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Land Planning

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The University of North Carolina at Charlotte Charlotte, North Carolina

PROJECT MANUAL

For

Campus Circulation Improvements

SCO Project No. 16-14055 Code 41526 Item 310 CJS Project No. 04496.00

March 8, 2017

NOTICE TO BIDDERS

Sealed proposals will be received by The University of North Carolina in Charlotte, NC, in Room 119 of the Facilities Management & Police building (#55 on the campus map – http://facilities.uncc.edu/maps) until 2:00 pm on Tuesday, April 4, 2017 and immediately thereafter publicly opened and read for the furnishing of labor, material and equipment entering into the construction of:

Campus Circulation Improvements The University of North Carolina at Charlotte

Campus Circulation Improvements are intended to enhance pedestrian and vehicular circulation on the UNC Charlotte campus with new connection to the CATS Lynx light rail line. Work includes the installation of new brick paver sidewalks, bus drop-off with parking, raised crosswalk with pedestrian signalization, and associated wall, stair, planter, drainage, and landscape improvements.

Bids will be received for single prime contract. All proposals shall be lump sum.

Visitor parking is available in Lot 26. Visitors will need to obtain a parking pass from the FM reception area on the first floor and return to their car prior to the bid opening. Campus map is available for review at http://maps.uncc.edu/.

Non-Mandatory Pre-Bid Meeting

A **non-mandatory** pre-bid meeting will be held for all interested bidders on Wednesday, March 15, 2017 at 2:00 pm in Room 112A of the Cone University Center (#5 on the campus map). The meeting will address project specific questions, issues, bidding procedures, and bid forms. After the prebid meeting there will be a site visit to go over the project scope and locations. **This will be the only opportunity for contractors and their subcontractors to visit the site, so please have all interested parties in attendance.**

Visitor parking is located in the Cone Deck adjacent the Cone University Center.

The meeting will address project specific questions, issues, bidding procedures, and bid forms. The meeting is also to identify preferred brand alternates and their performance standards that the Owner will consider for approval on this project. A walk of the site will be conducted immediately following the meeting.

Bidders questions will be entertained in writing until 5:00 pm on Wednesday, March 22, 2017. Address all questions to the designer, ColeJenest & Stone - Attn: Susan G. Freyler, sfrevler@coleieneststone.com.

NOTICE TO BIDDERS PAGE 1 OF 4

Final addenda will be issued Tuesday, March 28, 2017 to all plan holders/bidders of record.

Complete plans, specifications, and contract documents will be open for inspection at:

ColeJenest & Stone
200 South Tryon Street, Suite 1400
Charlotte, NC 28202
(704) 376-1555

UNC Charlotte
Hickory Hall
Room 02E – Capital Projects Design Plan Review
9151 Cameron Boulevard
Charlotte, NC 28223
(704) 687-0615

Metrolina Minority Contractors Association (MMCA) Plan Room 2848 Queen City Drive, Suite B Charlotte, NC 28208 (877) 526-6205 mmca@mmcaofcharlotte.org

Or may be obtained from <u>ColeJenest & Stone</u>, upon deposit of fifty dollars (\$50) in cash or certified check. The full plan deposit will be returned to those bidders provided all documents are returned in good, usable condition within ten (10) days after the bid date.

Electronic copies of the plans, specifications and contract documents will also be provided electronically to all interested bidders. Contact for electronic plans and specifications is Susan Freyler at (704) 376-1555 or sfreyler@colejeneststone.com.

Electronic copies of the plans, specifications and contract documents are available at the following:

- 1. Construct Connect at content@constructconnect.com 800-364-2059.
- 2. North Carolina Offices of McGraw-Hill Dodge Corporation (877) 784-9556 or (800) 393-6343; http://construction.com/dodge
- 3. Metrolina Minority Contractors Association (877) 526-6205; mmca@mmcaofcharlotte.org

NOTE: The bidder shall include with the bid proposal the form *Identification of Minority Business Participation* identifying the minority business participation it will use on the project and shall include either *Affidavit A* or *Affidavit B* as applicable. Forms and instructions are included within the Proposal Form in the bid documents. Failure to complete these forms is grounds for rejection of the bid. (GS143-128.2c Effective 1/1/2002.)

NOTICE TO BIDDERS PAGE 2 OF 4

All contractors are hereby notified that they must have proper license as required under the state laws governing their respective trades.

General contractors are notified that Chapter 87, Article 1, General Statutes of North Carolina, will be observed in receiving and awarding general contracts. General contractors submitting bids on this project must have license classification for <u>Building Contractor with an unlimited license required by the NC General Contractors Licensing Board under G.S. 87-1</u>.

NOTE--SINGLE PRIME CONTRACTS: Under GS 87-1, a contractor that superintends or manages construction of any building, highway, public utility, grading, structure or improvement shall be deemed a "general contractor" and shall be so licensed. Therefore a single prime project that involves other trades will require the single prime contractor to hold a proper General Contractors license.

Each proposal shall be accompanied by a cash deposit or a certified check drawn on some bank or trust company, insured by the Federal Deposit Insurance Corporation, of an amount equal to not less than five percent (5%) of the proposal, or in lieu thereof a bidder may offer a bid bond of five percent (5%) of the bid executed by a surety company licensed under the laws of North Carolina to execute the contract in accordance with the bid bond. Said deposit shall be retained by the owner as liquidated damages in event of failure of the successful bidder to execute the contract within ten days after the award or to give satisfactory surety as required by law

A performance and payment bond will be required for one hundred percent (100%) of the contract price.

Payment will be made based on ninety-five percent (95%) of monthly estimates and final payment made upon completion and acceptance of work.

No bid may be withdrawn after the scheduled closing time for the receipt of bids for a period of 30 days.

The owner reserves the right to reject any or all bids and to waive informalities.

Bidders who will not attend the Bid Opening need to ensure their sealed bids are delivered no later than 1:00 pm on Tuesday, April 4, 2017 to the following:

Mailed Proposals:

Attn: Ms. Joyce Clay, Hickory Hall, Room 35B The University of North Carolina at Charlotte Facilities Management – Capital Projects 9201 University City Boulevard Charlotte, NC 28223-0001

Or

NOTICE TO BIDDERS PAGE 3 OF 4

March 8, 2017 Construction Documents SCO ID 16-14055 Code 41526 Item 310

Hand Delivered:

Attn: Ms. Joyce Clay – Capital Projects, Room 35B Hickory Hall (#536 on the campus map) 9151 Cameron Boulevard Charlotte, NC 28223 (704) 687-0615

Designer:

Cole Jenest & Stone 200 South Tryon Street, Suite 1400 Charlotte, NC 28202 (704) 376-1555

Owner:

The University of North Carolina at Charlotte Hickory Hall, FM - Capital Projects 9201 University City Blvd Charlotte, NC 28223 (704) 687-0615

NOTICE TO BIDDERS PAGE 4 OF 4

GUIDELINES FOR RECRUITMENT AND SELECTION OF MINORITY BUSINESSES FOR PARTICIPATION IN STATE CONSTRUCTION CONTRACTS

In accordance with G.S. 143-128.2 (effective January 1, 2002) these guidelines establish goals for minority participation in single-prime bidding, separate-prime bidding, construction manager at risk, and alternative contracting methods, on State construction projects in the amount of \$300,000 or more. The legislation provides that the State shall have a verifiable ten percent (10%) goal for participation by minority businesses in the total value of work for each project for which a contract or contracts are awarded. These requirements are published to accomplish that end.

SECTION A: INTENT

It is the intent of these guidelines that the State of North Carolina, as awarding authority for construction projects, and the contractors and subcontractors performing the construction contracts awarded shall cooperate and in good faith do all things legal, proper and reasonable to achieve the statutory goal of ten percent (10%) for participation by minority businesses in each construction project as mandated by GS 143-128.2. Nothing in these guidelines shall be construed to require contractors or awarding authorities to award contracts or subcontracts to or to make purchases of materials or equipment from minority-business contractors or minority-business subcontractors who do not submit the lowest responsible, responsive bid or bids.

SECTION B: DEFINITIONS

- 1. <u>Minority</u> a person who is a citizen or lawful permanent resident of the United States and who is:
 - a. Black, that is, a person having origins in any of the black racial groups in Africa;
 - b. Hispanic, that is, a person of Spanish or Portuguese culture with origins in Mexico, South or Central America, or the Caribbean Islands, regardless of race;
 - c. Asian American, that is, a person having origins in any of the original peoples of the Far East, Southeast Asia and Asia, the Indian subcontinent, the Pacific Islands;
 - d. American Indian, that is, a person having origins in any of the original peoples of North America; or
 - e. Female
- 2. Minority Business means a business:
 - a. In which at least fifty-one percent (51%) is owned by one or more minority persons, or in the case of a corporation, in which at least fifty-one percent (51%) of the stock is owned by one or more minority persons or socially and economically disadvantaged individuals; and
 - b. Of which the management and daily business operations are controlled by one or more of the minority persons or socially and economically disadvantaged individuals who own it.
- 3. Socially and economically disadvantaged individual means the same as defined in 15 U.S.C. 637. "Socially disadvantaged individuals are those who have been subjected to racial or ethnic prejudice or cultural bias because of their identity as a member of a group without regard to their individual qualities". "Economically disadvantaged individuals are those socially disadvantaged individuals whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same business area who are not socially disadvantaged".
- 4. Public Entity means State and all public subdivisions and local governmental units.
- 5. Owner The State of North Carolina, through the Agency/Institution named in the contract.
- 6. <u>Designer</u> Any person, firm, partnership, or corporation, which has contracted with the State of North Carolina to perform architectural or engineering, work.
- 7. <u>Bidder</u> Any person, firm, partnership, corporation, association, or joint venture seeking to be awarded a public contract or subcontract.

- 8. <u>Contract</u> A mutually binding legal relationship or any modification thereof obligating the seller to furnish equipment, materials or services, including construction, and obligating the buyer to pay for them.
- 9. <u>Contractor</u> Any person, firm, partnership, corporation, association, or joint venture which has contracted with the State of North Carolina to perform construction work or repair.
- 10. <u>Subcontractor</u> A firm under contract with the prime contractor or construction manager at risk for supplying materials or labor and materials and/or installation. The subcontractor may or may not provide materials in his subcontract.

SECTION C: RESPONSIBILITIES

1. Office for Historically Underutilized Businesses, Department of Administration (hereinafter referred to as HUB Office).

The HUB Office has established a program, which allows interested persons or businesses qualifying as a minority business under G.S. 143-128.2, to obtain certification in the State of North Carolina procurement system. The information provided by the minority businesses will be used by the HUB Office to:

- a. Identify those areas of work for which there are minority businesses, as requested.
- b. Make available to interested parties a list of prospective minority business contractors and subcontractors.
- c. Assist in the determination of technical assistance needed by minority business contractors.

In addition to being responsible for the certification/verification of minority businesses that want to participate in the State construction program, the HUB Office will:

- (1) Maintain a current list of minority businesses. The list shall include the areas of work in which each minority business is interested.
- (2) Inform minority businesses on how to identify and obtain contracting and subcontracting opportunities through the State Construction Office and other public entities.
- (3) Inform minority businesses of the contracting and subcontracting process for public construction building projects.
- (4) Work with the North Carolina trade and professional organizations to improve the ability of minority businesses to compete in the State construction projects.
- (5) The HUB Office also oversees the minority business program by:
 - a. Monitoring compliance with the program requirements.
 - b. Assisting in the implementation of training and technical assistance programs.
 - c. Identifying and implementing outreach efforts to increase the utilization of minority businesses.
 - d. Reporting the results of minority business utilization to the Secretary of the Department of Administration, the Governor, and the General Assembly.

2. State Construction Office

The State Construction Office will be responsible for the following:

- a. Furnish to the HUB Office a minimum of twenty-one days prior to the bid opening the following:
 - (1) Project description and location;
 - (2) Locations where bidding documents may be reviewed;
 - (3) Name of a representative of the owner who can be contacted during the advertising period to advise who the prospective bidders are;
 - (4) Date, time and location of the bid opening.
 - (5) Date, time and location of prebid conference, if scheduled.
- b. Attending scheduled prebid conference, if necessary, to clarify requirements of the general statutes regarding minority-business participation, including the bidders' responsibilities.

- c. Reviewing the apparent low bidders' statutory compliance with the requirements listed in the proposal, that must be complied with, if the bid is to be considered as responsive, prior to award of contracts. The State reserves the right to reject any or all bids and to waive informalities.
- d. Reviewing of minority business requirements at Preconstruction conference.
- e. Monitoring of contractors' compliance with minority business requirements in the contract documents during construction.
- f. Provide statistical data and required reports to the HUB Office.
- g. Resolve any protest and disputes arising after implementation of the plan, in conjunction with the HUB Office.

3. Owner

Before awarding a contract, owner shall do the following:

- a. Develop and implement a minority business participation outreach plan to identify minority businesses that can perform public building projects and to implement outreach efforts to encourage minority business participation in these projects to include education, recruitment, and interaction between minority businesses and non-minority businesses.
- b. Attend the scheduled prebid conference.
- c. At least 10 days prior to the scheduled day of bid opening, notify minority businesses that have requested notices from the public entity for public construction or repair work and minority businesses that otherwise indicated to the Office for Historically Underutilized Businesses an interest in the type of work being bid or the potential contracting opportunities listed in the proposal. The notification shall include the following:
 - 1. A description of the work for which the bid is being solicited.

 - The date, time, and location where bids are to be submitted.
 The name of the individual within the owner's organization who will be available to answer questions about the project.
 - 4. Where bid documents may be reviewed.
 - 5. Any special requirements that may exist.
- d. Utilize other media, as appropriate, likely to inform potential minority businesses of the bid being sought.
- e. Maintain documentation of any contacts, correspondence, or conversation with minority business firms made in an attempt to meet the goals.
- f. Review, jointly with the designer, all requirements of G.S. 143-128.2(c) and G.S. 143-128.2(f) (i.e. bidders' proposals for identification of the minority businesses that will be utilized with corresponding total dollar value of the bid and affidavit listing good faith efforts, or affidavit of self-performance of work, if the contractor will perform work under contract by its own workforce) - prior to recommendation of award to the State Construction Office.
- g. Evaluate documentation to determine good faith effort has been achieved for minority business utilization prior to recommendation of award to State Construction Office.
- h. Review prime contractors' pay applications for compliance with minority business utilization commitments prior to payment.
- i. Make documentation showing evidence of implementation of Owner's responsibilities available for review by State Construction Office and HUB Office, upon request

4. Designer

Under the single-prime bidding, separate prime bidding, construction manager at risk, or alternative contracting method, the designer will:

- a. Attend the scheduled prebid conference to explain minority business requirements to the prospective bidders.
- b. Assist the owner to identify and notify prospective minority business prime and subcontractors of potential contracting opportunities.
- c. Maintain documentation of any contacts, correspondence, or conversation with minority business firms made in an attempt to meet the goals.
- d. Review jointly with the owner, all requirements of G.S. 143-128.2(c) and G.S.143-128.2(f) (i.e. bidders' proposals for identification of the minority businesses that will be utilized with

- corresponding total dollar value of the bid and affidavit listing Good Faith Efforts, or affidavit of self-performance of work, if the contractor will perform work under contract by its own workforce) prior to recommendation of award.
- e. During construction phase of the project, review "MBE Documentation for Contract Payment" (Appendix E) for compliance with minority business utilization commitments. Submit Appendix E form with monthly pay applications to the owner and forward copies to the State Construction Office.
- f. Make documentation showing evidence of implementation of Designer's responsibilities available for review by State Construction Office and HUB Office, upon request.

5. <u>Prime Contractor(s), CM at Risk, and Its First-Tier Subcontractors</u> Under the single-prime bidding, the separate-prime biding, construction manager at risk and

alternative contracting methods, contractor(s) will:

- a. Attend the scheduled prebid conference.
- b. Identify or determine those work areas of a subcontract where minority businesses may have an interest in performing subcontract work.
- c. At least ten (10) days prior to the scheduled day of bid opening, notify minority businesses of potential subcontracting opportunities listed in the proposal. The notification will include the following:
 - (1) A description of the work for which the subbid is being solicited.
 - (2) The date, time and location where subbids are to be submitted.
 - (3) The name of the individual within the company who will be available to answer questions about the project.
 - (4) Where bid documents may be reviewed.
 - (5) Any special requirements that may exist, such as insurance, licenses, bonds and financial arrangements.

If there are more than three (3) minority businesses in the general locality of the project who offer similar contracting or subcontracting services in the specific trade, the contractor(s) shall notify three (3), but may contact more, if the contractor(s) so desires.

- d. During the bidding process, comply with the contractor(s) requirements listed in the proposal for minority participation.
- e. Identify on the bid, the minority businesses that will be utilized on the project with corresponding total dollar value of the bid and affidavit listing good faith efforts as required by G.S. 143-128.2(c) and G.S. 143-128.2(f).
- f. Make documentation showing evidence of implementation of PM, CM-at-Risk and First-Tier Subcontractor responsibilities available for review by State Construction Office and HUB Office, upon request.
- g. Upon being named the apparent low bidder, the Bidder shall provide one of the following: (1) an affidavit (Affidavit C) that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the applicable goal; (2) if the percentage is not equal to the applicable goal, then documentation of all good faith efforts taken to meet the goal. Failure to comply with these requirements is grounds for rejection of the bid and award to the next lowest responsible and responsive bidder.
- h. The contractor(s) shall identify the name(s) of minority business subcontractor(s) and corresponding dollar amount of work on the schedule of values. The schedule of values shall be provided as required in Article 31 of the General Conditions of the Contract to facilitate payments to the subcontractors.
- i. The contractor(s) shall submit with each monthly pay request(s) and final payment(s), "MBE Documentation for Contract Payment" (Appendix E), for designer's review.
- j. During the construction of a project, at any time, if it becomes necessary to replace a minority business subcontractor, immediately advise the owner, State Construction Office, and the Director of the HUB Office in writing, of the circumstances involved. The prime contractor shall make a good faith effort to replace a minority business subcontractor with another minority business subcontractor.

- k. If during the construction of a project additional subcontracting opportunities become available, make a good faith effort to solicit subbids from minority businesses.
- 1. It is the intent of these requirements apply to all contractors performing as prime contractor and first tier subcontractor under construction manager at risk on state projects.

6. <u>Minority Business Responsibilities</u>

While minority businesses are not required to become certified in order to participate in the State construction projects, it is recommended that they become certified and should take advantage of the appropriate technical assistance that is made available. In addition, minority businesses who are contacted by owners or bidders must respond promptly whether or not they wish to submit a bid.

SECTION 4: DISPUTE PROCEDURES

It is the policy of this state that disputes that involves a person's rights, duties or privileges, should be settled through informal procedures. To that end, minority business disputes arising under these guidelines should be resolved as governed under G.S. 143-128(g).

<u>SECTION 5</u>: These guidelines shall apply upon promulgation on state construction projects. Copies of these guidelines may be obtained from the Department of Administration, State Construction Office, (physical address) 301 North Wilmington Street, Suite 450, NC Education Building, Raleigh, North Carolina, 27601-2827, (mail address) 1307 Mail Service Center, Raleigh, North Carolina, 27699-1307, phone (919) 807-4100, Website: www.nc-sco.com

SECTION 6: In addition to these guidelines, there will be issued with each construction bid package provisions for contractual compliance providing minority business participation in the state construction program.

MINORITY BUSINESS CONTRACT PROVISIONS (CONSTRUCTION)

APPLICATION:

The Guidelines for Recruitment and Selection of Minority Businesses for Participation in State Construction Contracts are hereby made a part of these contract documents. These guidelines shall apply to all contractors regardless of ownership. Copies of these guidelines may be obtained from the Department of Administration, State Construction Office, (physical address) 301 North Wilmington Street, Suite 450, NC Education Building, Raleigh, North Carolina, 27601-2827, (mail address) 1307 Mail Service Center, Raleigh, North Carolina, 27699-1307, phone (919) 807-4100, Website: http://www.nc-sco.com

MINORITY BUSINESS SUBCONTRACT GOALS:

The goals for participation by minority firms as subcontractors on this project have been set at 10%.

The bidder must identify on its bid, the minority businesses that will be utilized on the project with corresponding total dollar value of the bid and affidavit (Affidavit A) listing good faith efforts <u>or</u> affidavit (Affidavit B) of self-performance of work, if the bidder will perform work under contract by its own workforce, as required by G.S. 143-128.2(c) and G.S. 143-128.2(f).

The lowest responsible, responsive bidder must provide Affidavit C, that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the applicable goal.

OR

Provide Affidavit D, that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, with documentation of Good Faith Effort, if the percentage is not equal to the applicable goal.

OR

Provide Affidavit B, which includes sufficient information for the State to determine that the bidder does not customarily subcontract work on this type project.

The above information must be provided as required. Failure to submit these documents is grounds for rejection of the bid.

MINIMUM COMPLIANCE REQUIREMENTS:

All written statements, affidavits or intentions made by the Bidder shall become a part of the agreement between the Contractor and the State for performance of this contract. Failure to comply with any of these statements, affidavits or intentions, or with the minority business Guidelines shall constitute a breach of the contract. A finding by the State that any information submitted either prior to award of the contract or during the performance of the contract is inaccurate, false or incomplete, shall also constitute a breach of the contract. Any such breach may result in termination of the contract in accordance with the termination provisions contained in the contract. It shall be solely at the option of the State whether to terminate the contract for breach.

In determining whether a contractor has made Good Faith Efforts, the State will evaluate all efforts made by the Contractor and will determine compliance in regard to quantity, intensity, and results of these efforts. Good Faith Efforts include:

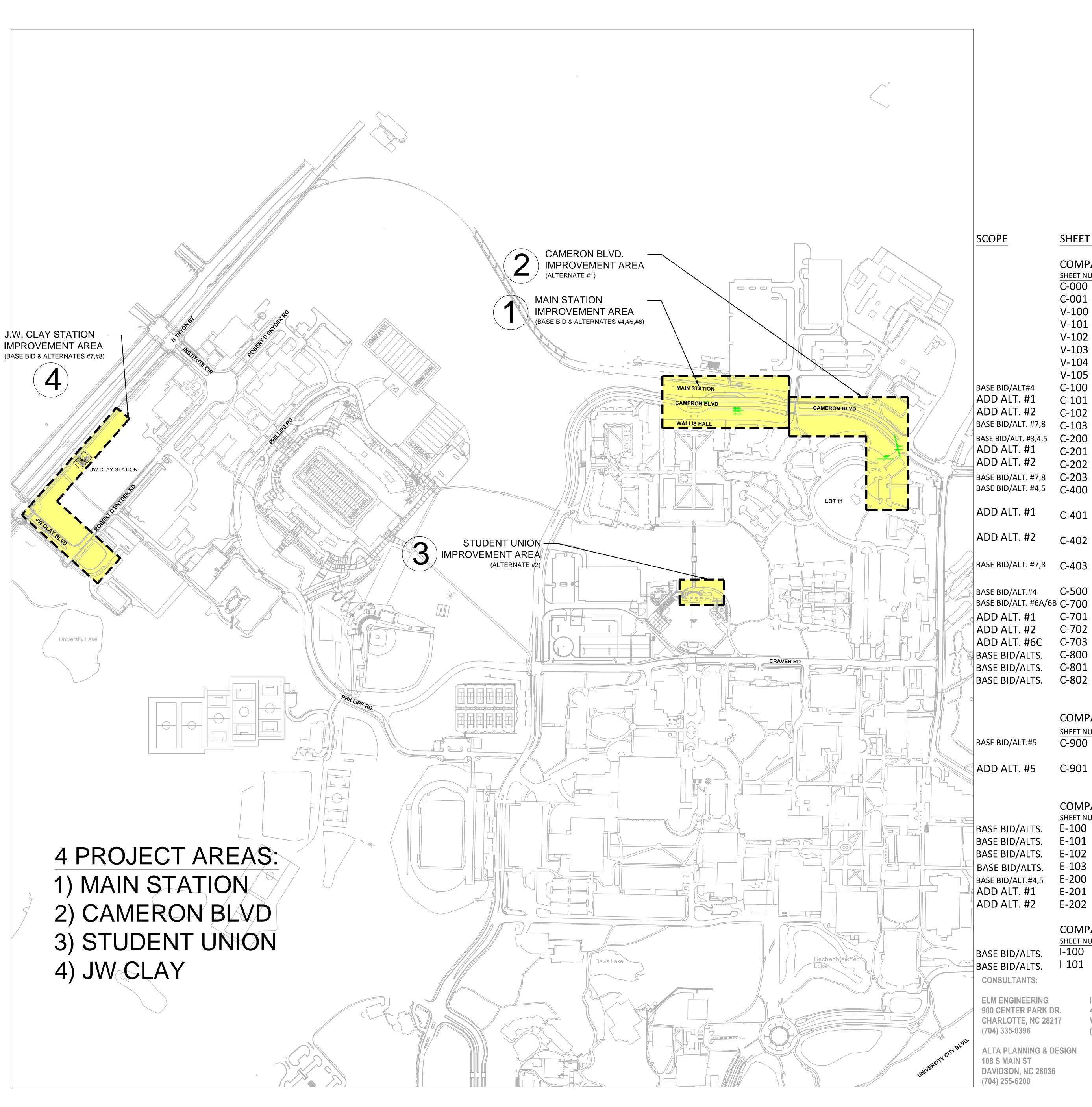
- (1) Contacting minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor or available on State or local government maintained lists at least 10 days before the bid or proposal date and notifying them of the nature and scope of the work to be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

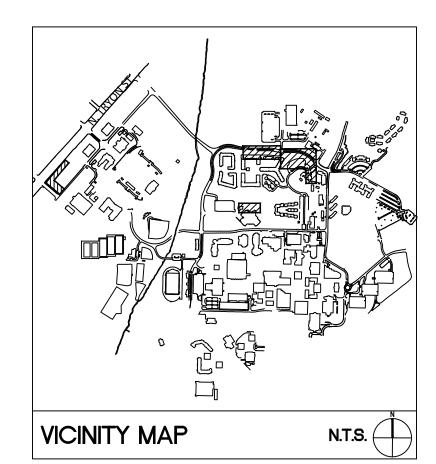
APPENDIX E

MBE DOCUMENTATION FOR CONTRACT PAYMENTS

Prime Contractor/Architect	t:			
Address & Phone:				
Project Name:				
Pay Application #:		Period:		
The following is a list of parentioned period.	ayments made to	Minority Business l	Enterprises on this pr	roject for the abov
MBE FIRM NAME	* INDICATE TYPE OF MBE	AMOUNT PAID THIS MONTH	TOTAL PAYMENTS TO DATE	TOTAL AMOUNT COMMITTED
*Minority categories: American Indian (I), F				
Date:	Approved/Ce	ertified By:		ame
			T	itle
			Sig	nature

SUBMIT WITH EACH PAY REQUEST & FINAL PAYMENT





CAMERON BLVD - EXISTING CONDITIONS

CAMERON BLVD - EXISTING CONDITIONS

STUDENT UNION - EXISTING CONDITIONS

MAIN STATION - EXISTING CONDITIONS

LOT 11 - EXISTING CONDITIONS

J.W. CLAY - DEMOLITION PLAN

EROSION CONTROL PLAN

EROSION CONTROL PLAN

EROSION CONTROL PLAN

EROSION CONTROL PLAN

MAIN STATION - UTILITY PLAN

J.W. CLAY - PLANTING PLAN

MAIN STATION - PLANTING PLAN

CAMERON BLVD - PLANTING PLAN

STUDENT UNION - PLANTING PLAN

J.W. CLAY - EXISTING CONDITIONS

MAIN STATION - DEMOLITION PLAN

CAMERON BLVD - DEMOLITION PLAN

STUDENT UNION - DEMOLITION PLAN

MAIN STATION - STAKING & MATERIALS PLAN

J.W. CLAY - STAKING & MATERIALS PLAN

MAIN STATION - GRADING, DRAINAGE AND

CAMERON BLVD - GRADING, DRAINAGE AND

STUDENT UNION - GRADING, DRAINAGE AND

J.W. CLAY - GRADING, DRAINAGE, AND

CAMERON BLVD - STAKING & MATERIALS PLAN

TOPOGRAPHIC SURVEY ISSUE DATE NOVEMBER 7, 2016. PROVIDED BY ALLEN GEOMATICS, P.C., PO BOX 89 ADVANCE, NC, 27006 336-998-0218

ColeJenest & Stone

Shaping the Environment Realizing the Possibilities

Land Planning

Landscape Architecture Civil Engineering

Urban Design

200 South Tryon Street, Suite 1400 Charlotte, North Carolina 28202

p+ 704 376 1555 f+ 704 376 7851

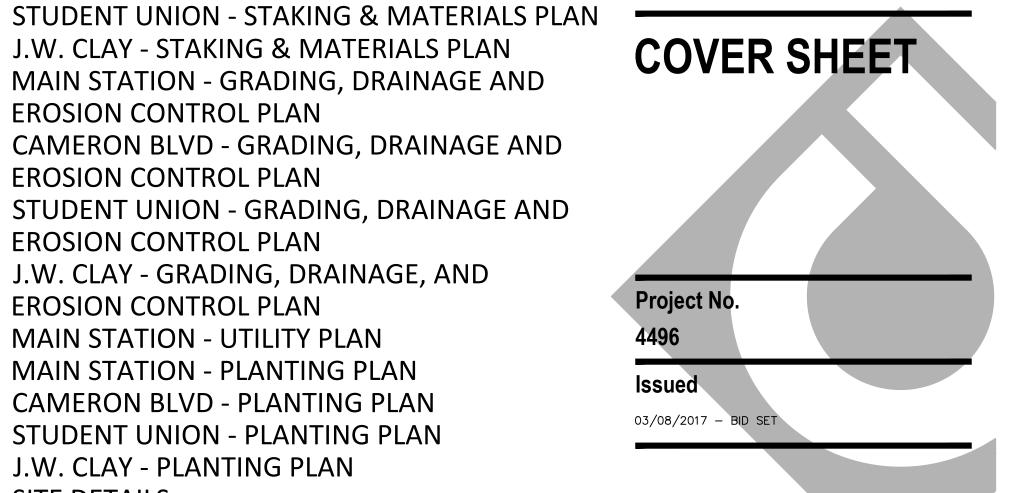
UNC-CHARLOTTE

9201 University City Blvd Charlotte, NC 28223

CAMPUS

CIRCULATION IMPROVEMENTS

SCO ID# 16-14055 **CODE 41526 ITEM 310**



Revised

COMPANY: ALTA PLANNING AND DESIGN

SITE DETAILS

SITE DETAILS

SITE DETAILS

SHEET NUMBER SHEET TITLE C-900

SHEET INDEX

SHEET NUMBER

C-000

C-001

V-100

V-101

V-102

V-103

V-104

V-105

C-100

C-101

C-102

C-202

C-401

C-402

C-500

C-701

C-702

C-703

C-800

C-801

C-802

COMPANY: COLE JENEST & STONE

SHEET TITLE

COVER SHEET

APPENDIX B

MAIN STATION - SIGNAGE AND PAVEMENT MARKING PLAN

C-901 **MAIN STATION - SIGNAL PLAN**

COMPANY: ELM ENGINEERING

SHEET NUMBER

ELECTRICAL COVER SHEET E-100

EXISTING ELECTRICAL POWER RISER DIAGRAM E-101 E-102 **ELECTRICAL DETAILS**

E-103 PANELBOARD SCHEDULE AND DETAILS E-200 MAIN STATION - SITE PLAN E-201 CAMERON BLVD - SITE PLAN E-202 STUDENT UNION - SITE PLAN

COMPANY: IRRIGATION INNOVATIONS

IRRIGATION INNOVATIONS

4218 CAHNNAS WAY

WAXHAW, NC 28173

(704) 256-4873

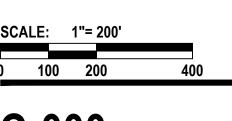
SHEET NUMBER SHEET TITLE

MAIN STATION - IRRIGATION PLAN MAIN STATION - IRRIGATION DETAILS North 91



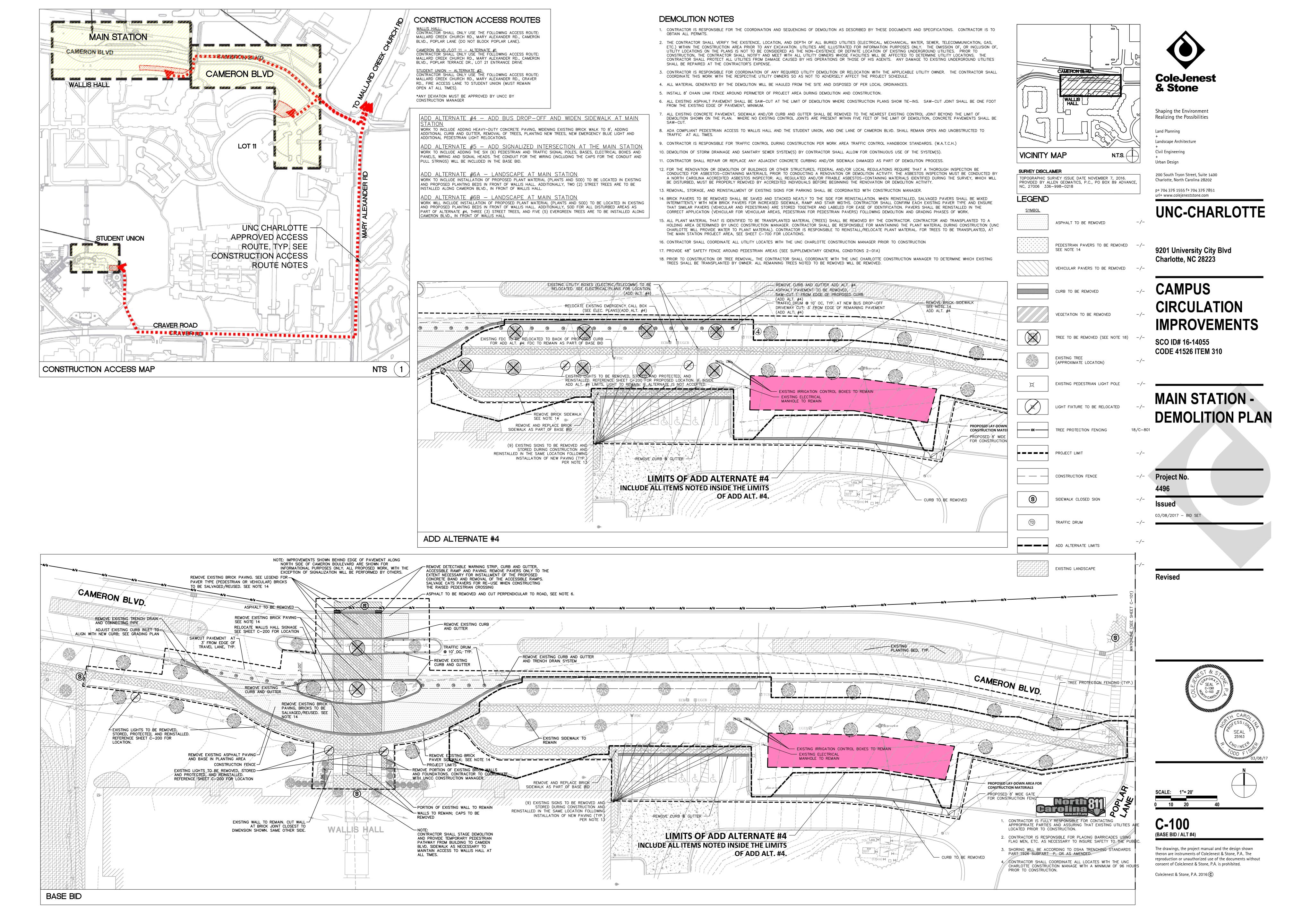
1. CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING APPROPRIATE PARTIES AND ASSURING THAT EXISTING UTILITIES ARE LOCATED PRIOR TO CONSTRUCTION. 2. CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES USING FLAG MEN, ETC. AS NECESSARY TO INSURE SAFETY TO THE PUBLIC

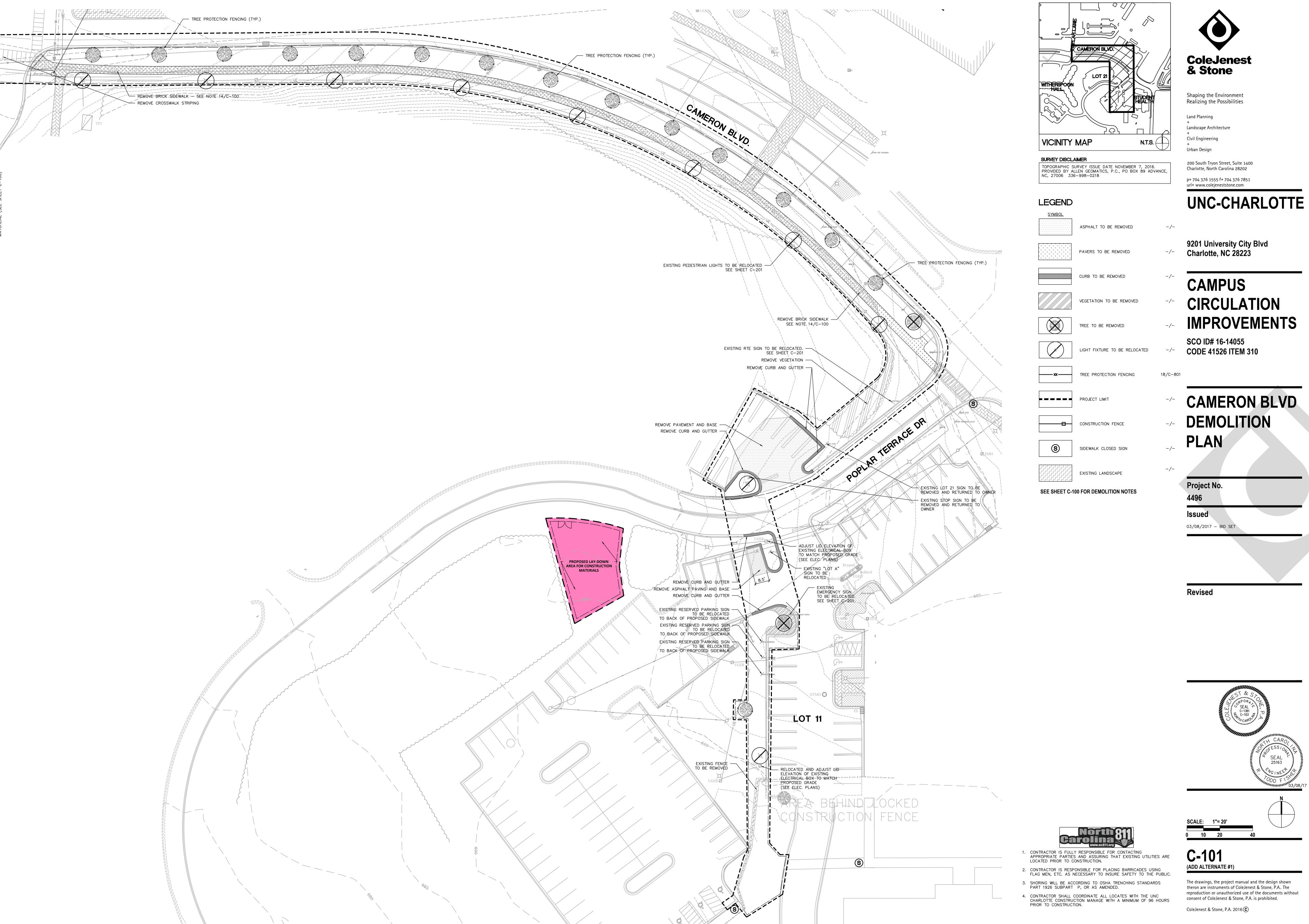
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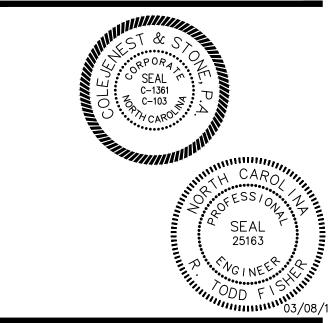
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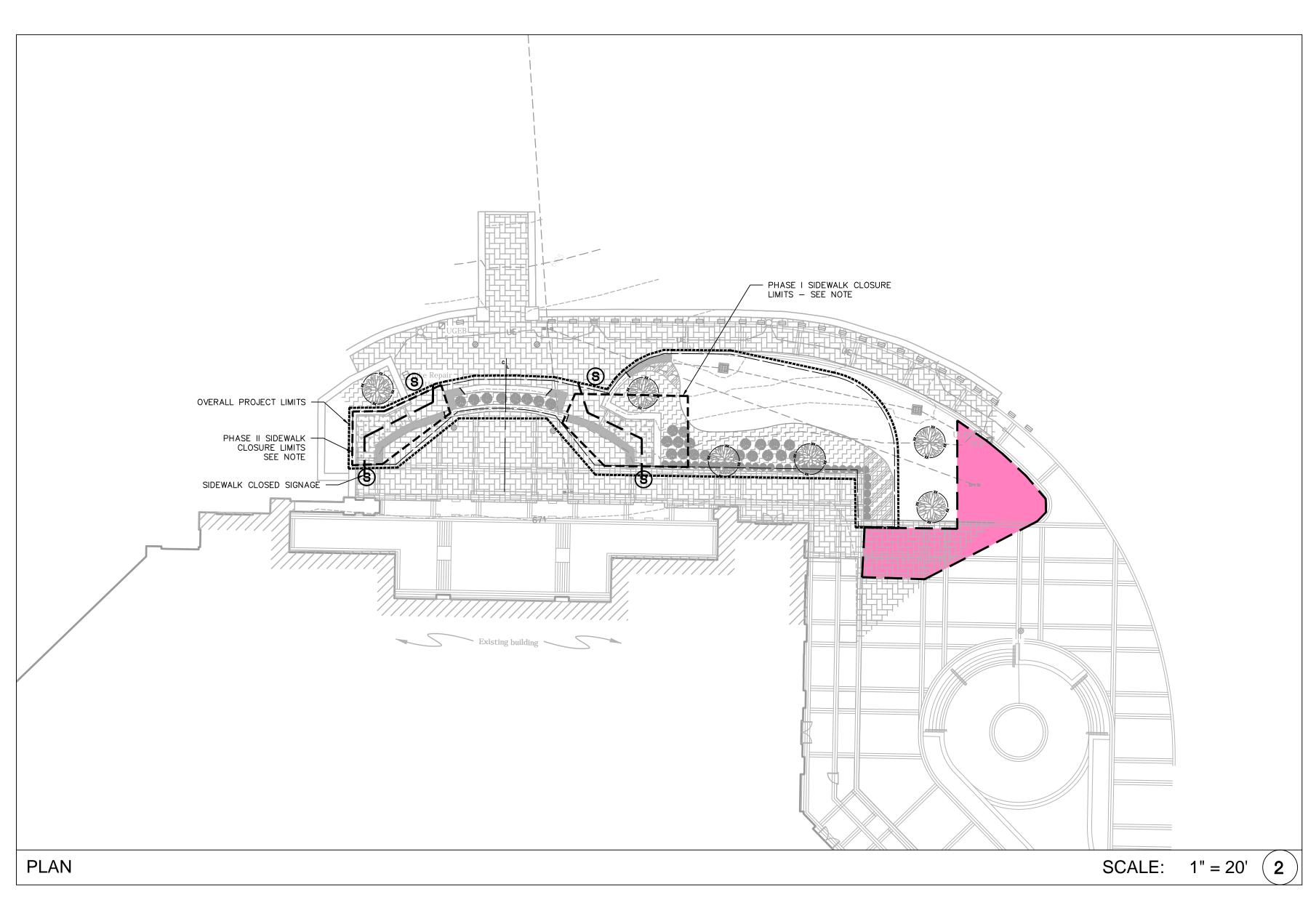


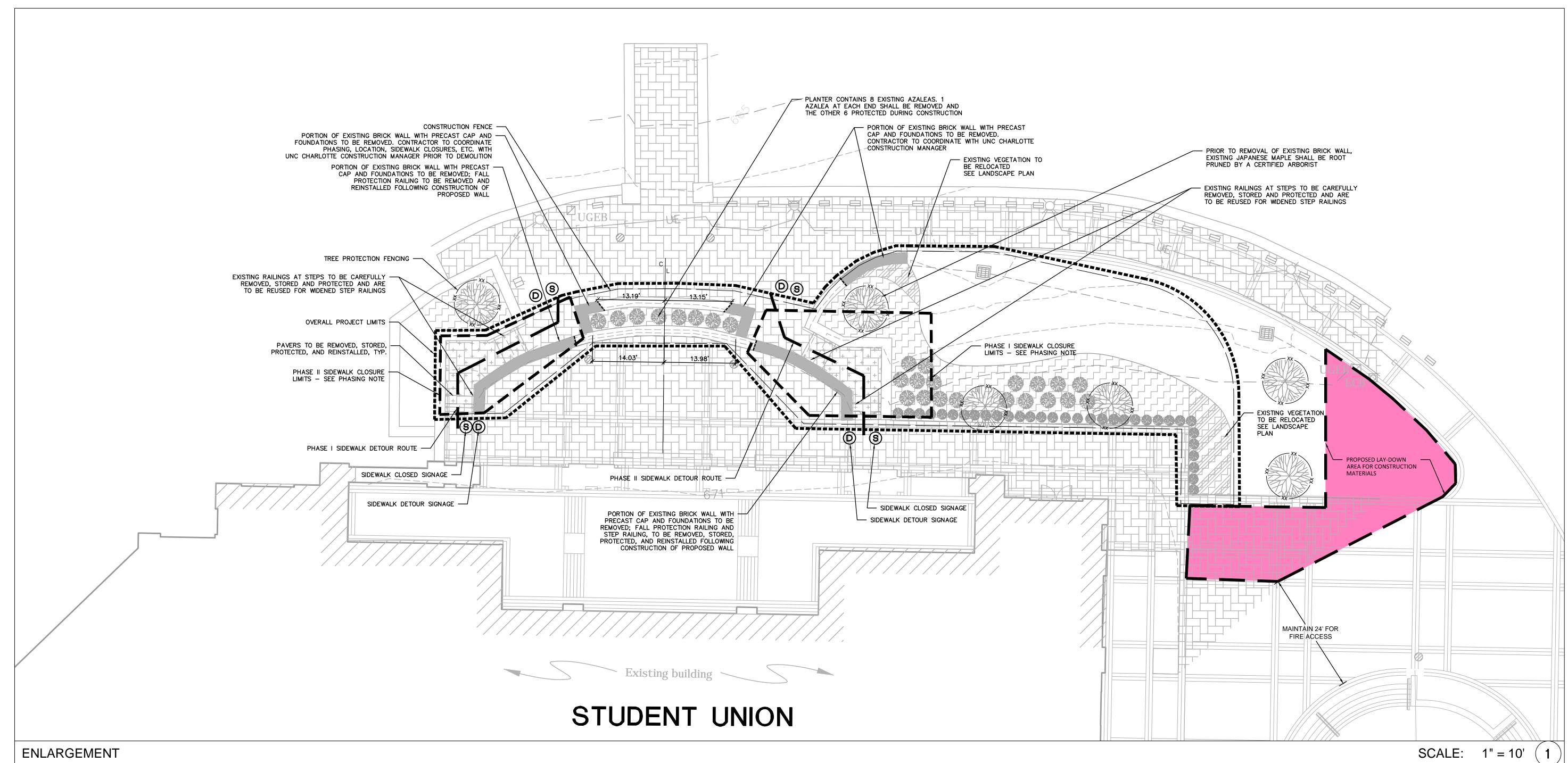


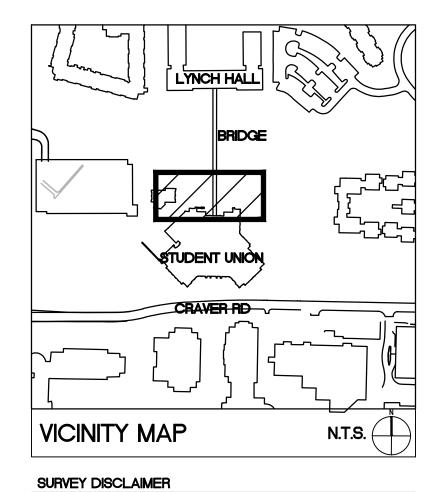
IMPROVEMENTS



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VEGETATION TO BE RELOCATED

TREE PROTECTION FENCING

CONSTRUCTION FENCE

SIDEWALK CLOSED SIGN

SIDEWALK DETOUR SIGN

EXISTING LANDSCAPE

LEGEND

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url+ www.colejeneststone.com

UNC-CHARLOTTE

PAVERS TO BE REMOVED 9201 University City Blvd Charlotte, NC 28223 WALL TO BE REMOVED

CAMPUS CIRCULATION IMPROVEMENTS

SCO ID# 16-14055 -/- **CODE 41526 ITEM 310**

STUDENT UNION-**DEMOLITION PLAN**

SEE SHEET C-100 FOR DEMOLITION NOTES

PROJECT LIMIT

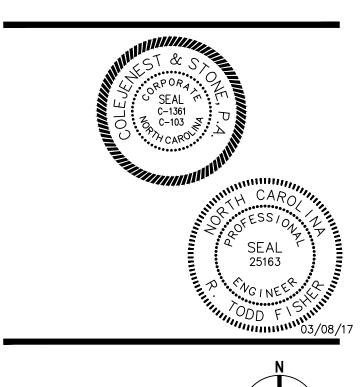
PHASING NOTES: 1. ONLY ONE SIDE OF STAIRWAY TO BE CLOSED AT ANY GIVEN TIME DURING CONSTRUCTION. REMAINING STAIR TO REMAIN OPEN TO PEDESTRIAN TRAFFIC. 2. ALL SIDEWALK CLOSURES SHALL BE ACCOMPANIED WITH A DETOUR SIGN AND ROUTE (SEE PLAN FOR DETAILS).

Issued

03/08/2017 - BID SET



Revised



North 9

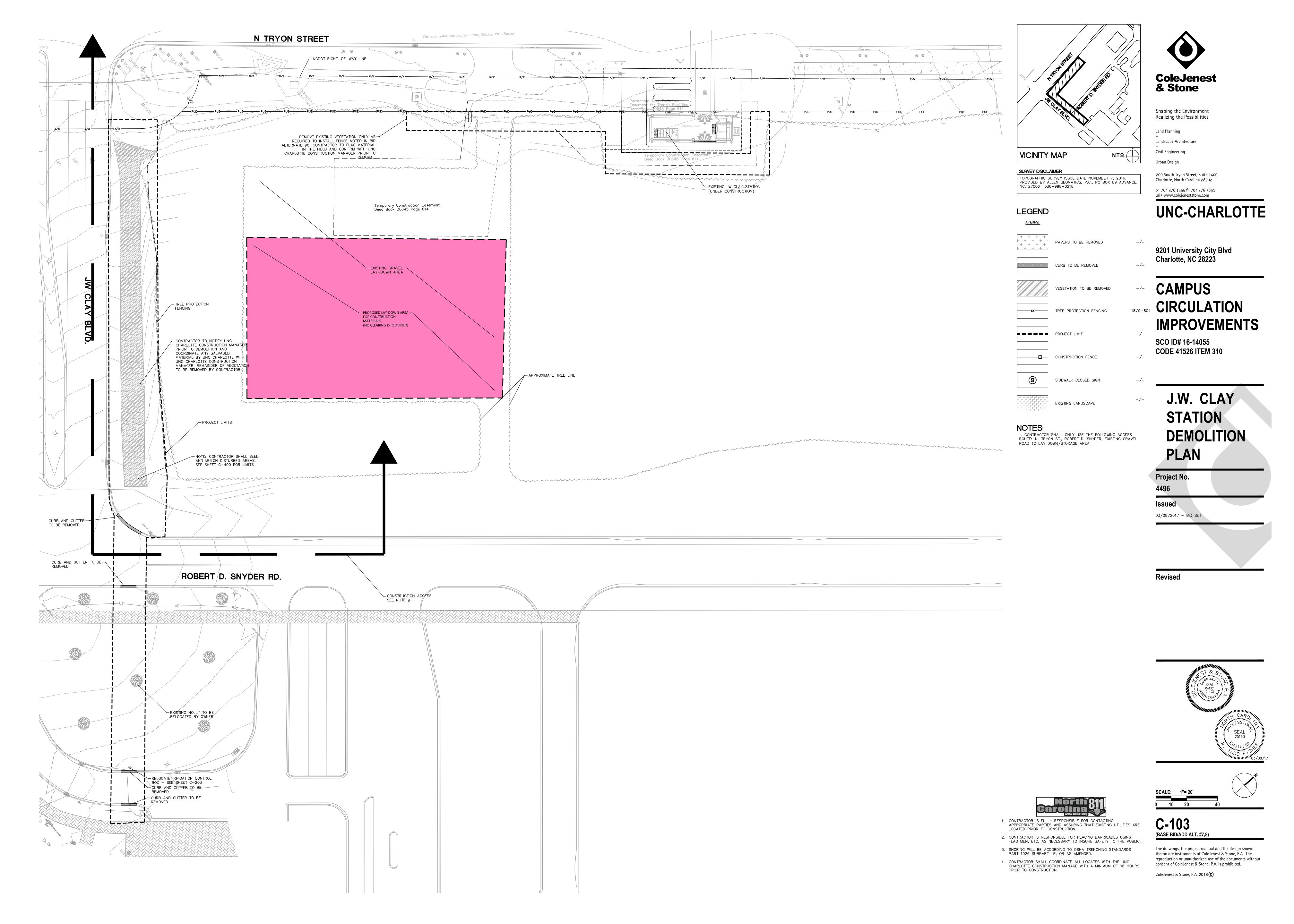
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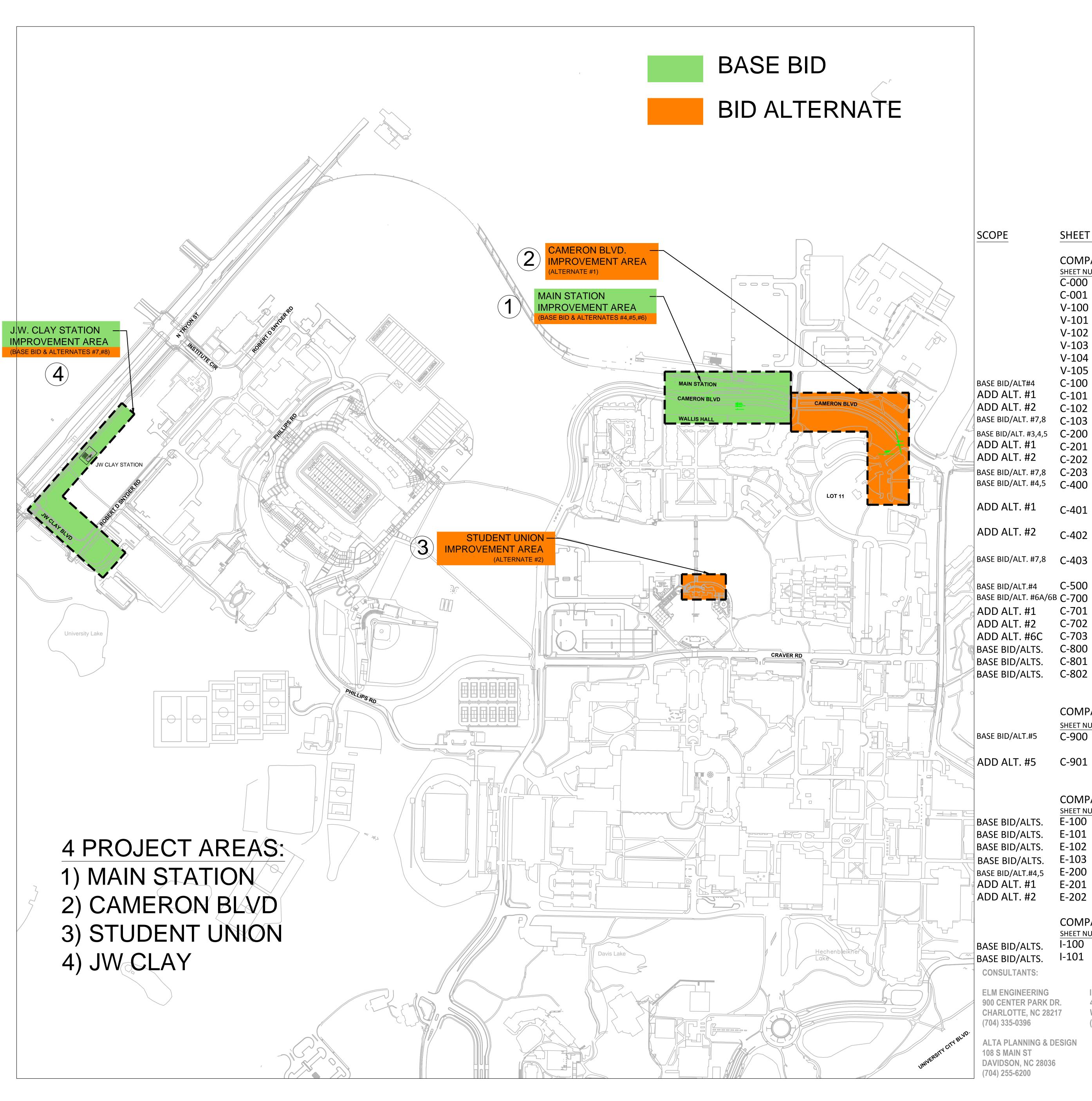


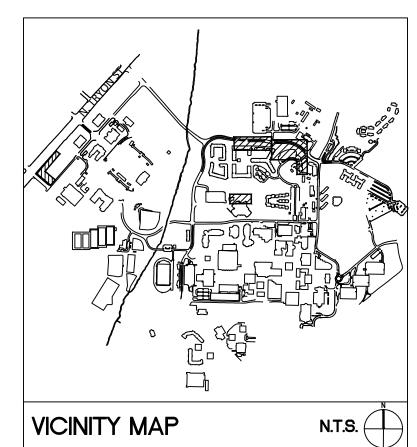
C-102 (ADD ALTERNATE #2)

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CAMERON BLVD - EXISTING CONDITIONS

CAMERON BLVD - EXISTING CONDITIONS

STUDENT UNION - EXISTING CONDITIONS

MAIN STATION - EXISTING CONDITIONS

LOT 11 - EXISTING CONDITIONS

J.W. CLAY - DEMOLITION PLAN

EROSION CONTROL PLAN

EROSION CONTROL PLAN

EROSION CONTROL PLAN

EROSION CONTROL PLAN

MAIN STATION - UTILITY PLAN

J.W. CLAY - PLANTING PLAN

MAIN STATION - PLANTING PLAN

CAMERON BLVD - PLANTING PLAN

STUDENT UNION - PLANTING PLAN

J.W. CLAY - EXISTING CONDITIONS

MAIN STATION - DEMOLITION PLAN

CAMERON BLVD - DEMOLITION PLAN

STUDENT UNION - DEMOLITION PLAN

MAIN STATION - STAKING & MATERIALS PLAN

J.W. CLAY - STAKING & MATERIALS PLAN

J.W. CLAY - GRADING, DRAINAGE, AND

MAIN STATION - GRADING, DRAINAGE AND

CAMERON BLVD - GRADING, DRAINAGE AND

CAMERON BLVD - STAKING & MATERIALS PLAN

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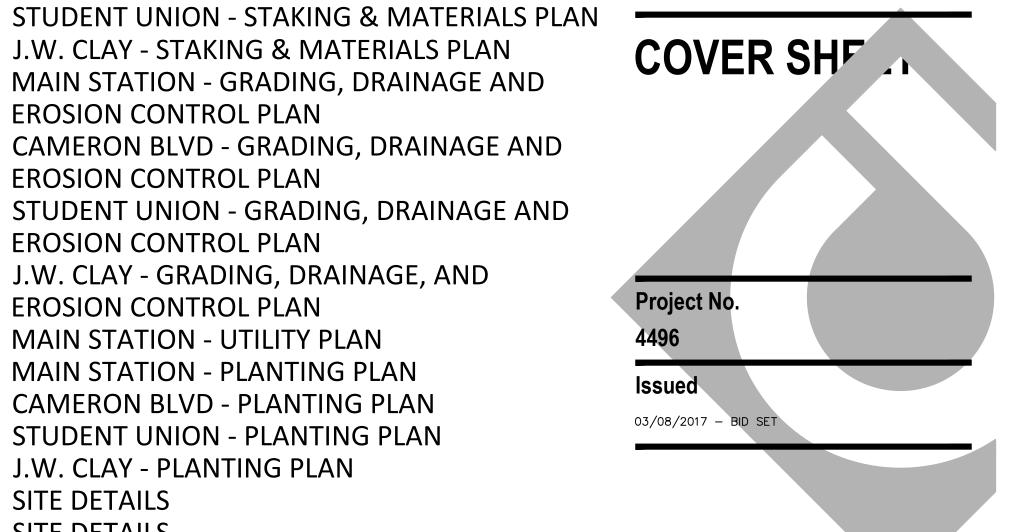
UNC-CHARLOTTE

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CAMPUS CIRCULATION

IMPROVEMENTS

SCO ID# 16-14055 **CODE 41526 ITEM 310**



COMPANY: ALTA PLANNING AND DESIGN

SITE DETAILS

SITE DETAILS

SITE DETAILS

SHEET NUMBER SHEET TITLE

C-900 MAIN STATION - SIGNAGE AND PAVEMENT

MARKING PLAN C-901 **MAIN STATION - SIGNAL PLAN**

SHEET INDEX

SHEET NUMBER

C-000

C-001

V-100

V-101

V-102

V-103

V-104

V-105

C-100

C-101

C-102

C-103

C-202

C-401

C-402

C-500

C-701

C-702

C-703

C-800

C-801

C-802

E-101

COMPANY: COLE JENEST & STONE

SHEET TITLE

COVER SHEET

APPENDIX B

COMPANY: ELM ENGINEERING

SHEET NUMBER

ELECTRICAL COVER SHEET E-100

> EXISTING ELECTRICAL POWER RISER DIAGRAM **ELECTRICAL DETAILS**

E-102 E-103 PANELBOARD SCHEDULE AND DETAILS

IRRIGATION INNOVATIONS

4218 CAHNNAS WAY

WAXHAW, NC 28173

(704) 256-4873

E-200 MAIN STATION - SITE PLAN E-201 CAMERON BLVD - SITE PLAN

E-202 STUDENT UNION - SITE PLAN

COMPANY: IRRIGATION INNOVATIONS

SHEET NUMBER SHEET TITLE

MAIN STATION - IRRIGATION PLAN MAIN STATION - IRRIGATION DETAILS

North 21

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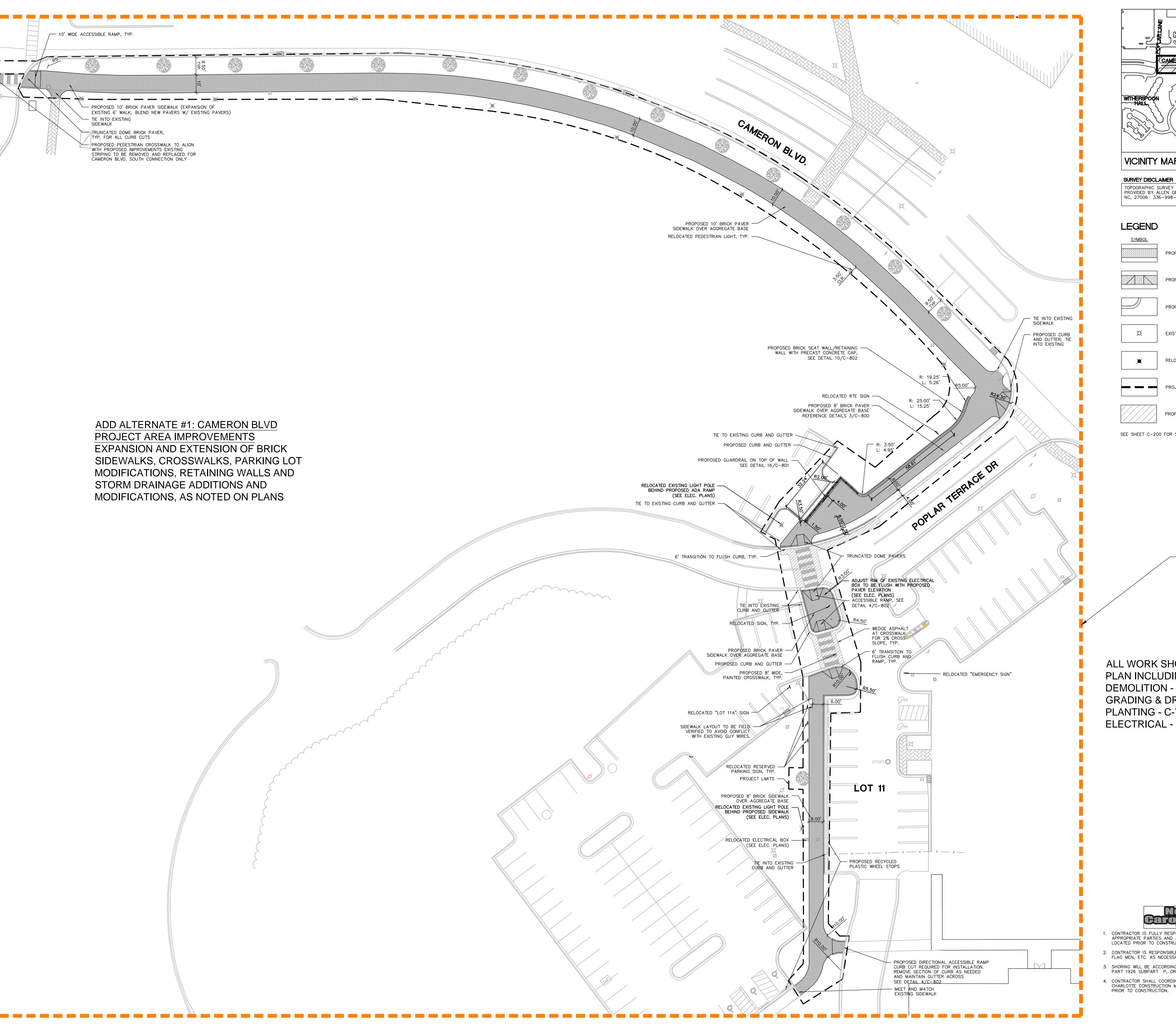
PRIOR TO CONSTRUCTION.

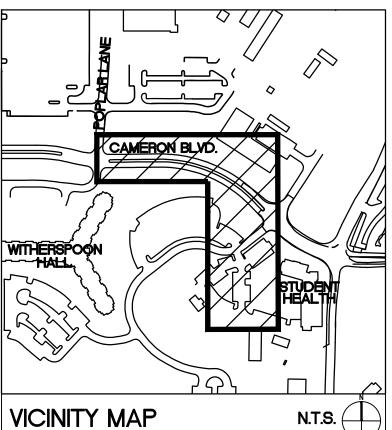
100 200

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> url+ www.colejeneststone.com **UNC-CHARLOTTE**

PROPOSED BRICK SIDEWALK PROPOSED ACCESSIBLE RAMP

1-4/C-800 9201 University City Blvd 4/C-802 Charlotte, NC 28223

PROPOSED 1'-6" CURB & GUTTER 10/C-800 EXISTING PEDESTRIAN LIGHTING RELOCATED PEDESTRIAN LIGHTING

CIRCULATION **IMPROVEMENTS**

CAMPUS

PROPOSED ASPHALT PATCH

PROJECT LIMIT

SCO ID# 16-14055 **CODE 41526 ITEM 310**

SEE SHEET C-200 FOR STAKING NOTES

CAMERON BLVD - STAKING AND MATERIALS PLAN

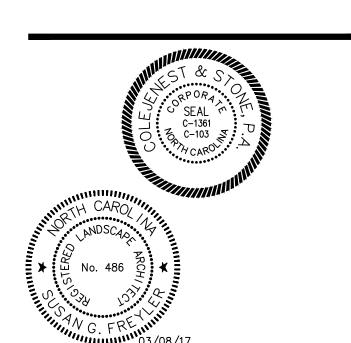
Project No.

Issued

03/08/2017 - BID SE

Revised

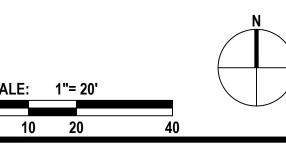
ALL WORK SHOWN ON THIS PLAN INCLUDING: DEMOLITION - C-101 **GRADING & DRAINAGE - C-401** PLANTING - C-701 ELECTRICAL - E-201





 CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING APPROPRIATE PARTIES AND ASSURING THAT EXISTING UTILITIES ARE LOCATED PRIOR TO CONSTRUCTION. 2. CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES USING FLAG MEN, ETC. AS NECESSARY TO INSURE SAFETY TO THE PUBLIC.

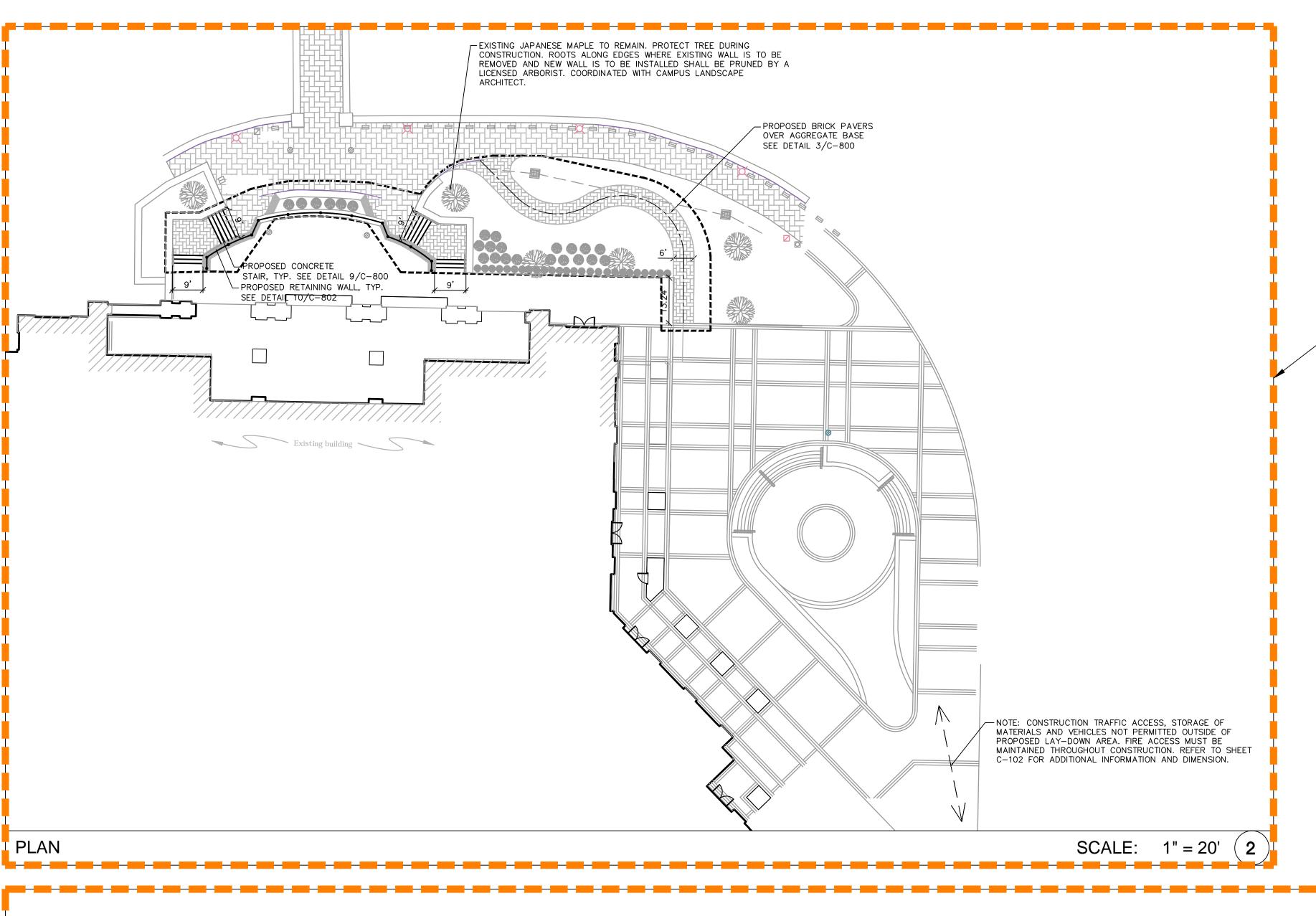
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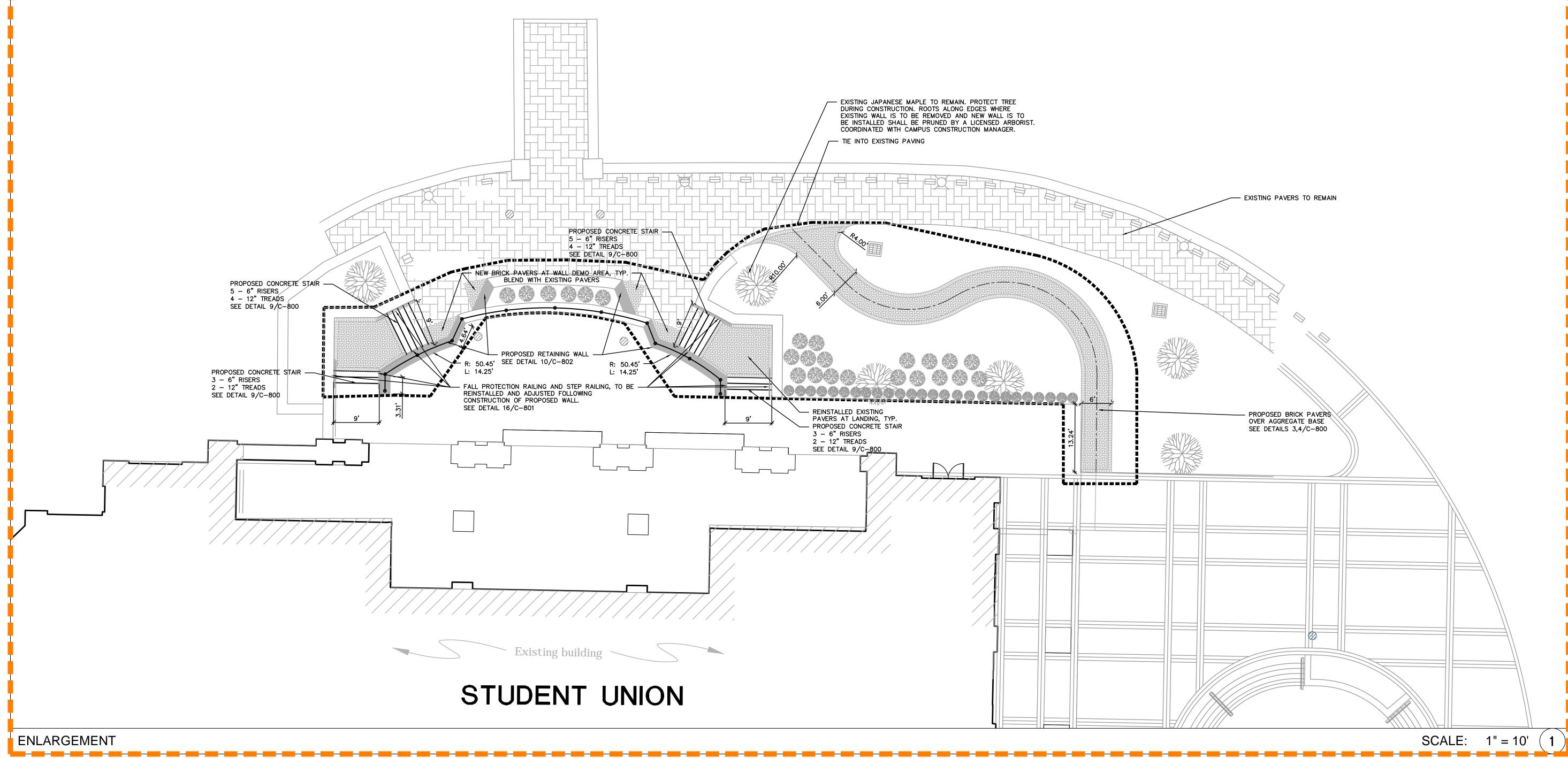
(ADD ALTERNATE #1)

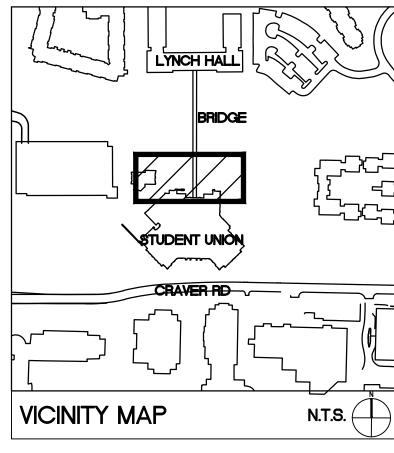
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ADD ALTERNATE #2: STUDENT UNION PROJECT AREA IMPROVEMENTS **EXPANSION AND EXTENSION OF** BRICK SIDEWALKS, STAIRS, RETAINING WALLS AND RAILINGS AS NOTED ON PLANS





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PROPOSED LIGHTING

PROJECT LIMIT

SEE SHEET C-200 FOR STAKING NOTES

LEGEND

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UNC-CHARLOTTE PROPOSED BRICK SIDEWALK 1-4/C-800 9201 University City Blvd EXISTING BRICK SIDEWALK

Charlotte, NC 28223

CAMPUS CIRCULATION **IMPROVEMENTS**

SCO ID# 16-14055 **CODE 41526 ITEM 310**

STUDENT UNION - STAKING AND MATERIALS PLAN

Project No

Issued

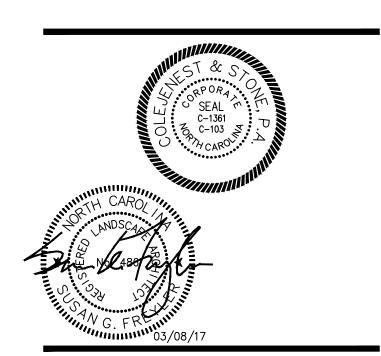
03/08/2017 - BID SE

ALL WORK SHOWN ON THIS PLAN

INCLUDING: DEMOLITION - C-102 GRADING & DRAINAGE - C-402 PLANTING - L-702 ELECTRICAL - E-202

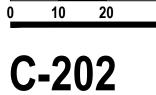
ADD ALTERNATE #2:







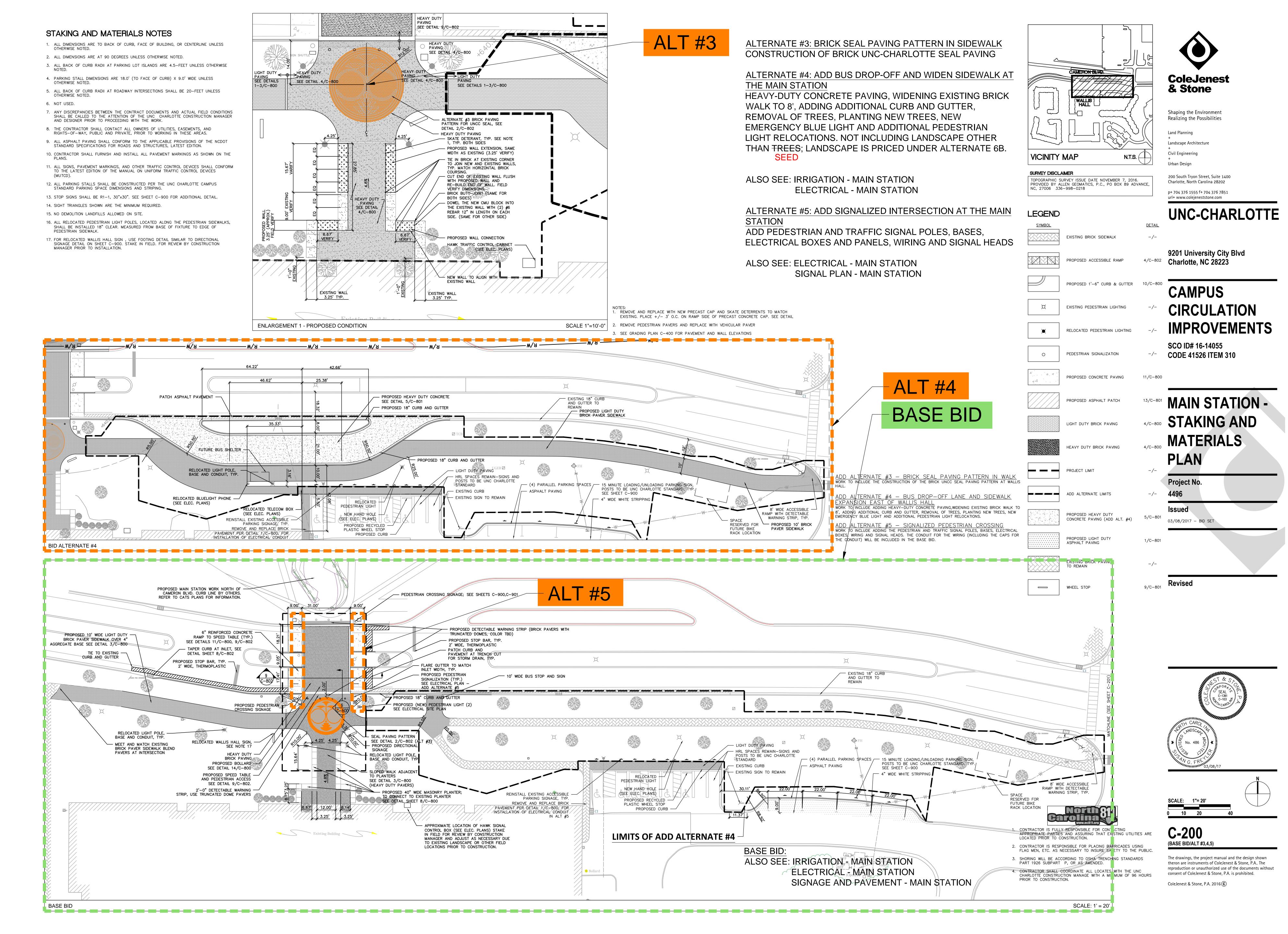
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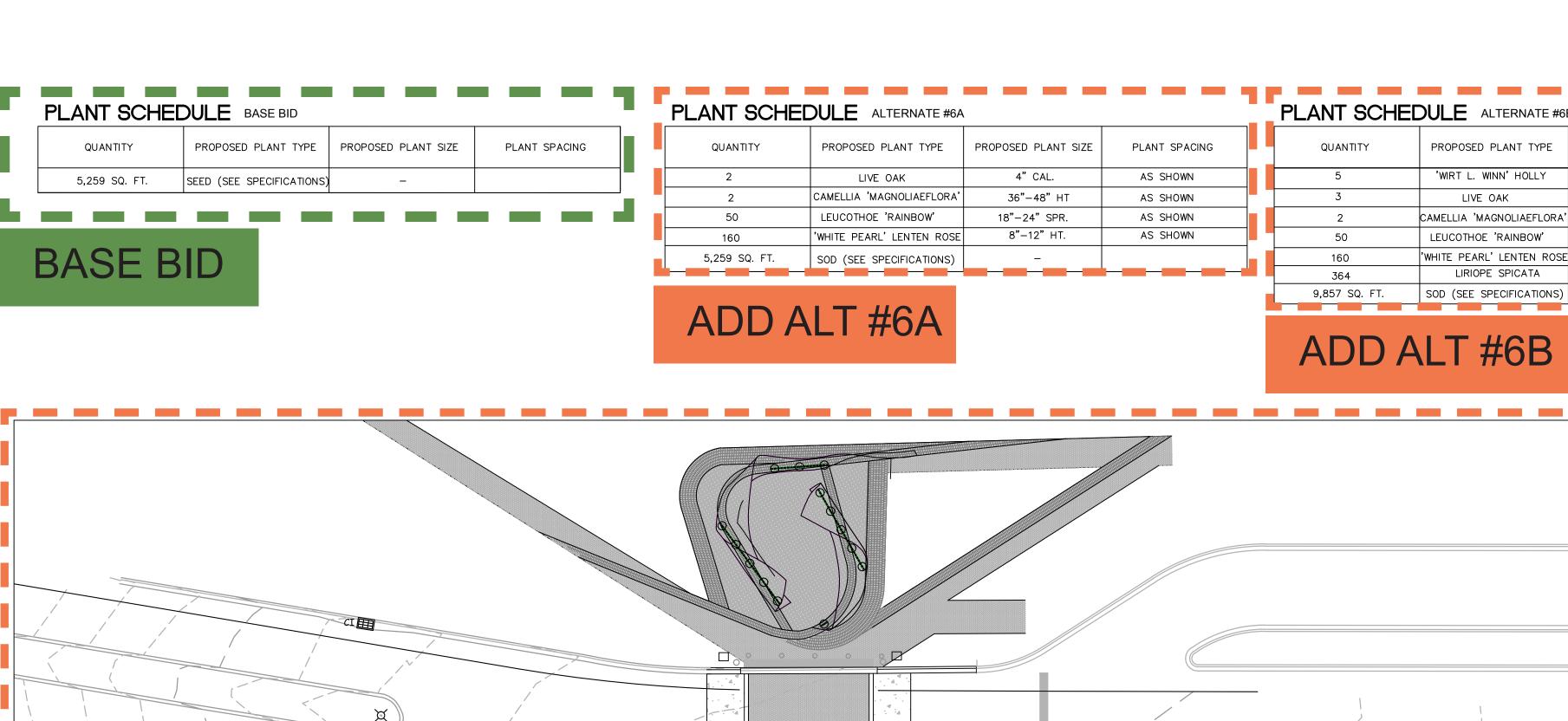


(ADD ALTERNATE #2)

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WALLIS HALL

BID ALT. 6A

EXISTING TREE TO REMAIN —

BID ALTERNATE #6A

EXISTING TREES TO REMAIN -

(80) LENTEN ROSE -

(80) LENTEN ROSE -

PLANT SCHEDULE ALTERNATE #6B PROPOSED PLANT TYPE PROPOSED PLANT SIZE PLANT SPACING 'WIRT L. WINN' HOLLY 7'–8' HT. AS SHOWN 4" CAL. AS SHOWN CAMELLIA 'MAGNOLIAEFLORA' 36"-48" HT AS SHOWN LEUCOTHOE 'RAINBOW' 18"-24" SPR. AS SHOWN 8"-12" HT. 'WHITE PEARL' LENTEN ROSE AS SHOWN

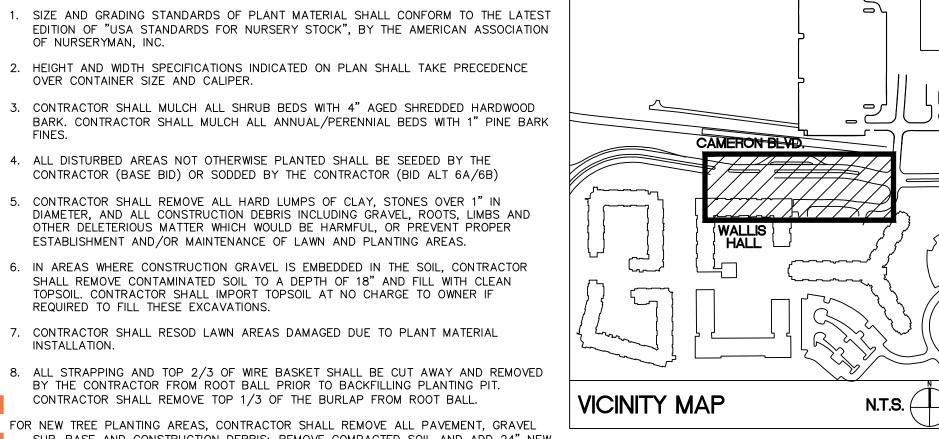
8"-12" HT. LIRIOPE SPICATA AS SHOWN

— existin 🕏 tree to

ECB, 🖸

ADD ALT #6B

· LIMITS OF ADD ALTERNATE #4 AREA



SUB-BASE AND CONSTRUCTION DEBRIS; REMOVE COMPACTED SOIL AND ADD 24" NEW SURVEY DISCLAIMER TOPOGRAPHIC SURVEY ISSUE DATE NOVEMBER 7, 2016. PROVIDED BY ALLEN GEOMATICS, P.C., PO BOX 89 ADVANCE,

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TREES AND 2 INCH CALIPER FOR SMALL MATURING TREES. ALL MULTI-STEM PLANTS SHALL BE TREE FORM, MAXIMUM THREE TO FIVE TRUNKS, AND A MINIMUM EIGHT FEET 1. INSTALLER SHALL BE RESPONSIBLE TO REPAIR OR REPLACE PLANTINGS THAT FAIL IN EXISTING TREELINE PERIOD SHALL CONSIST OF A HEALTHY, UNIFORM, CLOSE STAND OF GRASS, FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH TOTAL GRASS COVERAGE EXCEEDING 90 PERCENT OVER ANY 10 SQ. FT. AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES, WITH AT LEAST 85% OF THE TOTAL GRASS COVERAGE CONSISTING OF THE SPECIFIED PROPOSED TREELINE

PROPOSED GROUNDCOVER

PROPOSED LIGHT FIXTURE SEE ELECTRICAL PLAN

PROPOSED SOD

PROPOSED TREE TREE PROTECTION FENCING MUST BE INSTALLED BEFORE ANY DEMOLITION, CLEARING PROPOSED SHRUBS THE TREE PROTECTION FENCE SHALL BE LOCATED ALONG THE PERIMETER OF THE

TREE SAVE AREA (DRIP LINE PLUS 5 FEET). TREE PROTECTION FENCING FOR A FOREST CANOPY STAND AREA IS TO BE LOCATED ALONG THE PERIMETER OF THE TREE SAVE AREA AROUND THE FOREST EDGE. TREE PROTECTION FENCING SHALL CONSIST OF ORANGE SAFETY FENCING OR A COMBINATION OF ORANGE SAFETY FENCING WITH SILT FENCING AT A MINIMUM OF 4 FEET IN HEIGHT ON METAL OR WOOD POSTS. . NO SOIL DISTURBANCE OR COMPACTION, STOCK PILING OF SOIL OR OTHER CONSTRUCTION MATERIAL, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT AND MATERIALS ARE ALLOWED WITHIN THE TREE SAVE AREA. NO ROPES, SIGNS, WIRES, UNPROTECTED ELECTRICAL INSTALLATION OR OTHER DEVICE

PLANTING NOTES

OF NURSERYMAN, INC.

INSTALLATION.

GRASS SPECIES.

OVER CONTAINER SIZE AND CALIPER.

REQUIRED TO FILL THESE EXCAVATIONS.

4. ALL DISTURBED AREAS NOT OTHERWISE PLANTED SHALL BE SEEDED BY THE

ESTABLISHMENT AND/OR MAINTENANCE OF LAWN AND PLANTING AREAS.

CONTRACTOR SHALL REMOVE TOP 1/3 OF THE BURLAP FROM ROOT BALL.

TOPSOIL, OR AMEND THE TOP 24" OF EXISTING SOIL, TO MEET SPECIFIED

LARGE MATURING TREES SHALL BE A MINIMUM 25 TO 30 FEET FROM OVERHEAD

DISTRIBUTION OR TRANSMISSION LINES. IF TREES CONFLICT WITH POWER LINES OR

SIGNS, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT TO RESOLVE BEFORE

O. MINIMUM TREE SIZE AT PLANTING SHALL BE 3 INCH CALIPER FOR LARGE MATURING

MATERIALS, WORKMANSHIP, OR GROWTH WITHIN SPECIFIED WARRANTY PERIOD (ONE

12. FOR SEEDED AREAS, AN ACCEPTABLE LAWN AT THE END OF THE MAINTENANCE

ANY AND ALL DAMAGE TO EXISTING IRRIGATION SYSTEM IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR. CONTRACTOR TO COORDINATE WITH CONSTRUCTION MANAGER TO ENSURE IRRIGATION TEAM INSPECTS THE REPAIR WORK BEFORE IT IS

TOPSOIL/PLANTING MIX STANDARDS FOR TREES. INCLUDE IN BASE BID

YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER).

TREE PROTECTION NOTES

OR GRADING BEGINS, AND NOT REMOVED UNTIL FINAL INSPECTION.

ALL PROTECTIVE MEASURES SHALL BE MAINTAINED THROUGHOUT THE LAND DISTURBING AND CONSTRUCTION PROCESS, AND SHALL NOT BE REMOVED UNTIL FINAL LANDSCAPING IS INSTALLED.

ADD ALT #6A

ADD ALT #6B

CAMERON BLVD.

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2. CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES USING FLAG MEN, ETC. AS NECESSARY TO INSURE SAFETY TO THE PUBLIC.

SOX I

- 3. SHORING WILL BE ACCORDING TO OSHA TRENCHING STANDARDS PART 1926 SUBPART P, OR AS AMENDED.
- 4. CONTRACTOR SHALL COORDINATE ALL LOCATES WITH THE UNC CHARLOTTE CONSTRUCTION MANAGE WITH A MINIMUM OF 96 HOURS PRIOR TO CONSTRUCTION.



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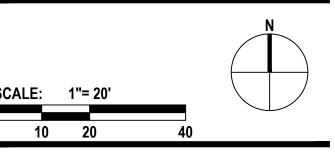
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CAMPUS 17/C-801 CIRCULATION **IMPROVEMENTS**

> SCO ID# 16-14055 **CODE 41526 ITEM 310**

-/- MAIN STATION -PLANTING PLAN (WALLIS HALL)

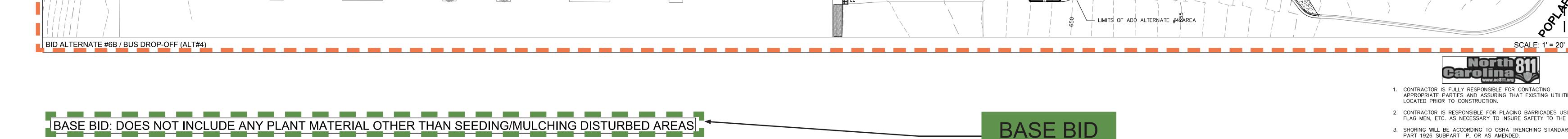
Revised



(BASE BID/ALT. #6A/6B)

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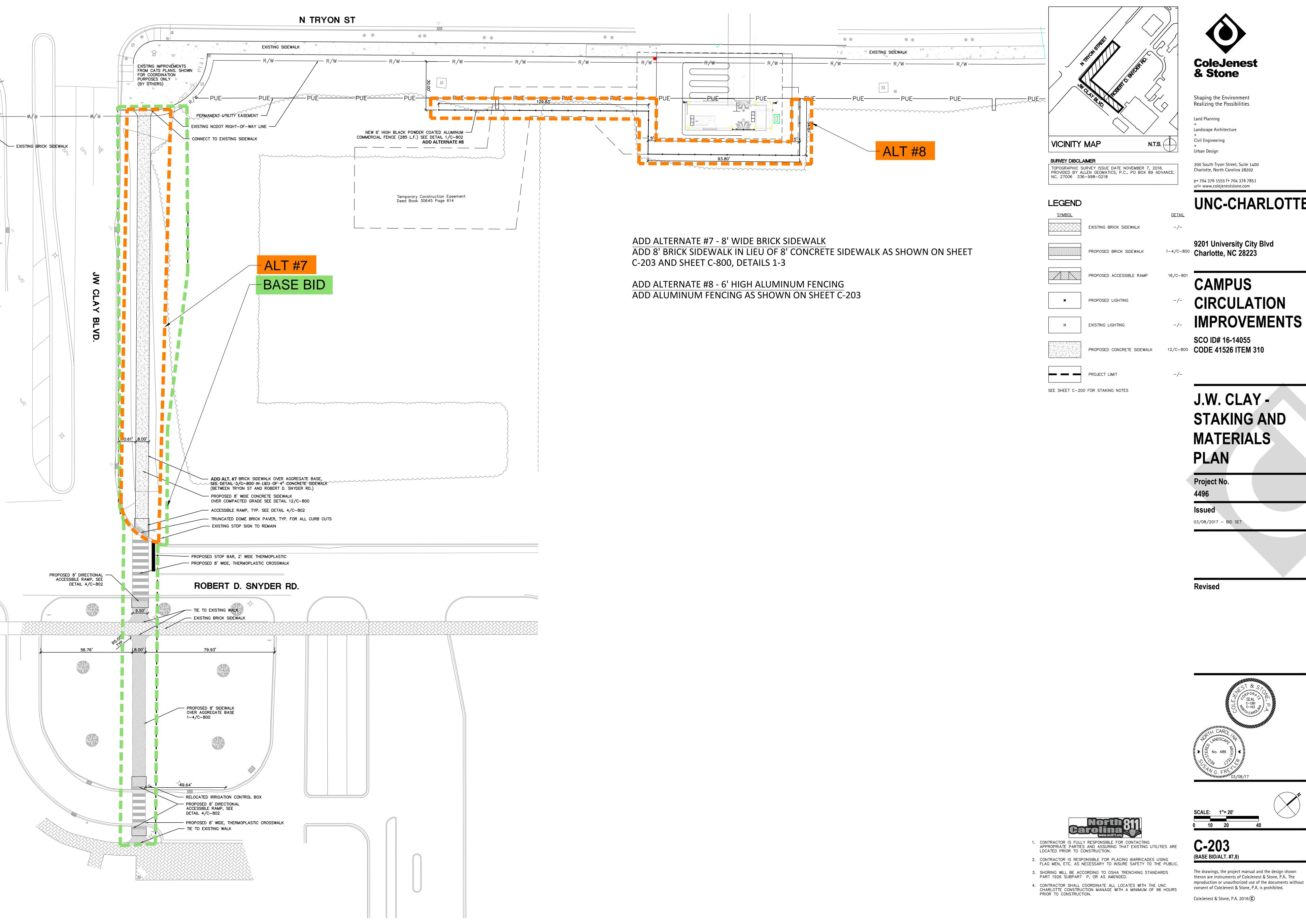
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CAMERON BLVD.

CAMERON BLVD.

EXISTING PLANT MATERIAL TO REMAIN





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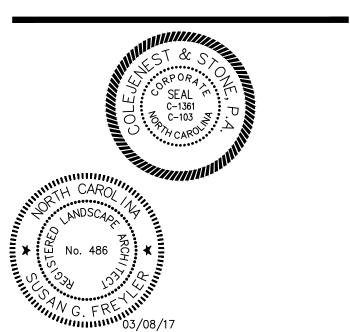
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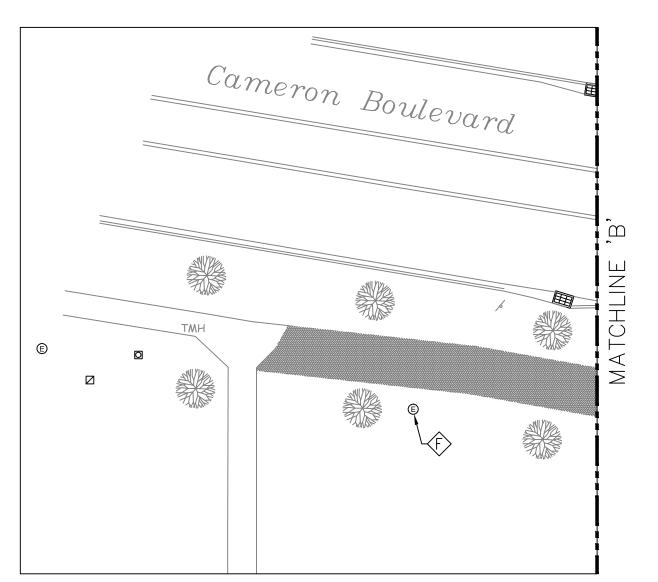
CIRCULATION

12/C-800 **CODE 41526 ITEM 310**

J.W. CLAY -STAKING AND MATERIALS



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GENERAL NOTES:

- ALL ELECTRICAL LINES SERVING NEW PEDESTRIAN AND TRAFFIC CONTROLS SHALL BE LOCATED UNDERGROUND.
 PROVIDE TRAFFIC RATED HAND HOLES AS NECESSARY FOR ROUTING CONDUITS UNDER GROUND AND RECONNECT EXISTING SITE LIGHTING.
- 3. SEE PLANTING PLAN FOR TREE LOCATIONS
- 4. REFER TO CIVIL PLANS FOR EXISTING POLES TO REMAIN, BE RELOCATED, OR TO BE REMOVED. PROVIDE NEW WIRING (2#10, 1#10, 1"C) TO EXTEND EXISTING CIRCUITS TO NEW LIGHT POLE LOCATIONS.
- 5. PROVIDE STAINLESS STEEL LOCKABLE GASKETED ENCLOSURE TO PROTECT EQUIPMENT & CONTROLS FOR EACH TRAFFIC CONTROL CABINET.
- 6. COORDINATE AND CONFIRM FINAL LOCATION OF LIGHTS WITH UNCC CONSTRUCTION MANAGER IN THE EVENT A PROPOSED LIGHT POLE LOCATION IS IN CONFLICT WITH AN EXISTING OR PROPOSED UTILITY.
- CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CALL NORTH CAROLINA ONE—CALL CENTER (1—800—632—4949) AND UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE AT LEAST 48 HOURS PRIOR TO UNDERGROUND WORK TO HAVE EXISTING UTILITIES LOCATED. REPORT ANY DISCREPANCIES TO THE ENGINEER.
- 8. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTRACT WITH PRIVATE UTILITY LOCATOR TO HAVE ALL EXISTING UTILITIES LOCATED.
- 9. ALL EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. CONTRACTOR IS FULLY RESPONSIBLE TO FIELD VERIFY ACTUAL LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.
- 10. THE CONTRACTOR SHALL ENSURE THAT ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
 REGULATIONS AND STANDARDS ARE FOLLOWED DURING ALL PHASES OF THE CONSTRUCTION PROJECT. SHEETING OR
 BRACING SHALL BE USED WHENEVER NECESSARY TO PREVENT FAILURE OF THE TRENCH BANKS. ALL SHEETING
 SHALL CONFORM TO AASHTO AND OSHA SAFETY STANDARDS.
- 11. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO PROVIDE SIGNS, BARRICADES, WARNING LIGHTS, GUARD RAILS, AND EMPLOY FLAGGERS AS NECESSARY WHEN CONSTRUCTION ENDANGERS EITHER VEHICULAR OR PEDESTRIAN TRAFFIC. THESE DEVICES SHALL REMAIN IN PLACE UNTIL THE TRAFFIC MAY PROCEED NORMALLY AGAIN.
- 12. CONSTRUCTION WORK ZONE SIGNS AND SIGNING PROCEDURES SHALL CONFORM TO THE MUTCD AND SUPPLEMENTS AND TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
- 13. SEE SHEET C-900 FOR LOCATION OF PEDESTRIAN SIGNAL POLES.
- 14. ADJUST ALL EXISTING ELECTRICAL HAND HOLES VERTICALLY AND HORIZONTALLY AS REQUIRED TO AVOID NEW CONDITIONS, FLUSH WITH SURROUNDING SURFACES AND COORDINATE WITH CIVIL DRAWINGS AND OWNER FINAL

KEY NOTES

- NEW 12" X 12" HAND HOLE FOR SITE LIGHTING CIRCUITS PROVIDE NEW 2#10, 1#10G, 1"C TO RECONNECT EXISTING CIRCUIT.
- B LOCATION FOR RELOCATED EXISTING SITE LIGHTING POLE. SEE DETAIL FOR PAVER MOUNTING. PROVIDE NEW POLE BASE. EXTEND CONDUIT AND RECONNECT TO EXISTING SITE LIGHTING CIRCUIT WITH 2#12, 1#12G, 1"C.
- NEW SIGNAL LIGHT AND POLE, DECORATIVE TO MATCH PEDESTRIAN LIGHTING POLES. SEE SHEET C-900 & C-901, SEE DETAIL 12/E-102, COORDINATE FINAL STYLE, HEIGHT, FINISH, LOCATION, ETC. WITH C.M.
- ENCLOSURES

 ENCLOSURES

 ENCLOSURES

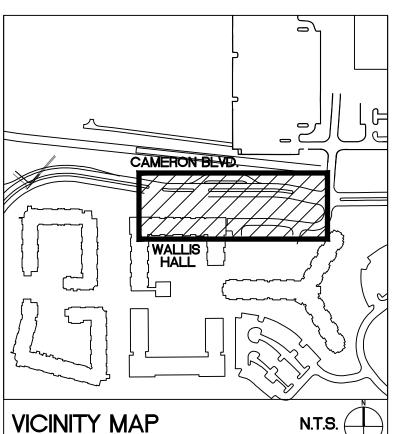
 PROVIDE NEW 24"X24"X18" D HAND HOLE FOR POWER DISTRIBUTION

 FOR PROVIDE UL LISTED LED RETROFIT KIT FROM ORIGINAL EQUIPMENT

D PROVIDE CONDUIT SLEEVES TO ENCLOSE EXISTING EXPOSED WIRING INTO

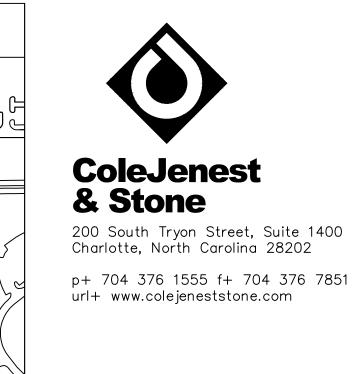
- MANUFACTURER

 © EXISTING SITE STREET LIGHT TO REMAIN.
- PROVIDE (4) 20A-120V NEMA 5-20R GFCI RECEPTACLES FOR TRAFFIC CONTROL SYSTEM.
- PROVIDE NEW STAINLESS STEEL PANELBOARD ENCLOSURE, ON 60"x36" CONCRETE PAD, SEE DETAIL.
- EXISTING BLUE LIGHT TO REMAIN UNDER BASE BID. REMOVE EXISTING BLUE LIGHT PHONE, ASSOCIATED CONDUIT, WIRE AND HAND HOLES UNDER ALTERNATE #4.
- LOCATION FOR NEW BLUE LIGHT PHONE AND ASSOCIATED EQUIPMENT. PROVIDE NEW 2#10, 1#10G IN 1"C TO NEW LOCATION. COORDINATE WITH UNCC I.T. STAFF FOR NEW TELECOM CABLE. PROVIDE 1½"C TO WALLIS BLDG I.T. ROOM. PROVIDE ONE 12" X 12" HAND HOLE FOR POWER AND ONE 12" X 12" HAND HOLE FOR TELECOM.
- EXTEND EXISTING CIRCUIT TO NEW PEDESTRIAN LIGHT POLE LOCATION.
- NEW PEDESTRIAN LIGHT POLE LOCATION, PROVIDE NEW BASE, POLE AND LIGHT TO MATCH EXISTING SURROUNDING PEDESTRIAN DECORATIVE 'ANP' FIXTURES AND POLES. SEE DETAIL 6/E-102 PROVIDE UL LISTED LED KIT TO MATCH RETROFIT FIXTURES. COORDINATE WITH OWNER.
- EXISTING PEDESTRIAN LIGHT POLE LOCATION, PROVIDE NEW POLE AND LIGHT TO MATCH EXISTING SURROUNDING PEDESTRIAN DECORATIVE 'ANP' FIXTURES AND POLES, MOUNT TO EXISTING BASE AND CONNECT TO EXISTING CIRCUIT. PROVIDE UL LISTED LED KIT TO MATCH RETROFIT FIXTURES. COORDINATE WITH OWNER.



SURVEY DISCLAIMER

TOPOGRAPHIC SURVEY ISSUE DATE NOVEMBER 7, 2016.
PROVIDED BY ALLEN GEOMATICS, P.C., PO BOX 89 ADVANCE,
NC, 27006 336-998-0218



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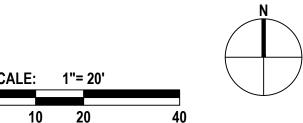
CAMPUS CIRCULATION IMPROVEMENTS

SCO ID# 16-14055 CODE 41526 ITEM 310



Revised

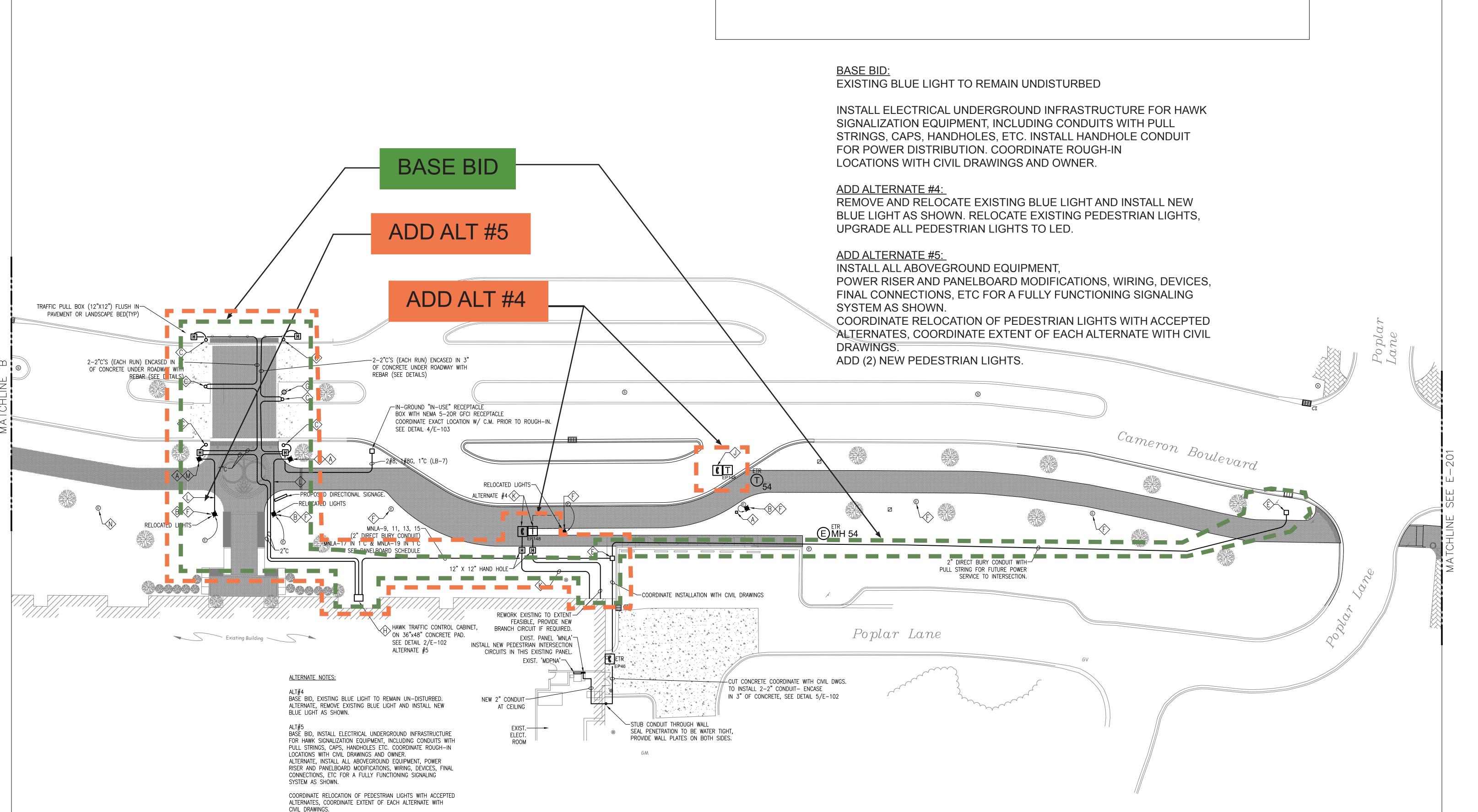


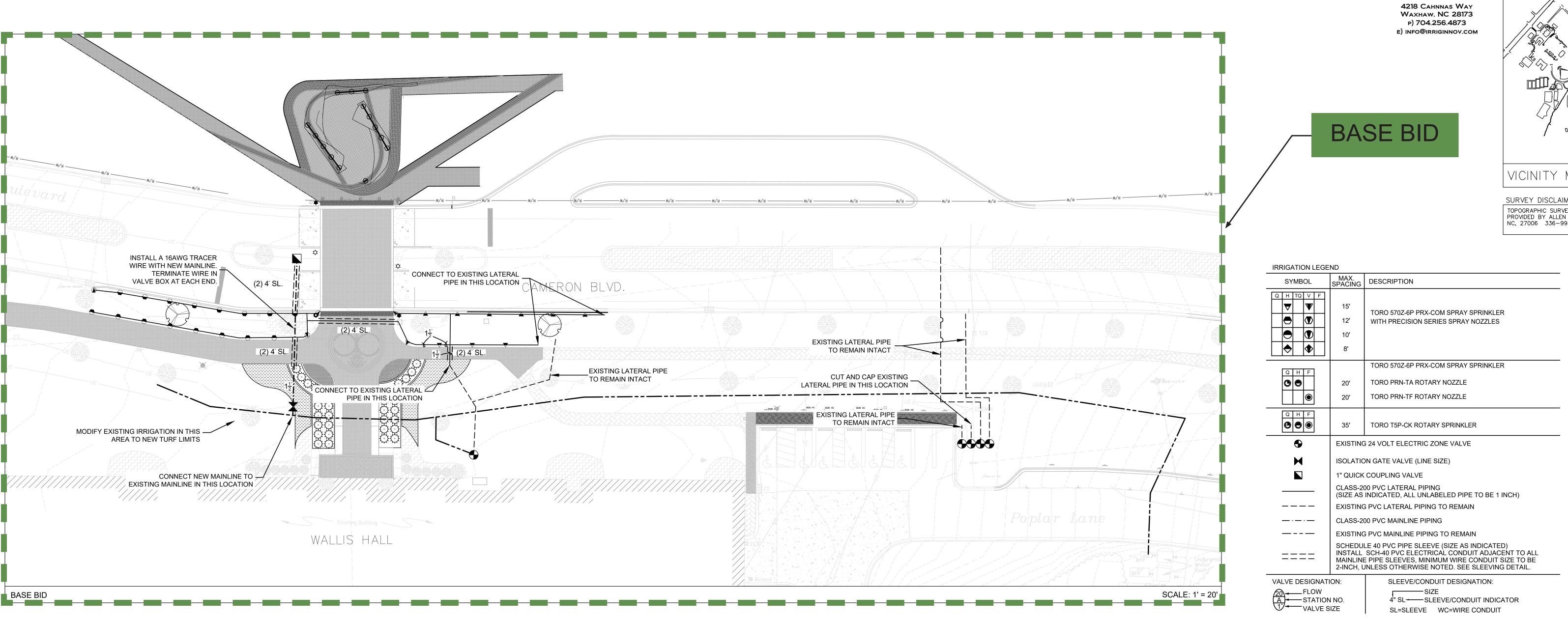


E-200

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CUT EXISTING LATERAL PIPE AND CONNECT

NEW LATERALS IN THIS LOCATION

INSTALL A 16AWG TRACER WIRE WITH NEW MAINLINE.

VALVE BOX AT EACH END.

MODIFY EXISTING IRRIGATION IN THIS —

CONNECT NEW MAINLINE TO EXISTING MAINLINE IN THIS LOCATION

AREA TO NEW TURF LIMITS

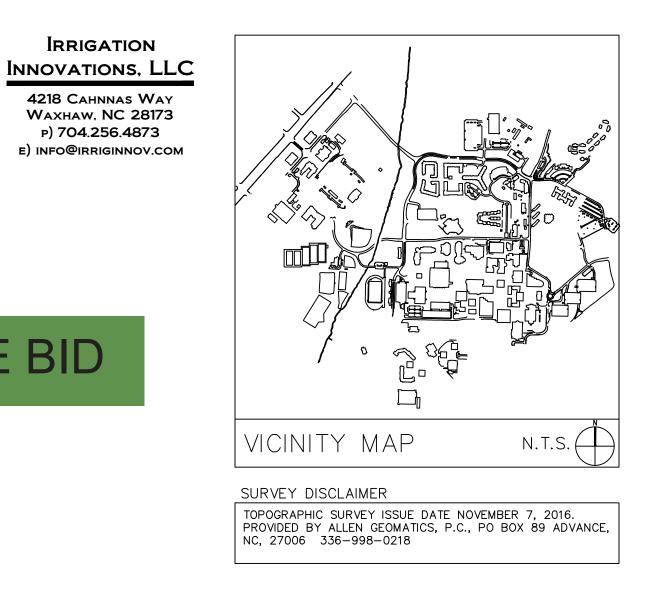
DISCONNECT EXISTING LATERAL PIPE FROM CONTROL VALVE AND CAP. CONNECT NEW LATERAL AS SHOWN.

WALLIS HALL

REMOVE EXISTING SPRINKLERS IN

SPRINKLERS TO OWNER

TERMINATE WIRE IN



IRRIGATION

ColeJenest & Stone

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Land Planning Landscape Architecture Civil Engineering

Urban Design

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CAMPUS CIRCULATION IMPROVEMENTS

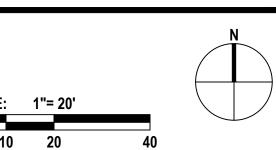
SCO ID# 16-14055 **CODE 41526 ITEM 310**

MAIN STATION -IRRIGATION PLAN

02/27/2017 - CD SCO SUBMITTAL

Revised

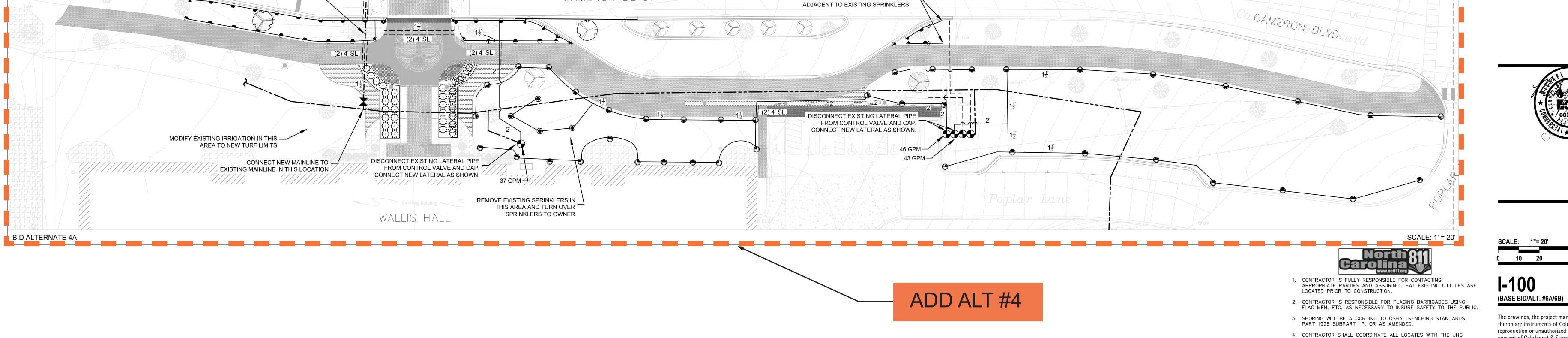


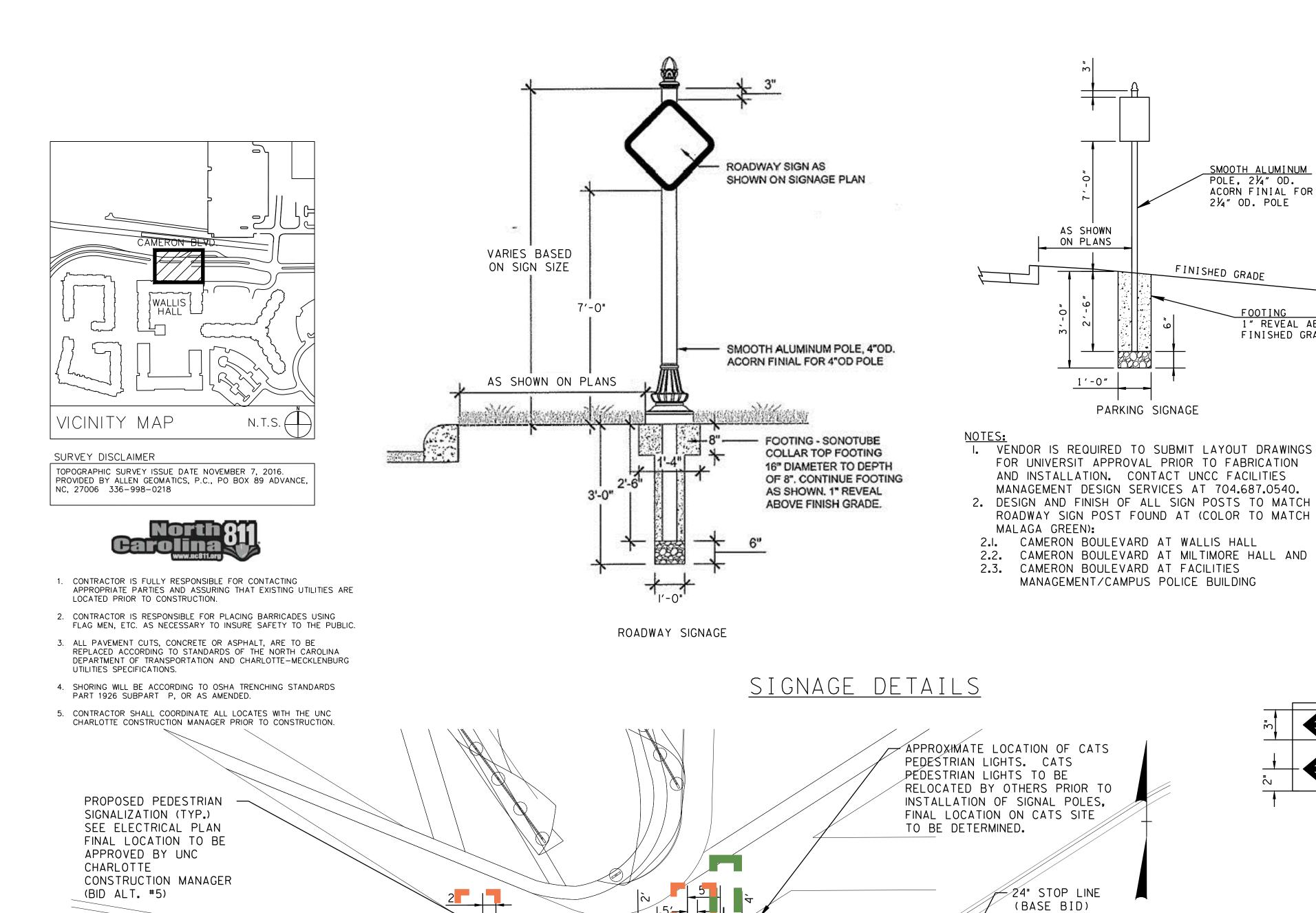


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4. CONTRACTOR SHALL COORDINATE ALL LOCATES WITH THE UNC CHARLOTTE CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. Copyright © 2017 Irrigation Innovations, LLC This drawing and any accompanying documents or calculations are the property of Irrigation Innovations, LLC. No third party use or modification is permitted without written authorization.





W11-15 36″ X 36″ € (BASE BID)

- W16-7PL 24" X 12" (BASE BID)

<u>Plan view</u>

40′

TO REMAIN

EXISTING STREET LIGHT

- PROPOSED PEDESTRIAN SIGNALIZATION (TYP.) SEE ELECTRICAL PLAN

PROPOSED DIRECTIONAL

SIGNAGE (SEE DETAIL

THIS SHEET)

(BASE BID)

(BID ALT. #5)

APPROXIMATE LOCATION OF CATS PEDESTRIAN

OF SIGNAL POLES, FINAL LOCATION ON CATS

 $\mathrel{\rlap{$\sqsubseteq}}$ 24" STOP LINE

RELOCATED WALLIS

HALL SIGN

(BASE BID)

(BASE BID)

RELOCATED BY OTHERS PRIOR TO INSTALLATION

40′

25'

W16-7PL 24" X 12" (BASE BID)

LIGHTS. CATS PEDESTRIAN LIGHTS TO BE

SITE TO BE DETERMINED.

CAMERON BLVD.

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION) SIZE STEEL DESIGN SIGN FACE MINIMUM LEGEND VERTICAL SUPPORT LENGTH | HEIGHT COPY BACKGROUND CLEARANCE LENGTH TYPE YELLOW SEE ROADWAY 30" | BLACK 30" SHEET 8′-3″ GREEN SIGNAGE DETAIL ALUMINUM (REF. FLUOR. YELLOW W16-7PL 12" | BLACK 24" SHEET MOUNTED WITH W11-15 7′-0″ GREEN ALUMINUM (REF.

18" | WHITE

RED

18"

Charlotte

Pavilion

Research Institute

Hauser Alumni

POLE, 2¼" OD.

2¼" OD. POLE

FINISHED GRADE

- PROJECT LIMIT

ADD ALT #5

BASE BID

ACORN FINIAL FOR

FOOTING 1" REVEAL ABOVE FINISHED GRADE

15 MIN PARKING TOW-AWAY ZONE

FONT: UTOPIA (TYP.)

Fretwell, Cato

R7-5(MOD.)*

TEXT PRIOR TO

FABRICATION

Student Union,

Student Activity

DIRECTIONAL PANEL

UNCC TO REVIEW AND APPROVE BUILDING

NAMES TO BE USED ON DIRECTIONAL PANEL

4'-10"

MAP PANEL

(MAP GRAPHIC TO BE

PROVIDED BY UNCC)

DIRECTIONAL PANEL

3'-7"

FRONT VIEW

I'-4"

King, Reese

Center

*OWNER TO APPROVE 12"

SIGN SCHEDULE DETAIL

GREEN

WHITE

(REF.

0.080"

SHEET

ALUMINUM

0.080"

SHEET

ALUMINUM

GENERAL NOTES

- I. SIGNAGE SHOULD COMPLY WITH UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE DESIGN AND CONSTRUCTION MANUAL SECTION 3, ANNEX D CAMPUS EXTERIOR SIGNAGE STANDARDS
- 2. POST STOCK ALUMINUM 3"X4" SQUARE TUBE WELDED AT 45 DEGREE CUT JOINT INTERSECTION WITH INTERNAL REINFORCED SUPPORTS. 3. HEADER BOARD - ASSEMBLY PAINTED IN CAMPUS GREEN, AND AFFIXED WITH

SEE PARKING

SIGNAGE DETAIL

SEE PARKING

SIGNAGE DETAIL

- BOTH MECHANICAL FASTENERS AND ADHESIVE SYSTEMS. 4. CROWN ASSEMBLY - AFFIXED TO BAND AS FEATURE, WITH GOLD AREA BEING
- 04 GOLD VINYL OR PAINT EQUAL, AND DARK GREEN AREA PAINTED TO MATCH SIGN BODY AND POSTS 5. SIGN BODY - ALUMINUM WITH CHANNEL EDGE (SEE DETAIL SHEET), AFFIXED WITH MECHANICAL FASTENERS, AND FILLER FINISH FOR BLENDING WITH
- LIGHTING. 6. FOOTER SUPPORT -3"X72" 'C' CHANNEL STEEL METAL FOOTING BAR. ¾"

PAINTED SURFACES. STAINLESS STEEL HINGE. LED INTERIOR CABINET

- DIAMETER STAINLESS STEEL HARDWARE ASSEMBLY AND #4 REBAR CROSS
- 7. FASTENERS ₹ SS BOLT ASSEMBLY AND I ACCESS HOLES OPPOSITE OF (E) FASTENERS MUST BE PLUGGED WITH PAINTED 'SNAP IN' CAP.
- 8. FOOTING IS 12" DIAMETER POST HOLE 42" IN DEPTH POURED -1" FINISHED

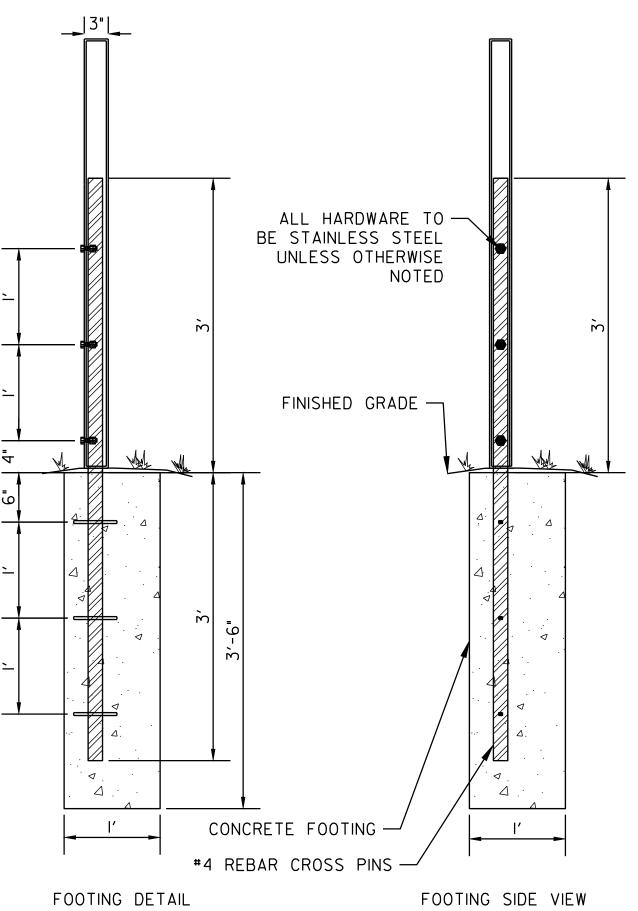
FINISH NOTES

9003 SIGNAL WHITE

- I. POSTS AND SIGN BODY: 'BLACK GREEN' MATTHEWS PAINT CO. MP2I337 R91290 - SATIN FINISH AND SATIN CLEAR COAT TO SEAL. ALTERNATE - RAL
- 6012 BLACK GREEN 2. HEADER ASSEMBLY: CAMPUS GREEN PMS 349 MATTHEWS PAINT CO. MP00457
- R91290 SATIN FINISH AND SATIN CLEAR COAT TO SEAL. 3. CANOPY ASSEMBLY: 'NATURAL WHITE LRV' MATTHEWS PAINT CO. MP42202SP R282204SP SATIN FINISH AND SATIN CLEAR COAT TO SEAL. ALTERNATE RAL
- 4. TEXT GRAPHICS/LETTERING: 3M DIAMOND GRADE PRISMATIC OR EQUAL WHITE HIGH PERFORMANCE VINYL.
- 5. LOGO: GOLD CROWN ARLON 04 OR EQUAL. INSET OR SECOND COLOR TO MATCH SIGN BODY PAINT CODE.

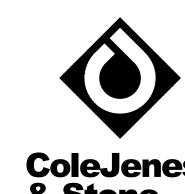
ALL SURFACES TO BE SMOOTH AND FREE OF OBVIOUS DEFECTS; VOIDS FILLED WHERE NECESSARY. ALUMINUM TO BE PRIME COATED TO ACCEPT FINISHES.

FOR ALL LAYOUTS ON EXTERIOR SIGNAGE, THE VENDOR MUST PROVIDE SUBMITTAL DRAWINGS WITH LAYOUT AND CHARACTER SIZING, INCLUDING COMPRESSION AND SPACING SIZES USED TO CREATE READABLE



SIGNAGE FOR MOVING VEHICULAR TRAFFIC. LOGO INFORMATION AT: HTTP://WWW.PUBLICRELATIONS.UNCC.EDU/LOGO/MAIN-LOGO.HTML

DIRECTIONAL SIGNAGE DETAIL



QUANTITY

7′-0″

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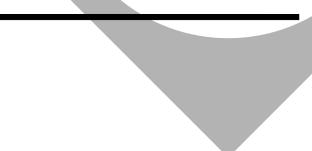
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CAMPUS CIRCULATION IMPROVEMENTS

SIGNAGE AND **PAVEMENT** MARKING PLAN

Project No.

Issued 03/08/2017 - BID



Revised

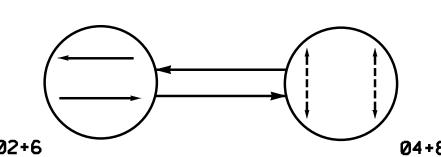


C-900

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PHASING DIAGRAM DETECTION LEGEND

←	DETECTED MOVEMENT
←	UNDETECTED MOVEMENT
◀	UNSIGNALIZED MOVEMENT
≪	PEDESTRIAN MOVEMENT

_				
	TABLE OF C	PER	ATI	ON
		Р	HAS	E
	SIGNAL FACE	Ø2+6	Ø 4 + 8	FLASI
	21, 22	G	R	Υ
	61, 62	G	R	Υ
	P41, P42	DW	W	DRK
	P81, P82	DW	W	DRK

(BID ALT #5)

Four later							
SER CLES FOR A SMITH THE CONTROL OF ALL TO SERVICE THE CONTROL OF							
O'S SONE COLORS STEED STORE STREET USIN THE LOCALISM STREET USIN TO TOWN SOLELYARD CAMERON SOLECANDS CAME	SEE ELECTR BE APPROVE CONSTRUCTI (BID ALT. #	RICAL PLAN FINAL LOCATION TO ED BY UNC CHARLOTTE ION MANAGER (5) APPROXIMATE LOCATION OF CATS PEDESTRIAN —			LIGHTS. CATS RELOCATED BY OF SIGNAL PO	S PEDESTRIAN LIGHTS TO BE Y OTHERS PRIOR TO INSTALLATION LES, FINAL LOCATION ON CATS SITE	
CAMPON BOLIZONO CAMPON	0	OF SIGNAL POLES, FINAL LOCATION ON CATS	2'		EXISTING STREET TO REMAIN	LIGHT	
			P42	PBI			
	CAMERON	BOULEVARD				CAMERON BOULEVARD	
Topic States and the states and the states are states as the states are states are states as the states are states ar	© FH			3'		X	(
	M □WM © ECB		P41 6	y P82			
		- MANAN	X X				TMH
Ecurity Bilding School							, ,
Eximing Building				off Pb.			
DICCE.	0						
			Ex	sting Building			
GM	X					© ECB	
						(((((((((((((
						2 0 1 0 0	20 40
SCALE: 1" = 20' ADD ALT #5	X					SCALE: 1" =	: 20'



N.T.S.

SURVEY DISCLAIMER TOPOGRAPHIC SURVEY ISSUE DATE NOVEMBER 7, 2016. PROVIDED BY ALLEN GEOMATICS, P.C., PO BOX 89 ADVANCE, NC, 27006 336-998-0218

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.

NOTES

Vendors - Signal Head, Vehicular MoboTrex Inc. Econolite Control Products General Traffic Equipment Corp. McCain Traffic Supply or Approved Equal

Vendors - Signal Head, Pedestrian MoboTrex Inc. Econolite Control Products General Traffic Equipment Corp. McCain Traffic Supply or Approved Equal

2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.

3. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.

4. Program pedestrian heads to countdown the flashing "Don't Walk" time only. 5. Pedestrian pedestals are conceptual and shown for reference only. See NCDOT special detail sheets 1705D01 for pushbutton location details. 6. All signal equipment shall be dark green "black

APPLICABLE NCDOT STANDARD DETAILS

green" in color per UNCC Design Standards.

STD.NO. TITLE

1700.01 Electrical Service Options 1700.02 Electrical Service Grounding

1705.02 Signal Heads

1705.03 Signal Heads

1715.01 Underground Conduit-Trenching

1716.01 Junction Boxes 1743.02 Pedestals

1743.04 Pedestals

ALSO SEE SHEET E-200

1751.01 Controllers and Cabinets 1751.02 Controllers and Cabinets Revised

VICINITY MAP

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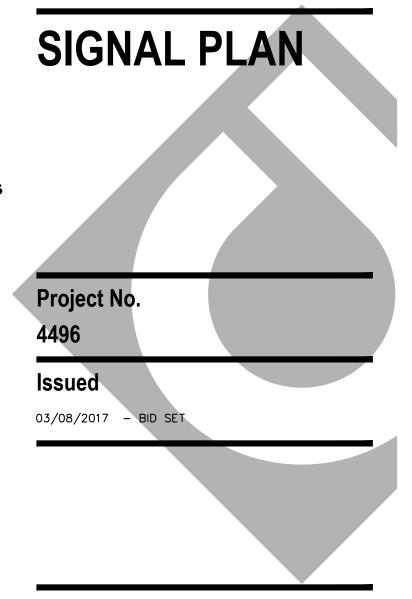
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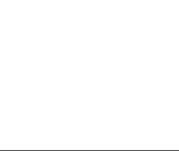
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CAMPUS CIRCULATION IMPROVEMENTS





	LEGEND	
PROPOSED		<u>EXISTIN</u>
\bigcirc	Traffic Signal Head with Type II Signal Pedestal	N/A
\downarrow	Pedestrian Signal Head With Push Button & Sign	N/A
	Controller & Cabinet	N/A
	Junction Box	N/A
	2-in Underground Conduit	N/A
\longrightarrow	Directional Arrow	\longrightarrow



C-901 **ADD ALTERNATE #5**

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FEATURE	2	4	6	8
Min Green 1 *	-	-	-	-
Extension 1 *	-	-	-	-
Max Green 1 *	-	-	-	-
Yellow Clearance	-	-	-	_
Red Clearance	-	-	-	_
Red Revert	-	-	-	_
Walk 1 *	-	7	-	7
Don't Walk 1	-	13	-	13
Seconds Per Actuation *	-	-	-	_
Max Variable Initial *	-	-	-	_
Time Before Reduction *	-	_	_	_
Time To Reduce *	-	-	-	_
Minimum Gap	-	-	-	-
Recall Mode	-	-	-	-

TIMING CHART

Vehicle Call Memory

Simultaneous Gap

Dual Entry

PHASE

DI

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.