# MASS GRADING / EROSION CONTROL WALLBROOK - Lot 8 S. Main St. / US-401 Business & Wall Creek Drive, Town of Rolesville, Wake County, North Carolina

V2-CID-24-03 Plan set

LOT 1B 2.30 AC

LOT 1C 1.90 AC

Project No. CID 24-03A

Vicinity Map

CROSLAND SOUTHEAST

REVISIONS:



WALLBI SS GRADING Town of Rolesy

2 LOD appears to

Rolesville

THE LOD LINE HAS SHIFTED

SEIGHTLY, HOWEVER THE

TOTAL AREA DISTURBED

REMAINS 2.80 AC

Engineer

Ark Consulting Group, PLLC

Project Manager: Drawn By: Checked By: 24137 D-1472 Drawing Number:

C<sub>0.1</sub>

April 1, 2024

0 50' 100' SCALE 1 inch = 100 ft

**PROJECT AREA** LOT 5 5.07 AC **INCLUDED WITH** LOT 7 2.74 AC LOT 8 5.35 AC REFERENCE WALLBROOK (PR 21-04) WALLBROOK DRIVE

THIS SUBMITTAL Site Data

PIN NUMBERS: REAL ESTATE ID: CURRENT ZONING: ACREAGE IN PARCEL: ACREAGE IN PUBLIC R/W: TOTAL ACREAGE DISTURBED: WATERSHED: RIVER BASIN: **CURRENT USE: EXISTING IMPERVIOUS:** PROPOSED IMPERVIOUS: PROPOSED USE(S):

Sheet Index

Existing Conditions & Demolition Plan

C1.2 Erosion Control Phase 2 & Mass Grading Plan

**REF** Survey - Johnson, Mirmiran & Thompson (3 Sheets)

1758-67-1871

0509438

0.00 ACRES

2.80 ACRES

Lower Neuse

VACANT / WOODED

Neuse

GC-CZ 5.35 ACRES

REF Tree Preservation Plan - PR-21-04 REVISED (1 Sheet)

Erosion Control Notes & Legend

Erosion Control Phase 1

0 SF 0 SF NON-RESIDENTIAL/ LOT 8 LOTS IN DEVELOPMENT: REFERENCES: DB 018103 PG 0156 BM2023 PG 01602

Owner/Developer Wallbrook Landco, LLC

3 Keel St, Ste 2 2755-B Charles Blvd Greenville, NC Wrightsville Beach, NC Contact: Bryan C. Fagundus, PE

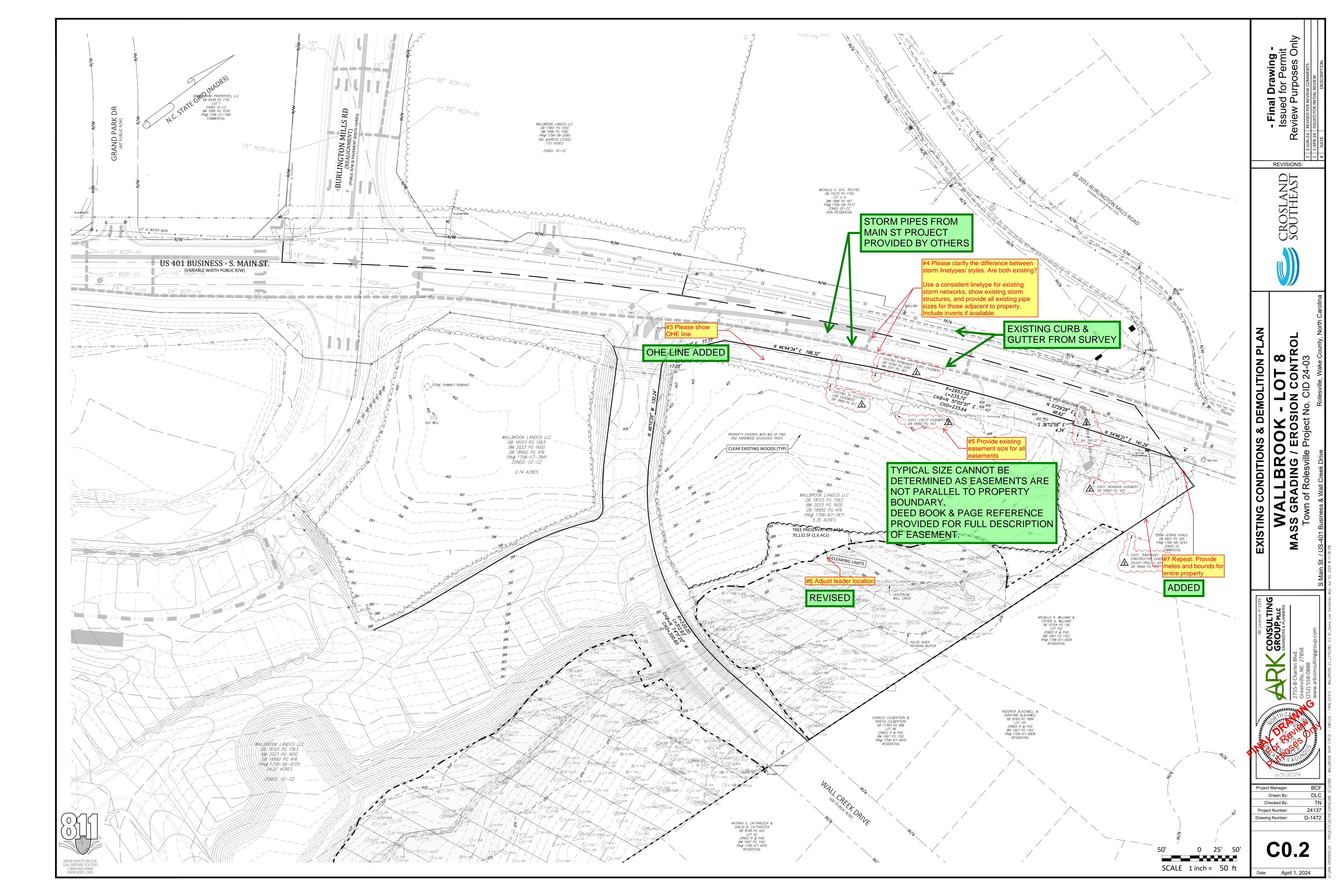
EROSION AND SEDIMENT CONTROL

APPROVED PLAN DATE

PERMIT NO. S-Wake County Environmental Services Sedimentation & Erosion Control 919-856-7400

ENVIRONMENTAL CONSULTANT SIGNATURE

LOT 6 24.27 AC



many calendar Site Area Description Timeframe variations land disturband ) Perimeter dikes, None swales, ditches, a perimeter slope: b) High Quality Wate None (HQW) Zones f slopes are 10' or less in length and are Slopes steeper tha not steeper than 2:1, 14 days are -7 days for slopes greater than 50' ir ength and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ) Slopes 3:1 to 4:1 ditches, perimeter slopes and HOW -10 days for Falls Lake Watershed days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zor Areas with slopes -10 days for Falls Lake Watershed unless flatter than 4:1 here 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

ctivity. Temporary ground stabilization shall be maintained in a manner to render the urface stable against accelerated erosion until permanent ground stabilization is achieved ROUND STABILIZATION SPECIFICATIO

abilize the ground sufficiently so that rain will not dislodge the soil. Use one of the chniques in the table below: Temporary Stabilization Permanent Stabilization Temporary grass seed covered with straw or • Permanent grass seed covered with straw or

other mulches and tackifiers Hvdroseeding Geotextile fabrics such as permanent soil Rolled erosion control products with or reinforcement matting without temporary grass seed Hvdroseeding Appropriately applied straw or other mulch
Shrubs or other permanent plantings covered with mulch Plastic sheeting • Uniform and evenly distributed ground cover sufficient to restrain erosion · Structural methods such as concrete, asphalt of

retaining walls

other mulches and tackifiers

Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS Select flocculants that are appropriate for the soils being exposed during

were delayed shall be noted in the Inspection Record.

(during normal

business hours)

At least once pe

and within 24

hours of a rain

event  $\geq$  1.0 in ch in

and within 24

hours of a rain

24 hours

hours of a rain

of grading

event > 1.0 inch in

3) Stormwater At least once per

utfalls (SDOs) and within 24

I) Perimeter of At least once pr

maintained in

good working

accessible)

measures

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

SELF-INSPECTION, RECORDKEEPING AND REPORTING

elf-inspections are required during normal business hours in accordance with the table

ersonnel to be in jeopardy, the inspection may be delayed until the next business day on

pelow. When adverse weather or site conditions would cause the safety of the inspection

hich it is safe to perform the inspection. In addition, when a storm event of equal to o

performed upon the commencement of the next business day. Any time when inspection

greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be

nspection records must include:

Identification of the measures inspected

Name of the person performing the inspecti

. Indication of whether the measures were operating

. Description of maintenance needs for the measur

. Name of the person performing the inspection,

Date and time of the inspectio

Date and time of the inspection,

If no daily rain gauge observations are made during weekend

available, record the cumulative rain measurement for those un

iday periods, and no individual-day rainfall information i

eeded). Days on which no rainfall occurred shall be recorded as The permittee may use another rain-monitoring device

Description, evidence, and date of corrective actions taken. Identification of the discharge outfalls inspected,

. Evidence of indicators of stormwater pollution such as oil

Description, evidence, and date of corrective actions take

An explanation as to the actions taken to control future.

stream has visible increased turbidity from the construction

neasures, clearing and grubbing, installation of stor

drainage facilities, completion of all land-disturbing

activity, construction or redevelopment, permanent

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

ocumentation that the required ground stabilization

imeframe or an assurance that they will be provided as

Description, evidence and date of corrective actions taken, a

Regional Office per Part III, Section C, Item (2)(a) of this per

. Records of the required reports to the appropriate Division

visible sedimentation is found outside site limits, then a record

. Actions taken to clean up or stabilize the sediment that has left

sheen, floating or suspended solids or discoloration,

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 has been corrected. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum product

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

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

to a recycling or disposal center that handles these materials.

from upland areas and does not drain directly to a storm drain, stream or wetland Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers. Anchor all lightweight items in waste containers during times of high winds. Empty waste containers as needed to prevent overflow. Clean up immediately if

Locate waste containers on areas that do not receive substantial amounts of runof

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

Do not dump paint and other liquid waste into storm drains, streams or wetlands.

containers overflow.

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

on a gravel pad and surround with sand bags.

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

products, follow manufacturer's instructions Provide staking or anchoring of portable toilets during periods of high winds or in high caused by removal of washout.

EARTHEN STOCKPILE MANAGEMEN

with properly operating unit.

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

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

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

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

SECTION B: RECORDKEEPING

Item to Document

shown on the approved E&SC Plan.

in accordance with the approved E&SC

irements for all E&SC Measure:

Corrective actions have been taken.

) The maintenance and repair

requirement not practical:

upon request. [40 CFR 122.41]

ave been performed

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.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

The approved E&SC plan as well as any approved deviation shall be kept on the site. The

The following items pertaining to the E&SC plan shall be documented in the manner

(a) Each E&SC Measure has been installed | Initial and date each E&SC Measure on a copy

and does not significantly deviate from the 📗 of the approved E&SC Plan or complete, date

locations, dimensions and relative elevations. Land sign an inspection report that lists each.

(b) A phase of grading has been completed. | Initial and date a copy of the approved E&SC

approved E&SC plan must be kept up-to-date throughout the coverage under this permit.

Documentation Requirements

| E&SC Measure shown on the approved E&SC

initial installation of the E&SC Measures or if

the E&SC Measures are modified after initial

Plan or complete, date and sign an inspection

Initial and date a copy of the approved E&

Plan or complete, date and sign an inspecti

report to indicate compliance with approved

Complete, date and sign an inspection report.

report to indicate the completion of the

report to indicate completion of the

struction phase.

ground cover specifications.

corrective action.

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

and available for agency inspectors at all times during normal business hours, unless the

This general permit as well as the certificate of coverage, after it is received

a similar inspection form that includes all the required elements. Use of

shown to provide equal access and utility as the hard-copy records.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

Division provides a site-specific exemption based on unique site conditions that make this

Records of inspections made during the previous 30 days. The permittee shall record

the required observations on the Inspection Record Form provided by the Division or

electronically-available records in lieu of the required paper copies will be allowed i

All data used to complete the Notice of Intent and older inspection records shall be

maintained for a period of three years after project completion and made available

CLEARLY MARKED SIGNAGE NOTING DEVICE (18\*X24\* MIN.) CLEARLY MARKED SIGNAGE NOTING DEVICE (18"X24" MIN.) 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 I CLEARY MARKED WITH SIGNAGE NOTING DEVICE 3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE. BELOW GRADE WASHOUT STRUCTURE ABOVE GRADE WASHOUT STRUCTURE ONCRETE 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 silt fence. 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 overflow. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.

Install at least one sign directing concrete trucks to the washout within the project 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

. 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

IERBICIDES, PESTICIDES AND RODENTICIDE Store and apply herbicides, pesticides and rodenticides in accordance with label

Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.

Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately. Do not stockpile these materials onsite.

ZARDOUS AND TOXIC WASTE

Occurrences that must be reported

They are 25 gallons or more,

Permittees shall report the following occurrences

(Ref: 40 CFR 302.4) or G.S. 143-215.85.

Reporting Timeframes and Other Requirement

deposition in a

h az ard ous

substances per Ita

bypasses [40 CFR]

bypasses [40 CFR

(e) Noncompliance

of this permit that

122.41(m)(3)]

may endanger

CFR 122.41(l)(7)]

health or the

122.41(m)(3)]

1(b)-(c) above

b) Anticipated bypasses and unanticipated bypasses.

(a) Visible sediment deposition in a stream or wetland.

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.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

They are less than 25 gallons but cannot be cleaned up within 24 hours,

Releases of hazardous substances in excess of reportable quantities under Section 311

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

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

Reporting Timeframes (After Discovery) and Other Requirements

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  ${\color{black} \bullet}$ 

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

Within 24 hours, an oral or electronic notification. The notificatio

shall include information about the date, time, nature, volume and

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

Within 7 calendar days, a report that includes an evaluation of the

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

been corrected, the anticipated time noncompliance is expected to

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

**EFFECTIVE:** 04/01/1

continue; and steps taken or planned to reduce, eliminate, and

noncompliance, and its causes; the period of noncompliance,

with the federal or state impaired-waters condition

Within 24 hours, an oral or electronic notification

 Within 24 hours, an oral or electronic notificatio with the conditions | • Within 7 calendar days, a report that contains a description of the

reported to the Division's Emergency Response personnel at (800) 662-7956, (800)

(a) Visible sediment | • Within 24 hours, an oral or electronic notification

case-by-case basis.

effect of the bypass

location of the spill or release.

quality and effect of the bypass

of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA

They cause sheen on surface waters (regardless of volume), or

• They are within 100 feet of surface waters (regardless of volume).

— – – TCE — = TEMP. CONSTRUCTION EASEMENT | EFFECTIVE: 04/01/1

= RIPARIAN BUFFER — — — — RIP —

= TREE PRESERVATION AREA

= PROJECT AREA 

= SKIMMER BASIN DRAINAGE AREA - - - - - -

# **Demolition Notes:**

**PROPOSED** 

<del>\_\_\_</del> w <del>\_\_\_\_</del>

\_\_\_\_\_ 8"W \_\_\_\_\_

\_\_\_\_\_ 12"W \_\_\_\_\_

~~

\_\_\_\_\_100 \_\_\_\_\_

\_\_\_\_\_ TDD \_\_\_\_\_

— LOD — LOD —

E--

\_ - - - - - -

= FOUND MONUMENT AS NOTED

= DIMENSION POINT (NOTHING SET)

O = SET IRON PIN

R/W = RIGHT OF WAY

= DROP INLET

= ELECTRIC BOX

EM EM = ELECTRIC METER

F/O = FIBER OPTIC

= HAND BOX

🗗 FH = FIRE HYDRAN

kd GV = GAS VALVE

= SIGN

← GUY WIRE

Ø PP = POWER POLE

 $\Delta$  = NCGS MONUMENT

= PROPERTY LINE

C&G = CURB AND GUTTER

= CABLE TV PEDESTAL

RCP = REINFORCED CONCRETE PIPE

= TRAFFIC SIGNAL POLE

= STORM DRAIN MANHOLE

= TELEPHONE PEDESTAL

= TRAFFIC BOX

----- = SANITARY SEWER FORCE MAIN

= FIRE LINE

= 8"ø WATER LINE

= 12"Ø WATER LINE

= DESIGN CONTOUR

= DESIGN CONTOUR

= SILT FENCE

= STORM PIPE

(McADAMS, CO.)

(ARK CONSULTING GROUP)

= TEMPORARY DIVERSION (TDD)

= LIMITS OF DISTURBANCE

= TRFF PROTECTION FENCE

= SKIMMER OUTLET DEVICE

= STONE CHECK DAM

= TDD DRAINAGE AREA

- - - - - - - = SANITARY SEWER LINE

= WATER BOX

(W) WMH = WATER MANHOL

MM WM = WATER METER

W WV = WATER VALVE

= WELL

----E ---- = ELECTRIC LINE

--- g --- = GAS LINE

----- FO ----- = FIBER OPTIC LINE

T = TELEPHONE LINE

--- 50 --- = MAJOR CONTOUR (5')

—— ▼ — = CABLE TV LINE

\_\_\_\_\_w \_\_\_ = WATER LINE

= TREELINE

= SANITARY SEWER MANHOLE

= PEDESTRIAN X-WALK POLE

= SANITARY SEWER FORCE MAIN VALVE

S.F. = SQUARE FEET (AREA)

- 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, FLECTRICAL 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 OWNFR.
- 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.
- IMPROVEMENTS WITHIN LIMITS OF DISTURBANCE UNLESS NOTED 13. TREES OUTSIDE OF CONSTRUCTION LIMITS OR TREES NOT INDICATED TO

12. CONTRACTOR SHALL REMOVE EXISTING VEGETATION AND

BE REMOVED SHALL BE PROTECTED.

# Wake County Basin Removal Sequence:

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

- 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.
- 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
- 4. INSTALL TREE PROTECTION FENCING AROUND ALL AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS SHOWN ON PLANS.
- PROVIDE 20' X 50' X 6" STONE CONSTRUCTION ENTRANCES AS SHOWN ON PLAN.
- 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.
- 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.
- 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 TAR RIVER BASINS. 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.

# **Construction Sequence:**

- 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.
- INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, 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. BEGIN CLEARING AND GRUBBING. 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. AS ROUGH MASS GRADING CONTINUES, SKIMMER SEDIMENT BASINS SHALL BE MAINTAINED AND CLEANED OF SEDIMENT. IN THE FUTURE SITE-SPECIFIC EROSION CONTROL PLAN SKIMMER SEDIMENT BASINS TO BE
- ABANDONED SHALL BE REMOVED AS FOLLOWS: DEWATER THROUGH SILT BAG, CLEAN SEDIMENT, REMOVE BAFFLES, BACKFILL BASIN AND STABILIZE IMMEDIATELY. DEWATERING OPERATIONS THROUGH SILT BAGS SHALL
- 8. STABILIZE STE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS PER GROUND STABILIZATION TIME FRAME.
- 9. WHEN MASS GRADING IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL WATERSHED MANAGER JEEVAN NEUPANE FOR INSPECTION
- 10. IF SITE IS APPROVED, MAINTAIN TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OR STABILIZED ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATERS, SHOULD NOW BE INSTALLED.
- 11. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR FINAL SITE INSPECTION BY THE WATERSHED MANAGER, JEEVAN NEUPANE. OBTAIN CERTIFICATE OF COMPLETION.

# **Erosion Control Provisions:**

- 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.
- INSPECTION CALL 919-819-8907. 48 HOUR NOTICE IS REQUIRED.

- 11. ALL AREAS DOWNSTREAM OF TEMPORARY BASINS AND DITCHES ARE TO BE STABILIZED IMMEDIATELY UPON CONSTRUCTION.

EROSION AND SEDIMENT CONTROL (E&SC) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES OCCUR.

ANY DEWATERING ON THE SITE SHALL BE DONE THROUGH A SILT BAG THAT IS CONSTANTLY MONITORED.

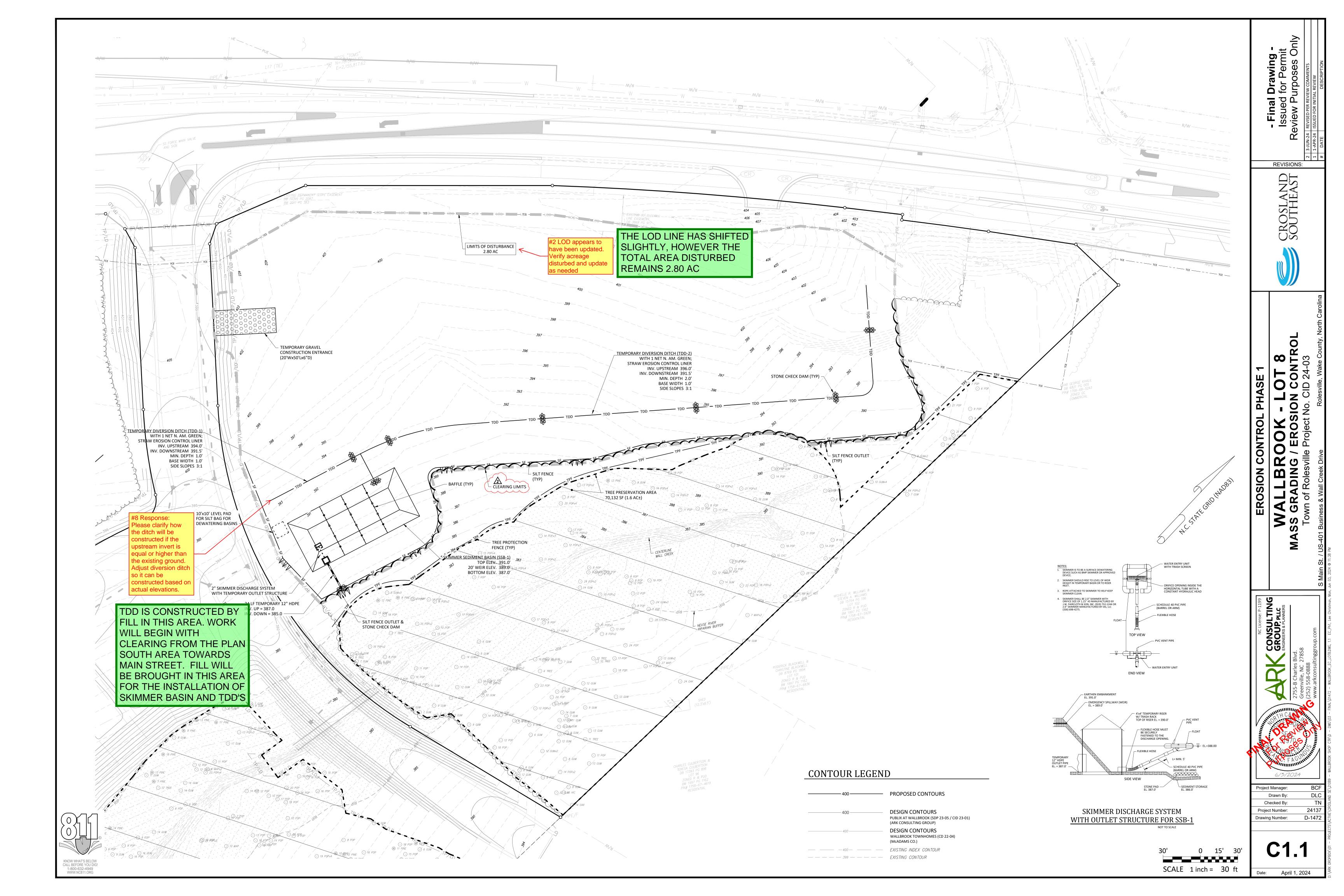
**EROSION** 

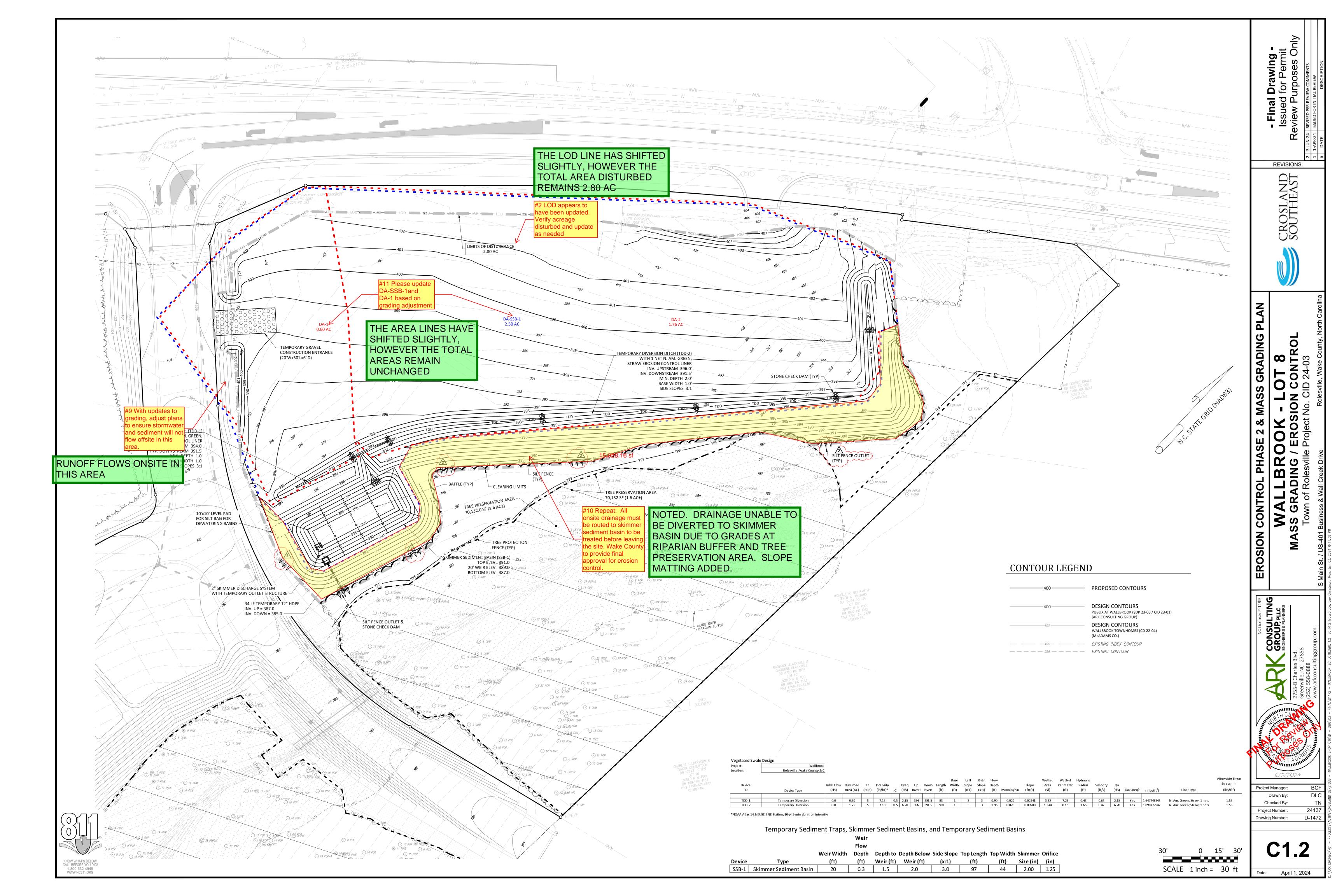
**REVISIONS:** 

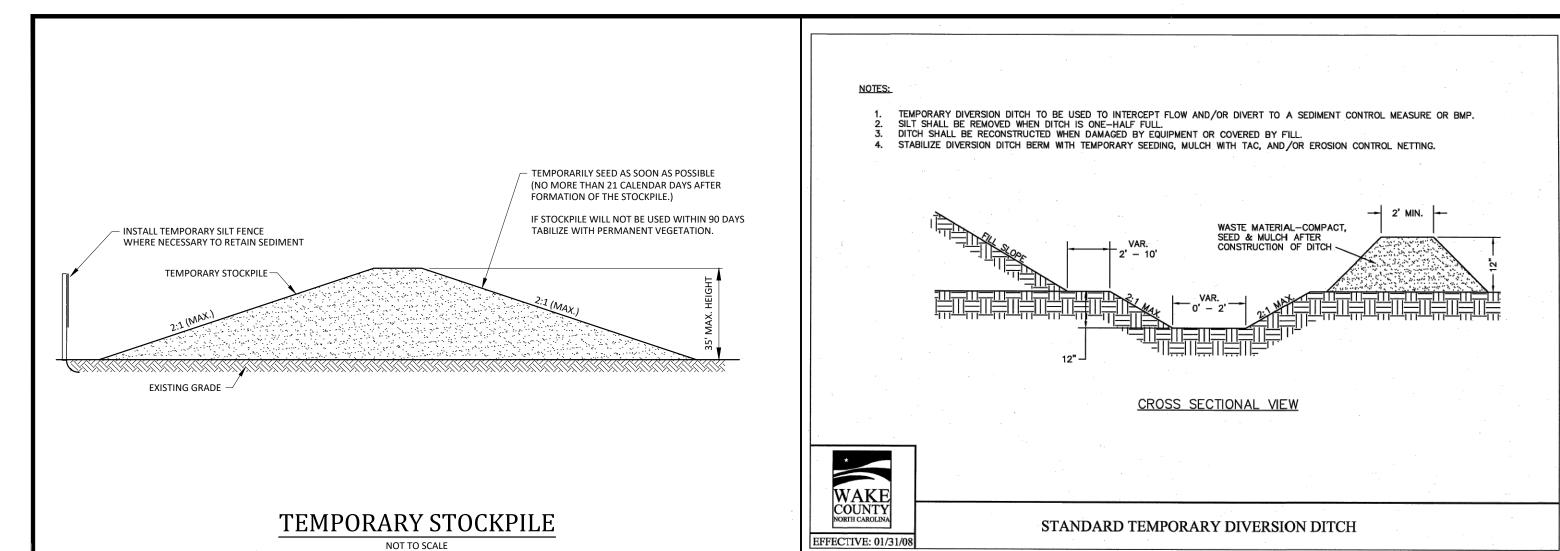
m ≥

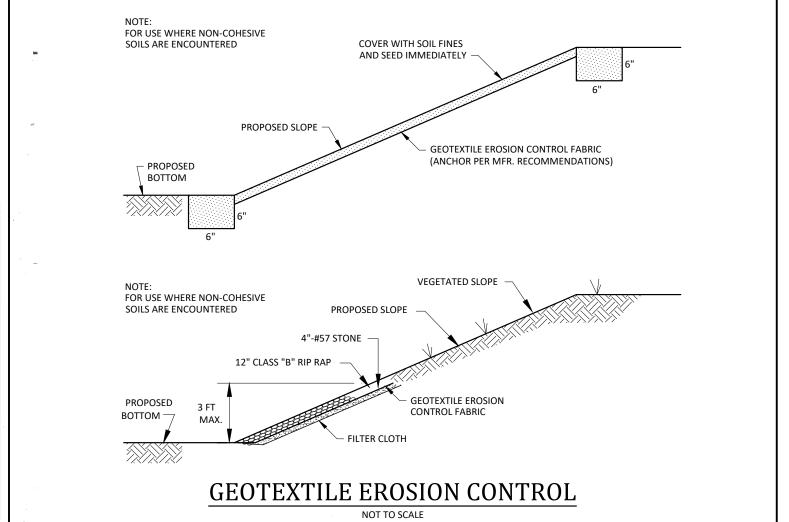
Project Manager

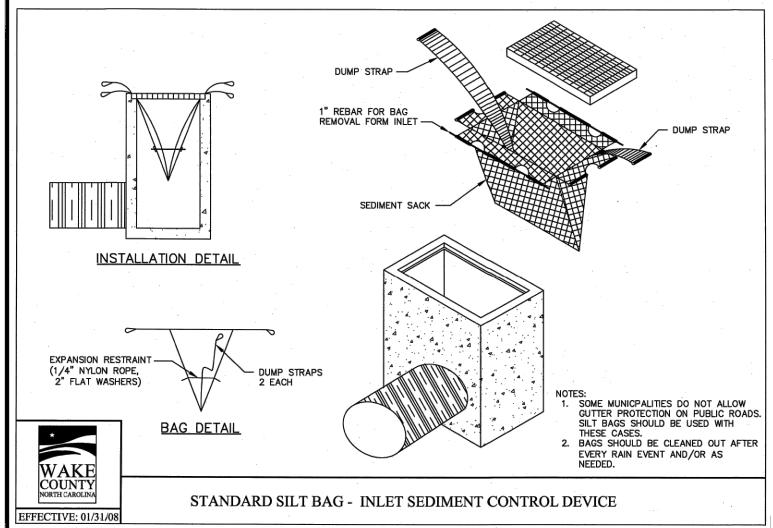
Drawn Bv Checked By 24137 D-1472 Drawing Number:

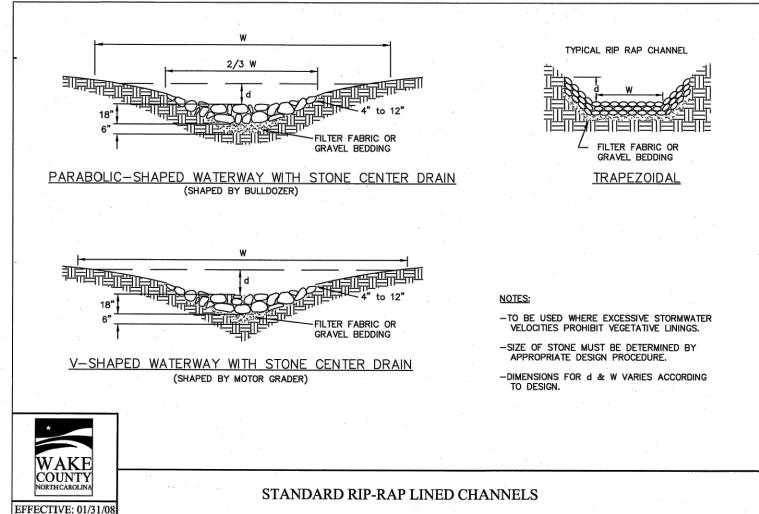


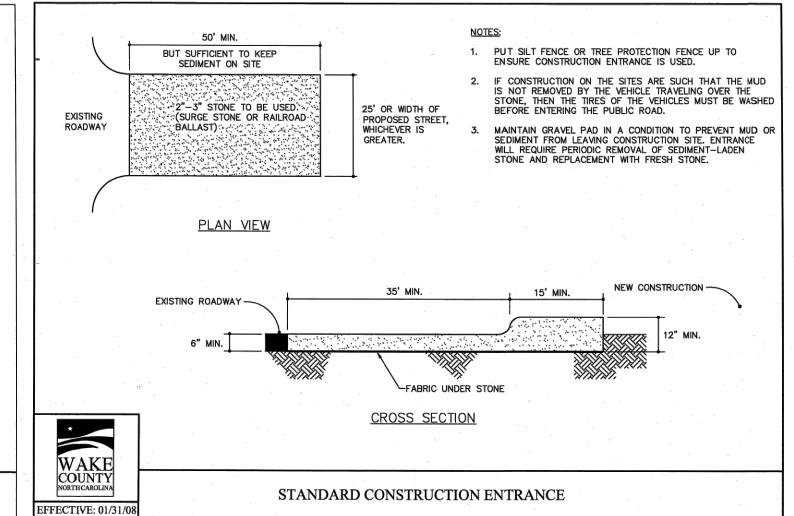


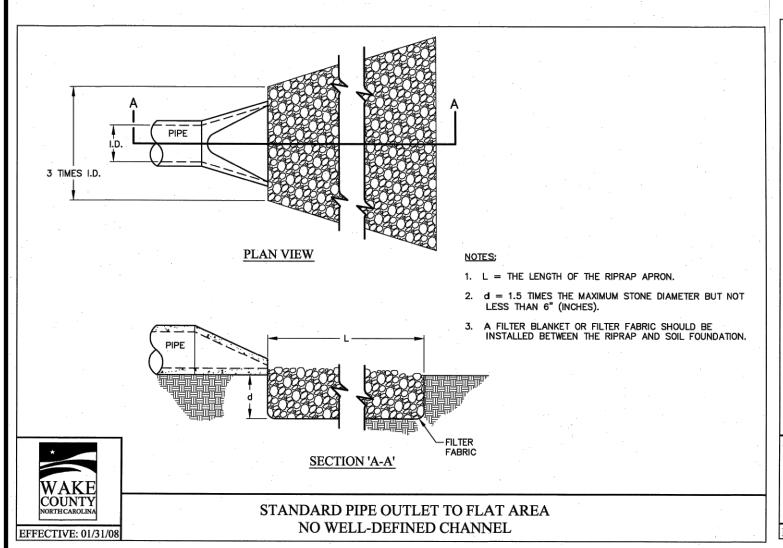


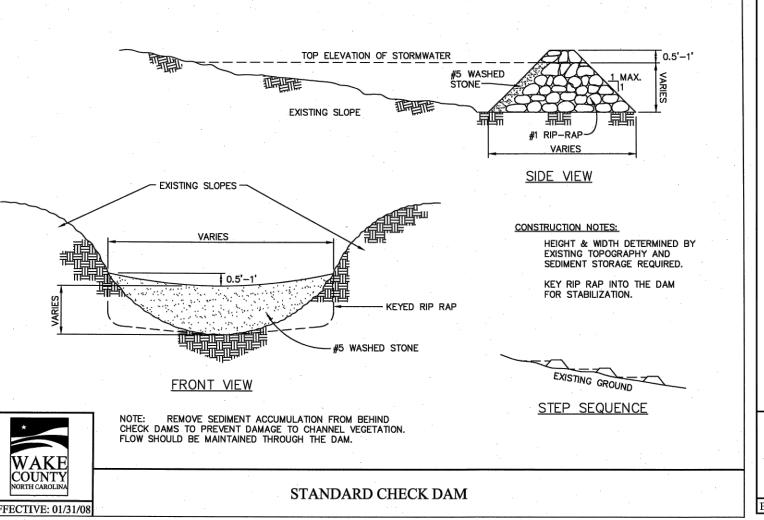


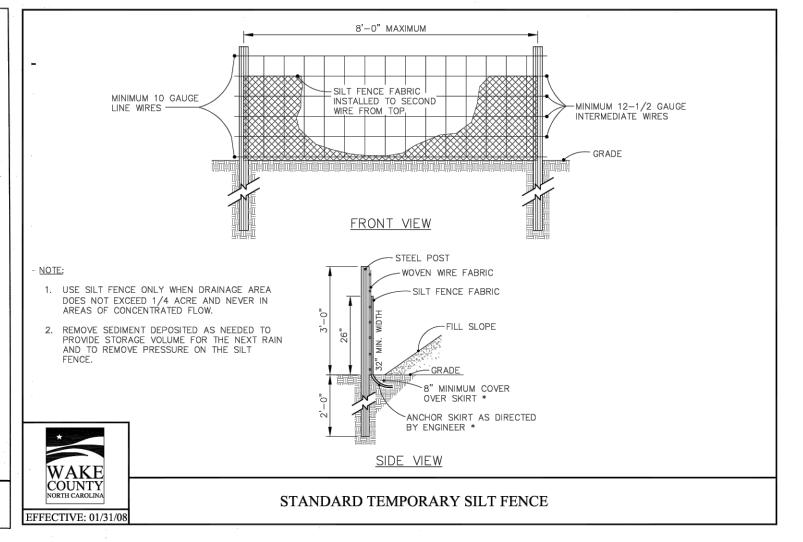


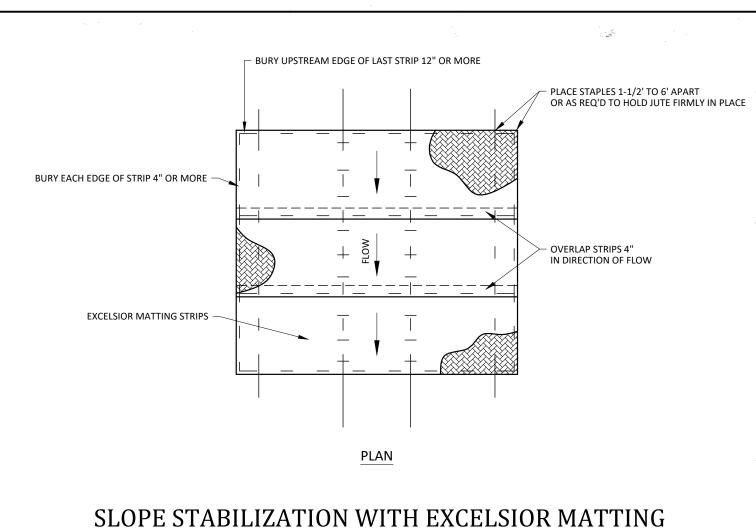


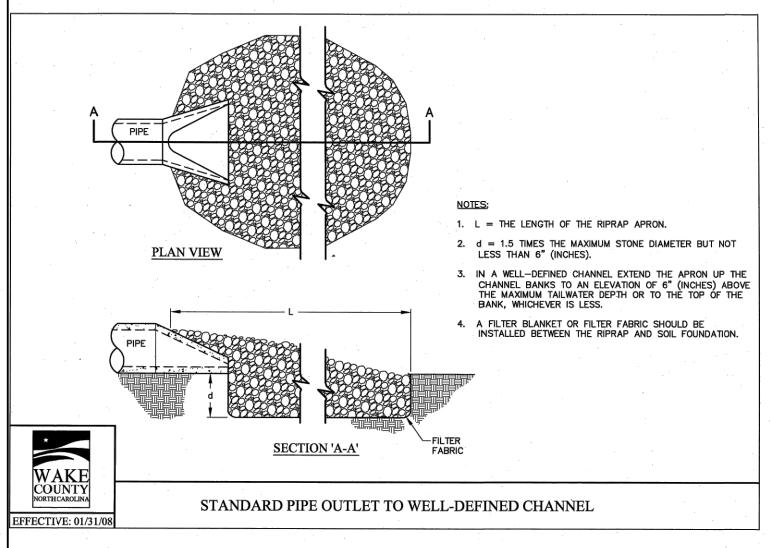


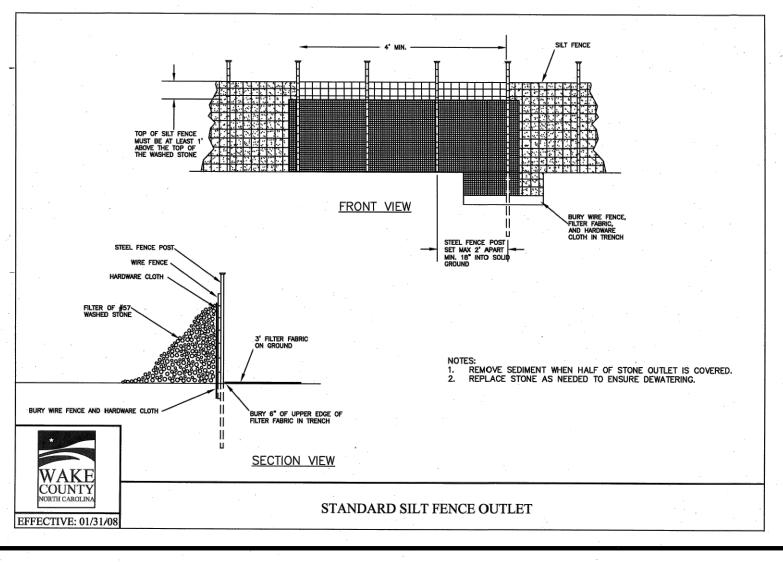


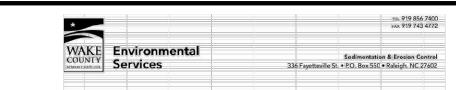












## Soil stockpiles shall be located on the approved plan and shall adhere to the following requirements:

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

## Seeding Specifications

NPDES Stormwater Discharge Permit for Construction Activities (NCGO1 - 4/1/19) NCDEQ/Division of Energy, Mineral and Land Resources

	guired Ground Sta	bilization Timeframes
Site Area Description	Stabilize within to many calendar days after ceasing land disturbance	Timetrame variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and ar not steeper than 2:1, 14 days are: allowed
[d] Slopes 3:1 to 4:1	14	-7 days for slopes greater than 30' in- length and with slopes steeper than 4. -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQIW. Zones -10 days for Falls, Lake Watershed
(e) Areas with slopes	14	days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zo days for Falls Lake Watershed unle
Note: After the permanent ground stabilization shall be	converted to per	manent ground stabilization as soon as
Note: After the permanent ground stabilization shall be practicable but in no case to activity: Temporary ground surface stable against accel GROUND STABILIZATION S Stabilize the ground sufficio techniques in the table belo	e converted to per origer than 90 cale i stabilization shall erated erosion un PECIFICATION ently so that rain wow:	ruction activities, any areas with temporar manent ground stabilization as soon and days after the last and disturbing be maintained in a manner to render the permanent ground stabilization is achieve ill not dislodge the soil. Use one of the
Note: After the permanent ground stabilization shall be practicable but in no case to activity: Temporary ground surface stable against accel GROUND STABILIZATION S Stabilize the ground sufficie	e converted to per orger than 90 cale of stabilization shall erated erosion un PECIFICATION entity so that rain wow:	ruction activities, any areas with temporar manent ground stabilization as soon as ndar days after the last land disturbing be maintained in a manner to render the til permanent ground stabilization is achie

## 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.
- 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.

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

For Shoulders, Side Ditches, Slopes (Max 3.1).		
Date	Туре	Planting Rate
Aug 15– Nov 1	Tall Fescue	300 lbs/acre
Nov 1- Mar 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1– Apr 15	Tall Fescue	300 lbs/acre
Apr 15-	Hulled Common	25 lhs/acre

25 lbs/acre

Jun 30 Bermudagrass Jul 1- Tall Fescue AND Browntop 125 lbs/acre (Tall Fescue); 35 Aug 15 Millet or Sorghum-Sudan lbs/acre (Browntop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)

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

AND Abruzzi Rye

Date	Туре	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	
	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 Mullet); 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)	

Consult Wake County Soil & Water Conservation District or NC State Cooperative Extension for additional information concerning other alternatives for vegetation of denuded areas. The above vegetation rates are those that do well under local conditions; other seeding rate combinations

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

CROSLAI SOUTHE

**REVISIONS:** 

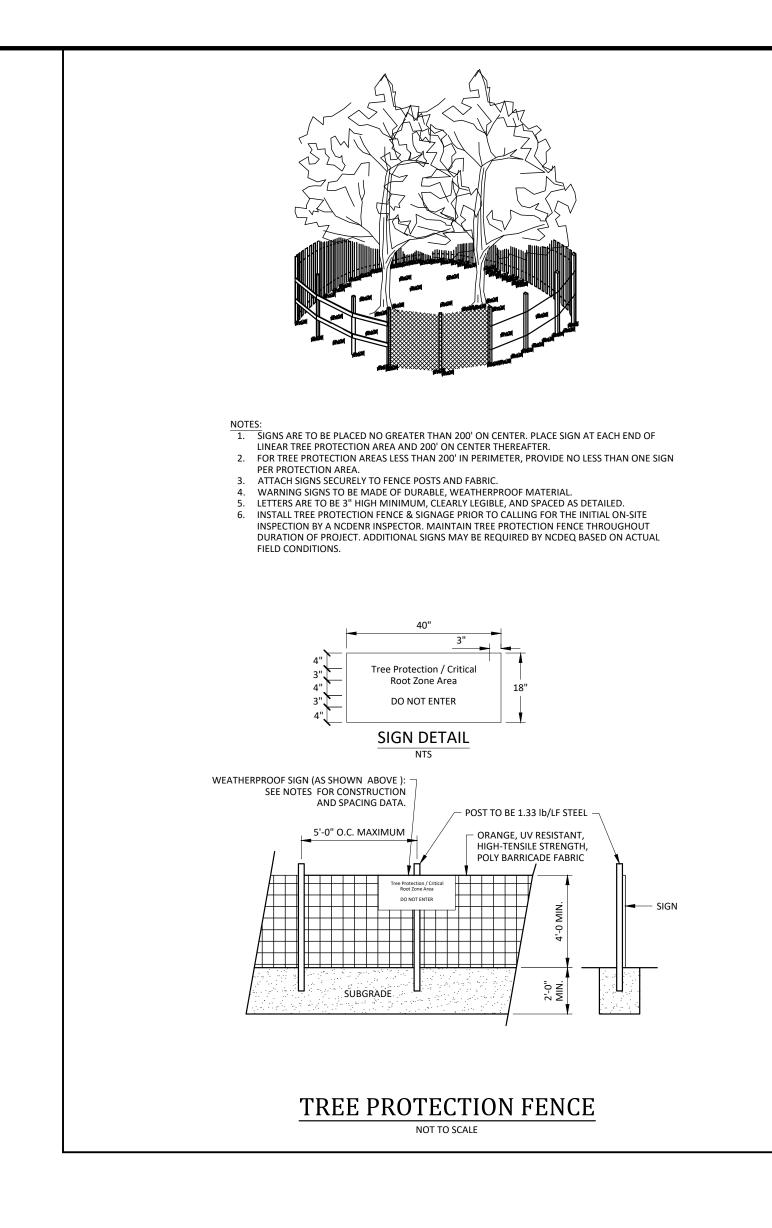
l **∞** E ଞ

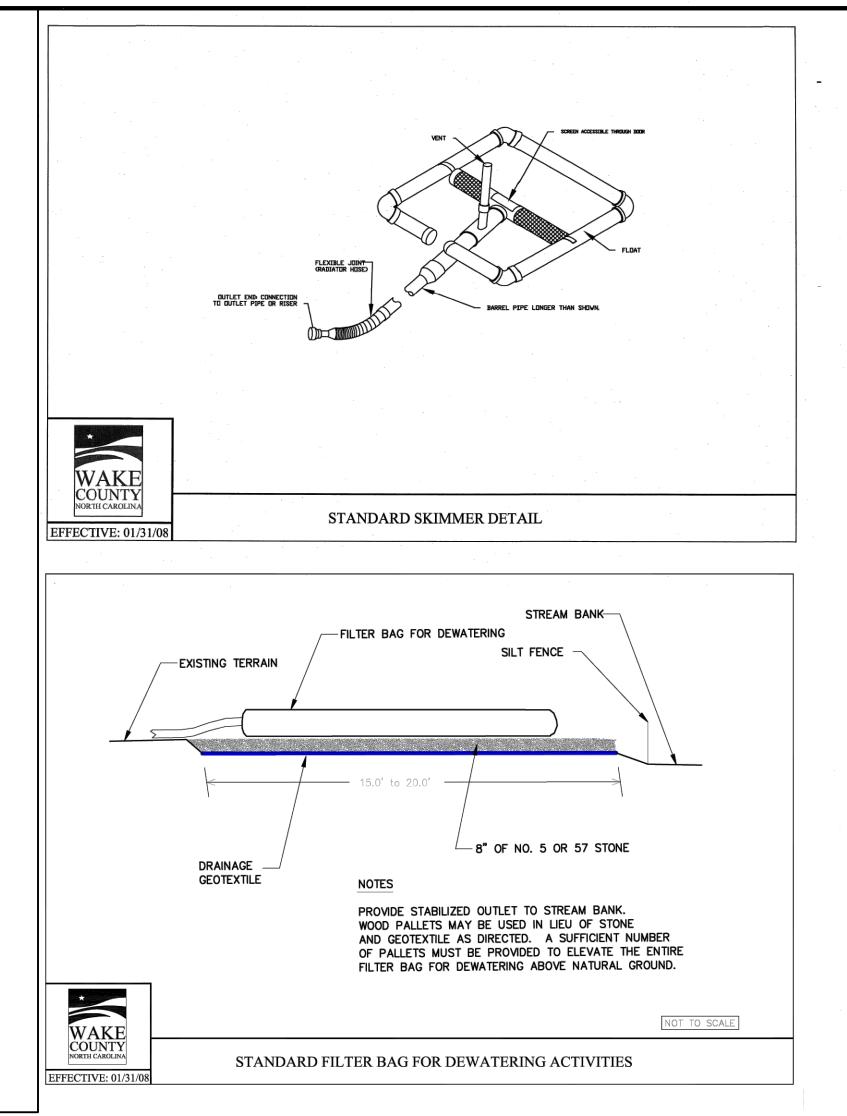
m≥

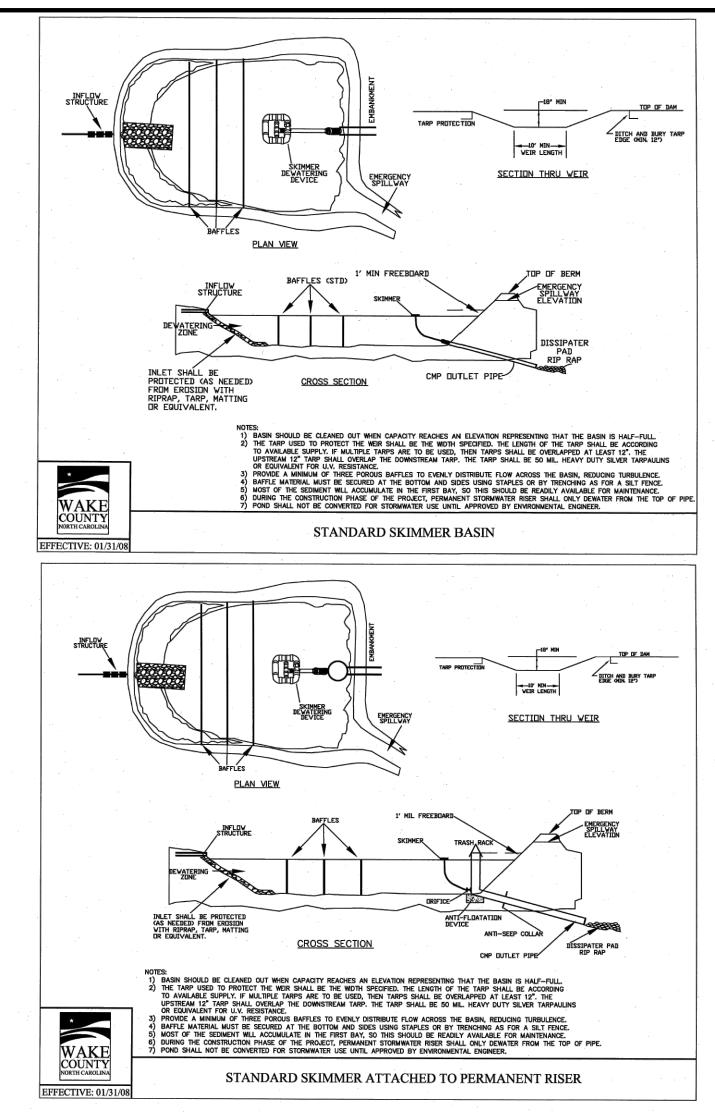
GROUP, PLL

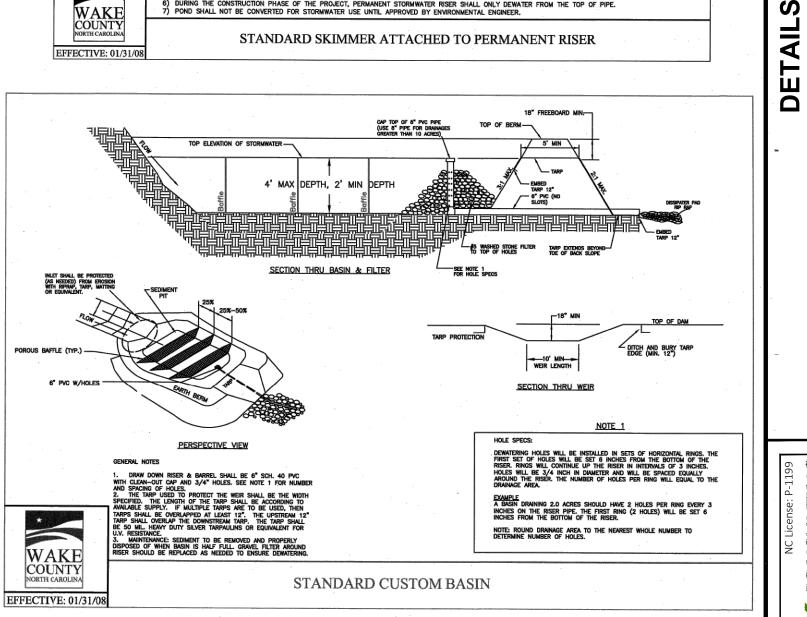
Project Manager: Drawn Bv Checked By: 24137 D-1472 Drawing Number:

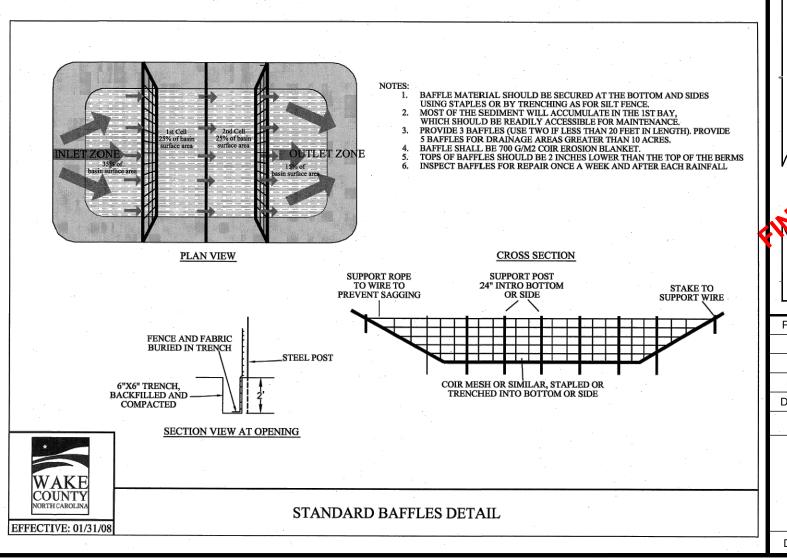
April 1, 2024











**REVISIONS:** CROSLAND Southeast

> 0 **α Τ Ε**Θ-

WALLBI SS GRADING Town of Rolesy

CONSULTING GROUP, PLLC ENGINEERS & PLANNERS

Project Manager: Drawn By: Checked By: 24137 D-1472 Drawing Number:

**C2.2** 

April 1, 2024