US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: September 1, 2020
Comment Deadline: September 15, 2020
Corps Action ID Number: SAW-2019-00206

The Wilmington District, Corps of Engineers (Corps) received an application from The Chemours Company, LLC seeking Department of the Army authorization to permanently impact 0.16-acre of wetlands and 120 linear feet of stream channel associated with a flow-through cell in-stream water treatment pilot study in Bladen County, North Carolina.

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Website at:
https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Public-Notices/

Applicant: The Chemours Company LLC, Christel Compton
22828 NC Highway 87 West
Fayetteville, North Carolina 28306
(910) 678-1213

Agent: Parsons, Luke Eggering
530 Maryville Centre Drive, Suite 400
St. Louis, Missouri 63141
(314) 819-5020

Authority

The Corps evaluates this application and decides whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of the following Statutory Authorities:

☒ Section 404 of the Clean Water Act (33 U.S.C. 1344)

☐ Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)

☐ Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413)

Location

Location Description: From Wilmington, North Carolina (NC), take US 17 S/ US 421 N for approximately 17 miles to Exit 270 toward Riegelwood/Elizabethtown. Continue on NC Highway 87 for 53.39 miles. Make a sharp right onto Glengerry Hill Road and travel approximately 0.5-mile. Then, bear right onto Bill Hall Road and travel 1.5 miles. The project area (Area 3) is approximately 400 feet to the east and extends approximately 0.5-mile to the north and 400 feet to the south (Attachment 1, Figures 1 and 2).

Project Area (acres): 55 Nearest Town: Fayetteville
Nearest Waterway: Cape Fear River River Basin: Cape Fear 03030005
Latitude and Longitude: 34.836511N, -78.824527W

Existing Site Conditions

On July 1, 2015, The Chemours Company (Chemours), a spin-off company of DuPont Chemical Company, took ownership of DuPont's 2,177-acre property and onsite manufacturing units. The site is located approximately 15 miles southeast of the City of Fayetteville and sprawls across the southern Cumberland and northern Bladen County lines. Chemours has continued to use the property as a manufacturing facility (Chemours-Fayetteville Works Facility) for plastic sheeting, fluorochemicals, and intermediates for plastic manufacturing.

The Chemours Fayetteville Works Facility is bounded to the east by the Cape Fear River (CFR), to the west by NC Highway 87, and by farmland to the north and south. A majority of the property is developed and contains the manufacturing units. This area is located on the high bluffs of the CFR and is relatively flat. The property has significant topographic fall from the bluffs moving towards the river. The 55-acre project area (Area 3), located east of the development, runs parallel to the CFR and encompasses the river's undeveloped, forested bottomland hardwood floodplain (Attachment 2, Figures 3 and 4).

Mapped soil types within the project area are hydric and consist of Wickham fine sandy loam, 1-6 percent slopes and Congaree silt loam, frequently flooded (Attachment 2, Figure 5). Dominate vegetation is comprised of lizard's tail (*Saururus cernuus*), American elm (*Ulmus americana*), box elder (*Acer negundo*), Gray's sedge (*Carex grayi*), red maple (*Acer rubrum*), bald cypress (*Taxodium distichum*), cherrybark oak (*Quercus pagoda*), Frank's sedge (*Carex frankii*), Virginia creeper (*Parthenocissus quinquefolia*), and American holly (*Ilex opaca*).

Within the project area, four tributaries and their respective abutting wetlands (Seeps A, B, C, and D) were determined to have perennial flow that is driven by groundwater seepage from the adjacent uplands to the west (Attachment 2, Figure 6). The tributaries also receive stormwater flow and occasional backwater flooding from the CFR during high flood events. For the purpose of this notice, only the conditions at Seep C are

described because it is the only location that is subject to the current proposal, as discussed in the Project Description below.

Seep C contains approximately 0.85-acre of wetland and 120 linear feet of perennial stream (Attachment 2, Figure 7). Within the wetland, soils are silty loam that transition to sandy loam at depths greater than 6 inches. Additionally, the wetlands are saturated to the surface most of the year, making anaerobic/depleted soil conditions apparent. Overstory trees and brush were removed from the area in coordination with the US Fish and Wildlife Service to prevent the destruction of potential habitat for or the incidental take of Red-Cockaded Woodpecker and Northern Long-Eared Bat.

Applicant's Stated Purpose

The applicant's stated purpose is to conduct a pilot study on the removal of perfluoroalkyl and polyfluoroalkyl substances (PFAS) from surface water at the impact location (Seep C) prior to discharging into the Cape Fear River.

Project Description

On February 25, 2019, the North Carolina Superior Court for Bladen County entered into a Consent Order (CO) among Chemours and the State of North Carolina and Cape Fear River Watch to address discharges of PFAS at the Chemours Fayetteville Works Facility (facility). Among other directives, the CO requires that Chemours develop a remedial plan for reducing PFAS loading from the facility to the Cape Fear River, beginning with a pilot study. The current CO also requires that the pilot study to be constructed and operational by November 16, 2020; therefore, mobilization for construction is intended no later than October 5, 2020. To meet this deadline, the Corps is issuing this Public Notice with a 15-day comment period rather than the standard 30-day period.

Release of PFAS to the Cape Fear River is derived from impacted groundwater discharging to onsite surface waters via seeps that form perennial streams. Subsequently, Chemours has designed an in-stream interim remediation system (flow-through cell) to treat surface water prior to discharge into the river. An earthen dam will impound water (approximately 6 feet in total height) to provide hydraulic head to allow for treatment with granular activated carbon (GAC) filter beds. Impounded water will flow through an inlet weir into a series of concrete basins to hydraulically control surface flow over vertically oriented GAC beds. Water will then flow via gravity drainage through the GAC beds and PFAS compounds will sorb to the media. Effluent water will collect in a stilling basin where it will then discharge downstream into the channel and, ultimately, into the Cape Fear River. Influent and effluent samples will be collected to monitor the PFAS removal efficiency. GAC media will need to be periodically replaced (Attachment 3, Figures 8-13).

Chemours is currently proposing to construct the flow-through cell system at Seep C only as a pilot study. Results of the study will inform the design, optimization, and installation of flow-through cells at the three additional seep locations. Construction of the treatment

system at Seep C requires impacts to approximately 0.16-acre of wetland and 120 linear feet of perennial stream. The currently proposed impacts are cumulative to impacts previously authorized on October 29, 2019, by Nationwide Permit 38-Cleanup of Hazardous and Toxic Waste for the construction and stabilization of an in-stream weir and the associated impoundment of waters at Old Outfall 002 (Area 2 on Attachment 1, Figure 2). Approximately 475 linear feet of perennial stream channel and 45 linear feet of ephemeral channel were impacted for this project (Attachment 4, Figures 14 and 15).

It is anticipated that a permit modification request for impacts at the three additional seep locations will be submitted in December 2020 after one month of pilot study data collection. The flow-through cells are expected to be in operation for approximately two to three years, at which point a long-term remedy for surface and groundwater treatment will be constructed.

Avoidance and Minimization

The applicant provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment: The location of the pilot study on Seep C is positioned at the narrowest point of the stream and wetland in an effort to avoid and minimize impacts to larger, abutting wetlands.

Compensatory Mitigation

The applicant offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment: The applicant is proposing to delay mitigation requirements until the request for a permit modification is submitted for impacts at the three additional locations at which time the applicant will propose mitigation for the cumulative impacts of both permit requests.

Essential Fish Habitat (EFH)

The Corps' determination is that the proposed project would not effect EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

Cultural Resources

Pursuant to Section 106 of the National Historic Preservation Act of 1966, Appendix C of 33 CFR Part 325, and the 2005 Revised Interim Guidance for Implementing Appendix C, the District Engineer consulted district files and records and the latest published version of the National Register of Historic Places and initially determines that:

> No historic properties, nor properties eligible for inclusion in the National Register, are present within the Corps' permit area; therefore, there will be no historic properties affected. The Corps subsequently requests concurrence from the State Historic Preservation Office (SHPO).

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO, as appropriate and required, and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-indentified permit area.

Endangered Species

Pursuant to the Endangered Species Act of 1973, the Corps reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information:

> The Corps determines that the proposed project would not affect federally listed endangered or threatened species or their formally designated critical habitat.

Section 408

There are no Corps Civil Works project(s) within or in the vicinity of the applicant's proposed project.

This public notice is not a paid advertisement and is for public information only. Issuance of this notice does not imply Corps endorsement of the project as described.

Any comments received will be considered by the Corps in determining whether to issue, modify, condition or deny a permission for this proposal if received before the comment period expiration date. To make its decision, the Corps will review comments received to supplement and inform its assessment of impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments will be taken into consideration in the preparation of an appropriate document pursuant to the National Environmental Policy Act (NEPA) (e.g. Environmental Assessment). Comments will also be used to determine the need for a public hearing and to determine overall public interest in the proposed action.

It should be noted that materials submitted as part of Section 408 requests become part of the public record and will be available to the general public under the provisions of the Freedom of Information Act (FOIA). Individuals may submit a written request to obtain materials under the FOIA or make an appointment to view the project file at the USACE Wilmington District's Office of Counsel.

Other Required Authorizations

The Corps forwards this notice and all applicable application materials to the appropriate State agencies for review.

North Carolina Division of Water Resources (NCDWR): The Corps will generally not make a final permit decision until the NCDWR issues, denies, or waives the state Certification as required by Section 401 of the Clean Water Act (PL 92-500). The receipt

of the application and this public notice, combined with the appropriate application fee, at the NCDWR Central Office in Raleigh constitutes initial receipt of an application for a 401 Certification. Unless NCDWR is granted a time review extension, a waiver will be deemed to occur if the NCDWR fails to act on this request for certification within sixty days of receipt of a complete application. Additional information regarding the 401 Certification may be reviewed at the NCDWR Central Office, 401 and Buffer Permitting Unit, 512 North Salisbury Street, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for a 401 Certification should do so, in writing, by September 15, 2020, to:

NCDWR Central Office
Attention: Mr. Paul Wojoski, 401 and Buffer Permitting Unit
(USPS mailing address): 1617 Mail Service Center, Raleigh, NC 27699-1617

Or,

(physical address): 512 North Salisbury Street, Raleigh, North Carolina 27604

North Carolina Division of Coastal Management (NCDCM):

The application did not include a certification that the proposed work complies with and would be conducted in a manner that is consistent with the approved North Carolina Coastal Zone Management Program. Pursuant to 33 CFR 325.2 (b)(2) the Corps cannot issue a Department of Army permit for the proposed work until the applicant submits such a certification to the Corps and the NCDCM, and the NCDCM notifies the Corps that it concurs with the applicant's consistency certification. As the application did not include the consistency certification, the Corps requests, via this Public Notice, concurrence or objection from the NCDCM.

Evaluation

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of

the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

Commenting Information

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidated State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the NEPA. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing will be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

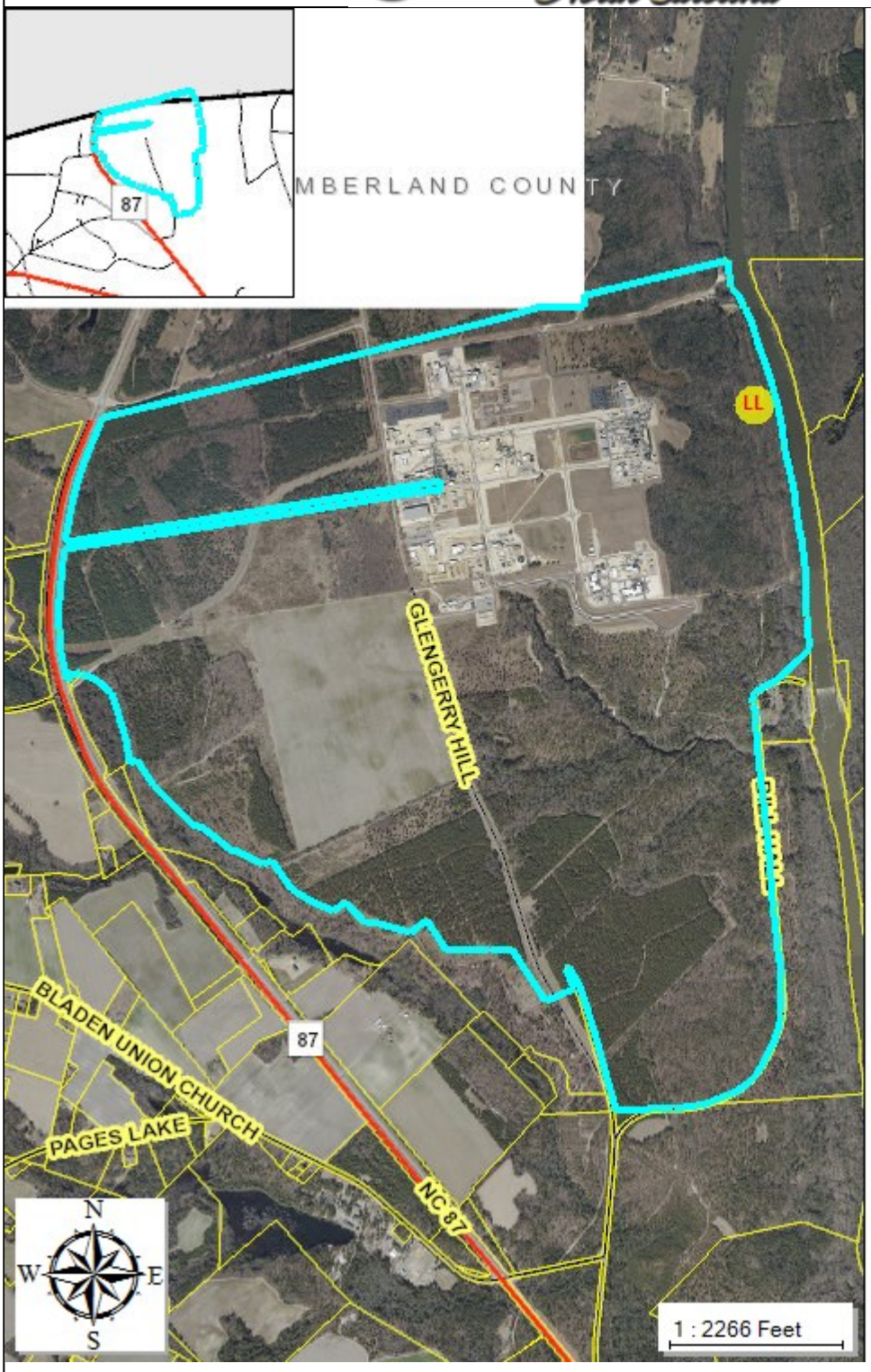
The Corps of Engineers, Wilmington District will receive written comments pertinent to the proposed work, as outlined above, until 5pm, September 15, 2020. Comments should be submitted to Emily Greer, Wilmington Regulatory Field Office, 69 Darlington Avenue, Wilmington, North Carolina 28403 , at emily.c.greer@usace.army.mil.

ATTACHMENT 1

CONNECTGIS WEB HOSTING

BLADEN COUNTY North Carolina

Bladen2
Printed June 05, 2019



Parcels

Major Roads

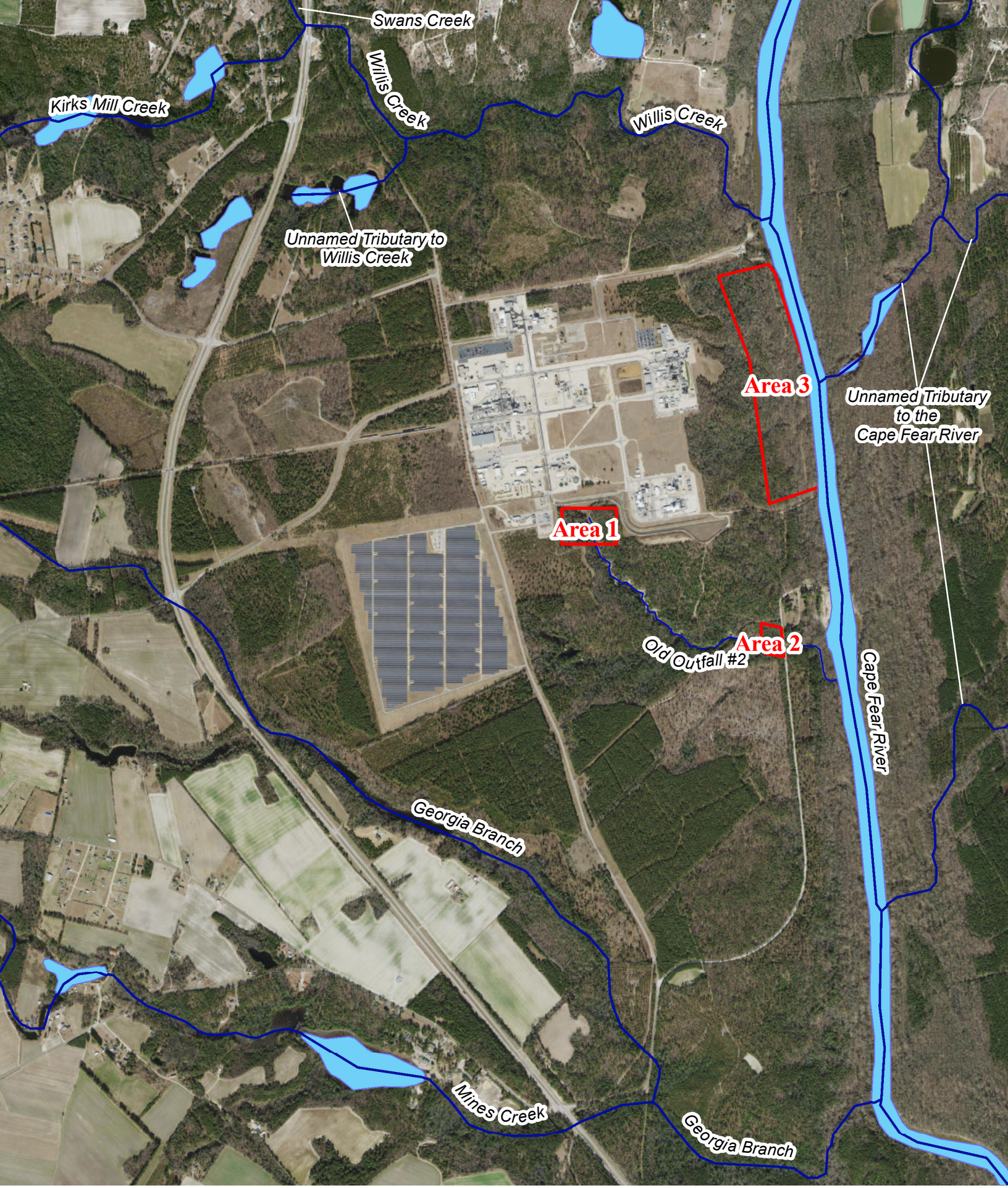
Centerlines

Municipal Limits

County Boundary

Surrounding Counties

Figure 1



The Chemour Company
Fayetteville Works
Cumberland County, North Carolina

Perennial Stream
Study Area

0 625 1,250 2,500 Feet

Figure 2

ATTACHMENT 2

USGS Excerpt – Chemours Flow-through Cells Project Area

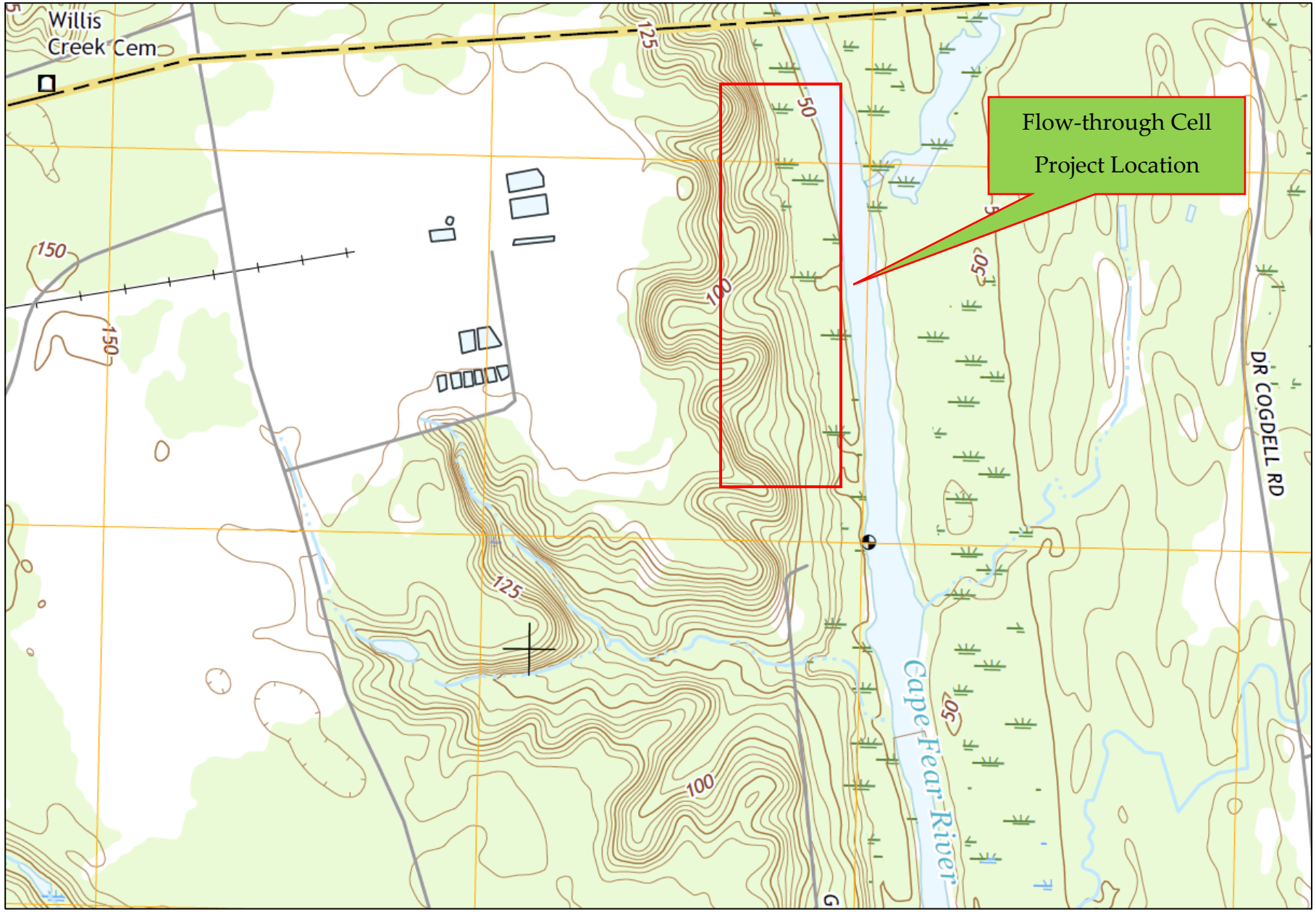
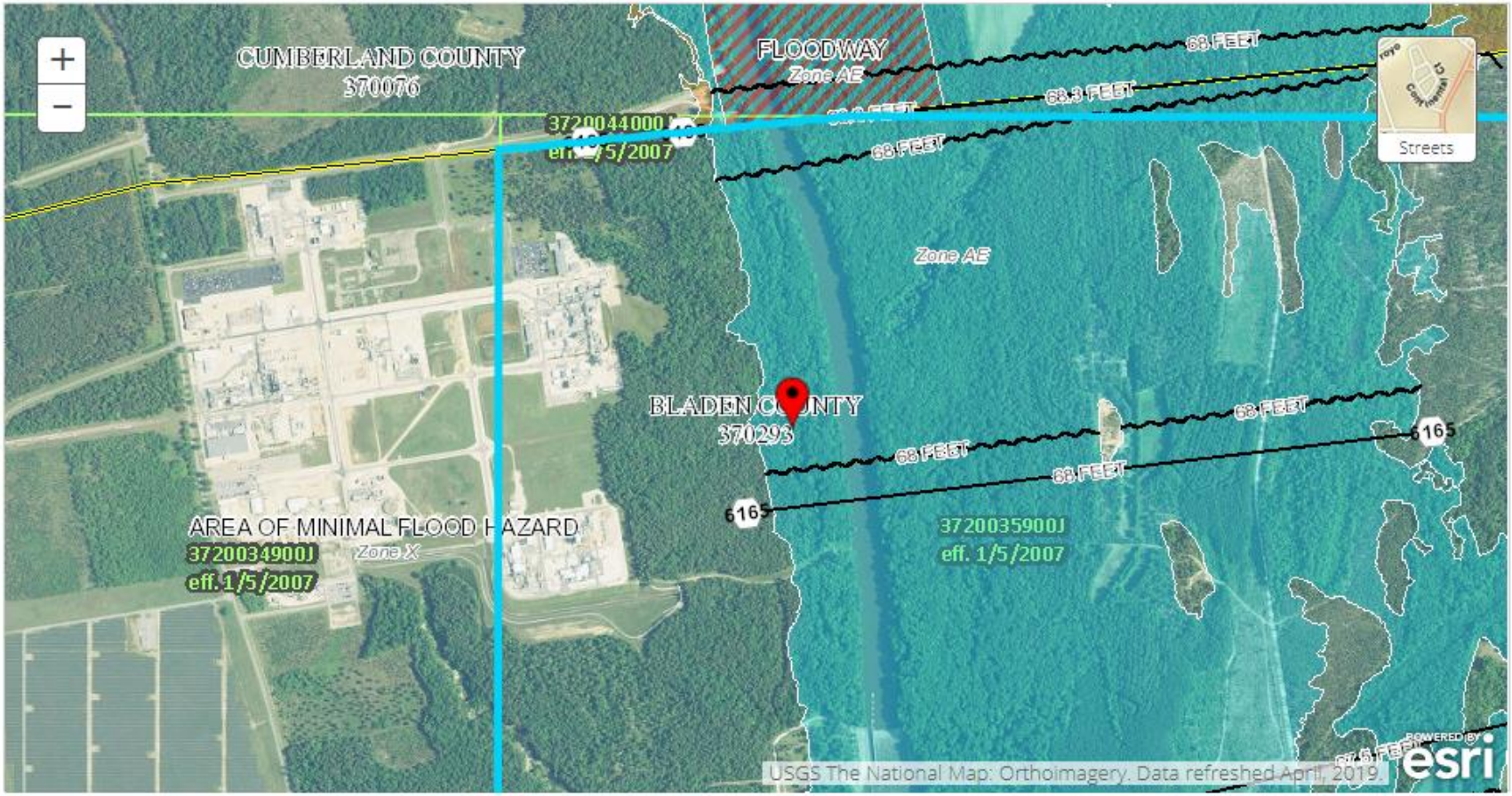


Figure 3

FEMA Flood Map Service Center: [https://msc.fema.gov/portal/search#searchresultsanchor]



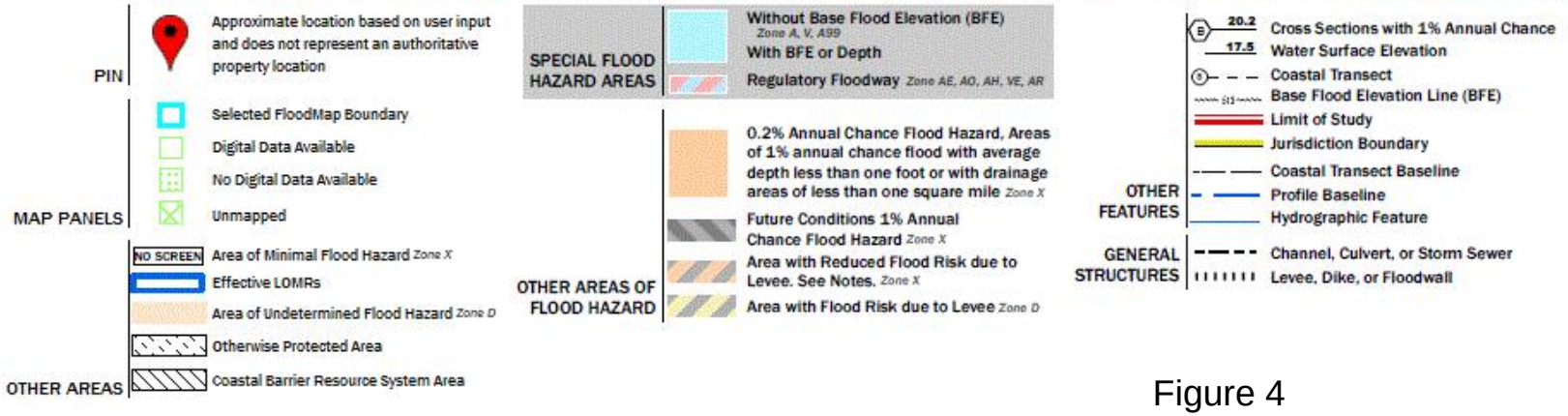


Figure 4

Soil Map—Bladen County, North Carolina
(The Chemours Company - Fayetteville Works)

Map Scale: 1:14,400 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 200 400 800 1200

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

Figure 5

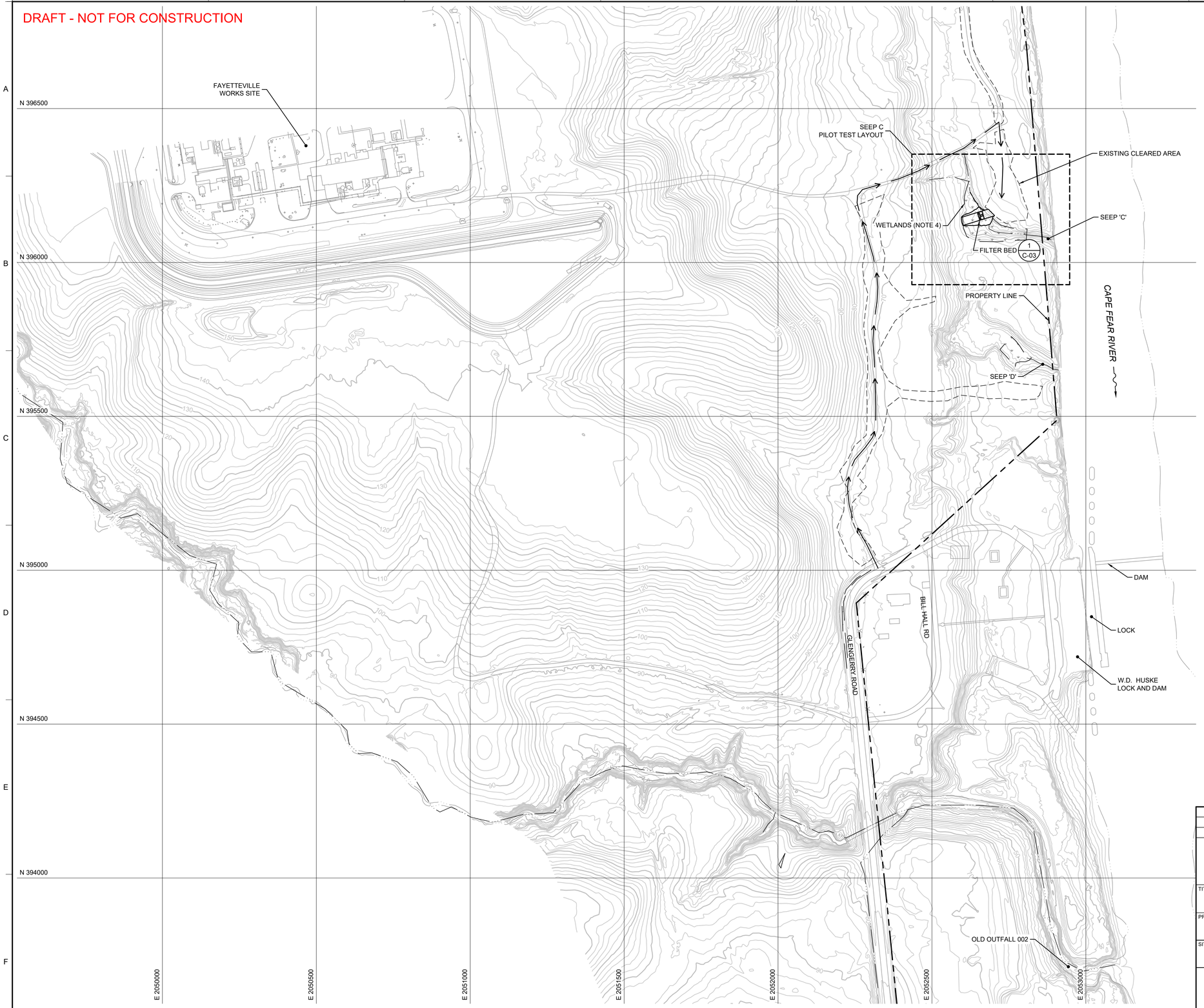

SEEP A
SEEP B
SEEP C
SEEP D
CAPE FEAR RIVER
Ephemeral Stream
Intermittent Stream
Perennial Stream
Culvert
Data Sheet Point
Wetland/Seep
0
250
500
Feet
The Chemours Company
Fayetteville Works
Bladen County, North Carolina

Figure 6

Figure 7
The Chemours Company
Fayetteville Works
Bladen County, North Carolina

ATTACHMENT 3

DRAFT - NOT FOR CONSTRUCTION



N

LEGEND

- EXISTING CONTOUR
- EXISTING CLEARED AREA
- PROPERTY LINE
- EXISTING ROAD
- EXISTING STRUCTURE
- STREAM / RIVER
- CONSTRUCTION ROUTE
- WETLANDS

NOTES:

1. GRID COORDINATE SYSTEM CORRESPONDS TO NAD83, NORTH CAROLINA.
2. ELEVATIONS PRESENTED ARE IN FEET, NAVD 88.
3. TOPOGRAPHIC, ROADS, BUILDINGS, AND PROPERTY LINE INFORMATION OBTAINED FROM FREELAND-CLINK SCALES & ASSOCIATES, INC. OF NC. SURVEY OF THE CHEMOURS FAYETTEVILLE WORKS SITE DATE 7 JANUARY 2019.
4. APPROXIMATE EXTENT OF DELINEATED WETLANDS. (WATERS OF THE UNITED STATES TECHNICAL REPORT, THE CHEMOURS COMPANY FAYETTEVILLE WORKS PROJECT: FLOW-THROUGH CELLS, SEEP C PILOT STUDY, AND REVISED SEEP A. PARSONS, AUGUST 2020)

0 150 300
SCALE IN FEET

REV	DATE	DESCRIPTION	DRN	APP
A	08.12.20	30% DESIGN SUBMITTAL	JFH	CAS

Geosyntec consultants of NC, P.C.
ATRIUM AT BLUE RIDGE
2501 BLUE RIDGE ROAD, SUITE 430
RALEIGH, NC 27607
919.870.0576

TITLE: Figure 8 OVERALL SITE PLAN

PROJECT: THE CHEMOURS COMPANY
SEEP C INTERIM REMEDIATION SYSTEM

SITE: FAYETTEVILLE WORKS SITE

DESIGN BY:	CMDS	DATE:	AUGUST 2020
DRAWN BY:	JFH	PROJECT NO.:	TR0795
CHECKED BY:	JWE	FILE:	TR0795-C101.dwg
REVIEWED BY:	JJD	DRAWING NO.:	C-01
APPROVED BY:	CAS		

30% DESIGN DRAWINGS
NOT FOR CONSTRUCTION

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E 2052500

E 2052750

N 396250

FILTER BED OVERTOPPING EL 42.35

ASSUMED CULVERT DIAMETER, MATERIAL, AND INVERTS UNKNOWN

EXISTING TOPO EL 43.54

15-FT WIDE GRAVEL ROADWAY

EXISTING CLEARED AREA

LIMIT OF DISTURBANCE

SILT FENCE

FILTER BED OVERTOPPING EL 42.35

BEGIN BYPASS EL 41.35

FILTER BED IMPOUNDMENT EL 40.85

EQUIPMENT AND MATERIAL STAGING AREA

CAPE FEAR RIVER

WETLANDS

INLET WEIR EL 40.85

RIPRAP ARMORED SLOPE

MODULAR BLOCK WALL (OR SHEET PILE)

FILTER BED PERIMETER WALL EL 42.35 (TYP)

MAINTENANCE PLATFORM (NOTE 5) EL 42.35

26.67'

16'

EXISTING CHANNEL FLOW LINE EL 35.17

RIPRAP ARMORED SLOPE

BYPASS SPILLWAY (NOTE 4) EL 41.35

FLOWLINE OF SEEP C

5' WIDE CONCRETE FLUME WITH RECTANGULAR WEIR

OUTLET PIPE INV. EL = 34.79

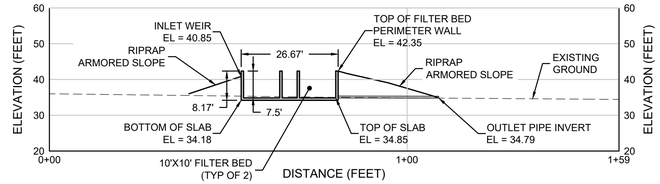
ROCK CHECK DAM

1 C-03 10'X10' FILTER BED (TYP OF 2)

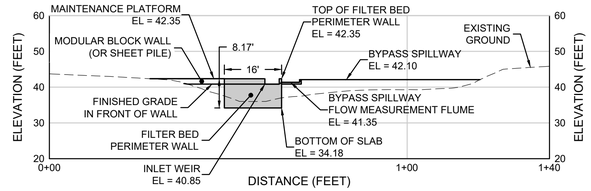
2 C-03

A C-02

B C-02



SECTION A
HORIZONTAL: 1" =20'
VERTICAL: 1" =20'



SECTION B
HORIZONTAL: 1" =20'
VERTICAL: 1" =20'

LEGEND

- EXISTING CONTOUR
- FINISHED GRADE CONTOUR
- EXISTING CLEARED AREA
- PROPERTY LINE
- EXISTING ROAD
- EXISTING STRUCTURE
- STREAM / RIVER
- WETLANDS

NOTES:

1. GRID COORDINATE SYSTEM CORRESPONDS TO NAD83, NORTH CAROLINA.
2. ELEVATIONS PRESENTED ARE IN FEET, NAVD 88.
3. TOPOGRAPHIC, ROADS, BUILDINGS, AND PROPERTY LINE INFORMATION OBTAINED FROM FREELAND-CLINK SCALES & ASSOCIATES, INC. OF NC. SURVEY OF THE CHEMOURS FAYETTEVILLE WORKS SITE DATE 7 JANUARY 2019.
4. BYPASS SPILLWAY AND SLOPES SHALL BE ARMORED WITH 12-INCH THINK (MIN) LAYER OF RIPRAP AND UNDERLAIN WITH A GEOTEXTILE SEPARATOR.
5. MAINTENANCE PLATFORM SHALL BE SURFACED WITH A 6-INCH (MIN) LAYER OF AGGREGATE AND UNDERLAIN WITH A GEOTEXTILE SEPARATOR.
6. DISTURBED AREAS NOT SURFACED WITH AGGREGATE OR CONCRETE WILL BE SEEDED AND MULCHED.

0 20 40
SCALE IN FEET

REV	DATE	DESCRIPTION	DRN	APP
A	08.12.20	30% DESIGN SUBMITTAL	JFH	CAS

Geosyntec consultants of NC, P.C.

ATRIUM AT BLUE RIDGE
2501 BLUE RIDGE ROAD, SUITE 430
RALEIGH, NC 27607
919.870.0576

TITLE: Figure 9 SEEP C INTERIM REMEDIATION SYSTEM PLAN

PROJECT: THE CHEMOURS COMPANY
SEEP C INTERIM REMEDIATION SYSTEM

SITE: FAYETTEVILLE WORKS SITE

DESIGN BY:	CMDS	DATE:	AUGUST 2020
DRAWN BY:	JFH	PROJECT NO.:	TR0795
CHECKED BY:	JWE	FILE:	TR0795-C102.dwg
REVIEWED BY:	JJD	DRAWING NO.:	C-02
APPROVED BY:	CAS		

30% DESIGN DRAWINGS
NOT FOR CONSTRUCTION

L:\CAD\DC\CHEMOURS\INTERIM SEEP REMEDY\DRAWINGS\TR0795-C102

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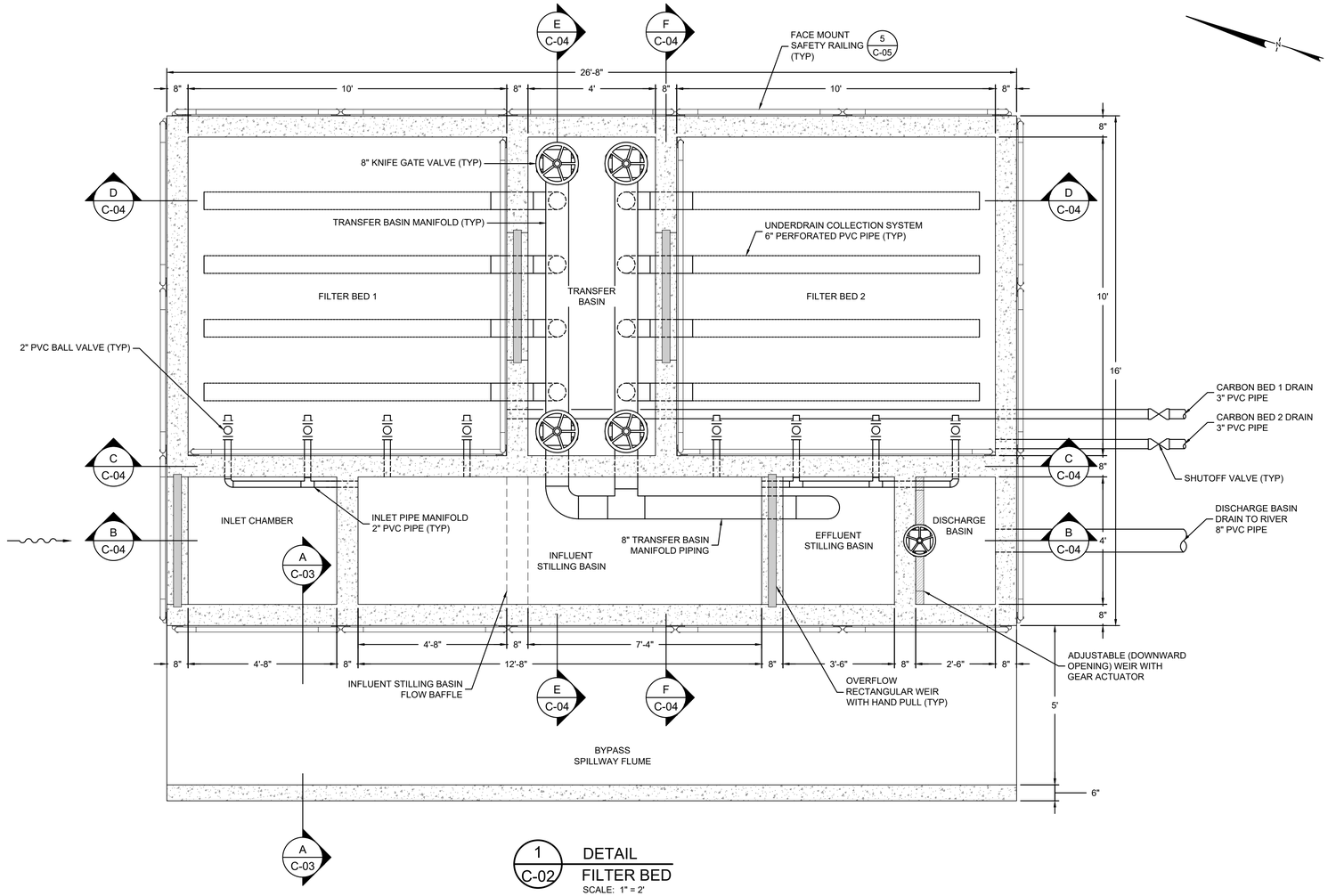
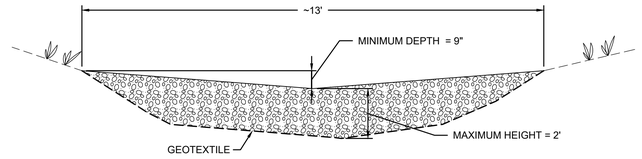


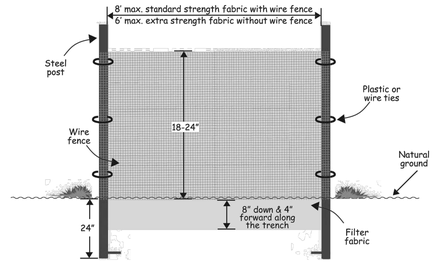
1 C-02 DETAIL
FILTER BED
SCALE: 1" = 2'

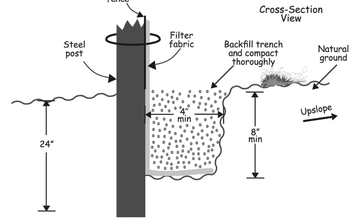


NOTES:

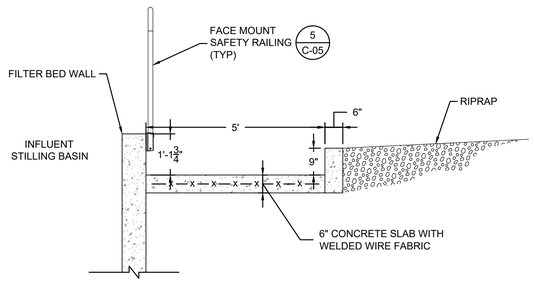
1. STONE CHECK DAMS SHOULD BE CONSTRUCTED USING USING NC DOT CLASS B STONE. THE UPSTREAM FACE OF THE ROCK STRUCTURE SHOULD BE COVERED WITH FINE GRAVEL (NCDOT #57 OR #5 WASH STONE) A MINIMUM OF 1 FOOT THICK TO REDUCE THE DRAINAGE RATE.
2. GEOTEXTILE SHALL BE SELECTED IN ACCORDANCE WITH AASHTO M288-96 SECTION 7.3, SEPARATION REQUIREMENTS.

2 C-02 DETAIL
ROCK CHECK DAM
SCALE: 1" = 2'





3 C-03 DETAIL
SILT FENCE
(SOURCE: NC DEQ)
SCALE: NTS



A C-03 SECTION
BYPASS SPILLWAY FLOW MEASUREMENT FLUME
SCALE: 1" = 2'

NOTES:

1. A FIBERGLASS GRATE WILL BE INSTALLED OVER THE INFLUENT STILLING BASIN AND TRANSFER BASIN TO PROVIDE OPERATOR ACCESS TO FLOW CONTROL VALVES AND SAMPLE LOCATIONS. SEE DRAWING C-05 FOR DETAILS
2. TRANSDUCERS WILL BE INSTALLED IN THE INLET CHAMBER AND THE EFFLUENT STILLING BASIN TO MONITOR WATER LEVELS. THE FLOW RATES THROUGH THE BYPASS SPILLWAY FLUME AND THE FILTER BED SYSTEM WILL BE CALCULATED BASED ON THE WATER LEVELS MEASURED IN THE INLET CHAMBER AND THE EFFLUENT STILLING BASIN, RESPECTIVELY.
3. COMPOSITE SAMPLERS WILL BE PLACED WITHIN THE INLET CHAMBER AND THE EFFLUENT STILLING BASIN FOR PERFORMANCE MONITORING. GRAB SAMPLES WILL ALSO BE PERFORMED AS NECESSARY, INCLUDING FROM WITHIN THE TRANSFER BASIN, TO EVALUATE BREAKTHROUGH.
4. SAFETY RAILING SHALL BE FACE-MOUNTED AND REMOVABLE.

0 2 4
SCALE IN FEET

REV	DATE	DESCRIPTION	DRN	APP
A	08.12.20	30% DESIGN SUBMITTAL	JFH	CAS

Geosyntec consultants of NC, P.C.

ATRIUM AT BLUE RIDGE
2501 BLUE RIDGE ROAD, SUITE 430
RALEIGH, NC 27607
919.870.0576

TITLE: Figure 10 SEEP C INTERIM REMEDIATION SYSTEM CONSTRUCTION DETAILS I

PROJECT: THE CHEMOURS COMPANY
SEEP C INTERIM REMEDIATION SYSTEM

SITE: FAYETTEVILLE WORKS SITE

DESIGN BY:	CMDS	DATE:	AUGUST 2020
DRAWN BY:	JFH	PROJECT NO.:	TR0795
CHECKED BY:	JWE	FILE:	TR0795-C501.dwg
REVIEWED BY:	JJD	DRAWING NO.:	C-03
APPROVED BY:	CAS		

30% DESIGN DRAWINGS
NOT FOR CONSTRUCTION

L:\CAD\DOCS\REMOURS\INTERIM SEEP REMEDY\DRAWINGS\TR0795-C501

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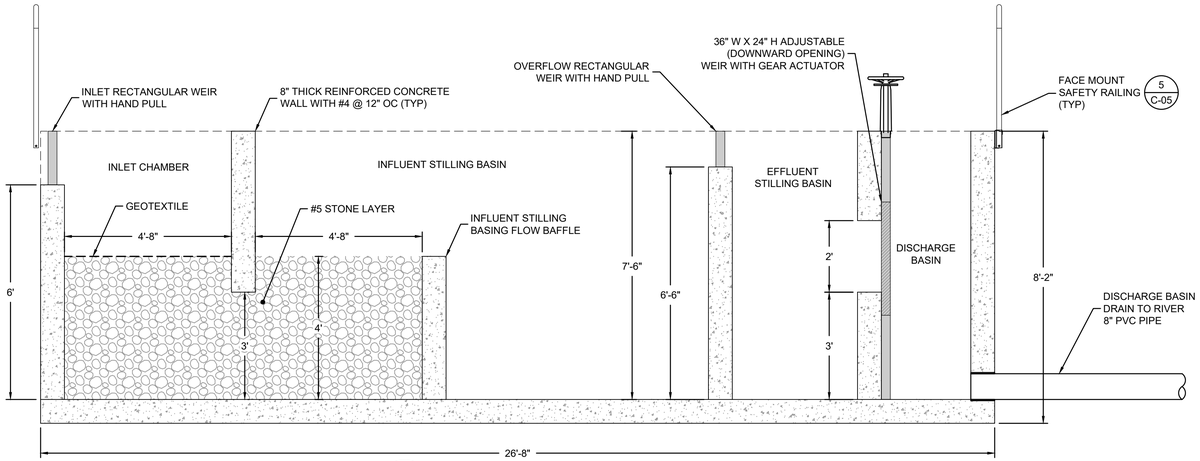
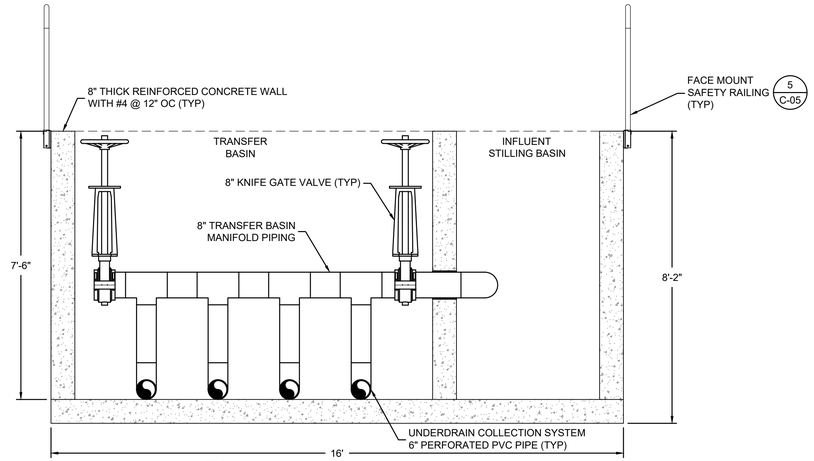
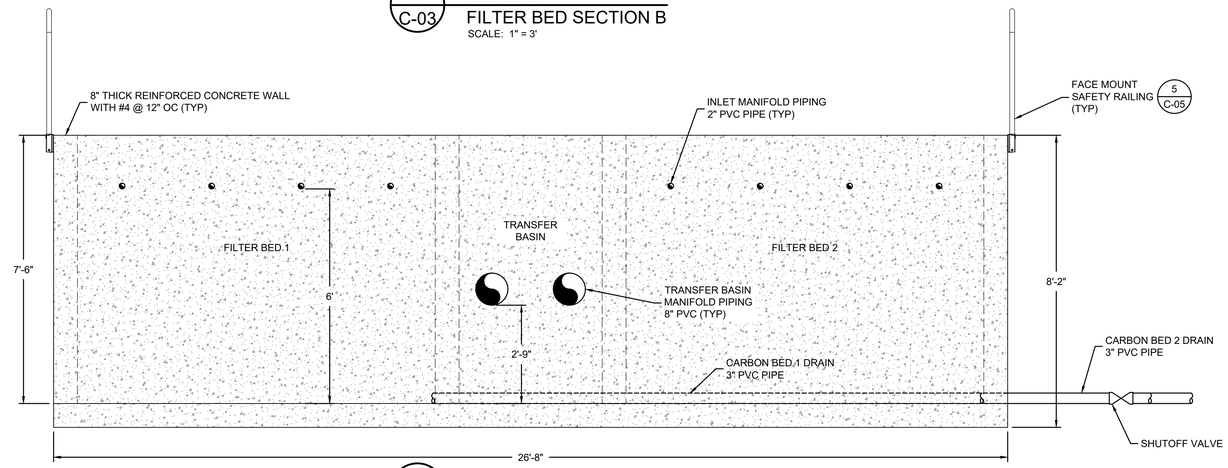


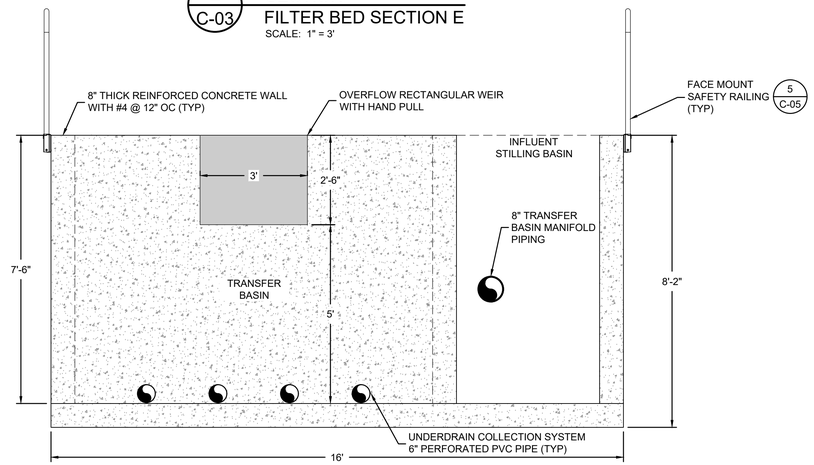
B C-03 SECTION
FILTER BED SECTION B
SCALE: 1" = 3'



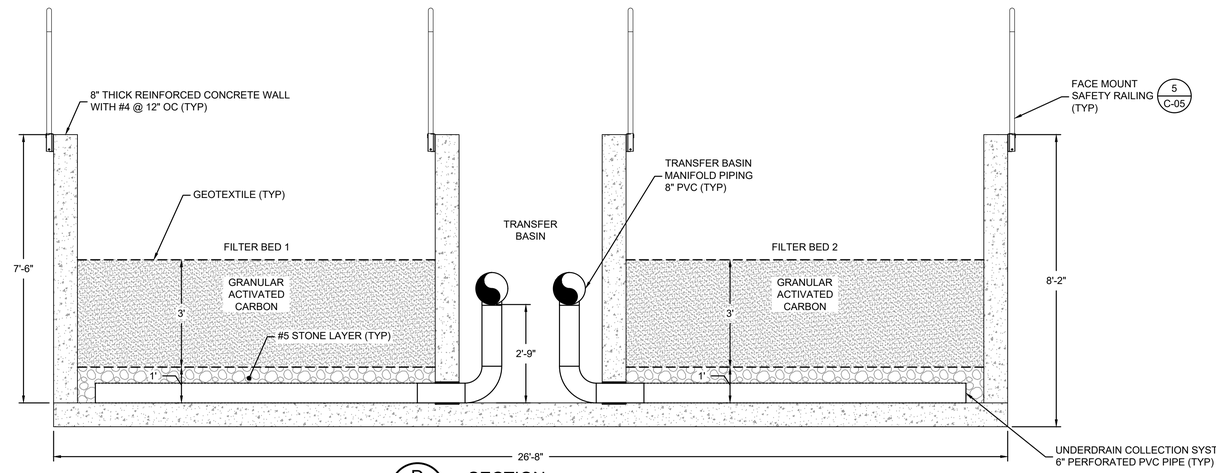
E C-03 SECTION
FILTER BED SECTION E
SCALE: 1" = 3'



C C-03 SECTION
FILTER BED SECTION C
SCALE: 1" = 3'



F C-03 SECTION
FILTER BED SECTION F
SCALE: 1" = 3'



D C-03 SECTION
FILTER BED SECTION D
SCALE: 1" = 3'

NOTES:

1. FIBERGLASS GRATING SHALL BE INSTALLED OVER THE INFLUENT STILLING BASIN AND TRANSFER BASIN TO PROVIDE OPERATOR ACCESS TO FLOW CONTROL VALVES AND SAMPLE LOCATIONS.
2. PIPE PENETRATIONS THROUGH CONCRETE WALLS WILL BE SEALED WITH GROUT TO PREVENT LEAKAGE FROM CHAMBER TO CHAMBER.
3. PIPE SUPPORTS WILL BE INSTALLED TO SUPPORT PIPING AND VALVES AS NEEDED.
4. SAFETY RAILING SHALL BE FACE MOUNTED AND REMOVABLE.

0 2 4
SCALE IN FEET

REV	DATE	DESCRIPTION	DRN	APP
A	08.12.20	30% DESIGN SUBMITTAL	JFH	CAS

Geosyntec consultants of NC, P.C.

ATRIUM AT BLUE RIDGE
2501 BLUE RIDGE ROAD, SUITE 430
RALEIGH, NC 27607
919.870.0576

TITLE: Figure 11 SEEP C INTERIM REMEDIATION SYSTEM CONSTRUCTION DETAILS II

PROJECT: THE CHEMOURS COMPANY
SEEP C INTERIM REMEDIATION SYSTEM

SITE: FAYETTEVILLE WORKS SITE

DESIGN BY:	CMDS	DATE:	AUGUST 2020
DRAWN BY:	JFH	PROJECT NO.:	TR0795
CHECKED BY:	JWE	FILE:	TR0795-C502.dwg
REVIEWED BY:	JJD	DRAWING NO.:	C-04
APPROVED BY:	CAS		

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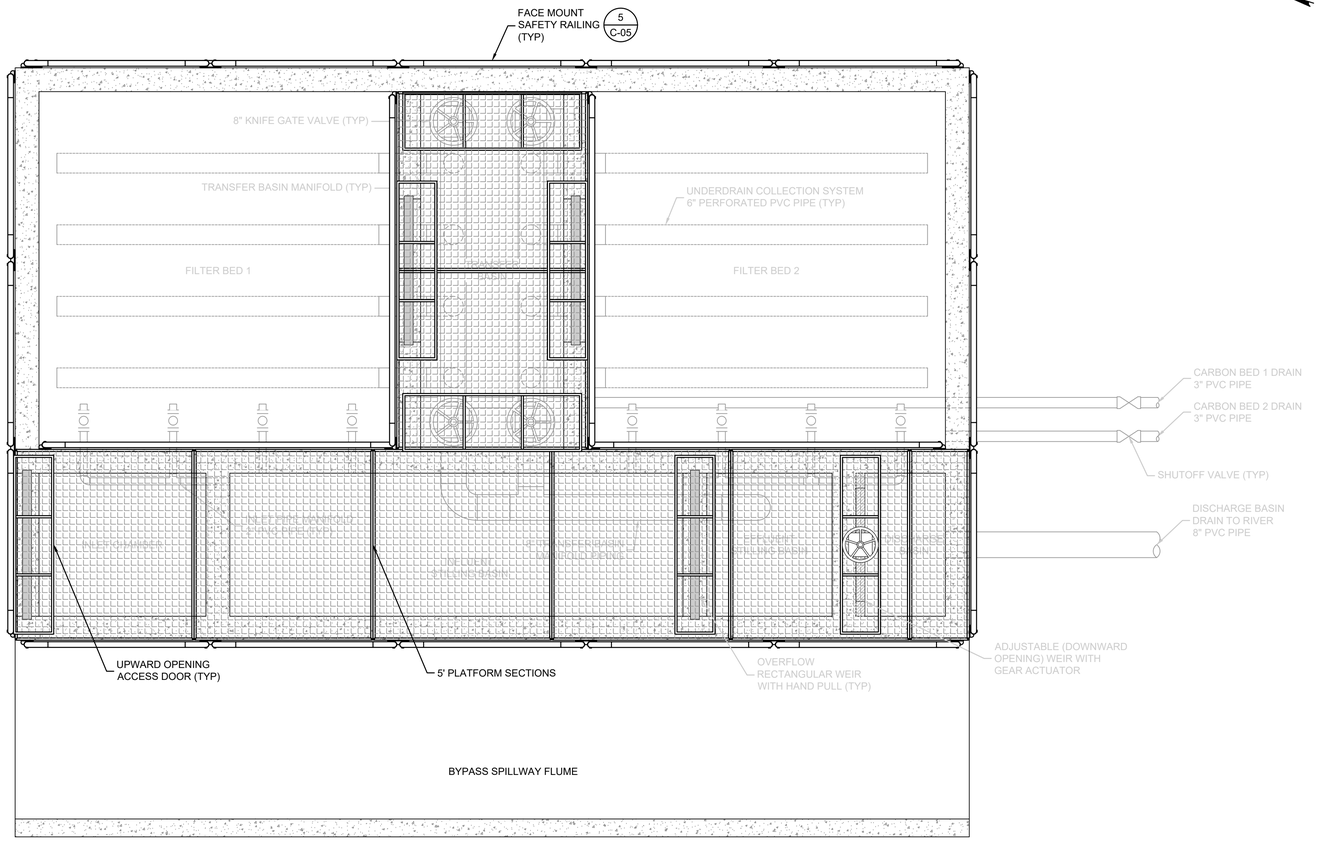
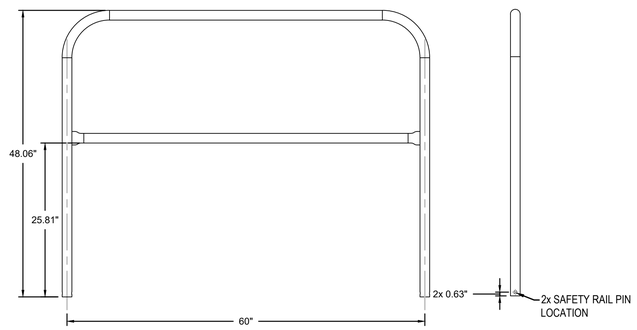


4 C-03 PLAN
SAFETY RAILING AND PLATFORM
SCALE: 1" = 2'



5 C-05 DETAIL
SAFETY RAILING
(NOTE 1)
SCALE: 1" = 1'

NOTES:

1. SAFETY RAILING SHALL BE FACE MOUNTED AND REMOVABLE.

0 3 6
SCALE IN FEET

REV	DATE	DESCRIPTION	DRN	APP
A	08.12.20	30% DESIGN SUBMITTAL	JFH	CAS

Geosyntec consultants of NC, P.C.
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2501 BLUE RIDGE ROAD, SUITE 430
RALEIGH, NC 27607
919.870.0576

TITLE: Figure 12 PLATFORM AND LADDER STRUCTURAL DETAILS

PROJECT: THE CHEMOURS COMPANY
SEEP C INTERIM REMEDIATION SYSTEM

SITE: FAYETTEVILLE WORKS SITE

DESIGN BY:	CMDS	DATE:	AUGUST 2020
DRAWN BY:	JFH	PROJECT NO.:	TR0795
CHECKED BY:	JWE	FILE:	TR0795-C503.dwg
REVIEWED BY:	JJD	DRAWING NO.:	C-05
APPROVED BY:	CAS		

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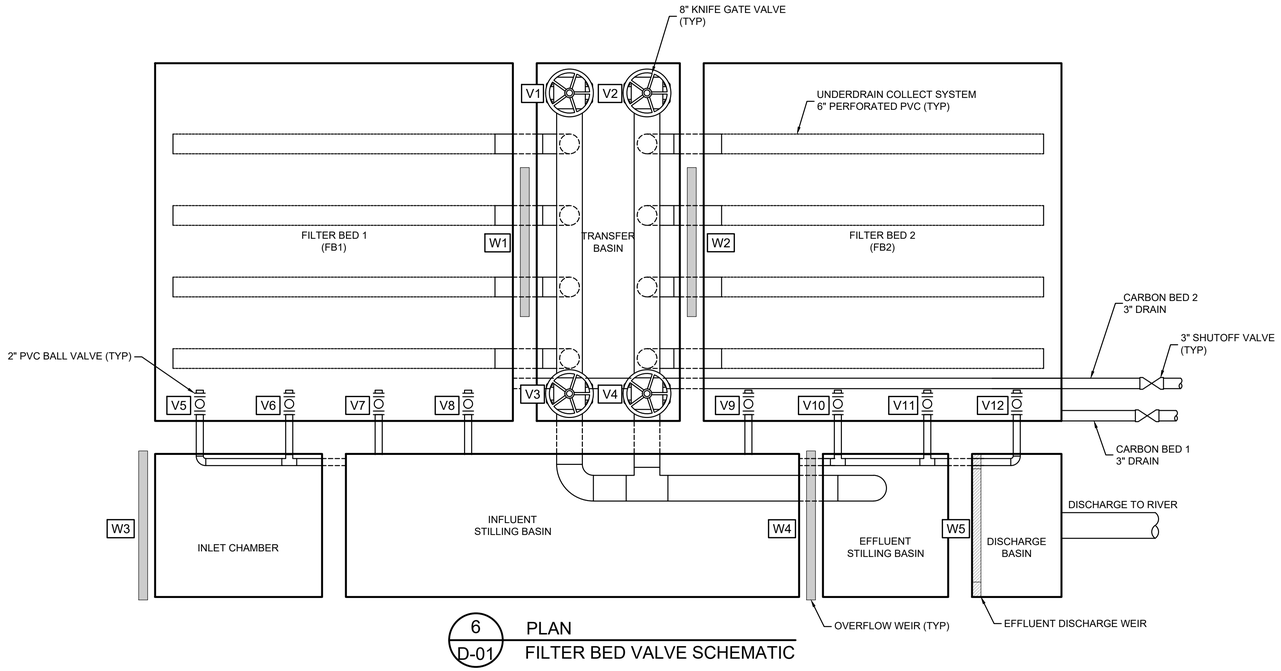
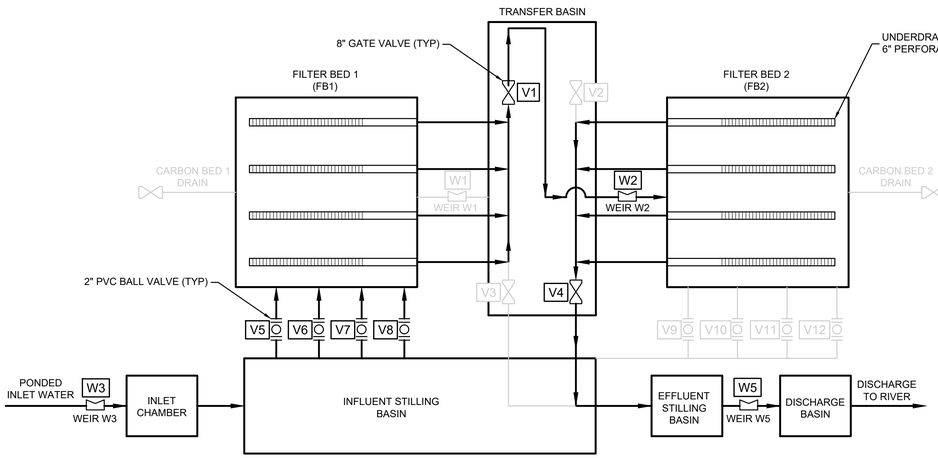


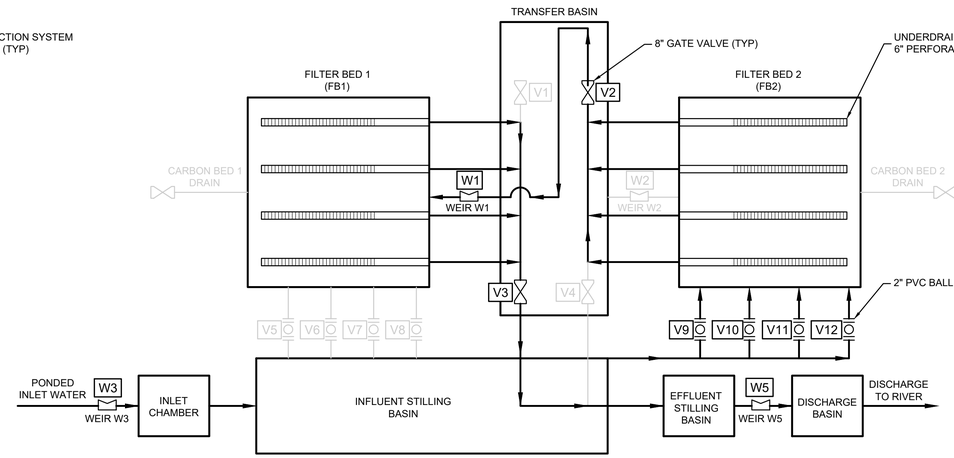
6 D-01 PLAN
FILTER BED VALVE SCHEMATIC

OPERATIONAL MODE				
FLOW CONTROL DEVICE	FB1 LEAD/ FB2 LAG	FB1 LAG/ FB2 LEAD	FB1 CHANGEOUT (FB2 OPEN)	FB2 CHANGEOUT (FB1 OPEN)
VALVE V1	OPEN	CLOSED	CLOSED	CLOSED
VALVE V2	CLOSED	OPEN	CLOSED	CLOSED
VALVE V3	CLOSED	OPEN	CLOSED	OPEN
VALVE V4	OPEN	CLOSED	OPEN	CLOSED
VALVE V5	OPEN	CLOSED	CLOSED	OPEN
VALVE V6	OPEN	CLOSED	CLOSED	OPEN
VALVE V7	OPEN	CLOSED	CLOSED	OPEN
VALVE V8	OPEN	CLOSED	CLOSED	OPEN
VALVE V9	CLOSED	OPEN	OPEN	CLOSED
VALVE V10	CLOSED	OPEN	OPEN	CLOSED
VALVE V11	CLOSED	OPEN	OPEN	CLOSED
VALVE V12	CLOSED	OPEN	OPEN	CLOSED
WEIR W1	CLOSED	OPEN	CLOSED	CLOSED
WEIR W2	OPEN	CLOSED	CLOSED	CLOSED
WEIR W3	OPEN	OPEN	OPEN	OPEN
WEIR W4	OPEN	OPEN	OPEN	OPEN
WEIR W5	OPEN	OPEN	OPEN	OPEN

7 D-01 TABLE
OPERATIONAL MODE



8 D-01 SCHEMATIC
FILTER BED SYSTEM FLOW WITH CARBON BED 1 IN LEAD POSITION AND CARBON BED 2 IS LAG POSITION



9 D-01 SCHEMATIC
FILTER BED SYSTEM FLOW WITH CARBON BED 2 IN LEAD POSITION AND CARBON BED 1 IS LAG POSITION

REV	DATE	DESCRIPTION	DRN	APP
A	08.12.20	30% DESIGN SUBMITTAL	JFH	CAS

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2501 BLUE RIDGE ROAD, SUITE 430
RALEIGH, NC 27607
919.870.0576

TITLE: Figure 13 SEEP C INTERIM REMEDIATION SYSTEM PROCESS FLOW DIAGRAM

PROJECT: THE CHEMOURS COMPANY
SEEP C INTERIM REMEDIATION SYSTEM

SITE: FAYETTEVILLE WORKS SITE

DESIGN BY:	CMDS	DATE:	AUGUST 2020
DRAWN BY:	JFH	PROJECT NO.:	TR0795
CHECKED BY:	JWE	FILE:	TR0795-D601.dwg
REVIEWED BY:	JJD	DRAWING NO.:	D-01
APPROVED BY:	CAS		

30% DESIGN DRAWINGS
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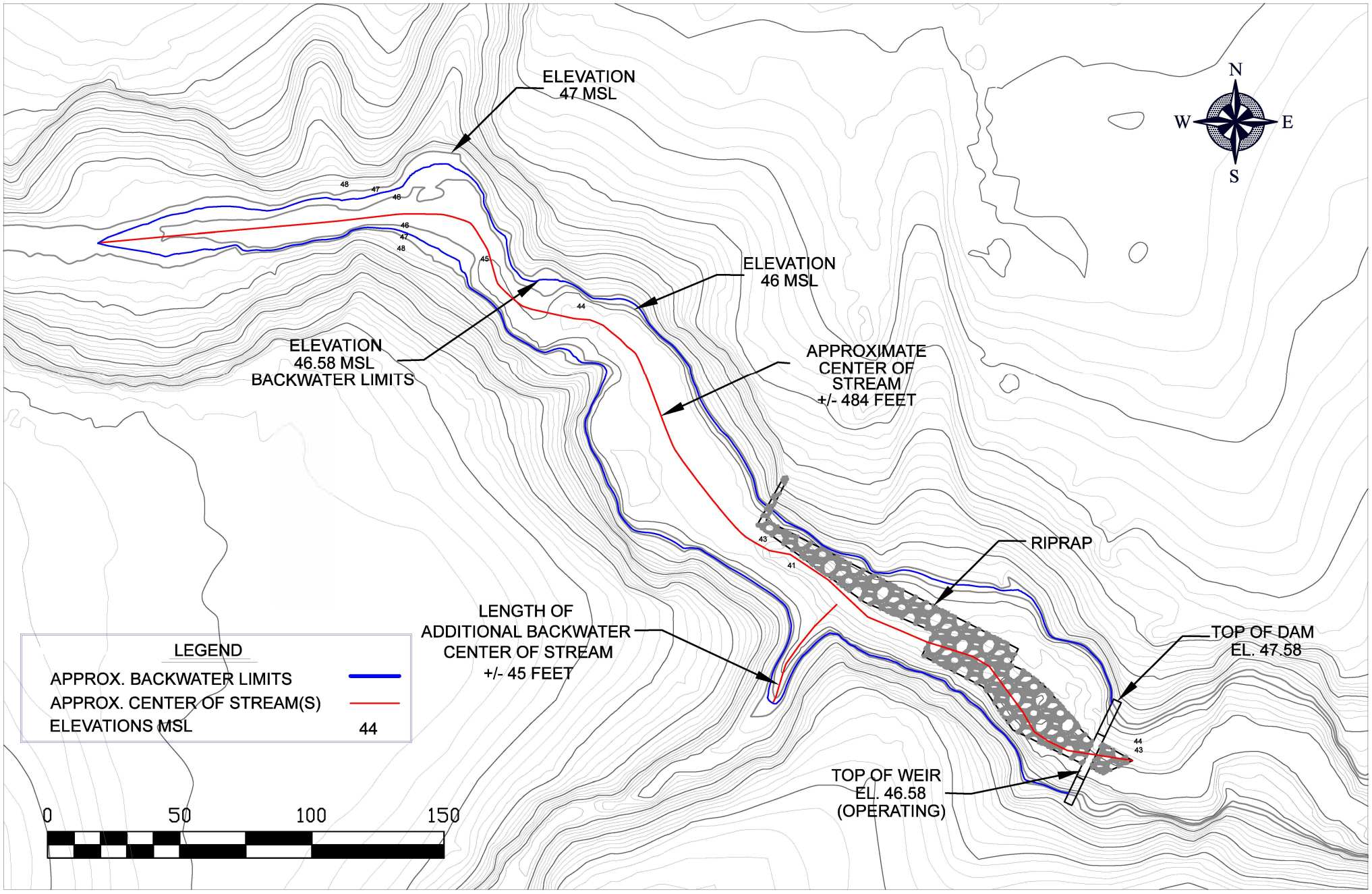
ATTACHMENT 4

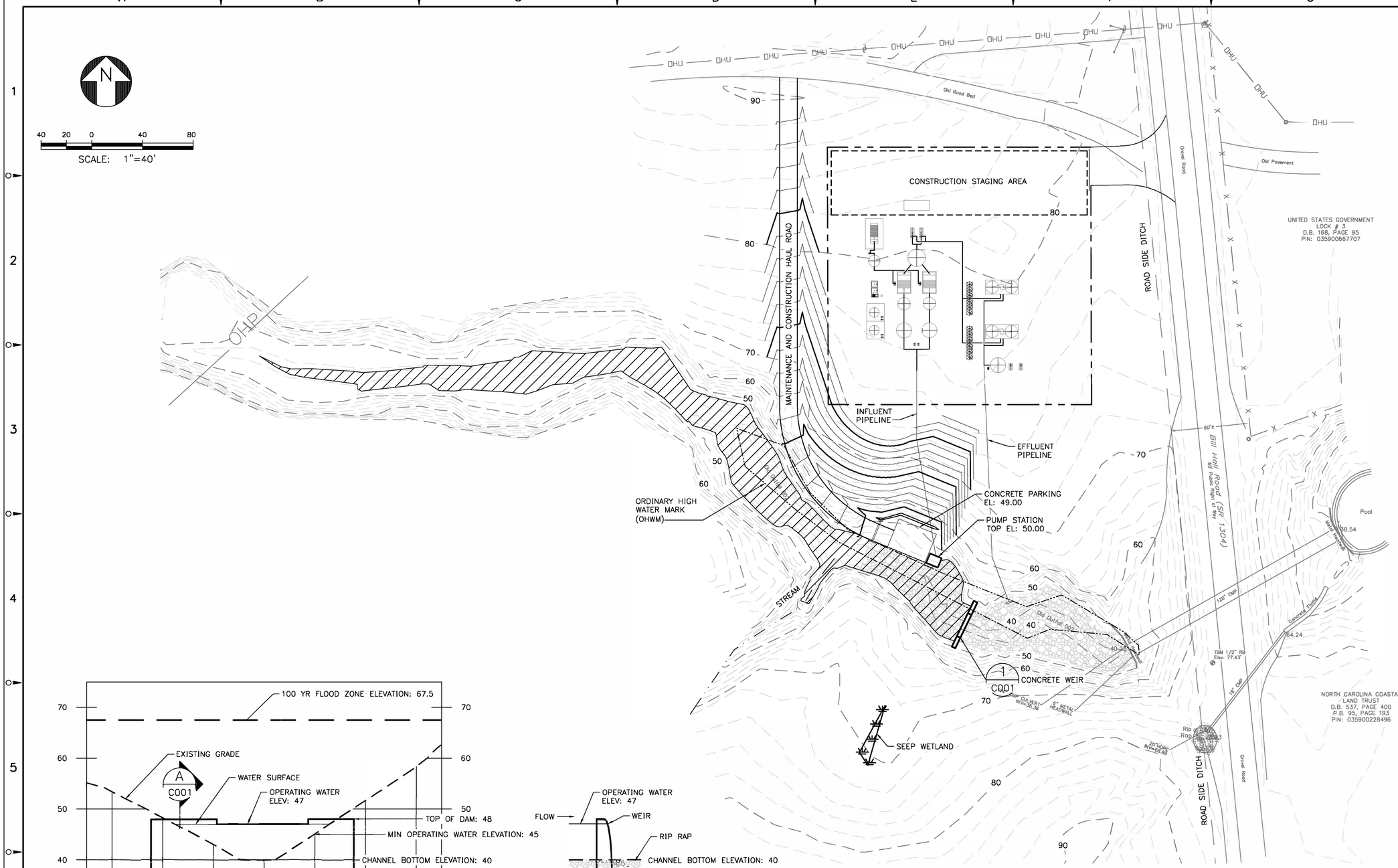


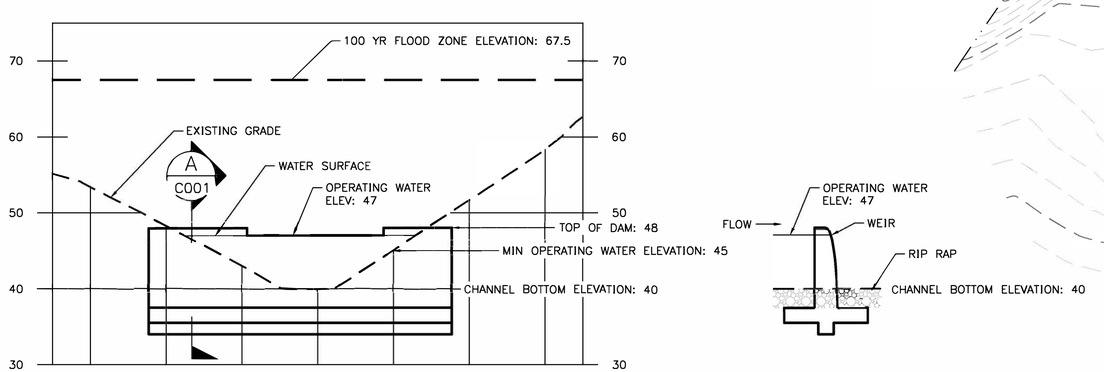
SCALE:	AS SHOWN
CHECKED BY:	BLB
DRAWN BY:	CSG
DATE:	8/28/2020

GEOServices, LLC-Geotechnical and Materials Engineers
2651 Willow Point Way
Knoxville, Tennessee 37931
Phone: (865) 539-8242
Fax: (865) 539-8252

STREAM IMPACTS
THE CHEMOURS COMPANY
FAYETTEVILLE OUTFALL
GLENGERRY ROAD
FAYETTEVILLE, NORTH CAROLINA

JOB NO: 24–20149





DETAIL 1 / C001
SCALE: 1"=10'-0"

SECTION A / C001
SCALE: 1"=10'-0"

CONSTRUCTION QUANTITIES (CUBIC YARDS)		
	ABOVE OHWM	BELOW OHWM
CONCRETE	130	75
RIP RAP	592	656
SOIL EXCAVATION	592	741
ROADWAY EXCAVATION (CUT)	3170	NA
TEMP PUMP EXCAVATION (CUT)	NA	60

LEGEND

- IMPOUNDMENT AREA
- EXISTING CONTOURS
- ORDINARY HIGH WATER MARK (OHWM)
- STONE RIP RAP
- WETLANDS

NOTES:

1. IMPOUNDMENT VOLUME: 40,000 CUBIC FEET

NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APP'D
A	ISSUED FOR REVIEW				

DRAWN BY	Karl Itschner	DATE 06/12/19
CHECKED BY		DATE
APPROVED BY		DATE
PROJECT MGR.		DATE

SEAL

PARSONS

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 449369
WBS 62022

PROJECT TITLE

CHEMOURS
TREATMENT PLANT FOR OLD OUTFALL 002
22828 NC-87
FAYETTEVILLE, NC 28306

DRAWING TITLE

CIVIL
SITE PLAN

SCALE Figure 15

DRAWING NO. C001 REV. A

AS SHOWN

FILE NAME: W:\CHEMOURS PROGRAM\449369 - FAYETTEVILLE PERMIT APPLICATION\ENGR\CAD\CIVIL\C001.DWG
PLOT DATE: 6/27/2019 4:00 PM PLOTTED BY: ITSCHNER, KARL