



- 1. CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE-CALL CENTER (NC 811) BY DIALING 811 OR 1-800-632-4949 AT LEAST 72 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY OR DIGGING AND HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK.
- AND/OR ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
- 4. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND DO NOT INCLUDE MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE DEMOLITION WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN
- 5. ALL DEMOLITION WASTE AND DEBRIS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
- 6. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR GETS WRITTEN AUTHORIZATION FROM THE LOCAL
- 7. ASBESTOS OR HAZARDOUS MATERIALS, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL
- NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED 8. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS. AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED. CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR
- 9. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL, AND OSHA REGULATIONS WHEN OPERATING DEMOLITION EQUIPMENT AROUND UTILITIES.
- 10. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE NCDOT STANDARDS, AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH THE LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT, AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
- 11. CONTRACTOR SHALL PROTECT AT ALL TIMES ADJACENT STRUCTURES AND ITEMS FROM DAMAGE DUE TO DEMOLITION OR CONSTRUCTION ACTIVITIES
- 12. CONTRACTOR SHALL REMOVE EXISTING VEGETATION AND IMPROVEMENTS WITHIN LIMITS OF DISTURBANCE UNLESS NOTED OTHERWISE.

13. TREES OUTSIDE OF CONSTRUCTION LIMITS OR TREES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED.



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CONSULTING GROUP, PLLC

Project Manager:	BCF
Drawn By:	DLC
Checked By:	BCF
Project Number:	24138
Drawing Number:	D-1592

	Re	quired Ground Stabil	ization Timeframes
Si	te Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a)	Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b)	High Quality Water (HQW) Zones	7	None
(c)	Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d)	Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e)	Areas with slopes flatter than 4:1	14	<ul> <li>-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones</li> <li>-10 days for Falls Lake Watershed unless there is zero slope</li> </ul>

ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the

surface stable against accelerated erosion until permanent ground stabilization is achieved.

### **GROUND STABILIZATION SPECIFICATION**

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilzation	Permanent Stabilzation
<ul> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> </ul>	Permanent grass seed covered with straw or other mulches and tackifiers
<ul><li>Hydroseeding</li><li>Rolled erosion control products with or</li></ul>	Geotextile fabrics such as permanent soil reinforcement matting
without temporary grass seed	Hydroseeding
<ul><li>Appropriately applied straw or other mulch</li><li>plastic sheeting</li></ul>	Shrubs or other permanent plantings covered with mulch
	Uniform and evenleyh distributed ground cover sufficient to restrain erosion
	Structural methods such as concrete, asphalt, or retaining walls
	Rolled erosion control products with grass seed

### POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures Apply flocculants at the concentrations specified in the NC DWR List of Approved
- *PAMS/Flocculants* and in accordance with the manufacturer's instructions. Provide ponding area for containment of treated Stormwater before discharging
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

## EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids. Provide drip pans under any stored equipment.
- 3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the

Remove leaking vehicles and construction equipment from service until the problem

- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products

### LITTER, BUILDING MATERIAL AND LAND CLEARING WASTI

## Never bury or burn waste. Place litter and debris in approved waste containers.

to a recycling or disposal center that handles these materials.

- Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow

On business days, clean up and dispose of waste in designated waste containers.

Dispose waste off-site at an approved disposal facility.

### **PAINT AND OTHER LIQUID WASTE**

- Do not dump paint and other liquid waste into storm drains, streams or wetlands. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- . Contain liquid wastes in a controlled area.
- 4. Containment must be labeled, sized and placed appropriately for the needs of site. 5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from

### construction sites.

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

### EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile
- Provide stable stone access point when feasible

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

# ONSITE CONCRETE WASHOU CONCRETE NOTING DEVICE (18"X24" MIN.) THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY. BELOW GRADE WASHOUT STRUCTURE ABOVE GRADE WASHOUT STRUCTURE

### CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site. 2. Dispose of, or recycle settled, hardened concrete residue in accordance with local
- and state solid waste regulations and at an approved facility. 8. Manage washout from mortar mixers in accordance with the above item and in
- addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence. Install temporary concrete washouts per local requirements, where applicable. If a
- alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum. install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the
- approving authority Install at least one sign directing concrete trucks to the washout within the project
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.

limits. Post signage on the washout itself to identify this location.

10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout

### HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

### HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.

### Do not store hazardous chemicals, drums or bagged materials directly on the ground.

## EFFECTIVE: 04/01/19

SELF-INSPECTION, RECORDKEEPING AND REPORTING

## **SECTION A: SELF-INSPECTION**

Frequency

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

(1) Rain gauge	business hours)  Daily	Daily rainfall amounts.
maintained in good working order		If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	Identification of the measures inspected,     Date and time of the inspection,     Name of the person performing the inspection,     Indication of whether the measures were operating properly,     Description of maintenance needs for the measure,     Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made:  1. Actions taken to clean up or stabilize the sediment that has left the site limits,  2. Description, evidence, and date of corrective actions taken, and  3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made:  1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover).      Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

## SELF-INSPECTION, RECORDKEEPING AND REPORTING

## SECTION B: RECORDKEEPING

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan.	Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC Plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

## In addition to the E&SC plan documents above, the following items shall be kept on the site

and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This General Permit as well as the Certificate of Coverage, after it is received.
- (b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

### 3. Documentation to be Retained for Three Years All data used to complete the e-NIO and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

### PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structure that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items. (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
- (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems, d) Vegetated, upland areas of the sites are a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (c) above,
- e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and Sediment removed from the dewatering treatment devices described in item (c) above is disposed of in a manner that does not cause deposition of sediment into water of the United States.

## SELF-INSPECTION, RECORDKEEPING AND REPORTING

**SECTION C: REPORTING** 1. Occurrences that Must be Reported

Permittees shall report the following occurrences: (a) Visible sediment deposition in a stream or wetland.

## (b) Oil spills if:

Occurrence

- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).
- a) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

### (b) Anticipated bypasses and unanticipated bypasses.

(c) Noncompliance with the conditions of this permit that may endanger health or the

### 2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Reporting Timeframes (After Discovery) and Other Requirements

(a) Visible sediment deposition in a stream or wetland	<ul> <li>Within 24 hours, an oral or electronic notification.</li> <li>Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis.</li> <li>If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.</li> </ul>		
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.		
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• A report at least ten days before the date of the bypass, if possible.  The report shall include an evaluation of the anticipated quality and effect of the bypass.		
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	Within 24 hours, an oral or electronic notification.     Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.		
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(I)(7)]	Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the procompliance. [40 CER 122 41(1)(6)]		

Division staff may waive the requirement for a written report on a

case-by-case basis.

Wake County Basin Removal Sequence:

- 1. SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.
- CONTACT NCDEQ RALEIGH REGIONAL OFFICE (919) 791-4200 TO DETERMINE THE DIVISION OF ENERGY, MINERAL AND LAND RESOURCES CONTACT PERSON TO RECEIVE DEWATERING NOTIFICATIONS. AT LEAST 10 DAYS PRIOR TO BEGINNING DEWATERING ACTIVITY, SEND EMAIL TO NCDEQ-DEMLR CONTACT PERSON AND COPY ENVIRONMENTAL CONSULTANT THAT MET YOU ONSITE. THE EMAIL SHOULD INCLUDE: E&SC JURISDICTION: WAKE COUNTY, WAKE COUNTY PROJECT: NAME, NUMBER, AND LOCATION (CITY/TOWN), ENVIRONMENTAL CONSULTANT NAME, AND ADDRESS THE FOLLOWING: A) REASON FOR CONVERSION, B) BASIN #, C) DEWATERING METHOD, AND D) ALL OTHER NECESSARY INFO FROM PART II, SECTION G, ITEM 4 OF THE NCG01. KEEP EMAIL FOR YOUR NDPES MONITORING DOCUMENTATION

Effective September 1, 2008

not exceed 35 feet.

approved BMP.

d. Stockpile slopes shall be 2:1 or flatter.

sediment loss from a stockpile.

Soil stockpiles shall be located on the approved plan and shall adhere to the

a. A 25-foot temporary maintenance and access easement shall be shown

b Stockpile footprints shall be setback a minimum of 25' from adjacent

c. A note shall be provided on the approved plan that stockpile height shall

e. Approved BMPs shall be shown on a plan to control any potential

f. Stockpiling materials adjacent to a ditch, drainageway, watercourse,

g. Any concentrated flow likely to affect the stockpile shall be diverted to an

h. Off-site spoil or borrow areas must be in compliance with Wake County

UDO and State Regulations. All spoil areas over an acre are required to

have an approved sediment control plan. Developer/Contractor shall notify

Wake County of any offsite disposal of soil, prior to disposal. Fill of FEMA Floodways and Non-encroachment Areas are prohibited except as

otherwise provided by subsection 14-19-2 of the Wake County Unified

. Seeding or covering stockpiles with tarps or mulch is required and will reduce erosion problems. Tarps should be keyed in at the top of the slope

(builders, etc.), the financial responsible party must notify Wake County

j. If a stockpile is to remain for future use after the project is complete

k. The approved plan shall provide for the use of staged seeding and

1. Establish and maintain a vegetative buffer at the toe of the slope (where

mulching on a continual basis while the stockpile is in use.

Development Ordinance (certifications and permits required)

Maintenance Requirements to be Noted on the Plan

of a new responsible party for that stockpile

to keep water from running underneath the plastic.

wetland, stream buffer, or other body of water shall be avoided unless an

stockpile shall be shown at the outer limit of this easement)

alternative location is demonstrated to be unavailable

around all proposed stockpiles (erosion control measures surrounding the

- AFTER RECEIVING POSITIVE CONFIRMATION FROM NCDEQ-DEMLR THAT YOU MAY REMOVE THE BASIN OR ON > DAY 11, WHICHEVER IS SOONER, REMOVE BASIN(S) AND ASSOCIATED TEMPORARY DIVERSION DITCHES. IF PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.
- 4. PERFORM SEEDBED PREPARATION, SEED, MULCH AND ANCHOR ANY RESULTING BARE AREAS IMMEDIATELY.
- INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
- WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVICE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION. NOTE: A MEETING SHOULD ALSO BE SCHEDULED WITH THE ENVIRONMENTAL CONSULTANT TO DETERMINE WHEN A BASIN MAY BE CONVERTED FOR STORMWATER USE. SOME MUNICIPALITIES MAY ALSO REQUIRE THIS.

### **Erosion Control Provisions:**

- 1. NO PERSON MAY INITIATE A LAND DISTURBING ACTIVITY BEFORE NOTIFYING WAKE COUNTY WATERSHED MANAGEMENT OF THE DATE THAT THE LAND DISTURBING ACTIVITY WILL BEGIN.
- 2. LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL APPROPRIATE EROSION CONTROL MAY NOT PROCEED UNTIL EROSION CONTROL MEASURES ARE INSPECTED AND APPROVED BY THE ENGINEER.
- 3. SCHEDULING OF A PRE-CONSTRUCTION CONFERENCE WITH THE WAKE COUNTY WATERSHED MANAGER, JEEVAN NEUPANE, PE (919-819-8907) PRIOR TO INITIATING LAND DISTURBING ACTIVITIES IS REQUIRED. FOR INSPECTION CALL 919-819-8907. 48 HOUR
- 4. INSTALL TREE PROTECTION FENCING AROUND ALL AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS SHOWN ON PLANS.
- 5. PROVIDE 20' X 50' X 6" STONE CONSTRUCTION ENTRANCES AS SHOWN ON PLAN.
- 6. SEED OR OTHERWISE PROVIDE GROUND COVER DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION FOR ALL EXPOSED SLOPES WITHIN 7 DAYS OF COMPLETION OF ANY PHASE OF GRADING ON PERIMETER AREAS AND SLOPES STEEPER THAN 3:1. ALL OTHER AREAS SHALL BE STABILIZED WITHIN 14 DAYS.
- 7. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. FAILURE TO KEEP ALL EROSION CONTROL DEVICES IN PROPER WORKING ORDER MAY RESULT IN A STOP WORK ORDER OR CIVIL PENALTIES UP TO \$5000.00 PER DAY OF VIOLATION.
- 8. THE ENGINEER RESERVES THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES SHOULD THE PLAN OR ITS IMPLEMENTATION PROVE TO BE INADEQUATE.
- 9. ACCEPTANCE AND APPROVAL OF THIS PLAN IS CONDITIONED UPON YOUR COMPLIANCE WITH FEDERAL AND STATE WATER QUALITY LAWS, REGULATION AND RULES. IN ADDITION LOCAL CITY AND COUNTY ORDINANCES OR RULES MAY ALSO APPLY TO THIS LAND DISTURBING ACTIVITY. APPROVAL BY THE COUNTY DOES NOT SUPERSEDE ANY OTHER PERMIT OR APPROVAL
- 10. PLEASE BE ADVISED OF THE RULES TO PROTECT AND MAINTAIN EXISTING BUFFERS ALONG WATERCOURSES IN THE NEUSE AND RIVER BASIN. THESE RULES ARE ENFORCED BY THE DIVISION OF WATER RESOURCES (DWR). DIRECT ANY QUESTIONS ABOUT THE APPLICABILITY OF THESE RULES TO YOUR PROJECT TO THE REGIONAL WATER QUALITY SUPERVISOR, RALEIGH REGIONAL OFFICE AT
- 11. ALL AREAS DOWNSTREAM OF TEMPORARY BASINS AND DITCHES ARE TO BE STABILIZED IMMEDIATELY UPON CONSTRUCTION.

### Construction Sequence:

- 1. EROSION AND SEDIMENT CONTROL (E&SC) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY 2. CALL WAKE COUNTY WATERSHED MANAGER JEEVAN NEUPANE AT (919) 819-8907 A MINIMUM OF 48 HOURS IN ADVANCE TO
- SCHEDULE A PRE-CONSTRUCTION MEETING AND FOR NOTIFICATION OF PROJECT START UP. ANY DEWATERING ON THE SITE SHALL BE DONE THROUGH A SILT BAG THAT IS CONSTANTLY MONITORED. 4. INSTALL GRAVEL CONSTRUCTION PAD, SILT FENCE, SEDIMENT BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN.

CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER

5. CALL WATERSHED MANAGER, JEEVAN NEUPANE FOR AN ONSITE INSPECTION TO OBTAIN A CERTIFICATE OF COMPLIANCE. 6. CLEAR AND GRUB EXISTING VEGETATION AS SHOWN ON THE DEMOLITION PLAN. REMOVE EXISTING STRUCTURES AND UTILITIES

SEDIMENT, AND REMOVE BAFFLES. RE-SHAPE THE BASIN AS REQUIRED BY THE DESIGN DRAWINGS, INCLUDING

- AS SHOWN ON THE DEMOLITION PLAN. BEGIN GRADING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE. INSTALL TEMPORARY SKIMMER SEDIMENT BASINS, ALONG WITH TEMPORARY DIVERSION DITCHES THAT SHALL BE INSTALLED TO ENSURE AS MUCH FLOW AS POSSIBLE IS DIRECTED TO THE BASINS. 7. SEDIMENT BASIN FOR PERMANENT USE AS WET POND SHALL BE REMOVED AS FOLLOWS: DEWATER (THROUGH SILT BAG), CLEAN
- EXCAVATION/SHAPING OF THE FOREBAY. SEED AND STABILIZE BASIN SLOPES. DEWATERING OPERATIONS THROUGH SILT BAGS SHALL BE MONITORED CONTINUOUSLY. 8. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, DITCH LININGS, ETC. SEED AND MULCH DENUDED
- AREAS PER GROUND STABILIZATION TIME FRAME.
- 9. INSTALLATION OF UNDERGROUND UTILITIES AND STONE BASE FOR ROADWAYS. 10. INSTALLATION OF CONCRETE CURB & GUTTER, CONCRETE SIDEWALK, & ASPHALT PAVEMENT.
- 11. WHEN GRADING IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL WATERSHED MANAGER JEEVAN NEUPANE FOR
- 12. IF SITE IS APPROVED, MAINTAIN TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATERS, SHOULD
- 13. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR FINAL SITE INSPECTION BY THE WATERSHED MANAGER, JEEVAN NEUPANE. OBTAIN CERTIFICATE OF COMPLETION.

### Seeding Specifications

NPDES Stormwater Discharge Permit for Construction Activities (NCGO1 - 4/1/19)

te within this calculation in the calculation in th	Timeframe variations  None  None  If slopes are 1.0 or less in length not steeper than 2.1, 14 days are allowed to steep than 2.1, 14 days are allowed to stope the steeper than 2.1, 14 days are allowed to stope the stope than 2.1, 14 days are allowed. To days for perimeter allow, await of the steeper than 2.1, 14 days are allowed. The stope than 1.0 days to refall talk Watershed Modes, perimeter slopes and HQ only for praint of lack, swell ditthes, perimeter slopes and HQ to days for falls talk Watershed there is zero slope to most children, any areas with tem
alendar Fer ceasing sturbance  7  7  7  14  14  14  10  on of construct	None None None None None None None None
7 14 14 14 15 14 15 16 17 17 17 17 17 17 17 17 17 17 17 17 17	None If dopes are 30 or less in length, not likesper are 21, 14 days are listened -7 days for slopes greater than 3, or -7 days for slopes greater than 3, or -7 days for perimeter dikes, await times, perimeter dikes, await times, perimeter dikes, await to days for Falls Lake Watershee -7 days for perimeter dikes, await -1 days for Falls Lake Watershee -1 days f
7   14   14   14   14   15   16   17   17   17   17   17   17   17	If slopes are 10° or less in length not steeper than 2:1, 14 days are allowed . 7- days for slopes greater than 50 elegth and with slopes steeper than 6.7-days for perimeter dikes, awal diches, perimeter slopes and 10-days for Falls Lake Watershed 7- days for Falls Lake Watershed 7- days for Falls Lake Watershed for the perimeter dikes, awalid cinches, perimeter slopes and 10-days for Falls Lake Watershed there is zero slopes.
14 (14 ) 14 ) 14 ) 15 ) 16 ) 17 ) 17 ) 17 ) 17 ) 17 ) 17 ) 17	not skeper than 2:1, 14 days are allowed '-7 days for slopes greater than 50 length and with slopes steeper th '-7 days for perimeter dikes, swall dikthes, perimeter slopes and HC Zones '-10 days for Falls Lake Watershee '-7 days for perimeter dikes, swall dikthes, perimeter dikes, swall dikthes, perimeter dikes, swall cit days for Falls Lake Watershee there is zero slope
14 (	length and with slöpes steeper the 7-7 days for perimeter dikes, swald ditches, perimeter slopes and HQ Zones 1-10 days for Falls Lake Watershee 7-7 days for perimeter slopes and HQ 1-10 days for Falls Lake Watershed there is zero slope
14 t	ditches, perimeter slopes and HQ -10 days for Falls Lake Watershed there is zero slope
	ion activities, any areas with tem
nan 90 calendar zation shall be r erosion until pe ATION	nent ground stabilization as soon days after the last land disturbit maintained in a manner to rende ermanent ground stabilization is not dislodge the soil. Use one of to Permanent Stabilization
straw or • Pe	rmanent grass seed covered with stra
• Ge ren • Hy • Sh wit • Un	her mulches and tackfliers cotestife fabrics such as permanent so inforcement matting prioseeding rubs or other permanent plantings co- th mulch wiform and evenly distributed ground of ficient to restrain erosion nuctural methods such as concrete, as
ŧ	h straw or Pe ot ot th or Pe Per mulch Sh wi su

1. Chisel compacted areas and spread topsoil three inches deep over adverse soil conditions, if available

- 2. Rip the entire area to six inches deep 3. Remove all loose rock, roots and other obstructions, leaving surface
- 4. Apply agricultural lime, fertilizer and superphosphate uniformly and mix with soil (see mixture below).
- 5. Continue tillage until a well-pulverized, firm, reasonably uniform seedbed is prepared four to six inches deep.
- 7. Mulch immediately after seeding and anchor mulch.

8. Inspect all seeded areas and make necessary repairs or reseedings within the planting season, if possible. If stand should be more than 60% damaged, reestablish following the original lime, fertilizer and seeding rates.

Agricultural Limestone 2 tons/acre (3 tons/acre in clay soils) 1,000 lbs/acre - 10-10-10 Fertilizer 500 lbs/acre - 20% analysis Superphosphate Mulch 2 tons/acre - small grain straw Asphalt emulsion at 400 gals/acre

Seeding	Schedule	
For Shou	ulders, Side Ditches, Slopes (M	ax 3:1):
Date	Туре	Planting Rate
Aug 15- Nov 1	Tall Fescue	300 lbs/acre
Nov 1– Mar 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1– Apr 15	Tall Fescue	300 lbs/acre
	Hulled Common Bermudagrass	25 lbs/acre
Jul 1–	Tall Fescue AND Brownton	125 lhs/acre (Tall Fe

Sericea Lespedeza (scarified) and use the following 50 lbs/acre (Sericea Lespedeza); Jun 1 combinations: Add Tall Fescue 120 lbs/acre Jun 30 Or add Weeping Love grass 10 lbs/acre

Tall Fescue AND Browntop 120 lbs/acre (Tall Fescue); 35 lbs/acre Mullet or Sorghum-Sudan (Browntop Mullet); 30 lbs/acre (Sorghum-Sudan Hybrids) Sericea Lespedeza (unhulled

Consult Wake County Soil & Water Conservation District or NC State Cooperative Extension for additional information concerning other alternatives for vegetation of denuded areas. The above

vegetation rates are those that do well under local conditions; other seeding rate combinations

\*\*\* **TEMPORARY**: Reseed according to optimum season for desired permanent vegetation. Do not allow temporary cover to grow more than 12" in height before mowing; otherwise, fescue

NCDEQ/Division of Energy, Mineral and Land Resources

	equired Ground Stabi		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timetrame variations.	
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None	
(b) High Quality Water (HQW) Zones 7 (c) Slopes steeper than 3:1		None If slopes are 10' or less in length and on steeper than 2:1, 14 days are.	
(e) Areas with slopes flatter than 4:1 14		<ul> <li>-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW 2</li> <li>-10 days for Falls Lake Watershed unit there is zero slope.</li> </ul>	
ground stabilization shall is practicable but in no case activity. Temporary groun surface stable against acco GROUND STABILIZATION. Stabilize the ground suffice	be converted to perm longer than 90 calend of stabilization shall be elerated erosion until SPECIFICATION iently so that rain will	ction activities, any areas with tempor anent ground stabilization as soon as ar days after the last land disturbing a maintained in a manner to render the permanent ground stabilization is achie and dislodge the soil. Use one of the	
round stabilization shall i racticable but in no case ctivity. Temporary groun urface stable against acco	be converted to perm longer than 90 calend of stabilization shall be elerated erosion until SPECIFICATION iently so that rain will dow:	enent ground stabilization as soon as lar days after the last land disturbing e maintained in a manner to render the permanent ground stabilization is achie	

- reasonably smooth and uniform
- 6. Seed on a freshly prepared seedbed and cover seed lightly with seeding equipment or cultipack after seeding

CROSLANI SOUTHEAS

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**EROSION** 

CONSULTI GROUP, PLLC

9. Consult Wake County Soil & Water or NC State Cooperative Extension on maintenance treatment and fertilization after permanent cover is established

Aug 15 Millet or Sorghum-Sudan Ibs/acre (Browntop Millet); 30 lbs/acre

(Sorghum-Sudan Hybrids)

## For Shoulders, Side Ditches, Slopes (3:1 to 2:1):

Mar 1- Or add Hulled Common Jun 30 Bermudagrass

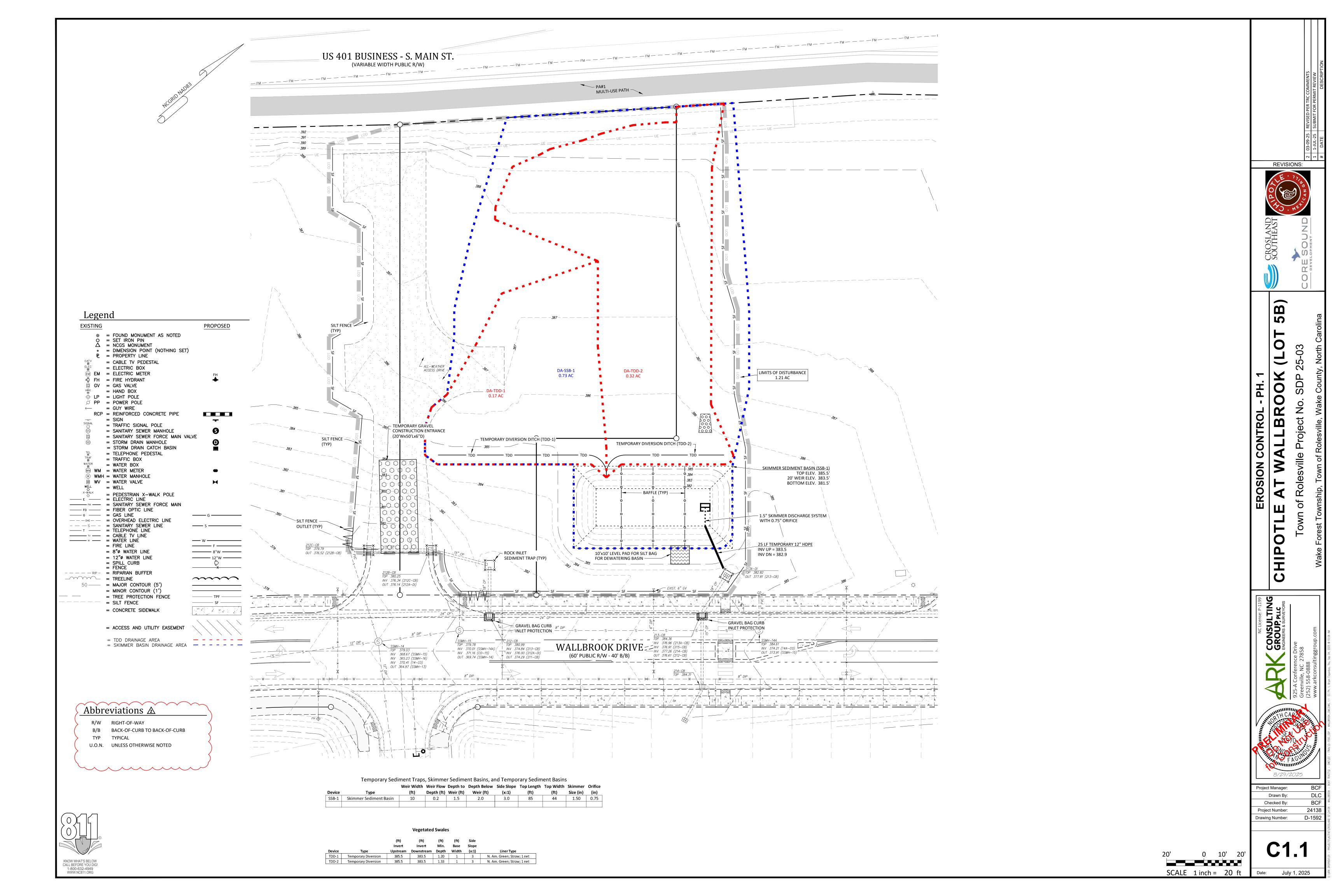
unscarified) AND Tall

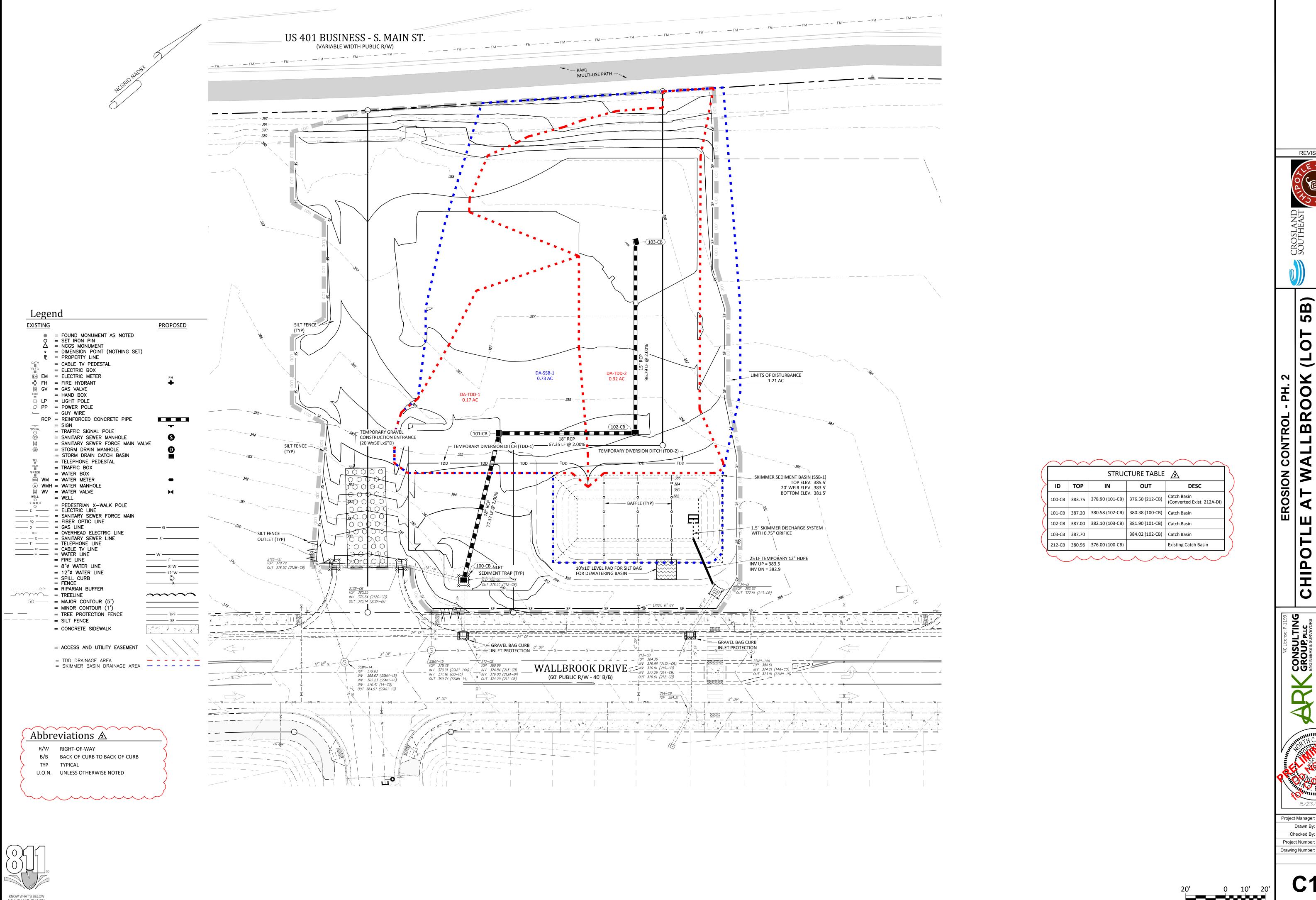
AND Abruzzi Rye

Project Manager: Drawn Bv Checked By 24138 Project Number D-1592 Drawing Number:

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

**EFFECTIVE: 04/01/19** 

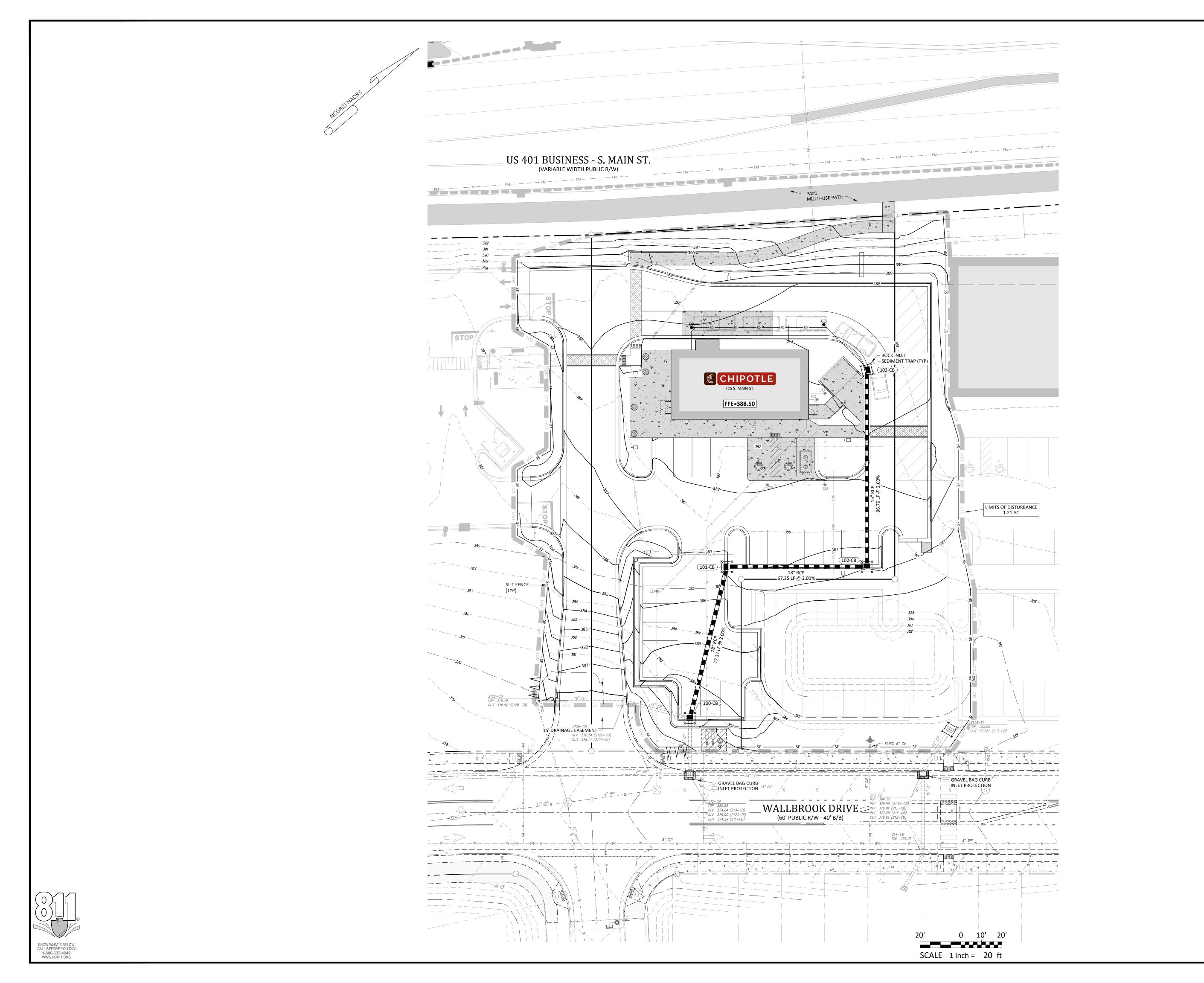




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Project Manager: Drawn By: Checked By: 24138 Project Number: D-1592 Drawing Number:

SCALE 1 inch = 20 ft



5 0 E AT WALLBRO

REVISIONS:

CROSLAND SOUTHEAST

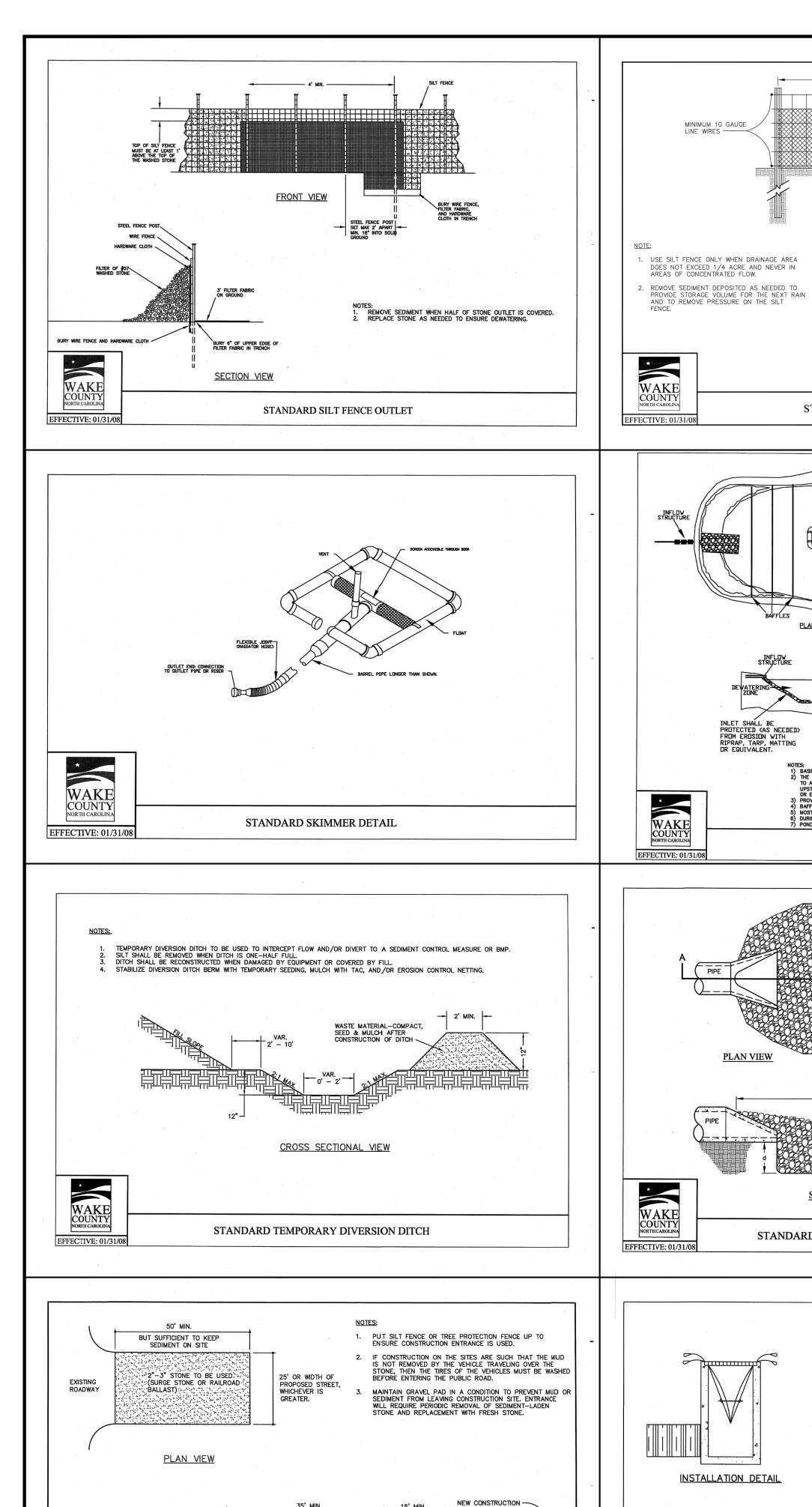
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GROUP, PLLC GROUP, PLLC ENGINEERS & SURVEYORS



Project Manager: Drawn By: Checked By: 24138 Project Number: D-1592 Drawing Number:

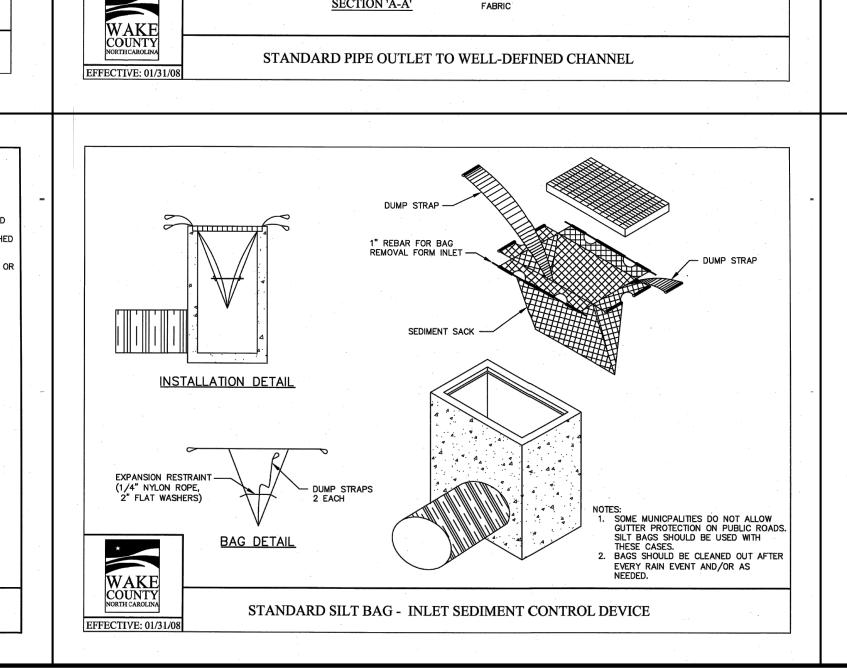
July 1, 2025



EXISTING ROADWAY -

CROSS SECTION

STANDARD CONSTRUCTION ENTRANCE



8'-0" MAXIMUM

FRONT VIEW

\_\_\_WOVEN WIRE FABRIC

SIDE VIEW

STANDARD TEMPORARY SILT FENCE

PLAN VIEW

FILL SLOPE

8" MINIMUM COVER OVER SKIRT \*

ANCHOR SKIRT AS DIRECTED

→ MINIMUM 12-1/2 GAUGE

SECTION THRU WEIR

CMP DUTLET PIPE

NOTES:

1) BASIN SHOULD BE CLEANED OUT WHEN CAPACITY REACHES AN ELEVATION REPRESENTING THAT THE BASIN IS HALF—FULL.

2) THE TARP USED TO PROTECT THE WEIR SHALL BE THE WIDTH SPECIFIED. THE LENGTH OF THE TARP SHALL BE ACCORDING TO AVAILABLE SUPPLY. IF MULTIPLE TARPS ARE TO BE USED, THEN TARPS SHALL BE OVERLAPPED AT LEAST 12°. THE UPSTREAM 12° TARP SHALL OVERLAP THE DOWNSTREAM TARP. THE TARP SHALL BE 50 MIL. HEAVY DUTY SILVER TARPAULINS OR EQUIVALENT FOR U.V. RESISTANCE.

3) PROVIDE A MINIMUM OF THREE PORGUS BAFFLES TO EVENLY DISTRIBUTE FLOW ACROSS THE BASIN, REDUCING TURBULENCE.

4) BAFFLE MATERIAL MUST BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR A SILT FENCE.

5) MOST OF THE SEDIMENT WILL ACCUMULATE IN THE FIRST BAY, SO THIS SHOULD BE REDULY AVAILABLE FOR MAINTENANCE.

6) DURING THE CONSTRUCTION PHASE OF THE PROJECT, PERMANENT STORMWATER RISER SHALL ONLY DEWATER FROM THE TOP OF PIPE.

7) POND SHALL NOT BE CONVERTED FOR STORMWATER USE UNTIL APPROVED BY ENVIRONMENTAL ENGINEER.

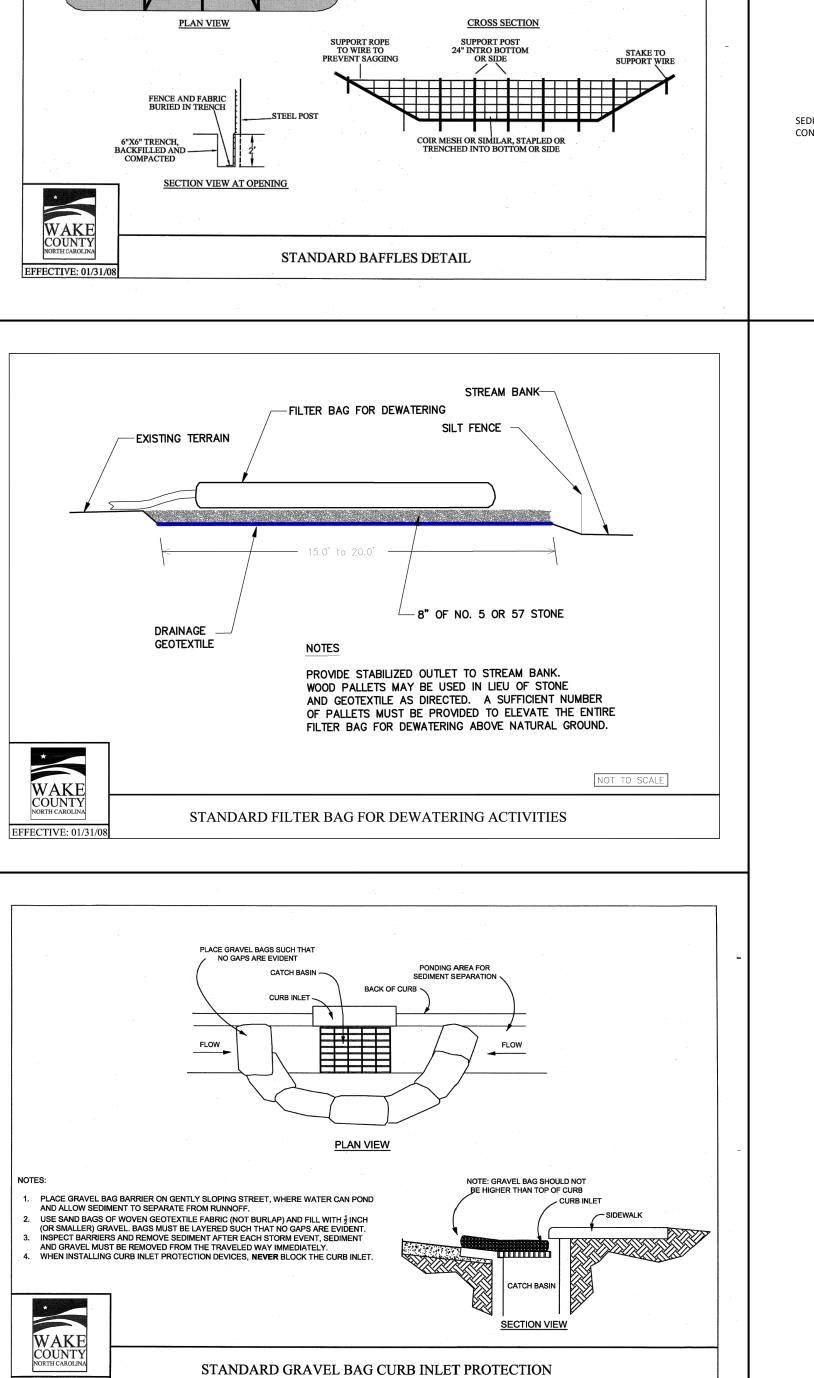
1. L = THE LENGTH OF THE RIPRAP APRON.

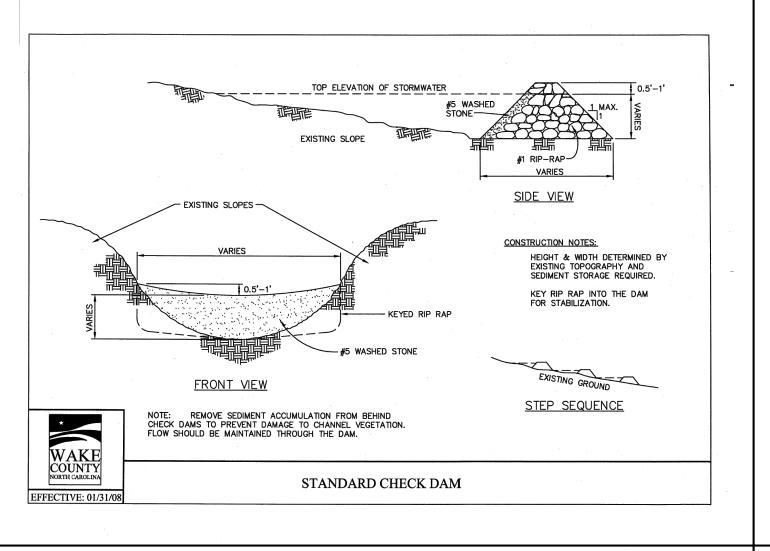
2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (INCHES).

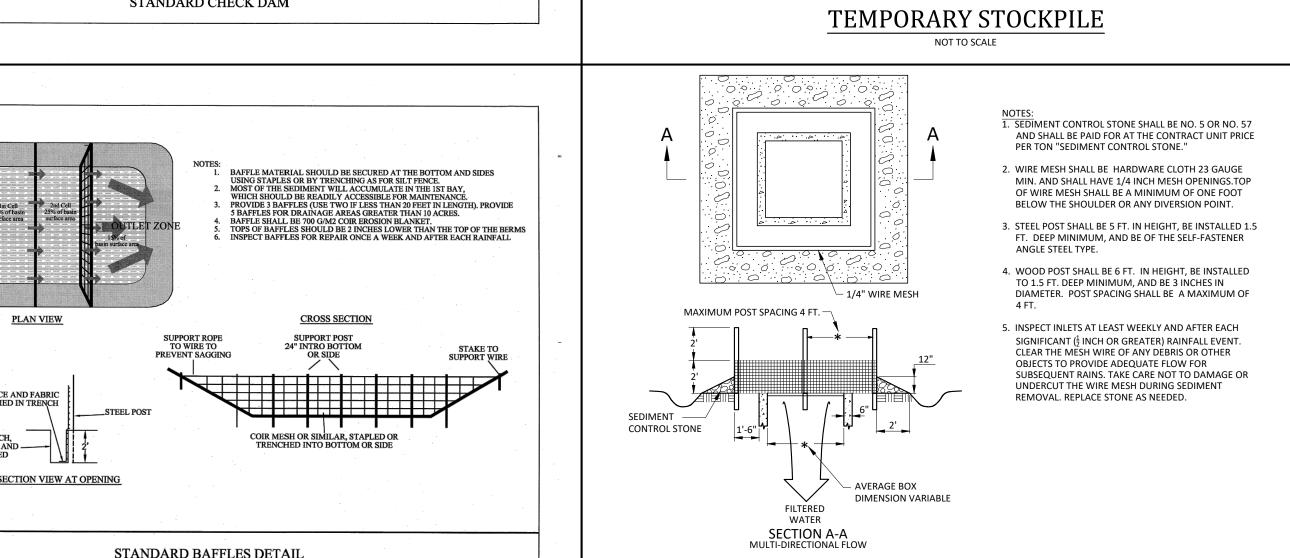
3. IN A WELL-DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" (INCHES) ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.

4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

STANDARD SKIMMER BASIN



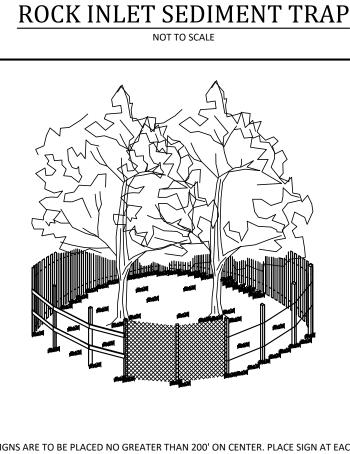




— INSTALL TEMPORARY SILT FENCE WHERE NECESSARY TO RETAIN SEDIMENT

EXISTING GRADE -

**TEMPORARY STOCKPILE** 

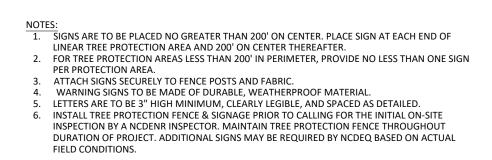


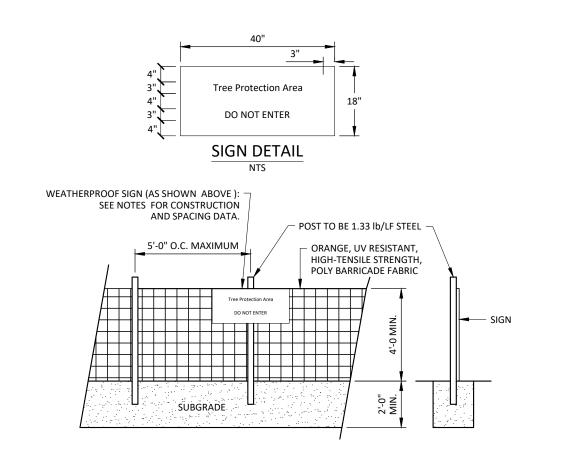
- TEMPORARILY SEED AS SOON AS POSSIBLE

(NO MORE THAN 21 CALENDAR DAYS AFTER FORMATION OF THE STOCKPILE.)

TABILIZE WITH PERMANENT VEGETATION.

IF STOCKPILE WILL NOT BE USED WITHIN 90 DAYS





TREE PROTECTION FENCE

DETAIL 0 CONTROL  $\mathbf{\Omega}$ EROSION

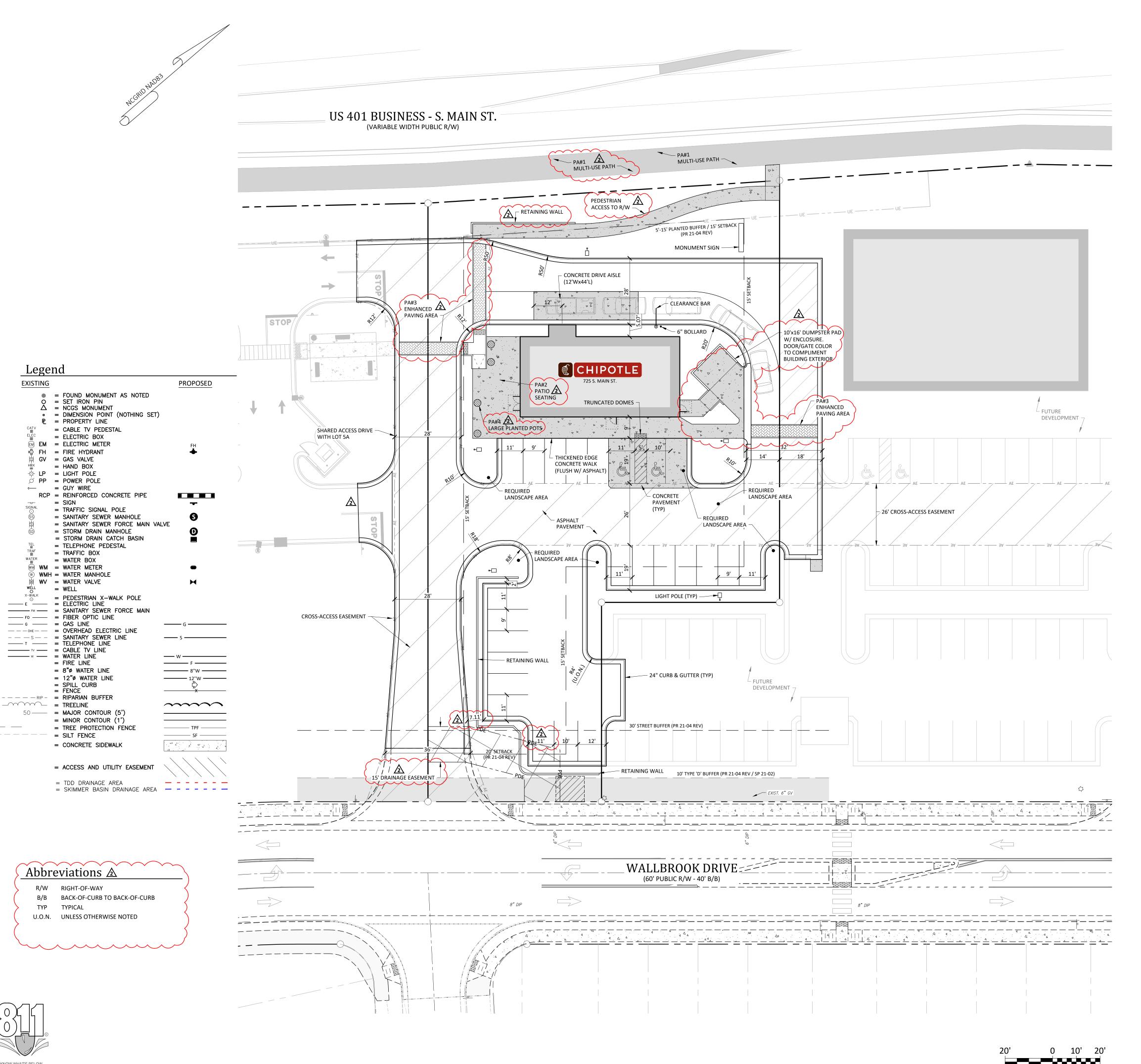
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CONSULTING GROUP, PLLC Project Manager: Drawn Bv

BCF Checked By: 24138 D-1592 Orawing Number:

July 1, 2025



### General Notes:

- 1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:
- ALTA/NSPS LAND TITLE SURVEY, PREPARED BY JOHNSON, MIRMIRAN & THOMPSON FOR WALLBROOK LANDCO, LLC, DATED REVISED OCTOBER 1, 2020
- "REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION ROLESVILLE SITE"
- PREPARED BY TERRATECH ENGINEERS, INC., DATED NOVEMBER 26, 2018 "REVISED WALLBROOK DEVELOPMENT TRAFFIC IMPACT ANALYSIS" PREPARED BY STANTEC CONSULTING SERVICES, INC., DATED AUGUST 11, 2020
- ALL ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE OR THE REQUIREMENTS OF THE JURISDICTION WHERE THIS PROJECT IS TO BE CONSTRUCTED.
- 3. THIS PROPERTY IS LOCATED IN FLOOD ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP (FIRM) 3720175800K, EFFECTIVE DATE: JULY 19,
- 4. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES. CONTRACTOR SHALL HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
- 5. THE OWNER / CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- 6. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE REQUIREMENTS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES HAVING JURISDICTION OVER THIS PROJECT.
- 7. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE PART OF THE REQUIRED CONSTRUCTION DOCUMENTS, AND, IN CASE OF CONFLICT, SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.
- 8. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO ARK CONSULTING GROUP, PLLC BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ARK CONSULTING GROUP, PLLC IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER ONSITE FEATURES.
- 9. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS AND GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO THE GIVING OF SUCH NOTIFICATION AND THE ENGINEER'S WRITTEN AUTHORIZATION OF SUCH ADDITIONAL WORK.
- 10. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL / BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY / EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
- 11. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE SITE PLAN AND LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER OF ANY DISCREPANCIES.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB & GUTTER. CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY SHALL RESTORE SUCH CONNECTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE EXISTING CONDITIONS, AND IN CONFORMANCE WITH APPLICABLE CODES. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
- 13. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, NOR IS THE ENGINEER RESPONSIBLE FOR ANY CONFLICTS OR SCOPE REVISIONS WHICH RESULT FROM THE SAME. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

### ▲ Pedestrian Amentiy Legend

PA #1 MULT-USE PATH / GREENWAY 148 LF MUP/GREENWAY MAIN ST PROJECT

PA #3 ENHANCED PAVING AREA **DECORATIVE STAMPED ASPHALT PAVING.** SEE DETAIL SHEET C6.1

PA #2 PATIO SEATING

PA #4 LARGE PLANTED POTS SEE DETAIL SHEET C6.1

Parking Requirements: 🛆

PARKING REQUIRED: EATING ESTABLISHMENT

SCALE 1 inch = 20 ft

(OUTDOOR SEATING SHALL BE INCLUDED IN SQUARE FOOTAGE) MINIMUM: 2.5 / 1000 SF = 3010 / 1000 \* 2.5 8 SPACES

30 SPACES MAXIMUM: 10 / 1000 SF = 3010 / 1000 \* 7.5 **TOTAL REQUIRED PARKING:** 8 SPACES

PARKING PROVIDED:

**REQUIRED HANDICAP PARKING:** 

24 SPACES (INCL. 2 H/C)

1 SPACE

5 0 0

**REVISIONS:** 

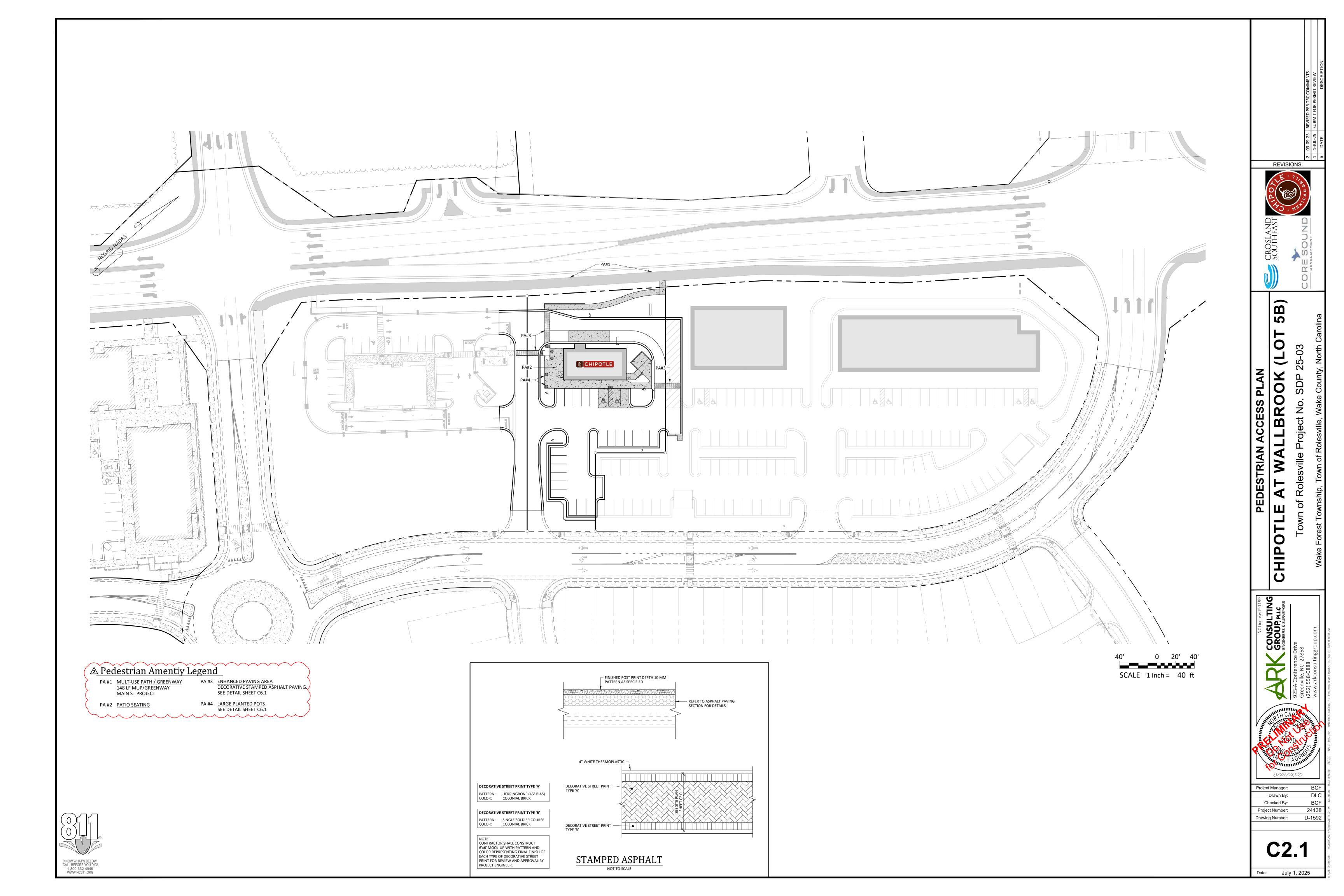
CROSLAND Southeast

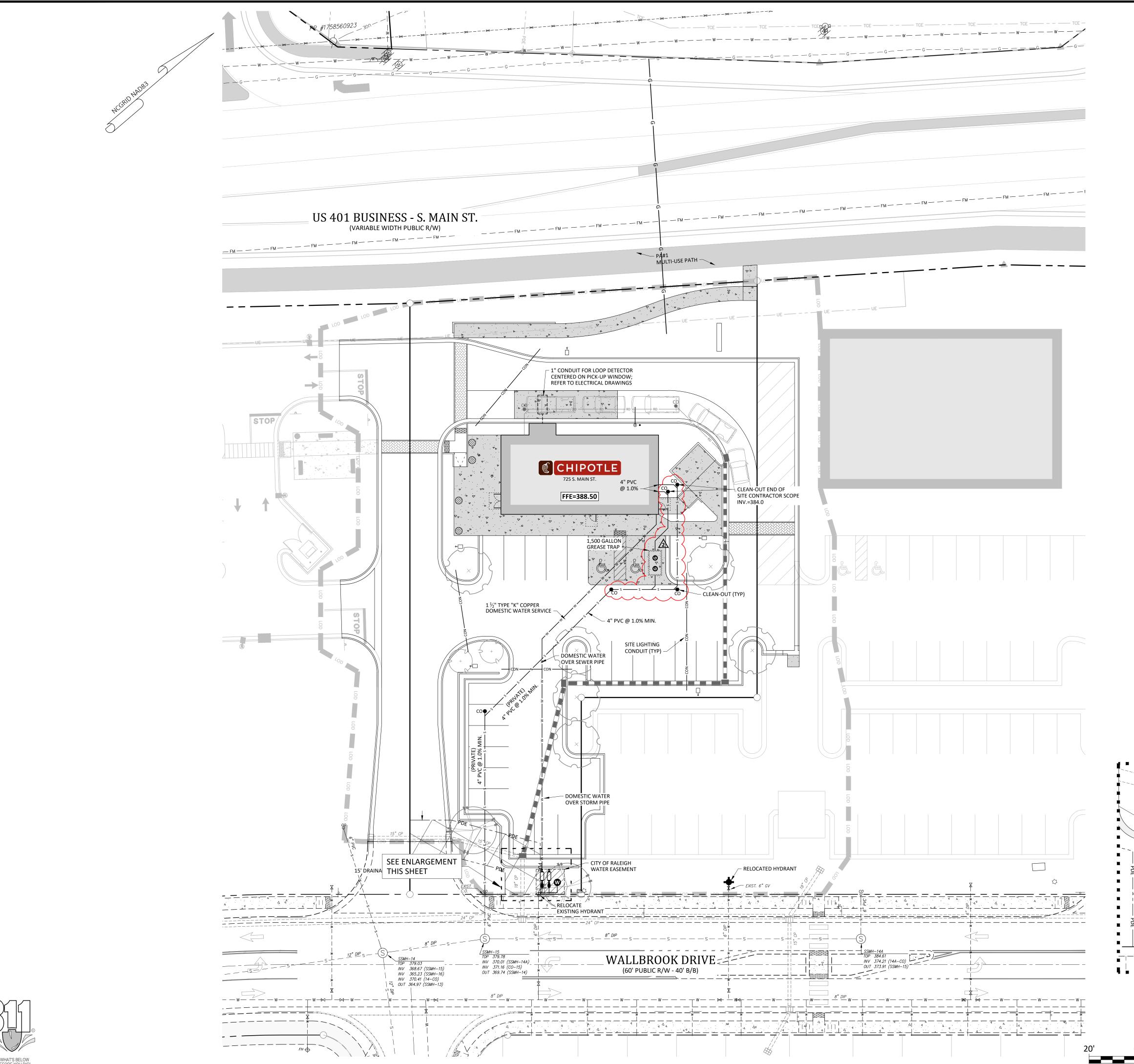
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GROUP, PLLC



Project Manager: Drawn Bv: Checked By: 24138 Project Number: D-1592 Drawing Number:





CORPUD Standard Utility Notes:

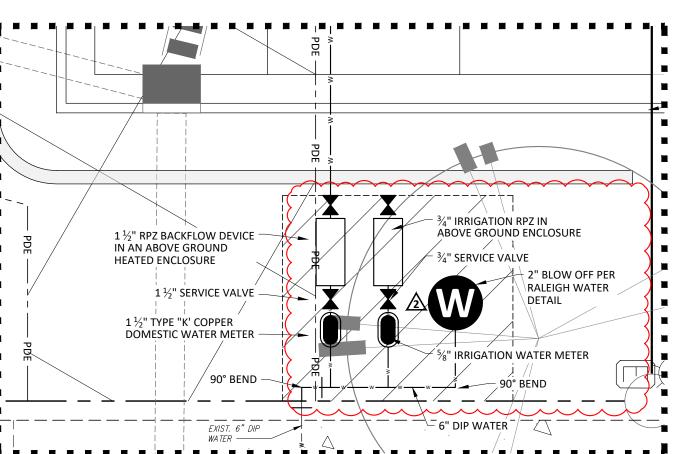
- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
- 2. UTILITY SEPARATION REQUIREMENTS:
  - a. A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
  - b. WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
  - c. WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
  - d. 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER
  - e. MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORMDRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W- 41 & S-49).
  - f. ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- 3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- 4. DEVELOPER SHALL PROVIDE 30 DAYS ADVANCE WRITTEN NOTICE TO OWNER FOR ANY WORK REQUIRED WITHIN AN EXISTING CITY OF RALEIGH UTILITY EASEMENT TRAVERSING PRIVATE PROPERTY
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24-HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- 6. SEWER BYPASS PUMPING A BYPASS PLAN SEALED BY AN NC PROFESSIONAL ENGINEER SHALL BE PROVIDED TO RALEIGH WATER PRIOR TO PUMPING OPERATIONS FOR APPROVAL. THE OPERATIONS AND EQUIPMENT SHALL COMPLY WITH THE PUBLIC UTILITIES HANDBOOK.
- 7. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
- 8. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- 9. INSTALL WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE.
- 10. INSPECTIONS OF 4" AND LARGER WATER MAINS OF THE PRIVATE DISTRIBUTION SYSTEM WILL BE INSPECTED AS PART OF THE INFRASTRUCTURE PERMIT.
- 11. PRIVATE SEWER MAINS AS PART OF A COLLECTION SYSTEM ARE PERMITTED AND INSPECTED UNDER THE PRIVATE INFRASTRUCTURE PERMIT FOR SEWER.
- 12. ANY WATER OR SEWER SERVICES ON PRIVATE PROPERTY THAT WILL BE INSTALLED UNDER CONSTRUCTION DRAWINGS MAY REQUIRE A PLUMBING UTILITY PERMIT IN THE CITY OF RALEIGH. CONSULT WITH THE ENGINEERING INSPECTION COORDINATOR DURING THE PRE-CONSTRUCTION MEETING ON THE NECESSARY PERMITS.
- 13. INSTALL SEWER SERVICES WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED PER THE CURRENT NC PLUMBING CODE.
- 14. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI;
  BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS
  LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
- 15. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- 16. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
- 17. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE RW FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A UC AND/OR BUILDING PERMIT. CONTACT (919) 996-4516 OR FOG@RALEIGHNC.GOV FOR MORE INFORMATION.
- 18. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON THE DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA
- 19. THE DEVICES SHALL MEET THE AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS
- AND BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST.

  20. THE DEVICE AND INSTALLATION SHALL MEET THE GUIDELINES OF APPENDIX A GUIDELINES AND
- REQUIREMENTS FOR THE CROSS CONNECTION PROGRAM IN RALEIGH'S SERVICE AREA.

  11. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH, INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT
- CROSS.CONNECTION@RALEIGHNC.GOV FOR MORE INFORMATION.

  22. NOTICE FOR PROJECTS THAT INVOLVE AN OVERSIZED MAIN OR URBAN MAIN REPLACEMENT. ANY CITY REIMBURSEMENT GREATER THAN \$250,000.00 MUST UNDERGO THE PUBLIC BIDDING
- PROCESS.

  23. PRIVATE SUB-METERING NO RESALE OF WATER SHALL OCCUR WITHOUT APPROVAL OF THE NORTH CAROLINA UTILITY COMMISSION. SUB-METERING SHALL BE IN ACCORDANCE WITH



SECTION 1400 OF THE "SAFE DRINKING WATER ACT".

WATER METER ENLARGEMENT

SCALE: 1" = 5'

20' 0 10' 20' SCALE 1 inch = 20 ft OTILITY PLAN
OTLE AT WALLBRO

**REVISIONS:** 

CROSLAND SOUTHEAST

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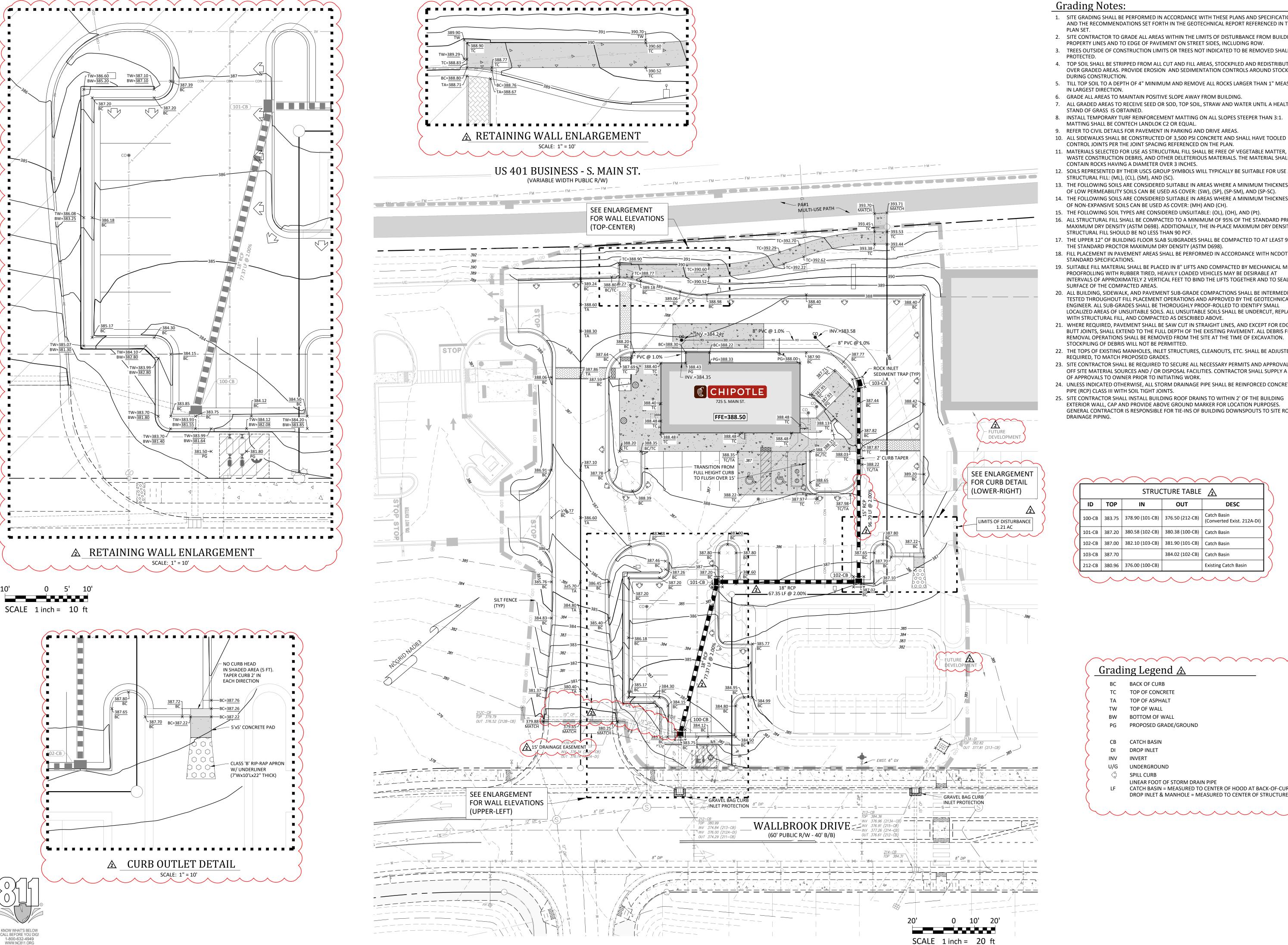
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Project Manager: BCF
Drawn By: DLC
Checked By: BCF
Project Number: 24138
Drawing Number: D-1592

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Date: July 1, 202



- 1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS
- 2. SITE CONTRACTOR TO GRADE ALL AREAS WITHIN THE LIMITS OF DISTURBANCE FROM BUILDING TO
- PROPERTY LINES AND TO EDGE OF PAVEMENT ON STREET SIDES, INCLUDING ROW. 3. TREES OUTSIDE OF CONSTRUCTION LIMITS OR TREES NOT INDICATED TO BE REMOVED SHALL BE
- 4. TOP SOIL SHALL BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER GRADED AREAS. PROVIDE EROSION AND SEDIMENTATION CONTROLS AROUND STOCKPILES
- 5. TILL TOP SOIL TO A DEPTH OF 4" MINIMUM AND REMOVE ALL ROCKS LARGER THAN 1" MEASURED
- 6. GRADE ALL AREAS TO MAINTAIN POSITIVE SLOPE AWAY FROM BUILDING.
- 7. ALL GRADED AREAS TO RECEIVE SEED OR SOD, TOP SOIL, STRAW AND WATER UNTIL A HEALTHY
- 8. INSTALL TEMPORARY TURF REINFORCEMENT MATTING ON ALL SLOPES STEEPER THAN 3:1.
- MATTING SHALL BE CONTECH LANDLOK C2 OR EQUAL.
- 9. REFER TO CIVIL DETAILS FOR PAVEMENT IN PARKING AND DRIVE AREAS.
- 10. ALL SIDEWALKS SHALL BE CONSTRUCTED OF 3,500 PSI CONCRETE AND SHALL HAVE TOOLED
- WASTE CONSTRUCTION DEBRIS, AND OTHER DELETERIOUS MATERIALS. THE MATERIAL SHALL NOT CONTAIN ROCKS HAVING A DIAMETER OVER 3 INCHES.
- 12. SOILS REPRESENTED BY THEIR USCS GROUP SYMBOLS WILL TYPICALLY BE SUITABLE FOR USE AS STRUCTURAL FILL: (ML), (CL), (SM), AND (SC).
- 13. THE FOLLOWING SOILS ARE CONSIDERED SUITABLE IN AREAS WHERE A MINIMUM THICKNESS OF 3'
- OF LOW PERMEABILITY SOILS CAN BE USED AS COVER: (SW), (SP), (SP-SM), AND (SP-SC). 14. THE FOLLOWING SOILS ARE CONSIDERED SUITABLE IN AREAS WHERE A MINIMUM THICKNESS OF 3'
- OF NON-EXPANSIVE SOILS CAN BE USED AS COVER: (MH) AND (CH).
- 15. THE FOLLOWING SOIL TYPES ARE CONSIDERED UNSUITABLE: (OL), (OH), AND (Pt). 16. ALL STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR
- MAXIMUM DRY DENSITY (ASTM D698). ADDITIONALLY, THE IN-PLACE MAXIMUM DRY DENSITY OF STRUCTURAL FILL SHOULD BE NO LESS THAN 90 PCF.
- 17. THE UPPER 12" OF BUILDING FLOOR SLAB SUBGRADES SHALL BE COMPACTED TO AT LEAST 98% OF
- 18. FILL PLACEMENT IN PAVEMENT AREAS SHALL BE PERFORMED IN ACCORDANCE WITH NCDOT
- 19. SUITABLE FILL MATERIAL SHALL BE PLACED IN 8" LIFTS AND COMPACTED BY MECHANICAL MEANS. PROOFROLLING WITH RUBBER TIRED. HEAVILY LOADED VEHICLES MAY BE DESIRABLE AT INTERVALS OF APPROXIMATELY 2 VERTICAL FEET TO BIND THE LIFTS TOGETHER AND TO SEAL THE
- 20. ALL BUILDING, SIDEWALK, AND PAVEMENT SUB-GRADE COMPACTIONS SHALL BE INTERMEDIATELY TESTED THROUGHOUT FILL PLACEMENT OPERATIONS AND APPROVED BY THE GEOTECHNICAL ENGINEER. ALL SUB-GRADES SHALL BE THOROUGHLY PROOF-ROLLED TO IDENTIFY SMALL LOCALIZED AREAS OF UNSUITABLE SOILS. ALL UNSUITABLE SOILS SHALL BE UNDERCUT, REPLACED WITH STRUCTURAL FILL, AND COMPACTED AS DESCRIBED ABOVE.
- 21. WHERE REQUIRED, PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, SHALL EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION.
- 22. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, CLEANOUTS, ETC. SHALL BE ADJUSTED, AS
- 23. SITE CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR OFF SITE MATERIAL SOURCES AND / OR DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO OWNER PRIOR TO INITIATING WORK.
- 24. UNLESS INDICATED OTHERWISE, ALL STORM DRAINAGE PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SOIL TIGHT JOINTS.
- 25. SITE CONTRACTOR SHALL INSTALL BUILDING ROOF DRAINS TO WITHIN 2' OF THE BUILDING EXTERIOR WALL, CAP AND PROVIDE ABOVE GROUND MARKER FOR LOCATION PURPOSES. GENERAL CONTRACTOR IS RESPONSIBLE FOR TIE-INS OF BUILDING DOWNSPOUTS TO SITE ROOF

STRUCTURE TABLE 🛕				
ID	ТОР	IN	OUT	DESC
100-CB	383.75	378.90 (101-CB)	376.50 (212-CB)	Catch Basin (Converted Exist. 212A-DI)
101-CB	387.20	380.58 (102-CB)	380.38 (100-CB)	Catch Basin
102-CB	387.00	382.10 (103-CB)	381.90 (101-CB)	Catch Basin
103-CB	387.70		384.02 (102-CB)	Catch Basin
212-CB	380.96	376.00 (100-CB)		Existing Catch Basin

### Grading Legend 🛕

- BACK OF CURB
- TOP OF CONCRETE
- BOTTOM OF WALL
- PROPOSED GRADE/GROUND

- UNDERGROUND
- SPILL CURB
- LINEAR FOOT OF STORM DRAIN PIPE CATCH BASIN = MEASURED TO CENTER OF HOOD AT BACK-OF-CURB



CONSULTING GROUP, PLLC

**REVISIONS:** 

CROSLAND SOUTHEAST

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