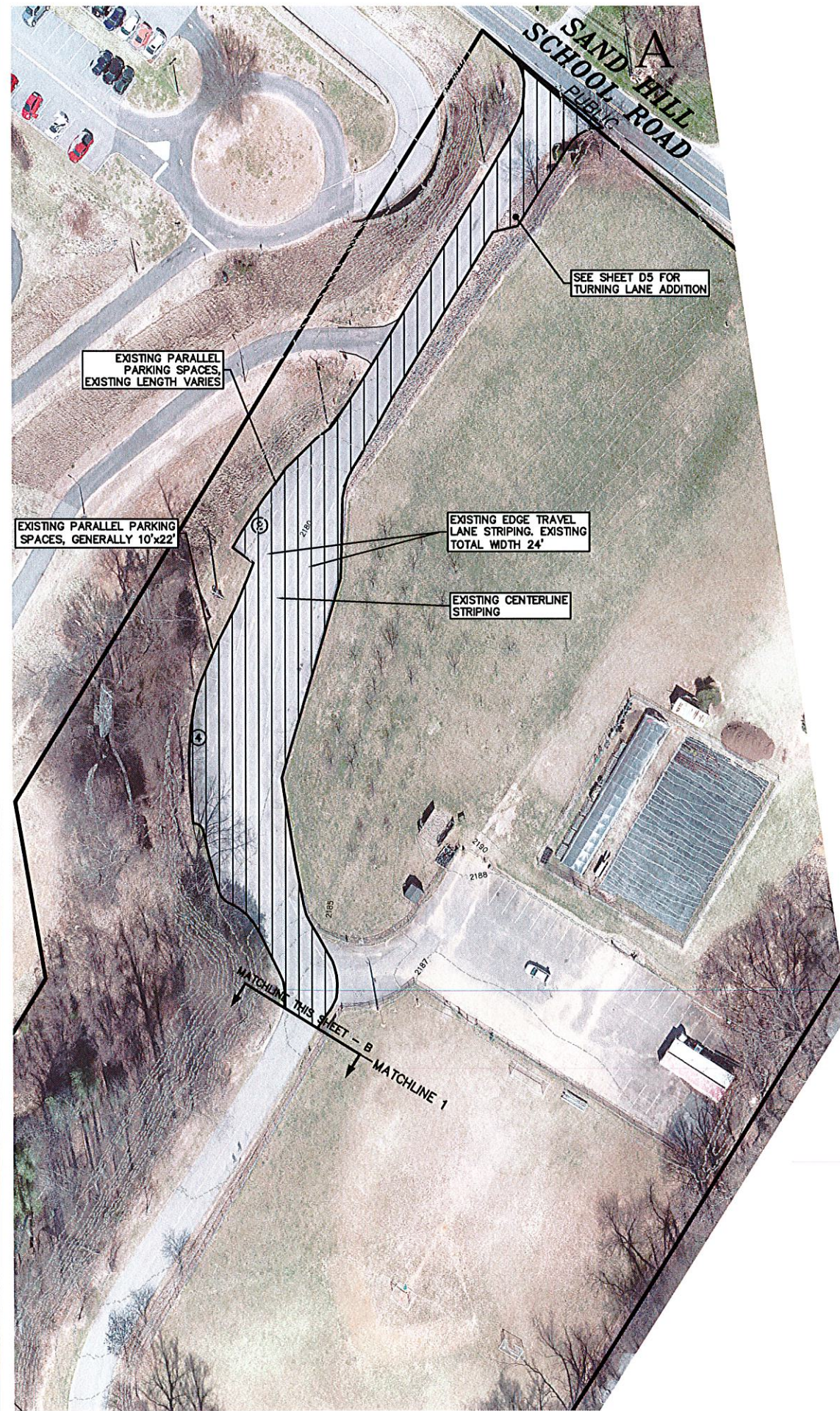
DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9617-75-0217, 76-0192, 86-2041
PHYSICAL ADDRESS:	50 APAC DRIVE ASHEVILLE, NC 28806
PROPERTY SIZE:	60.31 AC.

NOTES:
 ASPHALT AREA "A" APPROX. 21,600 SF
 ASPHALT AREA "B" APPROX. 19,000 SF
 ASPHALT AREA "C" APPROX. 14,600 SF
 ASPHALT AREA "D" APPROX. 41,200 SF
 ASPHALT AREA "E" APPROX. 70,200 SF
 ASPHALT AREA "F" APPROX. 78,000 SF

APAC DRIVE TOTAL PROJECT ASPHALT AREA APPROX. 247,000 SF
 SEE SUBSEQUENT SHEETS FOR AREA CLARIFICATIONS.



06/28/2022
 Date: July 25, 2022
 Scale: 1"=200'
 Revision:



NOTES:
 ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE INSTALLATION OF SILT FENCE IS NECESSARY DURING CONSTRUCTION, COORDINATE WITH ENGINEER.

HATCHED AREA REPRESENTS AREAS OF MILLING AND NEW ASPHALT INSTALLATION.

MILL 2" MIN., OR TO EXISTING ASPHALT DEPTH, AND INSTALL 2" S9.5B ASPHALT, OR MATCH EXISTING THICKNESS, WHICHEVER IS LESS.

PROOF ROLL AFTER REMOVAL IN PRESENCE OF ENGINEER OR COUNTY INSPECTOR. IN AREAS OF MOVEMENT, REMOVE EXISTING STONE AND SUBGRADE (12" MIN.). REPAIR AREAS OF MOVEMENT WITH FULL DEPTH CABG (12" MIN.).

ASPHALT AREA "A", SAND HILL SCHOOL ROAD TO MATCHLINE 1 APPROX. 21,600 SF
 ASPHALT AREA "B", MATCHLINE 1 TO MATCHLINE 2 APPROX. 19,000 SF

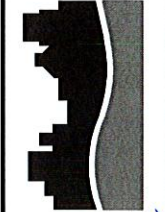
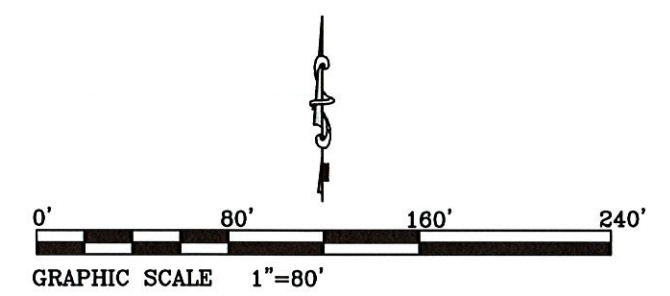
NEW STRIPING, INCLUDING BUT NOT LIMITED TO, PARKING SPACES, ACCESS AISLES, NO PARKING ZONES, CROSSWALKS, ETC., SHALL BE REINSTALLED TO THAT OF THE GENERAL SITE CONDITIONS THAT EXISTED PRIOR TO CONSTRUCTION, AFTER NEW ASPHALT HAS BEEN INSTALLED.

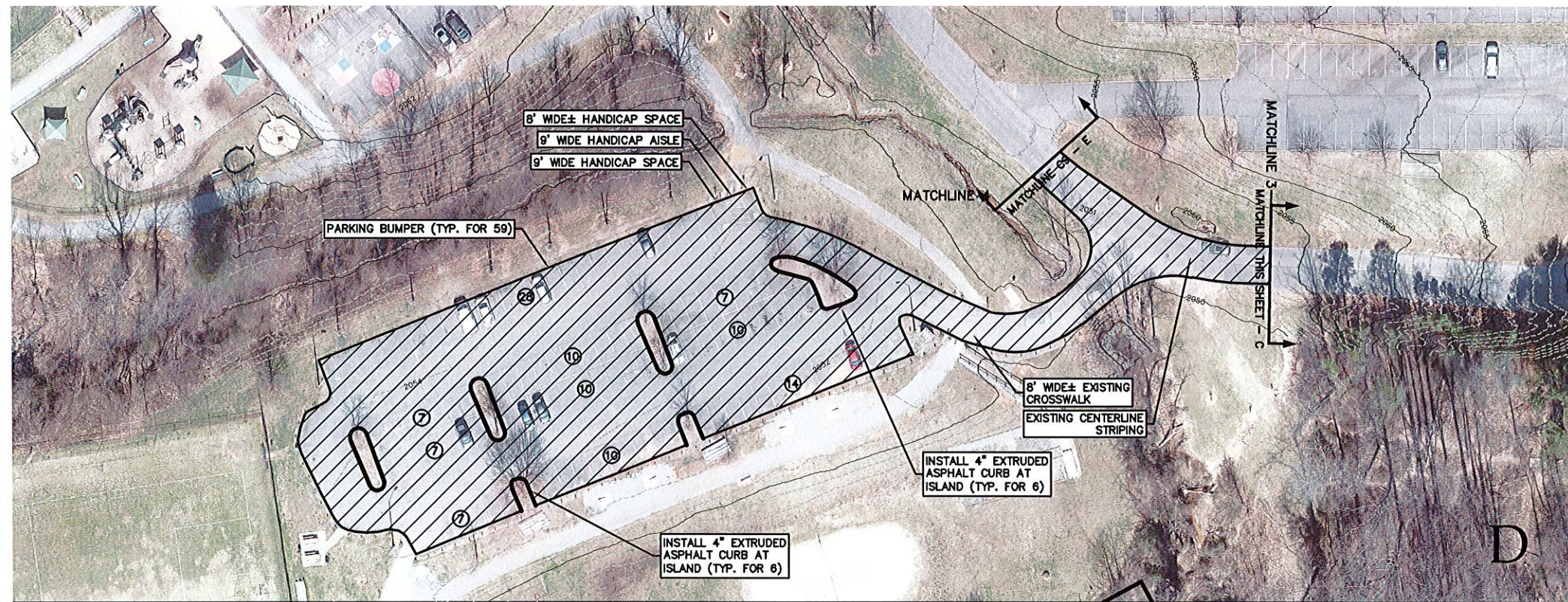
TYPICAL PARKING SPACE IS 9'x18'. TYPICAL PARALLEL PARKING SPACE IS 10'x22'. TYPICAL HANDICAPPED PARKING SPACE IS 8'x18' WITH ACCESS AISLE, EITHER VAN ACCESSIBLE, 8'x18', OR NOT VAN ACCESSIBLE, 5'x18'.

SEE PLAN FOR TOTAL EXISTING PARKING COUNT.

ANY PARKING BUMPERS LOCATED WITHIN A PARKING SPACE REMOVED FOR THE INSTALLATION OF NEW ASPHALT SHALL BE REINSTALLED AFTER PAVING HAS BEEN COMPLETED.

ANY CURBING OR CURB AND GUTTER, IF EXISTING, SHALL REMAIN.





NOTES:
 ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE INSTALLATION OF SILT FENCE IS NECESSARY DURING CONSTRUCTION, COORDINATE WITH ENGINEER.

HATCHED AREA REPRESENTS AREAS OF MILLING AND NEW ASPHALT INSTALLATION.

MILL 2" MIN., OR TO EXISTING ASPHALT DEPTH, AND INSTALL 2" S9.5B ASPHALT, OR MATCH EXISTING THICKNESS, WHICHEVER IS LESS.

PROOF ROLL AFTER REMOVAL IN PRESENCE OF ENGINEER OR COUNTY INSPECTOR. IN AREAS OF MOVEMENT, REMOVE EXISTING STONE AND SUBGRADE (12" MIN.), REPAIR AREAS OF MOVEMENT WITH FULL DEPTH CABG (12" MIN.).

ASPHALT AREA "C", MATCHLINE 2 TO MATCHLINE 3 APPROX. 14,600 SF
 ASPHALT AREA "D", MATCHLINE 3 TO MATCHLINE 4 APPROX. 41,200 SF

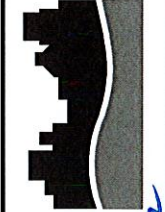
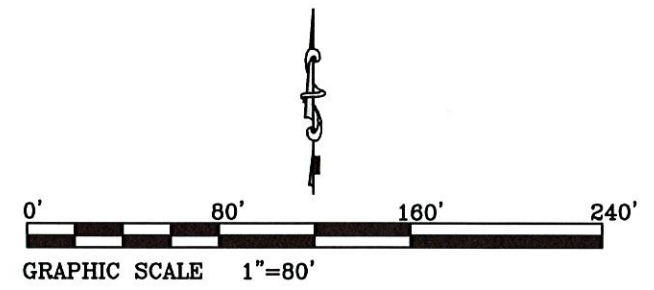
NEW STRIPING, INCLUDING BUT NOT LIMITED TO, PARKING SPACES, ACCESS AISLES, NO PARKING ZONES, CROSSWALKS, ETC., SHALL BE REINSTALLED TO THAT OF THE GENERAL SITE CONDITIONS THAT EXISTED PRIOR TO CONSTRUCTION, AFTER NEW ASPHALT HAS BEEN INSTALLED.

TYPICAL PARKING SPACE IS 9'x18'. TYPICAL PARALLEL PARKING SPACE IS 10'x22'. TYPICAL HANDICAPPED PARKING SPACE IS 8'x18' WITH ACCESS AISLE, EITHER VAN ACCESSIBLE, 8'x18', OR NOT VAN ACCESSIBLE, 5'x18'.

SEE PLAN FOR TOTAL EXISTING PARKING COUNT.

ANY PARKING BUMPERS LOCATED WITHIN A PARKING SPACE REMOVED FOR THE INSTALLATION OF NEW ASPHALT SHALL BE REINSTALLED AFTER PAVING HAS BEEN COMPLETED.

ANY CURBING OR CURB AND GUTTER, IF EXISTING, SHALL REMAIN.



CHAD H. HUDSON
 LICENSE NO. 22206
 STATE OF NORTH CAROLINA
 PROFESSIONAL ENGINEER

Parking Lot Improvements
 Countywide Projects
50 Apac Drive
 BUNCOMBE COUNTY, NORTH CAROLINA

Job No.: 20140
 Date: May 25, 2022
 Scale: 1"=80'
 Revision:

Site Plan

Sheet
C8

NOTES:
 ALL GRASSED AREAS OUTSIDE OF THE DITCH REPAIR AREA DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

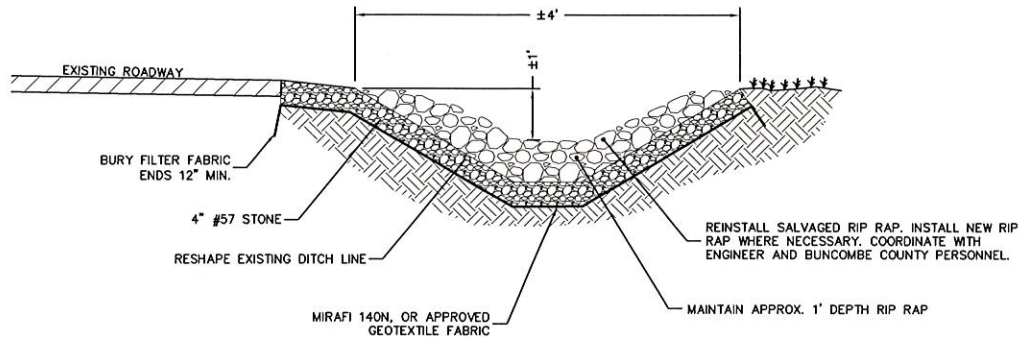
CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE INSTALLATION OF SILT FENCE IS NECESSARY DURING CONSTRUCTION, COORDINATE WITH ENGINEER.

EXISTING RIP RAP LOCATED IN DITCH LINE SHALL BE SALVAGED AND REINSTALLED UPON COMPLETION OF DITCH REPAIRS. ADDITIONAL RIP RAP WILL BE REQUIRED. COORDINATE WITH ENGINEER AND BUNCOMBE COUNTY PERSONNEL.

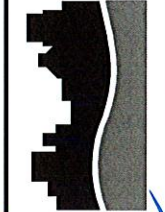
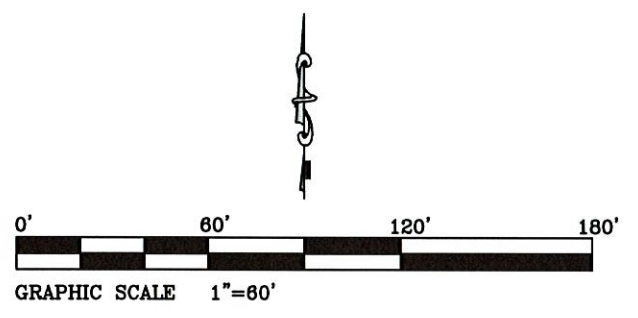
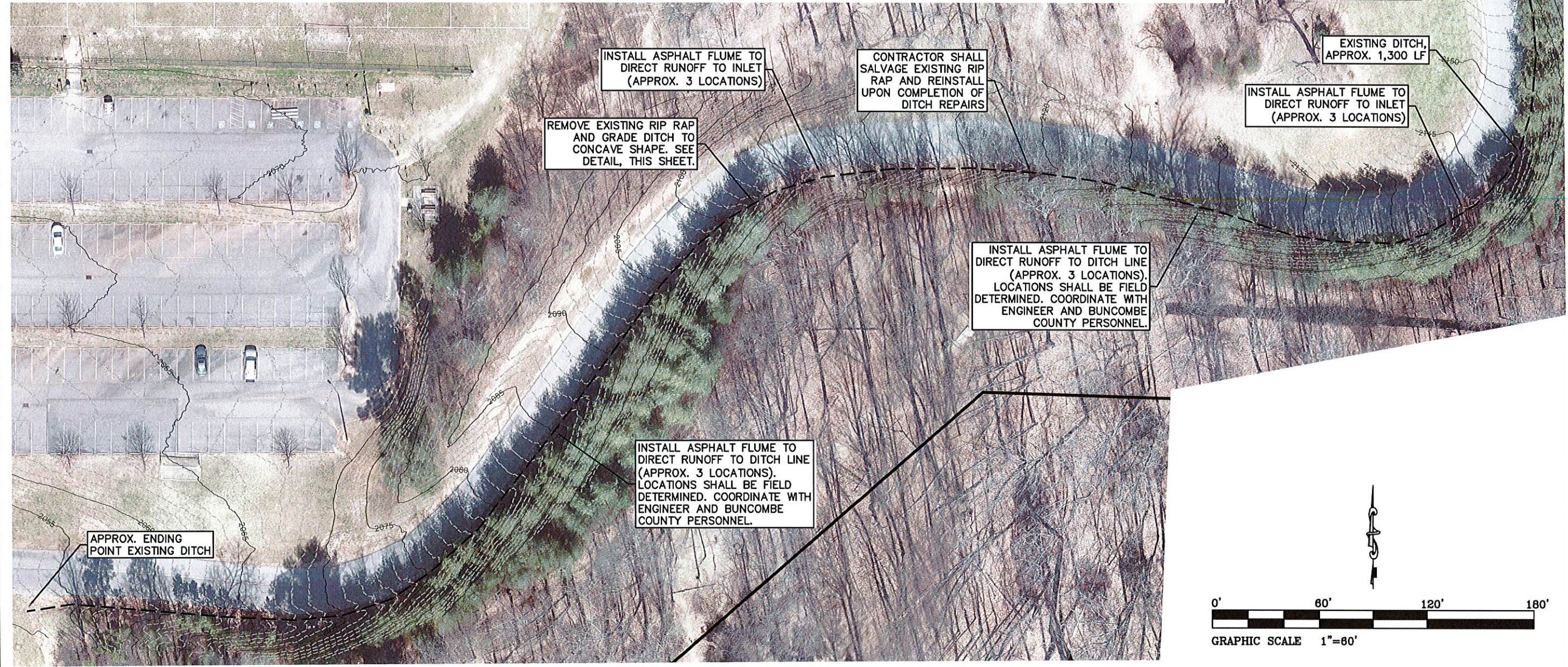
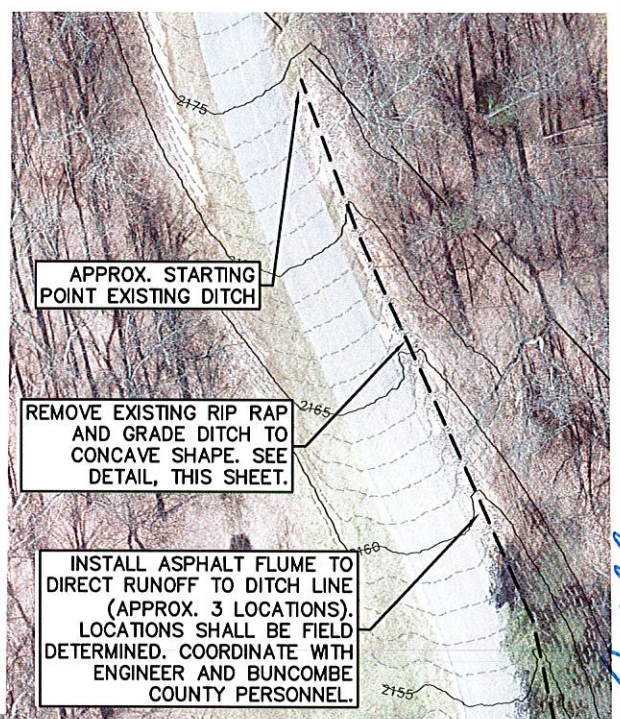
EXISTING INLETS LOCATED IN EXISTING DITCH LINE SHALL REMAIN. CONTRACTOR SHALL GRADE AROUND EXISTING INLETS, WHERE NECESSARY, TO MAINTAIN FLOW TO INLETS.

DITCH WIDTHS WILL VARY DEPENDING ON EXISTING SITE CONDITIONS. MAINTAIN A GENERAL WIDTH OF APPROX. 4' AND A GENERAL DEPTH OF APPROX. 1'.

THE INTENT OF THE DITCH REPAIR IS TO PROVIDE POSITIVE, UNOBSTRUCTED FLOW FROM THE EXISTING ROADWAY INTO THE DITCH LINE FOR CONVEYANCE OFFSITE.



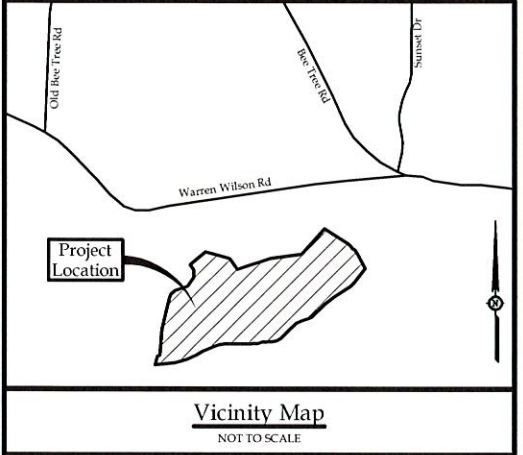
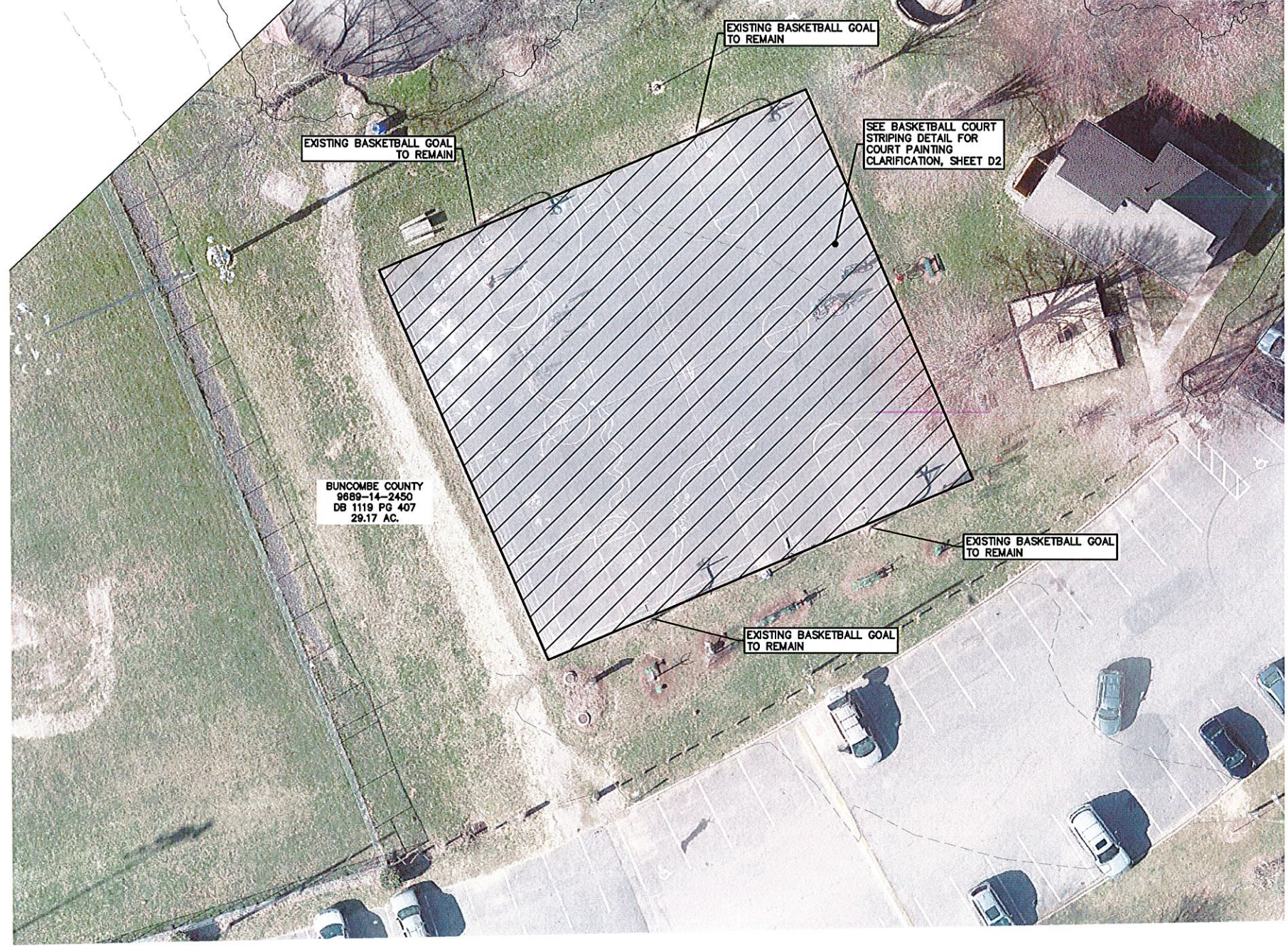
RIPRAP DITCH
 NOT TO SCALE



Professional Engineer Seal
 State of North Carolina
 License No. 12286
 Exp. 12/31/2024

Job No.: 20140
 Date: May 25, 2022
 Scale: 1"=60'
 Revision:

NOTE:
BOUNDARY INFORMATION SHOWN FOR REFERENCE ONLY, TAKEN
FROM BUNCOMBE COUNTY GIS.



DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9689-H-2450
PHYSICAL ADDRESS:	895 WARREN WILSON ROAD SWANNANOVA, NC 28778
PROPERTY SIZE:	29.17 AC.

NOTES:
ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE INSTALLATION OF SILT FENCE IS NECESSARY DURING CONSTRUCTION, COORDINATE WITH ENGINEER.

HATCHED AREA REPRESENTS AREAS OF MILLING AND NEW ASPHALT INSTALLATION.

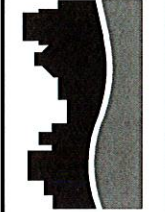
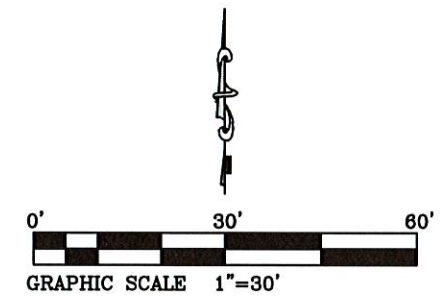
MILL 2" MIN., OR TO EXISTING ASPHALT DEPTH, AND INSTALL 2" S9.5B ASPHALT, OR MATCH EXISTING THICKNESS, WHICHEVER IS LESS.

PROOF ROLL AFTER REMOVAL IN PRESENCE OF ENGINEER OR COUNTY INSPECTOR. IN AREAS OF MOVEMENT, REMOVE EXISTING STONE AND SUBGRADE (12" MIN.). REPAIR AREAS OF MOVEMENT WITH FULL DEPTH CABG (12" MIN.).

TOTAL ASPHALT AREA APPROX. 9,500 SF

NEW STRIPING, INCLUDING BUT NOT LIMITED TO, PARKING SPACES, ACCESS AISLES, NO PARKING ZONES, CROSSWALKS, ETC., SHALL BE REINSTALLED TO THAT OF THE GENERAL SITE CONDITIONS THAT EXISTED PRIOR TO CONSTRUCTION, AFTER NEW ASPHALT HAS BEEN INSTALLED.

ANY CURBING OR CURB AND GUTTER, IF EXISTING, SHALL REMAIN.





NOTE:
BOUNDARY INFORMATION SHOWN FOR REFERENCE ONLY, TAKEN
FROM BUNCOMBE COUNTY GIS.

WOODFIN PLACE
PUBLIC

EXISTING CONCRETE
TO REMAIN

EXISTING CONCRETE
TO REMAIN

DIRECTIONAL ARROWS TO BE
REINSTALLED AFTER PAVING
IS COMPLETED (TYP.)

PARKING BUMPER (TYP. FOR 87)

BUNCOMBE COUNTY
9649-51-0852
DB 3508 Pg 716

DIRECTIONAL ARROWS TO BE
REINSTALLED AFTER PAVING
IS COMPLETED (TYP.)

14'± WIDE AT SIDEWALK

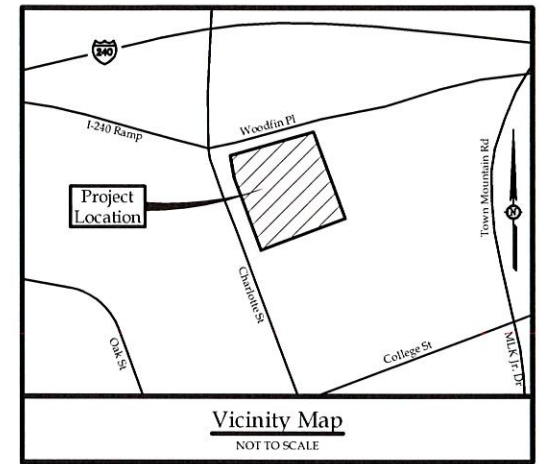
CHARLOTTE STREET
PUBLIC

EXISTING CONCRETE
TO REMAIN

REINSTALL ASPHALT WATER
BREAK TO DIRECT RUNOFF
TO INLET

NO PARKING AREA. 29'x18'
6" THICK CONCRETE PAD.

PARKING BUMPER (TYP. FOR 87)



DEVELOPMENT DATA BLOCK

OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4212
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9649-61-0852
PHYSICAL ADDRESS:	59 WOODFIN PLACE ASHEVILLE, NC 28801
PROPERTY SIZE:	157 AC.

NOTES:
ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING
CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE
INSTALLATION OF SILT FENCE IS NECESSARY DURING CONSTRUCTION,
COORDINATE WITH ENGINEER.

HATCHED AREA REPRESENTS AREAS OF MILLING AND NEW ASPHALT
INSTALLATION.

MILL 2" MIN., OR TO EXISTING ASPHALT DEPTH, AND INSTALL 2" S9.5B
ASPHALT, OR MATCH EXISTING THICKNESS, WHICHEVER IS LESS.

PROOF ROLL AFTER REMOVAL IN PRESENCE OF ENGINEER OR COUNTY
INSPECTOR. IN AREAS OF MOVEMENT, REMOVE EXISTING STONE AND
SUBGRADE (12" MIN.). REPAIR AREAS OF MOVEMENT WITH FULL DEPTH
CABC (12" MIN.).

TOTAL ASPHALT AREA APPROX. 35,700 SF

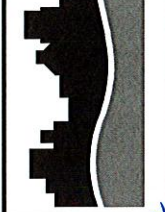
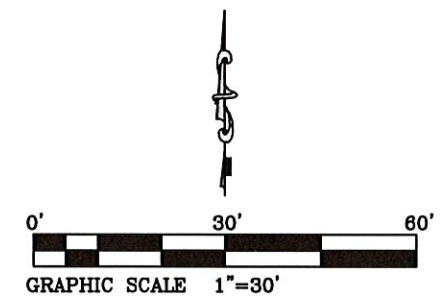
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ACCESS AISLES, NO PARKING ZONES, CROSSWALKS, ETC., SHALL BE
REINSTALLED TO THAT OF THE GENERAL SITE CONDITIONS THAT
EXISTED PRIOR TO CONSTRUCTION, AFTER NEW ASPHALT HAS BEEN
INSTALLED.

TYPICAL PARKING SPACE IS 9'x18'. TYPICAL HANDICAPPED PARKING
SPACE IS 8'x18' WITH ACCESS AISLE, EITHER VAN ACCESSIBLE, 8'x18',
OR NOT VAN ACCESSIBLE, 5'x18'.

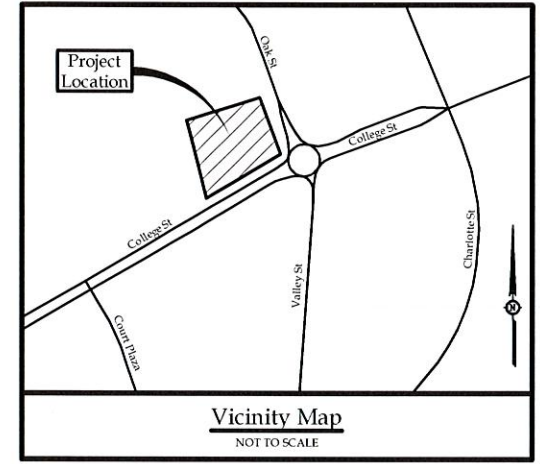
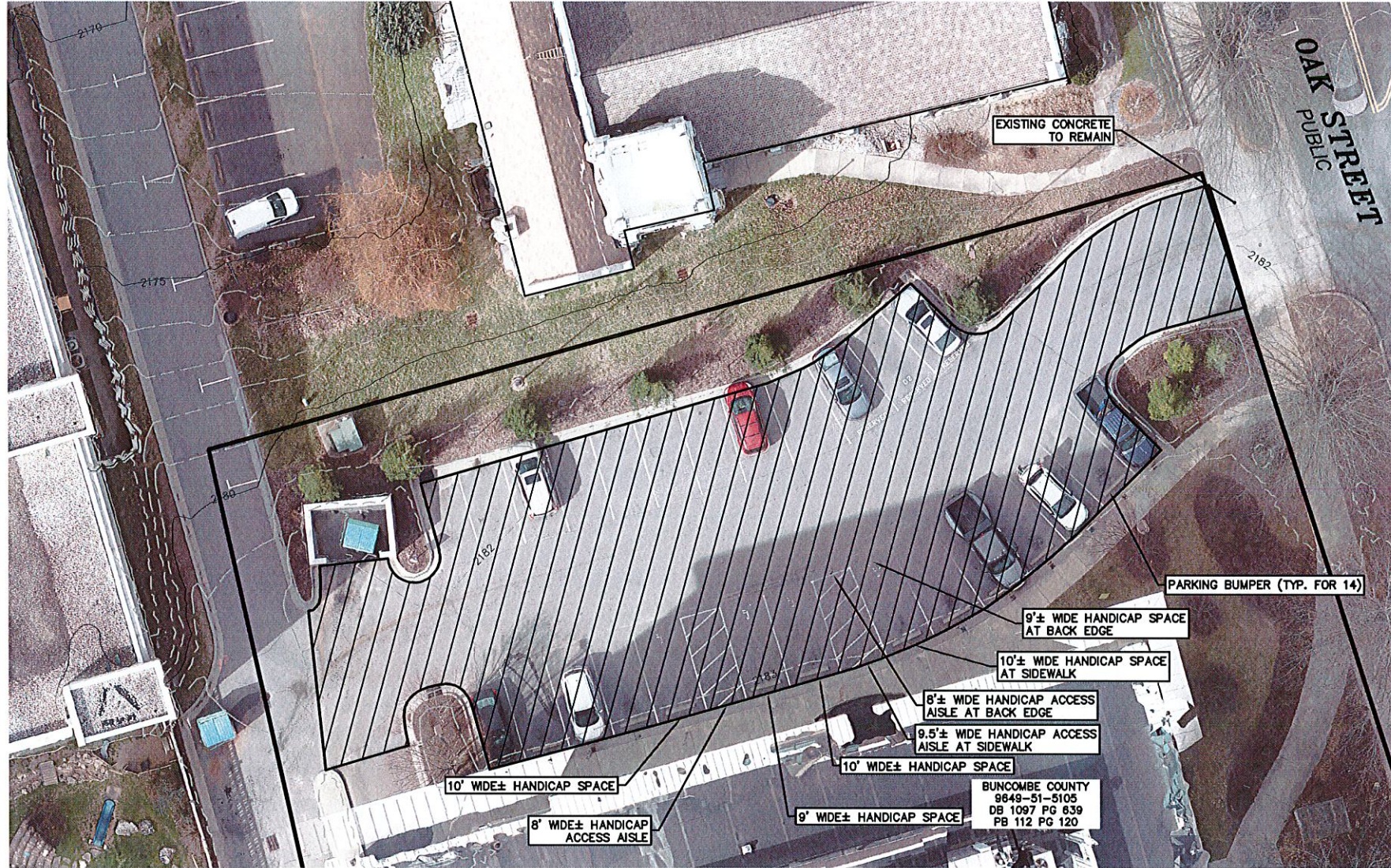
SEE PLAN FOR TOTAL EXISTING PARKING COUNT.

ANY PARKING BUMPERS LOCATED WITHIN A PARKING SPACE REMOVED
FOR THE INSTALLATION OF NEW ASPHALT SHALL BE REINSTALLED
AFTER PAVING HAS BEEN COMPLETED.

ANY CURBING OR CURB AND GUTTER, IF EXISTING, SHALL REMAIN.



NOTE:
BOUNDARY INFORMATION SHOWN FOR REFERENCE ONLY, TAKEN
FROM BUNCOMBE COUNTY GIS.



DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9649-51-5105
PHYSICAL ADDRESS:	200 COLLEGE STREET ASHEVILLE, NC 28801
PROPERTY SIZE:	0.87 AC.

NOTES:
ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

CONTRACTOR SHALL USE BEST JUDGEMENT TO DETERMINE IF THE INSTALLATION OF SILT FENCE IS NECESSARY DURING CONSTRUCTION, COORDINATE WITH ENGINEER.

HATCHED AREA REPRESENTS AREAS OF MILLING AND NEW ASPHALT INSTALLATION.

MILL 2" MIN., OR TO EXISTING ASPHALT DEPTH, AND INSTALL 2" S9.5B ASPHALT, OR MATCH EXISTING THICKNESS, WHICHEVER IS LESS.

PROOF ROLL AFTER REMOVAL IN PRESENCE OF ENGINEER OR COUNTY INSPECTOR. IN AREAS OF MOVEMENT, REMOVE EXISTING STONE AND SUBGRADE (12" MIN.). REPAIR AREAS OF MOVEMENT WITH FULL DEPTH CABG (12" MIN.).

TOTAL ASPHALT AREA APPROX. 9,500 SF

NEW STRIPING, INCLUDING BUT NOT LIMITED TO, PARKING SPACES, ACCESS AISLES, NO PARKING ZONES, CROSSWALKS, ETC., SHALL BE REINSTALLED TO THAT OF THE GENERAL SITE CONDITIONS THAT EXISTED PRIOR TO CONSTRUCTION, AFTER NEW ASPHALT HAS BEEN INSTALLED.

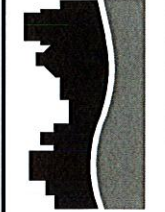
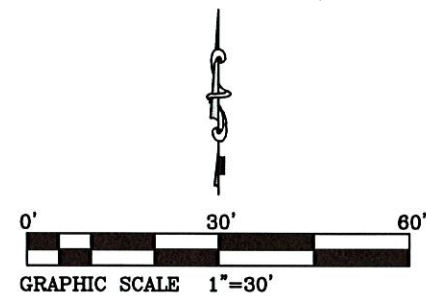
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SEE PLAN FOR TOTAL EXISTING PARKING COUNT.

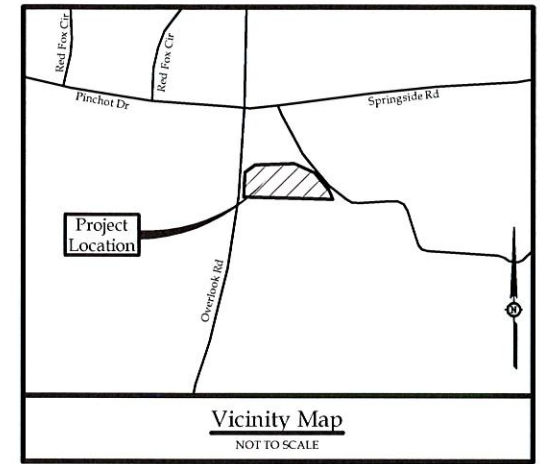
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BUNCOMBE COUNTY TO INSTALL PARKING STALL NUMBERS AND LETTERING UPON PROJECT COMPLETION.



NOTE:
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DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9615713352
PHYSICAL ADDRESS:	260 OVERLOOK ROAD ASHEVILLE, NC 28803
PROPERTY SIZE:	144 AC.

NOTES:
ANY GRASSED AREAS OUTSIDE OF PAVING LIMITS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, INCLUDING MATTING OR STRAW.

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TOTAL ASPHALT AREA APPROX. 10,400 SF

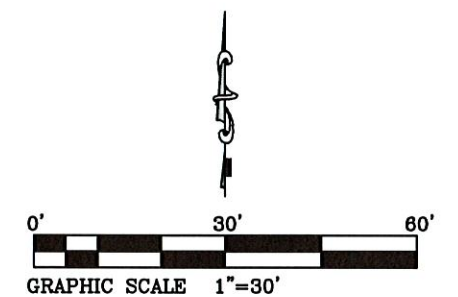
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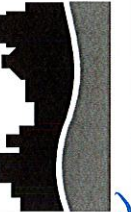
SEE PLAN FOR TOTAL EXISTING PARKING COUNT.

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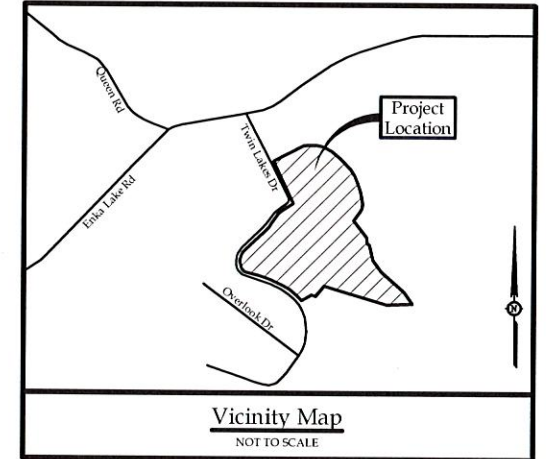
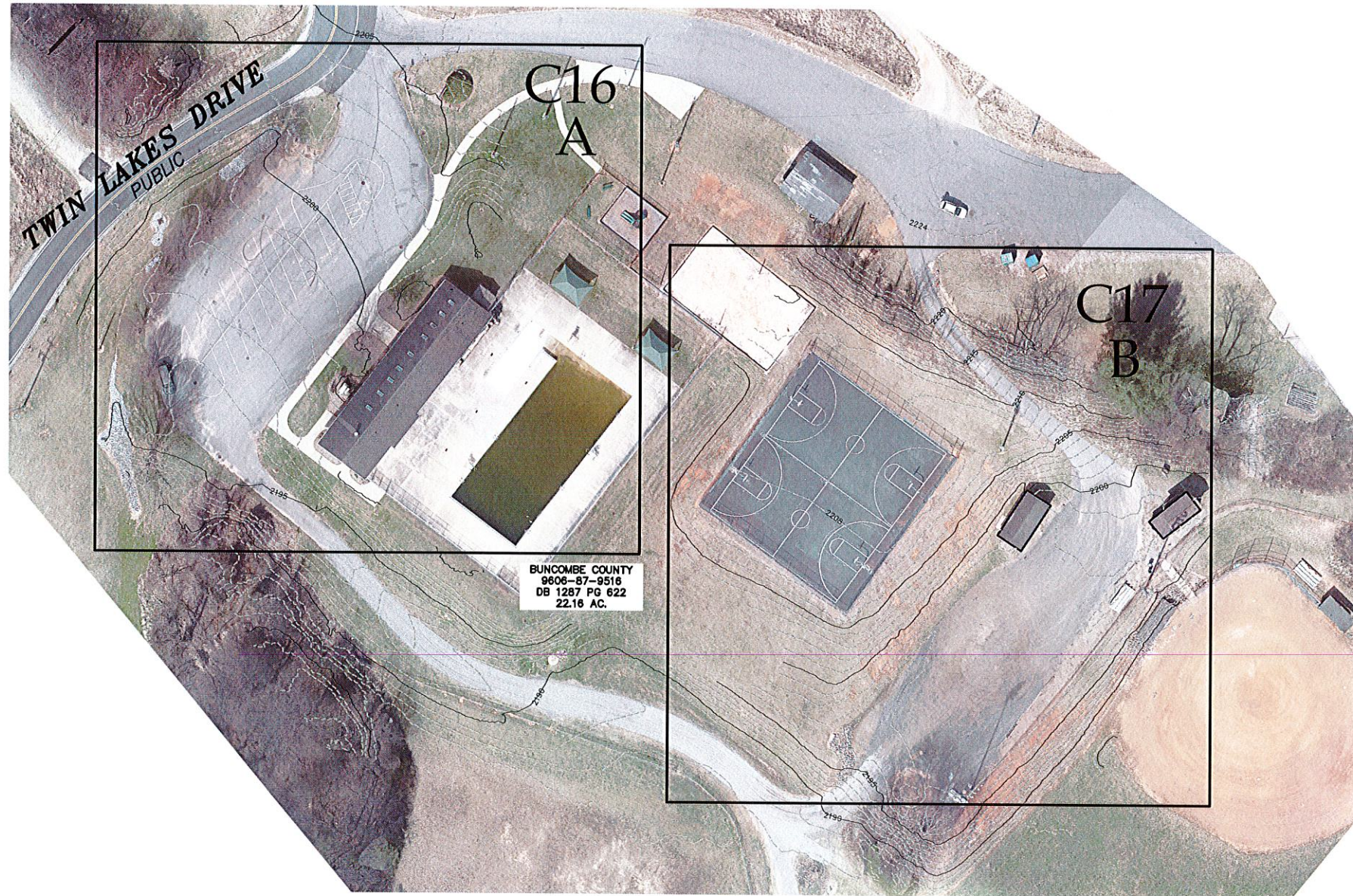


Parking Lot Improvements
Countywide Projects
South Buncombe Library
BUNCOMBE COUNTY, NORTH CAROLINA

Job No: 20140
Date: May 25, 2022
Scale: 1"=30'
Revision:

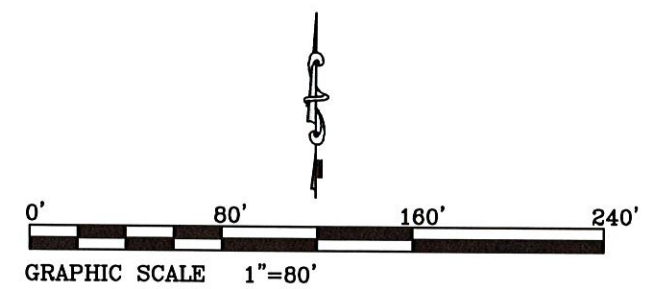
Site Plan

Sheet
C14



DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9606-87-9516
PHYSICAL ADDRESS:	25 TWIN LAKES DRIVE CANDLER, NC 28715
PROPERTY SIZE:	22.16 AC.

NOTES:
 ASPHALT AREA "A" APPROX. 18,100 SF
 ASPHALT AREA "B" APPROX. 24,500 SF
 HOMINY PARK TOTAL PROJECT ASPHALT AREA APPROX. 42,600 SF
 SEE SUBSEQUENT SHEETS FOR AREA CLARIFICATIONS.





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ASPHALT AREA "A" APPROX. 18,100 SF

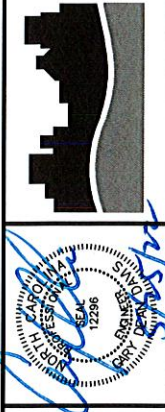
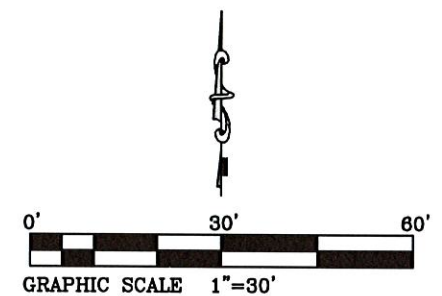
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PARKING/DRIVE ASPHALT AREA APPROX. 14,000 SF
 BASKETBALL COURT ASPHALT AREA APPROX. 10,500 SF
 TOTAL ASPHALT AREA "B" APPROX. 24,500 SF

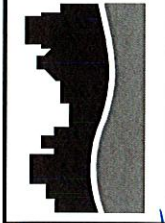
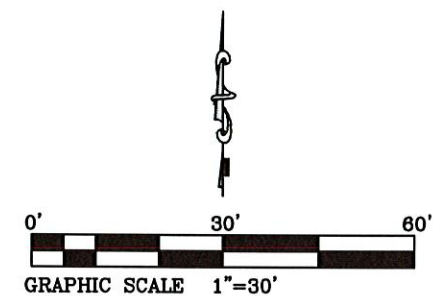
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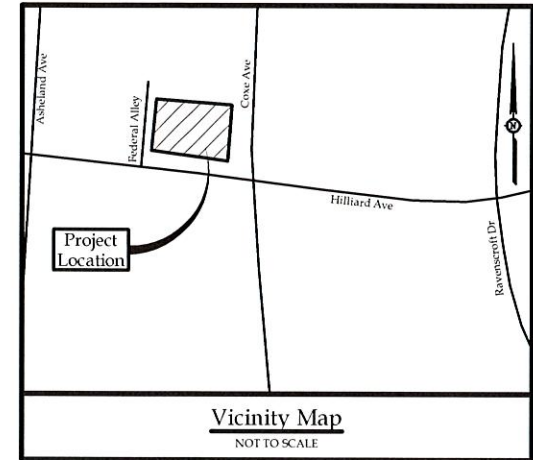
Parking Lot Improvements
 Countywide Projects
Hominy Park
 BUNCOMBE COUNTY, NORTH CAROLINA

05 Nov 2018
 Date May 25, 2022
 Scale 1"=30'
 Revision:

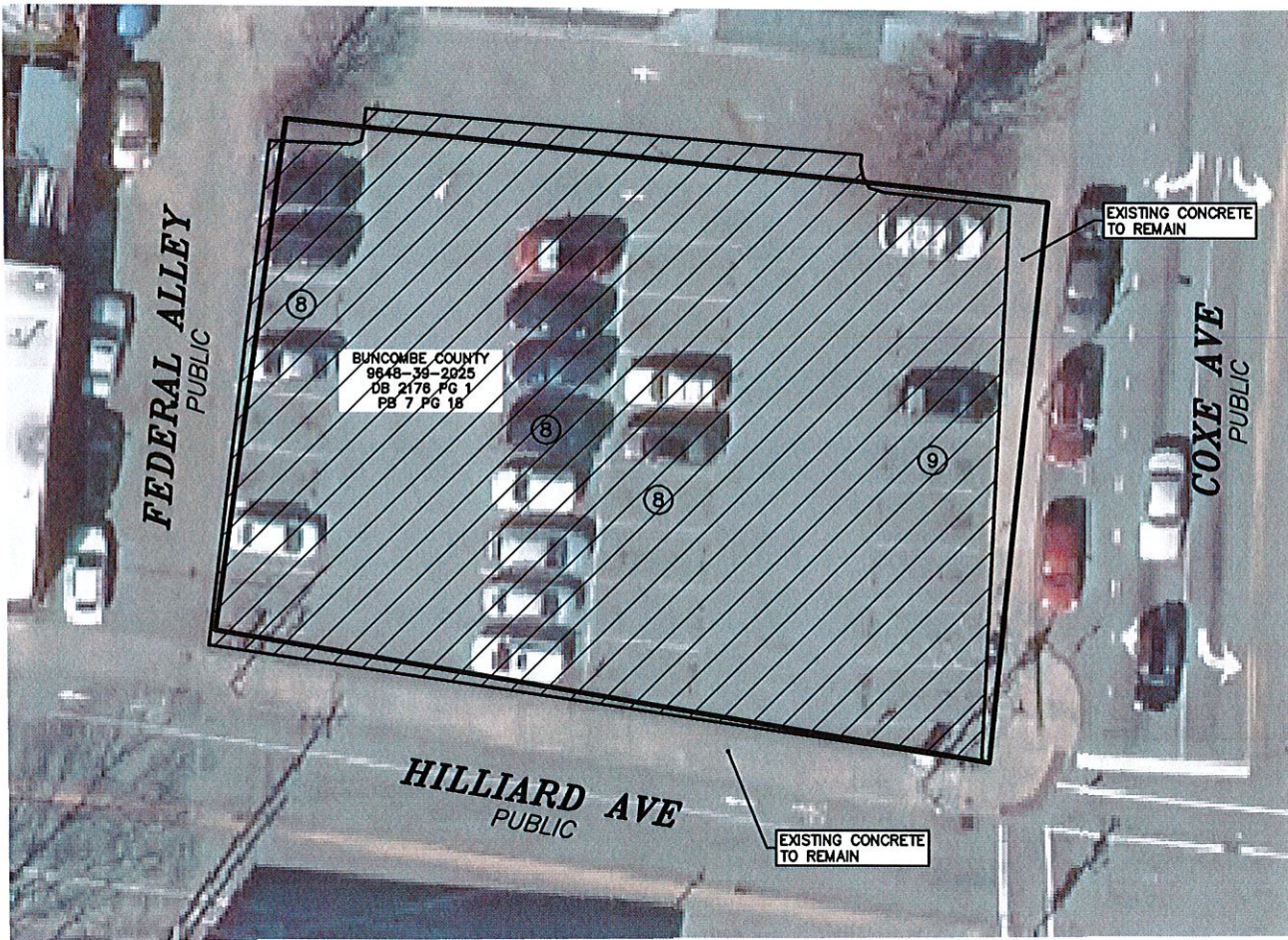
Site Plan

Sheet
C17

NOTE:
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FROM BUNCOMBE COUNTY GIS.



DEVELOPMENT DATA BLOCK	
OWNER/DEVELOPER:	BUNCOMBE COUNTY GOVERNMENT
CONTACT:	MICHAEL MACE
PHONE:	828.250.4242
ADDRESS:	175 BINGHAM ROAD, ASHEVILLE, NC 28806
PIN:	9648-39-2025
PHYSICAL ADDRESS:	NO ADDRESS ASSIGNED ASHEVILLE, NC 28801
PROPERTY SIZE:	0.24 AC.



NOTES:
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TOTAL ASPHALT AREA APPROX. 10,400 SF

NEW STRIPING, INCLUDING BUT NOT LIMITED TO, PARKING SPACES, ACCESS AISLES, NO PARKING ZONES, CROSSWALKS, ETC., SHALL BE REINSTALLED TO THAT OF THE GENERAL SITE CONDITIONS THAT EXISTED PRIOR TO CONSTRUCTION, AFTER NEW ASPHALT HAS BEEN INSTALLED.

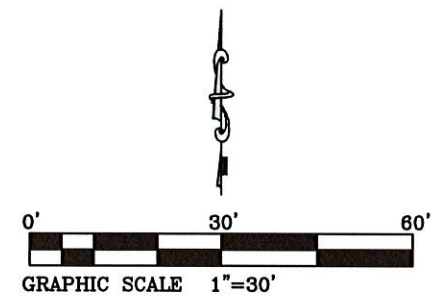
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SEE PLAN FOR TOTAL EXISTING PARKING COUNT.

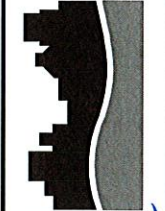
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BUNCOMBE COUNTY TO INSTALL PARKING STALL NUMBERS AND LETTERING UPON PROJECT COMPLETION.



Davis CivilSolutions, PA
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135-A Charlotte Highway Asheville, North Carolina 28801
828.299.9419 P11 www.daviscivilsolutions.com



Parking Lot Improvements
Countywide Projects
Federal Alley
BUNCOMBE COUNTY, NORTH CAROLINA

Job No: 20140
Date: May 25, 2022
Scale: 1"=30'
Revision:

Site Plan

Sheet
C18

GENERAL CONSTRUCTION NOTES

- FINISH GRADE TOLERANCES SHALL BE AS NOTED IN THE SPECIFICATIONS. THE ENGINEER MAY MAKE GRADE CHANGES AS REQUIRED IN THE FIELD WITHOUT EFFECTING THE UNIT BID PRICE FOR UNCLASSIFIED EXCAVATION.
 - UNLESS OTHERWISE STATED, ALL FILL AREAS SHALL BE CONSTRUCTED IN LAYERS OF 8" MAXIMUM THICKNESS, WITH WATER ADDED OR SOIL CONDITIONED TO THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE ENGINEER AND COMPACTED WITH A SHEEP'S FOOT ROLLER TO A COMPACTION EQUAL TO OR GREATER THAN 95% (100% IN THE TOP 2" OF THE SUB GRADE BELOW ROADWAYS, PARKING LOTS, AND SLABS) OF THE DENSITY OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH THE STANDARD PROCTOR METHOD OF MOISTURE-DENSITY RELATIONSHIP TEST, ASTM D998 OR AASHTO-99 UNLESS SPECIFIED IN OTHER SPECIFICATIONS. COPIES OF COMPACTION REPORTS SHALL BE PROVIDED TO THE LOCAL REGULATORY AGENCY, WHERE REQUIRED.
 - ENTIRE AREA TO BE GRADED SHALL BE CLEARED AND GRUBBED. NO FILL SHALL BE PLACED ON ANY AREA NOT CLEARED AND GRUBBED.
 - ALL SOIL EROSION CONTROL MEASURES REQUIRED BY THE GRADING PLAN SHALL BE PERFORMED PRIOR TO GRADING, CLEARING OR GRUBBING. ALL EROSION CONTROL DEVICES SUCH AS SILT FENCES, ETC., SHALL BE MAINTAINED IN WORKABLE CONDITION FOR THE LIFE OF THE PROJECT BY THE CONTRACTOR AT HIS EXPENSE. EROSION CONTROL FACILITIES SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT ONLY ON THE ENGINEER'S APPROVAL. PAYMENT SHALL BE CONSIDERED INCIDENTAL TO CLEARING AND GRUBBING UNLESS OTHERWISE SPECIFIED. IF DURING THE LIFE OF THE PROJECT, A STORM CAUSES SOIL EROSION WHICH CHANGES FINISH GRADES OR CREATES "GULLIES" AND "WASHED AREAS", THESE SHALL BE REPAIRED AT NO ADDITIONAL COST, AND ALL SILT WASHED OFF OF THE PROJECT SITE ONTO ADJACENT PROPERTY SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST. THE CONTRACTOR SHALL ADHERE TO ANY APPROVED EROSION CONTROL PLANS WHETHER INDICATED IN THE CONSTRUCTION PLANS OR UNDER SEPARATE COVER.
- EROSION CONTROL IS FIELD PERFORMANCE BASED AND ADDITIONAL SILT FENCE, TEMPORARY SEDIMENT BASINS AND OTHER MEASURES MAY NEED TO BE INSTALLED IN ADDITION TO THE APPROVED PLAN AS NECESSARY. MEASURES INDICATED ON THE DRAWINGS CAN AND SHOULD BE ADJUSTED TO ASSURE MAXIMUM PROTECTION OF THE SITE.
- DISPOSABLE MATERIAL
 - CLEARING AND GRUBBING WASTES SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE, UNLESS SPECIFIED OTHERWISE.
 - SOLID WASTES TO BE REMOVED, SUCH AS SIDEWALKS, CURBS, PAVEMENT, ETC., MAY BE PLACED IN SPECIFIC DISPOSAL AREAS DELINEATED ON THE PLANS WITH THE PRIOR APPROVAL OF THE ENGINEER OR SHALL BE REMOVED FROM THE SITE AS REQUIRED BY THE SPECIFICATIONS. THIS MATERIAL SHALL HAVE A MINIMUM COVER OF 2'. THE CONTRACTOR SHALL MAINTAIN SPECIFIED COMPACTION REQUIREMENTS IN THESE AREAS. WHEN DISPOSAL SITES ARE NOT PROVIDED, THE CONTRACTOR SHALL REMOVE THIS WASTE FROM THE SITE AND PROPERLY DISPOSE OF IT AT HIS EXPENSE.
 - ABANDONED UTILITIES SUCH AS CULVERTS, WATER PIPE, HYDRANTS, CASTINGS, PIPE SPURTINGS, UTILITY POLES, ETC., SHALL BE THE PROPERTY OF THE SPECIFIC UTILITY AGENCY, OR COMPANY HAVING JURISDICTION, BEFORE THE CONTRACTOR CAN REMOVE, DESTROY, SALVAGE, REUSE, SELL OR STORE FOR HIS OWN USE ANY ABANDONED UTILITY, HE MUST PRESENT TO THE OWNER WRITTEN PERMISSION FROM THE UTILITY INVOLVED.
 - ON SITE BURNING IS AN ACCEPTABLE METHOD OF DISPOSING OF FLAMMABLE WASTES WHERE ALLOWED BY LOCAL CODES. WHEN BURNING IS ANTICIPATED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND MEETING GOVERNING CODES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR HIS REPRESENTATIVE AS TO THE SPECIFIC LOCATION OF BURNING AND SHALL PROVIDE COPIES OF SECURED PERMITS. AFTER BURNING IS COMPLETED, PURE ASH MAY BE DISPOSED OF BY MIXING WITH FILL DIRT UPON THE APPROVAL OF THE ENGINEER. ALL MATERIAL NOT TOTALLY BURNED SHALL BE DISPOSED OF AS SPECIFIED IN "B" ABOVE. THE CONTRACTOR SHALL NOT HOLD UP WORK PROGRESS FOR THE PURPOSE OF WAITING FOR A "BURNING DAY".
 - IN THE EVENT EXCESSIVE GROUNDWATER OR SPRINGS ARE ENCOUNTERED WITHIN THE LIMITS OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL NECESSARY UNDER DRAINS AND STONE AS DIRECTED BY THE ENGINEER AND AS APPROVED BY PERMITTING FROM THE REGULATORY AGENCIES. ALL WORK SHALL BE PAID BASED UPON UNIT BIDS, UNLESS SPECIFIED OTHERWISE.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OR ADJUSTMENT OF ALL UTILITY SURFACE ACCESSES WHETHER HE PERFORMS THE WORK OR A UTILITY COMPANY PERFORMS THE WORK.
 - THE CONTRACTOR SHALL CONTROL ALL "DUST" BY PERIODIC WATERING AND SHALL PROVIDE ACCESS AT ALL TIMES FOR PROPERTY OWNERS WITHIN THE PROJECT AREA AND FOR EMERGENCY VEHICLES. ALL OPEN DITCHES AND HAZARDOUS AREAS SHALL BE CLEARLY MARKED IN ACCORDANCE WITH THE SPECIFICATIONS.

NOTE-1

SEEDING NOTES

PERMANENT SEEDING

LAWN SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
KENTUCKY BLUEGRASS (20%)	260 LBS.
REBEL FESCUE (80%)	

SEEDING DATES

MOUNTAINS	MARCH 15 - MAY 15
	AUGUST 15 - OCTOBER 15

SOIL AMENDMENTS

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKLING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE

RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RE-SEED, RE-FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

TEMPORARY SEEDING FOR SUMMER

SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
GERMAN MILLET	40 LBS.

SEEDING DATES

MOUNTAINS	MAY 15 - AUGUST 15
PIEDMONT	MAY 1 - AUGUST 15
COASTAL PLAIN	APRIL 15 - AUGUST 15

SOIL AMENDMENTS

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NOTE-14

GENERAL CONSTRUCTION NOTES CONT'D.

- ALL AREAS WHERE THERE IS EXPOSED DIRT SHALL BE SEED, FERTILIZED AND MULCHED ACCORDING TO THE SPECIFICATIONS. THE FINISHED SURFACE SHALL BE TO GRADE AND SMOOTH, FREE OF ALL ROCKS LARGER THAN 3". EQUIPMENT TRACKS, DIRT CLODS, BUMPS, RIDGES AND GULLIES PRIOR TO SEEDING; THE SURFACE SHALL BE LOOSENEED TO A DEPTH OF 4" TO 6" TO ACCEPT SEED. THE CONTRACTOR SHALL NOT PROCEED WITH SEEDING OPERATIONS WITHOUT FIRST OBTAINING THE ENGINEER'S APPROVAL OF THE GRADDED SURFACE. ALL SEEDING SHALL BE PERFORMED BY A MECHANICAL "HYDRO-SEEDER". HAND SEEDING SHALL BE AUTHORIZED ON AN AREA BY AREA APPROVAL BY THE ENGINEER. ALL FILL AND CUT SLOPES 2:1 HORIZONTAL TO VERTICAL, OR STEEPER, SHALL BE COVERED, AFTER SEEDING, WITH EROSION CONTROL MATTING CONSISTING OF BIODEGRADABLE STRAW WITH NATURAL FIBER OR BIODEGRADABLE NETTING, APPROVED BY THE ENGINEER.
 - WHERE SPECIFIED, STORM DRAIN PIPE SHALL BE CORRUGATED METAL PIPE (CMP) CONFORMING TO AASHTO M-36, WITH PERFORATED ENDS TO ACCOMMODATE CORRUGATED COUPLING BANDS. 18" PIPE SHALL BE 16 GAUGE, 24" AND 30" PIPE SHALL BE 14 GAUGE AND 36" PIPE AND OVER SHALL BE 12 GAUGE AS SPECIFIED ON THE PLANS. PIPE AND COUPLING BANDS SHALL CONFORM TO NCDOT 1032-3 FOR PLAIN PIPE OR 1032-4(A) FOR BITUMINOUS COATED AND PARTIALLY PAVED PIPE. DIMPLE BANDS SHALL NOT BE USED.
- WHERE SPECIFIED, STORM DRAIN PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) CONFORMING TO AASHTO M-170, AS CONTAINED IN NCDOT STANDARD SPECIFICATION 1032-9 FOR WALL "B" TYPE.
- WHERE SPECIFIED, ALL STORM DRAIN PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE), CORRUGATED EXTERIOR, SMOOTH WALL INTERIOR, WITH SOIL TIGHT JOINTS, BACKFILLED WITH # 57 WASHED STONE UP TO MIN. 6" OVER THE TOP OF THE PIPE, 12" ON EACH SIDE OF THE PIPE, AND 8" BENEATH THE PIPE. HOPE PIPE USED FOR STORM DRAINAGE DETENTION SYSTEMS SHALL BE "HANCOR BLUE SEAL" OR APPROVED EQUAL, WITH WATER TIGHT JOINTS.
- WHERE SPECIFIED, ALL STORM DRAIN PIPE SHALL BE DUAL WALL HIGH DENSITY POLYPROPYLENE (HDPP), CORRUGATED EXTERIOR, SMOOTH WALL INTERIOR, WITH GASKETED JOINTS, BACKFILLED WITH # 57 WASHED STONE UP TO THE SPRING LINE OF THE PIPE, WITH 12" STONE ON EACH SIDE OF THE PIPE, AND 8" BENEATH THE PIPE. PIPES OF A DIAMETER OF 30" OR GREATER SHALL BE TRIPLE WALL, CORRUGATED STRUCTURAL CORE, SMOOTH EXTERIOR, WITH DOUBLE GASKETED JOINTS.
- ALL CORRUGATED METAL STORM DRAIN PIPE (CMP) SHALL BE ALUMINIZED TYPE 2 CORRUGATED STEEL MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO M-36. THE PIPE SHALL BE MANUFACTURED FROM ALUMINIZED STEEL TYPE 2 MATERIAL CONFORMING TO THE REQUIREMENTS OF AASHTO M-274. ALL PIPE SHALL BE FURNISHED WITH PERFORATED ENDS AND SHALL BE JOINED WITH HIGHER BANDS. THE USE OF DIMPLE BANDS WILL NOT BE ALLOWED. PIPE THROUGH 24" DIAMETER SHALL BE 16 GAUGE, PIPE THROUGH 42" DIAMETER SHALL BE 14 GAUGE, PIPE THROUGH 54" DIAMETER SHALL BE 12 GAUGE.
- CONTRACTOR SHALL VERIFY THE APPROPRIATENESS OF ALL ELEVATIONS BEFORE INSTALLATION OF FACILITIES AND THAT THOSE ELEVATIONS CONTRIBUTE TO THE PROPER INTENDED PERFORMANCE OF THE INSTALLED FACILITIES.
 - CATCH BASINS CAST-IN-PLACE SHALL CONFORM TO THE REQUIREMENTS OF NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (LATEST EDITION) ARTICLES 840-1 THROUGH 840-3. CURB INLET CATCH BASIN SHALL CONFORM TO NCDOT STANDARD DETAILS 840.02 THROUGH 840.04. DROP INLETS SHALL CONFORM TO STANDARD DETAIL 840.14. JUNCTION BOXES SHALL CONFORM TO STANDARD DETAIL 840.31.
 - CURB INLET FRAME, GRATE AND HOOD SHALL BE NEEHAN R-3333D, PRODUCTS BY DEWEY BROS., U.S. FOUNDRY OR EQUAL. DROP INLET FRAME AND GRATE SHALL BE NEEHAN R-3333A OR EQUAL. FIELD INLET COVER SHALL CONFORM TO NCDOT STANDARD DETAIL 840.04, OPENING FACING UPSTREAM.
 - CONCRETE AND MASONRY SHALL MEET THE REQUIREMENTS OF THE APPROPRIATE SECTION OF THE NCDOT STANDARD SPECIFICATIONS FOR ROAD AND STRUCTURES (LATEST EDITION). CONCRETE SHALL BE CLASS A OR B, 4000 PSI MINIMUM, MEETING THE REQUIREMENTS OF SECTION 1000, CONSTRUCTED IN ACCORDANCE WITH SECTION 825. MASONRY SHALL MEET THE REQUIREMENTS OF SECTION 1040, CONSTRUCTED IN ACCORDANCE WITH SECTION 830 AND/OR 834.
 - TOPS OF PROPOSED FRAMES AND GRATES SHALL BE FLUSH WITH FINISHED GRADE. ALL STORM DRAIN BOXES AND MANHOLES OVER 4" IN DEPTH SHALL HAVE STEPS DIRECTLY BENEATH THE OPENING.
 - TINDALL PRE CAST CONCRETE BOXES ARE ACCEPTABLE ALTERNATIVES FOR PROPOSED CATCH BASINS WHERE APPROVED BY THE ENGINEER.
 - CONTRACTOR SHALL PROVIDE THE OWNER AND THE LOCAL REGULATORY AGENCY WITH PROOF OF ACTIVE GRADING PERMITS FOR ANY BORROW OR WASTE SITES TO BE USED, PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL ASSUME MAINTENANCE OF ALL EROSION CONTROL FACILITIES LEFT ON SITE BY PREVIOUS CONTRACTORS IN THE CASE OF PHASED PROJECTS WHEN SPECIFIED BY THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL MAINTAIN, ADD TO AND/OR ADJUST ALL FACILITIES TO ASSURE MAXIMUM PROTECTION OF THE SITE.

NOTE-2

SEEDING NOTES

TEMPORARY SEEDING FOR FALL

SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	260 LBS.

SEEDING DATES

MOUNTAINS	AUGUST 15 - DECEMBER 15
PIEDMONT	AUGUST 15 - DECEMBER 15
COASTAL PLAIN	AUGUST 15 - DECEMBER 30

SOIL AMENDMENTS

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

MULCH

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKLING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE

REPAIR AND RE-FERTILIZE DAMAGED AREAS IMMEDIATELY. TOPRESS WITH 50 LB/ACRE NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE SWITCHGRASS (PANICUM VIRGATUM) IN LATE FEBRUARY OR EARLY MARCH.

TEMPORARY SEEDING FOR WINTER & EARLY SPRING

SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120 LBS.
SWITCHGRASS (PANICUM VIRGATUM)	50 LBS.

SEEDING DATES

MOUNTAINS (ABOVE 2,500')	FEBRUARY 15 - MAY 15
MOUNTAINS (BELOW 2,500')	FEBRUARY 1 - MAY 1
PIEDMONT	JANUARY 1 - MAY 1
COASTAL PLAIN	DECEMBER 1 - APRIL 15

SOIL AMENDMENTS

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKLING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE

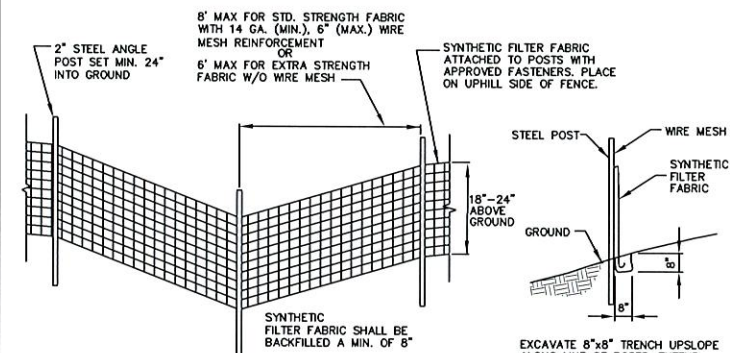
RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RE-SEED, RE-FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

NOTE-15

GENERAL CONSTRUCTION NOTES CONT'D.

- SEED AND MULCH DENUDED AREA WITHIN 14 DAYS ON DISTURBED FLAT AREAS AND 7 DAYS ON ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL. GROUND COVER SHALL BE REQUIRED AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 (OR 7) CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- THE LOCATIONS OF ALL UTILITIES SHOWN ON THESE PLANS ARE BASED ON THE AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UTILITIES WITH THE UTILITY OWNERS PRIOR TO CONSTRUCTION.
- ACCESS TO UTILITIES, FIRE HYDRANTS, STREET LIGHTING, ETC., SHALL REMAIN UNDISTURBED, UNLESS COORDINATED WITH RESPECTIVE UTILITY.
- CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL INSIDE OR OUTSIDE THE CONTRACT LIMITS DUE TO CONSTRUCTION OPERATIONS.
- THE GENERAL CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
- DO NOT SCALE THESE DRAWINGS AS THEY ARE REPRODUCTIONS AND SUBJECT TO DISTORTION.
- THE CONTRACTOR SHALL VERIFY ALL LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COST HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE, OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES. THE CONTRACTOR(S) SHALL CONTACT NC "ONE CALL" AT (800) 632-4949 FOR ASSISTANCE IN LOCATING EXISTING UTILITIES. CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
- THE CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL REVIEW ALL PLANS AND SPECIFICATIONS AND THE JOB SITE. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER WHO PREPARED THE PLANS OF ANY DISCREPANCIES THAT MAY REQUIRE MODIFICATIONS TO THESE PLANS OR OF ANY FIELD CONFLICTS.
- ALL PERMITS RELATIVE TO THE PROJECT MUST BE OBTAINED, PRIOR TO CONSTRUCTION. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY AND LOCAL CODES.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL BUILDING DIMENSIONS.
- CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THE REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD THE OWNER AND DESIGN PROFESSIONAL HARMLESS OF ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, ACCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR DESIGN PROFESSIONAL.
- ALL RECOMMENDATIONS/REQUIREMENTS OUTLINED IN THE SOILS REPORT AND ADDENDUMS TO THE SOILS REPORT CONTAINED IN THE CONTRACT DOCUMENTS SHALL BE INCORPORATED INTO THE EARTHWORK AND RELATED SPECIFICATIONS FOR THIS PROJECT.
- IF BORROWED OR WASTE FILL MATERIAL IS GENERATED, AN APPROVED GRADING PERMIT MUST BE SECURED FOR THE BORROW OR WASTE MATERIAL SITE PRIOR TO INITIATION OF ANY LAND DISTURBING ACTIVITY.
- UNLESS A PERMIT FROM NCDCE - DIVISION OF WASTE MANAGEMENT TO OPERATE A LANDFILL IS ON FILE FOR THE OFFICIAL SITE, ACCEPTABLE FILL MATERIAL SHALL BE FREE OF ORGANIC OR OTHER DEGRADABLE MATERIALS, MASONRY, CONCRETE AND BRICK IN SIZES EXCEEDING 12 INCHES, AND ANY MATERIALS WHICH WOULD CAUSE THE SITE TO BE REGULATED AS A LANDFILL BY THE STATE OF NORTH CAROLINA.
- ALL CONSTRUCTED SEVERE SLOPES GREATER THAN 2:1 AND GREATER THAN FIVE (5) FEET IN HEIGHT, AN INSPECTION AND A STABILITY CERTIFICATE ARE REQUIRED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER WITH GEOTECHNICAL EXPERTISE SUFFICIENT TO PERFORM THE INSPECTION AND STABILITY ANALYSIS. FOR ALL CONSTRUCTED SEVERE SLOPES WITHIN PROPOSED OR EXISTING PUBLIC RIGHTS-OF-WAY, PERIODIC INSPECTIONS AND COMPACTION REPORTS ARE REQUIRED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER WITH GEOTECHNICAL EXPERTISE.

NOTE-2A



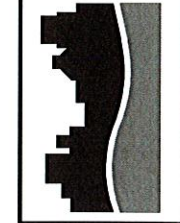
CONSTRUCTION REQUIREMENTS:

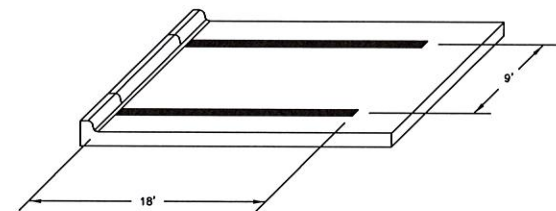
- CONSTRUCT SEDIMENT BARRIER OF STANDARD OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS.
- HEIGHT OF SEDIMENT FENCE SHALL NOT EXCEED 24 INCHES ABOVE GROUND SURFACE.
- CONSTRUCT FILTER FABRIC FROM CONTINUOUS ROLL TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, FASTEN FILTER CLOTH TO POST WITH 4" MIN. OVERLAP OR
- SUPPORT STANDARD STRENGTH FABRIC BY WIRE MESH FASTENED TO UPSLOPE SIDE OF POSTS. EXTEND WIRE MESH TO BOTTOM OF TRENCH. SECURE WITH WIRE OR PLASTIC ZIP TIES HAVE 50 LB. TENSILE STRENGTH.
- POST SPACING OF 8' MAX. WITH 14 GA. (MIN.), 6" (MAX.) WIRE MESH. POSTS SET MIN. 24" INTO GROUND.
- POST SPACE OF 6' MAX. WITH EXTRA STRENGTH FILTER FABRIC.
- EXCAVATE TRENCH 8" WIDE AND 8" DEEP DIRECTLY UPSLOPE BARRIER LINE.
- PLACE 16" OF FABRIC ALONG BOTTOM AND SIDE OF TRENCH.
- BACKFILL TRENCH OVER FILTER FABRIC AND COMPACT.
- DO NOT ATTACH FILTER FABRIC TO EXISTING TREES.

SILT FENCE

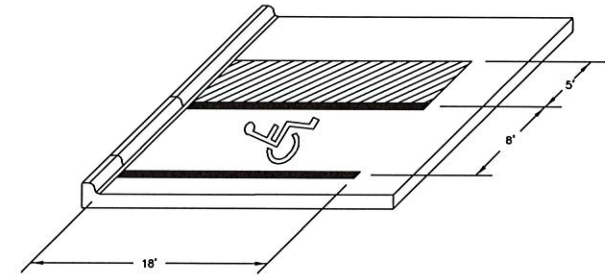
NOT TO SCALE

EC-36





TYPICAL PARKING SPACE



TYPICAL STANDARD HANDICAPPED PARKING SPACE

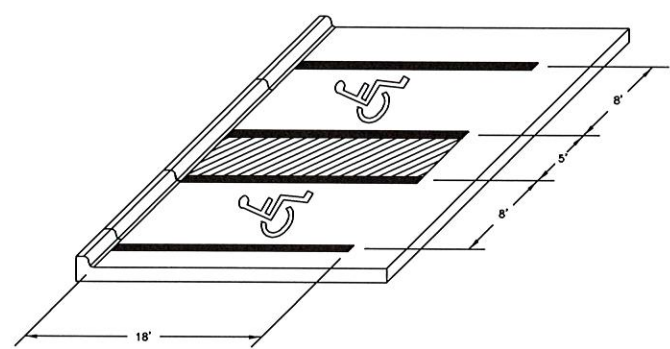
- NOTES:
- HANDICAPPED PARKING SPACES SHALL MEET THE STANDARDS OF THE AMERICANS WITH DISABILITIES ACT, AS AMENDED.
 - IF PARKING SPACES ARE PROVIDED FOR SELF-PARKING BY EMPLOYEES OR VISITORS, OR BOTH, THEN HANDICAPPED ACCESSIBLE SPACES SHALL BE PROVIDED AS INDICATED IN THE CHART BELOW. SPACES REQUIRED BY THE TABLE NEED NOT BE PROVIDED IN A DIFFERENT LOCATION IF EQUIVALENT OR GREATER ACCESSIBILITY, IN TERMS OF DISTANCE FROM AN ACCESSIBLE ENTRANCE, AND CONVENIENCE ARE ENSURED.
 - ACCESS AISLES ADJACENT TO HANDICAPPED SPACES, EXCEPT ACCESS AISLES, SHALL HAVE A MINIMUM WIDTH OF 5 FEET. ONE IN EVERY 8 HANDICAPPED SPACES, BUT NOT LESS THAN ONE, SHALL BE SERVED BY AN ACCESS AISLE NOT LESS THAN 8 FEET WIDE AND SHALL BE DESIGNATED "VAN ACCESSIBLE." ACCESS AISLES MAY BE SHARED BY ADJACENT HANDICAPPED PARKING SPACES.

TOTAL SPACES IN LOT	REQUIRED MINIMUM NUMBER OF HANDICAPPED SPACES
1 TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
200 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2% OF TOTAL
1001 AND OVER	20 PLUS 1 FOR EACH 100 OVER 1000

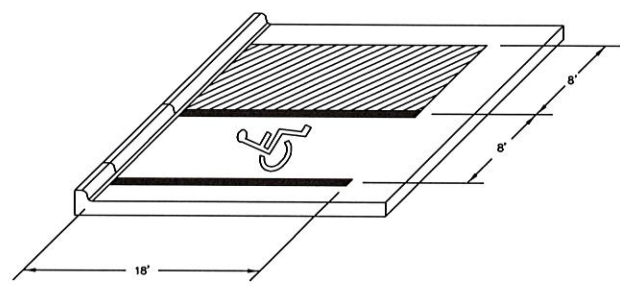
PARKING SPACE DIMENSIONS - 1A

NOT TO SCALE

ST-40



TWO STANDARD HANDICAPPED PARKING SPACES

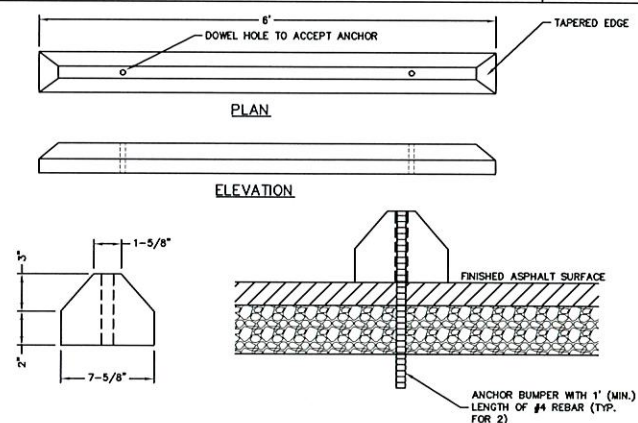


VAN-ACCESSIBLE HANDICAPPED PARKING SPACE

PARKING SPACE DIMENSIONS - 1B

NOT TO SCALE

ST-41

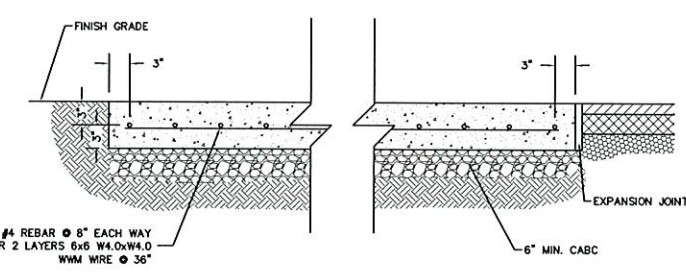


STANDARD PARKING BUMPER

NOT TO SCALE

ST-65

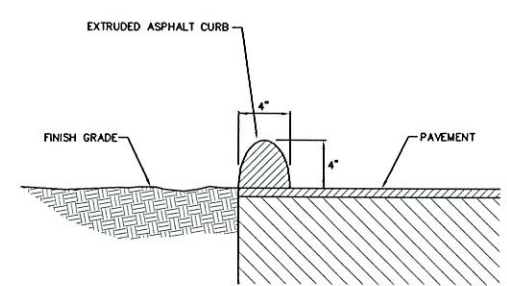
- NOTES:
- CONCRETE BUMPER SHALL BE MADE WITH A MIN. 3500 PSI CONCRETE.
 - ALTERNATIVES ARE ACCEPTABLE BUT MUST BE APPROVED BY THE ENGINEER.
 - WHERE CURB AND OUTER IS NOT PRESENT A PARKING BUMPER IS REQUIRED IN ALL SPACES TO ENSURE THAT NO ENCRoACHMENT IS MADE INTO ADJACENT ACCESSIBLE ROUTES.



DUMPSTER PAD SECTION

NOT TO SCALE

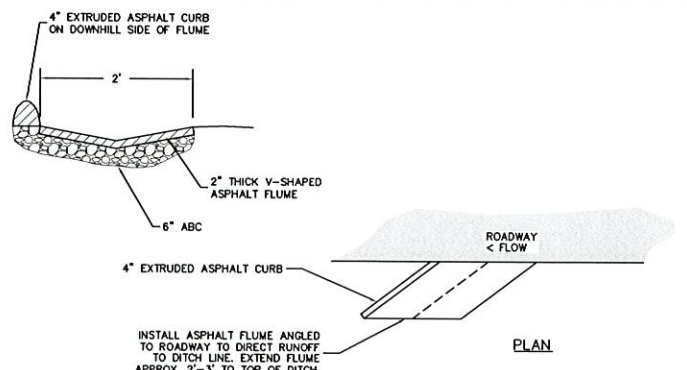
ST-51



ASPHALT CURB

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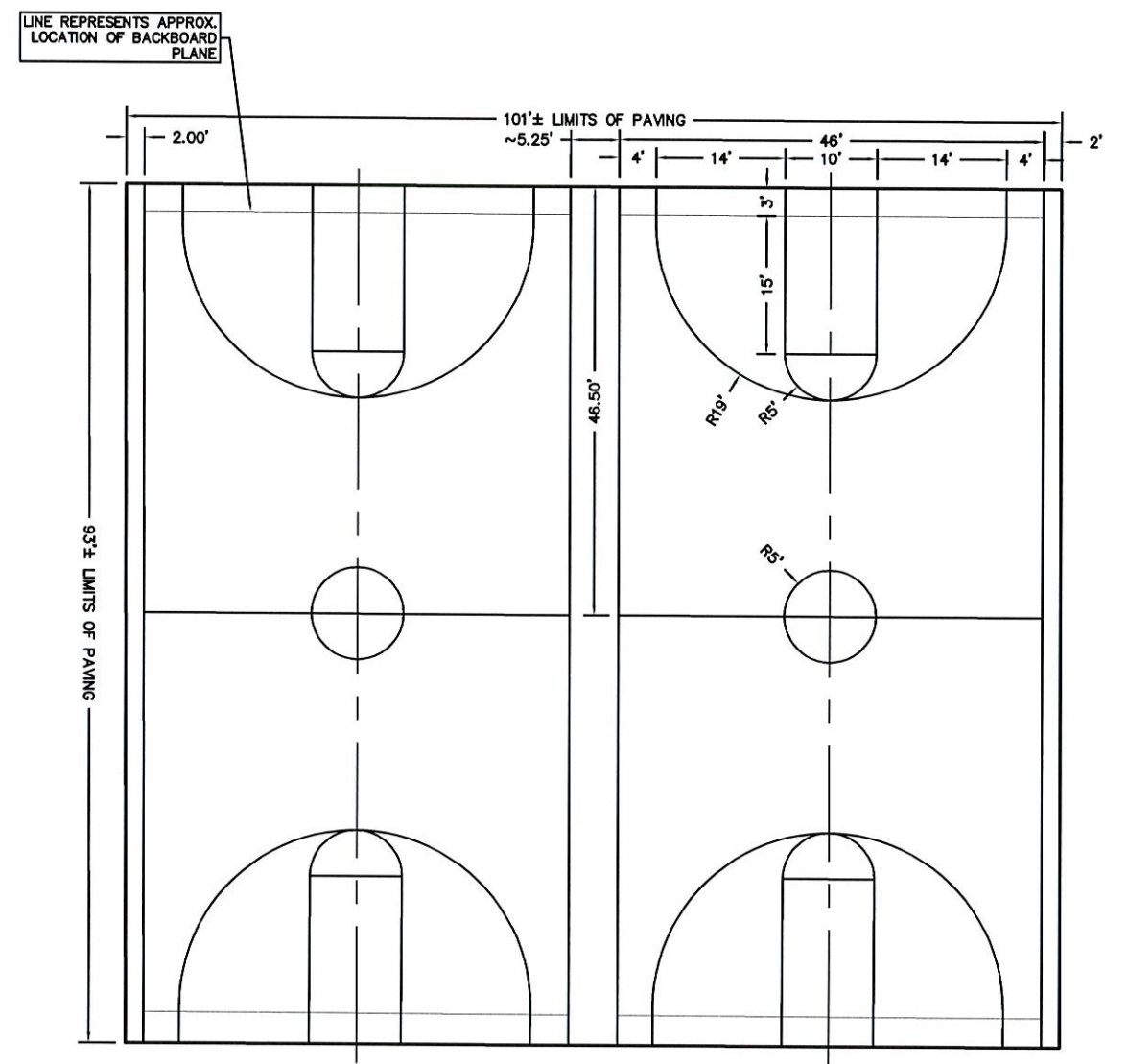
ST-8



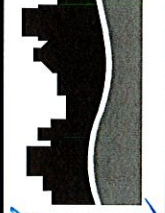
ASPHALT FLUME

NOT TO SCALE

Basketball Court Striping Detail - Owen Park
1" = 20'

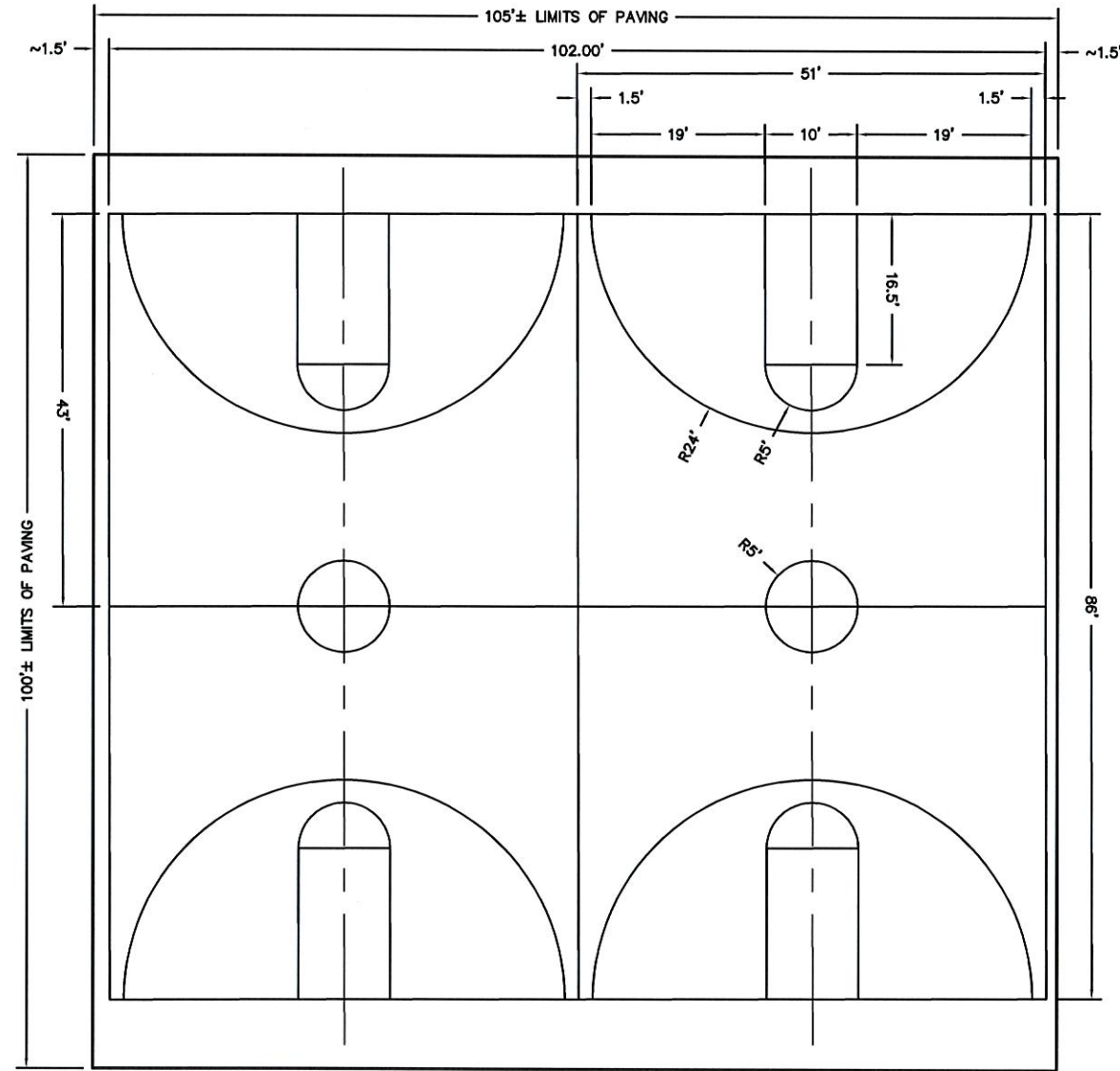


NOTE: DIMENSIONS INDICATED ON THIS PLAN ARE GENERALLY BASED ON EXISTING SITE CONDITIONS AND MAY NOT MEET STANDARD BASKETBALL COURT DIMENSIONS. THE INTENT IS TO PROVIDE STRIPING SIMILAR TO THAT OF EXISTING CONDITIONS.



Basketball Court Striping Detail - Hominy Park

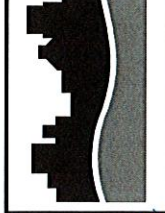
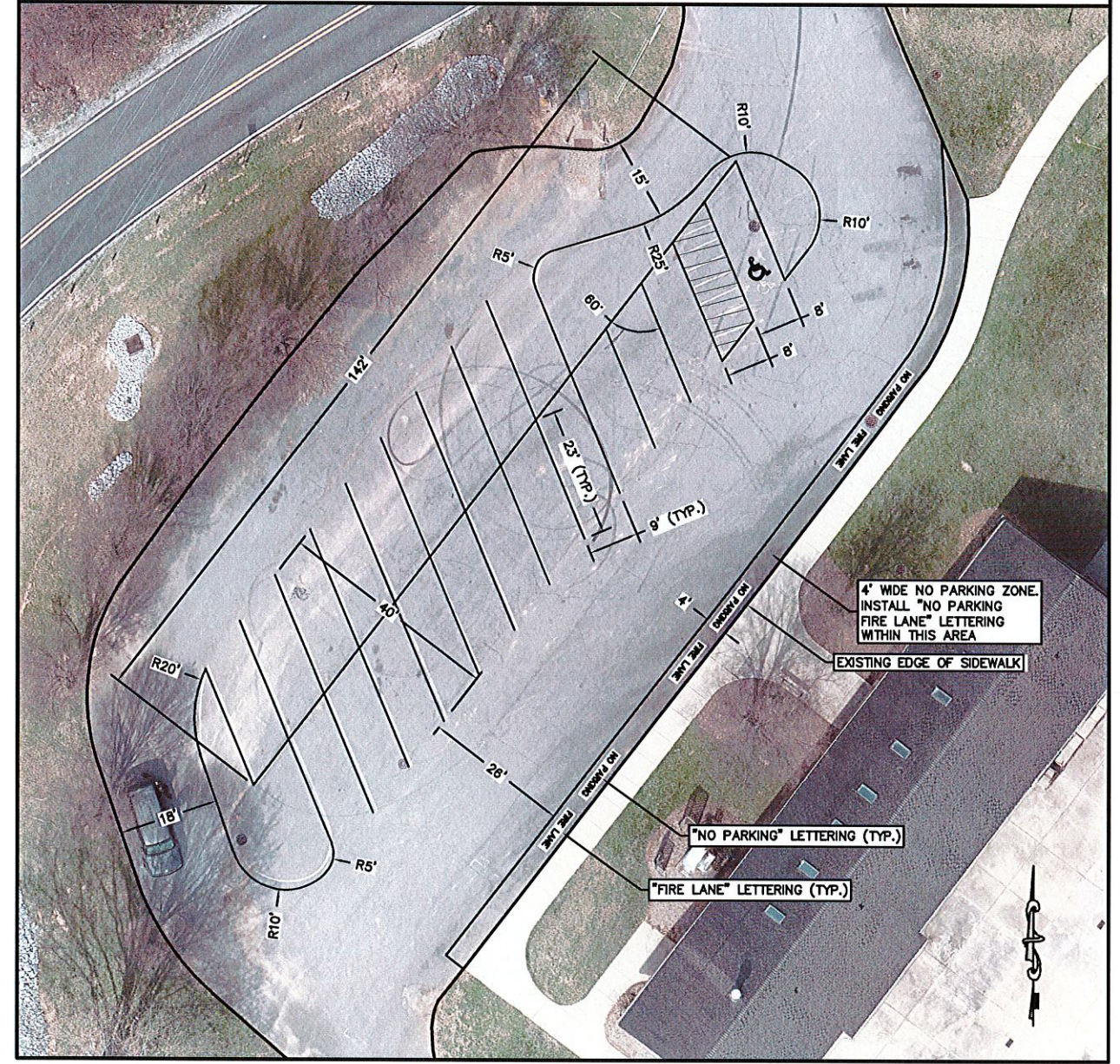
1" = 20'



NOTE:
DIMENSIONS INDICATED ON THIS PLAN ARE GENERALLY
BASED ON EXISTING SITE CONDITIONS AND MAY NOT
MEET STANDARD BASKETBALL COURT DIMENSIONS. THE
INTENT IS TO PROVIDE STRIPING SIMILAR TO THAT OF
EXISTING CONDITIONS.

Parking Layout Information - Hominy Park Upper Parking Area

1" = 30'



Parking Lot Improvements
Countywide Projects
Project Details
BUNCOMBE COUNTY, NORTH CAROLINA

Job No: 20140
Date: May 25, 2022
Scale: See Plans
Revision:

Details

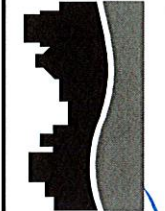
Sheet
D3

Parking Layout Information - Hominy Park Lower Parking Area
 1" = 30'



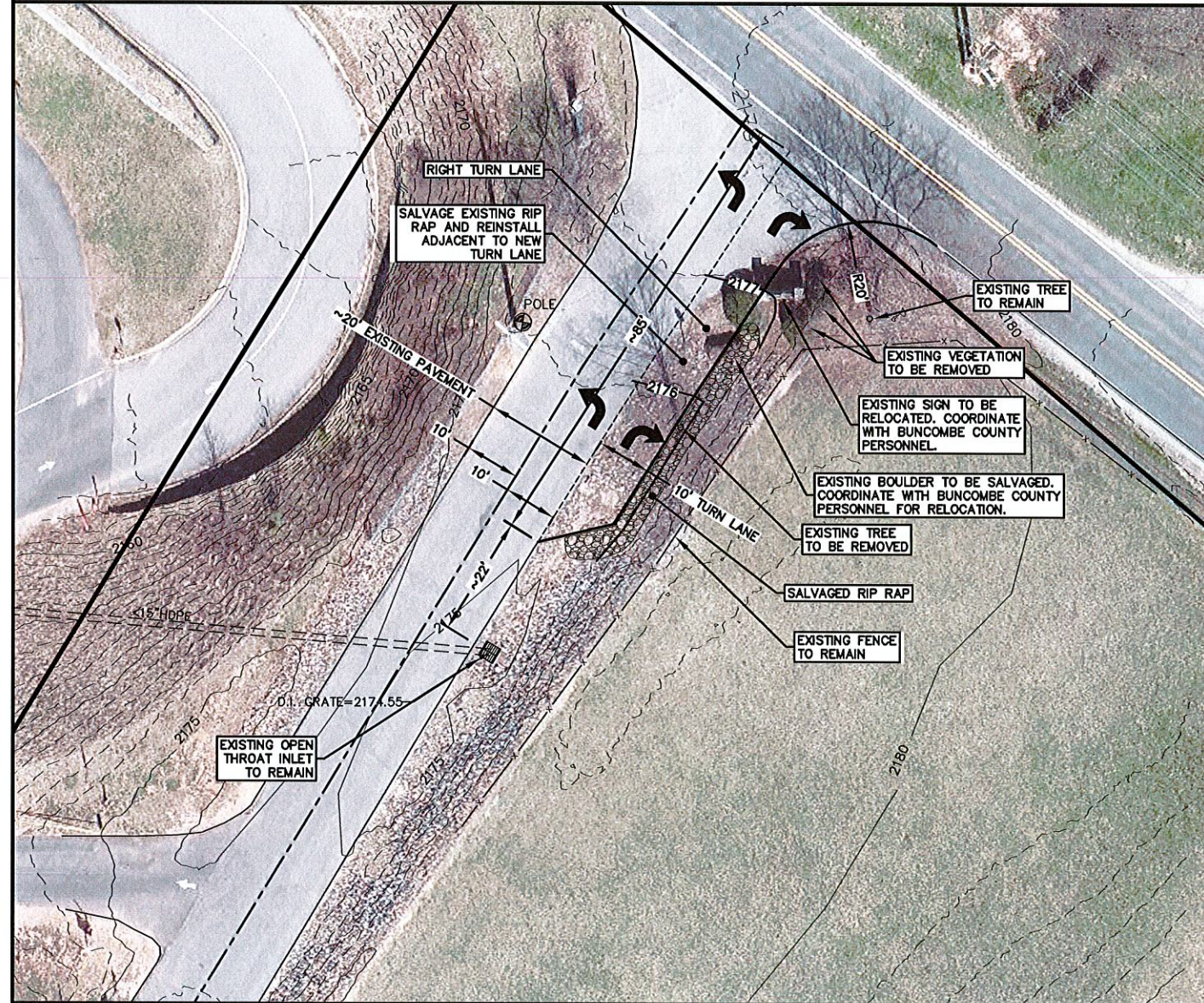
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Parking Lot Improvements
 Countywide Projects
Project Details
 BUNCOMBE COUNTY, NORTH CAROLINA



Davis Civil Solutions, PA
 Site/Infrastructure • Engineering/Planning
 135-A Charlotte Highway Asheville, North Carolina 28801
 828.299.9449 P11 - www.daviscivilsolutions.com

Turn Lane Information - 50 Apac Drive
1" = 30'





30 Valley Street Board Room Countywide Parking Lot Improvements Project Pre-Bid Conference – June 22, 2022 at 2:30 PM

- Thank you for attending and your interest in the project. This is the pre-bid conference for the Countywide Parking Lot Improvements project
- Introductions of Buncombe County Personnel
- Agenda items:
 1. **Sign-in sheet**
 2. **Bid document acquisition** – Ensure that everyone has been able to access the documents via the shared drive or email.
 3. **Bid administration information:**
 - a. Bidder question deadline – July 6, 2022 at 1:00 PM
 - b. Addendum out – July 11, 2022 at 1:00 PM
 - c. Bid submission due date – July 14, 2022 at 2:00 PM. Bids must be submitted in person at 30 Valley Street, Asheville, NC 28801. This is the Buncombe County Permits and Inspections building.
 - d. A minimum of one addendum will be issued that will include the items covered during the pre-bid meeting.
 - e. Contact Buncombe County General Services at GeneralServices@buncombecounty.org if you have any bid package questions about the bid forms.
 - f. Contact Buncombe County General Services at GeneralServices@buncombecounty.org if you have specific questions about the project.
 4. **Schedule:** Buncombe County would like this work to be performed as soon as possible.
 5. **General Scope Items:**
 - a. It is unlawful to allow any person to bring to the project site or any County owned property, any type of firearms, alcoholic beverages, or drugs other than prescribed by a physician. The use of tobacco products on county owned property is prohibited.
 - b. The contractor shall have a competent employee, directly employed by the 1st tier contractor, on the project site any time the contractor or their subcontractor is working.
 - c. The contractor shall be responsible for any permits required to perform their work. This includes but is not limited to: building, mechanical, electrical, plumbing, street closure, sidewalk closure and parking space closure permits.
 - d. The contractor shall be responsible for scheduling and coordinating for inspections required for completing their work.





General Services

Scott Metcalf
Facilities and Construction Coordinator

- e. The contractor shall be responsible for protecting existing property and equipment from damage. Any damage caused shall be repaired at the contractor's expense.
 - f. The contractor shall be responsible for providing and maintaining all traffic control that pertains to their work.
 - g. The contractor shall be responsible for furnishing and maintaining all necessary equipment for their work. This includes but is not limited to: cranes, tools, ladders, scaffolds, hoists, forklifts and man lifts. All necessary unloading and distribution of materials for the work is also the responsibility of the contractor.
 - h. The contractor shall be responsible for their own trash and debris removal. The project site should be kept clean and orderly. Trash is to be removed daily and legally disposed of.
6. **Specific scope items:**
- a. Each site has a specific scope. Please pay attention to the plans and specification for each site accordingly.
 - b. All work shall be performed in accordance with the provided drawings and specifications.
7. **General site/project information:**
- a. Work days/hours – After business hour sites will include 200 College Street, 94 Coxe Avenue and Federal Alley. The remaining sites will need to be scheduled to minimize impact to services.
 - b. Parking – Site specific but space will be provided if needed.
 - c. Material storage areas/requirements – Site specific but space will be provided if needed.
 - d. Safety – Your company's safety procedures are to be followed at all times. These sites are all public facilities so caution will need to be taken to insure the safety of the community.
8. **Bidder specific questions:**
- a. List all questions asked during the pre-bid and in the allotted time for questions.





**REQUEST FOR BID
COUNTY-WIDE PAVING PROJECT**

CHECKLIST OF REQUIRED ITEMS

Company _____

Signature _____

Date _____

#	ITEM	INCLUDED
1	This checklist is signed and included in the submitted bid	
2	Signed Bid Form	
3	MBE Forms	
4	Sub Contractor List	
5	Bid Bond in separate envelope	
6		
7		
8		
9		
10		

