

#### **ADDENDUM NO. 2**

January 17, 2020

TOWN OF EMERALD ISLE
ISLANDER DRIVE STREET IMPROVEMENTS
EMERALD ISLE, NC
DRAWING: D-1194

#### A. SCOPE:

This Addendum No. 2 consists of pages AD2-1 through AD2-3.

Bidders are hereby notified of the following changes in the specifications and plans.

#### B. SPECIFICATIONS:

BID DATE: January 27, 2020

NONE

#### C. PLANS:

REPLACE Plan Sheet C-1 with the enclosed. The Sheet Index has been revised to add sheet C-10 to the plan set. (page AD2-2).

**ADD** the enclosed Plan Sheet C-10 to the plan set. (page AD2-3).

#### D. GENERAL:

**NONE** 

Each BIDDER is required to acknowledge receipt of this Addendum in the space provided in the BID form.

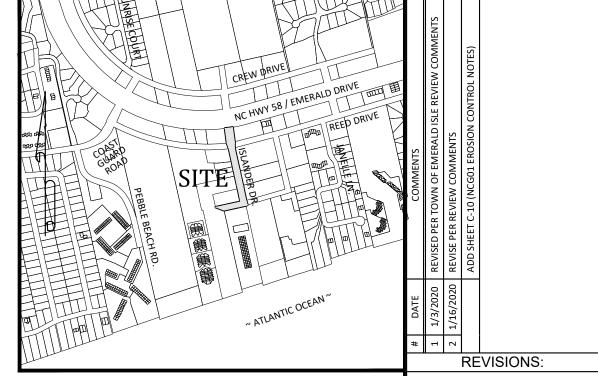


ARK CONSULTING GROUP, PLLC 2755-B Charles Boulevard Greenville, North Carolina 27858

# ISLANDER DRIVE STREET IMPROVEMENTS

FOR

# TOWN OF EMERALD ISLE



 $\frac{Vicinity\ Map}{SCALE:\ 1"=\ 1000'}$ 

Project Manager:

Drawn By

Checked By:

18038

D-1194

Project Number:

Drawing Number:

Date: 1-3-2020

SHEET NO. C-1 **COVER SHEET** PROJECT NOTES SHEET NO. C-2 SITE PLAN (ISLANDER DRIVE) SHEET NO. C-3 SITE PLAN (REED DRIVE) SHEET NO. C-4 SITE PLAN (ISLANDER DRIVE) SHEET NO. C-5 SITE PLAN (LOUISE AVE) SHEET NO. C-6 **EROSION CONTROL DETAILS** SHEET NO. C-7 SHEET NO. C-8 CIVIL DETAILS CIVIL DETAILS SHEET NO. C-9

CIVIL DETAILS SHEET NO. C-10

(THE CULLIPHER GROUP, P.A. - Surveyor)

# **Utility Providers:**

## STORM DRAINAGE:

Sheet Index

Town of Emerald Isle Contact: Artie Dunn Phone: (252) 354-4450

Carteret-Craven Electric Cooperative Contact: Will Pittman Phone: (252) 247-3107

**ELECTRIC UTILITIES:** 

WATER:

CABLE TV/TELEPHONE:

Bogue Banks Water Corporation Contact: Seola Hill Phone: (252) 345-3307

CenturyLink Contact: Mitch Averitte Phone: (252) 637-6620

PROPANE: Amerigas Contact: Keith Padgett

CABLE TV/TELEPHONE: Time Warner Cable

PUBLIC STREETS:

Contact: Barbara Kannan Phone: (919) 612-7241

Phone: (910) 232-6462

Town of Emerald Isle Contact: Artie Dunn Phone: (252) 354-4450

**Owner** TOWN OF EMERALD ISLE 7500 EMERALD DRIVE EMERALD ISLE, NC 28594 CONTACT: MATT ZAPP PHONE: (252) 354-3424 EMAIL: MZAPP@EMERALDISLE-NC.ORG

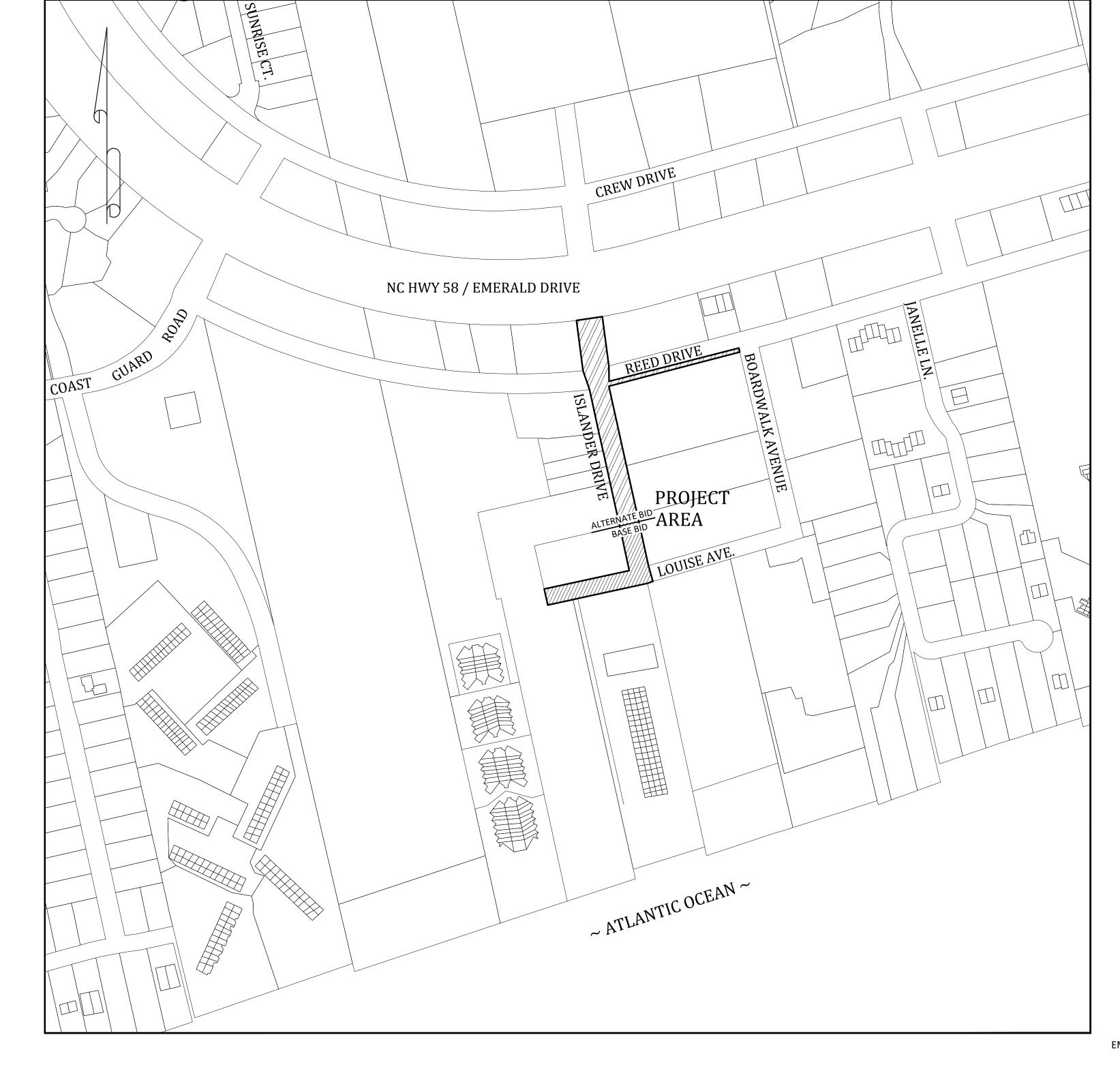
# Surveyor

THE CULLIPHER GROUP, P.A. 151A NC HWY 24 MOREHEAD CITY, NC 28557 CONTACT: CHASE CULLIPHER, P.E. P.L.S. PHONE: (252) 773-0090 EMAIL: CHASE@TCGPA.COM

## Engineer

ARK CONSULTING GROUP, PLLC 2755-B CHARLES BLVD. GREENVILLE, NC27858 CONTACT: BRYAN C. FAGUNDUS, PE PHONE: (252) 558-0888 EMAIL: BRYAN@ARKCONSULTINGGROUP.COM





SCALE 1 inch = 200 ft



LEGEND

PROPOSED FENCE

-----R/W------ RIGHT OF WAY

----- ESMT----- PROPOSED EASEMENT

REINFORCED CONCRETE PIPE

TOP OF BACK OF CURB

POWER/UTILITY POLE

TRUNCATED DOMES

DECORATIVE LIGHT POLE

ROCK INLET SEDIMENT TRAP

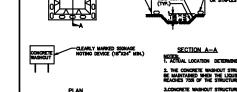
CATCH BASIN

 $\times$  TC 22.00 TOP OF CONCRETE

DRAINAGE EASEMENTS OR RIGHT-OF-WAY.

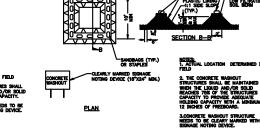
- 1. CONTACT NORTH CAROLINA ONE-CALL CENTER, INC. (NC ONE-CALL) AT 811 TO HAVE ALL UNDERGROUND UTILITIES LOCATED AT LEAST 72 HOURS PRIOR TO EXCAVATING OR TRENCHING.
- 2. ALL REQUIRED IMPROVEMENTS SHALL CONFORM TO THE TOWN OF EMERALD ISLE ZONING ORDINANCE AND THE TOWN OF EMERALD ISLE DEVELOPMENT STANDARDS.
- CONTRACTOR SHALL NOTIFY THE TOWN OF EMERALD ISLE AND NCDOT AT LEAST 48 HOURS PRIOR TO MAKING CONNECTIONS TO EXISTING STORM DRAINS LOCATED WITHIN PUBLIC STORM
- 4. A PORTION OF THE PROPERTY IS LOCATED WITHIN ZONE 'AE' AS DETERMINED FROM FEMA NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE MAP NUMBER 3720538300J, EFFECTIVE DATE: 07/16/2003.
- EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND MAY NOT INCLUDE ALL MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- 6. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
- UNDERGROUND UTILITIES PLOTTED IN PART FROM ACTUAL FIELD LOCATION OF ABOVE GROUND FEATURES AND IN PART FROM MAPS ON RECORD. ACTUAL LOCATIONS MAY VARY. SURVEYOR AND ENGINEER CANNOT PROVIDE ACCURACY OF INFORMATION TAKEN FROM RECORD DATA. OTHER UTILITIES MAY EXIST. CONTRACTOR SHOULD CONTACT NORTH CAROLINA ONE-CALL CENTER (NC ONE-CALL) AT 1-800-632-4949 OR BY DIALING 811 TO HAVE UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING.
- THE ENGINEER MAKES NO GUARANTEE THAT THE UTILITIES SHOWN ARE COMPRISED OF ALL SUCH UTILITIES IN THE AREA OF SURVEY EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE ENGINEER DOES HEREBY CERTIFY THAT ALL UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE ENGINEER HAS NOT PHYSICALLY UNCOVERED AND LOCATED ANY UNDERGROUND UTILITIES.

Call before you dig.



NOTES:

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



BELOW GRADE WASHOUT STRUCTURE

- Do not discharge concrete or cement slurry from the site. 2. Dispose of, or recycle settled, hardened concrete residue in accordance with local
- and state solid waste regulations and at an approved facility. 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
  - 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.
- 10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

#### HERBICIDES, PESTICIDES AND RODENTICIDES

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

## Do not stockpile these materials onsite.

- HAZARDOUS AND TOXIC WASTE
- 2. Place hazardous waste containers under cover or in secondary containment.

- . Create designated hazardous waste collection areas on-site.
- 3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

# NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

# 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.

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH

plementing 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.

**Required Ground Stabilization Timeframes** 

**Note:** After the permanent cessation of construction activities, any areas with temporary

ground stabilization shall be converted to permanent ground stabilization as soon as

activity. Temporary ground stabilization shall be maintained in a manner to render the

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the

Temporary grass seed covered with straw or
 Permanent grass seed covered with straw or

Appropriately applied straw or other mulch
 Shrubs or other permanent plantings covered

Select flocculants that are appropriate for the soils being exposed during

construction, selecting from the NC DWR List of Approved PAMS/Flocculants.

*PAMS/Flocculants* and in accordance with the manufacturer's instructions.

or surrounded by secondary containment structures.

4. Provide ponding area for containment of treated Stormwater before discharging

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

Store flocculants in leak-proof containers that are kept under storm-resistant cover

other mulches and tackifiers

sufficient to restrain erosion

retaining walls

reinforcement matting

• Geotextile fabrics such as permanent soil

Uniform and evenly distributed ground cover

Structural methods such as concrete, asphalt or

Rolled erosion control products with grass seed

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

practicable but in no case longer than 90 calendar days after the last land disturbing

Timeframe variations

f slopes are 10' or less in length and are

7 days for slopes greater than 50' in ength and with slopes steeper than 4:1

days for perimeter dikes, swales,

ditches, perimeter slopes and HQW

-10 days for Falls Lake Watershed

' days for perimeter dikes, swales,

litches, perimeter slopes and HQW Zone

-10 days for Falls Lake Watershed unless

not steeper than 2:1, 14 days are

Stabilize within this

days after ceasing

many calendar

THE NCG01 CONSTRUCTION GENERAL PERMIT

SECTION E: GROUND STABILIZATION

Site Area Description

swales, ditches, and

Slopes steeper than

perimeter slopes

(b) High Quality Water

(HQW) Zones

(d) Slopes 3:1 to 4:1

Areas with slope

flatter than 4:1

techniques in the table below

other mulches and tackifiers

without temporary grass seed

GROUND STABILIZATION SPECIFICATION

Rolled erosion control products with or

**Temporary Stabilization** 

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

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

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

## SELF-INSPECTION, RECORDKEEPING AND REPORTING

#### SECTION B: RECORDKEEPING . E&SC Plan Documentation

Item to Document

EQUIPMENT AND VEHICLE MAINTENANCE

has been corrected.

containers overflow.

PAINT AND OTHER LIQUID WASTE

foot traffic areas.

with properly operating unit.

five feet from the toe of stockpile.

Provide stable stone access point when feasible.

**EARTHEN STOCKPILE MANAGEMENT** 

Maintain vehicles and equipment to prevent discharge of fluids.

to a recycling or disposal center that handles these materials.

receptacle) on site to contain construction and domestic wastes.

waters unless no other alternatives are reasonably available

waters unless no other alternatives are reasonably available.

Identify leaks and repair as soon as feasible, or remove leaking equipment from the

Remove leaking vehicles and construction equipment from service until the problem

Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products

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

Locate waste containers at least 50 feet away from storm drain inlets and surface

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

from upland areas and does not drain directly to a storm drain, stream or wetland.

Cover waste containers at the end of each workday and before storm events or

provide secondary containment. Repair or replace damaged waste containers.

Empty waste containers as needed to prevent overflow. Clean up immediately if

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

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

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

Provide staking or anchoring of portable toilets during periods of high winds or in high

Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace

Show stockpile locations on plans. Locate earthen-material stockpile areas at least

50 feet away from storm drain inlets, sediment basins, perimeter sediment controls

Protect stockpile with silt fence installed along toe of slope with a minimum offset of

Stabilize stockpile within the timeframes provided on this sheet and in accordance

erosion on disturbed soils for temporary or permanent control needs.

with the approved plan and any additional requirements. Soil stabilization is defined

as vegetative, physical or chemical coverage techniques that will restrain accelerated

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.

Anchor all lightweight items in waste containers during times of high winds.

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

. Collect all spent fluids, store in separate containers and properly dispose as

Provide drip pans under any stored equipment.

TTER, BUILDING MATERIAL AND LAND CLEARING WASTE

Dispose waste off-site at an approved disposal facility.

Contain liquid wastes in a controlled area.

on a gravel pad and surround with sand bags.

hazardous waste (recycle when possible).

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 documented in the manner

Documentation Requirements

	(a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan.	Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC Measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC Measures or if the E&SC Measures are modified after initial installation.
	(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
l	(c) Ground cover is located and installed	Initial and date a copy of the approved E&SC

Plan or complete, date and sign an inspection in accordance with the approved E&SC report to indicate compliance with approved ground cover specifications. (d) The maintenance and repair Complete, date and sign an inspection report. requirements for all E&SC Measures have been performed. (e) Corrective actions have been taken Initial and date a copy of the approved E&SC to E&SC Measures. Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

## 2. Additional Documentation

In addition to the E&SC Plan documents above, the following items shall be kept on the and available for agency inspectors at all times during normal business hours, unless the

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

requirement not practical: (a) This general permit as well as the certificate of coverage, after it is received.

- (b) Records of inspections made during the previous 30 days. 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.
- 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 upon request. [40 CFR 122.41]

## SELF-INSPECTION, RECORDKEEPING AND REPORTING

## **SECTION C: REPORTING**

1. Occurrences that must be reported Permittees shall report the following occurrences

# (b) Oil spills if:

(e) Noncompliance

of this permit that

may endanger

health or the

environment[40]

CFR 122.41(I)(7)]

They are 25 gallons or more,

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

- 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).
- Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- (b) Anticipated bypasses and unanticipated bypasses.
- (c) Noncompliance with the conditions of this permit that may endanger health or the

# 2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul> <li>Within 24 hours, an oral or electronic notification.</li> <li>Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis.</li> <li>If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.</li> </ul>
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.

#### (c) Anticipated A report at least ten days before the date of the bypass, if possible bypasses [40 CFR The report shall include an evaluation of the anticipated quality and 122.41(m)(3)]

effect of the bypass (d) Unanticipated Within 24 hours, an oral or electronic notification. bypasses [40 CFR Within 7 calendar days, a report that includes an evaluation of the 122.41(m)(3)] quality and effect of the bypass

Within 24 hours, an oral or electronic notification

with the conditions • Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to

> continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6). Division staff may waive the requirement for a written report on a

> > EFFECTIVE: 04/01/19

WETLANDS ARE A VALUABLE NATURAL RESOURCE WHICH PROVIDE IMPORTANT ECOLOGICAL FUNCTIONS. WETLANDS ARE REGULATED BY THE FEDERAL GOVERNMENT UNDER SECTION 404 OF THE CLEAN WATER ACT. WITHIN THE PROJECT LIMITS OF THIS PROJECT, THERE IS NO EVIDENCE OF AREAS THAT MAY EXHIBIT THE INDICATORS OF THE THREE MAJOR CHARACTERISTICS OF WETLANDS: HYDROPHYTIC VEGETATION, HYDRIC SOILS, AND WETLAND HYDROLOGY.

**REVISIONS:** 

Drawn By Checked By D-1194 awing Number:

roiect Manager:

18038

Date: 1-3-2020

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING