Ample Storage Center 6839 Knightdale Blvd Knightdale, NC 27545 Proposed Indoor Self Storage

Proposed +/-28,800 SF, 3-Story Indoor Self-Storage Building
Sketch Plan Submittal
Comprehensive Plan Consistency
July 28, 2023

General Narrative

Ample Storage Center, located at 6839 Knightdale Blvd, desires to expand their existing facility on the north end of their property (Parcel # 1744868623). Enclosed is the Sketch Plan for review.

The existing facility was developed in two phases. Phase 1 is located at and includes the more traditional one-story exterior storage units. Phase 2 is located at 6839 Knightdale Blvd and includes a multi-story mini-storage building. The proposed development will be the construction of one 29,280 sf, 3-story indoor mini-storage facility (87,840 sf total floor area) at the rear of the property, abutting TRW Electric Supply and the Wake Stone Corporation quarry.

The project area is currently wooded. No other environmental features are present on site. Proposed development is consistent with the existing development on the same parcel. The project area is bounded on two sides by the existing quarry and a third side by the existing on-site development. The final side adjoins TRW Electric Supply and will include preservation of the existing wooded area as part of the requisite screening buffer. The existing and proposed tree lines are shown on the Natural Resources Sketch Plan.

The proposed development will be accessed via the existing Phase 1 entrance at the end of Great Falls Ct. The proposed use will likely not increase traffic demand along the street significantly, and will not require any additional public infrastructure outside of fire protection.

Given that the proposed development matches the existing development on site, and given the adjacent land use and site location, the proposed indoor mini-storage facility fits within the spirit of the Knightdale Comprehensive Plan. Detailed reasonings are discussed below.

Growth Framework Map Consistency

The site is located within existing town limits. The project area is described as a 2-acre section of a 7-acre parcel (zoned MI). Existing development on the property includes 95,600 sf of self-storage (Mini-Warehouses).

Growth & Conservation Map Consistency

The site is located within a Retail place type category. Adjacent land uses, along with the designated place type from the published map are as follows:

- Site: Ample Storage (Retail)
- North & West: Wake Stone Corporation Knightdale Quarry (Heavy Industrial).
- Northeast: TRW Electric and Supply Company (Retail).
- East: Auto DRS (Light Industrial)
 Tractor Supply Company (Retail)
- Southeast: Knightdale Pediatrics (Retail).

The growth map designates the property for commercial development (retail). The proposed development is allowed under the UDO zoning and is consistent with existing development.

Given the location and surrounding uses, the proposed office development is consistent with and promotes the vision of the Growth & Conservation Map.

Trails & Greenways Map Consistency

The site is not located adjacent to any existing or proposed trails, greenways, bicycle routes, parks or open space located within or adjacent to the site, it is consistent with the Trails & Greenways Map.

Street Network Map Consistency

Existing development abuts Knightdale Blvd (NCDOT arterial) and Great Falls Ct. Development will be accessed via the exiting driveway at the end of the cul-de-sac on Great Falls Ct (city). The proposed development (mini-warehouses) will not significantly increase the number of trips along Great Falls Ct. Due to the nature of both the existing and proposed development, pedestrian and bike traffic will be very minimal, if ever. Any increase in vehicular traffic will not pose any risks to either group. The proposed development is consistent with the street network plan.

Transit Network

The project area is not located along any planned transit route. As noted above, demand for transit use will be virtually non-existent for either the existing or proposed uses along Great Falls Ct. The proposed development fits the overall transit network plan.

Focus Area Studies

The project area is not located within any existing Focus Area Study.

Water Allocation

As the proposed development is an expansion of the existing mini-storage facility, no new office/residential facilities are included. Customers will have access to bathroom facilities in the Phase 2 building. No water connections will be used to provide any janitorial services. Submitted plans show only a fire line as part of development. No water demand will be needed to be allocated for the proposed development.

CIVIL ENGINEER

Rivers & Associates, INC.
Greenville, NC



107 East Second Street Greenville, NC 27858 (252) 752-4135

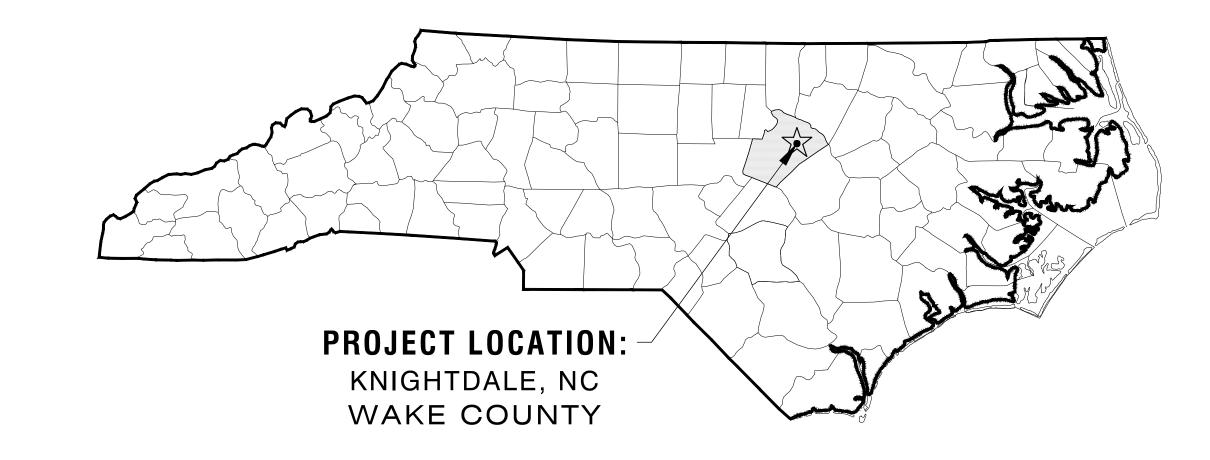
Contact: MATTHEW J. PROKOP, PE mprokop@riversandassociates.com

OWNER/DEVELOPER

AMPLE STORAGE LAKE WORTH LLC

P.O. BOX 608 SMITHFIELD, NC 27577-0608

Contact:





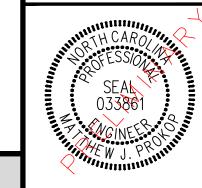
NC License: F-0334

& ASSOCIATES, INC.

ociates.com Since 1918

Freet Engineers
Planners
Surveyors

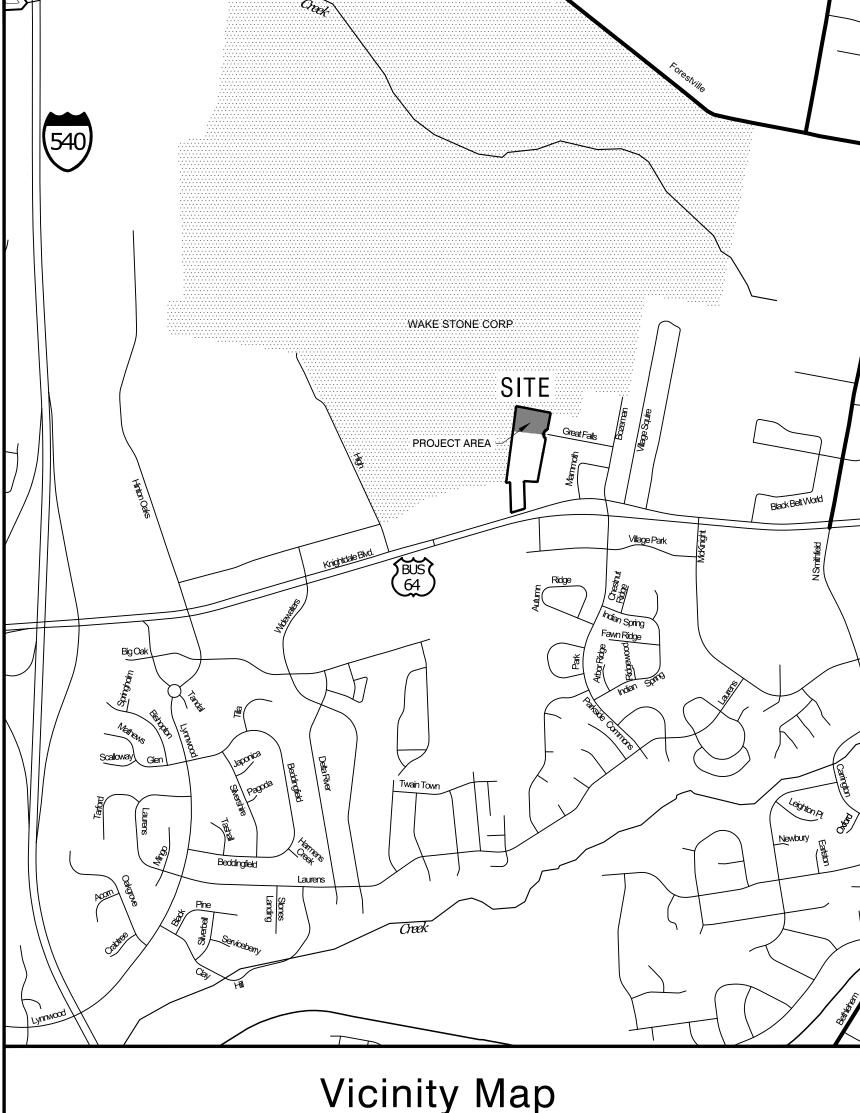
riversandassoc 107 East Second Stree Greenville, NC 27858 (252) 752-4135



REVISIONS:

AMPLE STORAGE EXPANSION

SITE DATA SITE ADDRESS PHASE 1: 1107 GREAT FALLS COURT KNIGHTDALE, NORTH CAROLINA 27545 SITE ADDRESS PHASE 2: 6839 KNIGHTDALE BLVD. KNIGHTDALE, NORTH CAROLINA 27545 MUNICIPALITY: ST. MATTHEWS PARCEL NO.: 1744868623 DEED REFERENCE: DB 15706, PG 63 AREA IN SITE: 6.98 ACRES (+/- 303,818 SF) ZONING / LAND USE CLASSIFICATION : GENERAL COMMERCIAL - HB & MI EXISTING/PROPOSED USE: | MINI-WAREHOUSES PROPOSED BUILDING AREA: 29,280± SF (BUILDING FOOTPRINT) BUILDING HEIGHT: 30' (3-STORY) **TOTAL NUMBER OF STORAGE UNITS IMPERVIOUS AREA** EXISTING BUILDINGS FOOTPRINT: 62,611 SF EXISTING CONCRETE: 4,197 SF EXISTING ASPHALT PARKING: 87,965 SF TOTAL EXISTING IMPERVIOUS AREA: 154,773 SF (3.55 ACRE) EXISTING: 50.9 % PROPOSED BUILDING FOOTPRINT: 29,280 SF PROPOSED CONCRETE: 15,752 SF TOTAL PROPOSED IMPERVIOUS AREA: 45,032SF (1.03ACRES) TOTAL IMPERVIOUS AREA: 199,805 SF (4.59 ACRES) **TOTAL POST DEVELOPMENT:** 65.8 % **PARKING SUMMARY** EXISTING REQUIREMENTS | MAXIMUM - .25 PER 1,000 SF(95,645 SF) = 23.9 SPACES MINI-STORAGE: MINIMUM - $\frac{1}{2}$ OF MAXIMUM() = 12 SPACES PROPOSED REQUIREMENTS | MAXIMUM - .25 PER 1,000 SF(87,840 SF) = 22 SPACES MINI-STORAGE: MINIMUM - ½ OF MAXIMUM() = 11 SPACES TOTAL PARKING SPACES REQUIRED: 23 TOTAL EXISTING PARKING SPACES: 12 NEW PARKING SPACES REQUIRED: 11 NEW PARKING SPACES PROVIDED: TOTAL PARKING SPACES PROVIDED: EXISTING H/C PARKING SPACES: H/C PARKING SPACES REQUIRED: TOTAL H/C PARKING SPACES PROVIDED:



Sheet Number	Sheet Title
C1.01	COVER SHEET
C1.11	BOUNDARY SURVEY
C1.12	NATURAL RESOURCES SKETCH PLAN
C1.21	EXISTING CONDITIONS
C2.01	SKETCH PLAN OVERALL
C2.10	SKETCH PLAN - PROJECT AREA
C2.51	SITE DETAILS
C2.52	BUILDING ELEVATIONS
C3.01	FIRE PREVENTION PLAN
C4.01	GRADING & DRAINAGE PLAN
C5.01	SEDIMENTATION & EROSION CONTROL PLAN – PH 1
C5.02	SEDIMENTATION & EROSION CONTROL PLAN – PH 2
C5.11	SEDIMENTATION & EROSION CONTROL NOTES
C5.21	SEDIMENTATION & EROSION CONTROL DETAILS
C5.22	SEDIMENTATION & EROSION CONTROL DETAILS

SHEET INDEX

GENERAL NOTES:

- NO CHANGES TO ANY ASPECT OF THIS SITE PLAN, INCLUDING BUT NOT LIMITED TO, LANDSCAPING, GRADING, BUILDING ELEVATIONS, LIGHTING OR UTILITIES WILL BE MADE WITHOUT THE APPROVAL OF THE TOWN OF KNIGHTDALE AND THE
- ENGINEER.

 2. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF KNIGHTDALE STANDARDS AND SPECIFICATIONS.

 3. CONTRACTOR MUST NOTIFY ONE CALL CENTER, INC. (NC ONE CALL) 1-800-632-4949 AT LEAST 72 HOURS PRIOR TO THE START OF
- EXCAVATION OR TRENCHING TO HAVE ALL UNDERGROUND UTILITIES LOCATED.

 4. CONTACT TOWN OF KNIGHTDALE AT 919-217-2255 TO SCHEDULE PRE-CONSTRUCTION MEETING WITH GRADING CONTRACTOR, EROSION CONTROL ADMINISTRATOR, PROJECT ENGINEER AND OWNER. NO PERSON MAY INITIATE A LAND DISTURBING ACTIVITY
- BEFORE NOTIFYING ALL APPROPRIATE AUTHORITIES TO THE DATE OF SAID ACTIVITY.

 5. THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA AS DETERMINED BY THE FEDERAL EMERGENCY

 MANAGEMENT ACENCY (FEMA). THIS PROPERTY IS LOCATED IN ZONE Y. AS SHOWN ON FIRM PANEL AND MARKET ACENCY.
- 5. THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA AS DETERMINED BY THE FEDERAL EMERGENCY
 MANAGEMENT AGENCY (FEMA). THIS PROPERTY IS LOCATED IN ZONE X, AS SHOWN ON FIRM PANEL NUMBER 3720174400K,
 DATED JULY 19, 2022.
- WETLANDS AND PONDS, IF PRESENT, ARE DENOTED ON THE SURVEY. NO IMPACTS TO WETLANDS ARE ANTICIPATED.
 PLEASE BE ADVISED TO OF THE RULES WHICH PROTECT AND MAINTAIN EXISTING BUFFERS ALONG WATERCOURSES IN THE NEUSE AND TAR/PAMLICO RIVER BASINS. THIS RULE IS ENFORCED BY THE DIVISION OF WATER QUALITY (DWQ). DIRECT ANY QUESTIONS ABOUT THE APPLICABILITY OF THIS RULE TO THE RALEIGH REGIONAL OFFICE. (919) 791-4200
- NEW BUILDINGS MUST COMPLY WITH NC FIRE CODE SECTION 510 -- EMERGENCY RESPONDER RADIO COVERAGE. FIRE DEPARTMENT VEHICULAR ACCESS TO ALL STRUCTURES UNDER CONSTRUCTION SHALL BE PROVIDED AT ALL TIMES.
 CONTRACTOR TO FURNISH ALL PAVEMENT MARKINGS AS SHOWN.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE POINTS.
 SITE LIGHTING IS TO BE INSTALLED WITH COORDINATION BETWEEN CONTRACTOR, OWNER/DEVELOPER AND DUKE ENERGY.
- 12. COPIES OF ALL PERMITS AND APPROVED PLANS MUST BE KEPT ON SITE IN A PERMIT BOX THAT IS CONSPICUOUSLY LOCATED AND EASILY ACCESSIBLE DURING CONSTRUCTION. THIS INCLUDES APPROVED CONSTRUCTION PLANS, APPROVED EROSION CONTROL PLANS, ENCROACHMENT AGREEMENTS, DRIVEWAY PERMITS, WATER/S.S. PERMITS, ETC.

Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: ______ Date: _____

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

Admini

IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN THESE CONSTRUCTION DRAWINGS AND THE TOWN OF KNIGHTDALE'S APPROVED STANDARDS FOR THIS PROJECT, THE APPROVED STANDARDS SHALL CONTROL. TOWN OF KNIGHTDALE APPROVED STANDARDS SHALL MEAN ALL DEVELOPMENT DOCUMENTS NECESSARY FOR APPROVAL FOR THE PROPERTY INCLUDING, BUT NOT LIMITED TO, ANY SPECIAL USE PERMIT, SUBDIVISION PLAN, SITE PLAN, SUBDIVISION PLAT(S), PHASING SCHEDULE, DEVELOPMENT AGREEMENT, UTILITY ALLOCATION AGREEMENT, ANNEXATION AGREEMENT, THE TOWN OF KNIGHTDALE STANDARD SPECIFICATION AND DETAILS MANUAL AND APPLICABLE PROVISIONS OF THE NORTH CAROLINA STATE BUILDING

Professional Design Engineer Certification. These improvements shall be constructed in accordance with the following drawings and with the Standard Specifications of the Town of Knightdale.

I, _______, PE, certify that the Standard Specifications of the Town of Knightdale have been thoroughly checked and found to be

I, _______, PE, certify that the Standard Specifications of the Town of Knightdale have been thoroughly checked and found to be applicable to this project. All exceptions to the applicable Town standards have been previously approved by the Town of Knightdale and said exceptions are shown on Sheet(s) ______ of these drawings.

Seal By: _______, PE

DATE:

AUGUST 11, 2023

DESIGNED BY: MJP

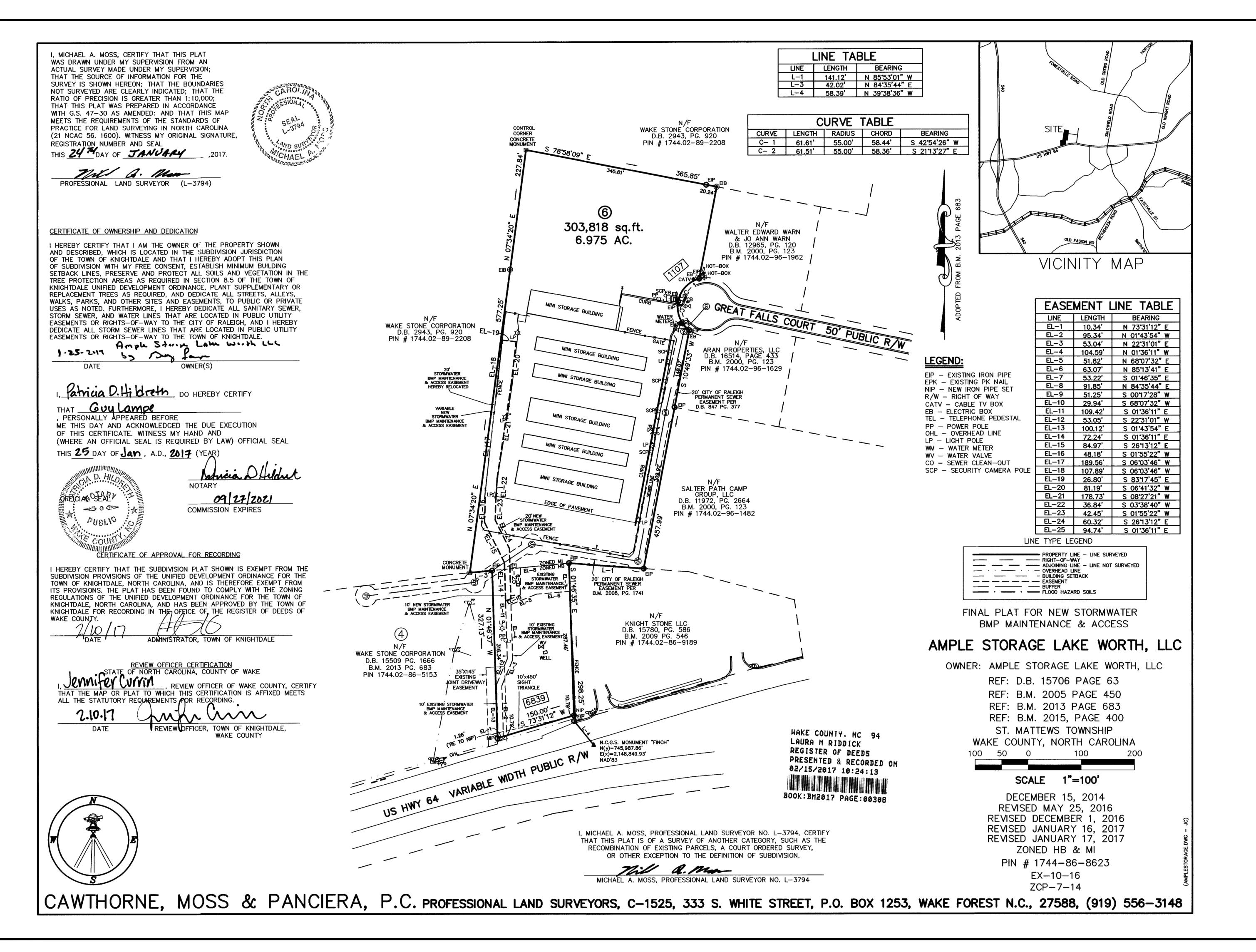
DRAWN BY: EDN

CHECKED BY: JSJ

PROJECT No. 2023008

DRAWING No. W-4073-SK

SCALE: 1" = 20



& ASSOCIATE
rivers and associates.com S
107 East Second Street
Greenville, NC 27858
(252) 752-4135
Landscape A

DESCRIPTION DATE BY

3E - EXPANSION TWSP. ~ WAKE CO. ~ NORTH CAROLIN

E STORAGE - EXPA E ~ ST. MATTHEWS TWSP. ~ WAKE CC BOUNDARY SURVE

DATE:
AUGUST 11, 2023

DESIGNED BY:
MJP

DRAWN BY:
CHECKED BY:
JSJ

PROJECT No.
2023008

C1.11

DRAWING No. W-4073-SK

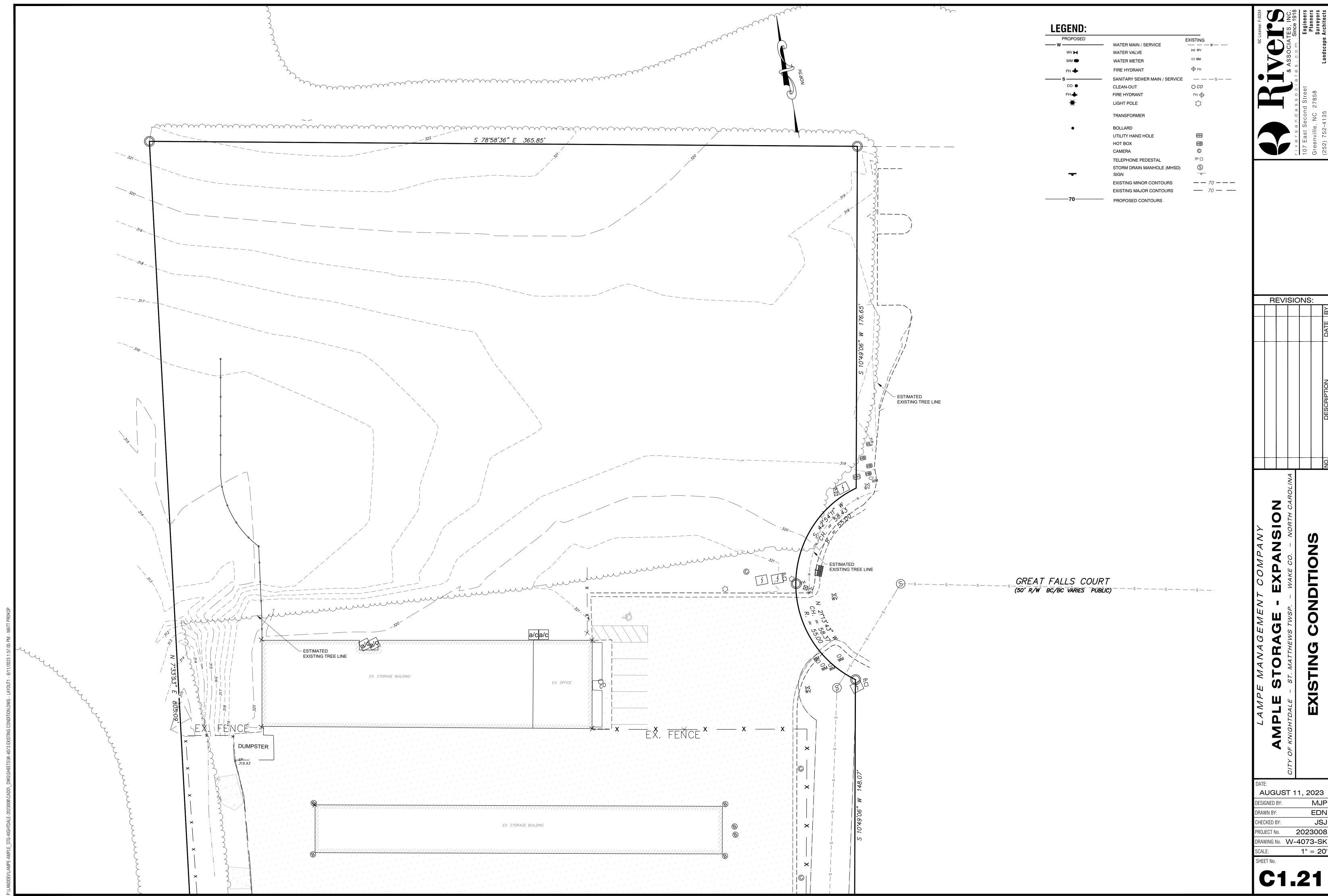
SCALE: NOT TO SCALE

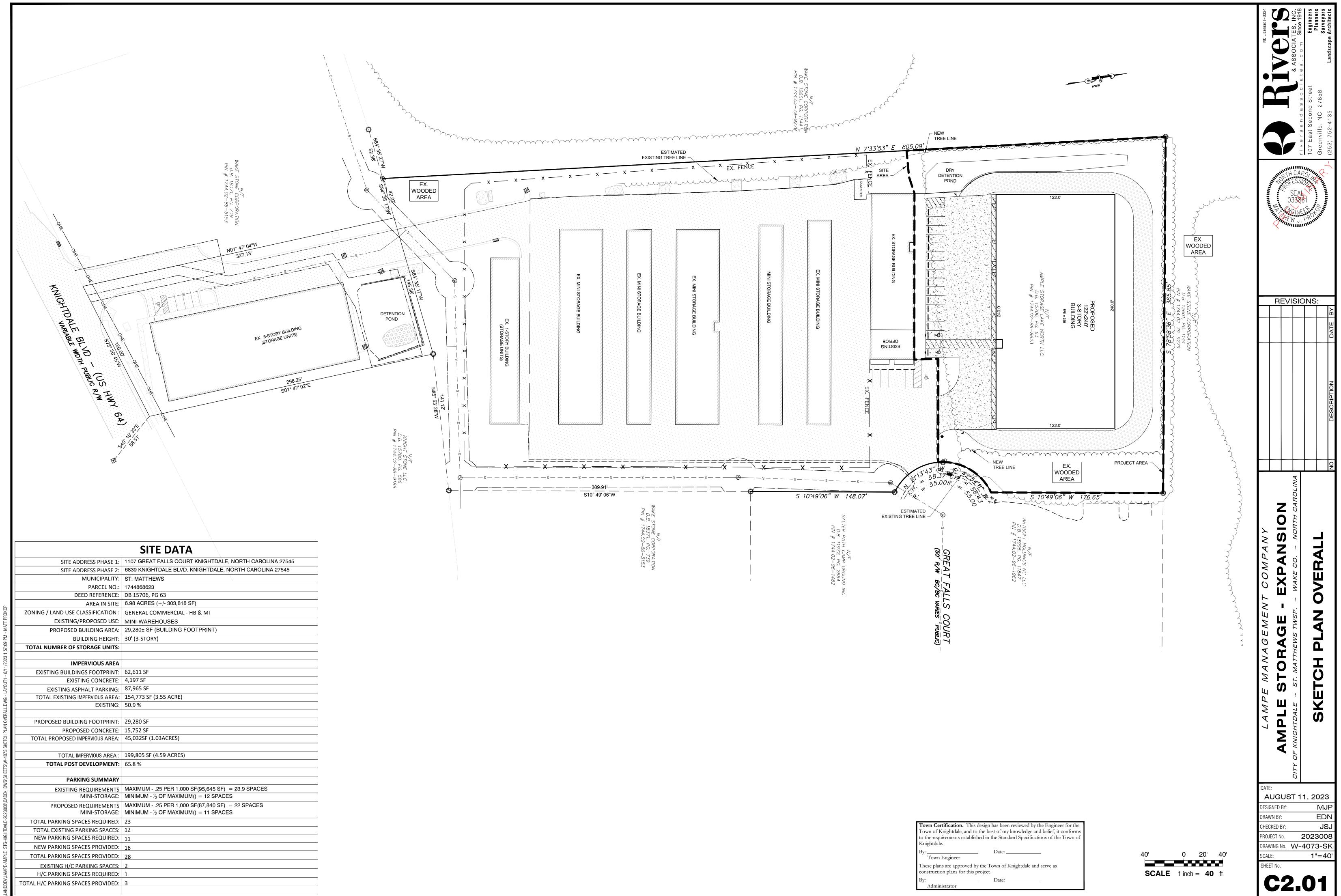


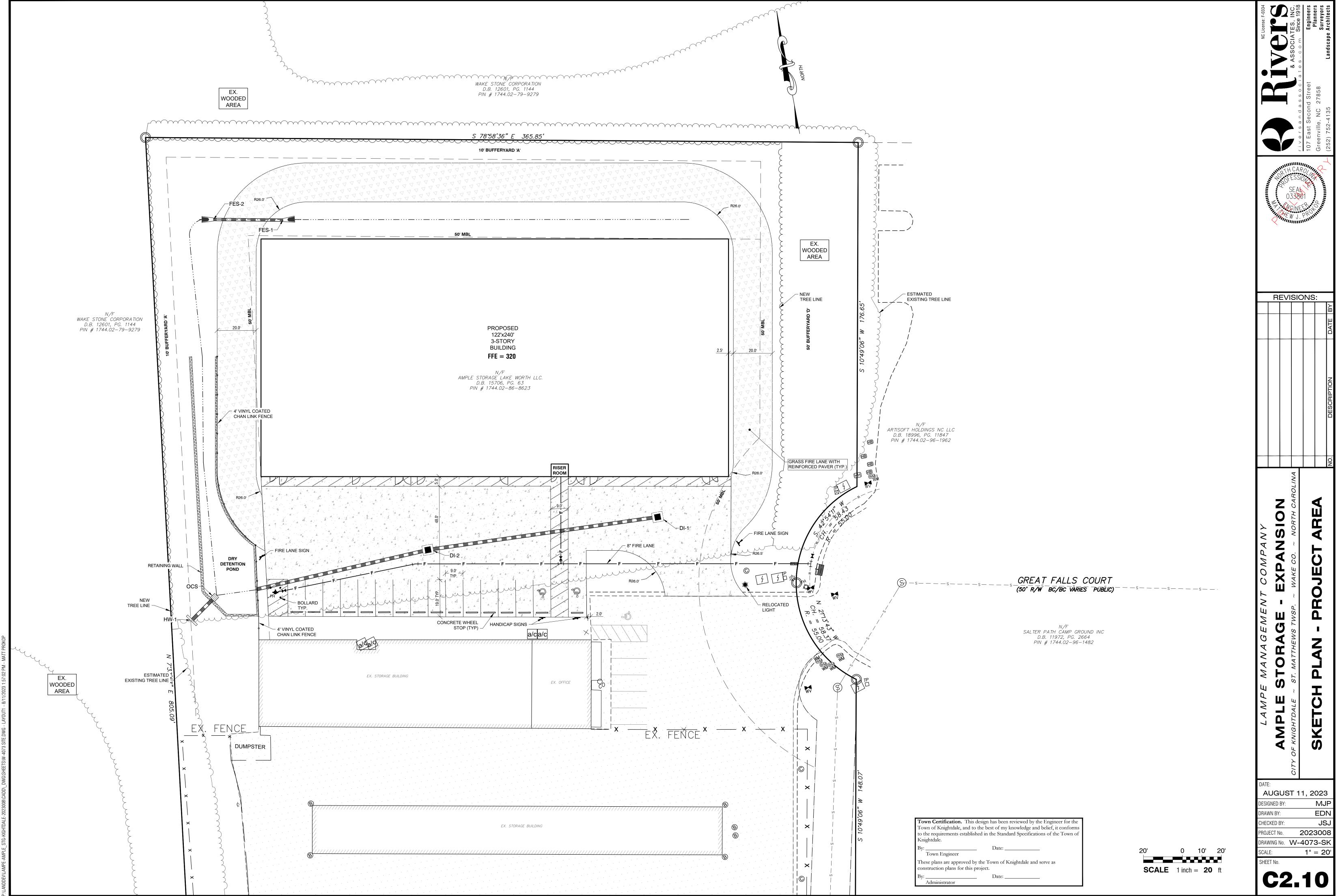
REVISIONS: AUGUST 11, 2023

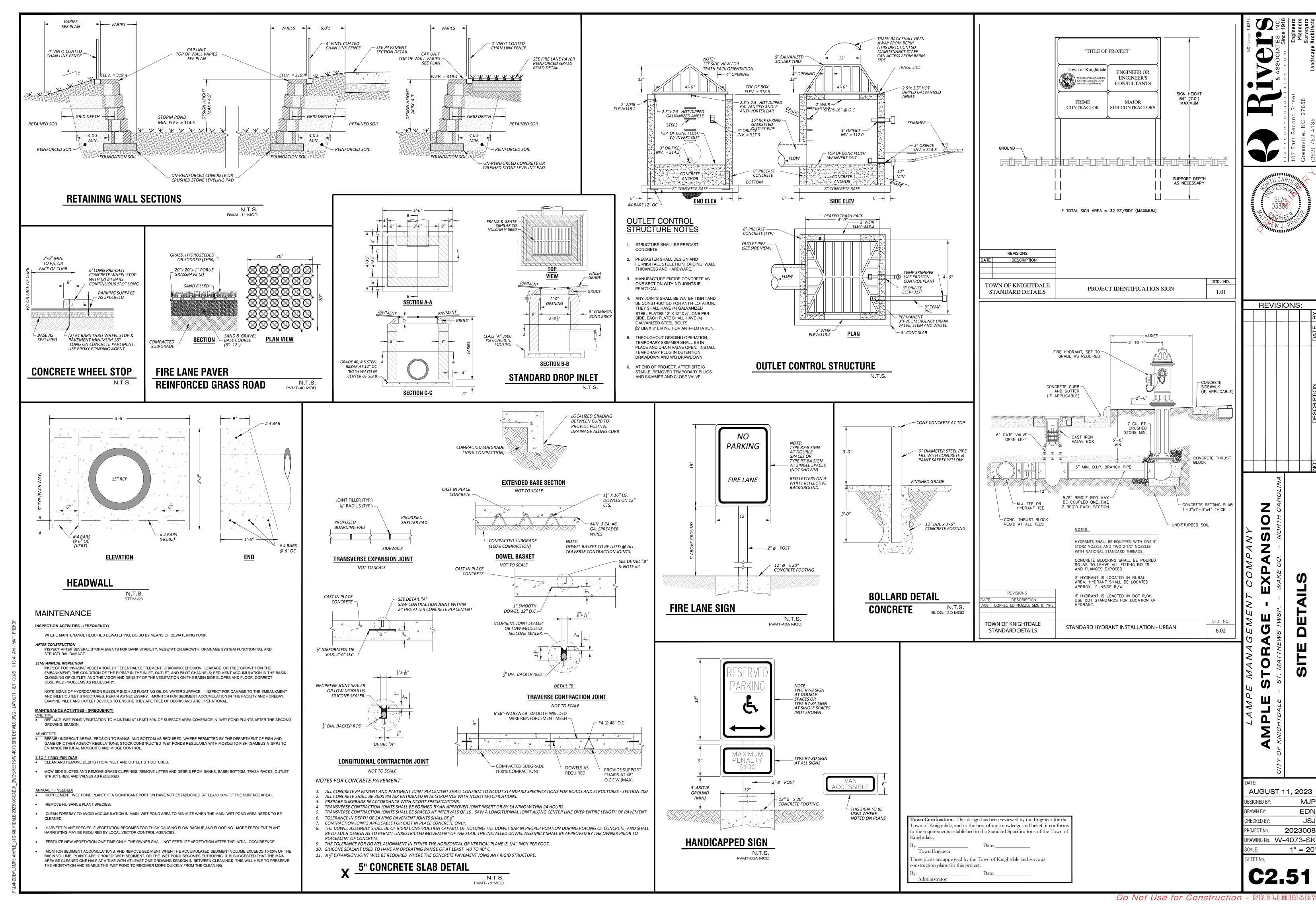
Do Not Use for Construction - PRELIMINARY

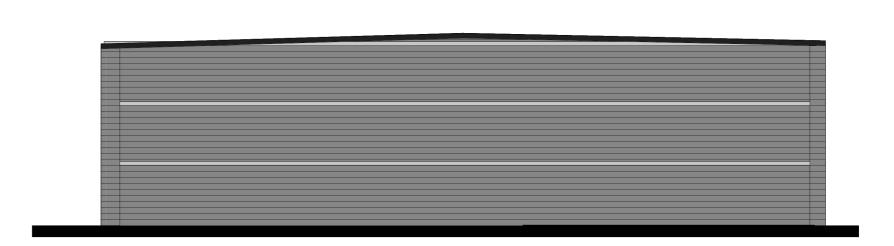
2023008





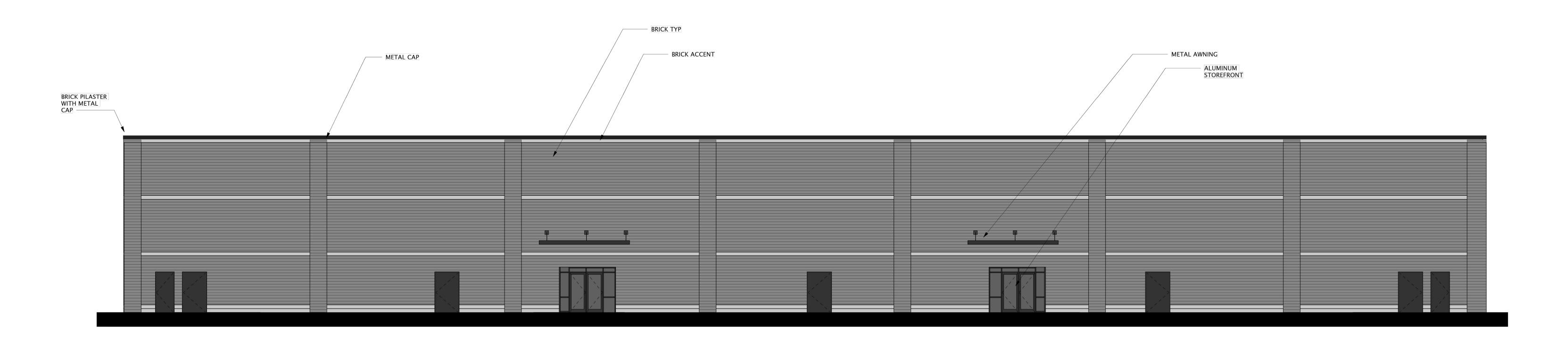






2 SIDE ELEVATION FACING CUL-DE-SAC

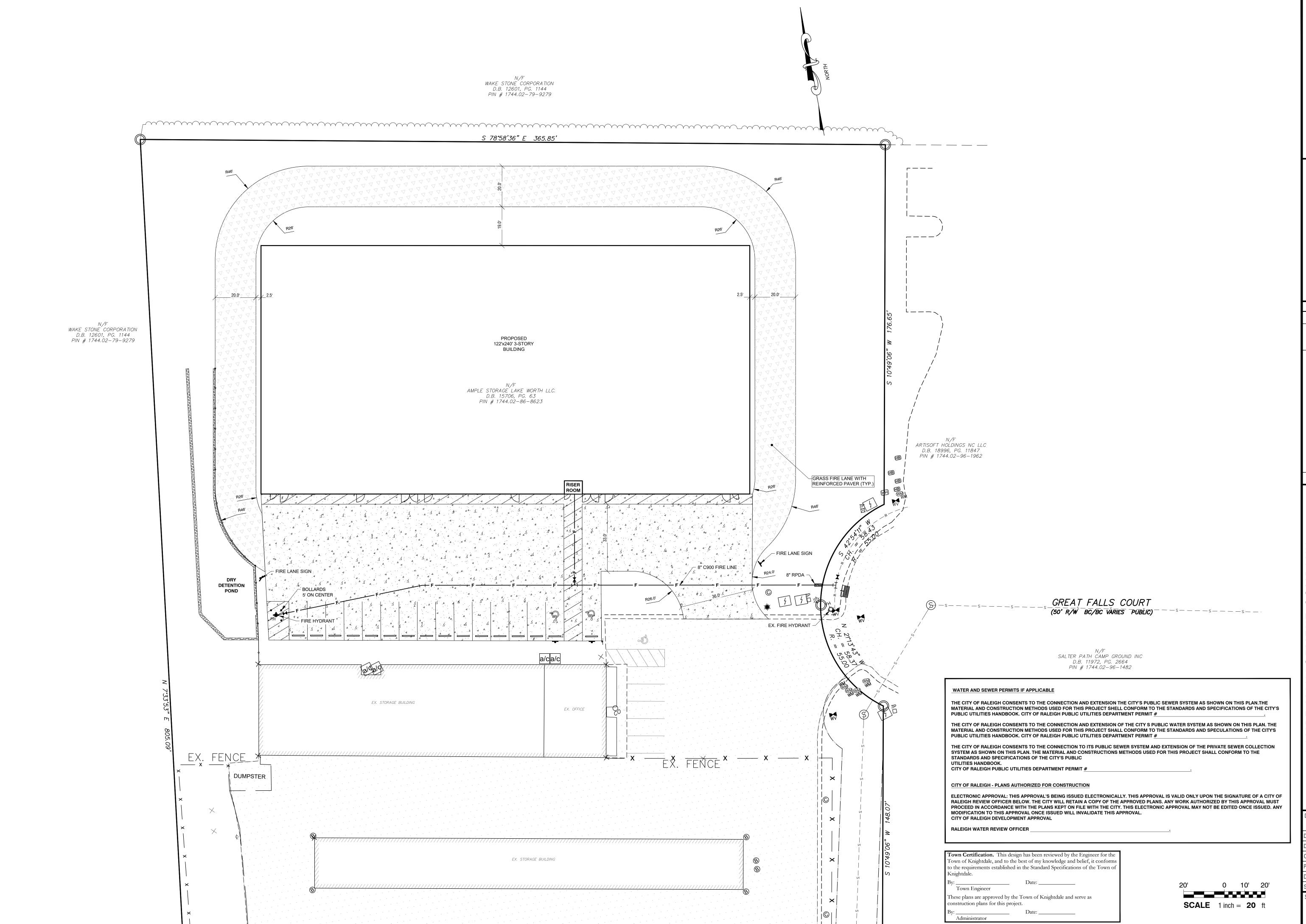
1 FRONT ELEVATION
1/8" = 1'-0"



Ample Storage Knightdale BUILDING ELEVATIONS

Scale As indicated

RND Project No. Date 6.29.23



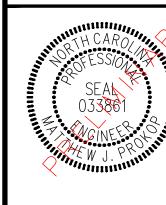
associates.com Since 1918

nd Street

27858

Landscape Architects

riversanda 107 East Second Greenville, NC



REVISIONS:

EXPANSION

WAKE CO. ~ NORTH CAROLINA

NA PLAN

NO. DESCRIPTION DATE

AMPLE STORAGE - EXPANS
OF KNIGHTDALE ~ ST. MATTHEWS TWSP. ~ WAKE CO. ~

FIRE PREVENTION PLA

DATE:

AUGUST 11, 2023

DESIGNED BY: MJP

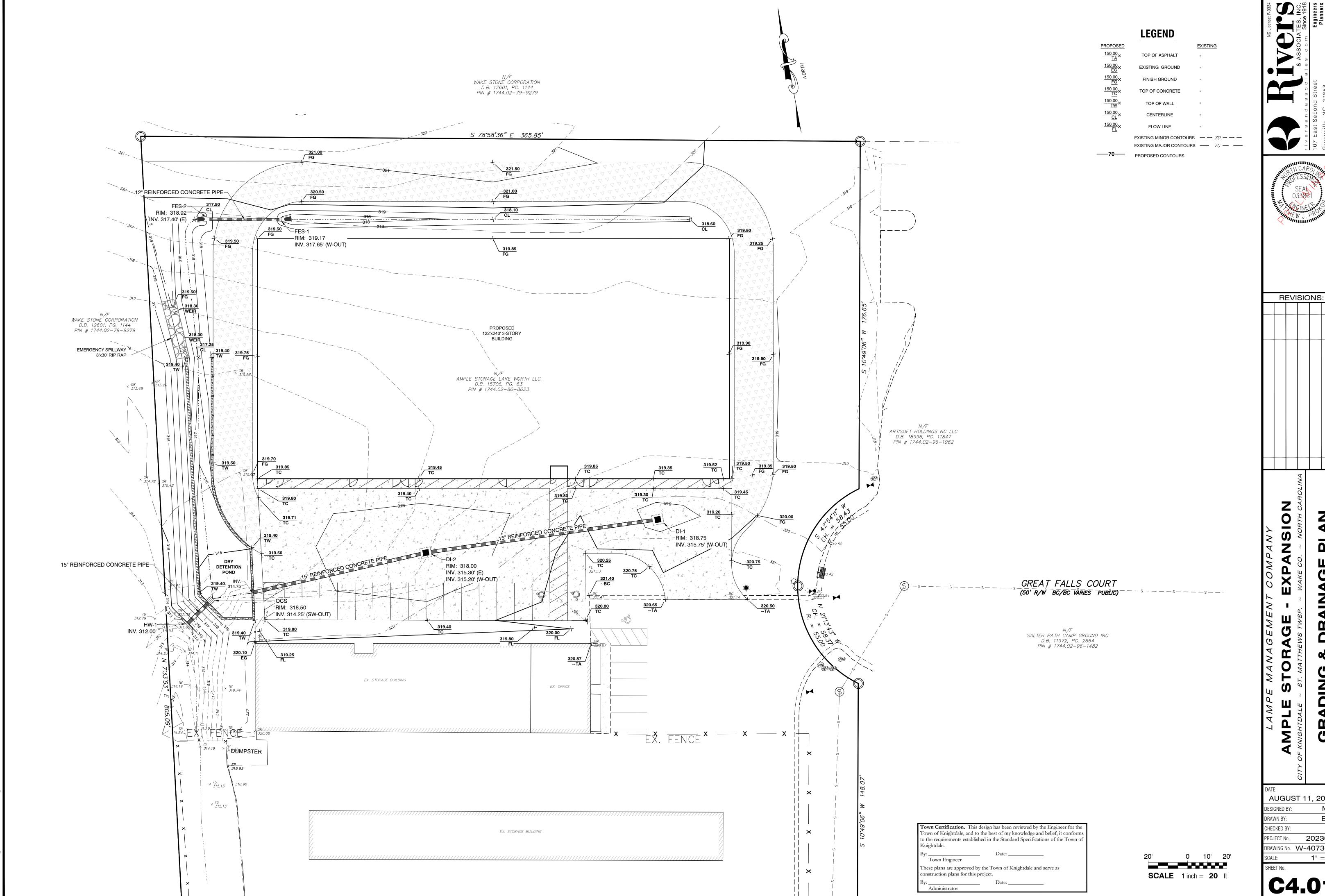
DRAWN BY: EDN

CHECKED BY: JSJ

PROJECT No. 2023008

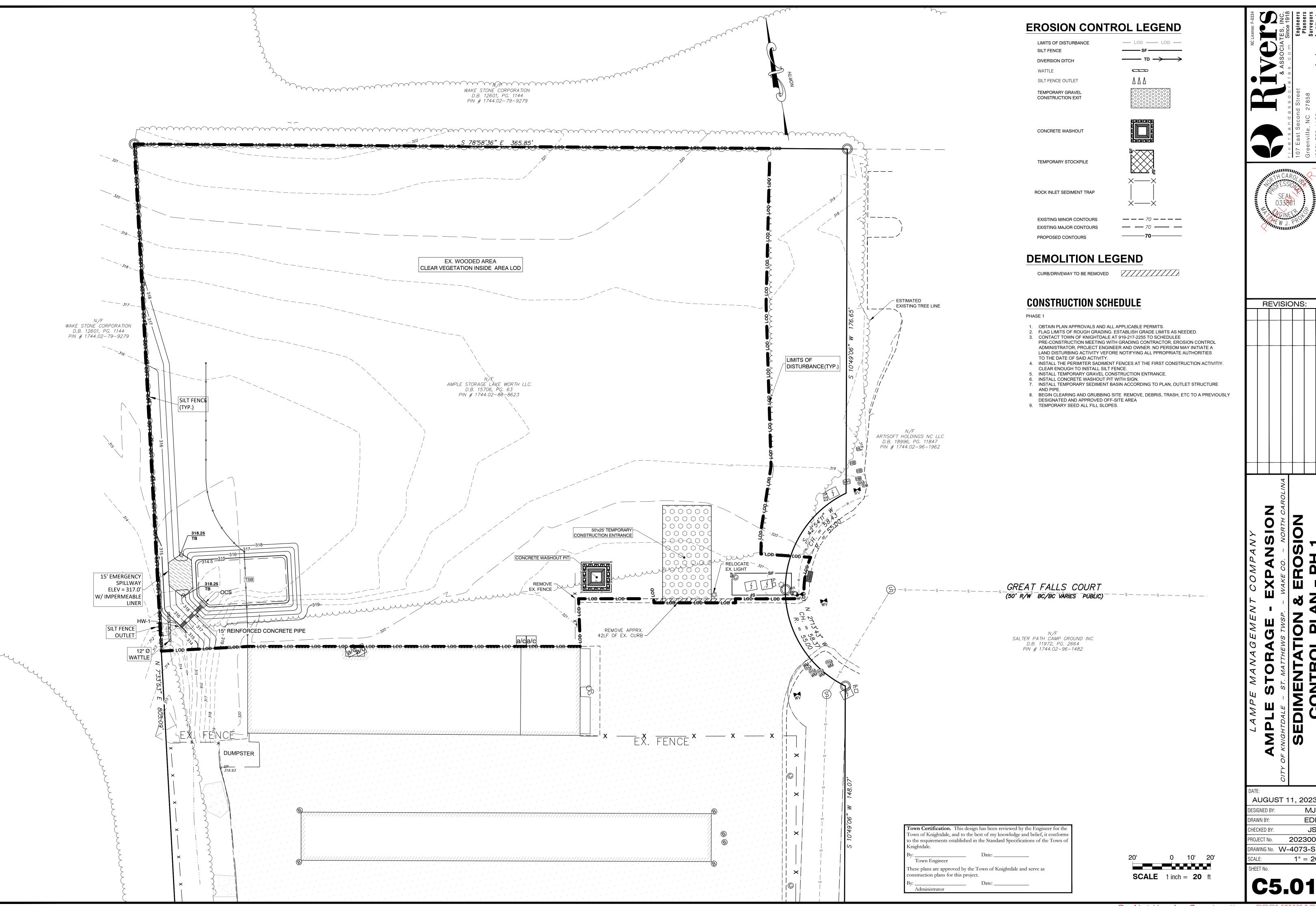
DRAWING No. W-4073-SK

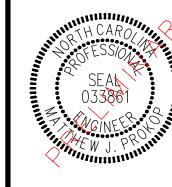
SCALE: 1" = 20'





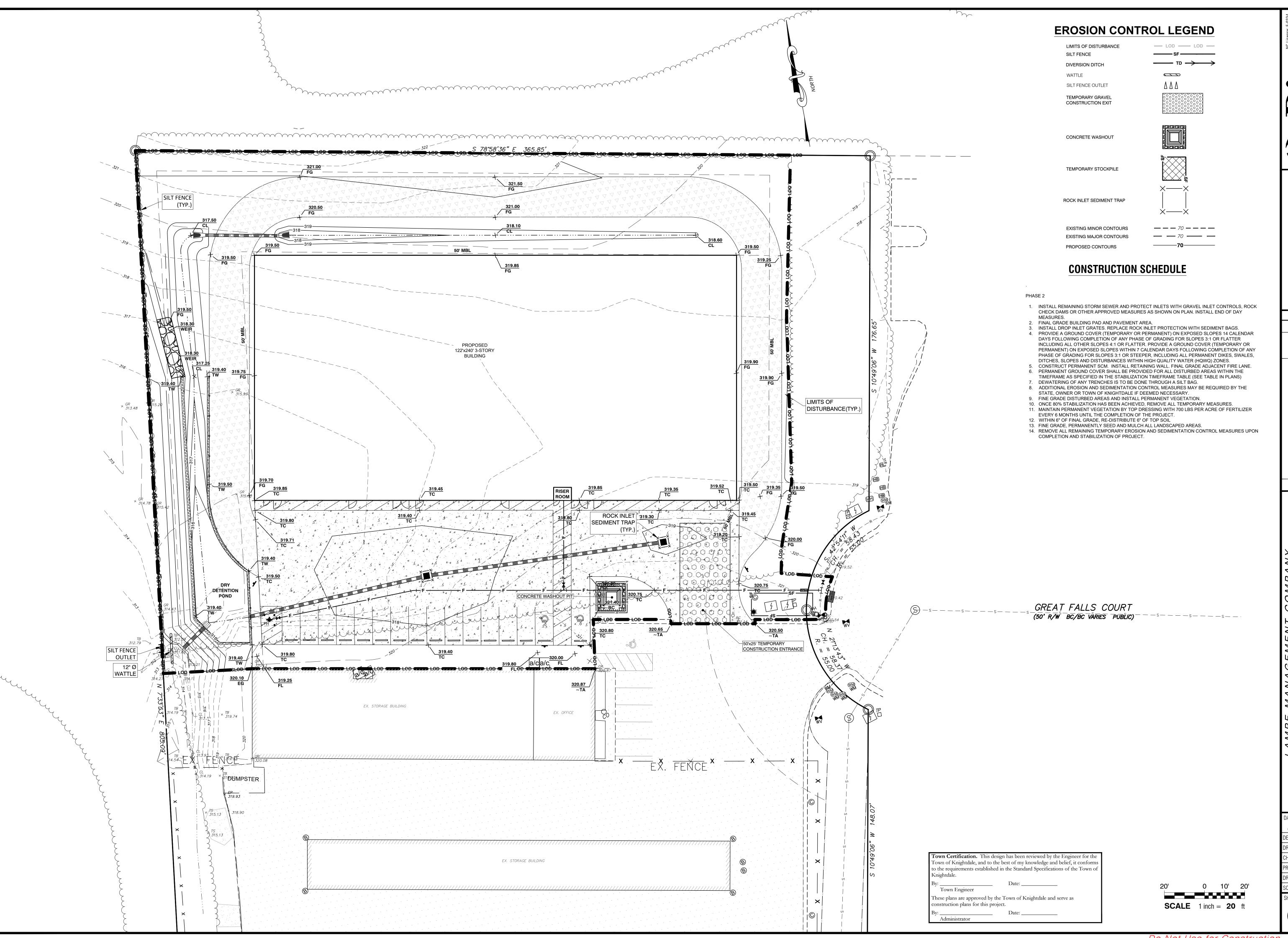
AUGUST 11, 2023 2023008 DRAWING No. W-4073-SK





REVISIONS:

AUGUST 11, 2023 CHECKED BY: 2023008 DRAWING No. W-4073-SK



NC License: F-0334

& ASSOCIATES, INC.

& ASSOCIATES, INC.

eet

Engineers

riversandas 107 East Second Greenville, NC 2



REVISIONS:

| NOISION | NO

PLE STORAGE - EXPANSION

TDALE ~ ST. MATTHEWS TWSP. ~ WAKE CO. ~ NORTH CAROLING

EDIMENTATION & EROSION

CONTROL PLAN - PH 2

DATE:

AUGUST 11, 2023

DESIGNED BY:

DRAWN BY:

CHECKED BY:

PROJECT No.

DRAWING No.

W-4073-SK

C5.02

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMI mplementing 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)	b) High Quality Water (HQW) Zones 7 None					
(c)	Slopes steeper than 3:1	7	If slopes are 10 feet 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 			

against accelerated erosion until permanent ground stabilization is achieved. **GROUND STABILIZATION SPECIFICATION**

Temporary ground stabilization shall be maintained in a manner to render the surface stable

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the echniques in the table below: **Temporary Stabilization Permanent Stabilization**

other mulches and tackifiers. Hvdroseedina Rolled erosion control products with or Hydroseeding without temporary grass seed Appropriately applied straw or other mulch

• Shrubs or other permanent plantings

 Temporary grass seed covered with straw or or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting

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

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

surrounded by secondary containment structures.

Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.

Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions. Provide ponding area for containment of treated Stormwater before discharging offsite. Store flocculants in leak-proof containers that are kept under storm-resistant cover or

NORTH CAROLINA Environmental Quality

Plastic sheeting

EQUIPMENT AND VEHICLE MAINTENANCE

Maintain vehicles and equipment to prevent discharge of fluids.

Provide drip pans under any stored equipment. . Identify leaks and repair as soon as feasible, or remove leaking equipment from the

Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible) Remove leaking vehicles and construction equipment from service until the problem Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to

TTER, BUILDING MATERIAL AND LAND CLEARING WASTE Never bury or burn waste. Place litter and debris in approved waste containers

a recycling or disposal center that handles these materials.

Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available. Locate waste containers on areas that do not receive substantial amounts of runoff fron upland areas and does not drain directly to a storm drain, stream or wetland.

Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers. Anchor all lightweight items in waste containers during times of high winds. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.

Dispose waste off-site at an approved disposal facility. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

Do not dump paint and other liquid waste into storm drains, streams or wetlands. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters

unless no other alternatives are reasonably available. Contain liquid wastes in a controlled area

Containment must be labeled, sized and placed appropriately for the needs of site. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from

construction sites PORTABLE TOILETS

attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas

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

Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

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

Provide stable stone access point when feasible

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.

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

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

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER 1. ACTUAL LOCATION DETERMINED

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACIT 3.CONCRETE WASHOU RUCTURE NEEDS TO BE CLEAR SECTION A-A BELOW GRADE WASHOUT STRUCTURE MARKED WITH SIGNAGE NOTING

NOTES: 1. ACTUAL LOCATION DETERMINEΓ 2. THE CONCRETE WASHOUT WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTUR DLDING CAPACITY WITH A MINIM 2 INCHES OF FREEBOARD. CONCRETE WASHOUT STRUCTUR NEEDS TO BE CLEARY MARKED WIT

OR STAPLES SECTION B-B ABOVE GRADE WASHOUT STRUCTURE

CONCRETE WASHOUTS

Do not discharge concrete or cement slurry from the site. Dispose of, or recycle settled, hardened concrete residue in accordance with local and

state solid waste regulations and at an approved facility. 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

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. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be

pumped out and removed from project. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or

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

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. 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.

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

HERBICIDES, PESTICIDES AND RODENTICIDES

Store and apply herbicides, pesticides and rodenticides in accordance with label

Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental Do not store herbicides, pesticides and rodenticides in areas where flooding is possible

or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.

Do not stockpile these materials onsite

NCG-01 GROUND COVER & MATERIALS HANDLING

EFFECTIVE DATE: 11/12/2020

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 structures 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,

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 Vegetated, upland areas of the sites or 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 waters of the United States.

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.

Frequency Inspection records must include:

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

2. Documentation that the required ground stabilization

measures have been provided within the required timeframe

or assurance that they will be provided as soon as possible.

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.

II	Item to Document	Document 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 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 to be Kept on Site 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.

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-NOI 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]

SELF-INSPECTION, RECORDKEEPING AND REPORTING SECTION C: REPORTING I. 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).

(c) 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.

(d) Anticipated bypasses and unanticipated bypasses.

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

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other

	requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.					
Ш	Occurrence Reporting Timeframe (After Discovery) and Other Requirements					
Ш	(a) Visible	Within 24 hours, an oral or electronic notification.				
Ш	sediment	 Within 7 Calendar Days, a report that contains a description of the 				
Ш	deposition in a	sediment and actions taken to address the cause of the deposition.				
	stream or wetland	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 caused, 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. 				
Ш	(b) Oil spills and	Within 24 Hours, an oral or electronic notification. The notification shall				
II	release of	include information about the date, time, nature, volume and location				
Ш	hazardous	of the spill or release.				
Ш	substances per					
I	item 1(b)-(c) above					
Ш	(c) Anticipated	 A report at least ten days before the date of the bypass, if possible. 				
Ш	bypasses [40 CFR	The report shall include an evaluation of the anticipated quality and				
Ш	122.41(m)(3)]	effect of the bypass.				
Ш	(d) Unanticipated	Within 24 Hours, an oral or electronic notification				
I	bypasses [40 CFR	······································				
	122.41(m)(3)]	quality and effect of the bypass.				
	(e) Noncompliance	,				
I	with the conditions	······································				
Ш	of this permit that	noncompliance, and its causes; the period of noncompliance, including				

exact dates and times, and if the noncompliance has not been

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

and steps taken or planned to reduce, eliminate and prevent

reoccurrence of the noncompliance. [40 CFR 122.41(I)(6).

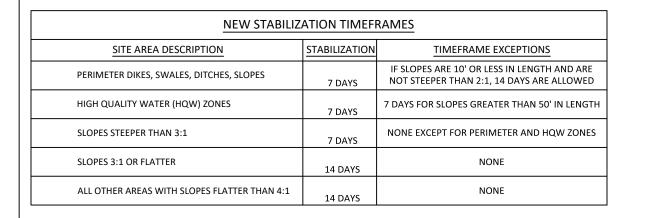
corrected, the anticipated time noncompliance is expected to continue;

may endanger

environment [40]

CFR 122.41(I)(7)]

health or the



CONSTRUCTION SCHEDULE

1. OBTAIN PLAN APPROVALS AND ALL APPROVALS AND ALL APPLICABLE PERMITS. 2. FLAG LIMITS OF ROUGH GRADING.

3. HOLD PRE-CONSTRUCTION MEETING WITH GRADING CONTRACTOR, EROSION CONTROL ADMINISTRATOR (252-329-4886) PROJECT ENGINEER AND OWNER BEFORE WORK BEGINS.

4. INSTALL THE PERIMETER SEDIMENT FENCES AS THE FIRST CONSTRUCTION ACTIVITY. 5. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE.

6. INSTALL CONCRETE WASHOUT PIT WITH SIGN. 7. INSTALL TEMPORARY SEDIMENT TRAP AND TEMPORARY DIVERSION SWALE PER PLAN. 8. BEGIN CLEARING AND GRUBBING SITE IN DESIGNATED AREAS AND STOCKPILE IN DESIGNATED

PHASE 2

PHASE 1

PAGE:

PAGE:

9. INSTALL STORM DRAINAGE PIPING AND END OF DAY MEASURES.

10. INSTALL HARDWARE CLOTH AND INLET PROTECTION AROUND ALL INLET CATCH BASINS. 11. BEGIN IMPORTING FILL FOR THE CONSTRUCTION OF THE BUILDING PAD AND DRIVE AREAS.

12. FINAL GRADE THE BUILDING PAD, FINE GRADE AND POUR SIDEWALK AND LAY DOWN GRAVEL.

13. INSTALL DROP INLETS AND GRATES. REPLACE ROCK INLET PROTECTION WITH SEDIMENT 14. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR SLOPES 3:1 OR

FLATTER INCLUDING ALL OTHER SLOPES 4:1 OR FLATTER. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES WITHIN 7 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR SLOPES 3:1 OR STEEPER.

15. CONSTRUCT PERMANENT SCM. 16. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED BY THE

STATE, OWNER, OR CITY ENGINEER IF DEEMED NECESSARY. 17. AFTER SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES, FINE GRADE DISTURBED AREAS, AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.

18. MAINTAIN PERMANENT VEGETATION BY TOP DRESSING WITH 700 LBS PER ACRE OF FERTILIZER EVERY 6 MONTHS UNTIL COMPLETION OF THE PROJECT.

19. WITHIN 6" OF FINAL GRADE, RE-DISTRIBUTE 6" OF TOP SOIL.

20. FINE GRADE, PERMANENTLY SEED AND MULCH ALL-LANDSCAPED AREAS.

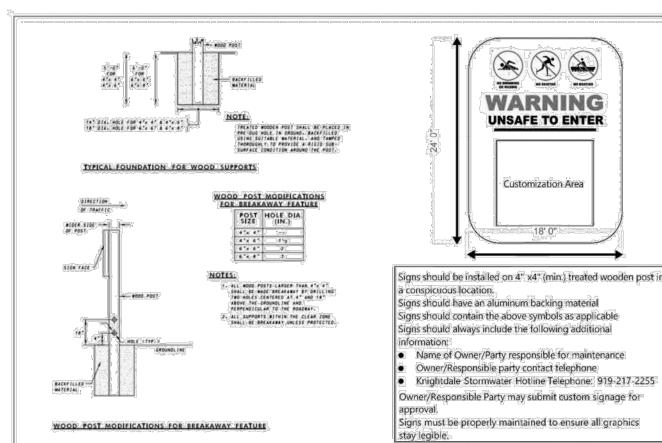
21. TEMPORARY EROSION CONTROL MEASURES TO REMAIN IN PLACE UNTIL +/- 80% STABILIZATION

EROSION CONTROL NOTES:

ALL WORK WILL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES. NO LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL THE APPROPRIATE EROSION CONTROL MEASURE MAY PROCEED UNTIL MEASURES ARE INSPECTED AND APPROVED. FOLLOWING STRIPPING OF SITE, ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED. SILT FENCES SHALL BE PLACED ALONG PROPERTY LINES AS INDICATED ON PLANS TO PROTECT ADJACENT DEVELOPMENTS. ROCK INLET SEDIMENT TRAPS SHALL BE INSTALLED AROUND ALL DRAINAGE STRUCTURES TO COLLECT SURFACE RUNOFF AND CONTROL SILTATION AND RELEASE WATER AT A GRADUAL RATE. ALL DISTURBED AREAS WILL BE GRADED, SEEDED AND MULCHED

ALL SHOULDERS SHALL BE SEEDED TO STABILIZE THE SOIL. SEED BED PREPARATION SHALL BE CONDUCTED ACCORDING TO NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (NCDOT). THE GROUND SURFACE SHALL BE CLEARED OF STUMPS, STONES, ROOTS, CABLES, WIRE, GRADE STAKES, AND OTHER MATERIALS THAT MIGHT HINDER PROPER GRADING, TILLAGE, SEEDING OR SUBSEQUENT MAINTENANCE OPERATIONS. GRADES ON THE AREA TO BE SEEDED SHALL BE MAINTAINED IN A TRUE AND EVEN CONDITION. MAINTENANCE SHALL INCLUDE ANY NECESSARY REPAIRS TO PREVIOUSLY GRADED AREAS. ALL GRADED AREAS SHALL BE THOROUGHLY TILLED TO A DEPTH OF AT LEAST FOUR (4) INCHES BY PLOWING, DISKING, HARROWING, OR OTHER APPROVED METHODS UNTIL THE CONDITION OF THE SOIL IS ACCEPTABLE. ON SITES WHERE SOIL CONDITIONS ARE SUCH THAT HIGH CLAY CONTENT AND EXCESSIVE COMPACTION CAUSE DIFFICULTY IN GETTING CLODS AND LUMPS EFFECTIVELY PULVERIZED, THE CONTRACTOR SHALL USE THE ROTARY TILLAGE MACHINERY UNTIL THE MIXING OF THE SOIL IS ACCEPTABLE AND NO CLODS OR CLUMPS REMAIN LARGER THAN 1 1/2 INCHES IN DIAMETER. A FIRM AND COMPACT SEED BED IS REQUIRED AND AFTER BEING GRADED, THE SEED BED SHALL BE LIGHTLY COMPACTED WITH A LAND ROLLER, SUCH AS A CULTIPACKER, BEFORE AND AFTER SEEDING. LIMESTONE SHALL BE DOLOMITIC AGRICULTURE GROUND LIMESTONE CONTAINING NOT LESS THAN 10 PERCENT MAGNESIUM OXIDE. LIME SHALL BE UNIFORMLY APPLIED AT THE RATE OF 2 TONS PER ACRE AS TESTING REQUIRES PER THE SPECIFICATIONS. IF REQUIRED PER SPECIFICATIONS, FERTILIZER SHALL BE INCORPORATED INTO THE UPPER THREE OR FOUR INCHES OF PREPARED SEED BED JUST PRIOR TO THE LAST TILLAGE OPERATION, BUT IN NO CASE SHALL IT BE APPLIED MORE THAN THREE DAYS PRIOR TO SEEDING. FERTILIZER SHALL BE USED IMMEDIATELY AFTER DELIVERY OR STORED IN A MANNER THAT WILL NOT PERMIT IT TO HARDEN OR DESTROY ITS EFFECTIVENESS.

NEW STABILIZATION TIMEFRAMES				
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS		
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED		
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH		
SLOPES STEEPER THAN 3:1	7 DAYS	NONE EXCEPT FOR PERIMETER AND HQW ZONES		
SLOPES 3:1 OR FLATTER	14 DAYS	NONE		
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE		



1.02 SCM Identification Sign

Stormwater Control Measure

TOWN OF

DETAILS

KNIGHTDALE

STANDARD

	SEEDING SCHEDULE	
N	MAXIMUM SLOPE 3:1	
SEEDING PERIOD	SEEDING TYPE	APPLICATION RAT (LBS/ACRE)
AUGUST 15 - NOVEMBER 01	TALL FESCUE	300
NOVEMBER 01 - MARCH 01	TALL FESCUE AND	300
NOVEMBER OF - MARCH OF	ABRUZZI RYE	25
MARCH 01 - APRIL 15	TALL FESCUE	300
APRIL 15 - JUNE 30	HULLED COMMON BERMUDAGRASS	25
	TALL FESCUE AND	120
JULY 01 - AUGUST 15	*BROWNTOP MILLET OR	35
	*SORGHUM-SUDAN HYBRIDS	30
:	SLOPES 2:1 TO 3:1	•
MARCH 01 - JUNE 01	SERICEA LESPEDEZA (SCARIFIED) AND	50
MARCH 01 - APRIL 15	TALL FESCUE OR	120
MARCH 01 - JUNE 30	WEEPING LOVEGRASS OR	10
MARCH UI - JUNE 30	HULLED COMMON BERMUDAGRASS	25
	*TALL FESCUE AND	120
JUNE 01 - SEPTEMBER 01	*BROWNTOP MILLET OR	35
	*SORGHUM-SUDAN HYBRIDS	30
SEPTEMBER 01 — MARCH 01	SERICEA LESPEDEZA (UNHULLED, USCARIFIED) AND	70
	TALL FESCUE OR	120
NOVEMBER 01 - MARCH 01	ABRUZZI RYE	25
*TEMPORARY — RESEED ACCORDING TO VEGETATION. DO NOT ALLOW TEMPOR. MOWING, OTHERWISE FESCUE MAY BE S SOUL CONSERVATION SERVICE FOR ADD FOR VEGETATION OF DENUDED AREAS.	ARY COVER TO GROW OVER 12" IN H SHADED OUT. CONSULT CONSERVATION DITIONAL INFORMATION CONCERNING (HEIGHT BEFORE ON ENGINEER OR OTHER ALTERNATIVI RE THOSE WHICH D

TOWN OF KNIGHTDALE SEEDING SCHEDULE STANDARD DETAILS 2.01

GRADED SLOPES AND FILLS - WITHIN 15 WORKING DAYS OR 30 CALENDAR DAYS, OR COMPLETION OF ANY PHASE OF GRADING, WHICHEVER PERIOD IS SHORTER, SLOPES SHALL BE PLANTED OR OTHERWISE PROVIDED WITH GROUND COVER, DEVICES, OR STRUCTURES

SUFFICIENT TO RESTRAIN EROSION.

DESCRIPTION

Town Certification. This design has been reviewed by the Engineer for the

to the requirements established in the Standard Specifications of the Town of

These plans are approved by the Town of Knightdale and serve as

onstruction plans for this project.

own of Knightdale, and to the best of my knowledge and belief, it conforms

REVISIONS:

		ROLINA	

AUGUST 11, 2023 ESIGNED BY RAWN BY CHECKED BY: PROJECT No. 2023008

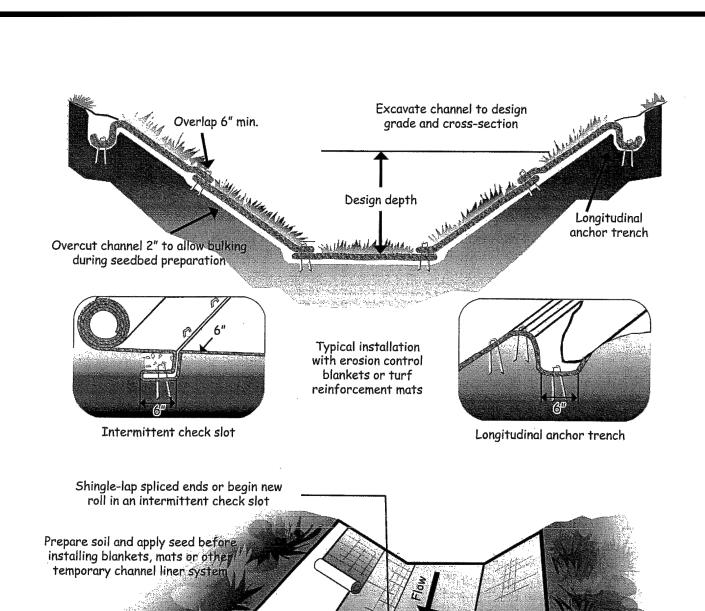
DRAWING No. W-4073-SK

Do Not Use for Construction - PRELIMINAR

NOTE: The rain inspection resets the required 7 calendar day inspection requirement. NORTH CAROLINA Environmental Quality

EFFECTIVE DATE: 11/12/2020

NCG01- SELF INSPECTION



1. Design velocities exceeding 2 ft/sec require temporary blankets, mats or similar liners to protect seed and soil until vegetation becomes established. 2. Grass-lined channels with design velocities exceeding 6 ft/sec should include turf reinforcement

EVEN IF PROPERLY DESIGNED, IF NOT PROPERLY INSTALLED, RECP'S WILL PROBABLY NOT FUNCTION AS DESIRED. PROPER INSTALLATION IS IMPERATIVE. EVEN IF PROPERLY INSTALLED, IF NOT PROPERLY TIMED AND NOURISHED, VEGETATION WILL PROBABLY NOT GROW AS DESIRED. PROPER SEED/VEGETATION SELECTION IS ALSO IMPERATIVE.

GRADE THE SURFACE OF INSTALLATION AREAS SO THAT THE GROUND IS SMOOTH AND LOOSE. WHEN SEEDING PRIOR TO INSTALLATION, FOLLOW THE STEPS FOR SEED BED PREPARATION, SOIL AMENDMENTS, AND SEEDING IN SURFACE STABILIZATION, 6.1. ALL GULLIES, RILLS, AND ANY OTHER DISTURBED AREAS MUST BE FINE GRADED PRIOR TO INSTALLATION. SPREAD SEED BEFORE RECP INSTALLATION. (IMPORTANT: REMOVE ALL LARGE ROCKS, DIRT CLODS, STUMPS, ROOTS, GRASS CLUMPS, TRASH, AND OTHER OBSTRUCTIONS FROM THE SOIL SURFACE TO ALLOW FOR DIRECT CONTACT BETWEEN THE SOIL SURFACE AND THE RECP).

TERMINAL ANCHOR TRENCHES ARE REQUIRED AT RECP ENDS AND INTERMITTENT TRENCHES MUST BE CONSTRUCTED ACROSS CHANNELS AT 25-FOOT INTERVALS. TERMINAL ANCHOR TRENCHES SHOULD BE A MINIMUM OF 12 INCHES IN DEPTH AND 6 INCHES IN WIDTH, WHILE INTERMITTENT TRENCHES NEED BE ONLY 6 INCHES DEEP AND 6 INCHES WIDE

INSTALLATION FOR SLOPES - PLACE THE RECP 2-3 FEET OVER THE TOP OF THE SLOPE AND INTO AN EXCAVATED END TRENCH MEASURING APPROXIMATELY 12 INCHES DEEP BY 6 INCHES WIDE. PIN THE RECP AT 1 FOOT INTERVALS ALONG THE BOTTOM OF THE TRENCH, BACKFILL, AND COMPACT. UNROLL THE RECP DOWN (OR ALONG) THE SLOPE MAINTAINING DIRECT CONTACT BETWEEN THE SOIL AND THE RECP. OVERLAP ADJACENT ROLLS A MINIMUM OF 3 INCHES. PIN THE RECP TO THE GROUND USING STAPLES OR PINS IN A 3 FOOT CENTER-TO-CENTER PATTERN. LESS FREQUENT STAPLING/PINNING

INSTALLATION IN CHANNELS - EXCAVATE TERMINAL TRENCHES (12 INCHES DEEP AND 6 INCHES WIDE) ACROSS THE CHANNEL AT THE UPPER AND LOWER END OF THE LINED CHANNEL SECTIONS. AT 25-FOOT INTERVALS ALONG THE CHANNEL, ANCHOR THE RECP ACROSS THE CHANNEL EITHER IN 6 INCH BY 6 INCH TRENCHES OR BY INSTALLING TWO CLOSELY SPACED ROWS OF ANCHORS. EXCAVATION AND ANCHORS. LONGITUDINAL TRENCHES 6 INCHES DEEP AND WIDE ALONG CHANNEL EDGES (ABOVE WATER LINE) IN WHICH TO BURY THE OUTSIDE RECP EDGES. PLACE THE FIRST RECP AT THE DOWNSTREAM END OF THE CHANNEL. PLACE THE END OF THE FIRST RECP IN THE TERMINAL TRENCH AND PIN IT AT 1 FOOT INTERVALS ALONG THE BOTTOM OF THE TRENCH.

NOTE: THE RECP SHOULD BE PLACED UPSIDE DOWN IN THE TRENCH WITH THE ROLL ON THE DOWNSTREAM SIDE OF THE BENCH.

ONCE PINNED AND BACKFILLED, THE RECP IS DEPLOYED BY WRAPPING OVER THE TOP OF THE TRENCH AND UNROLLING UPSTREAM. IF THE CHANNEL IS WIDER THAN THE PROVIDED ROLLS, PLACE ENDS OF ADJACENT ROLLS IN THE TERMINAL TRENCH, OVERLAPPING THE ADJACENT ROLLS A MINIMUM OF 3 INCHES. PIN AT 1 FOOT INTERVALS, BACKFILL, AND COMPACT. UNROLL THE RECP IN THE UPSTREAM DIRECTION UNTIL REACHING THE FIRST INTERMITTENT TRENCH. FOLD THE RECP BACK OVER ITSELF, POSITIONING THE ROLL ON THE DOWNSTREAM SIDE OF THE TRENCH, AND ALLOWING THE

THEN PIN THE RECP (TWO LAYERS) TO THE BOTTOM OF THE TRENCH, BACKFILL, AND COMPACT. CONTINUE UP THE CHANNEL (WRAPPING OVER THE TOP OF THE INTERMITTENT TRENCH) REPEATING THIS STEP AT OTHER INTERMITTENT TRENCHES. UNTIL REACHING THE UPPER TERMINAL TRENCH.

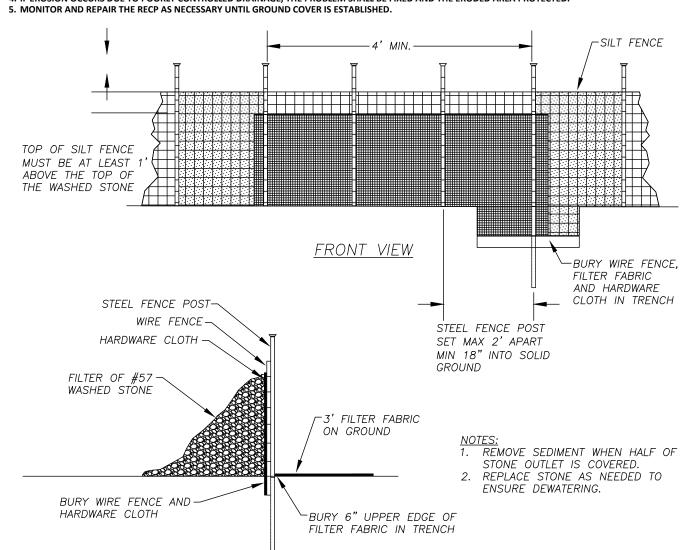
AT THE UPPER TERMINAL TRENCH, ALLOW THE RECP TO CONFORM TO THE TRENCH, SECURE WITH PINS OR STAPLES, BACKFILL, COMPACT AND THEN BRING THE MAT BACK OVER THE TOP OF THE TRENCH AND ONTO THE EXISTING MAT (2 TO 3 FEET OVERLAP IN THE DOWNSTREAM DIRECTION), AND PIN A 1 FOOT INTERVALS ACROSS THE RECP. WHEN STARTING INSTALLATION OF A NEW ROLL, BEGIN IN A TRENCH OR SHINGLE-LAP ENDS OF ROLLS A MINIMUM OF 1 FOOT WITH UPSTREAM RECP ON TOP TO PREVENT UPLIFTING. PLACE THE OUTSIDE EDGES OF THE RECP(S) IN LONGITUDINAL TRENCHES, PIN,

ANCHORING DEVICES - 11 GAUGE, AT LEAST 6 INCHES LENGTH BY 1 INCH WIDTH STAPLES OR 12 INCH MINIMUM LENGTH WOODEN STAKES ARE RECOMMENDED FOR ANCHORING THE RECP TO THE

DRIVE STAPLES OR PINS SO THAT THE TOP OF THE STAPLE OR PIN IS FLUSH WITH THE GROUND SURFACE. ANCHOR EACH RECP EVERY 3 FEET ALONG ITS CENTER. LONGITUDINAL OVERLAPS MUST BE SUFFICIENT TO ACCOMMODATE A ROW OF ANCHORS AND UNIFORM ALONG THE ENTIRE LENGTH OF OVERLAP AND ANCHORED EVERY 3 FEET ALONG THE OVERLAP LENGTH. ROLL ENDS MAY BE SPLICED BY OVERLAPPING 1 FOOT (IN THE DIRECTION OF WATER FLOW), WITH THE UPSTREAM/UNSLOPE MAT PLACED ON TOP OF THE DOWNSTREAM/DOWNSLOPE RECP. THIS OVERLAP SHOULD BE ANCHORED AT 1 FOOT SPACING ACROSS THE RECP. WHEN INSTALLING MULTIPLE WIDTH MATS HEAT SEAMED IN THE FACTORY, ALL FACTORY SEAMS AND FIELD OVERLAPS SHOULD BE SIMILARLY ANCHORED.

1. INSPECT ROLLED EROSION CONTROL PRODUCTS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAIN FALL EVENT REPAIR IMMEDIATELY. 2. GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED. AND EROSION MUST NOT OCCUR BENEATH THE RECP.

3. ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED. 4. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED.



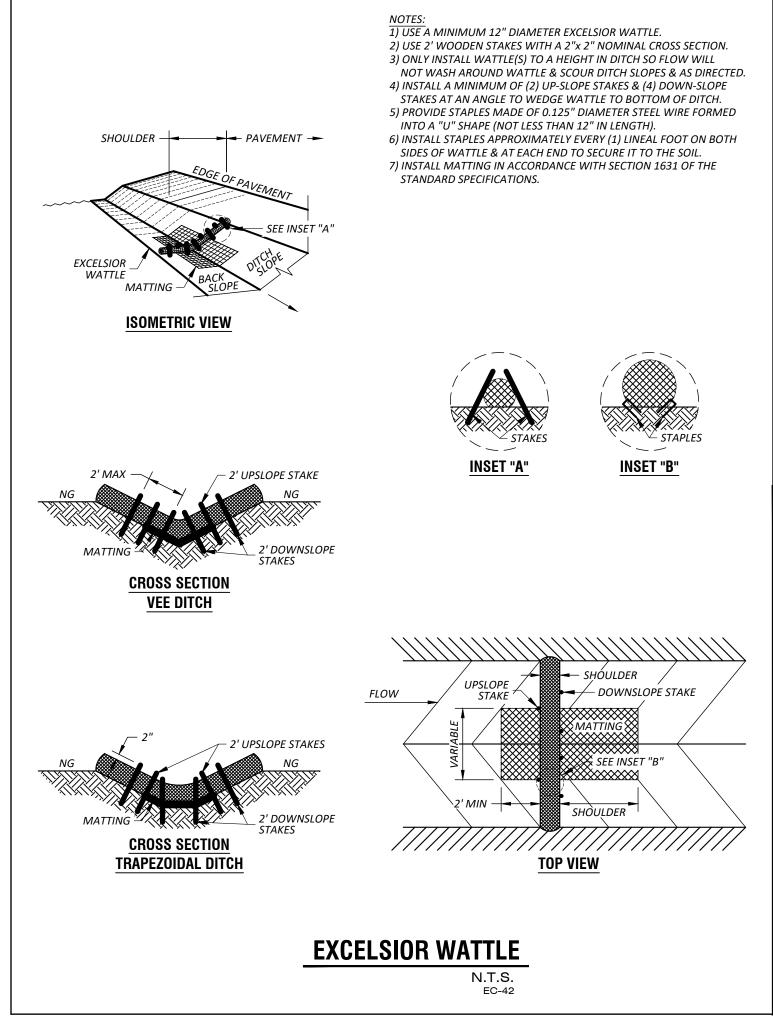
STANDARD SILT FENCE OUTLET

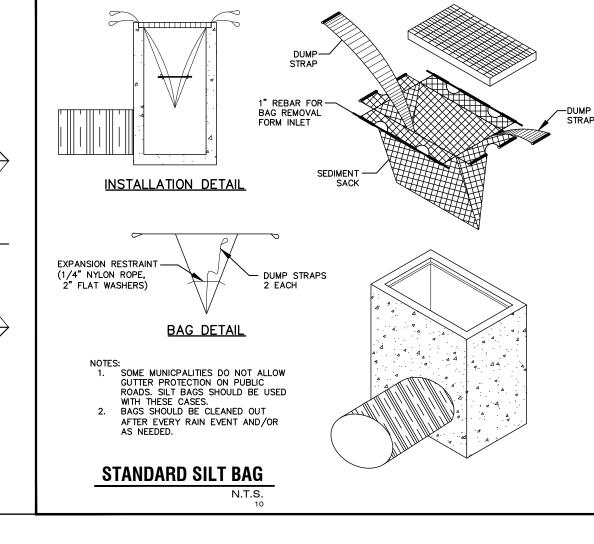
SECTION VIEW

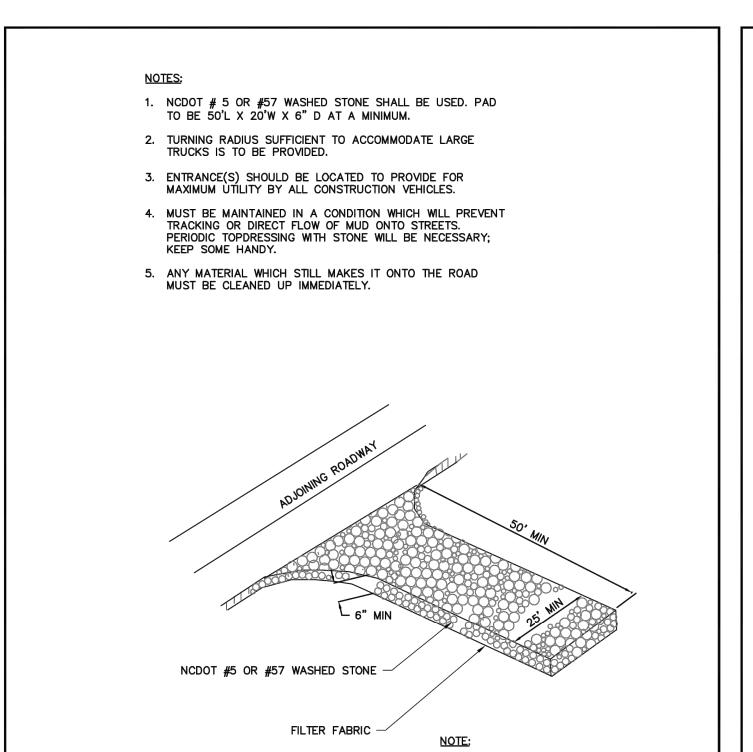
Terminal slope and hannel anchor trench Intermittent check slot 1. Check slots to be constructed per manufacturers specifications. 2. Staking or stapling layout per manufacturers specifications. Slope surface shall be smooth before If there is a berm at the top of slope, anchor upslope of the berm. placement for proper soil contact. Anchor in 6"x6" min. Trench Stapling pattern as and staple at 12" intervals. per manufacturers recommendations. max. 5" spacing. Bring material down to a level area, Do not stretch blankets/matting tight-allow turn the end under 4" and staple at 12" the rolls to conform to any irregularities. Lime, fertilize, and seed before installation. Planting For slopes less than 3H:1V, rolls of shrubs, trees, etc. should occur after installation. may be placed in horizontal strips.

N.T.S.

RECP DETAIL







REVISIONS

TOWN OF KNIGHTDALE

STANDARD DETAILS

DESCRIPTION

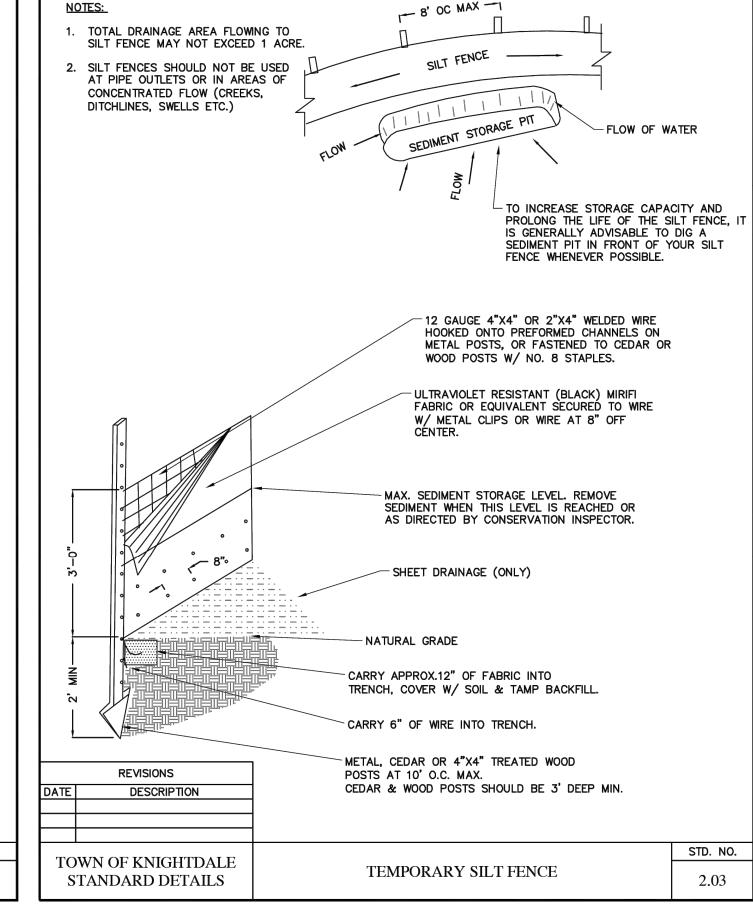
APPLICABLE AT ALL POINTS OF

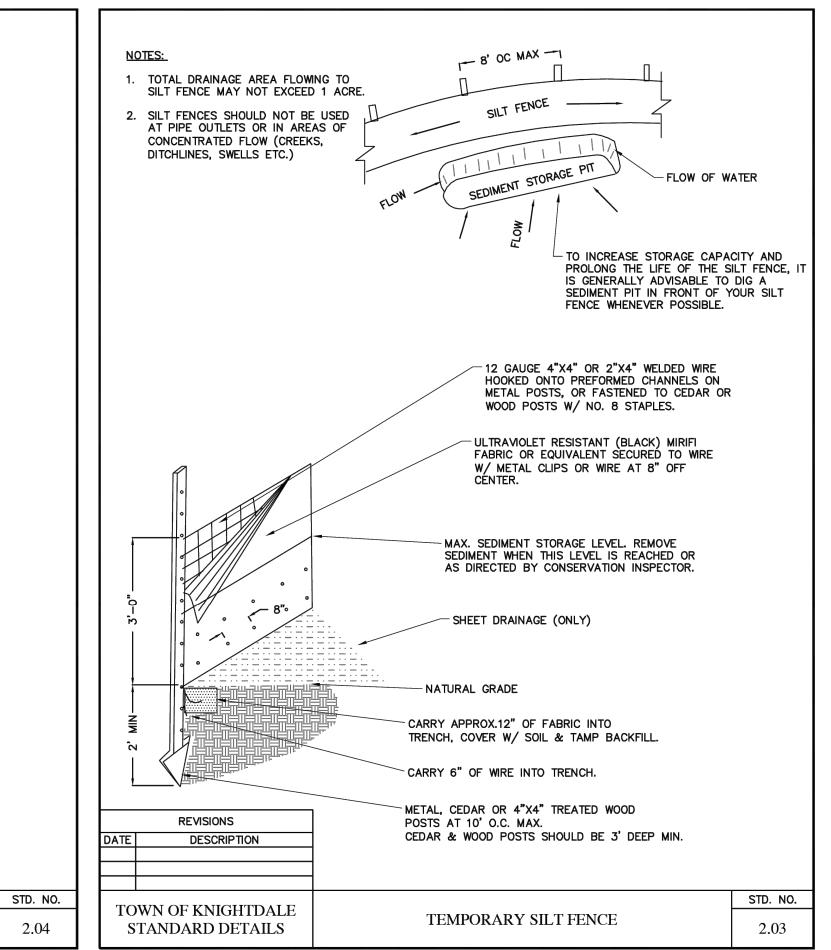
THE DEVICE AND TIMELY

TEMPORARY CONSTRUCTION ENTRANCE/EXIT

INGRESS & EGRESS UNTIL SITE IS STABILIZED, FREQUENT CHECKS OF

MAINTENANCE MUST BE PROVIDED.







MAINTENANCE

INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL, MAKE ANY REQUIRED REPAIRS IMMEDIATELY.

SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.

REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.

REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

AUGUST 11, 2023

RAWING No. W-4073-SK

2023008

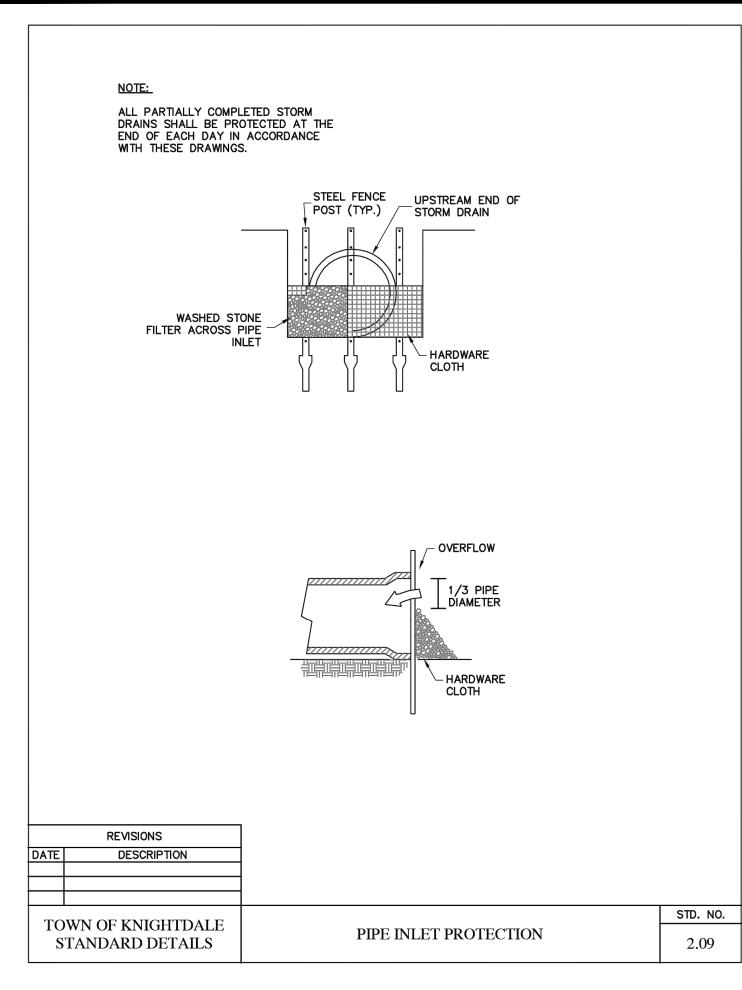
1" = 20

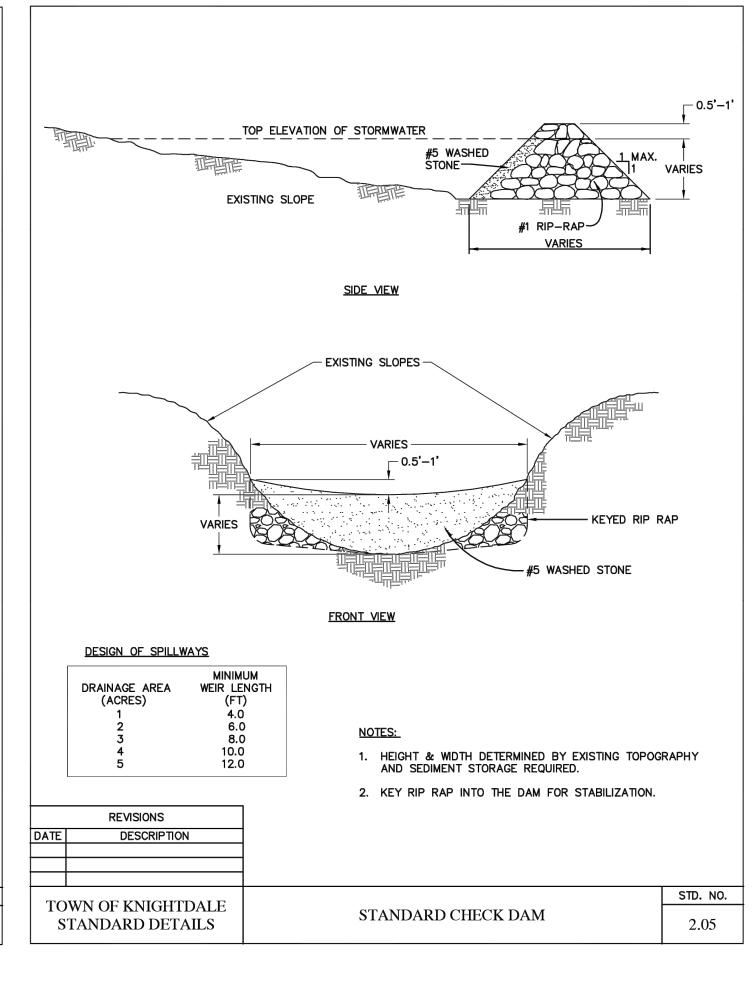
RAWN BY

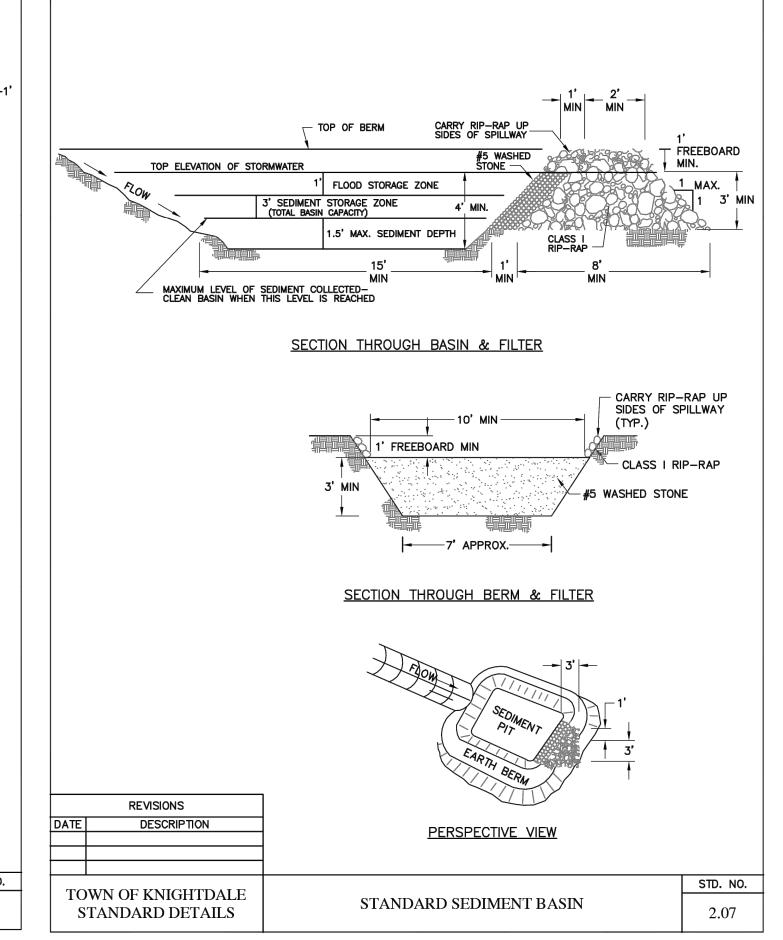
CHECKED BY:

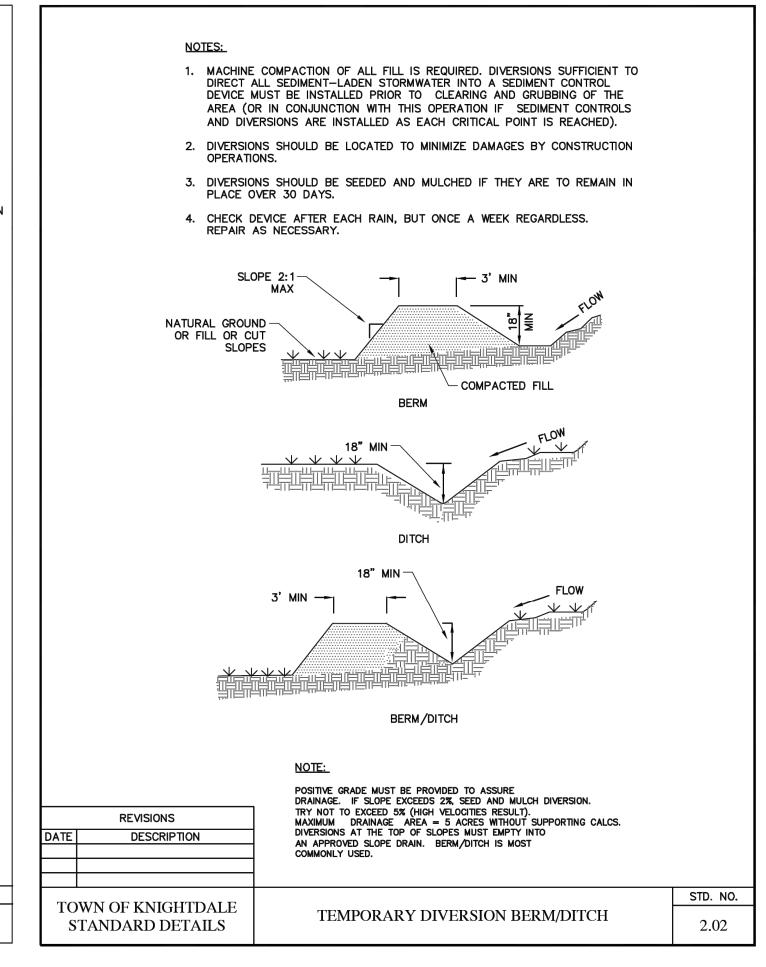
PROJECT No.

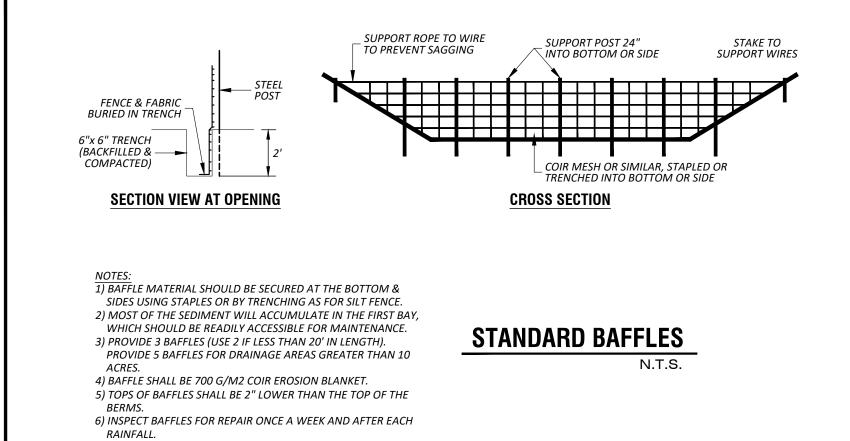
REVISIONS:

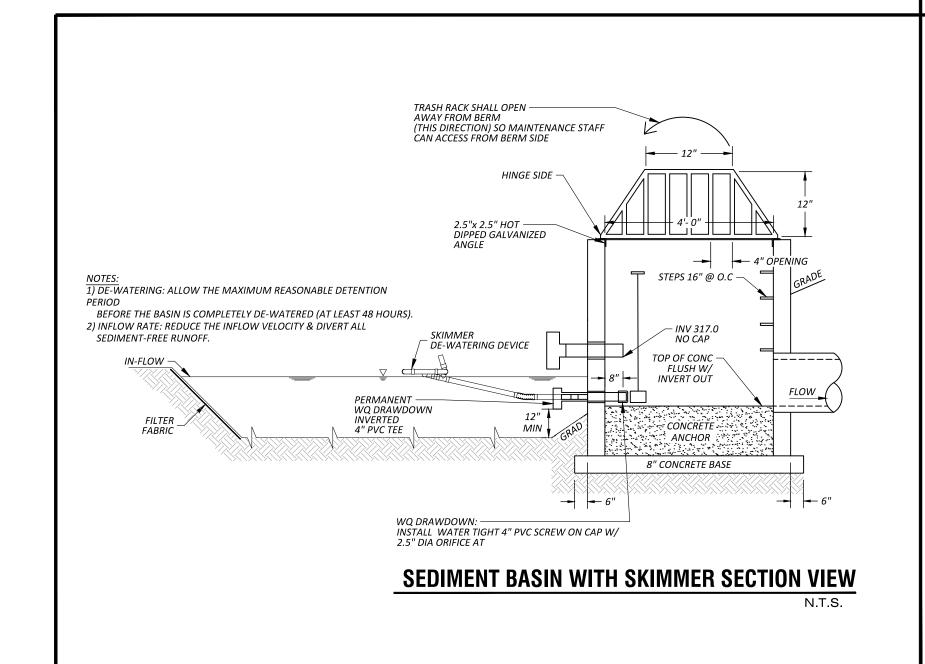












Town of Knightd	on. This design has been reviewed by the Engineer for the ale, and to the best of my knowledge and belief, it conforms ts established in the Standard Specifications of the Town of
Knightdale.	
By:Town Engine	Date:
These plans are ap construction plan	oproved by the Town of Knightdale and serve as s for this project.
By:Administrator	Date:

AMPLE STORA

SI SI MATTHEV

SI MATTHEV

SEDIMENTATI

DATE:
AUGUST 11, 2023

DESIGNED BY: MJP

DRAWN BY: EDN

CHECKED BY: JSJ

PROJECT No. 2023008

DRAWING No. W-4073-SK

EET No.