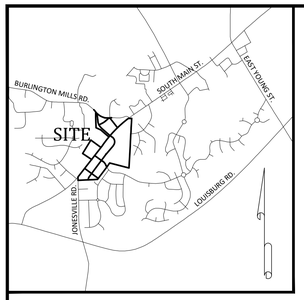
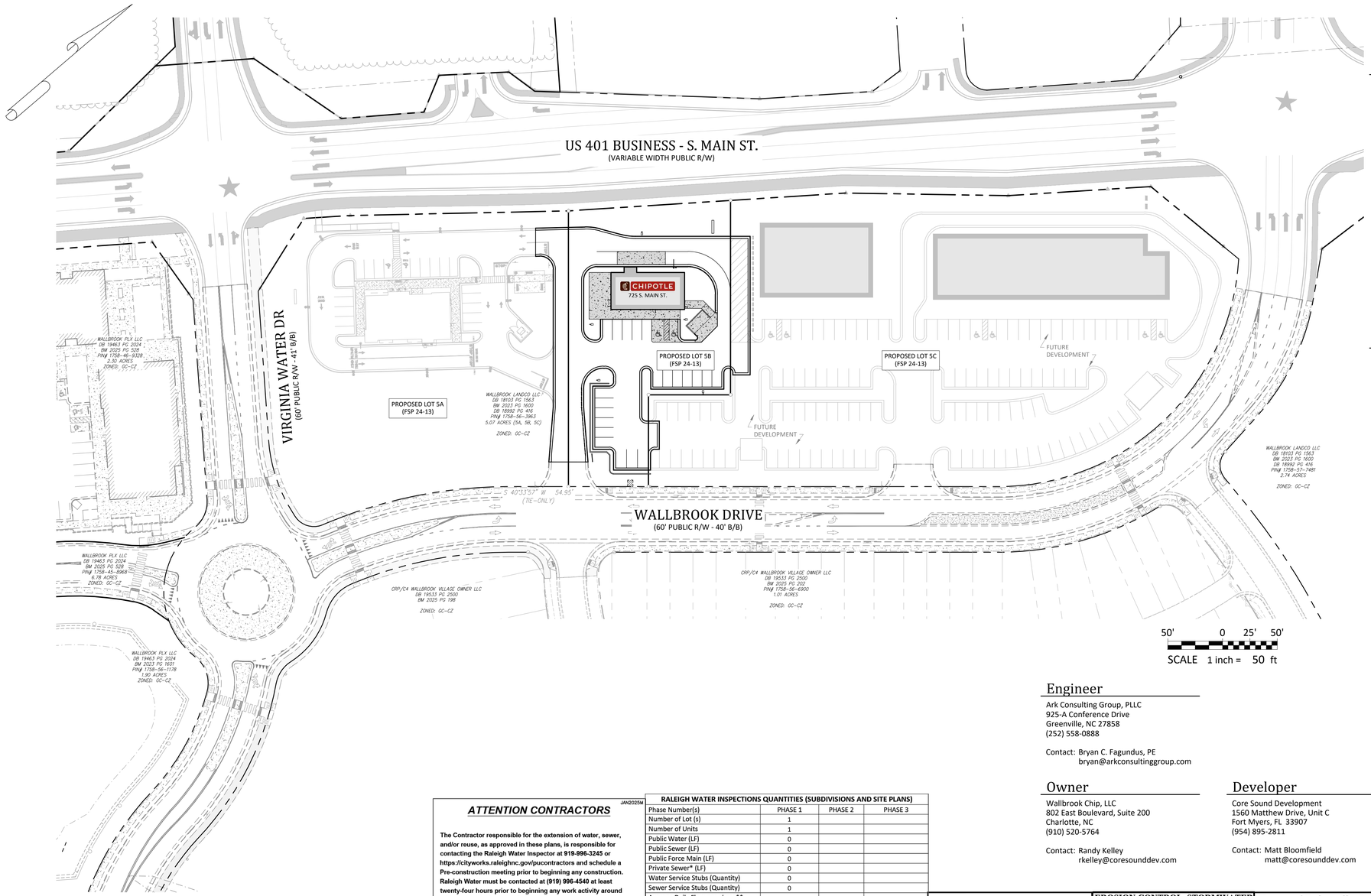
CHIPOTLE AT WALLBROOK

SITE DEVELOPMENT PLAN - SDP 25-03

US-401 BUS / S. Main Street ~ Wake Forest Township ~ Town of Rolesville ~ Wake County ~ North Carolina



Vicinity Map



Site Data

WAKE COUNTY PIN:	1758-56-3963
REAL ESTATE ID:	509435
CURRENT ZONING:	GC-CZ
TOTAL ACREAGE IN SITE:	0.73 AC (LOT 5B)
TOTAL ACREAGE IN PROJECT LIMITS:	0.95 AC
DISTURBED ACREAGE:	0.95 AC
WATERSHED:	Lower Neuse
RIVER BASIN:	Neuse
CURRENT USE:	VACANT / WOODED
PROPOSED USE:	NON-RESIDENTIAL / RESTAURANT
REQUIRED BUILDING SETBACKS:	35' (REAR), 25' (CORNER), 20' (FRONT), 15' (SIDE)
BUILDING FLOOR AREA:	2,333 SF
BUILDING LOT COVERAGE:	0% EXIST., 7.35% PROPOSED
BUILDING HEIGHT:	20'-8" (1 STORY)
TOTAL NUMBER OF PARKING SPACES REQUIRED:	8 SPACES (INCL. 1 H/C)
TOTAL NUMBER OF PROPOSED PARKING SPACES:	23 SPACES (INCL. 2 H/C)
TOTAL SQ. FEET OF EXIST. IMPERVIOUS AREA:	0 SF
TOTAL SQ. FEET OF PROP. IMPERVIOUS AREA:	23,024 SF (72.53% - LOT 5B)
DEVELOPMENT STANDARDS:	LDO
REFERENCES:	DB 18103, PG 1563 BM 2023, PG 1602
ADDRESS:	725 S. MAIN STREET

Parking Requirements:

PARKING REQUIRED:	EATING ESTABLISHMENT (OUTDOOR SEATING SHALL BE INCLUDED IN SQUARE FOOTAGE)	
	MINIMUM: 2.5 / 1000 SF = 3010 / 1000 * 2.5	8 SPACES
	MAXIMUM: 10 / 1000 SF = 3010 / 1000 * 7.5	30 SPACES
	TOTAL REQUIRED PARKING:	8 SPACES
	REQUIRED HANDICAP PARKING:	1 SPACE
	PARKING PROVIDED:	23 SPACES (INCL. 2 H/C)

Sheet Index

Engineer

Ark Consulting Group, PLLC
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888

Contact: Bryan C. Fagundus, PE
bryan@arkconsultinggroup.com

Owner

Wallbrook Chip, LLC
802 East Boulevard, Suite 200
Charlotte, NC
(910) 520-5764

Contact: Randy Kelley
rkelley@coresounddev.com

Developer

Core Sound Development
1560 Matthew Drive, Unit C
Fort Myers, FL 33907
(954) 895-2811

Contact: Matt Bloomfield
matt@coresounddev.com

ATTENTION CONTRACTORS

JAN2025W

The Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Raleigh Water Inspector at 919-996-3245 or https://cityworks.raleighnc.gov/pucontractors and schedule a Pre-construction meeting prior to beginning any construction. Raleigh Water must be contacted at (919) 996-4540 at least twenty-four hours prior to beginning any work activity around critical water and sewer infrastructure.

Failure to notify City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require re-installation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for inspection, install a downstream plug, have permitted plans on the jobsite, or any other violation of Raleigh Water Standards will result in a fine and possible exclusion from future work in the City of Raleigh.

RALEIGH WATER INSPECTIONS QUANTITIES (SUBDIVISIONS AND SITE PLANS)

Phase Number(s)	PHASE 1	PHASE 2	PHASE 3
Number of Lot (s)	1		
Number of Units	1		
Public Water (LF)	0		
Public Sewer (LF)	0		
Public Force Main (LF)	0		
Private Sewer* (LF)	0		
Water Service Stubs (Quantity)	0		
Sewer Service Stubs (Quantity)	0		
Average Daily Flow per phase**	----		
COMMERCIAL PROJECTS WITH SINGLE WATER AND SEWER SERVICE			
Fire Service (Size)	N/A		
Domestic Meter Size	1-1/2"		
Irrigation Meter Size	3/4"		
Average Daily Flow per phase**	____ GPD		

*Sewer mains and manholes as part of a collection system
**Entire Project Flow. Based on 75gpd per bedroom for residential (Apartments, single Family dwelling, townhouse, condos), or based on 15A NCAC 02T .0114 Wastewater Design Flow Rates for Commercial and Industrial.
The meter size must match domestic service size (Exemption - 3/4" service tap with 5/8" meter)

RALEIGH WATER

EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT

APPROVED

EROSION CONTROL ☐ S-_____
STORMWATER MGMT. ☐ S-_____
FLOOD STUDY ☐ S-_____
DATE_____

ENVIRONMENTAL CONSULTANT SIGNATURE

Town of Rolesville Development Applications

SUP 20-02	SPECIAL USE PERMIT
ANX 21-06	ANNEXATION
PR 21-04 REV	PRELIMINARY SUBDIVISION PLAT (REVISED)
FSP 23-09	INTERMEDIATE SUBDIVISION PLAT
PSP 24-01	LOT 5 PRELIMINARY SUBDIVISION PLAT
FSP 24-13	LOT 5 FINAL SUBDIVISION PLAT
SDP 25-03	LOT 5B SITE DEVELOPMENT PLAN (CURRENT APPLICATION)

KNOW WHAT'S BELOW
CALL BEFORE YOU DIG!
1-800-632-4949
WWW.NC811.ORG

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR PERMIT REVIEW

REVISIONS:

COVER

CHIPOTLE AT WALLBROOK (LOT 5B)
Town of Rolesville Project No. SDP 25-03
Wake Forest Township, Town of Rolesville, Wake County, North Carolina

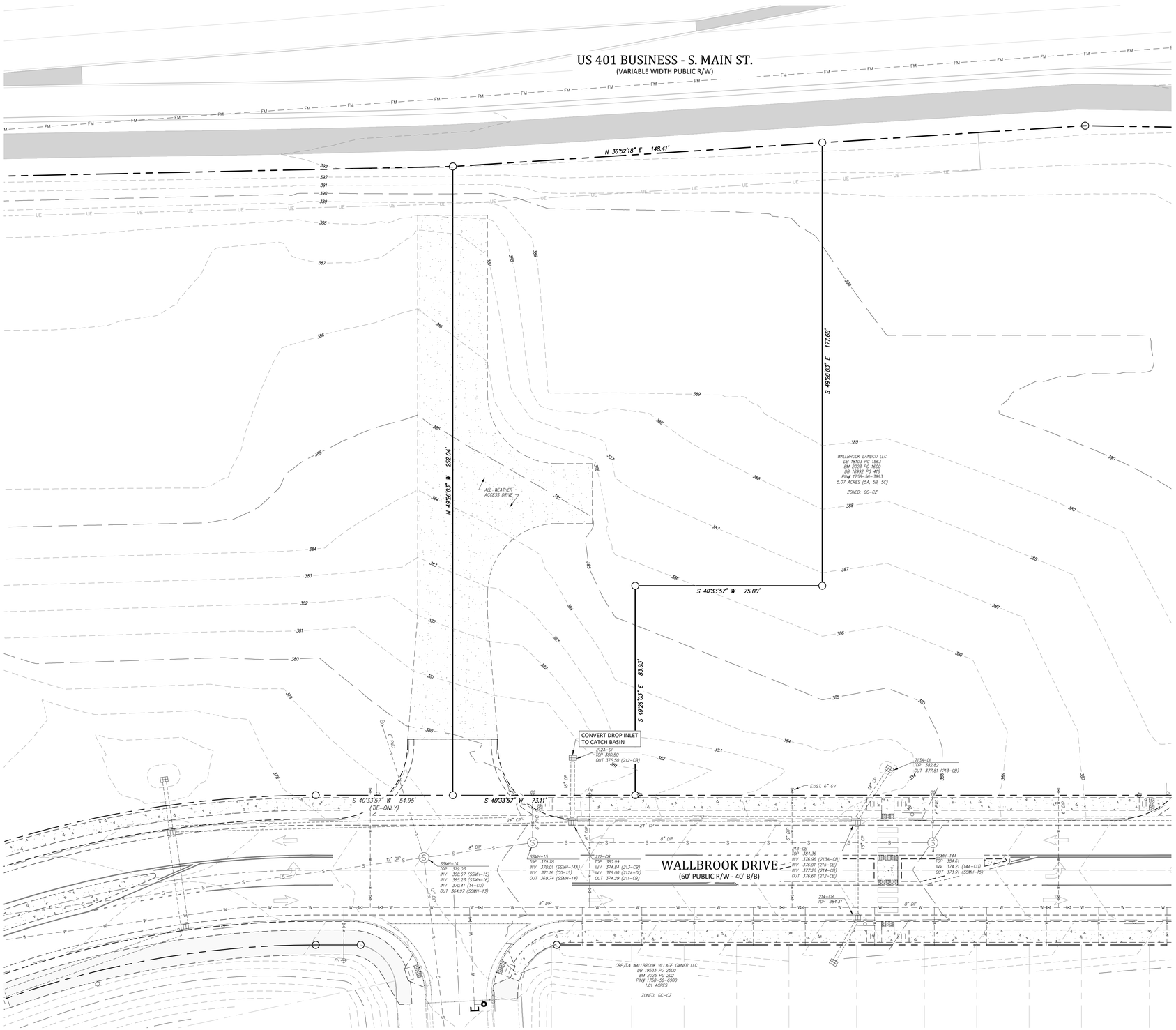
NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

PRELIMINARY
Do Not Use for Construction
7/1/2025

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

C0.1

Date: July 1, 2025



Demolition Notes:

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.
3. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER 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 THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
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 AUTHORITIES.
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 AT NO ADDITIONAL COST TO THE OWNER.
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.

KNOW WHAT'S BELOW
CALL BEFORE YOU DIG!
1-800-632-4949
WWW.NC811.ORG

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR PERMIT REVIEW

REVISIONS:

EXISTING CONDITIONS & DEMOLITION PLAN

CHIPOTLE AT WALLBROOK (LOT 5B)

Town of Rolesville Project No. SDP 25-03

Wake Forest Township, Town of Rolesville, Wake County, North Carolina

NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

PRELIMINARY
Do Not Use
for Construction
7/1/2025

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

C0.2

Date: July 1, 2025

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site 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	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary 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
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • 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

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

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. 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.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. 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.

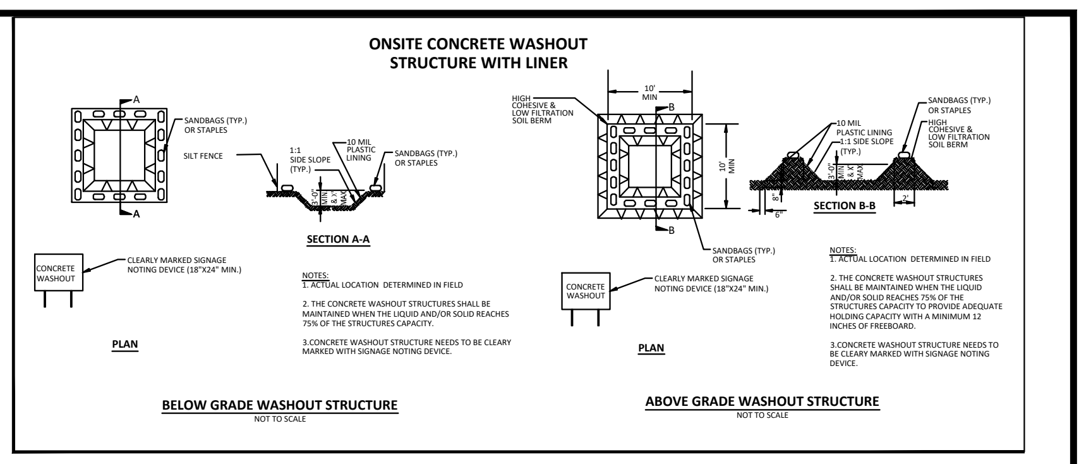
PORTABLE TOILETS

1. 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.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. 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

1. 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 available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. 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 WASHOUT STRUCTURE WITH LINER



NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

CONCRETE WASHOUTS

1. 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.
3. 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.
4. Install temporary concrete washouts per local requirements, where applicable. If an 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.
5. 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.
6. 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.
7. 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.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. 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.
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

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. 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.
3. 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.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

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.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. 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	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. 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	1. 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). 2. 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.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

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.

2. Additional Documentation

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 III
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:
- 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 environment.

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.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	· ***Within 24 hours***, an oral or electronic notification. · ***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. · 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.
(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(l)(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 noncompliance. [40 CFR 122.41(l)(6). · Division staff may waive the requirement for a written report on a case-by-case basis.

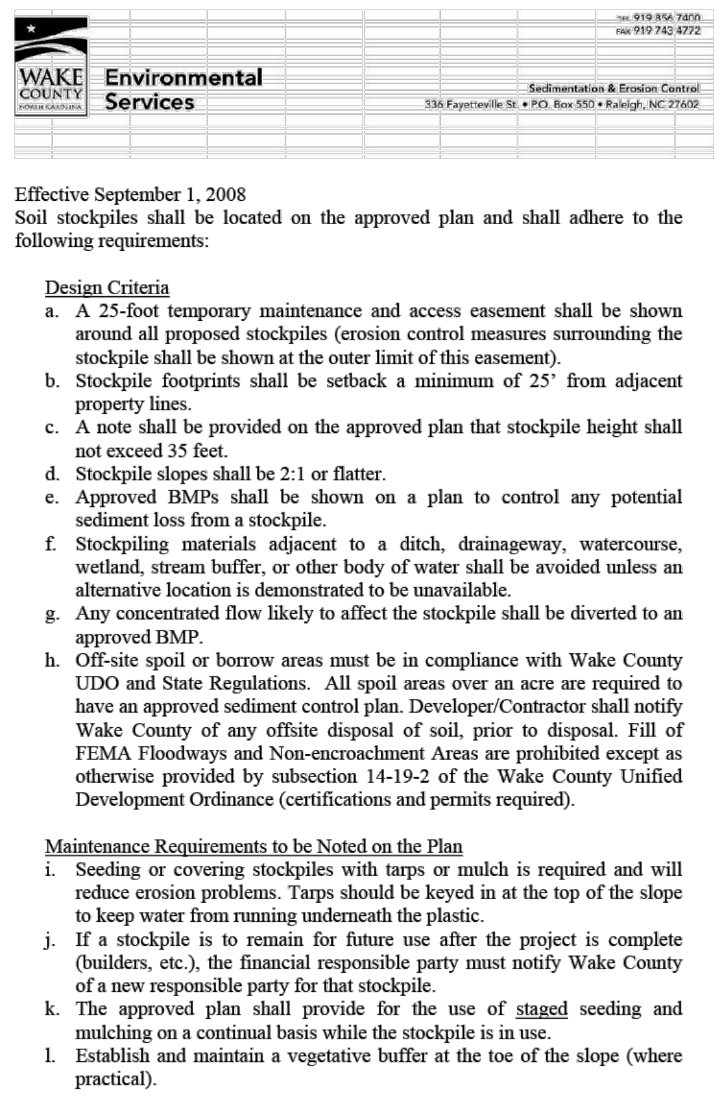
PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

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
(f) 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.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19



WAKE COUNTY
Environmental Services
TEL 919 856 7400
FAX 919 743 4772
Sedimentation & Erosion Control
336 Fayetteville St • P.O. Box 550 • Raleigh, NC 27602

Effective September 1, 2008
Soil stockpiles shall be located on the approved plan and shall adhere to the following requirements:

Design Criteria
a. A 25-foot temporary maintenance and access easement shall be shown around all proposed stockpiles (erosion control measures surrounding the stockpile shall be shown at the outer limit of this easement).
b. Stockpile footprints shall be setback a minimum of 25' from adjacent property lines.
c. A note shall be provided on the approved plan that stockpile height shall not exceed 35 feet.
d. Stockpile slopes shall be 2:1 or flatter.
e. Approved BMPs shall be shown on a plan to control any potential sediment loss from a stockpile.
f. Stockpiling materials adjacent to a ditch, drainageway, watercourse, wetland, stream buffer, or other body of water shall be avoided unless an alternative location is demonstrated to be unavailable.
g. Any concentrated flow likely to affect the stockpile shall be diverted to an approved BMP.
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 Development Ordinance (certifications and permits required).

Maintenance Requirements to be Noted on the Plan
i. 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 to keep water from running underneath the plastic.
j. If a stockpile is to remain for future use after the project is complete (builders, etc.), the financial responsible party must notify Wake County of a new responsible party for that stockpile.
k. The approved plan shall provide for the use of staged seeding and mulching on a continual basis while the stockpile is in use.
l. Establish and maintain a vegetative buffer at the toe of the slope (where practical).

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.
2. 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 NPDES MONITORING DOCUMENTATION
3. 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.
5. INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
6. 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:

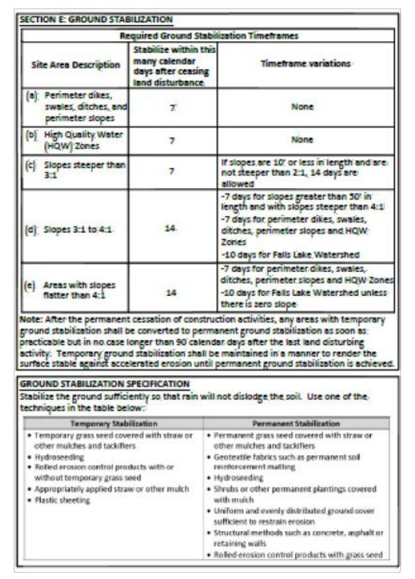
1. NO PERSON MAY INITIATE A LAND DISTURBING ACTIVITY BEFORE NOTIFYING WAKE COUNTY WATERSHED MANAGEMENT OF THE DATE THAT THE LAND DISTURBING ACTIVITY WILL BEGIN.
2. LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL APPROPRIATE EROSION CONTROL MAY NOT PROCEED UNTIL EROSION CONTROL MEASURES ARE INSPECTED 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 NOTICE IS REQUIRED.
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 (919) 791-4200.
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 LAND DISTURBING ACTIVITIES OCCUR.
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.
3. 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 CONSTRUCTION.
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 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 A WET POND SHALL BE REMOVED AS FOLLOWS: DEWATER (THROUGH SILT BAG), CLEAN SEDIMENT, AND REMOVE BAFFLES. RE-SHAPE THE BASIN AS REQUIRED BY THE DESIGN DRAWINGS, INCLUDING 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 INSPECTION.
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 BE INSTALLED NOW.
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)
NCDEQ/Division of Energy, Mineral and Land Resources



SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site 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	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary 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 Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

Seedbed Preparation:

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 reasonably smooth and uniform.
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.
6. Seed on a freshly prepared seedbed and cover seed lightly with seeding equipment or cultipack after seeding.
7. Mulch immediately after seeding and anchor mulch.
8. Inspect all seeded areas and make necessary repairs or reseedings within the planting season, if possible. If stand should be more than 60% damaged, re-establish following the original lime, fertilizer and seeding rates.
9. Consult Wake County Soil & Water or NC State Cooperative Extension on maintenance treatment and fertilization after permanent cover is established.

Mixture

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

Seeding Schedule
For Shoulders, Side Ditches, Slopes (Max 3:1):

Date	Type	Planting Rate
Aug 15–Nov 1	Tall Fescue	300 lbs/acre
Nov 1–Mar 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1–Apr 15	Tall Fescue	300 lbs/acre
Apr 15–Jun 30	Hulled Common Bermudagrass	25 lbs/acre
Jul 1–Aug 15	Tall Fescue AND Browntop Millet or Sorghum-Sudan Hybrids***	125 lbs/acre (Tall Fescue); 35 lbs/acre (Browntop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)

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

Date	Type	Planting Rate
Mar 1–Jun 1	Sericea Lespedeza (scarified) and use the following combinations:	50 lbs/acre (Sericea Lespedeza);
Mar 1–Apr 15	Add Tall Fescue	120 lbs/acre
Mar 1–Jun 30	Or add Weeping Love grass	10 lbs/acre
Mar 1–Jun 30	Or add Hulled Common Bermudagrass	25 lbs/acre
Jun 1–Sept 1	Tall Fescue AND Browntop Mullet or Sorghum-Sudan Hybrids***	120 lbs/acre (Tall Fescue); 35 lbs/acre (Browntop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)
Sept 1–Mar 1	Sericea Lespedeza (unhulled – unscarified) AND Tall Fescue	70 lbs/acre (Sericea Lespedeza); 120 lbs/acre (Tall Fescue)
Nov 1–Mar 1	AND Abruzzi Rye	25 lbs/acre

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 are possible.

*** 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 may be shaded out.

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR PERMIT REVIEW

REVISIONS:

EROSION CONTROL - NOTES

CHIPOTLE AT WALLBROOK (LOT 5B)

Town of Rolesville Project No. SDP 25-03

Wake Forest Township, Town of Rolesville, Wake County, North Carolina

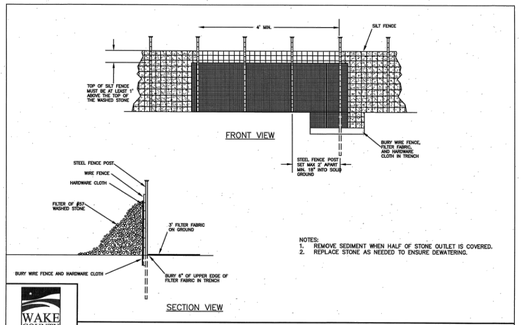
ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS
NC License: P-1199
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

PRELIMINARY
Do Not Use for Construction
7/1/2025

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

C1.0

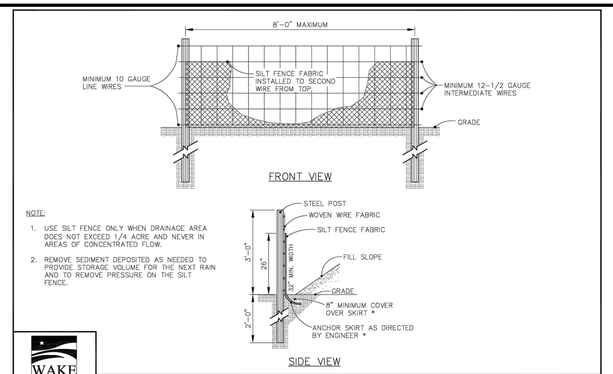
Date: July 1, 2025



NOTES:
1. REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED.
2. REPLACE STONE AS NEEDED TO ENSURE DEWATERING.

WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

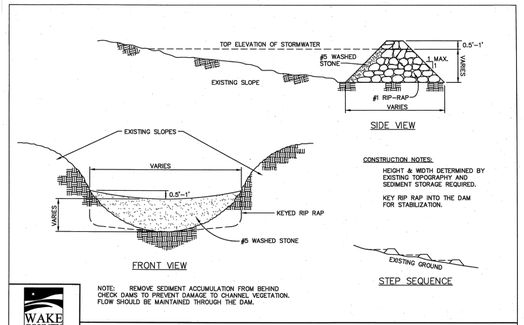
STANDARD SILT FENCE OUTLET



NOTE:
1. USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW.
2. REMOVE SEDIMENT DEPOSITED AS NEEDED TO PROVIDE STORAGE VOLUME FOR THE NEXT RAIN AND TO REMOVE PRESSURE ON THE SILT FENCE.

WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

STANDARD TEMPORARY SILT FENCE

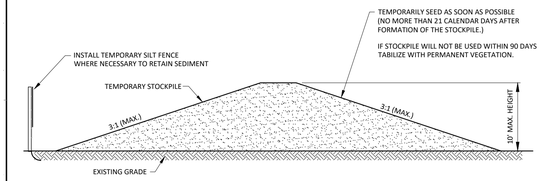


CONSTRUCTION NOTES:
HEIGHT & WIDTH DETERMINED BY EXISTING TOPOGRAPHY AND SEDIMENT STORAGE REQUIRED.
KEY RIP RAP INTO THE DAM FOR STABILIZATION.

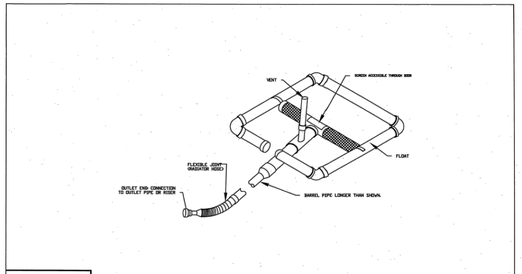
NOTE: REMOVE SEDIMENT ACCUMULATION FROM BEHIND CHECK DAMS TO PREVENT DAMAGE TO CHANNEL VEGETATION. FLOW SHOULD BE MAINTAINED THROUGH THE DAM.

WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

STANDARD CHECK DAM

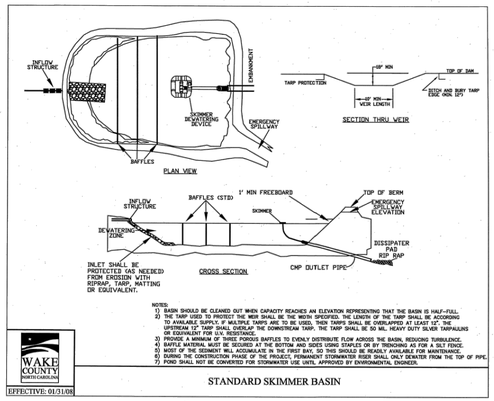


TEMPORARY STOCKPILE
NOT TO SCALE



WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

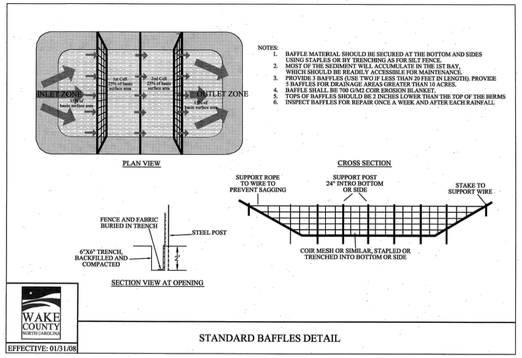
STANDARD SKIMMER DETAIL



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 TARP SHALL BE OF SUFFICIENT WEIGHT TO KEEP THE DOWNSTREAM TARP. THE TARP SHALL BE 30 MIL. HEAVY DUTY SILVER TARPAULINS OR EQUIVALENT FOR U.V. RESISTANCE.
3) PROVIDE A MINIMUM OF THREE POROUS 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 READILY AVAILABLE FOR MAINTENANCE.
6) DURING THE CONSTRUCTION PHASE OF THE PROJECT, PERMANENT STORMWATER RISER SHALL ONLY DEWATER FROM THE TOP OF PIPE.
7) FUND SHALL NOT BE CONVERTED FOR STORMWATER USE UNTIL APPROVED BY ENVIROMENTAL ENGINEER.

WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

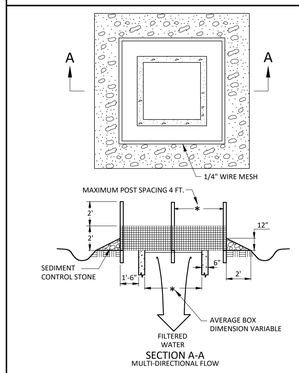
STANDARD SKIMMER BASIN



NOTES:
1. BAFFLE MATERIAL SHOULD BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR SILT FENCE.
2. MOST OF THE SEDIMENT WILL ACCUMULATE IN THE 1ST BAY, WHICH SHOULD BE READILY ACCESSIBLE FOR MAINTENANCE.
3. PROVIDE 3 BAFFLES (USE TWO IF LESS THAN 20 FEET IN LENGTH). PROVIDE 5 BAFFLES FOR DRAINAGE AREAS GREATER THAN 10 ACRES.
4. BAFFLE SHALL BE 700 G/M2 COIR EROSION BLANKET.
5. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERMS
6. INSPECT BAFFLES FOR REPAIR ONCE A WEEK AND AFTER EACH RAINFALL.

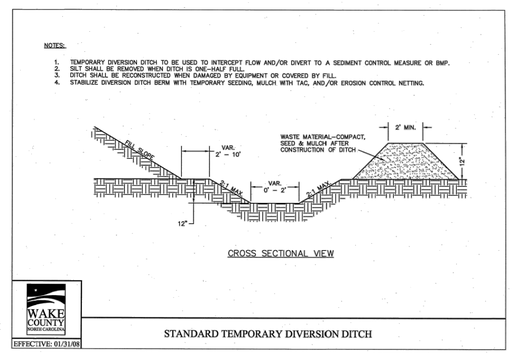
WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

STANDARD BAFFLES DETAIL



NOTES:
1. SEDIMENT CONTROL STONE SHALL BE NO. 5 OR NO. 57 AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON "SEDIMENT CONTROL STONE."
2. WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4 INCH MESH OPENINGS.TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
3. STEEL POST SHALL BE 5 FT. IN HEIGHT, BE INSTALLED 1.5 FT. DEEP MINIMUM, AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
4. WOOD POST SHALL BE 6 FT. IN HEIGHT, BE INSTALLED TO 1.5 FT. DEEP MINIMUM, AND BE 3 INCHES IN DIAMETER. POST SPACING SHALL BE A MAXIMUM OF 4 FT.
5. INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (½ INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

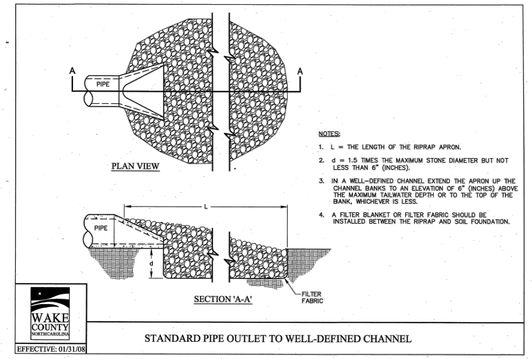
ROCK INLET SEDIMENT TRAP
NOT TO SCALE



NOTES:
1. TEMPORARY DIVERSION DITCH TO BE USED TO INTERCEPT FLOW AND/OR DIVERT TO A SEDIMENT CONTROL MEASURE OR BMP.
2. SILT SHALL BE REMOVED WHEN DITCH IS ONE-HALF FULL.
3. DITCH SHALL BE RECONSTRUCTED WHEN DAMAGED BY EQUIPMENT OR COVERED BY FILL.
4. STABILIZE DIVERSION DITCH BERM WITH TEMPORARY SEEDING, MULCH WITH TAC, AND/OR EROSION CONTROL NETTING.

WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

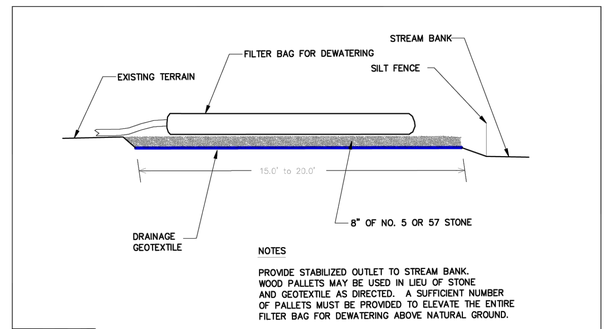
STANDARD TEMPORARY DIVERSION DITCH



NOTES:
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.

WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

STANDARD PIPE OUTLET TO WELL-DEFINED CHANNEL



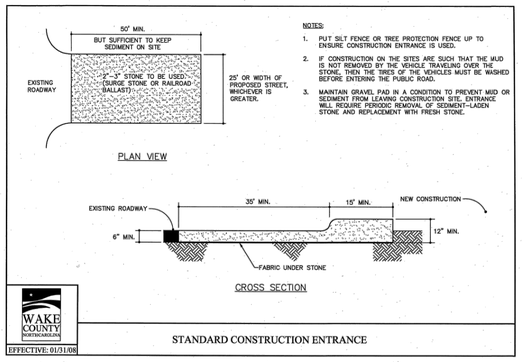
NOTES

PROVIDE STABILIZED OUTLET TO STREAM BANK. WOOD PALLETS MAY BE USED IN LIEU OF STONE AND GEOTEXTILE AS DIRECTED. A SUFFICIENT NUMBER OF PALLETS MUST BE PROVIDED TO ELEVATE THE ENTIRE FILTER BAG FOR DEWATERING ABOVE NATURAL GROUND.

NOT TO SCALE

WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

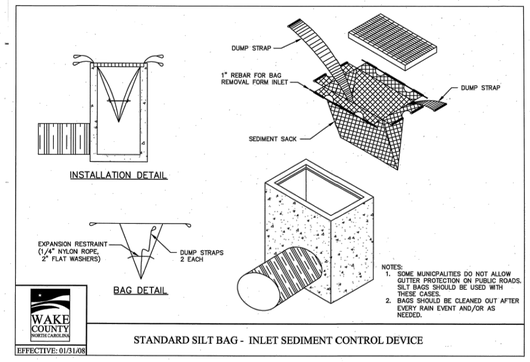
STANDARD FILTER BAG FOR DEWATERING ACTIVITIES



NOTES:
1. PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE CONSTRUCTION ENTRANCE IS USED.
2. IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT REMOVED BY THE VEHICLE TRAVELING OVER THE STONE, THEN THE TIRES OF THE VEHICLES MUST BE WASHED BEFORE ENTERING THE PUBLIC ROAD.
3. MAINTAIN GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING CONSTRUCTION SITE. ENTRANCE WILL REQUIRE PERIODIC REMOVAL OF SEDIMENT-LADEN STONE AND REPLACEMENT WITH FRESH STONE.

WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

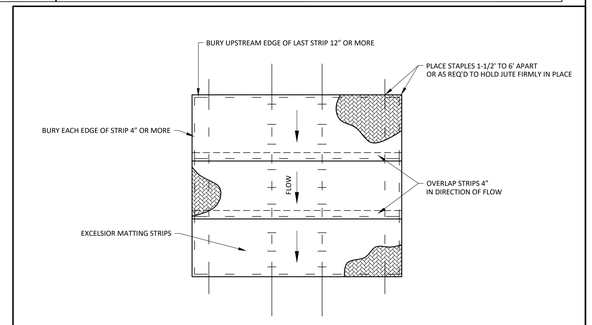
STANDARD CONSTRUCTION ENTRANCE



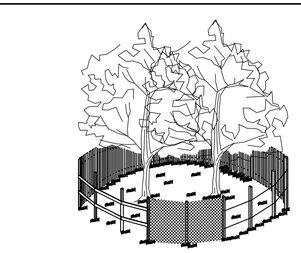
NOTES:
1. SOME MUNICPALITIES DO NOT ALLOW GUTTER PROTECTION ON PUBLIC ROADS. SILT BAGS SHOULD BE USED WITH THESE CASES.
2. BAGS SHOULD BE CLEANED OUT AFTER EVERY RAIN EVENT AND/OR AS NEEDED.

WAKE COUNTY NORTH CAROLINA
EFFECTIVE: 01/31/08

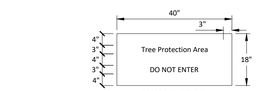
STANDARD SILT BAG - INLET SEDIMENT CONTROL DEVICE



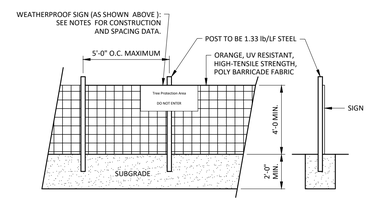
SLOPE STABILIZATION WITH EXCELSIOR MATTING
NOT TO SCALE



NOTES:
1. SIGNS ARE TO BE PLACED NO GREATER THAN 200' ON CENTER. PLACE SIGN AT EACH END OF LINEAR TREE PROTECTION AREA AND 200' ON CENTER THEREAFTER.
2. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
3. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
4. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.
5. LETTERS ARE TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE, AND SPACED AS DETAILED.
6. INSTALL TREE PROTECTION FENCE & SIGNAGE PRIOR TO CALLING FOR THE INITIAL ON-SITE INSPECTION BY A NCDENR INSPECTOR. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT. ADDITIONAL SIGNS MAY BE REQUIRED BY NCDEQ BASED ON ACTUAL FIELD CONDITIONS.



SIGN DETAIL
NTS



TREE PROTECTION FENCE
NOT TO SCALE

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR REPMIT REVIEW

REVISIONS:

EROSION CONTROL - DETAILS

CHIPOTLE AT WALLBROOK (LOT 5B)

Town of Rolesville Project No. SDP 25-03

Wake Forest Township, Town of Rolesville, Wake County, North Carolina

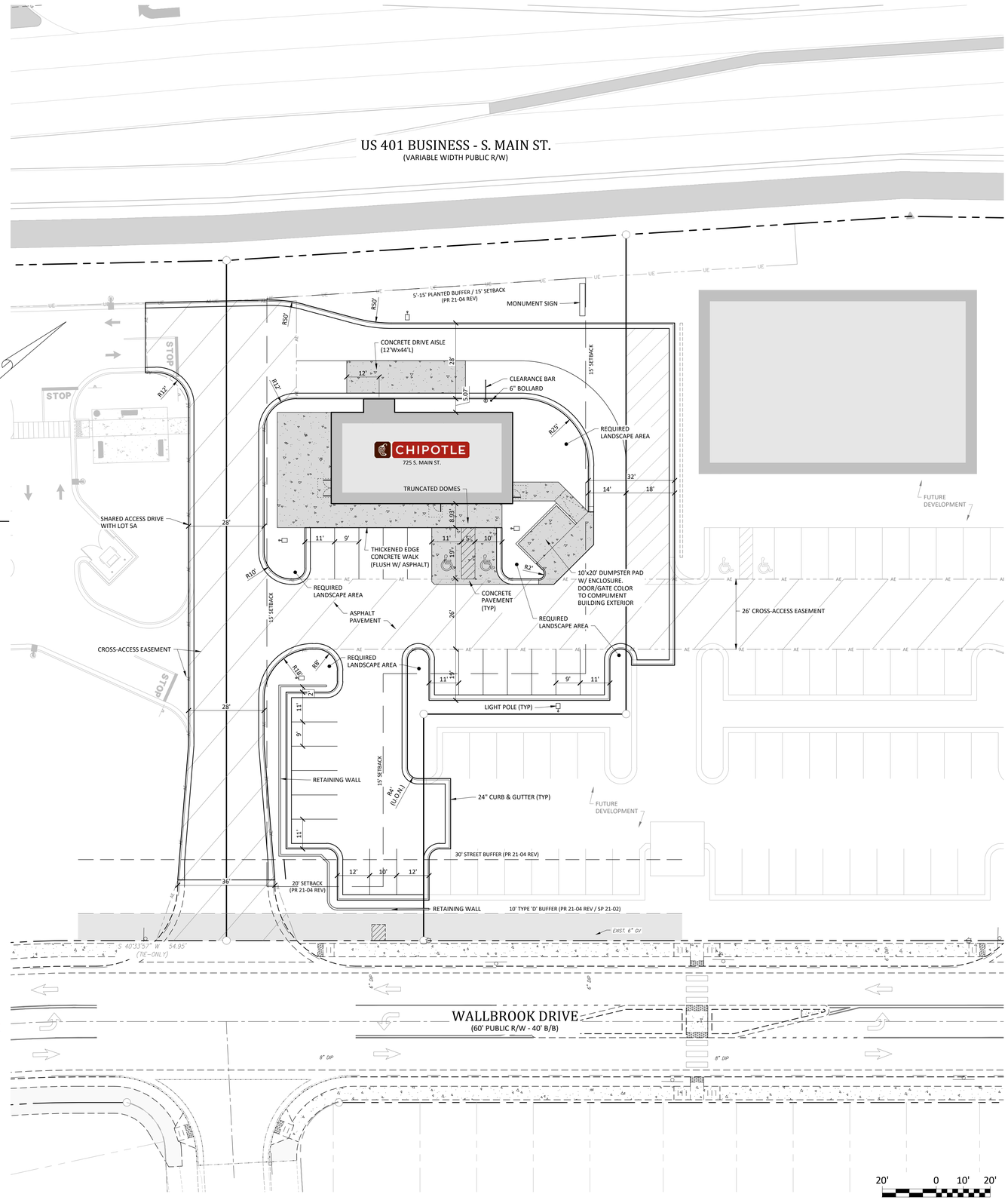
NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

PRELIMINARY Do Not Use for Construction 7/1/2025

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

C1.3

Date: 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
2. 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, 2022.
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.

Legend

EXISTING		PROPOSED
	= FOUND MONUMENT AS NOTED	
	= SET IRON PIN	
	= NCGS MONUMENT	
	= DIMENSION POINT (NOTHING SET)	
	= PROPERTY LINE	
R/W	= RIGHT OF WAY	
C&G	= CURB AND GUTTER	
CATV	= CABLE TV PEDESTAL	
DI	= DROP INLET	
ELEC	= ELECTRIC BOX	
EM	= ELECTRIC METER	
F/O	= FIBER OPTIC	
FH	= FIRE HYDRANT	FH
GV	= GAS VALVE	
HBX	= HAND BOX	
LP	= LIGHT POLE	
PP	= POWER POLE	
	= GUY WIRE	
RCP	= REINFORCED CONCRETE PIPE	
S.F.	= SQUARE FEET (AREA)	
	= SIGN	
SIGNAL	= TRAFFIC SIGNAL POLE	
SS	= SANITARY SEWER MANHOLE	S
SS	= SANITARY SEWER FORCE MAIN VALVE	
SD	= STORM DRAIN MANHOLE	D
SD	= STORM DRAIN CATCH BASIN	
TEL	= TELEPHONE PEDESTAL	
TRAF	= TRAFFIC BOX	
WATER	= WATER BOX	
WM	= WATER METER	
WMH	= WATER MANHOLE	
WV	= WATER VALVE	
WELL	= WELL	
X-WALK	= PEDESTRIAN X-WALK POLE	
E	= ELECTRIC LINE	
FO	= SANITARY SEWER FORCE MAIN	
FO	= FIBER OPTIC LINE	
G	= GAS LINE	G
OHE	= OVERHEAD ELECTRIC LINE	
S	= SANITARY SEWER LINE	S
T	= TELEPHONE LINE	
TV	= CABLE TV LINE	
W	= WATER LINE	W
	= FIRE LINE	F
	= 8"ø WATER LINE	8"W
	= 12"ø WATER LINE	12"W
	= SPILL CURB	
	= FENCE	X
RIP	= RIPARIAN BUFFER	
	= TREELINE	
50	= MAJOR CONTOUR (5')	
	= MINOR CONTOUR (1')	
	= TREE PROTECTION FENCE	TPF
	= SILT FENCE	SF
	= CONCRETE SIDEWALK	
	= ACCESS AND UTILITY EASEMENT	
	= TDD DRAINAGE AREA	
	= SKIMMER BASIN DRAINAGE AREA	

KNOW WHAT'S BELOW. CALL BEFORE YOU DIG! 1-800-632-4949 WWW.NC811.ORG

Parking Requirements:

PARKING REQUIRED:	EATING ESTABLISHMENT	
	(OUTDOOR SEATING SHALL BE INCLUDED IN SQUARE FOOTAGE)	
	MINIMUM: 2.5 / 1000 SF = 3010 / 1000 * 2.5	8 SPACES
	MAXIMUM: 10 / 1000 SF = 3010 / 1000 * 7.5	30 SPACES
	TOTAL REQUIRED PARKING:	8 SPACES
	REQUIRED HANDICAP PARKING:	1 SPACE
	PARKING PROVIDED:	23 SPACES (INCL. 2 H/C)

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR PERMIT REVIEW

REVISIONS:

CROSLAND SOUTHEAST

CORESOUND DEVELOPMENT

SITE PLAN
CHIPOTLE AT WALLBROOK (LOT 5B)
Town of Rolesville Project No. SDP 25-03
Wake Forest Township, Town of Rolesville, Wake County, North Carolina

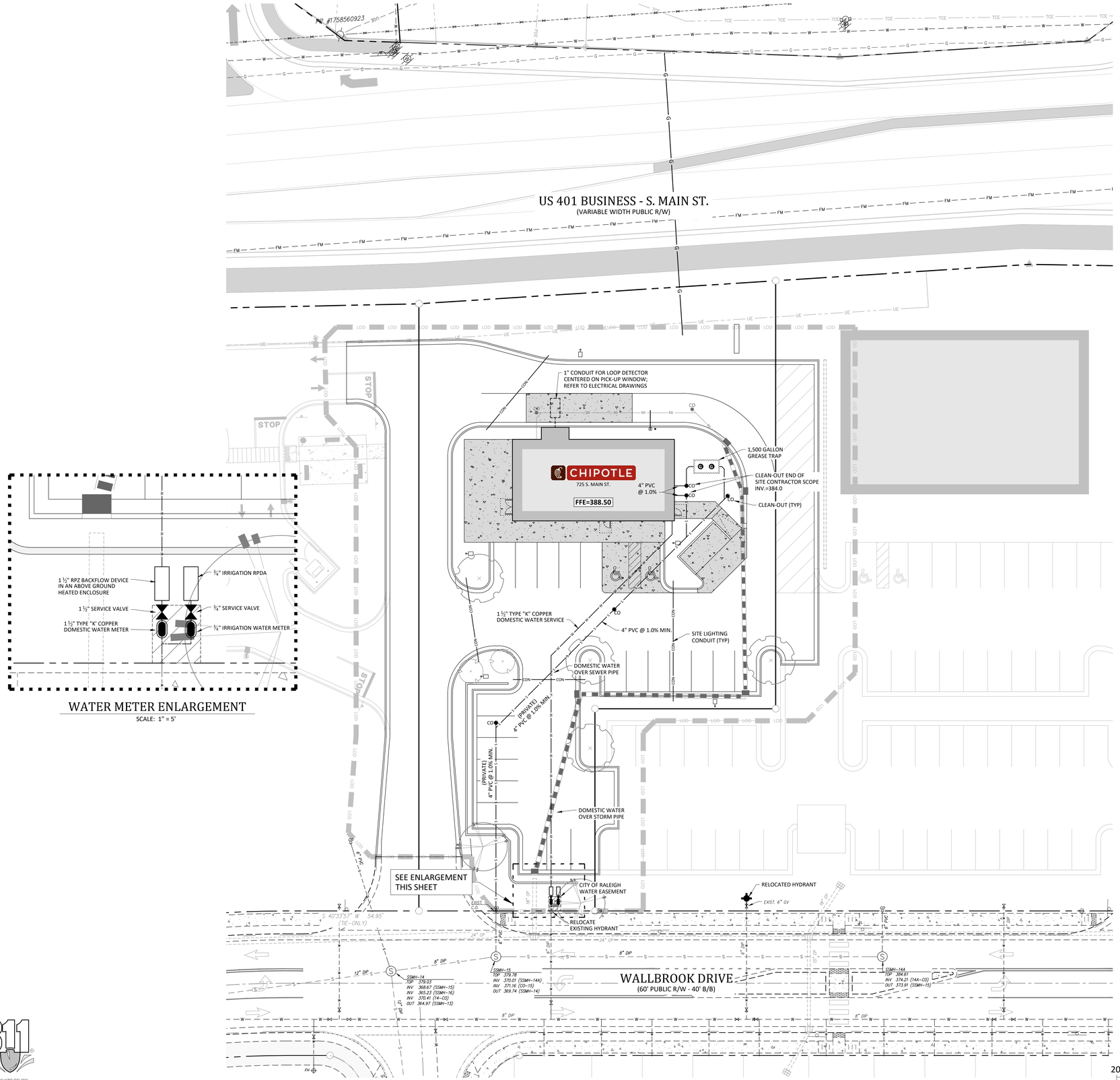
NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

PRELIMINARY Do Not Use for Construction
7/1/2025

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

C2.0

Date: July 1, 2025



CORPUD Standard Utility Notes:

1. 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.
5. 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.
21. 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".

KNOW WHAT'S BELOW
CALL BEFORE YOU DIG!
1-800-632-4949
WWW.NC811.ORG

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR PERMIT REVIEW

REVISIONS:

CROSLAND SOUTHEAST
CORESOUND DEVELOPMENT

UTILITY PLAN
CHIPOTLE AT WALLBROOK (LOT 5B)
Town of Rolesville Project No. SDP 25-03
Wake Forest Township, Town of Rolesville, Wake County, North Carolina

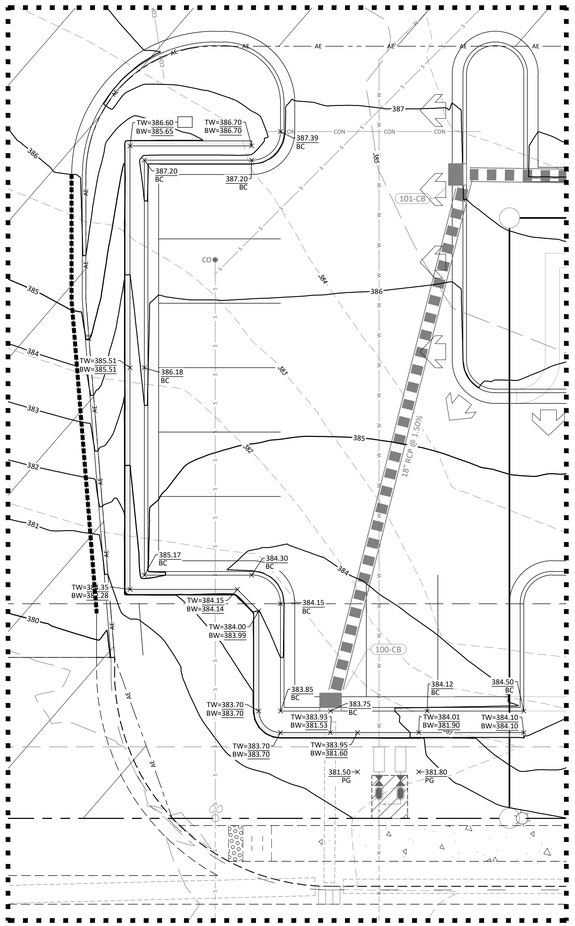
NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

PRELIMINARY
Do Not Use for Construction
7/1/2025

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

C3.0

Date: July 1, 2025

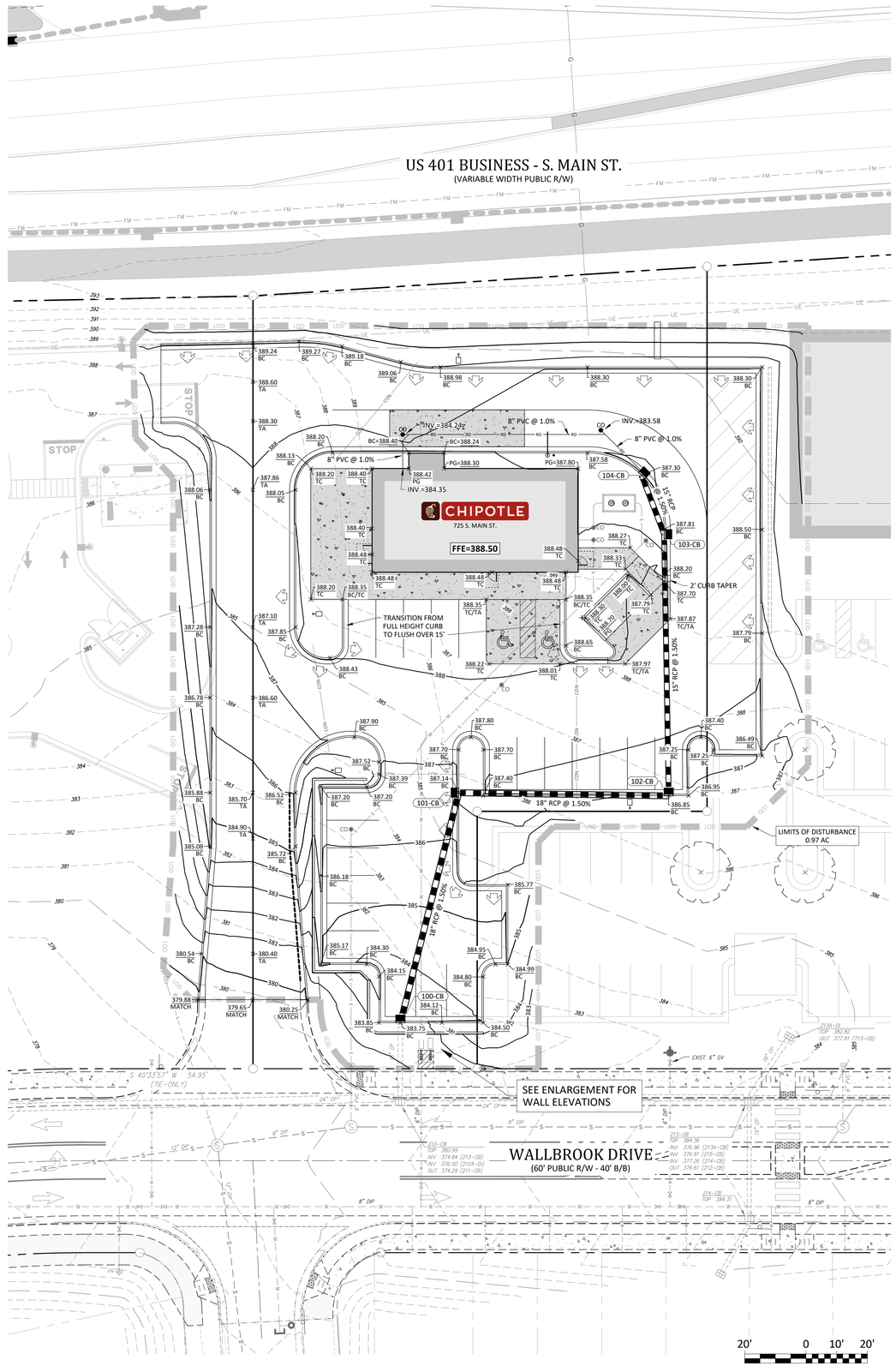


RETAINING WALL ENLARGEMENT

SCALE: 1" = 10'

10' 0 5' 10'

SCALE 1 inch = 10 ft



SCALE 1 inch = 20 ft

Grading Notes:

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 PLAN SET.
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 PROTECTED.
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 DURING CONSTRUCTION.
5. TILL TOP SOIL TO A DEPTH OF 4" MINIMUM AND REMOVE ALL ROCKS LARGER THAN 1" MEASURED IN LARGEST DIRECTION.
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 STAND OF GRASS IS OBTAINED.
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 CONTROL JOINTS PER THE JOINT SPACING REFERENCED ON THE PLAN.
11. MATERIALS SELECTED FOR USE AS STRUCUTRAL FILL SHALL BE FREE OF VEGETABLE MATTER, 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 THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698).
18. FILL PLACEMENT IN PAVEMENT AREAS SHALL BE PERFORMED IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS.
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 SURFACE OF THE COMPACTED AREAS.
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. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
22. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, CLEANOUTS, ETC. SHALL BE ADJUSTED, AS REQUIRED, TO MATCH PROPOSED GRADES.
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 DRAINAGE PIPING.

STRUCTURE TABLE

ID	TOP	IN	OUT	DESC
100-CB	383.75	378.12 (101-CB)	376.50 (212-CB)	Catch Basin
101-CB	387.14	379.78 (102-CB)	379.28 (100-CB)	Catch Basin
102-CB	386.85	381.01 (103-CB)	380.81 (101-CB)	Catch Basin
103-CB	387.85	382.49 (104-CB)	382.29 (102-CB)	Catch Basin
104-CB	387.30		382.80 (103-CB)	Catch Basin
212-CB	380.96	376.00 (100-CB)		Existing Catch Basin

Abbreviations

BC	BACK OF CURB
TC	TOP OF CONCRETE
TA	TOP OF ASPHALT
TW	TOP OF WALL
BW	BOTTOM OF WALL
PG	PROPOSED GRADE/GROUND
CB	CATCH BASIN
DI	DROP INLET
INV	INVERT
U/G	UNDERGROUND

KNOW WHAT'S BELOW CALL BEFORE YOU DIG! 1-800-632-4949 WWW.NC811.ORG

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR PERMIT REVIEW

REVISIONS:

CROSLAND SOUTHEAST

CORESOUND DEVELOPMENT

GRADING & DRAINAGE PLAN

CHIPOTLE AT WALLBROOK (LOT 5B)

Town of Rolesville Project No. SDP 25-03

Wake Forest Township, Town of Rolesville, Wake County, North Carolina

NC License: P-1199

ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS

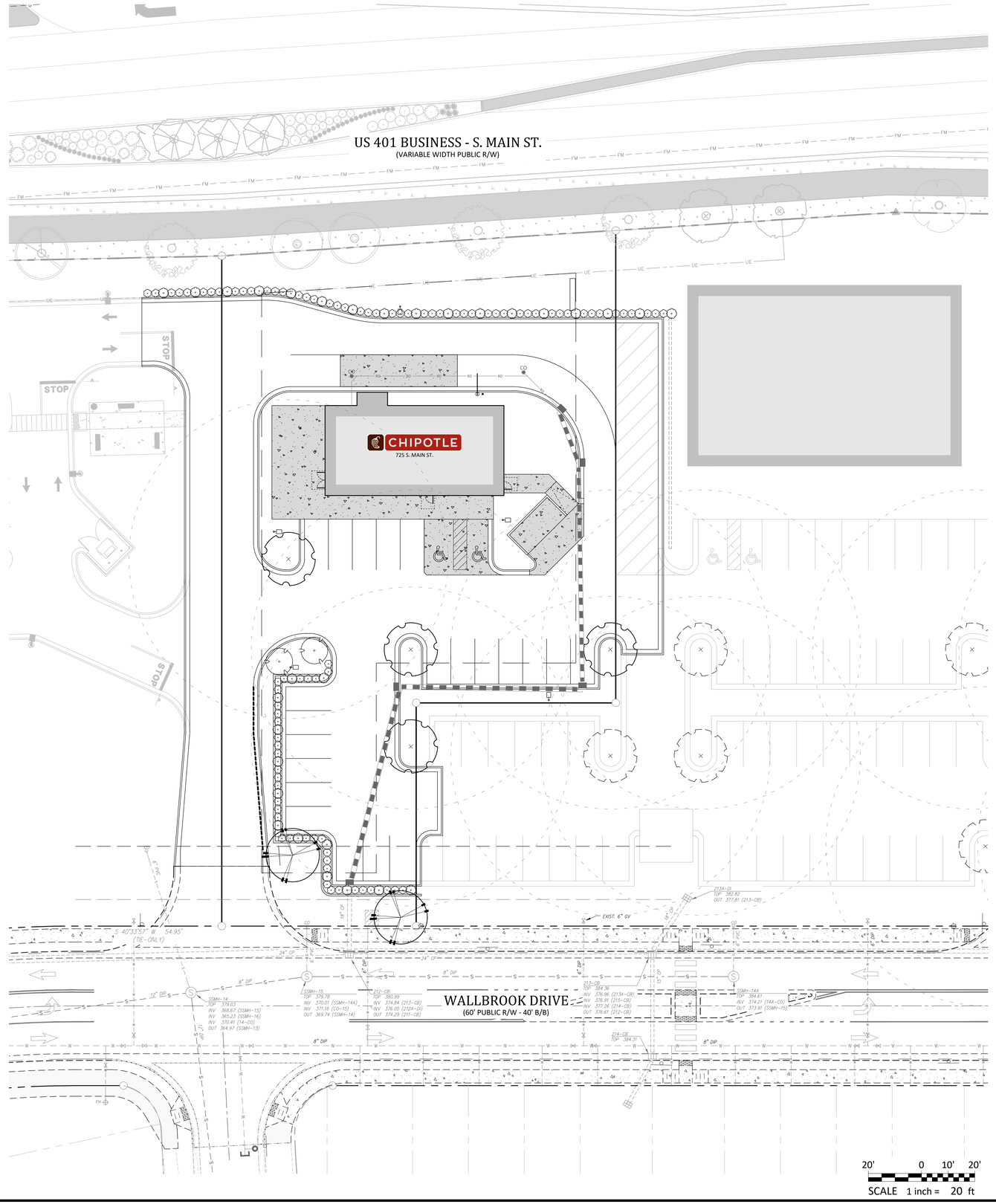
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

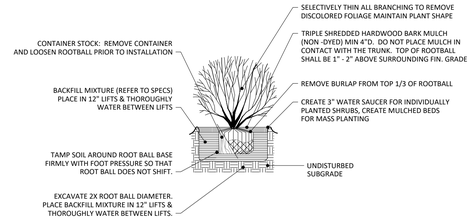
PRELIMINARY Do Not Use for Construction 7/1/2025

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

C4.0

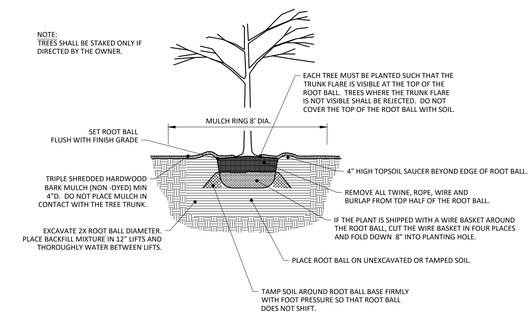
Date: July 1, 2025





SHRUB PLANTING

NOT TO SCALE



LARGE AND SMALL TREE PLANTING

NOT TO SCALE

Bufferyard Notes:

1. SITE DATA:
   A. PROVIDED VEGETATION FOR LOT:
      LARGE TREES: 6 PROVIDED
   B. REQUIRED STREET VEGETATION:
      LARGE TREES: S. MAIN STREET = 148 LF / 40 * 1 TREE = 4 TREES (4 PROVIDED BY MAIN STREET IMPROVEMENTS)
      WALLBROOK DRIVE = 73 LF / 40 * 1 TREE = 2 TREES (2 PROVIDED)
   C. REQUIRED SCREENING VEGETATION: NONE
   D. REQUIRED VEGETATION LOCATED IN EASEMENTS: NONE
2. NOTES:
   A. MINIMUM PLANT SIZES SHALL BE IN ACCORDANCE WITH THE SECTION 6.2.4.3 OF THE LDO AS FOLLOWS:

PLANTING MATERIAL TYPE	MINIMUM PLANTING SIZE
1. LARGE (CANOPY) TREE	8' (HEIGHT AND 2" CALIPER
2. SMALL/MEDIUM (UNDERSTORY) TREE	8' (HEIGHT) AND 1" CALIPER
3. SHRUB	24" (HEIGHT) - EVERGREEN 18" (HEIGHT) - DECIDUOUS

   B. NO PORTION OF ANY PARKING SPACE SHALL BE LOCATED MORE THAN SIXTY (60) FEET FROM AN ON-SITE LARGE (CANOPY) TREE. FOR PURPOSES OF THIS SECTION, THE MEASUREMENT SHALL BE FROM THE CLOSEST EDGE OF THE SUBJECT AREA TO THE CENTER OF THE BASE OF THE CLOSEST QUALIFYING TREE IN ACCORDANCE WITH SECTION 6.2.4.4 OF THE LDO.
   C. DUMPSTER/COMPACTOR SHALL BE SCREENED ON 3 SIDES IN ACCORDANCE WITH SECTION 6.2.4.6 OF THE LDO.
   D. NO TREES OR SHRUBS SHALL BE PLANTED WITHIN SANITARY SEWER, WATERLINE OR ELECTRIC EASEMENTS WITHOUT THE TOWN AND EASEMENT HOLDER APPROVAL.
   E. ALL MULTI-STEM TREES SHALL HAVE AT LEAST THREE STALKS WITH A MINIMUM CALIPER OF 2.5" IN ACCORDANCE WITH SECTION 6.2.4.7 OF THE LDO.
   F. LANDSCAPING SHALL BE COMPLIANT WITH LDO SECTION 6.2.4
   G. MINIMUM OF 3 FEET CLEARANCE MUST BE MAINTAINED AROUND ALL FIRE HYDRANTS IN ACCORDANCE WITH STATE BUILDING CODE.
   H. PLANTINGS WITHIN THE R/W ARE TO BE INSTALLED AS PART OF THE MAIN STREET PROJECT (NCDOT U-6241). SEE STANTEC PLAN SHEET L-4.
   I. REFER TO WALLBROOK PRELIMINARY PLAT (PR 21-04 REV) FOR VEGETATION PRESERVATION IN THIS AREA.
   J. CONTRACTOR SHALL PLACE WEED MATTING AND METAL EDGING LOCATED AT THE BACK OF CURB AROUND ALL MULCH BEDS

Vegetation Legend:

PROPOSED LARGE TREE (CANOPY)
TOTAL QUANTITY = 4
CALIPER = 3"
HEIGHT = 12'
MATURE HEIGHT = 50' - 80'
COMMON NAME: RED MAPLE
BOTANICAL NAME: ACER RUBRUM

PROPOSED LARGE TREE (CANOPY)
TOTAL QUANTITY = 2
CALIPER = 3"
HEIGHT = 12'
MATURE HEIGHT = 50' - 80'
COMMON NAME: WHITE OAK
BOTANICAL NAME: QUERCUS ALBA

PROPOSED SHRUB(S)
TOTAL QUANTITY = 88
HEIGHT = 24"
MATURE HEIGHT = 24" - 36"
COMMON NAME = GREY OWL EASTERN RED CEDAR
BOTANICAL NAME = JUNIPERUS VIRGINIANA 'GREY OWL'

PROPOSED SHRUB(S)
TOTAL QUANTITY = 30
HEIGHT = 24"
MATURE HEIGHT = 24" - 36"
COMMON NAME = BLUEBEARD
BOTANICAL NAME = CARYOPTERIS X CLANDONENSIS

KNOW WHAT'S BELOW
CALL BEFORE YOU DIG!
1-800-632-4949
WWW.NC811.ORG

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR PERMIT REVIEW

REVISIONS:

REQUIRED VEGETATION PLAN

CHIPOTLE AT WALLBROOK (LOT 5B)

Town of Rolesville Project No. SDP 25-03

Wake Forest Township, Town of Rolesville, Wake County, North Carolina

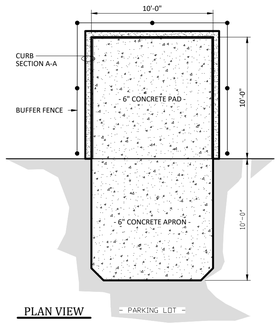
NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

PRELIMINARY
Do Not Use for Construction
7/1/2025

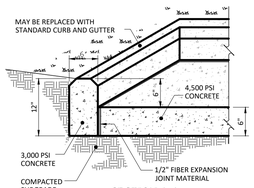
Project Manager:	BCF
Drawn By:	DLC
Checked By:	BCF
Project Number:	24138
Drawing Number:	D-1592

C5.0

Date: July 1, 2025



PLAN VIEW



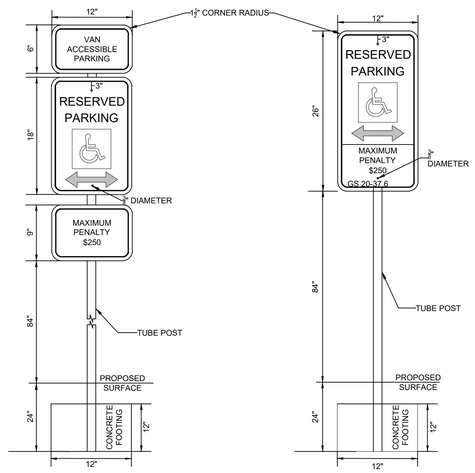
SECTION A-A

NOTES:

1. Container pad must be flush with parking lot pavement.

DUMPSTER PAD

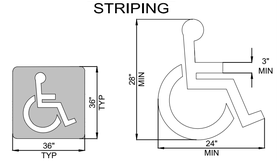
NOT TO SCALE



NOTES:

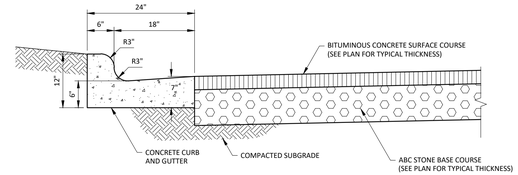
1. ALL INFORMATION MUST MEET THE CURRENT NORTH CAROLINA DOT STANDARDS. IF CONFLICT ARISES NCDOT STANDARDS SHALL DICTATE.
2. EACH HANDICAP PARKING SHALL HAVE ITS OWN SIGN.
3. SIGN SHALL BE ENGINEERING GRADE REFLECTIVE ALUMINIMUM, MEETING ASTM D4956 TYPE I REFLECTION SHALL BE EFFECTIVE FOR 7 YEARS AND WILL BE RESISTANT TO FADING AND MILD CHEMICALS.
4. SIGN SHALL BE 0.08" THICK - 18 GUAGE GALVAIZED SHEET METAL.
5. THE SIGN SHALL HAVE SERVICE TEMP RANGE OF -10°F TO 130°F.
6. THE AVERAGE TEXT SIZE SHALL BE ½" HELVETICA MEDIUM LETTERS.
7. HANDICAP SYSMBOL SHALL BE WHITE ON A BLUE BLACKGROUND.
8. BACKGROUND OF THE SIGN SHALL BE WHITE.
9. SIGN SHALL BE ATTACHED TO A 2" STEEL TUBE POST. TUBE SHALL BE PAINTED WITH A SUITABLE FLAT BLACK PAINT - 2 COATS.
10. THE SIGN SHALL BE MOUNTED TO THE SIGN USING A ¼" X 2½" LONG STRUSS HEAD GALVANIZED BOLTS THROUGH THE SIGN AND POST. MOUNTED AT THE TOP AND BOTTOM.
11. MOUNT POST IN BOLLARD. SEE SHEET C6.1 FOR BOLLARD DETAIL.

PARKING LOT STRIPING



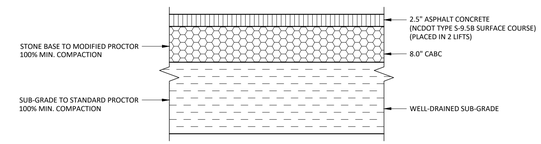
ACCESSIBLE PARKING SIGN

NOT TO SCALE



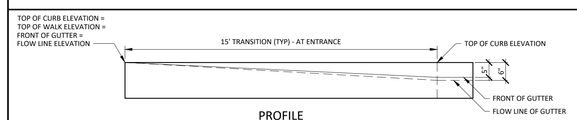
CURB AND GUTTER AND PAVEMENT DETAIL

NOT TO SCALE

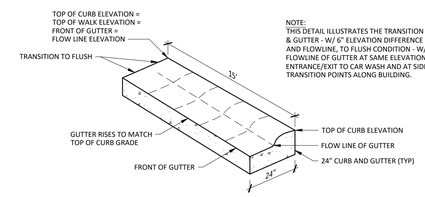


STANDARD ASPHALT PAVEMENT SECTION

NOT TO SCALE



PROFILE

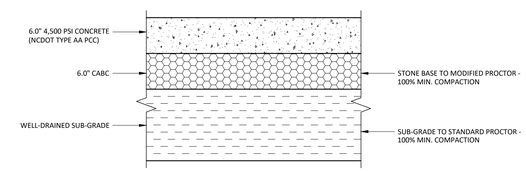


NOTE:
THIS DETAIL ILLUSTRATES THE TRANSITION FROM STANDARD CURB & GUTTER - W/ 6" ELEVATION DIFFERENCE BETWEEN TOP OF CURB AND FLOWLINE, TO FLUSH CONDITION - W/ TOP OF CURB AND FLOWLINE OF GUTTER AT SAME ELEVATION. TYPICALLY USED AT ENTRANCE/EXIT TO CAR WASH AND AT SIDEWALK/CURB & GUTTER TRANSITION POINTS ALONG BUILDING.

ISOMETRIC VIEW

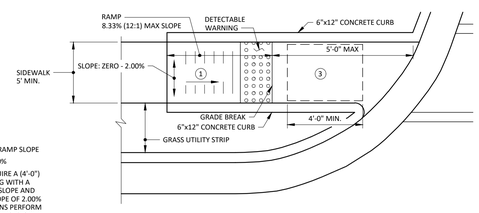
CURB AND GUTTER TO FLUSH PAVING TRANSITION

NOT TO SCALE



CONCRETE PAVEMENT SECTION

NOT TO SCALE



NOTES:

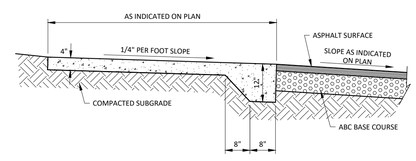
1. 8.33% (12:1) MAX RAMP SLOPE
2. CROSS SLOPE: 2.00%
3. CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

TYPE 1

REFER TO NCDOT ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

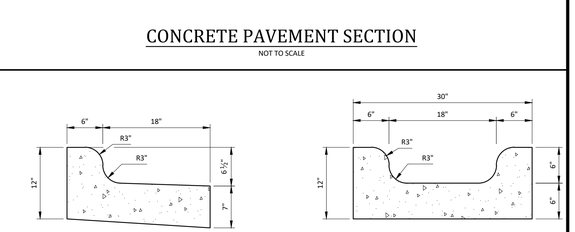
CURB RAMPS - DIRECTIONAL RAMPS

NOT TO SCALE



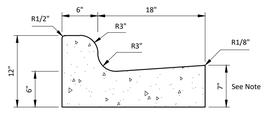
THICKENED EDGE CONCRETE WALK

NOT TO SCALE



24" CONCRETE CURB AND GUTTER - SPILL

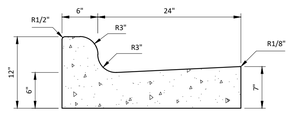
SPECIAL GUTTER



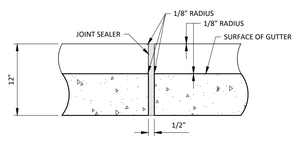
24" CONCRETE CURB AND GUTTER

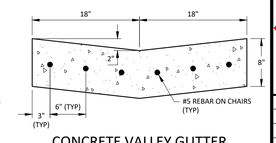
GENERAL NOTES:

1. CONTRACTION JOINTS SHALL BE SPACED AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
2. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.
3. ALL CONTRACTION JOINTS SHALL BE FILLED WITH JOINT FILLER.
4. EXPANSION JOINTS SHALL BE SPACED AT 90' INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS.
5. ALL CURB AND GUTTERS ARE TO BE POURED WITH CLASS "A" CONCRETE. (3000 PSI)
6. FLEXIBLE FORMS ARE TO BE USED WHEN RADII IS LESS THAN 200.



30" CONCRETE CURB AND GUTTER

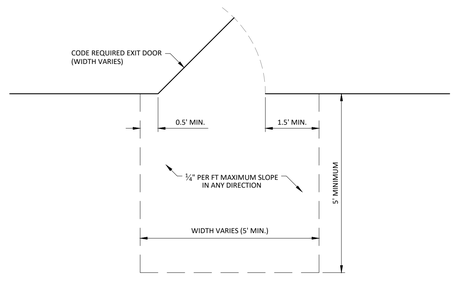




CONCRETE VALLEY GUTTER

CURB AND GUTTER DETAIL

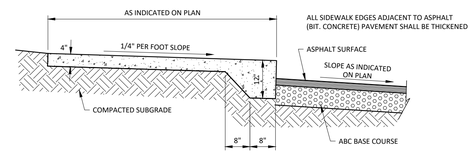
NOT TO SCALE



*REFER TO ARCHITECTURAL DRAWING(S) FOR REQUIRED EXIT DOOR LOCATION(S)

REQUIRED BUILDING EXIT DOOR ACCESSIBLE GRADES

NOT TO SCALE



RAISED THICKENED EDGE CONCRETE WALK

NOT TO SCALE

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR PERMIT REVIEW

REVISIONS:

MISC. DETAILS

CHIPOTLE AT WALLBROOK (LOT 5B)

Town of Rolesville Project No. SDP 25-03

Wake Forest Township, Town of Rolesville, Wake County, North Carolina

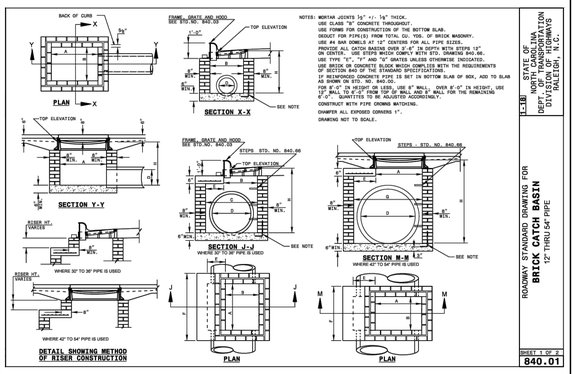
NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

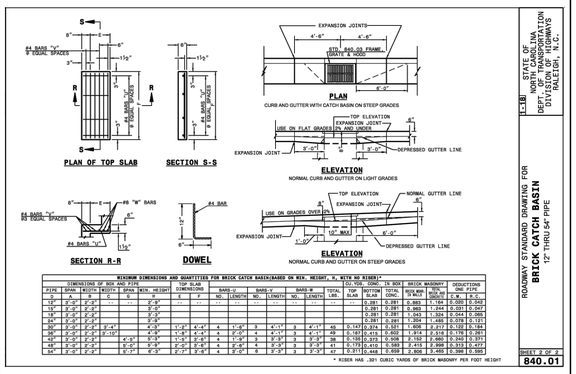
PRELIMINARY Do Not Use for Construction 7/1/2025

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

C6.1

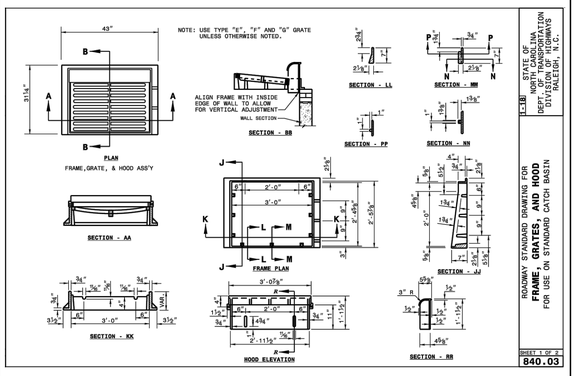
Date: July 1, 2025

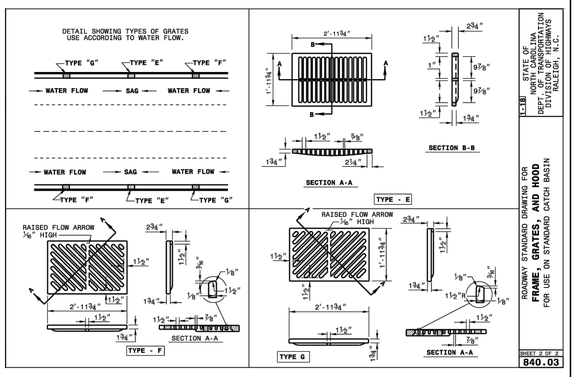


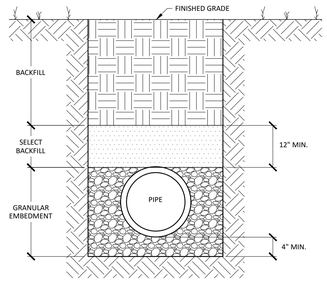


MINIMUM DIMENSIONS AND QUANTITIES FOR BRICK CATCH BASIN(BASED ON MIN. HEIGHT, H, WITH NO RISER)*																					
DIMENSIONS OF BOX AND PIPE						SLAB DIMENSIONS		BARS-1		BARS-2		BARS-3		51.1Cu. Yds. IN BOX			BRICK MASONRY		DEDUCTIONS FOR PIPE	
PIPE	SPAN	WIDTH	WIDTH	SPAN	WIN. HEIGHT	LENGTH	WIDTH	NO.	LENGTH	NO.	LENGTH	NO.	SIZE/No.	TOTAL LBS.	TOTAL SLAB	TOTAL BOTTOM SLAB	TOTAL BOX AND SLAB	TOTAL BOX AND SLAB	C.Y.	D.C.
12"	2'-0"	2'-0"	-	-	2'-6"	-	-	-	-	-	-	-	-	-	0.281	0.281	0.883	1.164	0.005	0.042
15"	2'-0"	2'-0"	-	-	2'-6"	-	-	-	-	-	-	-	-	-	0.281	0.281	0.883	1.164	0.011	0.047
18"	2'-0"	2'-0"	-	-	2'-3"	-	-	-	-	-	-	-	-	-	0.281	0.281	1.043	1.324	0.044	0.065
24"	2'-0"	2'-0"	-	-	2'-6"	-	-	-	-	-	-	-	-	-	0.281	0.281	1.304	1.585	0.078	0.121
30"	2'-0"	2'-0"	2'-4"	-	4'-0"	1'-2"	4'-4"	4	1'-8"	3	4'-1"	3	4'-1"	45	0.157	0.374	1.525	1.806	0.217	0.132
36"	2'-0"	2'-0"	2'-10"	-	4'-6"	1'-8"	4'-4"	4	2'-0"	4	4'-1"	3	4'-1"	48	0.187	0.418	1.803	1.914	0.316	0.176
42"	2'-0"	2'-0"	-	4'-0"	5'-0"	2'-0"	5'-0"	4	2'-6"	5	5'-3"	3	5'-3"	61	0.219	0.469	2.082	2.351	0.429	0.213
48"	2'-0"	2'-0"	-	4'-6"	5'-6"	2'-4"	5'-4"	4	3'-0"	6	5'-3"	3	5'-3"	69	0.250	0.519	2.508	2.410	0.550	0.313
54"	2'-0"	2'-0"	-	5'-0"	6'-7"	2'-7"	5'-7"	4	3'-6"	6	5'-3"	3	5'-3"	47	0.311	0.446	0.658	2.506	0.486	0.595

* RISER HAS .321 CUBIC YARDS OF BRICK MASONRY PER FOOT HEIGHT



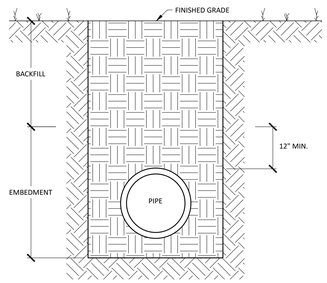




CLASS 'D'

TRENCH SECTION DETAIL FOR THE INSTALLATION OF PVC GRAVITY STORM DRAIN & SANITARY SEWER PIPING

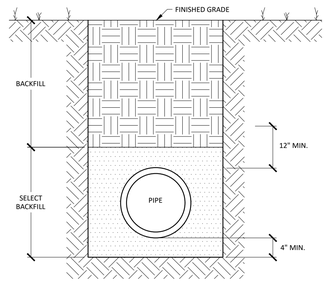
NOT TO SCALE



CLASS 'F'

TRENCH SECTION FOR THE INSTALLATION OF REINFORCED CONCRETE PIPE

NOT TO SCALE



CLASS 'E'

TRENCH SECTION DETAIL FOR THE INSTALLATION OF PVC PRESSURE PIPE

NOT TO SCALE

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR PERMIT REVIEW

REVISIONS:

MISC. DETAILS

CHIPOTLE AT WALLBROOK (LOT 5B)

Town of Rolesville Project No. SDP 25-03

Wake Forest Township, Town of Rolesville, Wake County, North Carolina

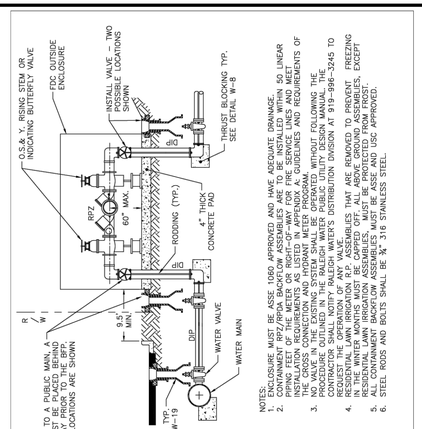
NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

PRELIMINARY Do Not Use for Construction 7/1/2025

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

C6.2

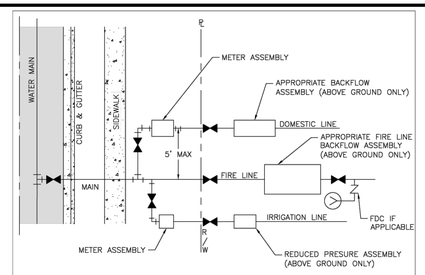
Date: July 1, 2025



NOTES:
1. ENCLOSURE MUST BE ASSE 1060 APPROVED AND HAVE ADEQUATE DRAINAGE.
2. CONTAINMENT RP2/RPDA BACKFLOW ASSEMBLIES ARE TO BE INSTALLED WITHIN 50 LINEAR PIPING FEET OF THE METER OR RIGHT-OF-WAY FOR FIRE SERVICE LINES AND MEET THE REQUIREMENTS OF THE NC PLUMBING CODE. ALL ASSEMBLIES MUST BE LOCATED IN THE CROSS CONNECTION AND HYDRANT METER PROGRAM.
3. THE USE OF THE RP2 ASSEMBLY SHALL BE CONSIDERED ONLY WITHOUT FOLLOWING THE PROCEDURE OUTLINED IN THE RALEIGH WATER PUBLIC UTILITY DESIGN MANUAL. THE CONTRACTOR SHALL NOTIFY RALEIGH WATER'S DISTRIBUTION DIVISION AT 919-996-3245 TO SCHEDULE A PRE-CONSTRUCTION MEETING.
4. THE RP2 ASSEMBLY SHALL BE USED ONLY FOR THE FOLLOWING: FIRE LINES, EXCEPT RESIDENTIAL LAWN IRRIGATION R.P. ASSEMBLIES THAT ARE REMOVED TO PREVENT FREEZING DAMAGE, ALL COMMERCIAL LAWN IRRIGATION, AND ALL INDUSTRIAL PROCESS LINES, EXCEPT RESIDENTIAL LAWN IRRIGATION ASSEMBLIES. MUST BE PROTECTED FROM FROST.
5. ALL CONTAINMENT BACKFLOW ASSEMBLIES MUST BE ASSE AND USC APPROVED.
6. STEEL RODS AND BOLTS SHALL BE ¾" 316 STAINLESS STEEL.

CITY OF RALEIGH
STANDARD DETAIL

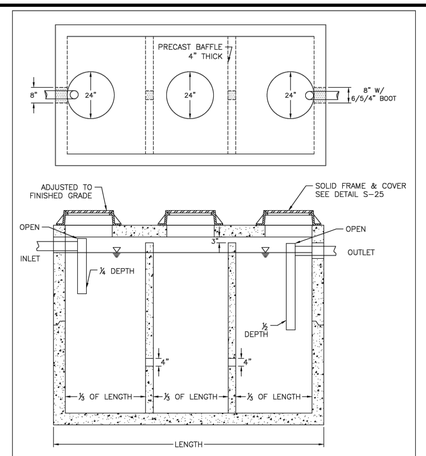
REVISIONS	DATE: 01/18/2023	NOT TO SCALE
	REDUCED PRESSURE ZONE AND REDUCED PRESSURE DETECTOR ASSEMBLY	
	W-36	



NOTES:
1. SERVICE TAPS FOR 2" AND SMALLER DOMESTIC SERVICES MAY BE BY CORPORATION COCKS. LARGER SERVICES WILL REQUIRE A TEE AND GATE VALVE OR TAPPING SLEEVE AND VALVE ASSEMBLY AND 90° BEND.
2. DOMESTIC SERVICE TAPS SHALL BE ALLOWED ONLY ON 6" OR LARGER FIRE LINES BEFORE THE BACKFLOW ASSEMBLY.
3. ONE DOMESTIC TAP PER FIRE LINE ON STREET SIDE OF BACKFLOW.
4. FIRE LINE SHALL HAVE A FIRE HYDRANT OR BLOW OFF ASSEMBLY AT ITS END TO FACILITATE FLUSHING WHEN NEEDED.
5. IRRIGATION METER SHALL BE LOCATED ON THE SIDE OF DOMESTIC METER WITH INCREASING ADDRESSES.
6. THE CONTAINMENT BACKFLOW ASSEMBLY SHALL BE INSTALLED WITHIN 50 LINEAR PIPING FEET OF THE METER OR RIGHT-OF-WAY FOR FIRE SERVICE LINES.
7. DOMESTIC/IRRIGATION BACKFLOW RISER/STANDPIPE SHALL BE OF APPROVED MATERIALS AS LISTED IN NC PLUMBING CODE.
8. THE RP RELIEF VALVE SHALL BE A MINIMUM OF 12" ABOVE ANY MATERIAL (MULCH INCLUDED) OR GRADE.
9. A SERVICE VALVE IS REQUIRED AFTER THE METER BUT BEFORE THE BACKFLOW ASSEMBLY FOR MAINTENANCE AND REPLACEMENT PURPOSES.
10. THE INSTALLATION MUST ALSO MEET ALL CODE REQUIREMENTS PER THE NC PLUMBING CODE.

CITY OF RALEIGH
STANDARD DETAIL

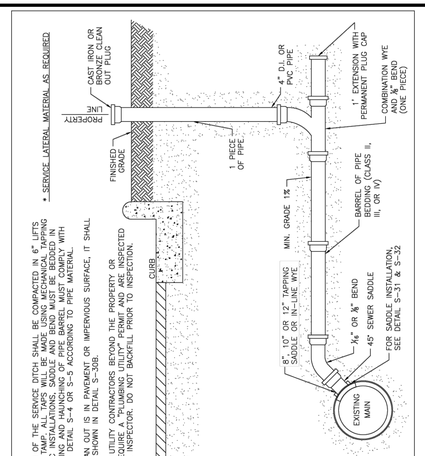
REVISIONS	DATE: 01/18/2023	NOT TO SCALE
	FIRE, DOMESTIC & IRRIGATION OPTIONS SCHEMATIC	
	W-34	



NOTES:
1. REINFORCEMENT: H-20 BRIDGE LOADING (TRAFFIC RATED).
2. CONCRETE: 4,000 PSI @ 28 DAYS.
3. EARTHCOVER: 0' TO 5' MAX.
4. HDPE ALLOWED IN LIEU OF CONCRETE. MEET SAME LOADING REQUIREMENTS.

CITY OF RALEIGH
STANDARD DETAIL

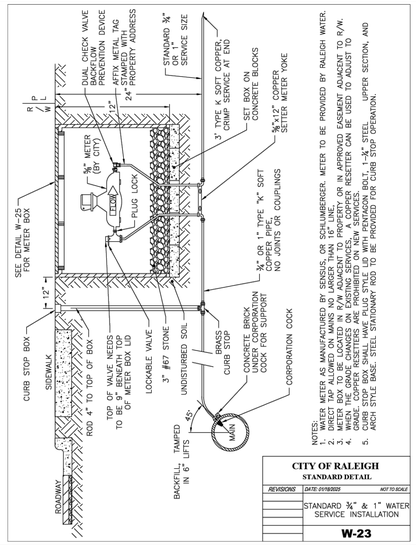
REVISIONS	DATE: 01/18/2023	NOT TO SCALE
	1,000 GALLON OIL-WATER-SAND SEPARATOR	
	S-40A	



NOTES:
1. THE FULL LENGTH OF THE SERVICE DITCH SHALL BE COMPACTED IN 6" LIFTS WITH MECHANICAL TAMPS. THE SADDLE MUST BE INSTALLED USING A TAPPING MACHINE. FOR PVC INSTALLATIONS, SADDLE AND BEND MUST BE BEDDED IN #67 STONE. FOR CAST IRON INSTALLATIONS, SADDLE AND BEND MUST BE BEDDED IN REQUIREMENTS OF DETAIL S-4 OR S-5 ACCORDING TO PIPE MATERIAL.
2. WHEN SEWER CLEAN OUT IS IN PAVEMENT OR IMPERVIOUS SURFACE, IT SHALL BE INSTALLED AS SHOWN IN DETAIL S-30B.
3. INSTALLATIONS BY UTILITY CONTRACTORS BEYOND THE PROPERTY OR EASEMENT LINE REQUIRE A "PLUMBING UTILITY" PERMIT AND ARE INSPECTED BY THE PLUMBING INSPECTOR. DO NOT BACKFILL PRIOR TO INSPECTION.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 01/18/2023	NOT TO SCALE
	TYPICAL SANITARY SEWER LATERAL CONNECTION	
	S-30	



NOTES:
1. WATER METER AS MANUFACTURED BY SENSUS, OR SCHLUMBERGER. METER TO BE PROVIDED BY RALEIGH WATER.
2. DIRECT BOX ALLOWED ON MAINS 24" LARGER THAN PIPE.
3. WHEN THE GRADE CHANGES ON EXISTING SERVICES, A COPPER RESETTER CAN BE USED TO ADJUST TO FINISH GRADE. A COPPER RESETTER CAN BE USED ONLY WHEN THE GRADE CHANGES ON NEW SERVICES.
4. CURB STOP BOX SHALL HAVE PLUG STYLE LID WITH PENTAGON BOLT, 1-¾" STEEL UPPER SECTION, AND ARCH STYLE BASE. STEEL STATIONARY ROD TO BE PROVIDED FOR CURB STOP OPERATION.
5. ROD TO BE PROVIDED FOR CURB STOP OPERATION.

CITY OF RALEIGH
STANDARD DETAIL

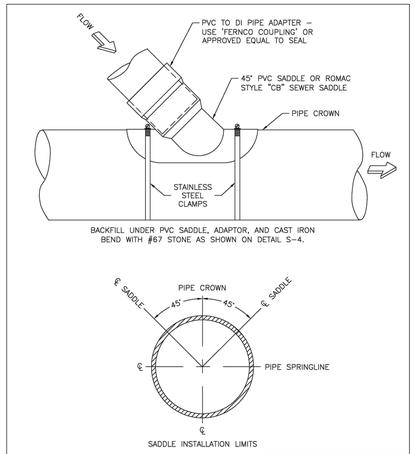
REVISIONS	DATE: 01/18/2023	NOT TO SCALE
	STANDARD ¾" & 1" WATER SERVICE INSTALLATION	
	W-23	

LOCALLY AVAILABLE SIZES	
INTERCEPTORS CAPACITY (GAL.)	SEPARATORS CAPACITY (GAL.)
300	1,000
550	1,200
750	1,600
1,000	
1,200	
1,500	
2,000	
2,500	
3,000	
4,000	
5,000	
6,000	
8,000	

NOTES:
1. BAFFLE WALLS LOCATED AT A DISTANCE FROM INLET WALL ⅖ TO ¾ OF THE TOTAL LENGTH OF THE INTERCEPTOR OR SEPARATOR AS SHOWN ON DETAIL S-40. BAFFLE WALLS LOCATED AT A DISTANCE APPROXIMATELY OF ⅓ OF THE TOTAL LENGTH OF THE SEPARATOR AS SHOWN ON DETAIL S-40A.
2. EACH INTERCEPTOR OR SEPARATOR SHALL HAVE INLET AND OUTLET TEES. THE OUTLET TEE SHALL EXTEND 50% INTO THE LIQUID DEPTH. THE INLET TEE SHALL EXTEND 25% INTO THE LIQUID DEPTH. INLET AND OUTLET TEES MUST BE OPEN TO ALLOW THE COLLECTION OF F.O.G. SAMPLE.
3. ACCESS OPENINGS OVER EACH COMPARTMENT WITHIN THE INTERCEPTOR OR SEPARATOR SHALL BE 24 INCHES IN DIAMETER AND CONTAIN PICK HOLES. ALL COVERS SHALL BE CONSTRUCTED OF CAST IRON OR EQUIVALENT TRAFFIC BEARING MATERIAL. MANHOLE COVERS MUST EXTEND TO FINISH GRADE AND BE INSTALLED TO EXCLUDE THE ENTRANCE OF STORMWATER INTO THE INTERCEPTOR OR SEPARATOR.
4. FULL SIZE DUAL SWEEP CLEANOUTS SHALL BE INSTALLED ON THE INLET AND OUTLET SIDES OF THE INTERCEPTOR OR SEPARATOR.
5. INTERCEPTORS AND SEPARATORS MUST BE VENTED IN ACCORDANCE WITH THE NC STATE PLUMBING CODE.
6. CONCRETE: 4,000 PSI @ 28 DAYS.
7. DESIGN: ACI 318 BUILDING CODE
   ASTM C1613-06 FOR GREASE INTERCEPTORS
   ASTM C913-02 FOR WATER AND WASTEWATER STRUCTURES
   ASTM C890-06 FOR MINIMAL STRUCTURAL DESIGN LOADING
8. INTERCEPTORS AND SEPARATORS SHALL BE DESIGNED TO WITHSTAND AN H-20 WHEEL LOAD.
9. INTERCEPTORS OR SEPARATORS MADE OF POLYETHYLENE OR FIBERGLASS SHALL INCLUDE A MINIMUM 12,000 PSI TENSILE STRENGTH, 19,000 PSI FLEXURAL STRENGTH, AND 800,000 PSI FLEXURAL MODULUS.
10. ALL INTERCEPTORS AND SEPARATORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

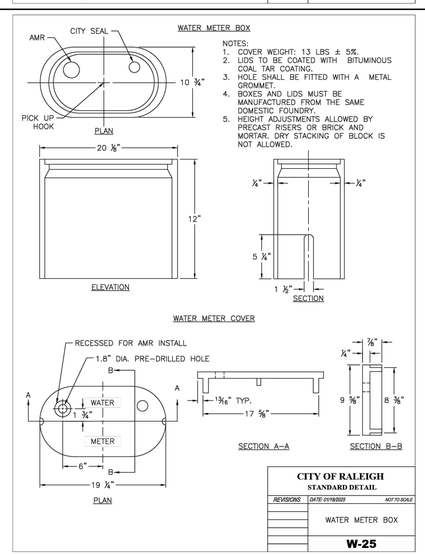
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 01/18/2023	NOT TO SCALE
	DIMENSIONS: GREASE INTERCEPTORS & OIL-WATER SAND SEPARATORS	
	S-41	



CITY OF RALEIGH
STANDARD DETAIL

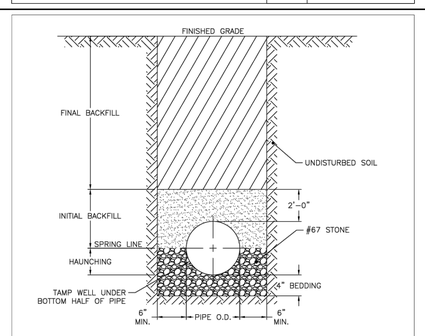
REVISIONS	DATE: 01/18/2023	NOT TO SCALE
	LATERAL SADDLE INSTALLATION DETAIL FOR PVC PIPE	
	S-31	



NOTES:
1. COVER WEIGHT: 13 LBS ± 5%.
2. LIDS TO BE COATED WITH BITUMINOUS COAL TAR COATING.
3. HOLE SHALL BE FITTED WITH A METAL GROMMET.
4. BOXES AND LIDS MUST BE MANUFACTURED FROM THE SAME DOMESTIC FOUNDRY.
5. HEIGHT ADJUSTMENTS ALLOWED BY PRECAST RISERS OR BRICK AND MORTAR. DRY STACKING OF BLOCK IS NOT ALLOWED.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 01/18/2023	NOT TO SCALE
	WATER METER BOX	
	W-25	



TYPICAL TRENCH BOTTOM DIMENSIONS FOR SDR 35 PVC GRAVITY PIPE

NOTES:
1. FOR TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
2. NO ROCKS OR BOULDERS, 4" OR LARGER, TO BE USED IN INITIAL BACKFILL.
3. ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
4. BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 01/18/2023	NOT TO SCALE
	TRENCH BOTTOM DIMENSIONS & BACKFILLING REQUIREMENTS FOR PVC GRAVITY SEWER MAIN	
	S-5	

ATTENTION CONTRACTORS

JAN2025M

The Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Raleigh Water Inspector at 919-996-3245 or https://cityworks.raleighnc.gov/pucontractors and schedule a Pre-construction meeting prior to beginning any construction. Raleigh Water must be contacted at (919) 996-4540 at least twenty-four hours prior to beginning any work activity around critical water and sewer infrastructure.

Failure to notify City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require re-installation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for inspection, install a downstream plug, have permitted plans on the jobsite, or any other violation of Raleigh Water Standards will result in a fine and possible exclusion from future work in the City of Raleigh.

#	DATE	DESCRIPTION
1	1-JUL-25	SUBMIT FOR PERMIT REVIEW

REVISIONS:

CHIPOTLE MEXICAN GRILL

CROSLAND SOUTHEAST

CORESOUND DEVELOPMENT

MISC. DETAILS

CHIPOTLE AT WALLBROOK (LOT 5B)

Town of Rolesville Project No. SDP 25-03

Wake Forest Township, Town of Rolesville, Wake County, North Carolina

NC License: P-1199
ARK CONSULTING GROUP PLLC
ENGINEERS & SURVEYORS
925-A Conference Drive
Greenville, NC 27858
(252) 558-0888
www.arkconsultinggroup.com

PRELIMINARY Do Not Use for Construction 7/1/2025

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

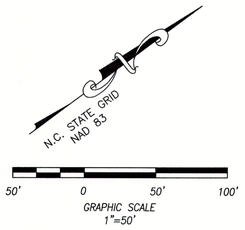
C6.3

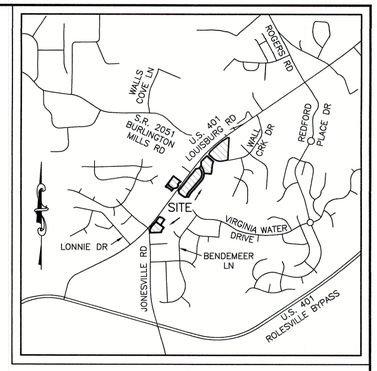
Date: July 1, 2025

LEGEND

- ● = FOUND MONUMENT AS NOTED
- ○ = SET 5/8" IRON REBAR (UNLESS OTHERWISE NOTED)
- ⊠ = 5/8" IRON REBAR TO BE SET
- ∘ = DIMENSION POINT (NOTHING SET)
- B.M. = BOOK OF MAPS
- D.B. = DEED BOOK
- R/W = RIGHT OF WAY
- (7) = KEYNOTE – SEE STORM DRAIN TABLE
- C&G = CURB & GUTTER
- CONC= CONCRETE
- CPP = CORRUGATED PLASTIC PIPE
- RCP = REINFORCED CONCRETE PIPE
- = FIBER OPTIC HAND HOLE
- = CABLE TELEVISION HAND HOLE
- = TELEPHONE PEDESTAL
- = FIBER OPTIC MARKER (FOM) / GAS MARKER (GMP)
- = LIGHT POLE
- = POWER POLE
- = GUY WIRE ANCHOR
- = TRANSFORMER
- = TRAFFIC SIGNAL POLE
- = TRAFFIC CONTROL HAND HOLE
- = GAS VALVE
- = STORM DRAIN MANHOLE
- = SANITARY SEWER MANOLE
- = SEWER FORCE MAIN VALVE
- = FIRE HYDRANT
- = WATER VALVE
- = WELL
- = UNKNOWN HAND HOLE

- = BOUNDARY LINE
- = RIGHT OF WAY LINE
- = ADJOINING PROPERTY LINE
- = EASEMENT LINE
- = EDGE OF ASPHALT
- = WOODS – TREE LINE
- CATV = UTILITY – UNDERGROUND CABLE TV LINE
- G = UTILITY – UNDERGROUND GAS LINE
- T/FO = UTILITY – UNDERGROUND TELEPHONE FIBER OPTIC
- F.O. DUCT = UTILITY – UNDERGROUND FIBER OPTIC DUCT
- W = UTILITY – UNDERGROUND WATER LINE
- SFM = UTILITY – UNDERGROUND SANITARY SEWER FORCE MAIN LINE
- OHL = UTILITY – OVERHEAD LINE (TYPE AND NUMBER OF LINES NOT SPECIFIED)





VICINITY MAP
SCALE: 1"=2000'±

STORM DRAIN

(1) 18" RCP
385.00 INV. FROM #2

(2) CURB INLET
389.45 GRATE
385.65 INV. TO #1

(3) CURB INLET
(UNDER CONSTRUCTION)
389.66 GRATE

(4) SDMH
(UNDER CONSTRUCTION)
392.27 RIM
388.23 BOTTOM OF OPENING FROM #5
381.76 INV. 36" RCP FROM #16
381.62 INV. 36" RCP FROM #6

(5) CURB INLET
391.64 GRATE
388.57 BOTTOM OF OPENING TO #4

(6) CURB INLET
391.67 GRATE
387.98 INV. 18" RCP FROM #13
385.64 INV. 15" RCP FROM #8
382.58 INV. 24" RCP FROM #7
382.58 INV. 36" RCP TO #5

(7) 24" RCP
383.05 INV. TO #6

(8) CURB INLET
391.27 GRATE
387.01 INV. 15" RCP FROM #9
386.95 INV. 15" RCP TO #6

(9) CURB INLET
390.72 GRATE
387.22 INV. 15" RCP FROM #10
387.17 INV. 15" RCP TO #8

(10) CURB INLET
390.83 GRATE
387.62 INV. 15" RCP FROM #12
387.57 INV. 15" RCP FROM #11
387.48 INV. 15" RCP TO #9

(11) CURB INLET
390.89 GRATE
387.76 INV. 15" RCP TO #10

(12) DROP INLET
390.87 GRATE (LOW POINT IN 'V')
387.80 INV. 15" RCP TO #10

(13) S.D. MANHOLE
392.64 RIM
388.52 BOTTOM OF OPENING FROM #14
388.45 INV. 15" RCP FROM #15
388.33 INV. 18" RCP TO #6

(14) CURB INLET
392.08 GRATE
388.52 BOTTOM OF OPENING TO #13

(15) CURB INLET
391.87 GRATE
388.75 INV. 15" RCP FROM N.E.
388.71 INV. 15" RCP TO #13

(16) S.D. MANHOLE
392.65 RIM
388.86 BOTTOM OF OPENING FROM #17
382.19 INV. 30" RCP FROM #18
382.17 INV. 36" RCP TO #4

(17) CURB INLET
391.97 GRATE
388.86 BOTTOM OF OPENING TO #16

(18) CURB INLET
392.16 GRATE
384.71 INV. 30" RCP FROM #19
384.70 INV. 30" RCP TO #16

(19) CURB INLET
392.48 GRATE
385.27 INV. 30" RCP FROM #20
385.16 INV. 30" RCP TO #18

(20) CURB INLET
392.38 GRATE
386.20 INV. 15" RCP FROM #21
386.09 INV. 24" RCP FROM #22
386.03 INV. 30" RCP TO #19

(21) CURB INLET
392.99 GRATE
386.31 INV. 15" RCP TO #20

(22) CURB INLET
392.64 GRATE
388.12 INV. 15" RCP FROM #23
387.96 INV. 24" RCP FROM #24
387.81 INV. 24" RCP TO #20

(23) CURB INLET
393.60 GRATE
389.17 INV. 15" RCP TO #22

(24) CURB INLET
392.25 GRATE
387.93 INV. 24" RCP FROM #25
387.79 INV. 24" RCP TO #22

(25) CURB INLET
394.23 GRATE
388.44 INV. 15" RCP FROM #26
388.46 INV. 18" RCP FROM #27
388.37 INV. 24" RCP TO #24

(26) CURB INLET
396.33 GRATE
388.60 INV. 15" RCP TO #25

(27) CURB INLET
395.57 GRATE
389.75 INV. 18" RCP FROM #28
389.61 INV. 18" RCP TO #25

(28) CURB INLET
396.13 GRATE
390.27 INV. 15" RCP FROM N.W.
(UNABLE TO LOCATE N.W. END)
390.14 INV. 18" RCP TO #27

(29) 18" RCP
393.60 INV. FROM #30

(30) CURB INLET
403.77 GRATE
(INVERTS NOT MEASURED)

(31) CURB INLET
396.93 GRATE
(INVERTS NOT MEASURED)

(32) CURB INLET
397.17 GRATE
(INVERTS NOT MEASURED)

(33) CURB INLET
395.97 GRATE
(INVERTS NOT MEASURED)

(34) CURB INLET
395.81 GRATE
(INVERTS NOT MEASURED)

(35) CURB INLET
393.00 GRATE
(INVERTS NOT MEASURED)

(36) CURB INLET
392.68 GRATE
(INVERTS NOT MEASURED)

(37) CURB INLET
391.02 GRATE
(INVERTS NOT MEASURED)

(38) CURB INLET
391.03 GRATE
(INVERTS NOT MEASURED)

(39) 5' x 5' BOX CULVERT
373.95 INV. FROM #40

(40) 5' x 5' BOX CULVERT
379.48 INV. TO #39

(41) CURB INLET
390.59 GRATE
(INVERTS NOT MEASURED)

(42) CURB INLET
387.36 GRATE
(INVERTS NOT MEASURED)

(43) CURB INLET
386.64 GRATE
(INVERTS NOT MEASURED)

(44) CURB INLET
389.98 GRATE
(INVERTS NOT MEASURED)

(45) CURB INLET
390.19 GRATE
(INVERTS NOT MEASURED)

(46) CURB INLET
390.80 GRATE
(INVERTS NOT MEASURED)

(47) CURB INLET
390.47 GRATE
(INVERTS NOT MEASURED)

(48) CURB INLET
389.91 GRATE
(INVERTS NOT MEASURED)

(49) CURB INLET
388.65 GRATE
(INVERTS NOT MEASURED)

(50) CURB INLET
383.56 GRATE
(INVERTS NOT MEASURED)

(51) DROP INLET
382.68 GRATE
(INVERTS NOT MEASURED)

(52) CURB INLET
380.21 GRATE
(INVERTS NOT MEASURED)

(53) CURB INLET
376.19 GRATE
(INVERTS NOT MEASURED)

(54) CURB INLET
378.41 GRATE
(INVERTS NOT MEASURED)

(55) 15" RCP
382.95 INV. FROM #56

(56) 15" RCP
386.47 INV. TO #55

(57) 18" CPP
377.81 INV.
(PIPE DIRECTION NOT NOTED)

(58) CURB INLET
400.40 GRATE
(INVERTS NOT MEASURED)

(59) CURB INLET
402.29 GRATE
(INVERTS NOT MEASURED)

EXISTING EASEMENTS

1
30' ELECTRIC LINE EASEMENT
D.B. 3868 PG 917

2
INGRESS/EGRESS EASEMENT
D.B. 10105 PG 778
D.B. 10123 PG 2779

3
15' UTILITY EASEMENT
B.M. 2003 PG 614

4
20' UTILITY EASEMENT
B.M. 2003 PG 614

5
TEMPORARY CONSTRUCTION EASEMENT
TO DEPARTMENT OF TRANSPORTATION
D.B. 18992 PG 406

6
APPROX. LOCATION OF
CROSS ACCESS EASEMENT
D.B. 18988 PG 1102

7
PERMANENT UTILITY EASEMENT
D.B. 18992 PG 412

8
TEMPORARY CONSTRUCTION EASEMENT
D.B. 18992 PG 412

9
CITY OF RALEIGH
30' SANITARY SEWER EASEMENT
D.B. 19691 PG 2034

10
TEMPORARY
CONSTRUCTION EASEMENT
D.B. 18992 PG 409

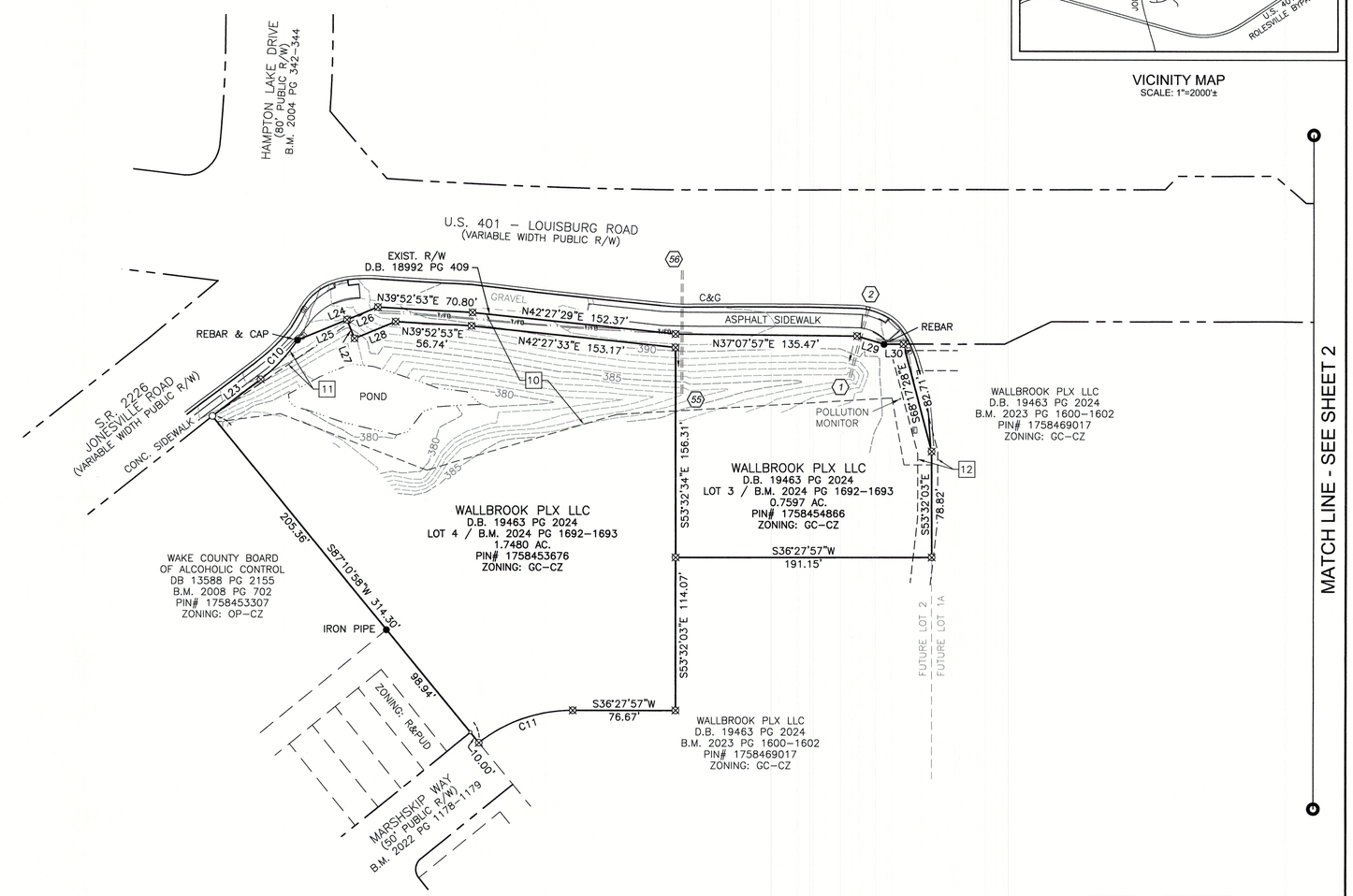
11
PERMANENT
WATERLINE EASEMENT
D.B. 16679 PG 132

12
ELECTRIC EASEMENT
D.B. 19701 PG 2770
(DESIGN LOCATION, NOT AS-BUILT)

13
PERMANENT SLOPE EASEMENT
D.B. 14395 PG 2087
B.M. 2011 PG 383

14
PERMANENT DRAINAGE EASEMENT
D.B. 18992 PG 412

15
PRIVATE DRAINAGE EASEMENT
B.M. 2025 PG 198–204



CERTIFICATE OF SURVEY

I, MICHAEL W. ZMUDA, CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT THIS GROUND SURVEY WAS PERFORMED AT THE 95% CONFIDENCE LEVEL TO MEET FEDERAL GEOGRAPHIC DATA COMMITTEE STANDARDS; THAT THIS SURVEY WAS PERFORMED TO MEET THE REQUIREMENTS FOR A TOPOGRAPHIC/PLANIMETRIC SURVEY TO THE ACCURACY OF CLASS "A", AND THAT THE ORIGINAL DATA WAS OBTAINED ON JANUARY 28, 2025; THAT THE SURVEY WAS COMPLETED ON MARCH 6, 2025; AND ALL COORDINATES ARE BASED ON NORTH CAROLINA STATE GRID, 'NAD 83' AND REALIZATION 2001 AND ALL ELEVATIONS ARE BASED ON NAVD 88.

THIS 24th DAY OF March, 2025.

MICHAEL W. ZMUDA, PLS# L-5205

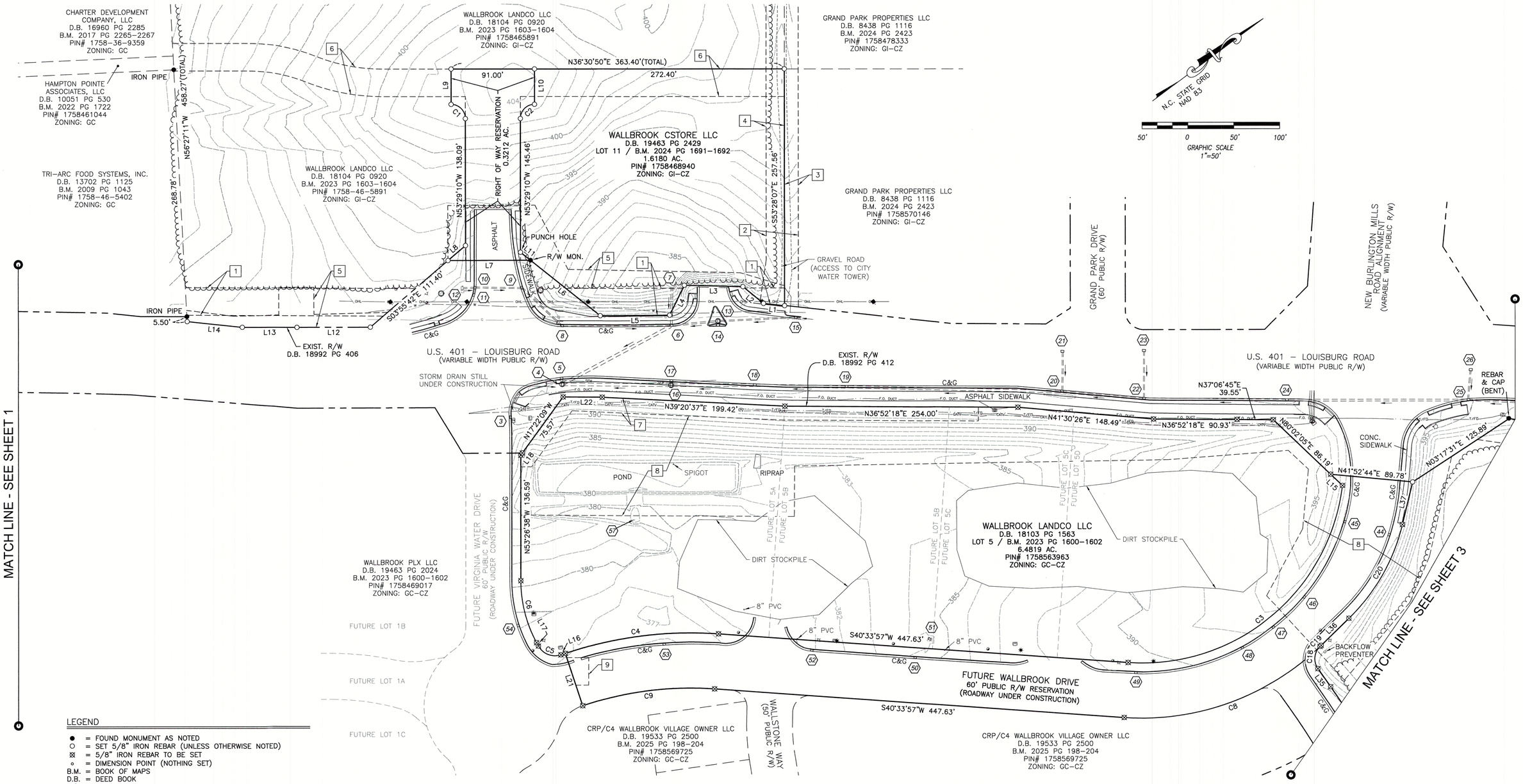
NORTH CAROLINA PROFESSIONAL SEAL L-5205 LAND SURVEYOR MICHAEL W. ZMUDA 3/24/25

JMT
9201 ARBORETUM PARKWAY, SUITE 310 | RICHMOND, VA 23236
P: (804) 323-9900 | F: (804) 323-0596 | www.jmt.com

REVISION #	DATE	REASON FOR REVISION

WALLBROOK
EXISTING CONDITIONS
LOTS 3, 4, 5, 7, 8 & 11
WAKE FOREST TOWNSHIP
TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

DRAWN BY: JSZ	PROJECT#:	
CHECKED BY: MWZ	CONTRACT#:	JMT#: 25-00159-001
DATE: 03/24/2025	SCALE: 1"=50'	SHEET 1 OF 3



LEGEND

- ● = FOUND MONUMENT AS NOTED
- ○ = SET 5/8" IRON REBAR (UNLESS OTHERWISE NOTED)
- ⊠ = 5/8" IRON REBAR TO BE SET
- ∘ = DIMENSION POINT (NOTHING SET)
- B.M. = BOOK OF MAPS
- D.B. = DEED BOOK
- R/W = RIGHT OF WAY
- (7) = KEYNOTE – SEE STORM DRAIN TABLE
- C&G = CURB & GUTTER
- CONC= CONCRETE
- CPP = CORRUGATED PLASTIC PIPE
- RCP = REINFORCED CONCRETE PIPE
- = FIBER OPTIC HAND HOLE
- = CABLE TELEVISION HAND HOLE
- = TELEPHONE PEDESTAL
- = FIBER OPTIC MARKER (FOM) / GAS MARKER (GMP)
- = LIGHT POLE
- = POWER POLE
- = GUY WIRE ANCHOR
- = TRANSFORMER
- = TRAFFIC SIGNAL POLE
- = TRAFFIC CONTROL HAND HOLE
- = GAS VALVE
- = STORM DRAIN MANHOLE
- = SANITARY SEWER MANOLE
- = SEWER FORCE MAIN VALVE
- = FIRE HYDRANT
- = WATER VALVE
- = WELL
- = UNKNOWN HAND HOLE

- = BOUNDARY LINE
- = RIGHT OF WAY LINE
- = ADJOINING PROPERTY LINE
- = EASEMENT LINE
- = EDGE OF ASPHALT
- = WOODS – TREE LINE
- CATV = UTILITY – UNDERGROUND CABLE TV LINE
- G = UTILITY – UNDERGROUND GAS LINE
- T/TD = UTILITY – UNDERGROUND TELEPHONE FIBER OPTIC
- F.O. DUCT = UTILITY – UNDERGROUND FIBER OPTIC DUCT
- W = UTILITY – UNDERGROUND WATER LINE
- SFM = UTILITY – UNDERGROUND SANITARY SEWER FORCE MAIN LINE
- OHL = UTILITY – OVERHEAD LINE (TYPE AND NUMBER OF LINES NOT SPECIFIED)

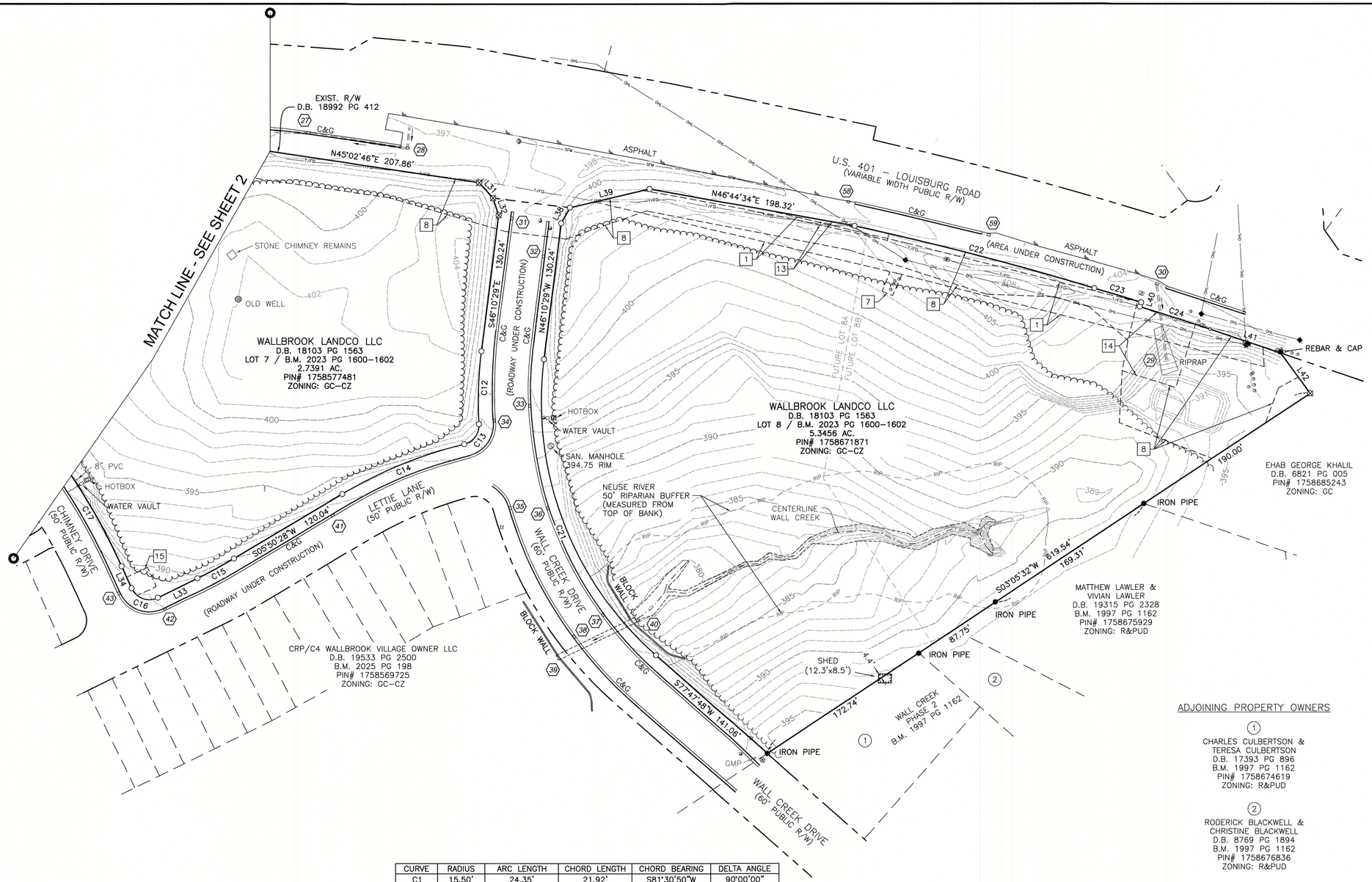
JMT
9201 ARBORETUM PARKWAY, SUITE 310 | RICHMOND, VA 23236
P: (804) 323-9900 | F: (804) 323-0596 | www.jmt.com

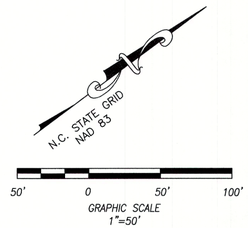
REVISION #	DATE	REASON FOR REVISION

NORTH CAROLINA PROFESSIONAL SEAL L-5205 LAND SURVEYOR MICHAEL W. ZMUDA 3/24/25

WALLBROOK
EXISTING CONDITIONS
LOTS 3, 4, 5, 7, 8 & 11
WAKE FOREST TOWNSHIP
TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

DRAWN BY: JSZ	PROJECT#:	
CHECKED BY: MWZ	CONTRACT#:	JMT#: 25-00159-001
DATE: 03/24/2025	SCALE: 1"=50'	SHEET 2 OF 3





LINE	BEARING	DISTANCE
L1	S42°44'43"W	23.10'
L2	S75°45'31"W	28.94'
L3	S37°49'21"W	63.91'
L4	S27°10'50"E	36.31'
L5	S36°06'10"W	75.75'
L6	S74°59'26"W	96.87'
L7	S36°20'17"W	90.00'
L8	N03°55'42"W	25.12'
L9	N53°29'10"W	38.50'
L10	N53°29'10"W	38.50'
L11	S74°59'26"W	13.90'
L12	S36°20'17"W	80.00'
L13	S36°41'55"W	59.58'
L14	S42°28'55"W	60.39'
L15	N80°02'05"E	17.70'
L16	S17°58'15"W	5.00'
L17	N82°01'45"W	4.21'
L18	N17°22'09"W	2.86'
L19	S39°45'15"E	47.63'
L20	S07°36'24"E	42.14'
L21	N72°01'45"W	60.00'
L22	N36°56'35"E	42.60'
L23	N00°52'23"W	45.18'
L24	N14°14'29"E	64.65'
L25	N14°14'29"E	39.65'
L26	N14°14'29"E	25.00'
L27	S75°45'31"E	15.00'
L28	N14°14'29"E	33.14'
L29	N53°08'21"E	20.88'
L30	N36°26'23"E	14.62'
L31	N84°24'49"E	19.69'
L32	S71°32'55"E	17.19'
L33	S10°35'58"W	41.96'
L34	N77°54'14"W	22.90'
L35	N88°51'30"W	24.22'
L36	N07°36'24"W	42.14'
L37	N39°45'15"W	47.63'
L38	N23°56'19"W	17.05'
L39	N23°25'13"E	77.77'
L40	S36°12'58"E	4.33'
L41	N55°13'38"E	70.99'
L42	S89°44'38"E	47.23'

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	15.50'	24.35'	21.92'	S81°30'50"W	90°00'00"
C2	15.50'	24.35'	21.92'	N08°29'10"W	90°00'00"
C3	220.00'	333.74'	302.64'	S02°53'33"E	86°55'01"
C4	430.00'	169.57'	168.48'	S29°16'06"W	22°35'42"
C5	20.50'	28.62'	26.35'	S57°58'15"W	80°00'00"
C6	140.50'	70.10'	69.37'	N67°44'11"W	28°35'07"
C7	212.00'	118.95'	117.39'	S23°40'50"E	32°08'50"
C8	280.00'	235.42'	228.54'	S16°28'47"W	48°10'22"
C9	370.00'	145.91'	144.97'	S29°16'06"W	22°35'42"
C10	123.92'	40.68'	40.50'	N10°16'40"W	18°48'34"
C11	114.00'	75.45'	74.08'	S17°30'15"W	37°55'23"
C12	380.00'	69.35'	69.25'	S51°24'10"E	10°27'22"
C13	18.50'	25.65'	23.64'	S16°54'37"E	79°26'28"
C14	425.00'	125.87'	125.41'	S14°19'32"W	16°58'09"
C15	475.00'	39.45'	39.44'	S08°13'13"W	4°45'31"
C16	18.50'	29.54'	26.50'	S56°20'52"W	91°29'47"
C17	625.00'	119.49'	119.31'	N83°22'52"W	10°57'16"
C18	18.50'	26.35'	24.18'	N48°02'53"W	81°37'14"
C19	280.00'	1.80'	1.80'	N07°25'20"W	0°22'08"
C20	212.00'	118.95'	117.39'	N23°40'50"W	32°08'50"
C21	320.00'	312.92'	300.60'	N74°11'20"W	56°01'43"
C22	2953.50'	235.70'	235.64'	N51°05'51"E	4°34'21"
C23	11465.50'	46.62'	46.62'	N53°30'00"E	0°13'59"
C24	3700.00'	70.31'	70.31'	N54°18'48"E	1°05'20"

ADJOINING PROPERTY OWNERS

(1)
CHARLES CULBERTSON &
TERESA CULBERTSON
D.B. 17393 PG 896
B.M. 1997 PG 1162
PIN# 1758674619
ZONING: R&PUD

(2)
RODERICK BLACKWELL &
CHRISTINE BLACKWELL
D.B. 8769 PG 1894
B.M. 1997 PG 1162
PIN# 1758676836
ZONING: R&PUD

LEGEND

- ● = FOUND MONUMENT AS NOTED
- ○ = SET 5/8" IRON REBAR (UNLESS OTHERWISE NOTED)
- ⊠ = 5/8" IRON REBAR TO BE SET
- ∘ = DIMENSION POINT (NOTHING SET)
- B.M. = BOOK OF MAPS
- D.B. = DEED BOOK
- R/W = RIGHT OF WAY
- (7) = KEYNOTE – SEE STORM DRAIN TABLE
- C&G = CURB & GUTTER
- CONC= CONCRETE
- CPP = CORRUGATED PLASTIC PIPE
- RCP = REINFORCED CONCRETE PIPE
- = FIBER OPTIC HAND HOLE
- = CABLE TELEVISION HAND HOLE
- = TELEPHONE PEDESTAL
- = FIBER OPTIC MARKER (FOM) / GAS MARKER (GMP)
- = LIGHT POLE
- = POWER POLE
- = GUY WIRE ANCHOR
- = TRANSFORMER
- = TRAFFIC SIGNAL POLE
- = TRAFFIC CONTROL HAND HOLE
- = GAS VALVE
- = STORM DRAIN MANHOLE
- = SANITARY SEWER MANOLE
- = SEWER FORCE MAIN VALVE
- = FIRE HYDRANT
- = WATER VALVE
- = WELL
- = UNKNOWN HAND HOLE

- = BOUNDARY LINE
- = RIGHT OF WAY LINE
- = ADJOINING PROPERTY LINE
- = EASEMENT LINE
- = EDGE OF ASPHALT
- = WOODS – TREE LINE
- CATV = UTILITY – UNDERGROUND CABLE TV LINE
- G = UTILITY – UNDERGROUND GAS LINE
- T/TD = UTILITY – UNDERGROUND TELEPHONE FIBER OPTIC
- F.O. DUCT = UTILITY – UNDERGROUND FIBER OPTIC DUCT
- W = UTILITY – UNDERGROUND WATER LINE
- SFM = UTILITY – UNDERGROUND SANITARY SEWER FORCE MAIN LINE
- OHL = UTILITY – OVERHEAD LINE (TYPE AND NUMBER OF LINES NOT SPECIFIED)

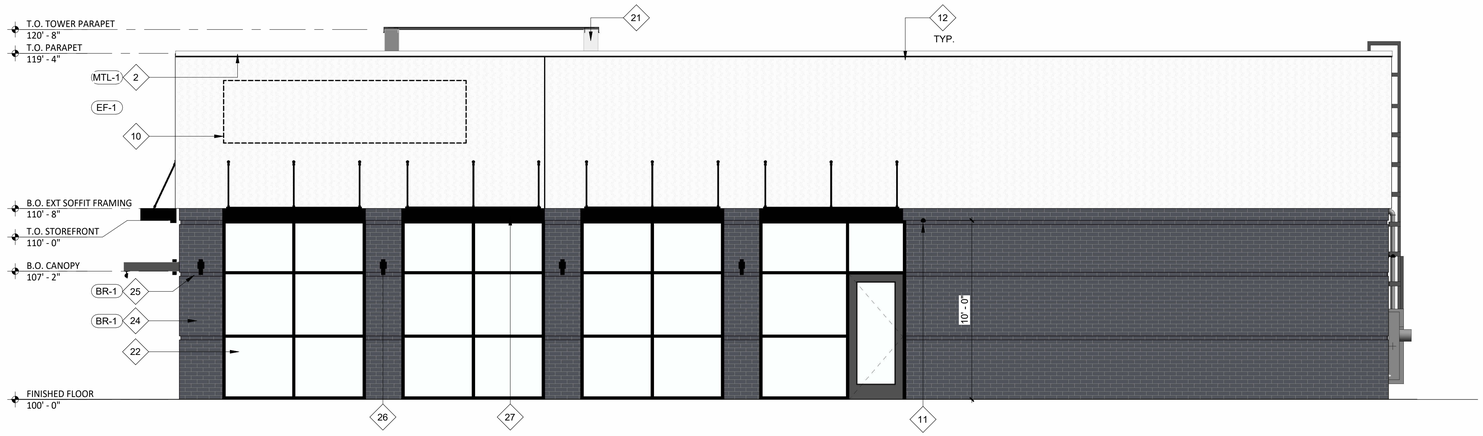
9201 ARBORETUM PARKWAY, SUITE 310 | RICHMOND, VA 23236
P: (804) 323-9900 | F: (804) 323-0596 | www.jmt.com

REVISION #	DATE	REASON FOR REVISION

NORTH CAROLINA PROFESSIONAL SEAL L-5205 LAND SURVEYOR MICHAEL W. ZMUDA
3/24/25

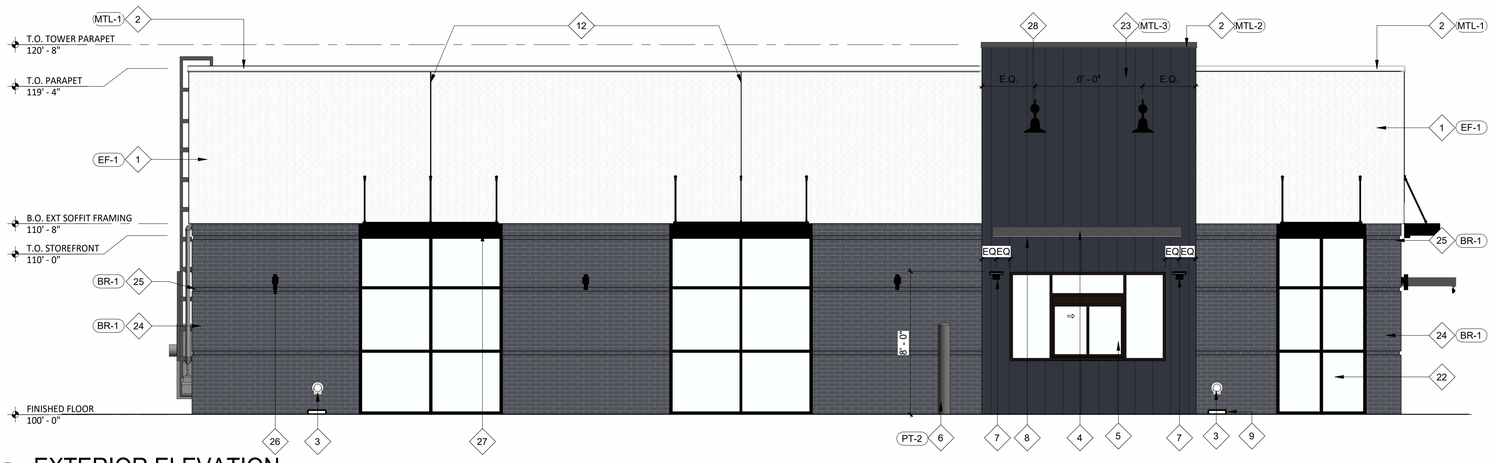
WALLBROOK
EXISTING CONDITIONS
LOTS 3, 4, 5, 7, 8 & 11
WAKE FOREST TOWNSHIP
TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

DRAWN BY: JSZ	PROJECT#:	
CHECKED BY: MWZ	CONTRACT#:	JMT#: 25-00159-001
DATE: 03/24/2025	SCALE: 1"=50'	SHEET 3 OF 3



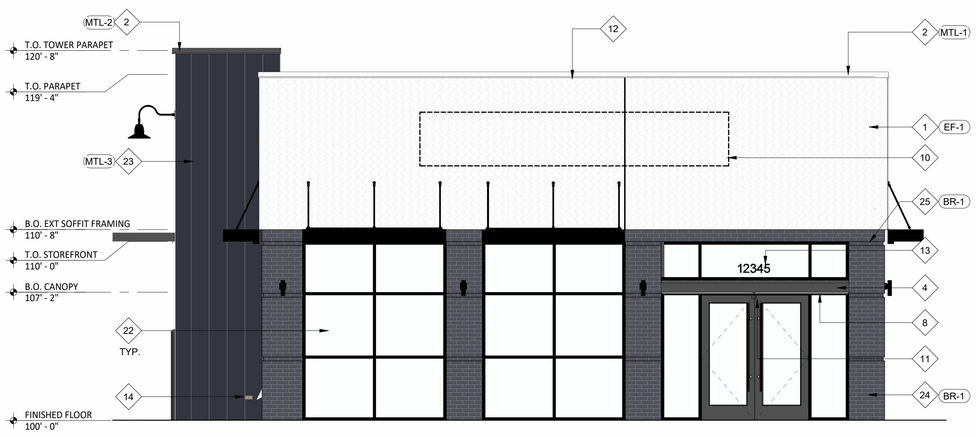
1 EXTERIOR ELEVATION

SCALE: 1/4" = 1'-0"



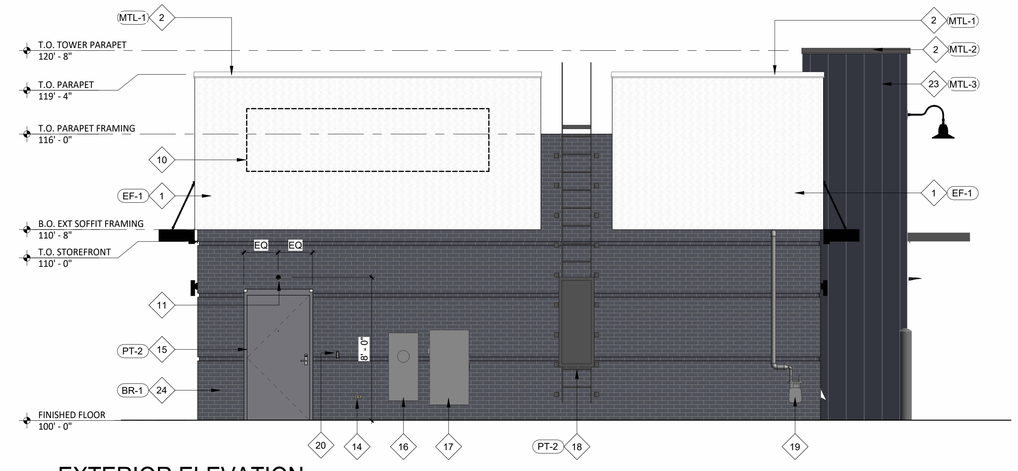
2 EXTERIOR ELEVATION

SCALE: 1/4" = 1'-0"



3 EXTERIOR ELEVATION

SCALE: 1/4" = 1'-0"



4 EXTERIOR ELEVATION

SCALE: 1/4" = 1'-0"

EXT. ELEV GENERAL NOTES

A. METAL CANOPY FROM AMERICAN PRODUCTS, INC. (API), PHONE: (813)-925-0144, E-MAIL: BIDS@AMERICANPROD.COM OR COMPARABLE

KEYNOTE LEGEND

1	EIFS - REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2	PREFINISHED METAL COPING.
3	STAINLESS STEEL COW TONGUE OVERFLOW ROOF DRAIN DISCHARGE.
4	PREFINISHED METAL CANOPY W/ INTEGRAL LIGHTING.
5	PREFINISHED DARK BRONZE ALUMINUM PASS-THRU WINDOW WITH INTEGRATED INTERIOR AIR CURTAIN, TRANSOM AND SIDELITES - CAULK AROUND ENTIRE PERIMETER OF OPENING AT BOTH SIDES.
6	8" CONCRETE SAFETY BOLLARD.
7	WALL PACK LIGHT (X6).
8	LED CHANNEL LIGHT (X9) - LENGTH TO MATCH CANOPY.
9	CONCRETE SPLASH BLOCK.
10	DASHED LINE INDICATES EXTENTS OF BLOCKING TO BE PROVIDED BY GENERAL CONTRACTOR - PROVIDE ELECTRICAL ACCESS AS REQUIRED - COORDINATE ADDITIONAL REQUIREMENTS WITH TENANT SIGNAGE VENDOR.
11	EXTERIOR EMERGENCY LIGHT (E2).
12	EIFS JOINT ALIGNED WITH BUILDING ELEMENTS AS SHOWN - REFER TO MANUFACTURER'S RECOMMENDATION FOR SPACING REQUIREMENTS.
13	6" HIGH VINYL BUILDING ADDRESS NUMBERS - COORDINATE REQUIREMENTS WITH AUTHORITIES HAVING JURISDICTION.
14	FROST PROOF WALL HYDRANT.
15	INSULATED HOLLOW METAL DOOR AND FRAME - CAULK AROUND ENTIRE PERIMETER OF OPENING AT BOTH SIDES.
16	ELECTRICAL METER.
17	ELECTRICAL FUSED DISCONNECT SWITCH.
18	EXTERIOR ROOF LADDER WITH LOCKING GATE.
19	GAS METER.
20	DOOR BELL - MOUNT BETWEEN 36" AND 48" ABOVE GRADE.
21	RAISED PARAPET BEYOND - EXTERIOR FINISHES TO WRAP AROUND ON EXPOSED SIDES.
22	THERMALLY BROKEN ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED GLAZING - CAULK AROUND ENTIRE PERIMETER OF OPENINGS.
23	MBCI METAL PANELS.
24	FACE BRICK VENEER - RUNNING BOND - REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
25	SINGLE BRICK COURSE REVEAL - REFER TO 1/A-800 FOR ADDITIONAL INFORMATION.
26	EXTERIOR WALL PACK LIGHT TO MATCH SURROUNDING BUILDINGS.
27	PREFINISHED METAL CANOPY.
28	EXTERIOR GOOSNECK LIGHTING TO MATCH URROUNDING BUILDINGS.

EXTERIOR FINISH SCHEDULE

FINISH	MATERIAL	COLOR	REMARKS
BR-1	4" FACE BRICK	VELOUR IRONSPOT MAGANESE	REFER TO SPEC FOR GROUT COLOR
EF-1	EIFS	MATCH PT-1	FLAT FINISH
MTL-1	PREFINISHED METAL COPING	PPG #1010-2 "FOG"	TO MATCH ADJACENT FINISH
MTL-2	PREFINISHED METAL COPING	PPG #1001-6 "KNIGHT'S ARMOR"	TO MATCH ADJACENT FINISH
MTL-3	PREFINISHED MBCI PANELS	MATCH PT-2	SHADOWRIB
PT-1	PAINT	PPG #1010-2 "FOG"	SHADOWRIB
PT-2	PAINT	PPG #1001-6 "KNIGHT'S ARMOR"	SHADOWRIB

CONSULTANT

WILKUS ARCHITECTS

CLIENT

CORE SOUND DEVELOPMENT

MATT BLOOMFIELD
CORE SOUND DEVELOPMENT
1560 MATTHEW DRIVE, UNIT C
FORT MYERS, FL 33907
MATT@CORESOUNDDEV.COM
(954) 895-2811

PROJECT INFORMATION

ROLESVILLE (WALLBROOK) SHELL BUILDING

S. MAIN STREET & VIRGINIA WATER DRIVE
ROLESVILLE, NC 27571

SEAL

NOT FOR CONSTRUCTION

PROJECT NO. 2024-0229
DRAWN BY SAS
CHECKED BY KAM

ISSUE	DATE

REVISION	DATE

TITLE:

EXTERIOR ELEVATIONS

SHEET NUMBER:

A-700

SECTION 15055 - COMMON PIPING REQUIREMENTS
PART 1 - GENERAL
A. SECTION REQUIREMENTS
  1. Comply with the requirements of the Building Code and the local authority having jurisdiction.
PART 2 - PRODUCTS
2.1 SUPPORTING DEVICES
A. Hanger and Pipe Attachments: Factory fabricated with galvanized coatings; nonmetallic coated for hangers in direct contact with copper tubing.
B. Building Attachments: Powder actuated type, drive pin attachments with pullout and shear capacities appropriate for supported loads and building materials; UL listing and FM approval for fire protection systems.
C. Mechanical Anchor Fasteners: Insert-type attachments with pullout and shear capacities appropriate for supported loads and building materials; UL listing and FM approval for fire protection systems.
PART 3 - EXECUTION
3.1 INSTALLATION
A. Install piping free of sags and bends.
B. Install fittings for changes in direction and branch connections.
C. Install sleeves for pipes passing through concrete and masonry walls, gypsum board partitions, and concrete floor and roof slabs.
D. Exterior Wall, Pipe Penetrations: Mechanical sleeve seals installed in steel or cast iron pipes for wall sleeves.
E. Fire Barrier Penetrations: Seal pipe penetrations with through-penetration firestop systems.
F. Install unions adjacent to each valve and at final connection to each piece of equipment.
G. Install dielectric unions and flanges to connect piping materials of dissimilar metals in gas piping.
H. Install dielectric coupling and nipple fittings to connect piping materials of dissimilar metals in water piping.
I. Provide full ring escutcheons at plumbing penetrations through walls or ceilings. Tightly seal escutcheons to the adjacent surface.
3.2 HANGERS AND SUPPORTS
A. Install building attachments within concrete or to structural steel. Install additional attachments at concentrated loads, including valves, flanges, guides, strainers, expansion joints, and at changes in direction of piping.
B. Install powder actuated drive pin fasteners in concrete after concrete is cured. Do not use in lightweight concrete or in slabs less than 4 inches thick.
C. Install mechanical anchor fasteners in concrete after concrete is cured. Do not use in lightweight concrete or in slabs less than 4 inches thick.
D. Support fire protection system piping independent of other piping.
E. Load Distribution: Install hangers and supports so piping live and dead loading and stresses from movement will not be transmitted to connected equipment.
END OF SECTION 15055

SECTION 15080 - MECHANICAL INSULATION
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. Submittals: None.
B. Quality Assurance: Labeled with maximum flame-spread rating of 25 and maximum smoke developed rating of 50 according to ASTM E 84.
PART 2 - PRODUCTS
2.1 PIPE INSULATION
A. Preformed Glass Fiber Pipe Insulation: ASTM C 547, Class 1, with factory applied, all purpose, vapor retarder jacket.
B. Polyolefin Pipe Insulation: Unicellular polyethylene, preformed pipe insulation. Comply with ASTM C 534, Type I, except for density.
PART 3 - EXECUTION
3.1 INSTALLATION
A. Install vapor barriers on insulated pipes with surface operating temperatures below 60 deg F.
B. Insulate fittings, valves, and specialties.
C. Seal vapor barrier penetrations for hangers, supports, anchors, and other projections.
D. Coat glass fiber pipe insulation ends with vapor barrier coating.
E. Roof Penetrations: Apply insulation for interior applications to a point even with the top of the roof flashing.
F. Exterior Wall Penetrations: For penetrations of below grade exterior walls, terminate insulation flush with mechanical sleeve seal.
G. Interior Walls and Partitions Penetrations: Apply insulation continuously through walls and partitions, except fire rated walls and partitions.
H. Fire Rated Walls and Partitions Penetrations: Terminate insulation at penetrations through fire rated walls and partitions. Seal around penetration with through penetration firestop systems.
I. Floor Penetrations: Terminate insulation at the underside of the floor assembly and at the floor support at top of floor. Seal around penetration with through penetration firestop systems.
J. Glass Fiber Insulation Installation: Bond insulation to pipe with adhesive. Seal seams and joints with vapor barrier compound.
K. Interior Piping System Applications: Insulate the following piping systems:
  1. Domestic cold, hot, and recirculation water pipes.
  2. Exposed sanitary drains and water supply pipes for public hand sinks.
  3. Refrigerant piping.
L. Do not apply insulation to the following systems, materials, and equipment:
  1. Flexible connectors.
  2. Fire protection piping systems.
  3. Sanitary drainage and vent piping.
  4. Chrome plated pipes and fittings, except for plumbing fixtures for the disabled.
  5. Piping specialties, including air chambers, unions, strainers, check valves, plug valves, and flow regulators.
M. Pipe Insulation Thickness Application Schedule: Insulate piping with the following materials and thicknesses:
  1. Domestic Hot and Recirculation water pipes: 1-inch preformed glass fiber pipe insulation.
  2. Domestic Cold Water: 1/2-inch preformed glass fiber pipe insulation.
  3. P-Trap and Fixture Supplies for public hand sinks: ADA-compliant pre-formed insulation.
END OF SECTION 15080

SECTION 15110 - VALVES
PART 1 - GENERAL (Not Applicable)
PART 2 - PRODUCTS
2.1 GENERAL DUTY VALVES
A. End Connections: Threads shall comply with ANSI B1.20.1. Flanges shall comply with ANSI B16.1 for cast iron valves and ANSI B16.24 for bronze valves. Solder-joint connections shall comply with ANSI B16.18.
B. Ball Valves: Rated for 150 psig saturated steam pressure, 400 psig WOG pressure; 2 piece construction; with bronze body, standard (or regular) port, chrome plated brass ball, replaceable "Teflon" or "TFE" seats and seals, blowout proof stem, and vinyl covered steel handle.
C. Plug Valves: Rated at 150 psig WOG; bronze body, with straightaway pattern, square head, and threaded ends.
D. Swing Check Valves: Class 125, cast bronze body and cap; with horizontal swing, Y-pattern, and bronze disc.
E. Valves for Copper Tube: Solder ends, except provide threaded ends for heating hot water and low pressure steam service.
F. Valves for Steel Pipe: Threaded ends.
PART 3 - EXECUTION
3.1 INSTALLATION
A. Use gate and ball valves for shutoff duty and ball for throttling duty.
B. Locate valves for easy access and provide separate support where necessary.
C. Install accessible valves for each fixture and item of equipment.
D. Install valves in horizontal piping with stem at or above center of pipe.
E. Install valves in a position to allow full stem movement.
F. Install check valves for proper direction of flow in horizontal position with hinge pin level.
END OF SECTION 15110

SECTION 15140 - DOMESTIC WATER PIPING
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. Performance Requirements: Unless otherwise indicated minimum pressure requirements for water piping are as follows:
  1. Service Entrance Piping: 100 psig.
  2. Domestic Water Piping: 80 psig.
B. Comply with NSF 14 "Plastic Piping Components and Materials."
C. Comply with NSF 61 "Drinking Water System Components -- Health Effects."
PART 2 - PRODUCTS
2.1 PIPES AND TUBES (See Material Schedule on sheet P010 for where these materials are to be used)
A. Hard Copper Tube: ASTM B 88, Types L and M, water tube, drawn temper.
2.2 FITTINGS
A. Wrought Copper, Solder Joint Pressure Fittings: ASME B 16.22.
B. Cast Copper Alloy, Solder Joint Pressure Fittings: ASME B 16.18.
C. Bronze Flanges: ASME B 16.24, Classes 150 and 300.
D. Copper Unions: ASME B 16.18, cast copper alloy body, hexagonal stock, with ball and socket joint, metal to metal seating surfaces, and solder joint, threaded, or solder joint and threaded ends. Threads complying with ASME B 1.20.1.
E. Copper and Copper Alloy Press-Connect Pressure FittingsCopper Press Fittings: ASME B16.51
2.3 JOINING MATERIALS
A. Solder Filler Metal: ASTM B 32, lead free.
B. Brazing Filler Metals: AWS A5.8, alloys to suit system requirements.
C. Solvent Cements: As recommended by manufacturer.
D. Plastic Pipe Seals: ASTM F 477, elastomeric gasket.
PART 3 - EXECUTION
3.1 VALVE APPLICATIONS
A. Install gate valves close to main on each branch and riser serving two or more plumbing fixtures or equipment connections and where indicated.
B. Install gate or ball valves on inlet to each plumbing equipment item, on each supply to each plumbing fixture not having stops on supplies, and elsewhere as indicated.
C. Install drain valve at base of each riser, at low points of horizontal runs, and where required to drain water distribution piping system.
D. Install swing check valve on discharge side of each pump and elsewhere as indicated.
E. Install ball valves in each hot water circulating loop and discharge side of each pump.
3.2 PIPING INSTALLATIONS
A. Install hangers and supports at intervals indicated in the applicable plumbing code and as recommended by pipe manufacturer.
B. Support vertical piping at each floor.
3.3 INSPECTING AND CLEANING
A. Inspect and test piping systems following procedures of authorities having jurisdiction.
B. Clean and disinfect water distribution piping following procedures of authorities having jurisdiction.
END OF SECTION 15140

SECTION 15150 - SANITARY WASTE AND VENT PIPING
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. Minimum Pressure Requirement for Soil, Waste and Vent: 10 feet head.
B. Comply with NSF 14 "Plastic Piping Components and Related Materials".
PART 2 - PRODUCTS
2.1 PIPES AND TUBES
A. PVC Plastic, DWV Pipe: ASTM D 2665, Schedule 40, plain ends.
2.2 FITTINGS
A. PVC Plastic, DWV Pipe Fittings: ASTM D 2665, made to ASTM D 3311; socket type; drain, waste, and vent pipe patterns.
PART 3 - EXECUTION
3.1 PIPING INSTALLATION
A. Install cleanout and extension to grade at connection of building sanitary drain and building sanitary sewer.
B. Locate drainage piping runouts as close as possible to bottom of floor slab supporting fixtures or drains.
3.2 INSPECTION
A. Inspect and test piping systems following procedures of authorities having jurisdiction.
END OF SECTION 15150

SECTION 15198 - NATURAL GAS PIPING
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. Quality Assurance: Comply with NFPA 54 and the Plumbing Code.
PART 2 - PRODUCTS
2.1 PIPE, TUBE, AND SPECIALTIES
A. Steel Pipe: ASTM A 53, Type S (Seamless), Grade B, Schedule 40, plain ends.
B. Fittings:
  a. Malleable Iron Threaded Fittings: ASME B16.3, Class 150.
  b. Cold Press Mechanical Joint Fitting System: Viega MegaPress
C. Manual Valves: Comply with standards listed or, if appropriate, to ANSI Z21.15.
D. Gas Stops: AGA certified, bronze-body, plug type with bronze plug, for 2-psig or less natural gas. Include AGA stamp, flat or square head or lever handle, and threaded ends complying with ASME B1.20.1.
E. Gas Valves: 150-psig WOG, cast-iron or bronze body, bronze plug, straightaway pattern, square head, tapered-plug type.
F. Gas Pressure Regulators: ANSI Z21.18, single stage, steel jacketed, corrosion resistant pressure regulators. Include atmospheric vent, elevation compensator. Regulator pressure ratings, inlet and outlet pressures, and flow volume in cubic feet per hour of natural gas at specific gravity are as indicated.
G. Line Gas Pressure Regulators: Inlet pressure rating not less than system pressure.
H. Flexible Connectors: ANSI Z21.24, copper alloy.
I. Strainers: Bronze body, Y-pattern, full size of connecting piping. Include stainless-steel screens with 3/64 inch perforations and a pressure rating of 125-psig- minimum, WOG working pressure.
PART 3 - EXECUTION
3.1 INSTALLATION
A. Close equipment shutoff valves before turning off gas to premises or section of piping. Perform leakage test as specified to determine that all equipment is turned off in affected piping section.
B. Install shutoff valve, downstream from gas meter, outside building at gas service entrance.
C. Install gas stops for shutoff to appliances with NPS 2" or smaller low pressure gas supply.
D. Drips and Sediment Traps: Install drips at points where condensate may collect. Include outlets of gas meters. Locate where readily accessible to permit cleaning and emptying. Do not install where condensate would be subject to freezing.
E. Install gas piping at uniform slope of 0.1 percent upward toward risers.
F. Connect branch piping from top or side of horizontal piping.
G. Install strainers on supply side of each control valve, gas pressure regulator, solenoid valve, and elsewhere as indicated.
H. Install valves in accessible locations, protected from damage.
I. Install gas valve upstream from each gas pressure regulator. Where two gas-pressure regulators are installed in series, valve is not required at second regulator.
J. Connect gas piping to equipment and appliances with shutoff valves and unions. Install gas valve upstream from and within 36 inches of each appliance using gas. Install union or flanged connection downstream from valve.
K. Inspect, test, and purge piping according to NFPA 54, Part 4, "Gas Piping Inspection, Testing, and Purging", and requirements of authorities having jurisdiction.
END OF SECTION 15198

PLUMBING SYMBOLS

	ELBOW UP
	ELBOW DOWN
	DOMESTIC COLD WATER
G	GAS
G	GAS (ON ROOF)
	SANITARY WASTE
GW	GREASE WASTE
	SANITARY VENT
X	PLAN NOTE: SEE PLAN NOTES LISTED ON THE SAME SHEET FOR NOTE MEANING
	CONNECT TO EXISTING
RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
WM	WATER METER
GM	GAS METER
XX-#	EQUIPMENT TAG: SEE EQUIPMENT SCHEDULE ON SHEET P600 FOR EQUIPMENT INFORMATION
	VALVE
	CLEANOUT

PLUMBING ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
(E)	EXISTING
EXT'G	EXISTING
FCO	FLOOR CLEANOUT
GCO	GRADE CLEANOUT
GC	GENERAL CONTRACTOR

PLUMBING GENERAL NOTES

A GENERAL NOTES APPLY TO PLUMBING SHEETS.
B PLUMBING WORK SHALL BE DONE IN ACCORDANCE WITH THE PLUMBING CODE, LOCAL HEALTH DEPARTMENT STANDARDS, AND THE AUTHORITY HAVING JURISDICTION. SEE ARCHITECTURAL SHEETS FOR THE PREVAILING CODES.
C PIPING LAYOUTS ON DRAWINGS ARE SCHEMATIC. EXACT LOCATIONS ARE TO BE COORDINATED WITH THE EXISTING CONDITIONS AND THE WORK OF OTHER TRADES.
D CONCEAL PIPING UNLESS NOTED OTHERWISE. WATER SUPPLY PIPES SHALL BE INSTALLED LEVEL.
E PIPING IN EXTERIOR WALLS SHALL BE INSTALLED BETWEEN THE INSULATION AND THE INTERIOR WALL FINISHING MATERIAL.
F PLUMBING FIXTURES, ACCESSORIES, AND MATERIALS PROVIDED FOR DOMESTIC WATER SHALL BE LEAD FREE.
G THE TERM "FURNISH" MEANS SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS. THE TERM "INSTALL" DESCRIBES THE OPERATIONS AT THE PROJECT SITE INCLUDING THE ACTUAL UNLOADING, UNPACKING, ASSEMBLY, ERECTING, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS. THE TERM "PROVIDE" MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE.
H PRIOR TO CONNECTION TO ANY EXISTING SEWER SYSTEM PERFORM A DIE TEST TO VERIFY THE TYPE OF SYSTEM AND THE DIRECTION OF FLOW. REPORT ANY DEVIATION FROM THE CONSTRUCTION DOCUMENTS TO THE TENANT'S CONSTRUCTION MANAGER.
I PROVIDE SANITARY AND GREASE WASTE PIPES AT A MINIMUM SLOPE OF 1/4" PER FOOT UNLESS NOTED OTHERWISE.

PLUMBING MATERIAL SCHEDULE

CATEGORY	APPLICATION	ALLOWABLE MATERIAL
WATER SUPPLY PIPE	ABOVE GRADE	TYPE L COPPER TUBE
NATURAL GAS PIPE	CONCEALED	SCH. 40 STEEL PIPE, MALLEABLE IRON THREADED FITTINGS
	EXPOSED	SCH. 40 STEEL PIPE, MALLEABLE IRON THREADED FITTINGS, PAINTED
SANITARY WASTE & VENT PIPE	ABOVE GROUND, CONCEALED	PVC PLASTIC DWV PIPE AND FITTINGS
	BELOW GROUND	PVC PLASTIC DWV PIPE AND FITTINGS

Consultant:
NATIONAL ENGINEERING
4635 Trueman Blvd. Suite 250
Hilliard, Ohio 43026
Phone: (614) 751-9610
Fax: (614) 552-5240
Contact: Trey Mitchell
(614) 328-2034
tmitchell@nationalengineering.com

PRELIMINARY -
NOT FOR CONSTRUCTION

MATT BLOOMFIELD
CORE SOUND DEVELOPMENT
1560 MATTHEW DRIVE, UNIT C
FORT MYERS, FL 33907
MATT@CORESOUNDDEV.COM
(954) 895-2811

SHELL - ROLESVILLE, NC
US-401 & GRAND PARK DR.
ROLESVILLE, NC 27587

Issue Record:
05-12-2025 PERMIT ISSUE

Revisions:

Drawn: TRM
Checked: TRM

Project No.
2501146

Contents:
PLUMBING SPECIFICATIONS

P010

PLUMBING SUPPLY PLAN NOTES

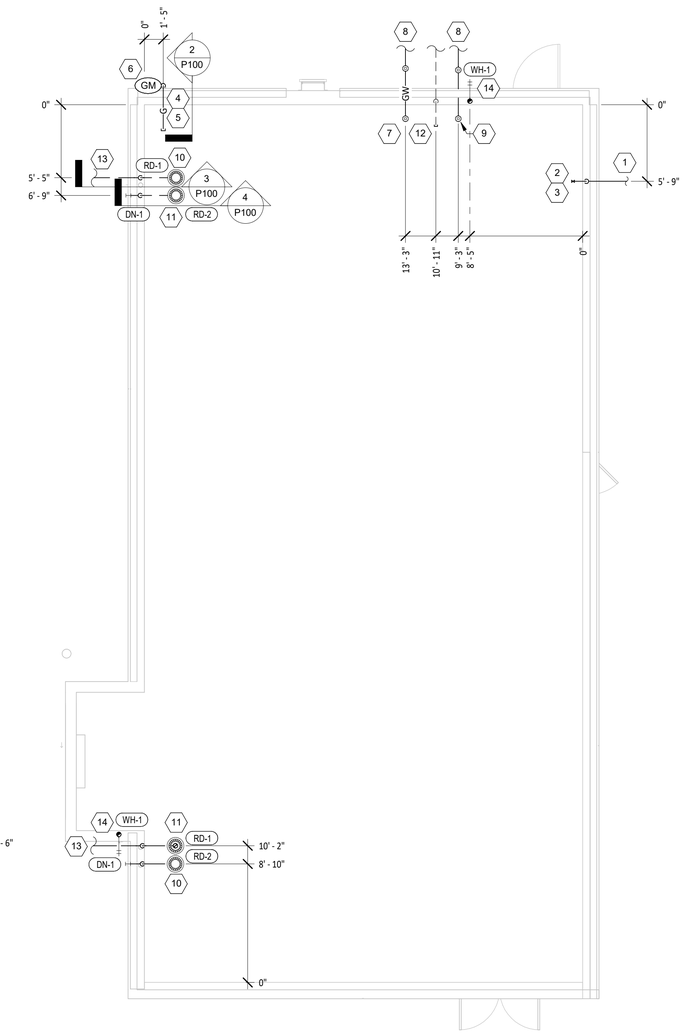
1. SEE CIVIL UTILITY PLANS FOR CONTINUATION OF WATER LINE TO CONNECT TO WATER MAIN.
2. PROVIDE A 1-1/2" WATER SERVICE ENTRY AND MAIN DOMESTIC WATER SHUTTOFF VALVE IN AN ACCESSABLE LOCATION ABOVE CEILING FOR FUTURE TENANT CONNECTION.
3. MEASURE DOMESTIC WATER PRESSURE DOWNSTREAM OF BACKFLOW PREVENTER WITHIN BUILDING. IF PRESSURE IS LESS THAN 60 PSI COORDINATE WITH OWNER TO PROVIDE PRESSURE BOOSTER. IF WATER PRESSURE IS GREATER THAN 80 PSI PROVIDE LINE-SIZE PRESSURE REGULATOR SET AT 80 PSI UPSTREAM OF BACKFLOW PREVENTER.
4. PROVIDE A 2-1/2" GAS LINE FROM THE GAS METER THROUGH THE EXTERIOR WALL PER DETAIL 2/THIS SHEET.
5. NATURAL GAS DELIVERY PRESSURE AFTER THE METER SHALL BE 7" W.C. PER TENANT'S WORK LETTER. PROVIDE A NATURAL GAS REGULATOR IF GAS COMPANY CANNOT SUPPLY A DELIVERY PRESSURE OF 7" W.C. TO THE BUILDING. COORDINATE A MUTUTALLY AGREEABLE LOCATION FOR THE GAS PRESSURE REGULATOR WITH CHIPOTLE'S CONSTRUCTION MANAGER.
6. PROVIDE A 1,600 MBH NATURAL GAS SERVICE TO A NEW GAS METER ON THE EXTERIOR WALL OF THE BUILDING AT THE LOCATION SHOWN. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF THE GAS LINE TO THE CITY MAIN CONNECTION.
7. PROVIDE A 4" GREASE WASTE LINE WITH A MINIMUM 48" INVERT ELEVATION STUBBED INTO THE BUILDING AS SHOWN. TERMINATE WITH A FLOOR CLEANOUT WITHIN SPACE AS SHOWN.
8. SEE CIVIL UTILITY PLANS FOR CONTINUATION OF SEWER LINE.
9. PROVIDE A 4" SANITARY SEWER LINE WITH A MINIMUM 48" INVERT ELEVATION STUBBED INTO THE BUILDING AS SHOWN. TERMINATE WITH A FLOOR CLEANOUT WITHIN SPACE AS SHOWN.
10. PROVIDE 3" STORM DRAIN CONDUCTOR FROM PRIMARY ROOF DRAIN RD-1 DOWN IN WALL TO 4" STORM DRAIN BELOW GRADE. INTERIOR HORIZONTAL STORM DRAIN CONDUCTORS SHALL BE SLOPED A MINIMUM OF 1/2" PER FOOT.
11. PROVIDE 3" STORM DRAIN CONDUCTOR FROM SECONDARY ROOF DRAIN RD-2 TO DOWNSPOUT NOZZLE DN-1 MOUNTED AT 24" AFG. INTERIOR HORIZONTAL STORM DRAIN CONDUCTORS SHALL BE SLOPED A MINIMUM OF 1/2" PER FOOT.
12. PROVIDE A 2" SEWER VENT TIGHT TO THE EXTERIOR WALL FROM THE GREASE INTERCEPTOR TO THE BUILDING AS SHOWN. CAP VENT LINE FOR FUTURE CONNECTION TO VENT SYSTEM BY TENANT.
13. SEE CIVIL UTILITY PLAN FOR CONTINUATION OF 4" STORM SEWER.
14. PROVIDE WALL HYDRANT AS SHOWN. PROVIDE 1/2" DOMESTIC WATER FROM WALL HYDRANT UP ON INSIDE FACE OF EXTERIOR WALL TO 11'-0" AFF FOR FUTURE CONNECTION BY TENANT.

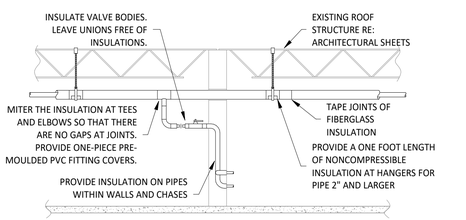
ROOF DRAIN CONDUCTOR SIZING CALCULATIONS - CODE REFERENCES NORTH CAROLINA PLUMBING CODE 2018 (IPC 2015 WITH AMENDMENTS)

DESCRIPTION	Total	Units
Roof Area Total	2188	ft^2
Parapet Area Total	956	ft^2
Per Section 1106.4 (Parapet Area / 2) =	478	ft^2
Project Roof Area = (Parapet Area / 2) + (Roof Area) =	2666	ft^2
Project Roof Area / 2 (for two roof drains) =	1333	ft^2
Per 1106.1(a) Primary 100 Year, 1-Hour Rainfall For NC	4	in/Hour
Per 1106.1(b) Secondary 100 Year, 1-Hour Rainfall For NC	7.2	in/Hour
Per Table 1106.2(1) Primary Vertical Conductors and Leaders Pipe Sizing	3	in
Per Table 1106.2(1) Secondary Vertical Conductors and Leaders Pipe Sizing	3	in
Per Table 1106.3 Primary Horizontal Conductors and Leaders Pipe Sizing (1/8" Per Foot)	4	in
Per Table 1106.3 Primary Horizontal Conductors and Leaders Pipe Sizing (1/2" Per Foot)	3	in

PLUMBING FIXTURE SCHEDULE

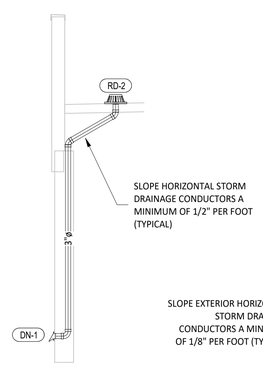
TAG	FIXTURE	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL	DESCRIPTION	QUANTITY	CONNECTION SIZES CW	CONNECTION SIZES WASTE
DN-1	DOWNSPOUT NOZZLE	GC	GC	WATTS	RD-950	STAINLESS STEEL DOWNSPOUT COVER WITH PERFORATED HINGED STRAINER	2		3"
GI-1	GREASE INTERCEPTOR	GC	GC	CUSTOM	--	1,500 GALLON PRECAST GREASE INTERCEPTOR	1		4"
RD-1	ROOF DRAIN	GC	GC	WATTS	RD-103	EPOXY COATED CAST IRON ROOF DRAIN WITH FLASHING CLAMP WITH INTEGRAL GRAVEL	2		3"
RD-2	ROOF DRAIN	GC	GC	WATTS	RD-103-W	EPOXY COATED CAST IRON OVERFLOW ROOF DRAIN WITH FLASHING CLAMP WITH INTEGRAL 4 IN. (102MM) HIGH INTERNAL STANDPIPE, SELF-LOCKING POLYTHYLENE DOME, AND NO HUB OUTLET	2		3"
WH-1	FROST PROOF WALL HYDRANT	GC	GC	WOODFORD	MODEL 65	AUTOMATIC DRAINING, FREEZELESS WALL HYDRANT WITH ANTI-SIPHON VACUUM BREAKER. PROVIDE WITH STEM LONG ENOUGH TO REACH INSIDE THE THERMAL ENVELOPE OF THE BUILDING.	2	3/4"	
							9		



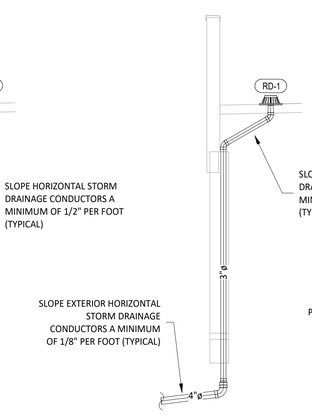


PROVIDE INSULATION ON INTERIOR COLD AND HOT WATER PIPING, CONDENSATE DRAIN PIPE, AND STORM PIPE. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION REGARDING INSULATION. INSTALL ITEMS PER SPECIFICATIONS AND MANUFACTURER'S INSTRUCTIONS. MAINTAIN VAPOR BARRIER ON COLD WATER AND CONDENSATE PIPING BY MEANS OF SEALANT AND TAPE. FLAME SPREAD AND SMOKE-DEVELOPED INDEXES SHALL NOT EXCEED 25/50. SEAL EXPOSED ENDS OF FIBERGLASS INSULATION WITH ADHESIVE MASTIC. PROVIDE PREFORMED GLASS FIBER PIPE INSULATION WITH PRE-MOLDED PVC JACKETS, SLEEVES, AND FITTING COVERS ON EXPOSED WATER PIPE SO THAT EXPOSED WATER PIPE IS COVERED ENTIRELY WITH PVC INSULATION COVERS.

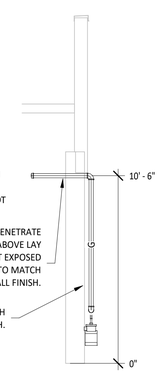
5 / P100 **PIPE INSULATION DETAIL**
N.T.S.



4 / P100 **OVERFLOW ROOF DRAIN SECTION**
1/4" = 1'-0"



3 / P100 **ROOF DRAIN SECTION**
1/4" = 1'-0"



2 / P100 **GAS METER SECTION**
1/4" = 1'-0"

1 / P100 **PLUMBING SUPPLY PLAN**
3/16" = 1'-0"

Consultant:
NATIONAL ENGINEERING
4635 Trueman Blvd. Suite 250
Hilliard, Ohio 43026
Phone: (614) 751-9610
Fax: (614) 552-5240
Contact: Trey Mitchell
(614) 328-2034
tmitchell@nationalengineering.com

PRELIMINARY -
NOT FOR CONSTRUCTION

MATT BLOOMFIELD
CORE SOUND DEVELOPMENT
1560 MATTHEW DRIVE, UNIT C
FORT MYERS, FL 33907
MATT@CORESOUNDDEV.COM
(954) 895-2811

SHELL - ROLESVILLE, NC
US-401 & GRAND PARK DR.
ROLESVILLE, NC 27587

Issue Record:
05-12-2025 PERMIT ISSUE

Revisions:

Drawn: TRM
Checked: TRM

Project No.
2501146

Contents:
PLUMBING SITE PLAN

P100

SECTION 16011 TEMPORARY & PERMANENT ELECTRICAL SERVICE
PART 1 GENERAL
1.1 DEFINITIONS
A. GFCI: Ground fault current interrupter.
B. RMS: Root Mean Square
C. SPDT: Single Pole, Double Throw
1.2 USE CHARGES
A. General: Cost or use charges for temporary facilities are not chargeable to Tenant, Architect, or Engineer and shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, the following:
  1. Tenant's construction forces.
  2. Occupants of Project.
  3. Architect.
  4. Engineer.
  5. Testing agencies.
  6. Personnel of authorities having jurisdiction.
B. Permanent Service: Coordinate with building Tenant and utility company to establish permanent service upon completion of the project. Contractor shall pay for all permits, aid-to-construction charges, and related fees associated with the new service.
1.3 NOTIFICATION
A. Coordinate with Tenant to provide 72 hour written notification to other tenants of any power interruptions. Notification shall state the estimated time and duration of the electrical outage.
1.4 QUALITY ASSURANCE
A. Standards: Comply with ANSI A10.6, NECA's 'Temporary Electrical Facilities," and NFPA 241.
  1. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with trade regulations and union jurisdictions.
  2. Electric Service: Comply with NECA, NEMA and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
  3. Comply with OSHA standards and regulations.
PART 2 PRODUCTS
2.1 MATERIALS
A. Electrical Outlets: Properly configured, NEMA-polarized outlets to prevent insertion of 110- to 120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button, and pilot light.
B. Power Distribution System Circuits: Where permitted and overhead and exposed for surveillance, wiring circuits, not exceeding 125-V ac, 20-A rating, and lighting circuits may be nonmetallic sheathed cable.
C. Main panelboard with disconnect.
D. Temporary lighting.
E. 120 volt receptacles with overcurrent protection.
F. Enclosures. NEMA AB 1 and NEMA KS 1 to meet environmental conditions of installed location.
  1. Outdoor Locations: NEMA 250, Type 3R.
PART 3 EXECUTION
3.1 INSTALLATION
A. Electric Power Service: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include meters, transformers, and overload-protected disconnecting means.
  1. Install power distribution wiring overhead and rise vertically where least exposed to damage.
B. Electric Distribution: Provide receptacle outlets adequate for connection of power tools and equipment.
  1. Provide waterproof connectors to connect separate lengths of electrical power cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.
  2. Provide metal conduit, tubing, or metallic cable for wiring exposed to possible damage. Provide rigid steel conduits for wiring exposed on grades, floors, decks, or other traffic areas.
  3. Provide metal conduit enclosures or boxes for wiring devices.
  4. Provide 4-gang outlets, spaced so 1 DO-foot (30-m) extension cord can reach each area for power hand tools and task lighting. Provide a separate 125-V ac, 20-A circuit for each outlet.
C. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations and traffic conditions.
  1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
  2. Provide one 100-W incandescent lamp (or equivalent) every 50 feet (15 m) in traffic areas.
  3. Install exterior-yard site lighting that will provide adequate illumination for construction operations, parking and traffic conditions, and signage visibility when the Work is being performed.
END OF SECTION 16011

SECTION 16060 - GROUNDING AND BONDING
PART 1 - GENERAL
1.1 SUMMARY
A. This Section includes grounding of electrical systems and equipment. Grounding requirements specified in this Section may be supplemented by special requirements of systems described in other Sections.
1.2 QUALITY ASSURANCE
A. Testing Agency Qualifications: Testing agency as defined by OSHA in 29 CFR 1910.7 or a member company of the International Electrical Testing Association and that is acceptable to authorities having jurisdiction.
  1. Testing Agency's Field Supervisor: Person currently certified by the International Electrical Testing Association to supervise on-site testing specified in Part 3.
B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
  1. Comply with UL 467.
PART 2 - PRODUCTS
2.1 GROUNDING CONDUCTORS
A. For insulated conductors, comply with Division 16 Section "Wiring Methods."
B. Material: Copper.
C. Equipment Grounding Conductors: Insulated with green-colored insulation.
D. Grounding Electrode Conductors: Stranded cable.
E. Bare Copper Conductors: Comply with the following:
  1. Solid Conductors: ASTM B 3.
  2. Assembly of Stranded Conductors: ASTM B 8.
2.2 CONNECTOR PRODUCTS
A. Comply with IEEE 837 and UL 467; listed for use for specific types, sizes, and combinations of conductors and connected items.
PART 3 - EXECUTION
3.1 APPLICATION
A. Use only copper conductors.
B. In raceways, use insulated equipment grounding conductors.
C. Equipment Grounding Conductor Terminations: Use bolted pressure clamps.
D. Grounding Bus: Install in electrical and telephone equipment rooms, in rooms housing service equipment, and elsewhere as indicated.
  1. Use insulated spacer; space 1 inch from wall and support from wall 6 inches above finished floor, unless otherwise indicated.
  2. At doors, route the bus up to the top of the door frame, across the top of the doorway, and down to the specified height above the floor.
3.2 EQUIPMENT GROUNDING CONDUCTORS
A. Comply with NFPA 70, Article 250, for types, sizes, and quantities of equipment grounding conductors, unless specific types, larger sizes, or more conductors than required by NFPA 70 are indicated.
3.3 INSTALLATION
A. Grounding Conductors: Route along shortest and straightest paths possible, unless otherwise indicated. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.
3.4 CONNECTIONS
A. General: Make connections so galvanic action or electrolysis possibility is minimized. Select connectors, connection hardware, conductors, and connection methods so metals in direct contact will be galvanically compatible.
B. Equipment Grounding Conductor Terminations: For No. 8 AWG and larger, use pressure-type grounding lugs. No. 10 AWG and smaller grounding conductors may be terminated with winged pressure-type connectors.
C. Tighten screws and bolts for grounding and bonding connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A.
D. Compression-Type Connections: Use hydraulic compression tools to provide correct circumferential pressure for compression connectors. Use tools and dies recommended by connector manufacturer. Provide embossing die code or other standard method to make a visible indication that a connector has been adequately compressed on grounding conductor.
END OF SECTION 16060

SECTION 16100 - WIRING METHODS
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. Summary: Building wire and cable and associated splices, connectors, and terminations for wiring systems rated 600 V and less, and twisted-pair cable; and raceways and boxes.
PART 2 - PRODUCTS
2.1 WIRES AND CABLES
A. Connectors and Splices: Wiring connectors of size, ampacity rating, material, and type and class for application and for service indicated.
2.2 RACEWAYS
A. Wireways: Screwed cover type, with manufacturers standard finish.
B. Outlet and Device Boxes: Sheet metal boxes, except use cast-metal boxes at exterior, interior exposed, and interior damp locations.
C. Pull and Junction Boxes: Sheet metal boxes, except use nonmetallic boxes with gasketed covers at exterior and interior damp locations.
2.3 ENCLOSURES
A. Hinged-Cover Enclosures: NEMA 250, steel enclosure with continuous hinge cover and flush latch. Finish inside and out with manufacturer's standard enamel.
B. Cabinets: NEMA 250, Type 1, unless otherwise indicated.
PART 3 - EXECUTION
3.1 INSTALLATION
A. Install wires and cables according to the NECA's "Standard of Installation.
B. Wiring at Outlets: Install with at least 12 inches of slack conductor at each outlet.
C. Conceal wiring, unless otherwise indicated, within finished walls, ceilings, and floors.
D. Boxes and Enclosures: In damp or wet locations use NEMA 250, Type 4, stainless steel.
E. Use raceway fittings compatible with raceway and suitable for use and location. For intermediate metal conduit, use threaded rigid steel conduit fittings, unless otherwise indicated.
F. Raceways Embedded in Slabs: Install in middle third of the slab thickness where practical, and leave at least 1 -inch concrete cover.
G. Install exposed raceways parallel to or at right angles to nearby surfaces or structural members, and follow the surface contours as much as practical.
H. Join raceways with fittings designed and approved for the purpose and make joints tight. Use bonding bushings or wedges at connections subject to vibration. Use bonding jumpers where joints cannot be made tight. Use insulating bushings to protect conductors.
I. Install pull wires in empty raceways. Use No. 14 AWG zinc-coated steel or monofilament plastic line having not less than 200-lb tensile strength. Leave not less than 18 inches of slack at each end of the pull wire.
J. Install raceway sealing fittings where required by the NEC and at wiring entrances to refrigerated spaces. Locate at suitable, approved, accessible locations and fill them with UL-listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces.
K. Stub-up Connections for Equipment: Extend conductors to equipment with rigid metal conduit; flexible metal conduit may be used 3 inches above the floor.
L. Install a separate green ground conductor in surface metal raceway from the junction box supplying the raceway to receptacle and fixture ground terminals.
3.2 IDENTIFICATION MATERIALS AND DEVICES
A. Install at locations for most convenient viewing without interference with operation and maintenance of equipment.
B. Coordinate names, abbreviations, colors, and other designations used for electrical identification with corresponding designations indicated in the Contract Documents or required by codes and standards. Use consistent designations throughout Project.
C. Identify raceways and cables with color banding as follows:
  1. Bands: Pretensioned, snap-around, colored plastic sleeves or colored encircling conduit, and place adjacent bands of two-color markings in contact, side by side.
  2. Band Locations: At changes in direction, at penetrations of walls and floors, at 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.
  3. Colors: As follows:
    a. Telecommunication System: Green and yellow.
D. Color-code System secondary service, feeder, and branch-circuit conductors throughout the secondary electrical system as follows:

	120/208V	277/480V
1. Phase A:	Black	Brown
2. Phase B:	Red	Orange
3. Phase C:	Blue	Yellow
4. Neutral:	White	Gray
5. Ground:	Green	Green

END OF SECTION 16100

SECTION 16140 - WIRING DEVICES
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. Submittals: None.
B. Comply with NEMA WD 1.
C. Comply with NFPA 70.
PART 2 - PRODUCTS
2.1 DEVICES
A. General: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.
B. Color: Per Material Schedule on sheet E010.
C. Receptacles: Heavy- Duty grade, NEMA WD6, Configuration 5-20R unless otherwise indicated.
D. Ground-Fault Circuit Interrupter Receptacles: integral duplex receptacle; for installation in box without an adapter. Feed-through type, with a 2-3/4-inch- deep outlet
E. Isolated-Ground Receptacles: Equipment grounding contacts connected only to the green grounding screw terminal of the device with inherent electrical isolation from mounting strap.
F. Snap Switches: Heavy-duty, quiet type.
G. Wall Plate: Per Material Schedule on sheet E010.
H. Floor Service Fittings: Modular, above-floor, dual-service units suitable for wiring method used.
PART 3 - EXECUTION
3.1 INSTALLATION
A. Install devices and assemblies plumb and secure.
B. Mount devices flush with long dimension vertical unless otherwise indicated.
C. Protect devices and assemblies during painting.
D. Install wall plates when painting is complete and paint is cured.
END OF SECTION 16140

SECTION 16442 - PANELBOARDS
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. Submittals: None.
B. Comply with NFPA 70.
C. Comply with NEMA PB 1.
PART 2 - PRODUCTS
2.1 PANELBOARDS AND LOAD CENTERS
A. Manufacturers: Subject to compliance with requirement, provide products by one of the following:
  1. Panelboards, Overcurrent Protective Devices, Controllers, Contactors, and Accessories:
    a. Square D Co.
    b. Eaton Corp.; Cutler-Hammer Products.
    c. General Electric Co.; Electrical Distribution & Control Div.
    d. Siemens Energy & Automation.
B. Recessed, NEMA PB 1, Type 1.
  1. Load Center Capacity: as shown on drawings.
  2. Front: Secured to box with concealed trim clamps.
  3. Doors: With concealed hinges, flush catches, and tumbler locks, all keyed alike.
  4. Bus: Hard drawn copper of 98 percent conductivity.
C. Molded-Case Circuit Breakers: NEMA AB 1, plug-in type, Single-handle for multipole circuit breakers. Appropriate for application, including Type SWD for repetitive switching lighting loads and Type HACR for heating, air-conditioning, and refrigerating equipment.
D. Contactors: NEMA ICS 2, Class A combination contactors.
PART 3 - EXECUTION
3.1 INSTALLATION
A. Install panelboards and accessory items according to NEMA PB 1.1. Provide typed, permantently-mounted English and Spanish circuit directories showing the panel schedules as installed in each panelboard.
B. Mounting Heights: Top of trim 74 inches above finished floor, unless otherwise indicated.
C. Future Circuit Provisions at Flush Panel boards: Stub four empty 3/4-inch conduits from panelboard into accessible or designated ceiling space.
D. Wiring in Panelboard Gutters: Arrange conductors into groups, bundle and wrap with wire ties according to NEC guidelines.
E. Tighten electrical connectors and terminals, including grounding connections, according to manufacturer's published torque-tightening values. Where manufacturer's torque values are not indicated, use those specified in UL 486A.
F. Perform visual and mechanical inspections and electrical tests stated In NETA ATS.
END OF SECTION 16442

SECTION 16500 - LIGHTING
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. Submittals: None.
B. Fixtures, Emergency Lighting Units, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.
C. Coordinate ceiling-mounted luminaires with ceiling construction, mechanical work, and security and fire-prevention features mounted In ceiling space and on ceiling.
PART 2 - PRODUCTS
2.1 FIXTURES AND FIXTURE COMPONENTS, GENERAL
A. Metal Parts: Free from burrs, sharp corners, and edges. Steel, unless otherwise indicated. Form and support to prevent warping and sagging.
B. Doors, Frames, and Other Internal Access: Smooth operating, free from light leakage under operating conditions, and arranged to permit re-lamping without use of tools. Arrange doors, frames, lenses, diffusers, and other pieces to prevent accidental falling during re-lamping and when secured in operating position.
C. Lenses, Diffusers, Covers, and Globes: 100 percent virgin acrylic plastic or annealed crystal glass, unless otherwise indicated.
PART 3 - EXECUTION
3.1 INSTALLATION
A. Set units level, plumb, and square with ceiling and walls, and secure.
B. Support for Recessed and Semirecessed Grid-Type Fluorescent Fixtures: Install ceiling support system rods or wires at a minimum of 4 rods or wires for each fixture, located not more than 6 inches from fixture corners.
C. Support for Suspended Fixtures: Support according to manufacturers' recommendations.
D. Lamping: Where specific lamp designations are not indicated, lamp units according to manufacturer's written instructions.
END OF SECTION 16500

ELECTRICAL MATERIAL SCHEDULE

CATEGORY	APPLICATION	ALLOWABLE MATERIAL
CONDUCTORS	#10 AWG AND SMALLER	SOLID CU, TYPE THHN/THWN OR XHHW
	#8 AWG AND LARGER	STRANDED CU, TYPE THHN/THWN OR XHHW
CONDUITS	INDOOR, EXPOSED	ELECTRICAL METALLIC TUBING U.N.O.
	INDOOR, WITHIN 1-1/2" OF ROOF DECK	INTERMEDIATE METAL CONDUIT
	INDOOR, CONCEALED ABOVE GRADE	ELECTRICAL METALLIC TUBING, FLEXIBLE METAL CONDUIT, OR METAL CLAD CABLE
	CONNECTION TO VIBRATING EQUIPMENT (EXPOSED WET OR DAMP LOCATIONS)	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
	CONNECTION TO VIBRATING EQUIPMENT (EXPOSED INDOOR DRY LOCATIONS)	FLEXIBLE METAL CONDUIT
	OUTDOOR, ABOVE GRADE, EXPOSED OR CONCEALED	INTERMEDIATE METAL CONDUIT
	LOW VOLTAGE, INDOOR, ABOVE GRADE	ELECTRICAL METALLIC TUBING
	LOW OR LINE VOLTAGE, BELOW GRADE	RIGID NONMETALLIC CONDUIT (SCHEDULE 40 PVC)
WIRING DEVICES	IN KITCHEN, OFFICE, OR NON-PUBLIC SPACES	GRAY DEVICE WITH STAINLESS STEEL COVER PLATE
	IG OR IG/GFI RECEPTACLES	GRAY DEVICE WITH STAINLESS STEEL COVER PLATE
	ON DRYWALL IN DINING ROOM	WHITE DEVICE WITH WHITE COVER PLATE
	ON HOT ROLLED STEEL, RICHLITE, OR OTHER BLACK FINISHES	BLACK DEVICE WITH BLACK COVER PLATE
	IN RESTROOMS	WHITE DEVICE WITH WHITE COVER PLATE

ELECTRICAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
C	CONDUIT
(E)	EXISTING
EXT'G	EXISTING
G	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPT
IG	ISOLATED GROUND
JB	JUNCTION BOX
NL	NIGHT LIGHT
GC	GENERAL CONTRACTOR

ELECTRICAL SYMBOLS

- CONDUIT CONCEALED ABOVE THE CEILING, IN A WALL, OR IN A RACEWAY
- CONDUIT CONCEALED BELOW THE SLAB
- A-6 — HOME-RUN TO PANELBOARD AND CIRCUIT NUMBER SHOWN
- # — PLAN NOTE: SEE PLAN NOTES LISTED ON THE SAME SHEET FOR NOTE MEANING
- X/Y/Z — DISCONNECT SWITCH: X = SWITCH RATING, Y = FUSE SIZE (NF = NON-FUSED), Z = NUMBER OF POLES
- JUNCTION BOX
- ELECTRIC PANELBOARD
- NEMA 5-20R 1-PLEX RECEPTACLE
- NEMA 5-20R DUPLEX RECEPTACLE
- OTHER RECEPTACLE - SEE PLAN FOR RATING AND TYPE

ELECTRICAL GENERAL NOTES

A GENERAL NOTES APPLY TO ELECTRICAL SHEETS.
B ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE ELECTRICAL CODE AND IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION. SEE ARCHITECTURAL SHEETS FOR THE PREVAILING CODES.
C WIRING SHALL BE (2)#12, #12 G IN 3/4" C UNLESS NOTED OTHERWISE.
D INDIVIDUAL CONDUIT HOME RUNS SHOWN SHALL NOT BE CONSOLIDATED.
E INSTALL CONDUIT CONCEALED ABOVE THE CEILING, IN WALLS, OR IN RACEWAYS.
F THE TERM "FURNISH" MEANS SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS. THE TERM "INSTALL" DESCRIBES THE OPERATIONS AT THE PROJECT SITE INCLUDING THE ACTUAL UNLOADING, UNPACKING, ASSEMBLY, ERECTING, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS. THE TERM "PROVIDE" MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE.

Consultant:
NATIONAL ENGINEERING
4635 Trueman Blvd. Suite 250
Hilliard, Ohio 43026
Phone: (614) 751-9610
Fax: (614) 552-5240
Contact: Trey Mitchell
(614) 328-2034
tmitchell@nationalengineering.com

PRELIMINARY - NOT FOR CONSTRUCTION

MATT BLOOMFIELD
CORE SOUND DEVELOPMENT
1560 MATTHEW DRIVE, UNIT C
FORT MYERS, FL 33907
MATT@CORESOUNDDEV.COM
(954) 895-2811

SHELL - ROLESVILLE, NC
US-401 & GRAND PARK DR.
ROLESVILLE, NC 27587

Issue Record:

05-12-2025	PERMIT ISSUE

Revisions:

Drawn: TRM
Checked: TRM

Project No. 2501146

Contents:

ELECTRICAL SPECIFICATIONS

E010

SITE LIGHTING FIXTURE SCHEDULE

TAG	QUANTITY	NUM. OF FIXTURES PER POLE	LAMP WATTAGE & TYPE	VOLTAGE	DISTRIBUTION	COLOR	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL #	OPTIONS & ACCESSORIES	POLE TYPE	POLE SIZE	POLE HEIGHT	POLE COLOR
PL1	9	1	279W SHOEBOX LED	208 V	TYPE V	DARK BRONZE	GC	GC	COOPER	GLEON-SA5C-740-U-5WQ-BZ	LAMP	TAPERED ROUND STEEL	4"	27' - 0"	DARK BRONZE
PL2	4	1	279W SHOEBOX LED	208 V	TYPE II	DARK BRONZE	GC	GC	COOPER	GLEON-SA5C-740-U-SL2-BZ	LAMP	TAPERED ROUND STEEL	4"	27' - 0"	DARK BRONZE

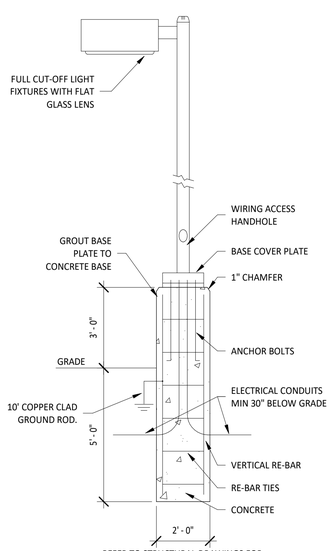
LIGHTING FIXTURE SCHEDULE

TAG	QTY	TYPE	MOUNT	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL	LAMP(S)	VOLTS	WATTS	SPECIAL REQUIREMENTS
E2	3	EXTERIOR REMOTE EMERGENCY LIGHT	VARIOUS	GC	GC	EXITRONIX	MLED1-B-WP	(1) SPECIAL LED	4	1	LOW VOLTAGE REMOTE EMERGENCY LIGHT POWERED BY REMOTE-CAPABLE EXIT SIGN WITH MOUNTING PLATE
E4	3	WHITE EXIT SIGN WITH EMERGENCY LIGHT - STANDARD RED LETTERS	VARIOUS	GC	GC	EXITRONIX	CLED-U-WH	(1) SPECIAL LED	120	2	90 MINUTE BATTERY BACKUP WITH INTEGRAL EMERGENCY LIGHT, REMOTE HEAD CAPABLE
X6(B)	2	EXTERIOR FLOOD LIGHT	SURFACE	GC	GC	RAB LIGHTING	WPLED10Y	INTEGRAL LED	120	10	PROVIDE WITH WALL-MOUNT KIT. BRONZE FINISH
X6(W)	2	EXTERIOR FLOOD LIGHT	SURFACE	GC	GC	RAB LIGHTING	WPLED10W	INTEGRAL LED	120	10	PROVIDE WITH WALL-MOUNT KIT. WHITE FINISH.
X9	2	LED CHANNEL LIGHT	SURFACE	GC	GC	PARADIGM LED	AMC-2410-S W/ OPAL LENS AND END CAPS	FLEXSR-45-30-67-24	120	47	FURNISHED W/ REMOTE-MOUNTED NEMA 3R LED DRIVER. SEE PLAN FOR LENGTHS.

ELECTRICAL SITE LIGHTING PLAN NOTES

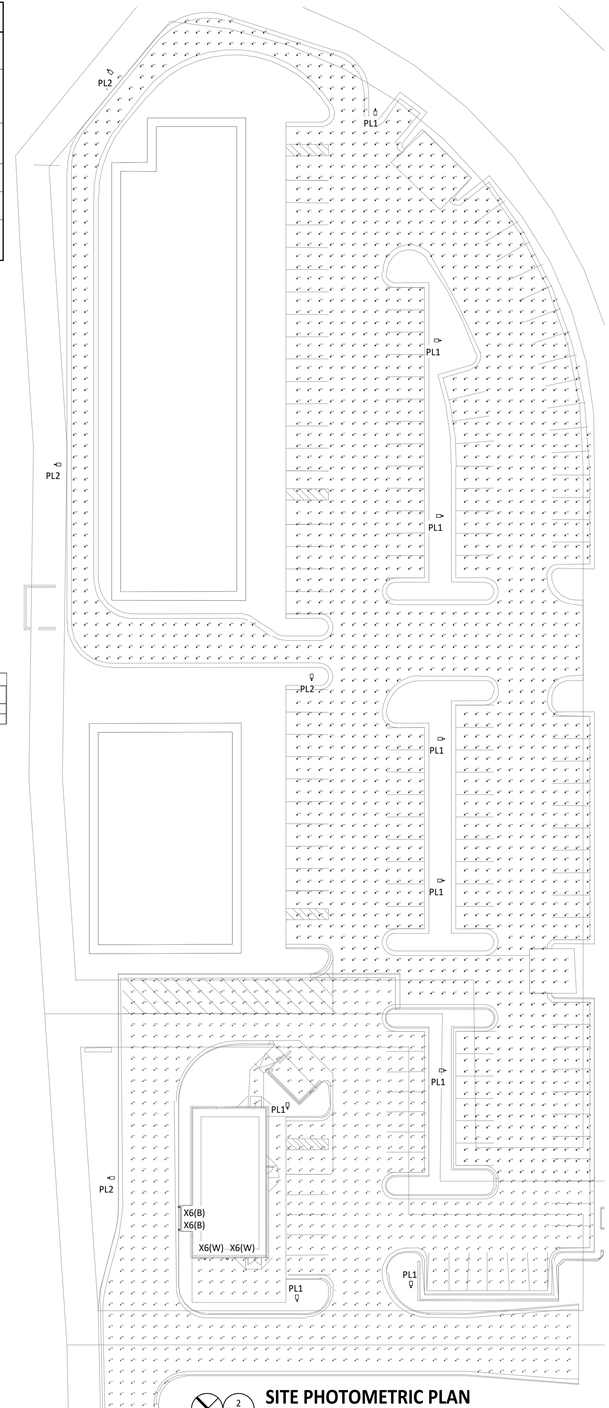
1. INSTALL LED DRIVERS FURNISHED WITH THE X9 LED STRIP LIGHTS ON WALL AT 12'-0" AFF IN AN ACCESSIBLE LOCATION. PROVIDE LOW VOLTAGE WIRING FROM LED DRIVER TO THE X9 LIGHT FIXTURES AS SHOWN.
2. PROVIDE JUNCTION BOX NEAR FUTURE ELECTRICAL PANEL FOR EXTERIOR LIGHTING CONNECTION BY TENANT.
3. PROVIDE JUCTION BOX NEAR FUTURE ELECTRICAL PANEL FOR EXTERIOR BUILDING MOUNTED LIGHTING CONNECTION BY TENANT.
4. INSTALL E2 REMOTE EMERGENCY LIGHT TO BOTTOM OF CANOPY. CONCEAL LOW VOLTAGE WIRING FROM EXIT SIGN TO REMOTE EMERGENCY LIGHT.
5. PROVIDE SITE LIGHTING PER DETAIL 2/THIS SHEET.
6. PROVIDE (2) #10, #10 G. IN 3/4" C FROM POLE LIGHT FIXTURES TO J-BOX WITHIN BUILDING FOR FUTURE CONNECTION BY TENANT.
7. PROVIDE (2) #10, #10 G. IN 3/4" C FROM POLE LIGHT FIXTURES FUTURE PANEL LOCATION TBD.

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
LOT 1	+	3.5 fc	8.3 fc	0.8 fc	10.4:1	4.4:1
LOT 2	×	2.9 fc	8.6 fc	1.1 fc	7.8:1	2.6:1

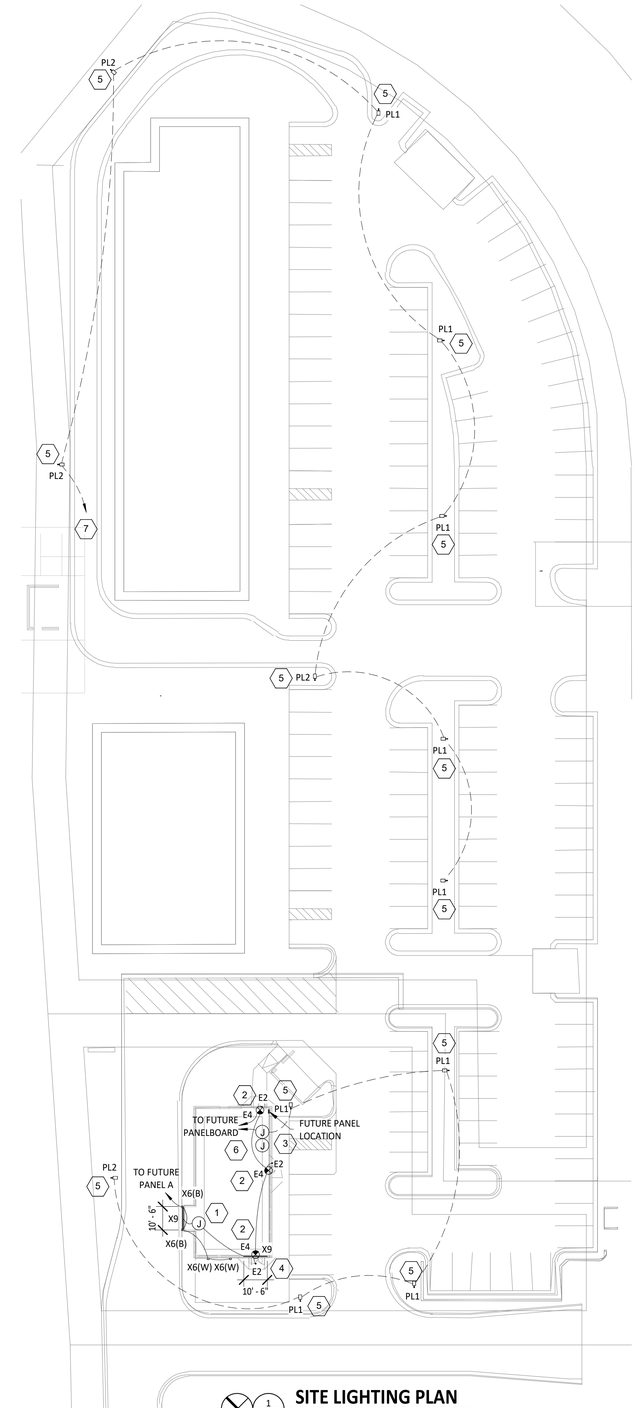


REFER TO STRUCTURAL DRAWINGS FOR EXACT LIGHT BASE DETAIL REQUIREMENTS.

3 / E105 **LIGHT BASE DETAIL**
N.T.S.



2 / E105 **SITE PHOTOMETRIC PLAN**
1/32" = 1'-0"



1 / E105 **SITE LIGHTING PLAN**
1/32" = 1'-0"

Consultant:
NATIONAL ENGINEERING
4635 Trueman Blvd. Suite 250
Hilliard, Ohio 43026
Phone: (614) 751-9610
Fax: (614) 552-5240
Contact: Trey Mitchell
(614) 328-2034
tmitchell@nationalengineering.com

PRELIMINARY - NOT FOR CONSTRUCTION

MATT BLOOMFIELD
CORE SOUND DEVELOPMENT
1560 MATTHEW DRIVE, UNIT C
FORT MYERS, FL 33907
MATT@CORESOUNDDEV.COM
(954) 895-2811

SHELL - ROLESVILLE, NC
US-401 & GRAND PARK DR.
ROLESVILLE, NC 27587

Issue Record:

05-12-2025	PERMIT ISSUE

Revisions:

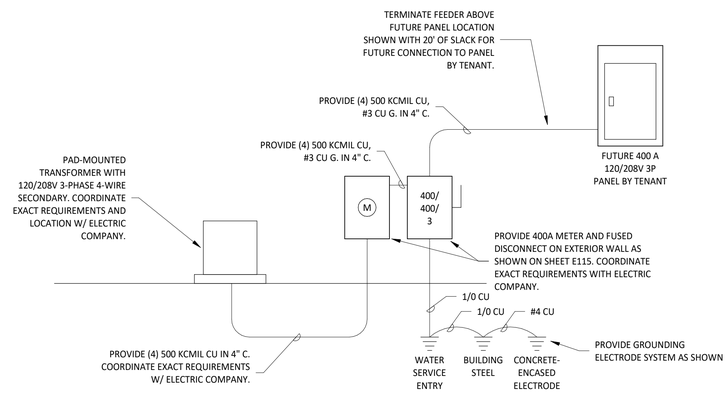
Drawn: TRM
Checked: TRM

Project No. 2501146

Contents:

ELECTRICAL SITE LIGHTING PLAN

E105



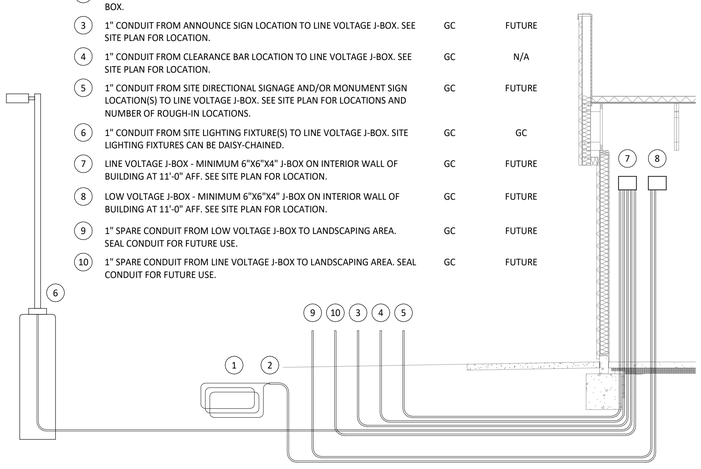
3 E115 MAIN DISTRIBUTION DIAGRAM

N.T.S.

TAG	DESCRIPTION	RESPONSIBILITY: DEVICE OR CONDUIT	RESPONSIBILITY: CONNECTION OR CONDUCTORS
1	VEHICLE DETECTOR LOOP - 6'x4' WITH 4 TURNS (EMX PR-46-XX). VERIFY LENGTH OF LEAD-IN WIRE PRIOR TO ORDERING TO ALLOW WIRE TO REACH VEHICLE DETECTOR WITHOUT SPLICING. SEE SITE PLAN FOR LOCATIONS.	FUTURE	FUTURE
2	1" CONDUIT FROM VEHICLE DETECTOR LOOP LOCATION TO LOW VOLTAGE J-BOX.	GC	FUTURE
3	1" CONDUIT FROM ANNOUNCE SIGN LOCATION TO LINE VOLTAGE J-BOX. SEE SITE PLAN FOR LOCATION.	GC	FUTURE
4	1" CONDUIT FROM CLEARANCE BAR LOCATION TO LINE VOLTAGE J-BOX. SEE SITE PLAN FOR LOCATION.	GC	N/A
5	1" CONDUIT FROM SITE DIRECTIONAL SIGNAGE AND/OR MONUMENT SIGN LOCATION(S) TO LINE VOLTAGE J-BOX. SEE SITE PLAN FOR LOCATIONS AND NUMBER OF ROUGH-IN LOCATIONS.	GC	FUTURE
6	1" CONDUIT FROM SITE LIGHTING FIXTURE(S) TO LINE VOLTAGE J-BOX. SITE LIGHTING FIXTURES CAN BE DAISY-CHAINED.	GC	GC
7	LINE VOLTAGE J-BOX - MINIMUM 6"X6"X4" J-BOX ON INTERIOR WALL OF BUILDING AT 11'-0" AFF. SEE SITE PLAN FOR LOCATION.	GC	FUTURE
8	LOW VOLTAGE J-BOX - MINIMUM 6"X6"X4" J-BOX ON INTERIOR WALL OF BUILDING AT 11'-0" AFF. SEE SITE PLAN FOR LOCATION.	GC	FUTURE
9	1" SPARE CONDUIT FROM LOW VOLTAGE J-BOX TO LANDSCAPING AREA. SEAL CONDUIT FOR FUTURE USE.	GC	FUTURE
10	1" SPARE CONDUIT FROM LINE VOLTAGE J-BOX TO LANDSCAPING AREA. SEAL CONDUIT FOR FUTURE USE.	GC	FUTURE

GENERAL NOTES

A. WORK AND MATERIALS SHALL BE COMPLIANT WITH THE NEC AND REQUIREMENTS OF THE AHJ.
B. CONDUCTORS AND CONNECTIONS BELOW GRADE, EVEN WHERE WITHIN CONDUITS OR ENCLOSURES, SHALL BE SUITABLE FOR WET LOCATIONS.
C. PROVIDE PULL STRING IN EMPTY CONDUITS.
D. SEAL ENDS OF CONDUITS STUBBED UP ABOVE GRADE TO PROTECT FROM THE ELEMENTS.

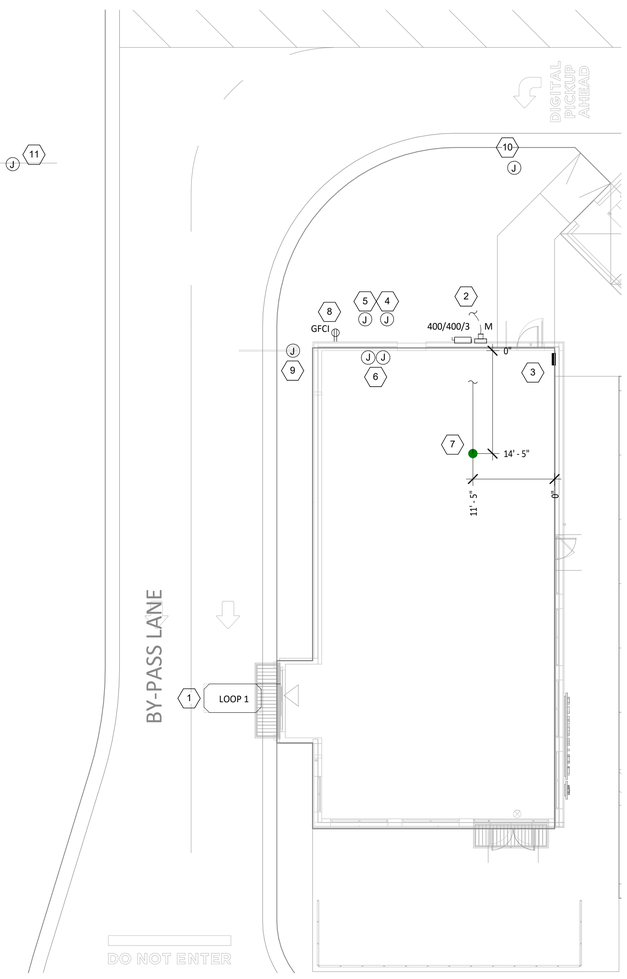


2 E115 SITE CONDUIT DETAIL

N.T.S.

ELECTRICAL POWER PLAN NOTES

1. PROVIDE A 1" CONDUIT FOR THE VEHICLE DETECTION LOOP AT THIS LOCATION PER DETAIL 2/THIS SHEET. SEE TENANT'S ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION OF THE VEHICLE DETECTION LOOP.
2. PROVIDE A 400A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL SERVICE TO THE 400A CT METER CABINET AND THE 400A MAIN DISCONNECT SWITCH PER DETAIL 3/THIS SHEET. SEE CIVIL DRAWINGS FOR CONTINUATION OF WIRE.
3. PROVIDE SERVICE CONDUCTORS PER DETAIL 3/THIS SHEET FROM THE 400A MAIN DISCONNECT SWITCH TO TENANT'S FUTURE PANELBOARD LOCATION AS SHOWN. COORDINATE FINAL PANELBOARD LOCATION WITH TENANT'S CONSTRUCTION MANAGER PRIOR TO ROUGH-IN.
4. PROVIDE A 1" SPARE LOW VOLTAGE CONDUIT AT THIS LOCATION. SEE DETAIL 2/THIS SHEET FOR MORE INFORMATION.
5. PROVIDE A 1" SPARE LINE VOLTAGE CONDUIT AT THIS LOCATION. SEE DETAIL 2/THIS SHEET FOR MORE INFORMATION.
6. PROVIDE INTERIOR J-BOXES AT 11'-0" AFF FOR LINE VOLTAGE AND LOW VOLTAGE SITE WIRING. SEE DETAIL 2/THIS SHEET FOR MORE INFORMATION.
7. PROVIDE TWO 2" CONDUITS FROM TELEPHONE DEMARCATION POINT TO OFFICE LOCATION. REFER TO THE CIVIL UTILITY PLANS FOR CONTINUATION OF CONDUIT AND EXACT LOCATION OF THE TELEPHONE DEMARCATION. COORDINATE TELEPHONE CONDUIT STUB-IN LOCATION WITH TENANT'S CONSTRUCTION MANAGER.
8. PROVIDE A DUPLEX GFCI RECEPTACLE WITH WEATHERPROOF WHILE IN USE OUTLET COVER FOR IRRIGATION CONTROLLER. PROVIDE CONDUCTORS TO A BOX NEAR FUTURE PANELBOARD LOCATION.
9. PROVIDE A 1" CONDUIT WITH PULL STRING TO CLEARANCE BAR PER DETAIL 2/THIS SHEET. SEE TENANT'S ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION OF THE CLEARANCE BAR.
10. PROVIDE A 1" CONDUIT FOR THE ANNOUNCE BOARD AT THIS LOCATION PER DETAIL 2/THIS SHEET. SEE TENANT'S ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION OF THE ANNOUNCE SIGN.
11. PROVIDE A 1" CONDUIT FOR THE MONUMENT SIGN AT THIS LOCATION PER DETAIL 2/THIS SHEET. SEE TENANT'S ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION OF THE MONUMENT SIGN.



1 E115 POWER SITE PLAN

1" = 10'-0"

Consultant:
NATIONAL ENGINEERING
4635 Trueman Blvd. Suite 250
Hilliard, Ohio 43026
Phone: (614) 751-9610
Fax: (614) 552-5240
Contact: Trey Mitchell
(614) 328-2034
tmitchell@nationalengineering.com

PRELIMINARY - NOT FOR CONSTRUCTION

MATT BLOOMFIELD
CORE SOUND DEVELOPMENT
1560 MATTHEW DRIVE, UNIT C
FORT MYERS, FL 33907
MATT@CORESOUNDDEV.COM
(954) 895-2811

SHELL - ROLESVILLE, NC
US-401 & GRAND PARK DR.
ROLESVILLE, NC 27587

Issue Record:

05-12-2025	PERMIT ISSUE

Revisions:

Drawn: TRM
Checked: TRM

Project No. 2501146

Contents:

ELECTRICAL SITE POWER PLAN

E115