



REPLY TO  
ATTENTION OF

Regulatory Division  
West Branch  
Mining Team

**DEPARTMENT OF THE ARMY**  
**JACKSONVILLE DISTRICT CORPS OF ENGINEERS**  
701 SAN MARCO BOULEVARD  
JACKSONVILLE, FLORIDA 32207-8915

**January 28, 2020**

***PUBLIC NOTICE***

Permit Application No. SAJ-2019-00480 (SP-JPF)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) as described below:

APPLICANT: The Chemours Company FC LLC  
P.O. Box 753  
Starke, FL 32091

WATERWAY AND LOCATION: The project would affect waters of the United States associated with headwater wetlands of the Santa Fe River (HUC 03110206), a tributary of the Suwannee River (HUC 031102). The project site is located south of State Road 230 and east of State Road 100, approximately four miles southeast of downtown Starke, in Sections 12, 13, and 24, Township 7 South, Range 22 East, Bradford County, and Sections 6, 7, 18, and 19, Township 7 South, Range 23 East, Clay County, Florida.

Directions to the site are as follows: From US 301 in Starke, take SR 230 east approximately 5.5 miles to Kingsley Road; take Kingsley approximately 0.4 mile east to the first right; take that road approximately 2.3 miles to the applicant's facility to gain access to the project site.

APPROXIMATE CENTRAL COORDINATES: Latitude 29.883858  
Longitude -82.051777

**PROJECT PURPOSE:**

Basic: To mine mineral sands

Overall: To mine mineral sands from identified deposits in the vicinity of the applicant's existing Trail Ridge processing facilities

EXISTING CONDITIONS: The proposed mine site totals approximately 2884.4 acres. The majority of the proposed project area has historically been managed for silviculture and as such is in various stages of pine growth. Unpaved, graded roads cross the proposed project area to provide access for silviculture operations. Wetlands and ditches occur throughout the proposed project area, and portions of the wetlands have been subject to timber harvesting and replanted with pine for silviculture.

More specifically, the predominant existing land use is coniferous plantations (FLUCCS 441), covering 1216.91 acres. Additional upland land uses include 44.94 acres of dirt roads (8146), 117.06 acres of formerly mined lands/extractive (117.06), and xeric oak (28.16). and 27.10 acres of CR 228 (8144). Onsite wetlands and surface waters include 480.76 acres of wetland pine plantation (441W), 816.37 acres of various forested wetlands (611, 613, 621, and 630), 121.61 acres of shrub and herbaceous wetlands (631 and 641), and 47.67 acre of ditches and lakes (510d, 523, and 534).

The area surrounding the project area consists of the applicant's mining and processing facilities to the north, additional pine plantations to the west and south, and Camp Blanding Joint Training Center to the east. Keystone Heights Airport is located one mile south of the project's southern limit.

The project site also overlaps or is in the vicinity of several public and private parcels of conservation lands, as shown in the attached drawings.

**PROPOSED WORK:** The applicant seeks authorization to impact 740.45 acres of aquatic resources, including 710.59 acres of wetland impacts and 29.86 acres of impacts to ditches and other surface waters. The wetland impacts include 227.53 acres of impacts to wetland pine plantation areas. The attached site plans show the work as currently proposed.

**AVOIDANCE AND MINIMIZATION INFORMATION** – The applicant has provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

The applicant states that there are no alternative sites that have the necessary mineral deposits that are not already active mines themselves. Onsite, the applicant states that the proposed mining area is necessary to provide an economically viable project.

The applicant states that the proposed mine plan avoids higher-quality onsite wetlands, and preserves flow ways that drain offsite to the Santa Fe River. The applicant proposes to implement best management practices to minimize impacts to avoided and offsite wetlands, including a perimeter berm around the active mining areas and use of existing culverted wetland crossings.

**COMPENSATORY MITIGATION** – The applicant has offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

The applicant states that the proposed impacts will result in a loss of 347.58 wetland functional units (using UMAM). To offset this loss the applicant proposes permittee-responsible onsite and offsite mitigation, specifically, the re-establishment of 710.59 acres of wetlands onsite in conjunction with reclamation as required by the state of Florida, the enhancement of 136.49 acres of onsite, avoided wetlands, and 65.54 acres

of re-establishment of offsite wetlands at the applicant's Florida Mine/Trail Ridge Mine, in conjunction with reclamation as required by the state of Florida. The offsite wetlands are not part of the mitigation for any Corps permits. The applicant states that the proposed mitigation provides 348.14 units of functional gain. A summary of the applicant's compensatory mitigation plan, including the 12 components required by the 2008 Compensatory Mitigation Rule, is attached.

#### CULTURAL RESOURCES:

The applicant provided a copy of a June 26, 2019 letter from the State Historic Preservation Officer (SHPO) (DHR File No. 2018-0132-B), stating that the SHPO concurred with a determination that the proposed project will have no effect on cultural resources listed, or eligible for listing in the National Register of Historic Places, or otherwise of archaeological, historical, or architectural significance within the study area. The Corps notes that the referenced review did not constitute a review under Section 106 of the National Historic Preservation Act.

Therefore, by copy of this public notice, the Corps is providing information for review. Our final determination relative to historic resource impacts is subject to review by and coordination with the State Historic Preservation Officer and those federally recognized tribes with concerns in Florida and the Permit Area.

#### ENDANGERED SPECIES:

The project area has suitable habitat for the wood stork (*Mycteria americana*), Florida scrub jay, and the eastern indigo snake (*Drymarchon corais couperi*). Camp Blanding, to the east, has documented occurrences of scrub jays, and multiple populations of red-cockaded woodpeckers (*Picoides borealis*) (RCW). The Santa Fe River downstream of the project area supports populations of the Suwannee moccasinshell (*Medionidus walker*) and oval pigtoe (*Pleurobema pyriforme*) freshwater mussels, and critical habitat for the oval pigtoe.

The furthest upstream extent of the oval pigtoe critical habitat, which overlaps with a unit of the proposed critical habitat for the Suwannee moccasinshell, is greater than eight miles downstream of the project site. The Corps notes that the primary headwaters for the Santa Fe River are Lake Santa Fe and the Santa Fe Swamp, and that the applicant's proposed mine plan avoids the larger wetland flow ways on the project site. Based on available information, the Corps has determined that the proposed project would have no effect on the oval pigtoe and its critical habitat, or on the Suwannee moccasinshell.

The project is outside of the core foraging area of any wood stork colonies, and the applicant states that no wood storks have been observed foraging onsite. Using the September 2008 effect determination key for the wood stork in central and north peninsular Florida (A-B-C-D), the Corps has determined the proposed project may

affect but is not likely to adversely affect the wood stork; no further coordination is necessary.

The applicant conducted informal scrub jay surveys in October 2012, and documented no individual birds or calls. The applicant states that the onsite habitat is not optimal. Based on the information provided, the Corps has determined that the project may affect but is not likely to adversely affect the scrub jay.

The project area does not have suitable nesting habitat for RCWs. The applicant conducted informal foraging area surveys in November 2012 and documented no birds or calls. Based on the information provided, the Corps has determined that the project may affect but is not likely to adversely affect the RCW.

Based on ground surveys, the applicant estimates that the site has approximately 122 gopher tortoise burrows, as well as areas of xeric habitat (scrub, sandhill or scrubby flatwoods). The applicant has agreed to the use of the standard protection measures for the eastern indigo snake. Using the January 25, 2010 effect determination key for the eastern indigo snake, as updated August 13, 2013 (A-B-C-D), the Corps has determined that the proposal may affect the eastern indigo snake.

By separate letter, the Corps will request U.S. Fish and Wildlife (USFWS) concurrence with the determinations for the scrub jay and RCW, and request initiation of formal consultation for the eastern indigo snake, pursuant to Section 7 of the Endangered Species Act by separate letter.

**ESSENTIAL FISH HABITAT (EFH):** This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. The proposal would impact inland freshwater wetlands. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

**NOTE:** This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. Corps personnel verified the jurisdictional line with a Preliminary Jurisdictional Determination dated May 17, 2019.

**AUTHORIZATION FROM OTHER AGENCIES:** Water Quality Certification may be required from the Florida Department of Environmental Protection and/or one of the state Water Management Districts.

**COMMENTS** regarding the potential authorization of the work proposed should be submitted in writing to the attention of the District Engineer through the Mining Team,



10117 Princess Palm Avenue, Suite 120, Tampa, FL 33610 within 21 days from the date of this notice.

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact to the associated wetlands. This is based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.

QUESTIONS concerning this application should be directed to the project manager, John Fellows, in writing at the Mining Team, 10117 Princess Palm Avenue, Suite 120, Tampa, FL 33610; by electronic mail at [johnp.fellows@usace.army.mil](mailto:johnp.fellows@usace.army.mil); by facsimile transmission at (813)769-7061; or, by telephone at (813)769-7070.

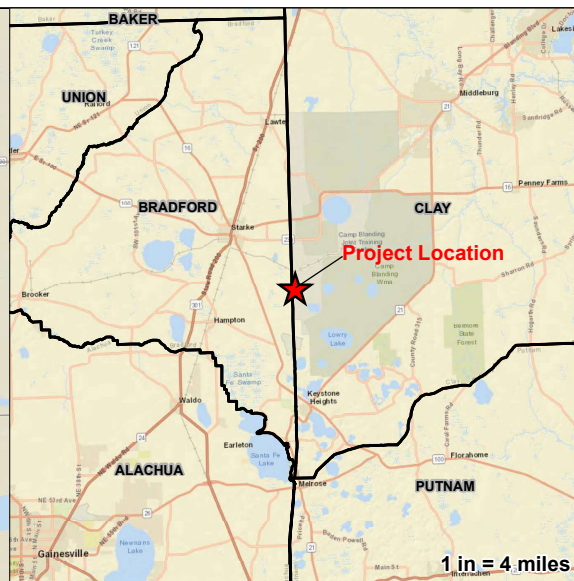
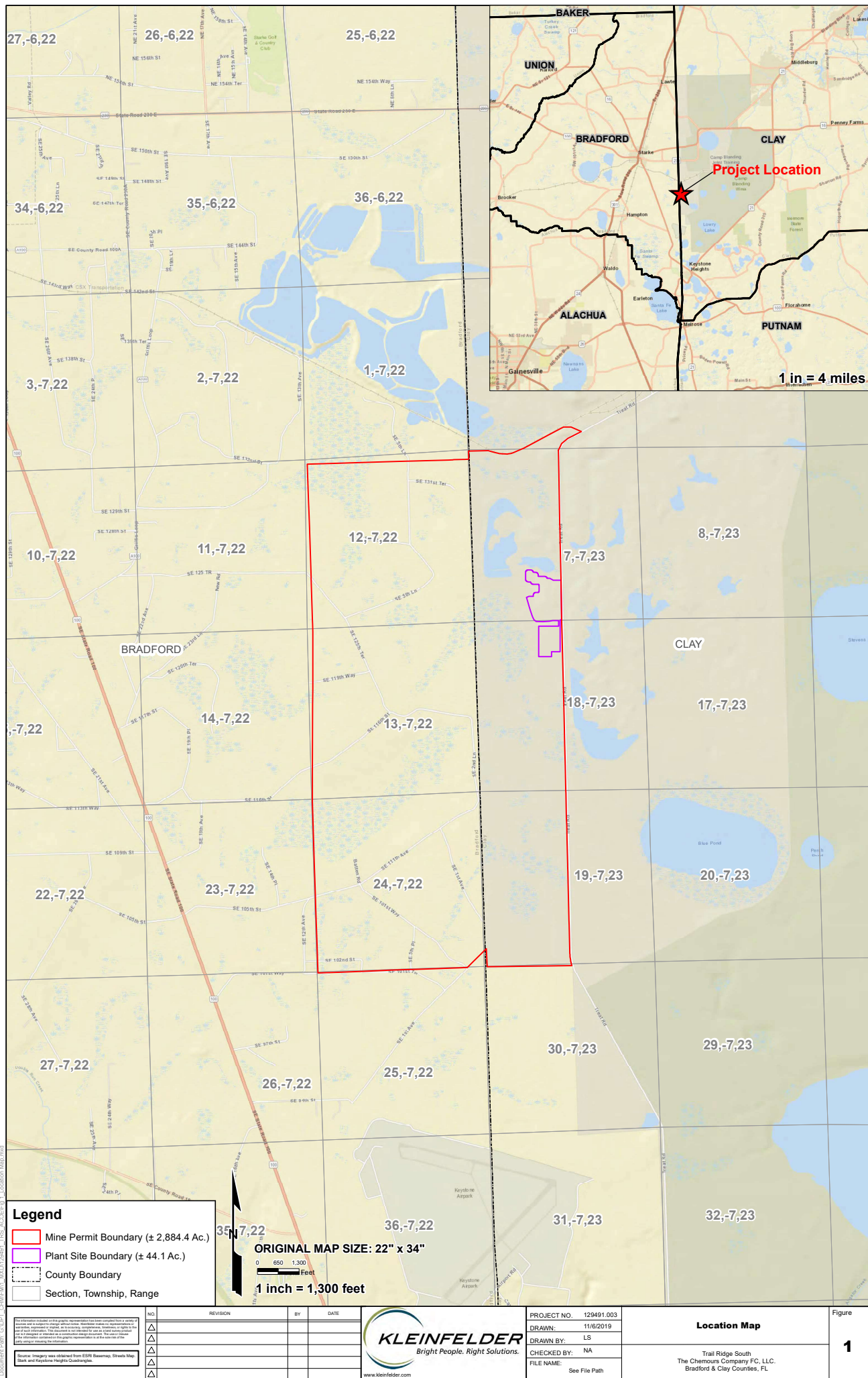
IMPACT ON NATURAL RESOURCES: Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact 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 benefits, 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 cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, 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. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; 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 to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**COASTAL ZONE MANAGEMENT CONSISTENCY:** In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board. In the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with the Coastal Zone Management Plan.

**REQUEST FOR PUBLIC HEARING:** Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.



Document Path: G:\PST\_CHAIRMAN\MOI\25431\_TIS\_Access\1\_Location Map.mxd

This information is intended to provide a general overview of the project. It is not intended to be used for any other purpose. The information is provided for informational purposes only. The information is not intended to be used for any other purpose. The information is provided for informational purposes only.

NO.	REVISION	BY	DATE
1			
2			
3			
4			
5			



PROJECT NO.	129491.003
DRAWN BY:	LS
CHECKED BY:	NA
FILE NAME:	See File Path

**Location Map**

Trail Ridge South  
The Chemours Company FC, LLC.  
Bradford & Clay Counties, FL





**Legend**

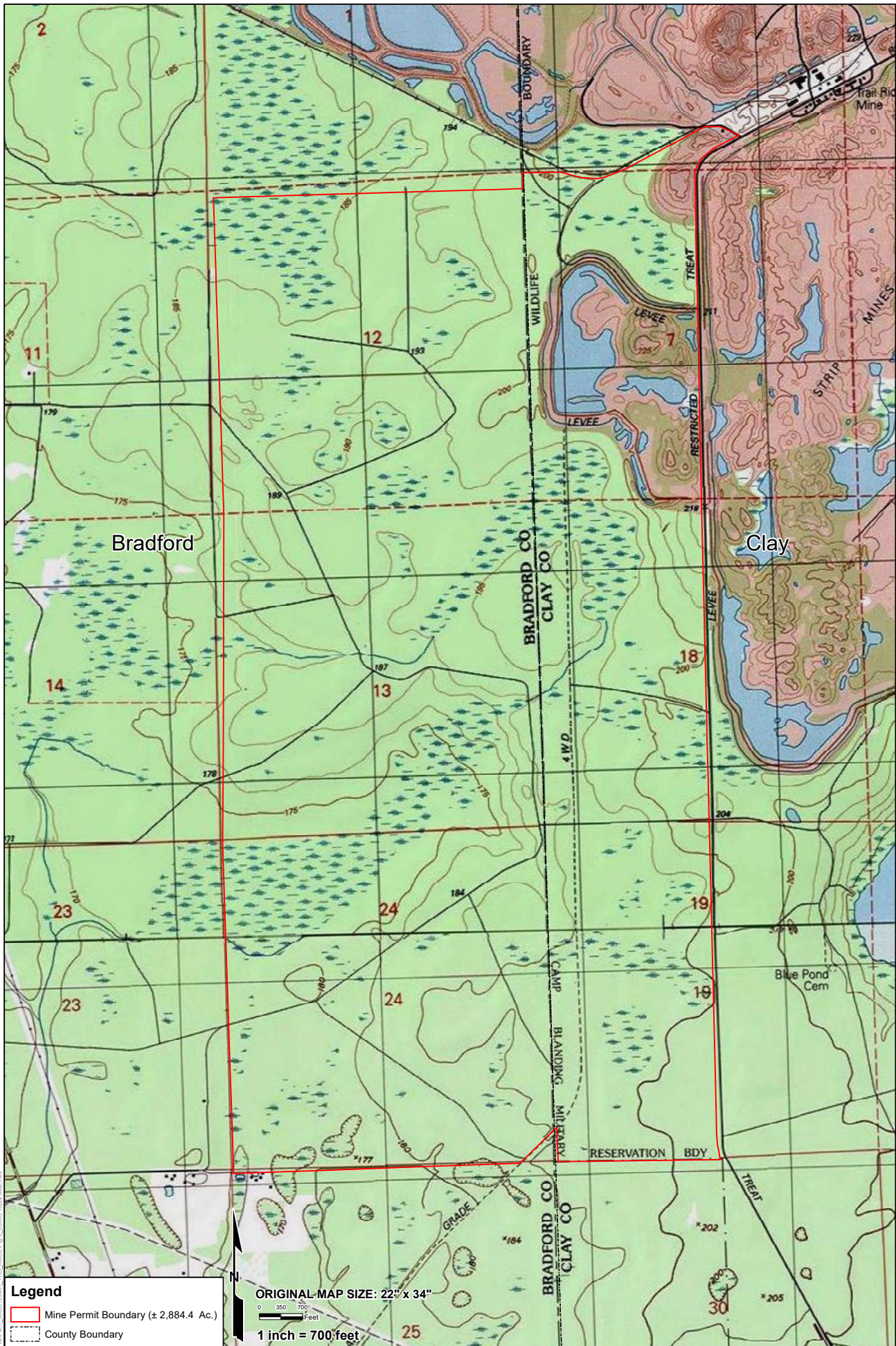
- Mine Permit Boundary (± 2,884.4 Ac.)
- County Boundary
- Section, Township, Range

**ORIGINAL MAP SIZE: 22" x 34"**
  
  
**1 inch = 700 feet**

Document Path: G:\DET\_CHAIRMAN\MCD\25491\_TIS\_Acquiring\_2\_Aerial\_Map.mxd

				<div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div>&lt;</div></div>	
--	--	--	--	---	--





Document Path: G:\PDT\CHAMBERS\MXD\129491\TSS\AC001Fig 3 USGS Topo Map.mxd

NO.	REVISION	BY	DATE
Δ			
Δ			
Δ			
Δ			
Δ			

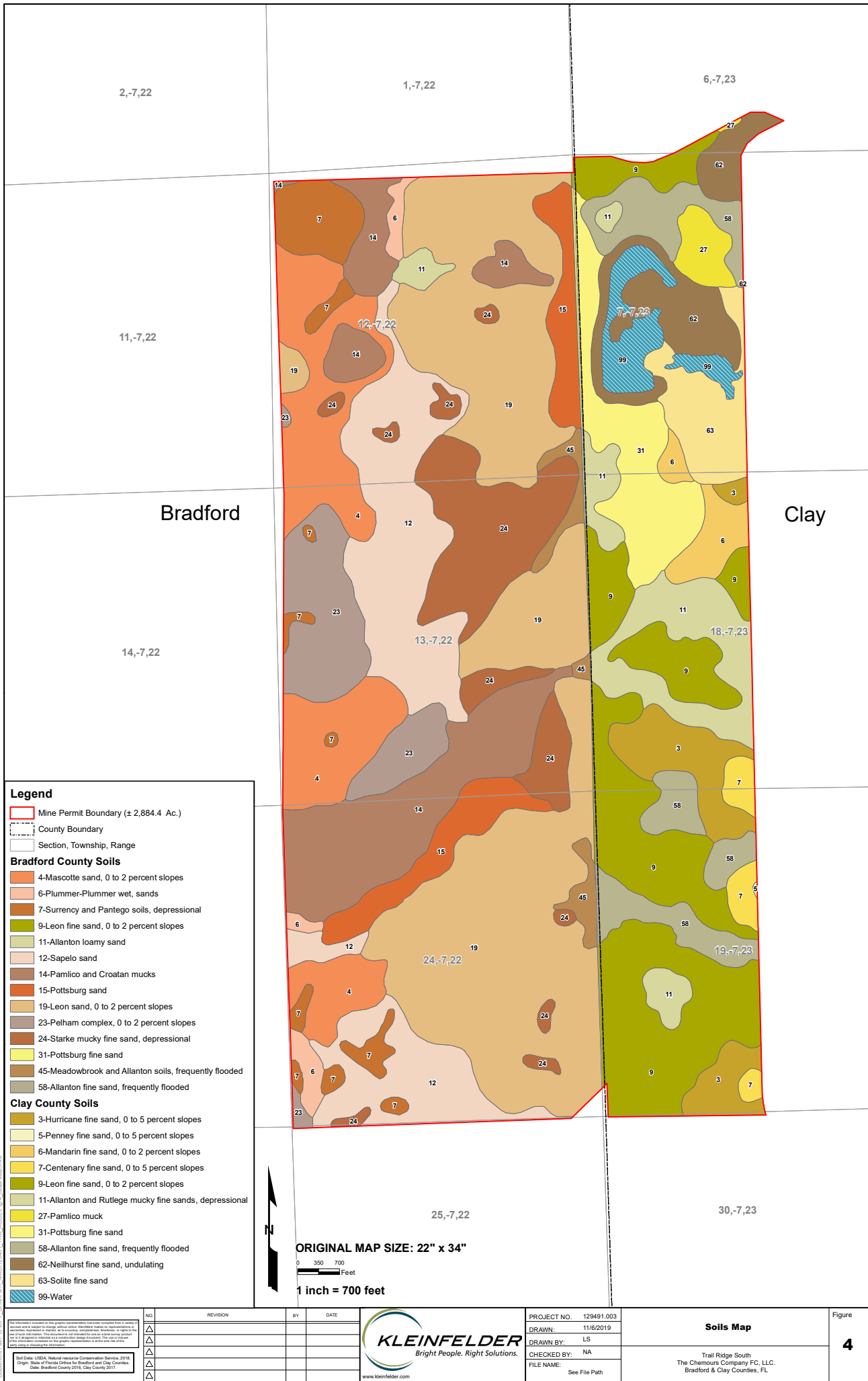
**KLEINFELDER**  
Bright People. Right Solutions.  
www.kleinfelder.com

PROJECT NO.	129491.003
DRAWN BY:	LS
CHECKED BY:	NA
FILE NAME:	See File Path

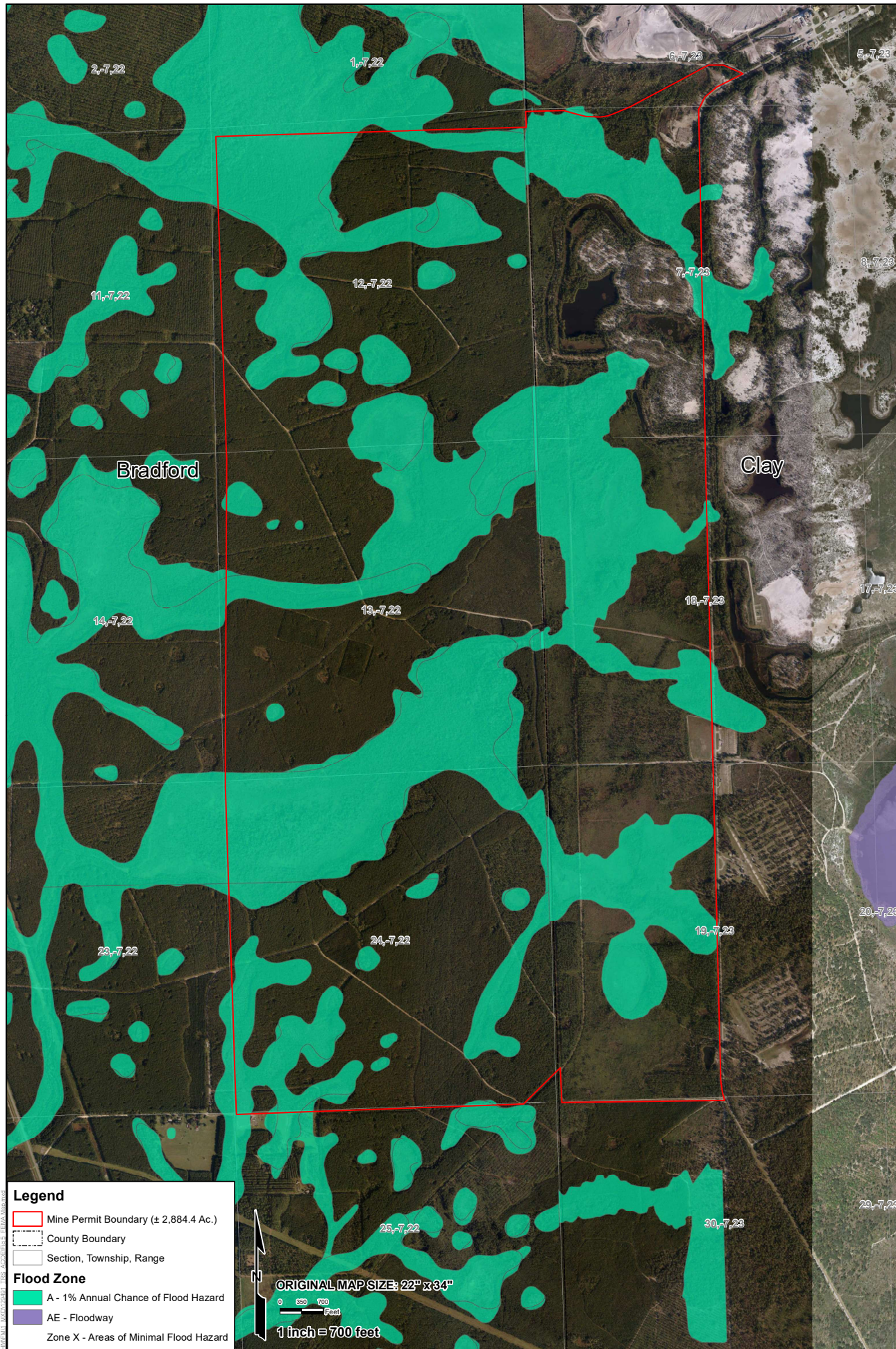
**USGS Topographic Map**

Trail Ridge South  
The Chemours Company FC, LLC.  
Bradford & Clay Counties, FL









**Legend**

- Mine Permit Boundary (± 2,884.4 Ac.)
- County Boundary
- Section, Township, Range

**Flood Zone**

- A - 1% Annual Chance of Flood Hazard
- AE - Floodway
- Zone X - Areas of Minimal Flood Hazard

ORIGINAL MAP SIZE: 22" x 34"

0 350 700 Feet

1 inch = 700 feet

For information only. This map was prepared from GIS data provided by the Florida Department of Transportation (FDOT) and is not intended to be used for any purpose other than informational. The user of this map assumes all liability for any and all errors or omissions. The user of this map assumes all liability for any and all errors or omissions. The user of this map assumes all liability for any and all errors or omissions.

NO.	REVISION	BY	DATE
1			
2			
3			
4			
5			

**KLEINFELDER**  
Bright People. Right Solutions.

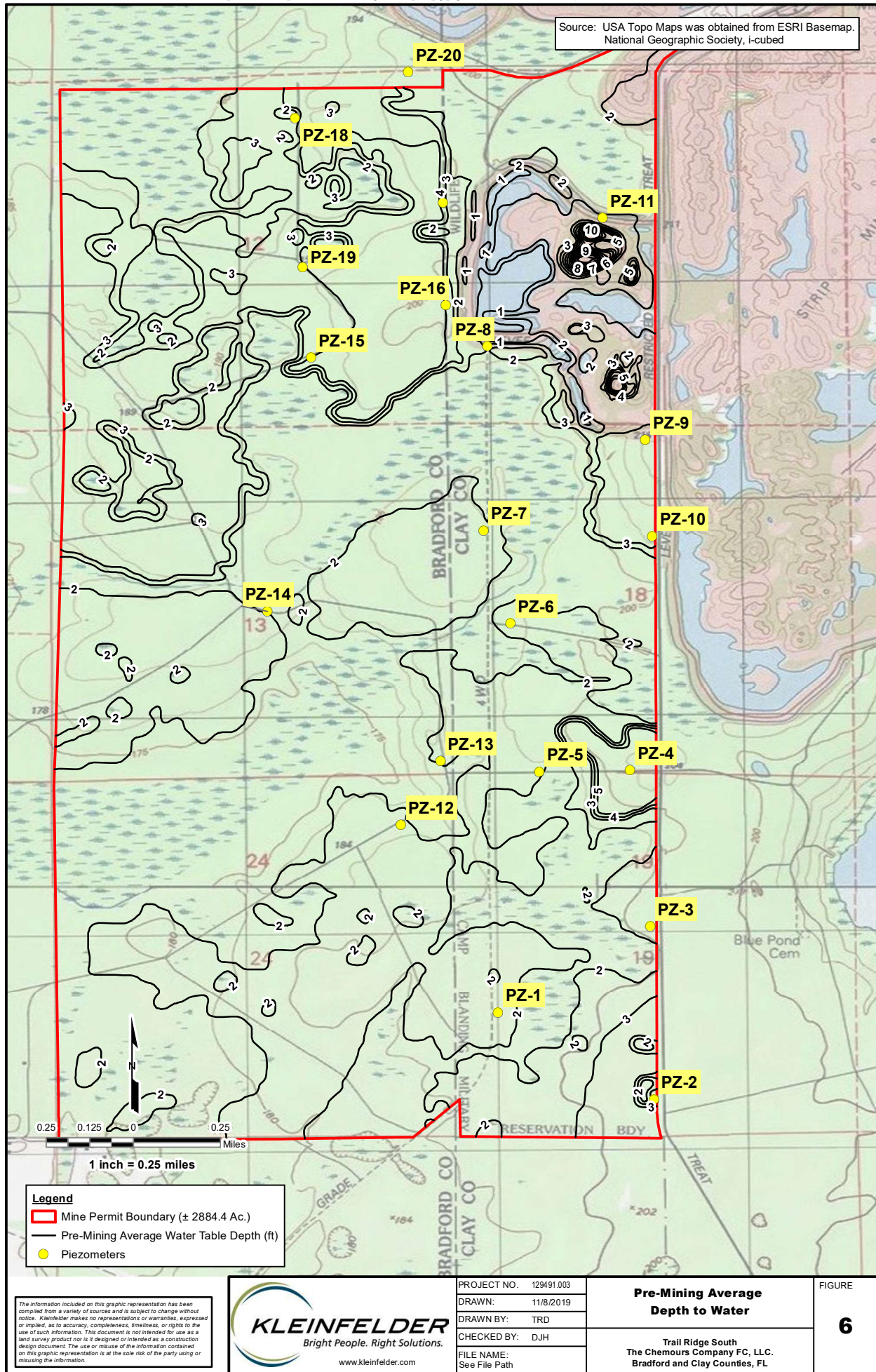
www.kleinfelder.com

PROJECT NO.	129491.003
DRAWN BY:	LS
CHECKED BY:	NA
FILE NAME:	See File Path

**FEMA Floodplain Map**

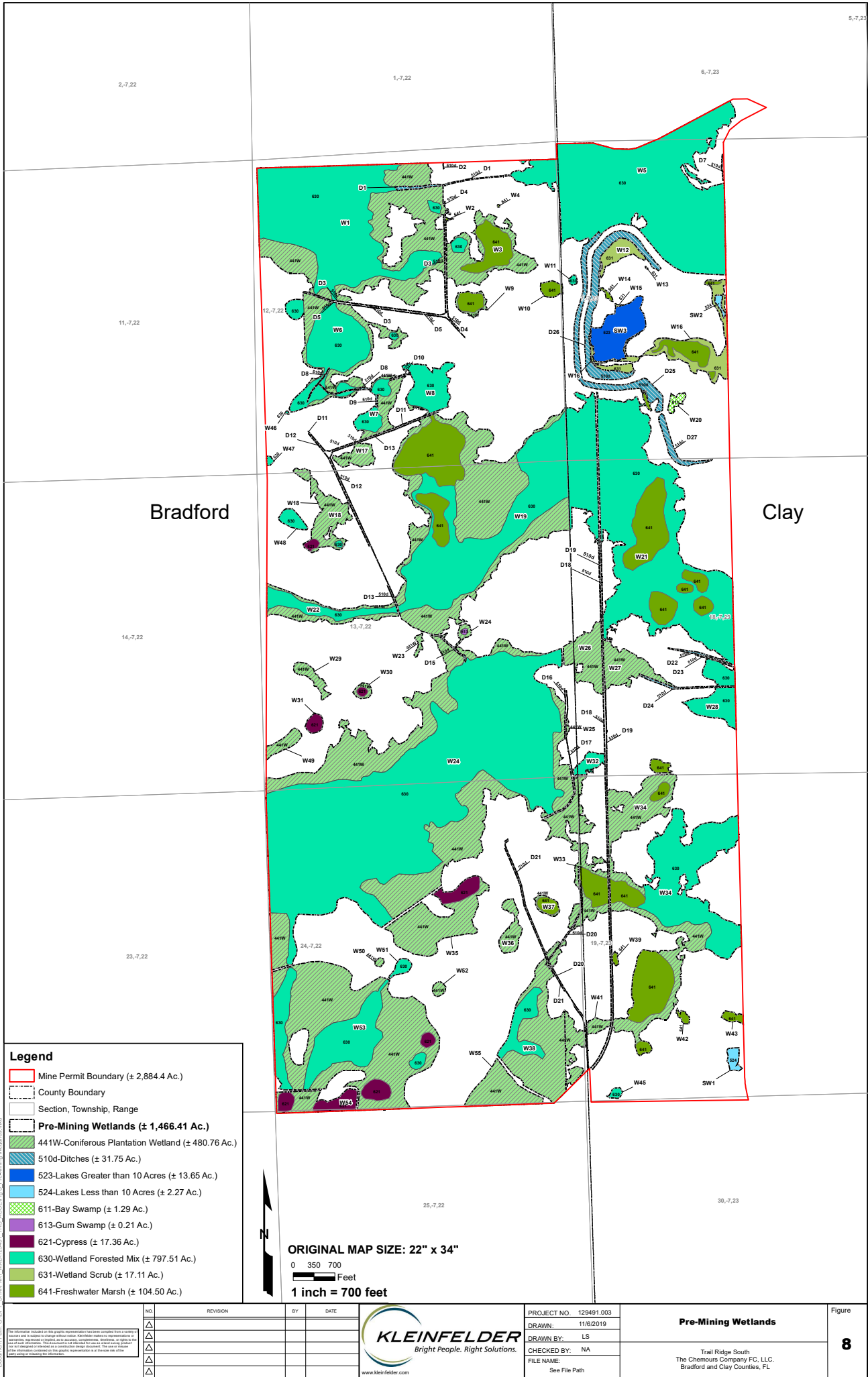
Trail Ridge South  
The Chemours Company FC, LLC.  
Bradford & Clay Counties, FL











**Legend**

- Mine Permit Boundary (± 2,884.4 Ac.)
- County Boundary
- Section, Township, Range
- Pre-Mining Wetlands (± 1,466.41 Ac.)**
- 441W-Coniferous Plantation Wetland (± 480.76 Ac.)
- 510d-Ditches (± 31.75 Ac.)
- 523-Lakes Greater than 10 Acres (± 13.65 Ac.)
- 524-Lakes Less than 10 Acres (± 2.27 Ac.)
- 611-Bay Swamp (± 1.29 Ac.)
- 613-Gum Swamp (± 0.21 Ac.)
- 621-Cypress (± 17.36 Ac.)
- 630-Wetland Forested Mix (± 797.51 Ac.)
- 631-Wetland Scrub (± 17.11 Ac.)
- 641-Freshwater Marsh (± 104.50 Ac.)

ORIGINAL MAP SIZE: 22" x 34"

0 350 700  
Feet

1 inch = 700 feet

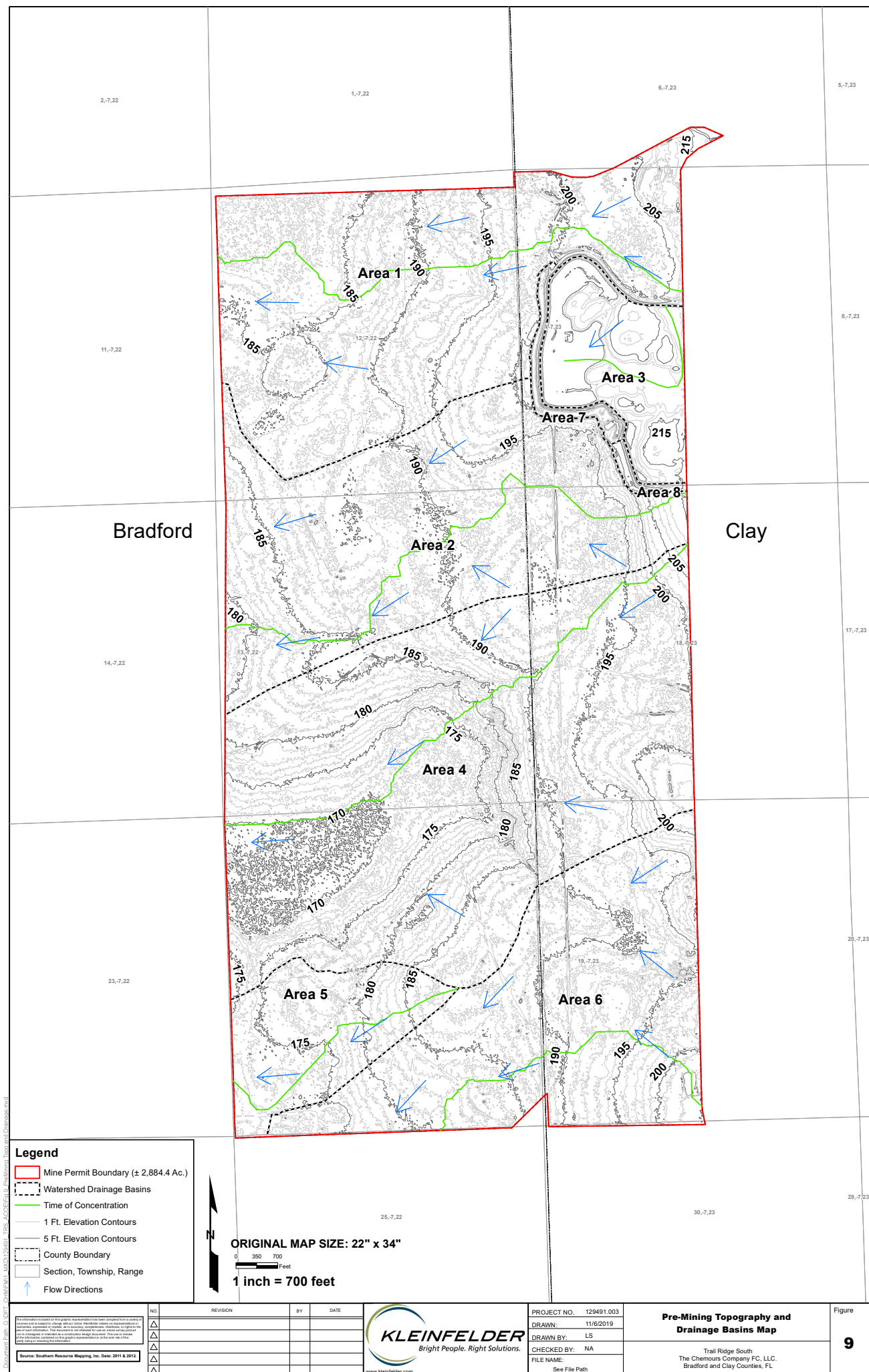
NO.	REVISION	BY	DATE
1			
2			
3			
4			
5			
6			

**KLEINFELDER**  
Bright People. Right Solutions.  
www.kleinfelder.com

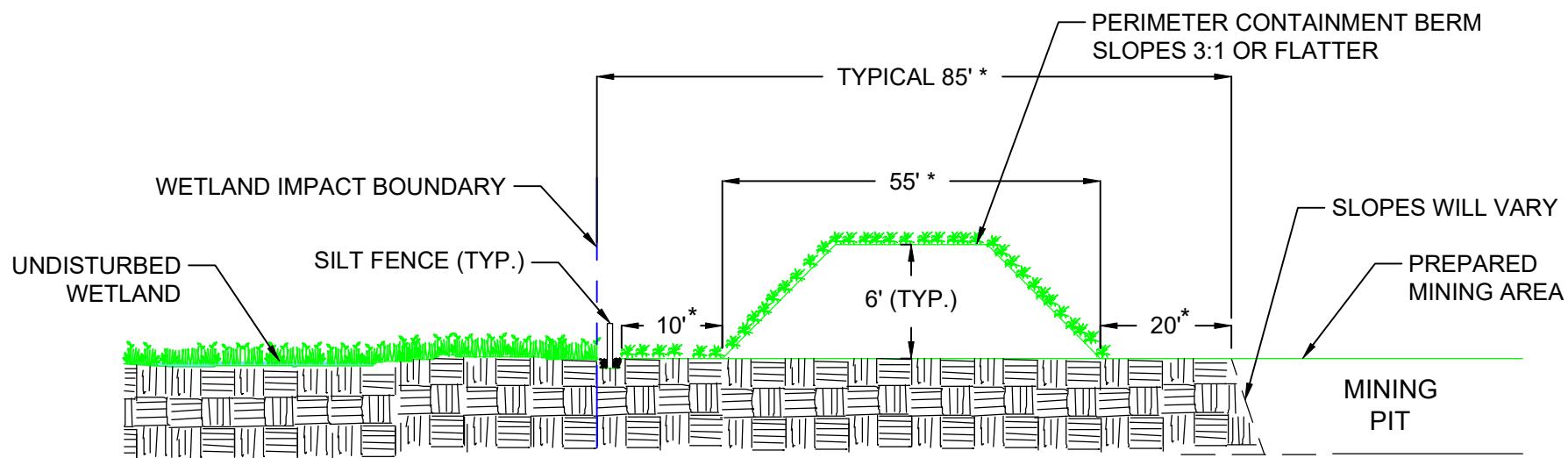
PROJECT NO.	129491.003
DRAWN BY:	LS
CHECKED BY:	NA
FILE NAME:	See File Path

**Pre-Mining Wetlands**

Trail Ridge South  
The Chemours Company FC, LLC.  
Bradford and Clay Counties, FL.







\*DISTANCES MAY CHANGE WITH CHANGE IN SLOPE  
**CROSS SECTION A-B - WETLAND IMPACT BOUNDARY**  
 NOT TO SCALE

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



PROJECT NO.	129491.003
DRAWN BY:	TD
CHECKED BY:	DL
DATE	11-08-2019
FILENAME:	See file path

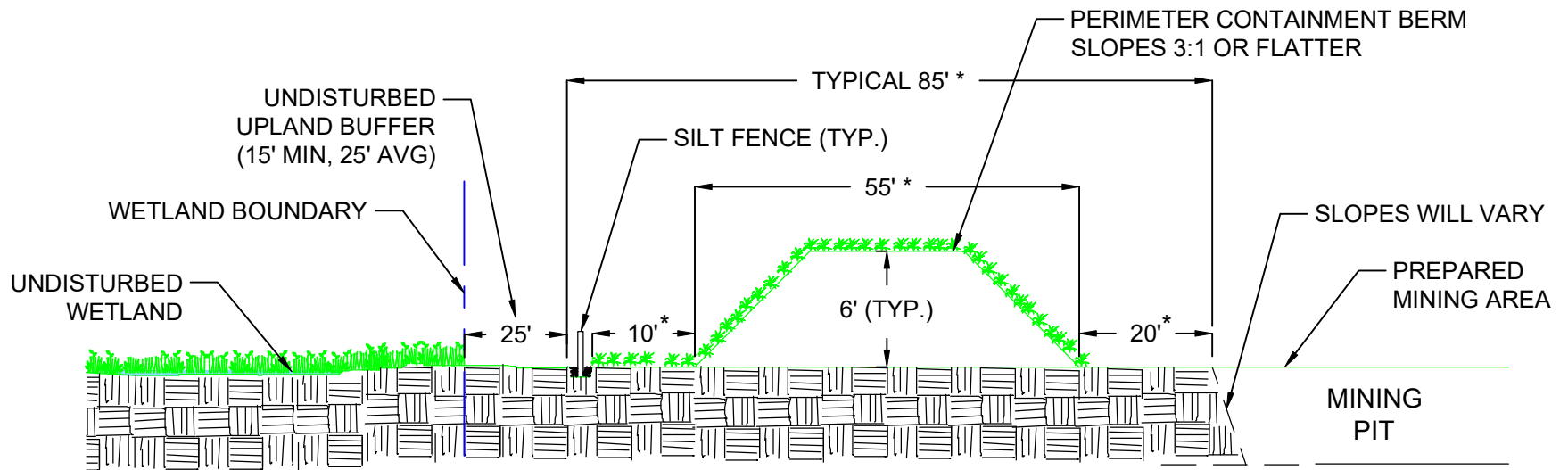
CROSS SECTION A - B

TRAIL RIDGE SOUTH  
 THE CHEMOURS COMPANY FC, LLC.  
 BRADFORD AND CLAY COUNTIES, FL

FIGURE

10A





\*DISTANCES MAY CHANGE WITH CHANGE IN SLOPE

**CROSS SECTION C-D - UNDISTURBED WETLAND BOUNDARY**  
NOT TO SCALE

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



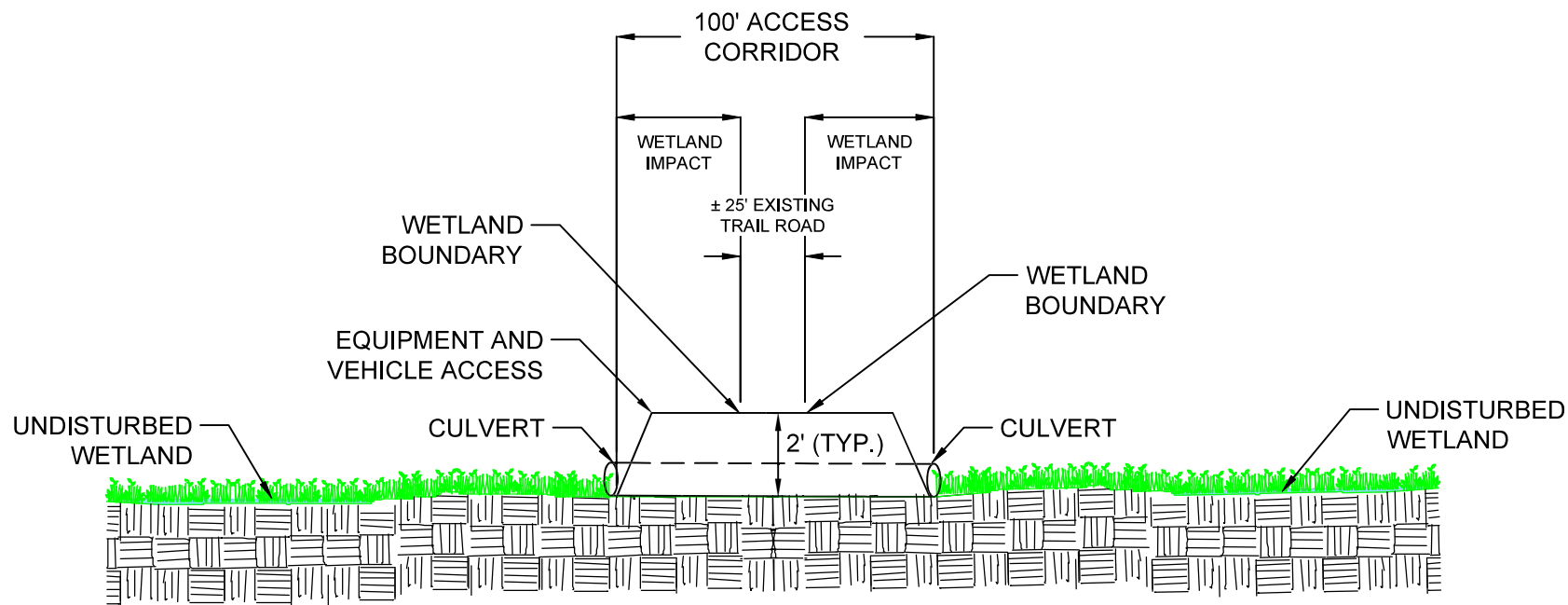
PROJECT NO.	129491.003
DRAWN BY:	TD
CHECKED BY:	DL
DATE	11-08-2019
FILENAME:	See file path

### CROSS SECTION C - D

TRAIL RIDGE SOUTH  
THE CHEMOURS COMPANY FC, LLC.  
BRADFORD AND CLAY COUNTIES, FL

FIGURE

10B



**CROSS SECTION E-F - CULVERTED ROAD WETLAND CROSSING**  
NOT TO SCALE

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



PROJECT NO. 129491.003

DRAWN BY: TD

CHECKED BY: DL

DATE 11-08-2019

FILENAME: See file path

CROSS SECTION E - F

TRAIL RIDGE SOUTH  
THE CHEMOURS COMPANY FC, LLC.  
BRADFORD AND CLAY COUNTIES, FL

FIGURE

10C

CAD FILE: \\kleinfelder.com\Shares\MOUNTDORA-DATA\GIS\CAD\Chemours\_2019\00129491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TRIS\_ACOE\_MineFootprint.dwg LAYOUT: 10D-MINE FOOTPRINT

## Typical Mining Footprint

±80 acres per Mobile Mining Unit (MMU)

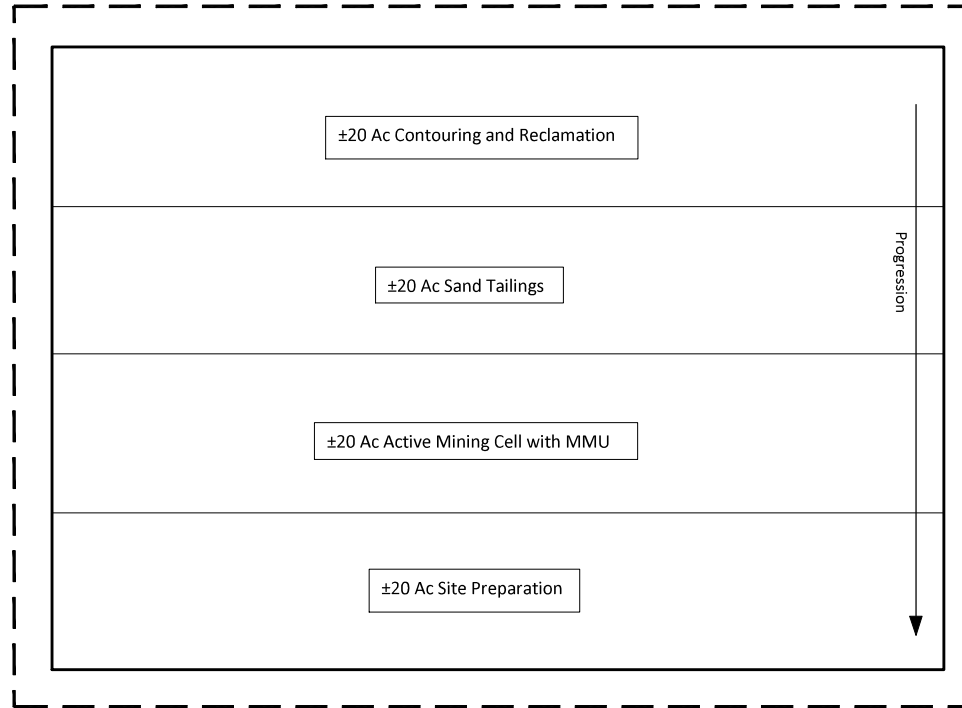
### Contouring and Reclamation

Once the tailings are sufficiently dewatered, reclamation activities, including recontouring of the site (mined area) so the topography is similar to pre-mining conditions, topsoil placement, and revegetation will be conducted. Native herbaceous vegetation will be reestablished from the replaced topsoil. Temporary groundcover may be seeded/planted (millet or rye) to assist with erosion control, if needed.

### Active Mining

The removal of the ore will be in 7- to 10-foot lifts or benches. The excavation will progress through the cells using multiple excavators to feed an MMU. This unit will process the feed and slurry the ore to the near-by MC. The mine cells will be dewatered as excavation progresses and the water incorporated into the process water for reuse. Mining depth will average approximately 22 feet with a maximum depth of 40 feet.

Perimeter Containment Berm



### Sand Tailings Return

Once the ore has been separated from the quartz at the MC, the lighter SG quartz sands (approximately 98% by volume) will become tailings and will be pumped to mined-out cells via HDPE pipeline where they are dewatered and utilized for reclamation activities.

### Site Preparation

All merchantable timber is harvested in a manner consistent with silviculture best management practices (BMPs) and area is "root raked" with all wooden material burned per appropriate State/County regulations. Silt fencing and other applicable erosion control measures will be installed around the proposed mine cells. The top 12 inches of topsoil will be removed and used to form the perimeter or containment berms around the mining area for control of storm water runoff.

The Trail Ridge South mining footprint will consist of two (2) MMUs and a land-based separation plant site, Mobile Concentrator (MC). The MMUs move as mining progresses. The MMUs consist of a feed hopper and shredder to break apart oversize (roots, rocks and hardpan) from the excavated material prior to being slurried and pumped via High-density polyethylene (HDPE) pipeline to a single deck vibrating screen which also moves around the ore body as mining progresses to remove oversize. The oversize material from the screen will be used as backfill in the mined-out cells.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



PROJECT NO. 00129491.003A  
DRAWN BY NCD  
CHECKED BY TRD  
DATE: 11-08-2019  
REVISED:

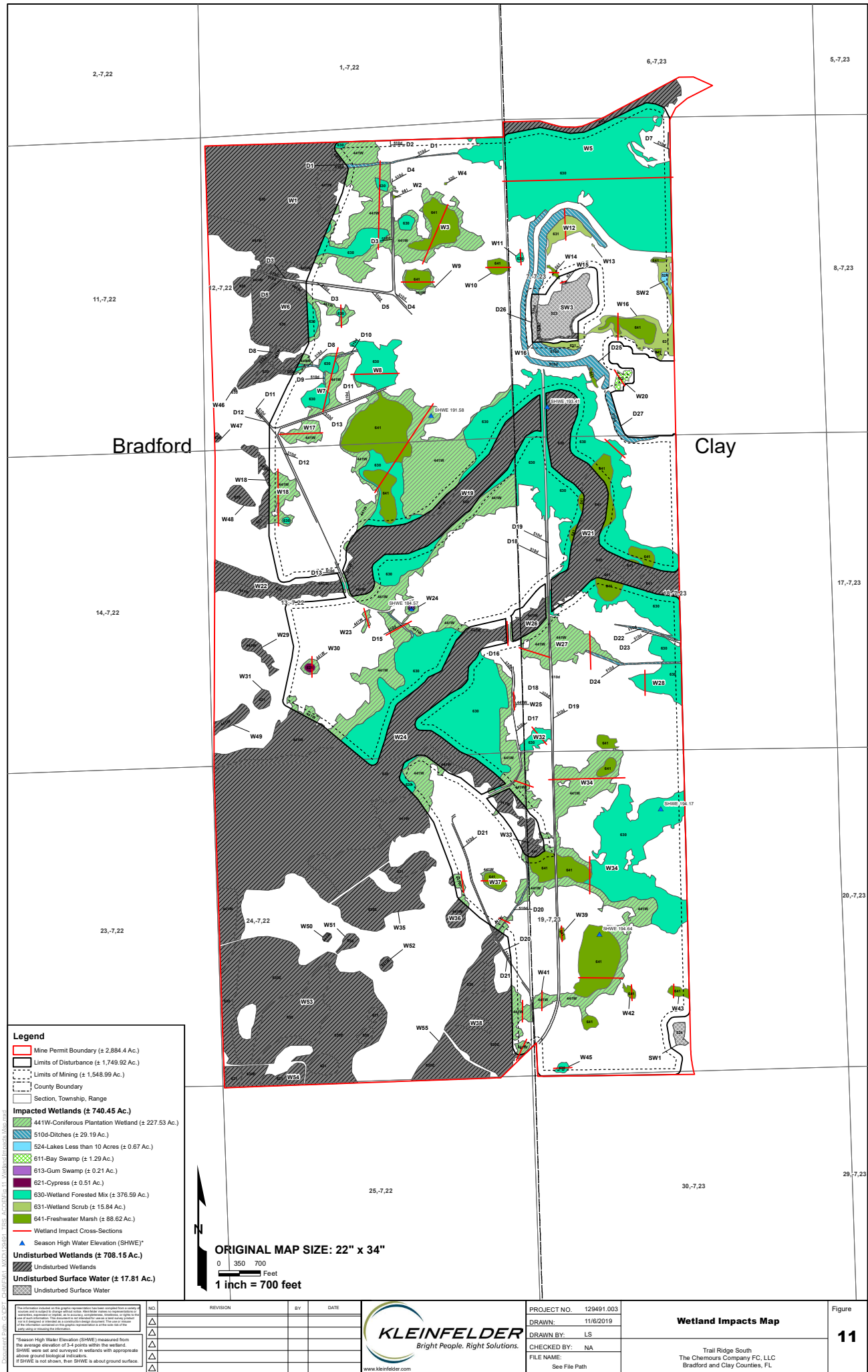
### TYPICAL MINING FOOTPRINT

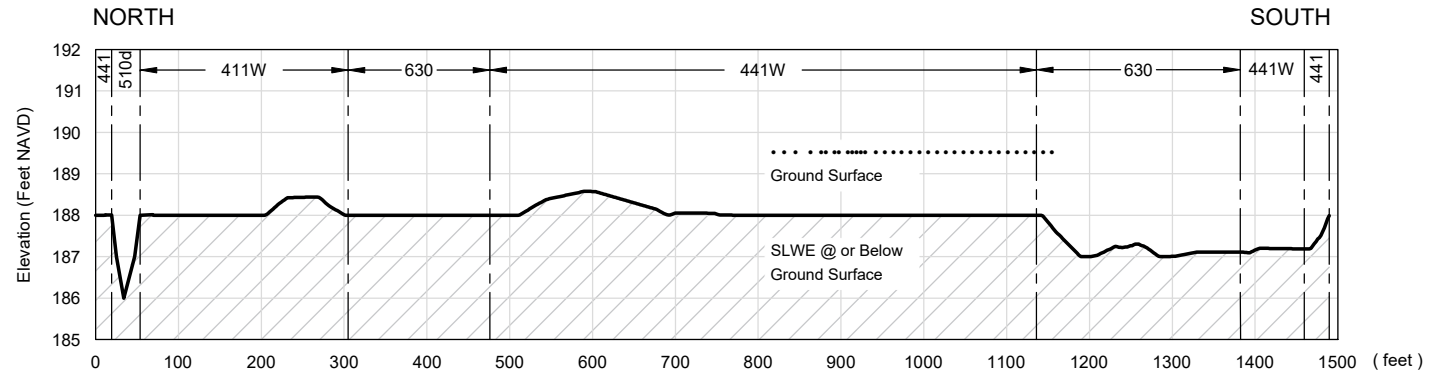
Trail Ridge South  
The Chemours Company FC LLC  
Bradford and Clay Counties, FL

FIGURE

10D











Wetland 1

LEGEND

-  IMPACT
-  UNDISTURBED
-  EXISTING GROUND
-  LAND USE CODE

- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

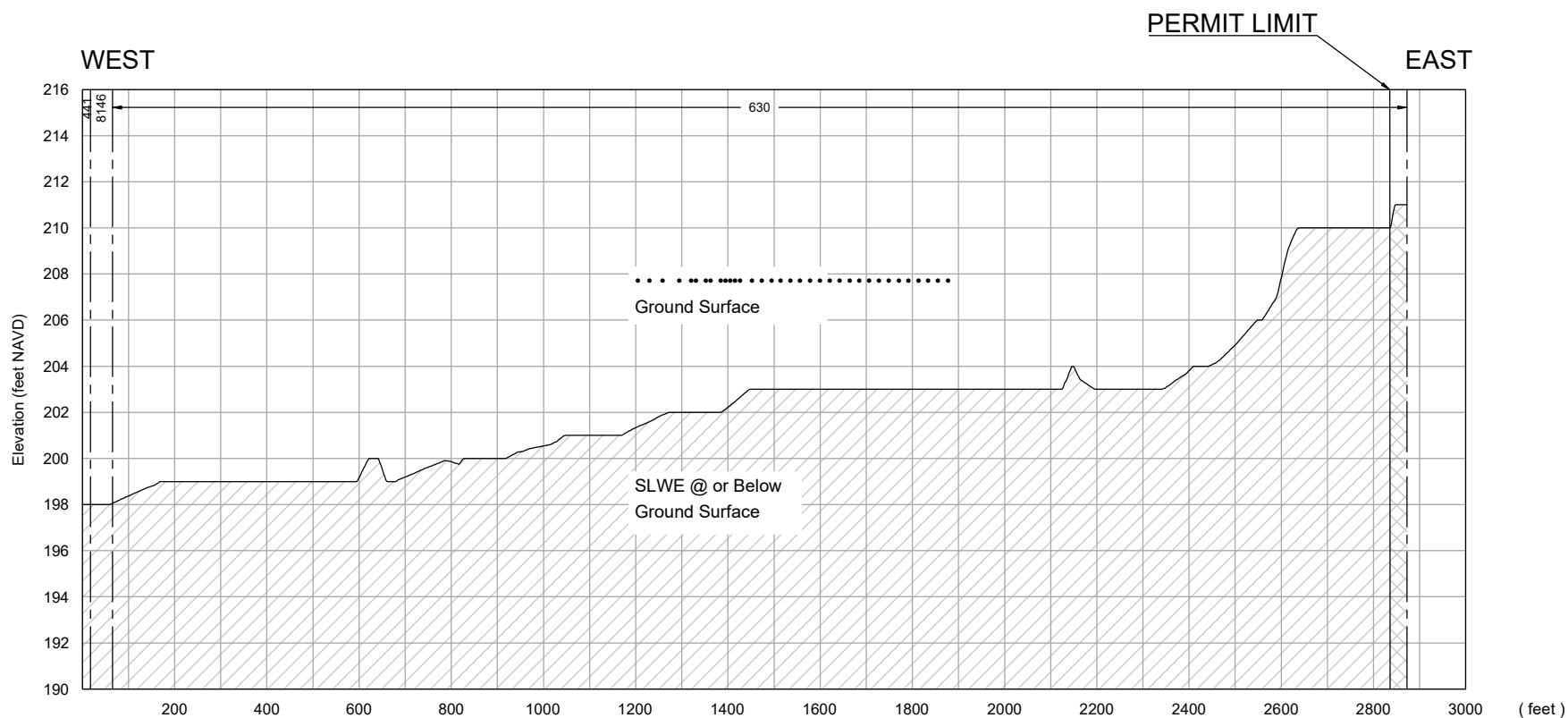
Source: Topography - Southern Resources Mapping, Inc. 2012.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 1 & 3	FIGURE 11A
DRAWN BY YQ	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 1 of 21
CHECKED BY TRD		
DATE: 11-08-2019		
REVISED:		

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



## Wetland 5

### LEGEND

IMPACT

UNDISTURBED

EXISTING GROUND

LAND USE CODE

- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

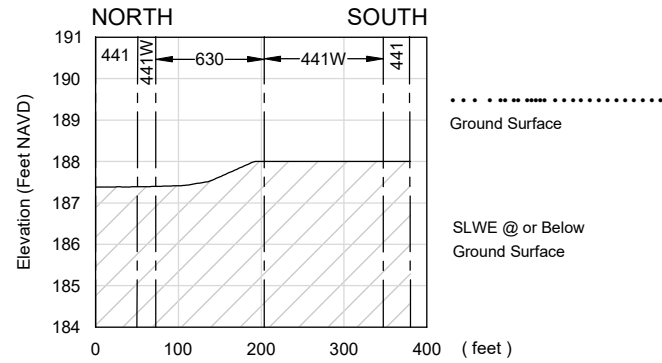
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor as a design or construction document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

Source: Topography - Southern Resources Mapping, Inc. 2012.

SCALE:  
HORIZ. 1"= 100'  
VERT. 1"=5'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 5	FIGURE 11B
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-08-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
REVISED:		PAGE: 2 of 21



## LEGEND

- IMPACT
- UNDISTURBED
- EXISTING GROUND
- LAND USE CODE

- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

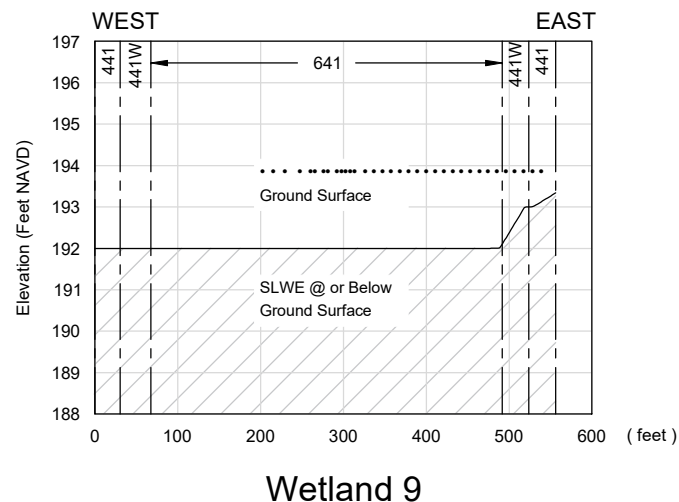
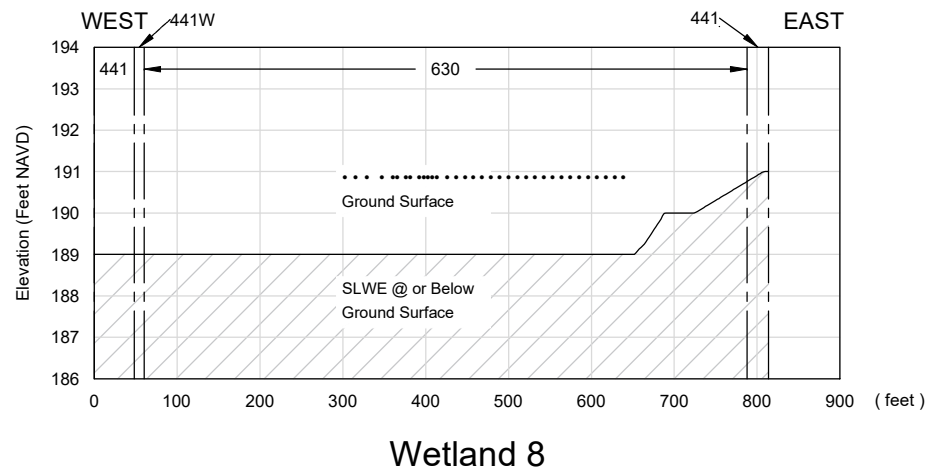
Source: Topography - Southern Resources Mapping, Inc. 2012.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 6 & 7	FIGURE  11C
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 3 of 21
DATE: 11-08-2019		
REVISED:		

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



## LEGEND

- IMPACT
- UNDISTURBED
- EXISTING GROUND
- LAND USE CODE

- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

Source: Topography - Southern Resources Mapping, Inc. 2012.

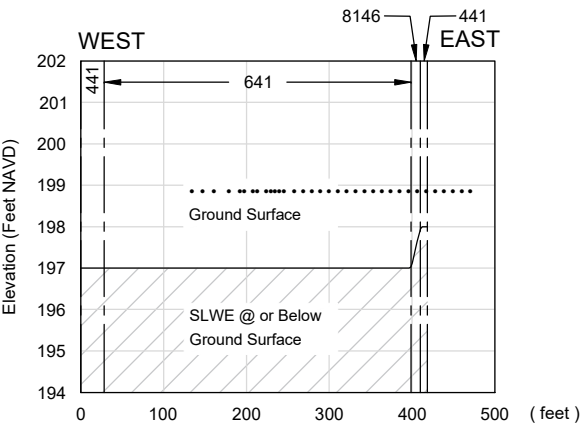
SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



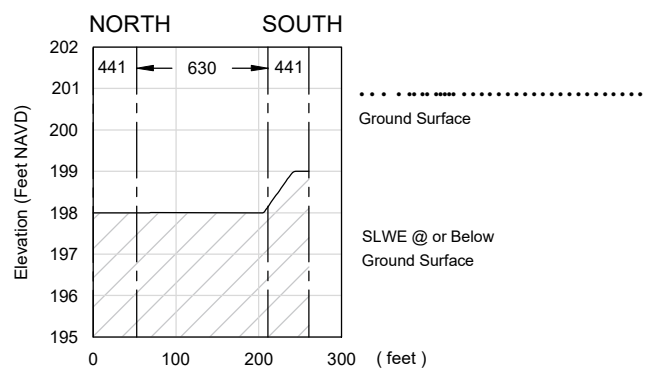
PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 8 & 9	FIGURE  <b>11D</b>
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 4 of 21
DATE: 11-08-2019		
REVISED:		

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

CAD FILE: \\kleinfelder.com\Shares\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\001284191\_003A\_Chemours-FC\CY2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 11/02/2019 12:36 PM BY: tm damannas LAYOUT: Wetland Impact 10 & 11







Wetland 10



Wetland 11

LEGEND

-  IMPACT
-  UNDISTURBED
-  EXISTING GROUND
-  LAND USE CODE
- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

Source: Topography - Southern Resources Mapping, Inc. 2012.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 10 & 11	FIGURE  11E
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 5 of 21
DATE: 11-08-2019		
REVISED:		

CAD FILE: \\kleinfelder.com\Shares\MOUNTDORA-DATA\GIS\CAD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 1/10/2019 12:38 PM BY: tm damannas LAYOUT: Wetland Impact 12 & 14

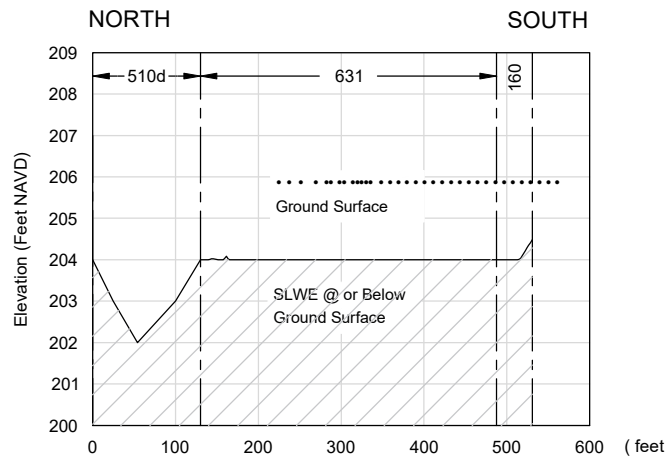
LEGEND

- IMPACT
- UNDISTURBED
- EXISTING GROUND
- LAND USE CODE

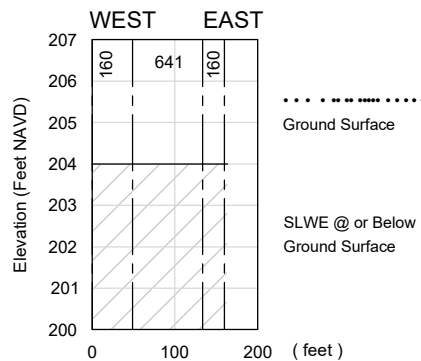
- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

Source: Topography - Southern Resources Mapping, Inc. 2012.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



Wetland 12



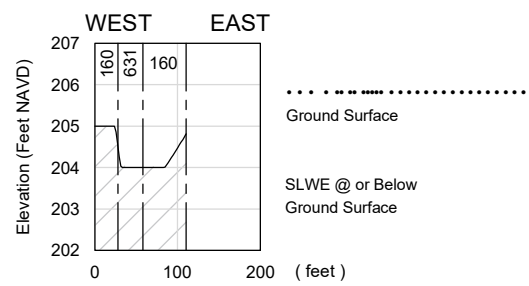
Wetland 14

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'







PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 12 & 14	FIGURE 11F
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-08-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
REVISED:		PAGE: 6 of 21

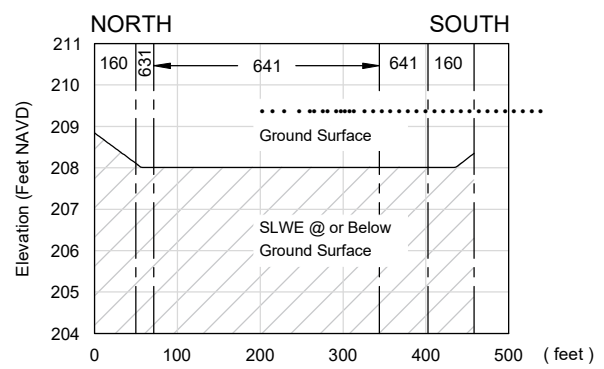
CAD FILE: \\kleinfelder.com\Shares\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 1/10/2019 12:38 PM BY: tm damannas LAYOUT: Wetland Impact 15 & 16



Wetland 15

LEGEND

-  IMPACT
-  UNDISTURBED
-  EXISTING GROUND
-  LAND USE CODE
- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails



Wetland 16

Source: Topography - Southern Resources Mapping, Inc. 2012.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

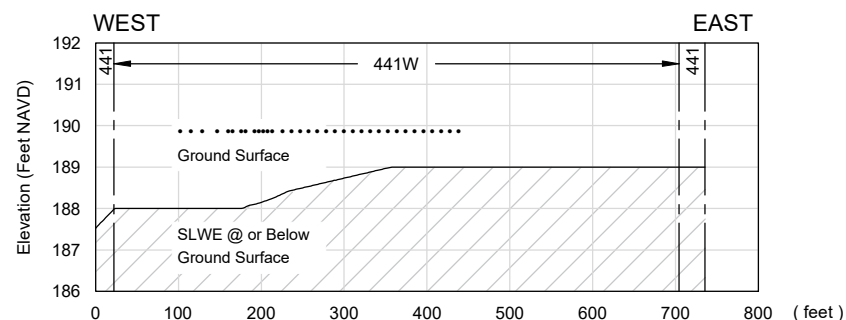
SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 15 & 16	FIGURE  11G
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
DATE: 11-08-2019		
REVISED:		PAGE: 7 of 21







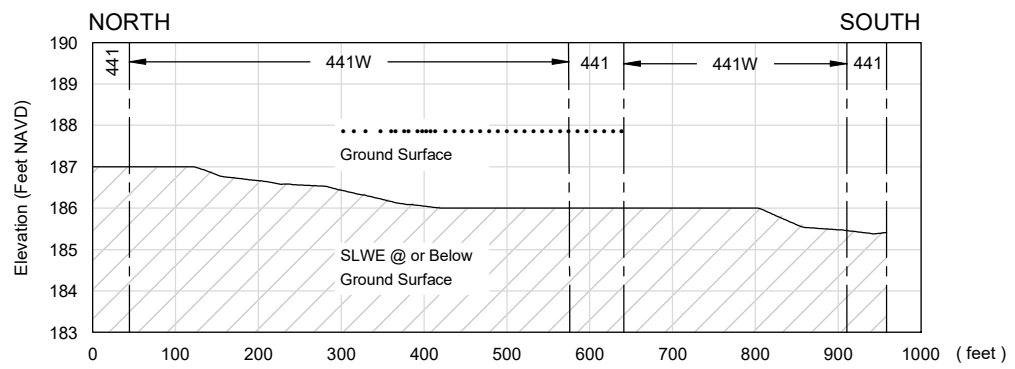
CAD FILE: \\kleinfelder.com\Share\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\001284191\_003A\_Chemours-FC\CY2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 1/10/2019 12:38 PM BY: tm damann LAYOUT: Wetland Impact 17 & 18



Wetland 17

LEGEND

-  IMPACT
-  UNDISTURBED
-  EXISTING GROUND
-  LAND USE CODE
- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails



Wetland 18

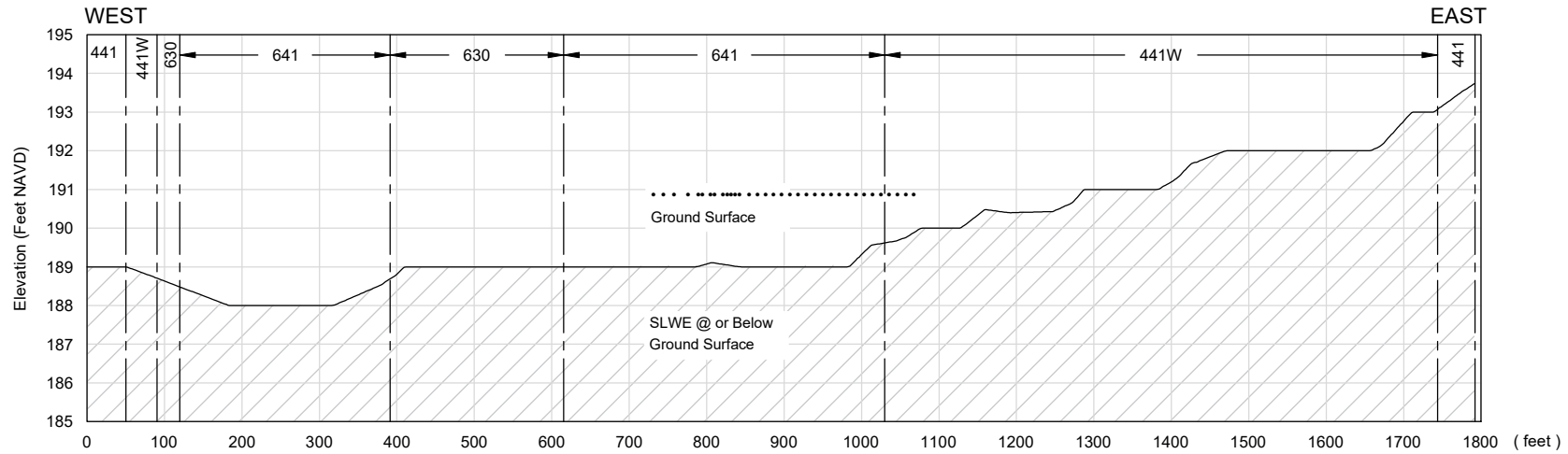
Source: Topography - Southern Resources Mapping, Inc. 2012.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'







PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 17 & 18	FIGURE  11H
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 8 of 21
DATE: 11-08-2019		
REVISED:		



Wetland 19

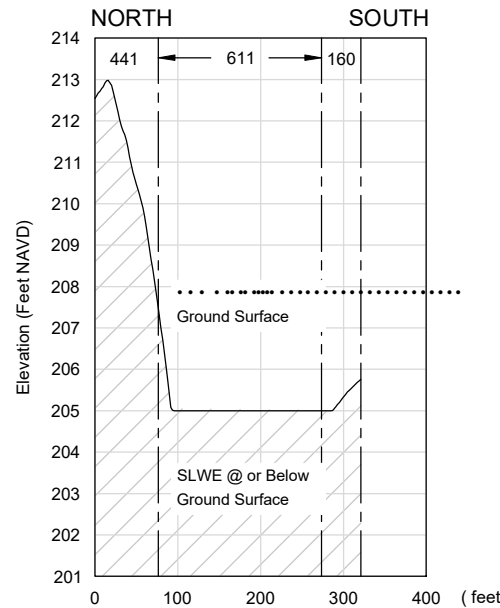
LEGEND

-  IMPACT
-  UNDISTURBED
-  EXISTING GROUND
-  LAND USE CODE

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'

Source: Topography - Southern Resources Mapping, Inc. 2012.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



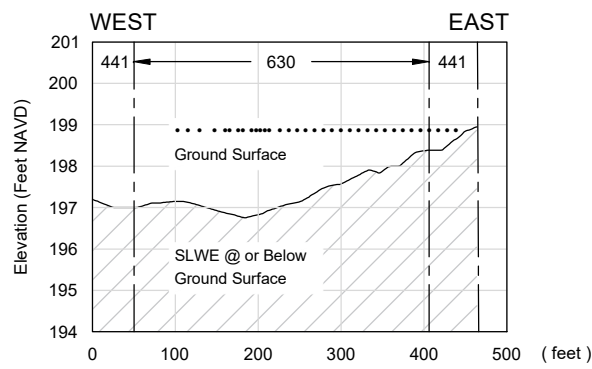
Wetland 20

- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

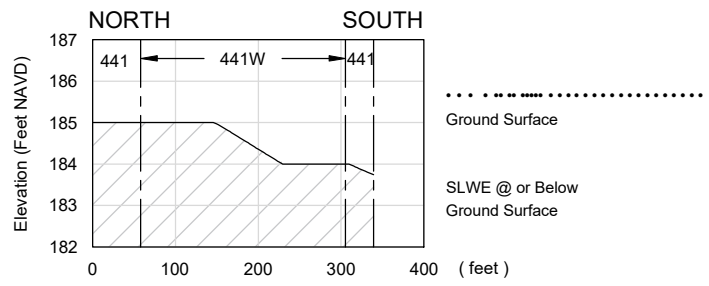


PROJECT NO. 00129491.003A		WETLAND IMPACT CROSS-SECTION WETLAND 19 & 20	FIGURE
DRAWN BY	YQ		111
CHECKED BY	TRD		
DATE:	11-08-2019		
REVISED:			
		Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 9 of 21

CAD FILE: \\kleinfelder.com\Share\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CADD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 1/10/2019 12:38 PM BY: tm damannas LAYOUT: Wetland Impact 21 & 23



Wetland 21



Wetland 23

LEGEND

- IMPACT
  - UNDISTURBED
  - EXISTING GROUND
  - LAND USE CODE
- 160 - Extractive  
173 - Military  
441 - Coniferous Plantation  
441W- Coniferous Plantation Wetland  
510d - Ditch/Canal  
611 - Bay Swamps  
630 - Wetland Forested Mixed  
631 - Wetland Scrub  
641 - Freshwater Marsh  
8146- Primitive Roads/Trails

Source: Topography - Southern Resources Mapping, Inc. 2012.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 21 & 23	FIGURE 11J
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 10 of 21
DATE: 11-08-2019		
REVISED:		

CAD FILE: \\kleinfelder.com\Share\PROJECTS\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FC-CY2019 Trail Ridge South\CADD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 11/02/2019 12:38 PM BY: tm.damarras LAYOUT: Wetland Impact 24

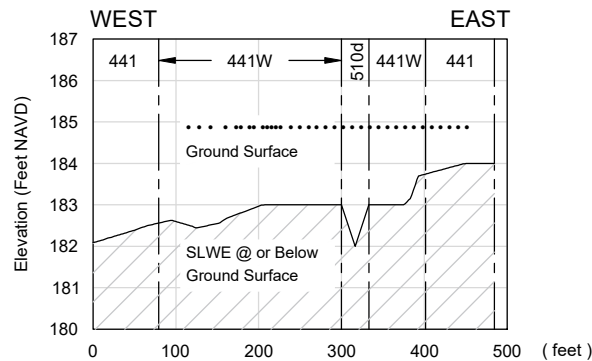
LEGEND

- IMPACT
- UNDISTURBED
- EXISTING GROUND
- LAND USE CODE

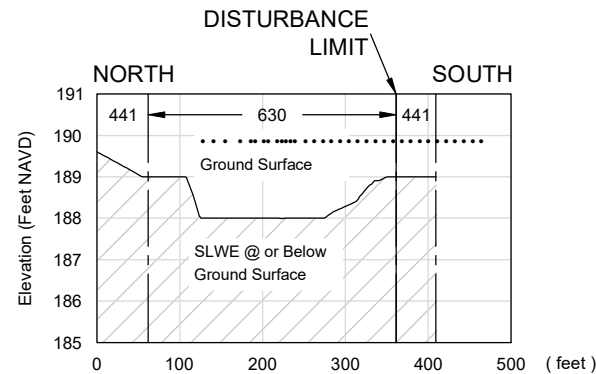
- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

Source: Topography - Southern Resources Mapping, Inc. 2012.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



Wetland 24-1



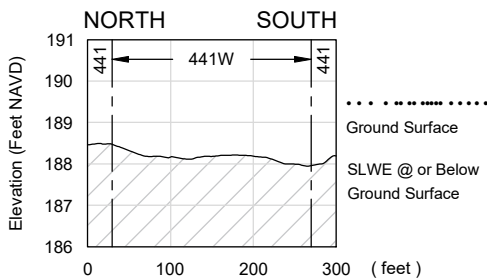
Wetland 24-2

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 24	FIGURE 11K
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-08-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
REVISED:		PAGE: 11 of 21

CAD FILE: \\kleinfelder.com\Shares\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FC\2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 1/10/2019 12:36 PM BY: tm damannas LAYOUT: Wetland Impact 25 & 26

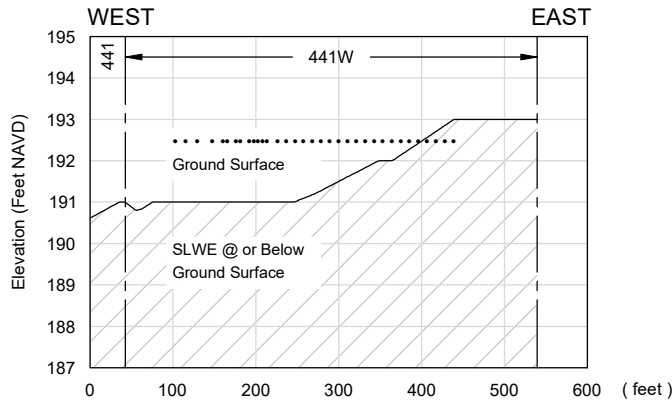


Wetland 25

LEGEND

- IMPACT
- UNDISTURBED
- EXISTING GROUND
- LAND USE CODE

- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails



Wetland 26

Source: Topography - Southern Resources Mapping, Inc. 2012.

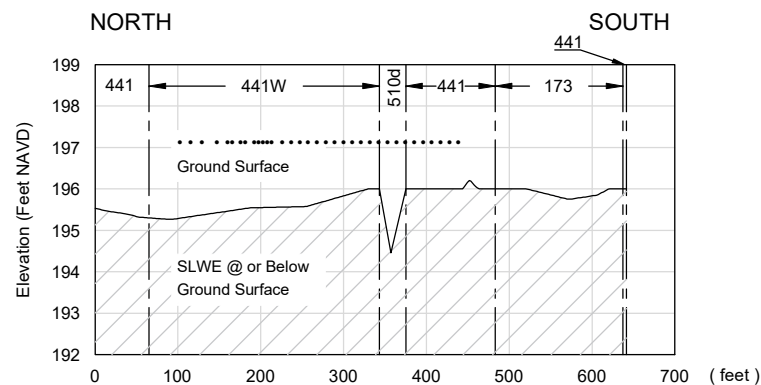
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'







PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 25 & 26	FIGURE 11L
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 12 of 21
DATE: 11-08-2019		
REVISED:		

CAD FILE: \\kleinfelder.com\Shares\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FC\CY2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 1/10/2019 12:38 PM BY: tm damann

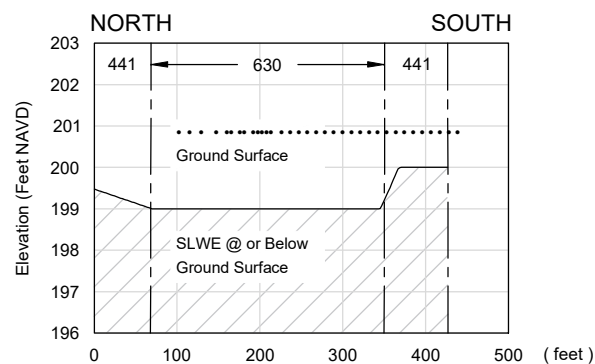


Wetland 27

LEGEND

-  IMPACT
-  UNDISTURBED
-  EXISTING GROUND
-  LAND USE CODE

- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails



Wetland 28

Source: Topography - Southern Resources Mapping, Inc. 2012.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 27 & 28	FIGURE  11M
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 13 of 21
DATE: 11-08-2019		
REVISED:		

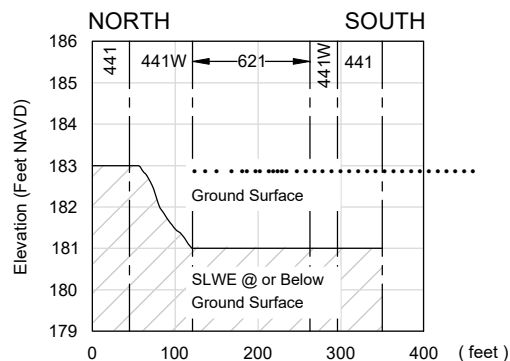
# LEGEND

- IMPACT
- UNDISTURBED
- EXISTING GROUND
- LAND USE CODE

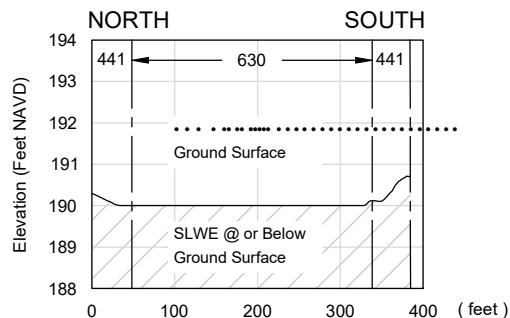
- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

Source: Topography - Southern Resources Mapping, Inc. 2012.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



Wetland 30







Wetland 32

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'

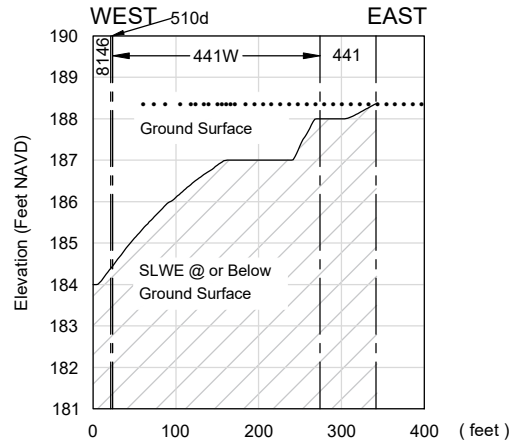


PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION	FIGURE
DRAWN BY YQ	WETLAND 30 & 32	11N
CHECKED BY TRD	Trail Ridge South	
DATE: 11-08-2019	The Chemours Company FC LLC	
REVISED:	Bradford and Clay Counties, FL	PAGE: 14 of 21

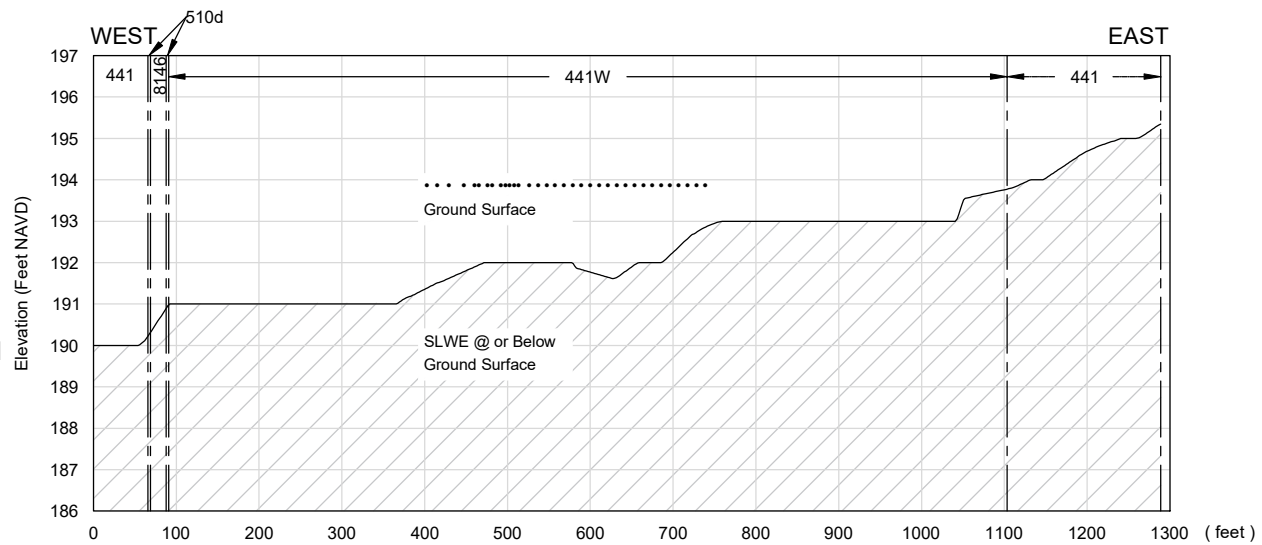
## LEGEND

-  IMPACT
-  UNDISTURBED
-  EXISTING GROUND
-  LAND USE CODE

- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails



Wetland 33



Wetland 34-1

Source: Topography - Southern Resources Mapping, Inc. 2012.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'







PROJECT NO. 00129491.003A		WETLAND IMPACT CROSS-SECTION WETLAND 33 & 34	FIGURE
DRAWN BY	YQ		110
CHECKED BY	TRD		
DATE:	11-08-2019		
REVISED:			
		Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 15 of 21

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



## LEGEND

-  IMPACT
-  UNDISTURBED
-  EXISTING GROUND
-  LAND USE CODE

- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

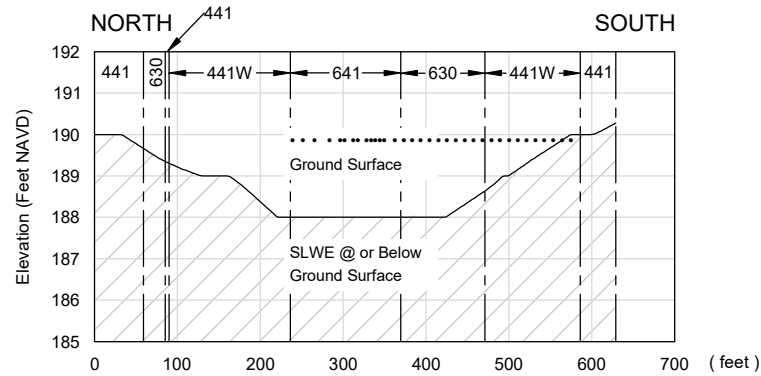
Source: Topography - Southern Resources Mapping, Inc. 2012.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

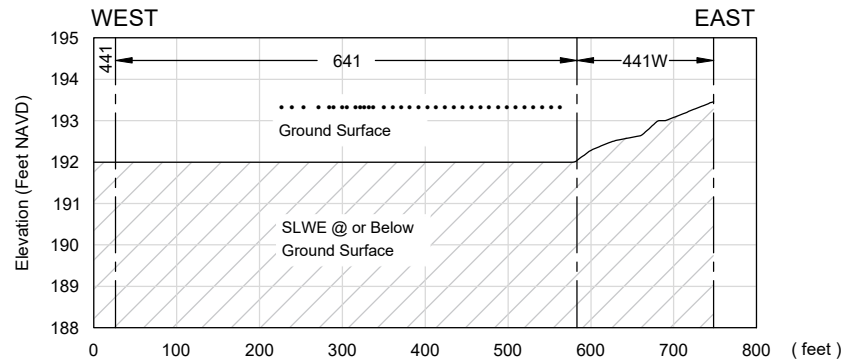
SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00.129491.003A	WETLAND IMPACT CROSS-SECTION		FIGURE
DRAWN BY YQ	WETLAND 34		
CHECKED BY TRD	Trail Ridge South		11P
DATE: 11-08-2019	The Chemours Company FC LLC		
REVISED:	Bradford and Clay Counties, FL		
			PAGE: 16 of 21



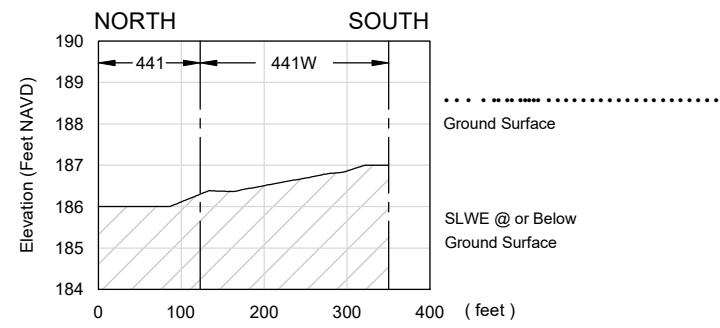
Wetland 34-2



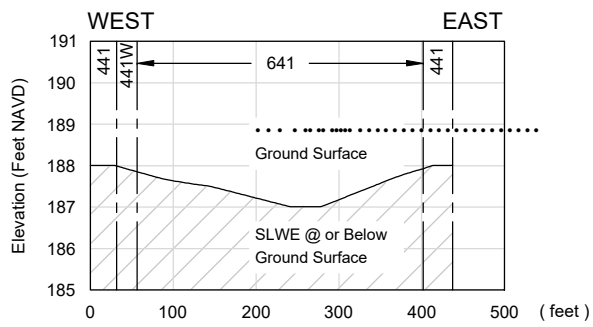
Wetland-34-3

Trail Ridge South  
The Chemours Company FC LLC  
Bradford and Clay Counties, FL

CAD FILE: \\kleinfelder.com\Share\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\001284191\_003A\_Chemours-FC\CY2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 1/10/2019 12:36 PM BY: tm damannas LAYOUT: Wetland Impact 36 & 37



Wetland 36



Wetland 37

LEGEND

- IMPACT
- UNDISTURBED
- EXISTING GROUND
- LAND USE CODE
- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

Source: Topography - Southern Resources Mapping, Inc. 2012.

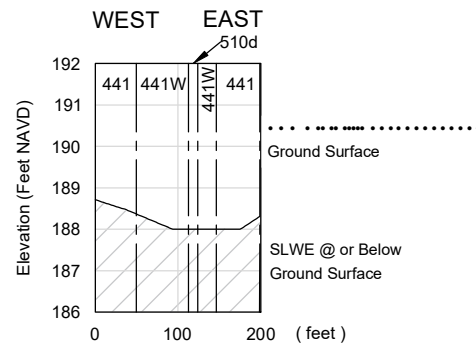
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'







PROJECT NO. 00129481.003A	WETLAND IMPACT CROSS-SECTION WETLAND 36 & 37	FIGURE 11Q
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 17 of 21
DATE: 11-08-2019		
REVISED:		

CAD FILE: \\kleinfelder.com\Share\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 11/02/2019 12:38 PM BY: tm damannas LAYOUT: Wetland Impact 38

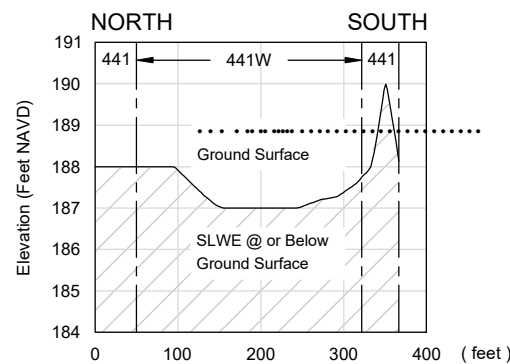


Wetland 38 -1

## LEGEND

-  IMPACT
-  UNDISTURBED
-  EXISTING GROUND
-  LAND USE CODE

- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails



Wetland 38-2

Source: Topography - Southern Resources  
Mapping, Inc. 2012.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 38	FIGURE  11R
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 18 of 21
DATE: 11-08-2019		
REVISED:		

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

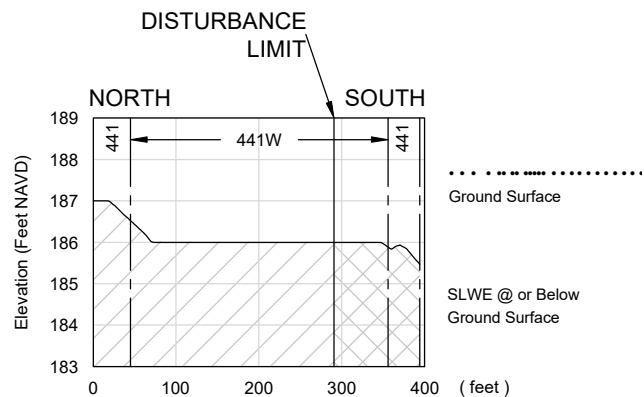
CAD FILE: \\kleinfelder.com\Shares\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\001284191\_003A\_Chemours-FC\2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 1/10/2019 12:39 PM BY: tm damaras LAYOUT: Wetland Impact 38 & 39

LEGEND

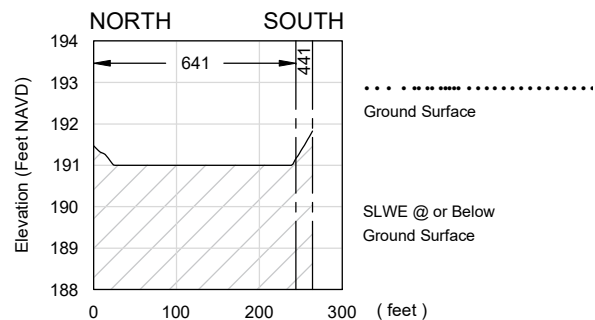
- IMPACT
- UNDISTURBED
- EXISTING GROUND
- LAND USE CODE
- 160 - Extractive
- 173 - Military
- 441 - Coniferous Plantation
- 441W- Coniferous Plantation Wetland
- 510d - Ditch/Canal
- 611 - Bay Swamps
- 630 - Wetland Forested Mixed
- 631 - Wetland Scrub
- 641 - Freshwater Marsh
- 8146- Primitive Roads/Trails

Source: Topography - Southern Resources Mapping, Inc. 2012.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



Wetland 38-3



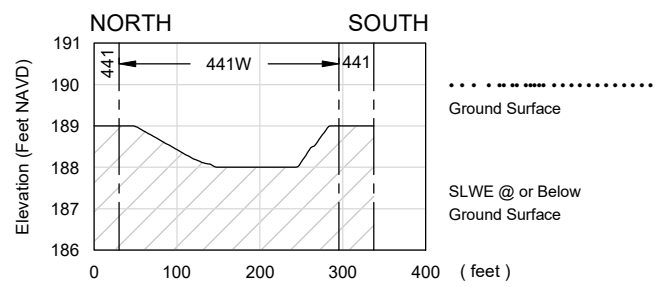
Wetland 39

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 38 & 39	FIGURE 11S
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 19 of 21
DATE: 11-08-2019		
REVISED:		

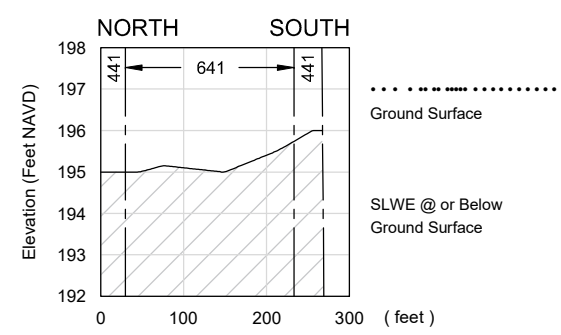
CAD FILE: \\kleinfelder.com\Shares\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\001284191\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg PLOTTED: 1/10/2019 12:36 PM BY: tm damannas LAYOUT: Wetland Impact 41 & 42



Wetland 41

LEGEND

- IMPACT
  - UNDISTURBED
  - EXISTING GROUND
  - LAND USE CODE
- 160 - Extractive  
173 - Military  
441 - Coniferous Plantation  
441W- Coniferous Plantation Wetland  
510d - Ditch/Canal  
611 - Bay Swamps  
630 - Wetland Forested Mixed  
631 - Wetland Scrub  
641 - Freshwater Marsh  
8146- Primitive Roads/Trails



Wetland 42

Source: Topography - Southern Resources Mapping, Inc. 2012.

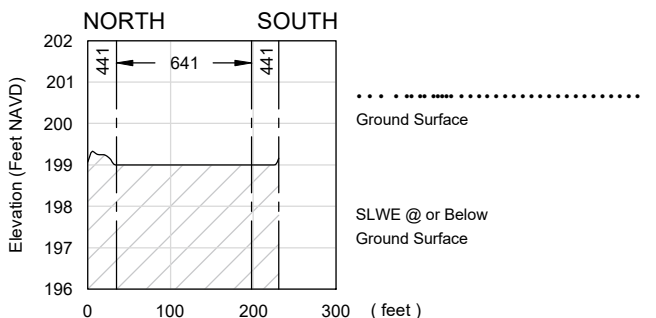
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION WETLAND 41 & 42	FIGURE 11T
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-08-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
REVISED:		PAGE: 20 of 21

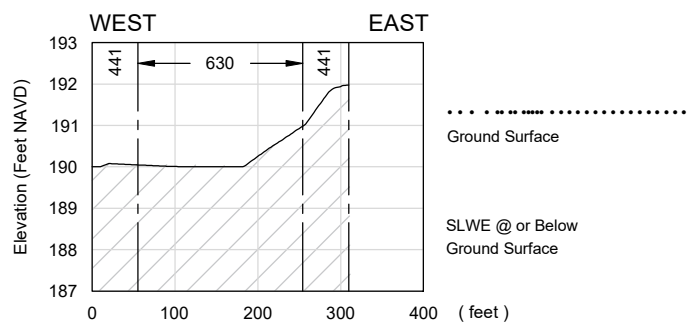
CAD FILE: \\kleinfelder.com\Shares\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_WetlandImpact\_XS.dwg LAYOUT: Wetland Impact 43 & 45 PLOTTED: 1/10/2019 12:38 PM BY: tm damann



Wetland 43

LEGEND

- IMPACT
  - UNDISTURBED
  - EXISTING GROUND
  - LAND USE CODE
- 160 - Extractive  
173 - Military  
441 - Coniferous Plantation  
441W- Coniferous Plantation Wetland  
510d - Ditch/Canal  
611 - Bay Swamps  
630 - Wetland Forested Mixed  
631 - Wetland Scrub  
641 - Freshwater Marsh  
8146- Primitive Roads/Trails



Wetland 45

Source: Topography - Southern Resources Mapping, Inc. 2012.

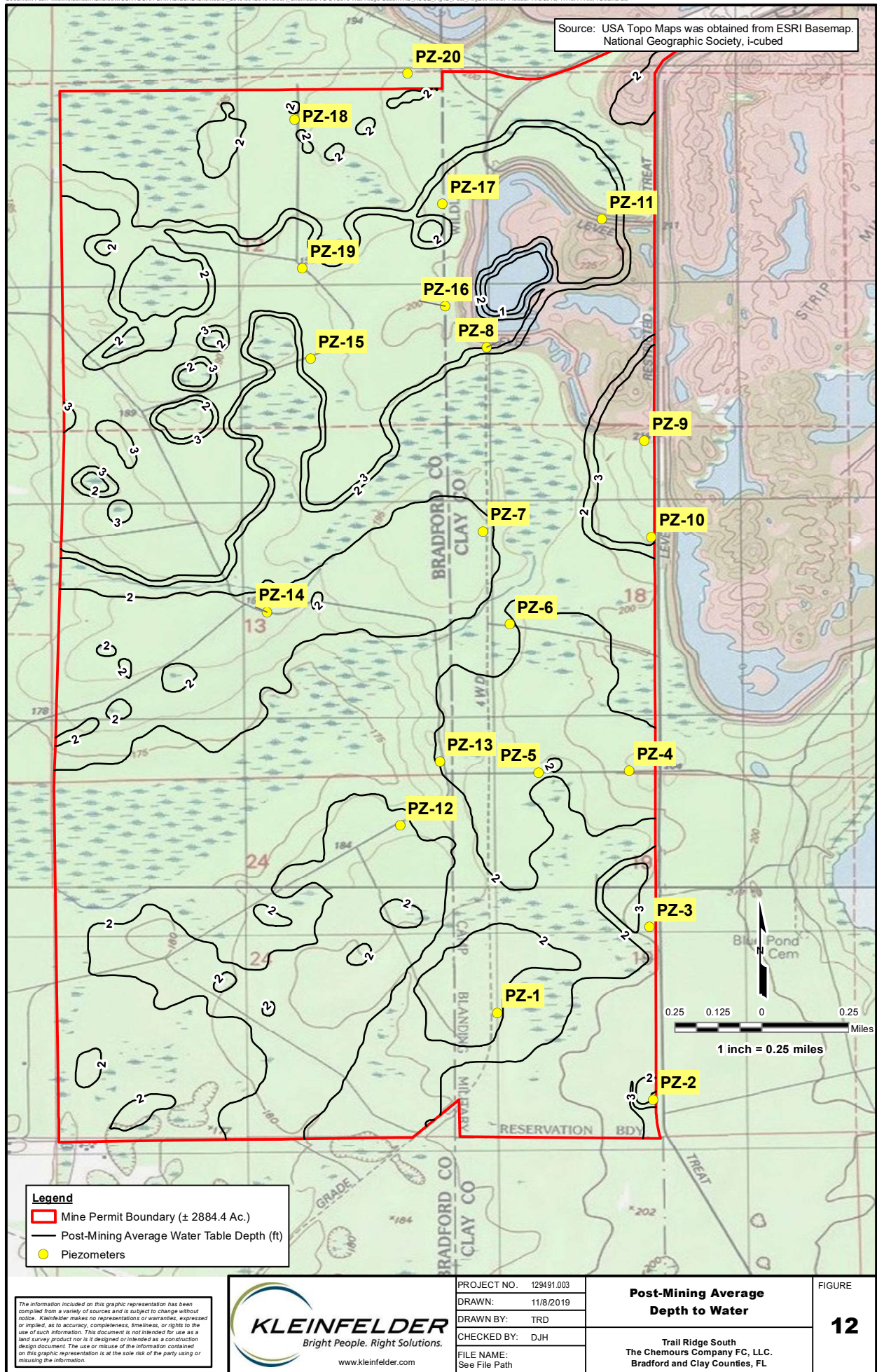
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND IMPACT CROSS-SECTION	FIGURE
DRAWN BY YQ	WETLAND 43 & 45	11U
CHECKED BY TRD	Trail Ridge South	
DATE: 11-08-2019	The Chemours Company FC LLC	
REVISED:	Bradford and Clay Counties, FL	
		PAGE: 21 of 21





The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfielder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a legal survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



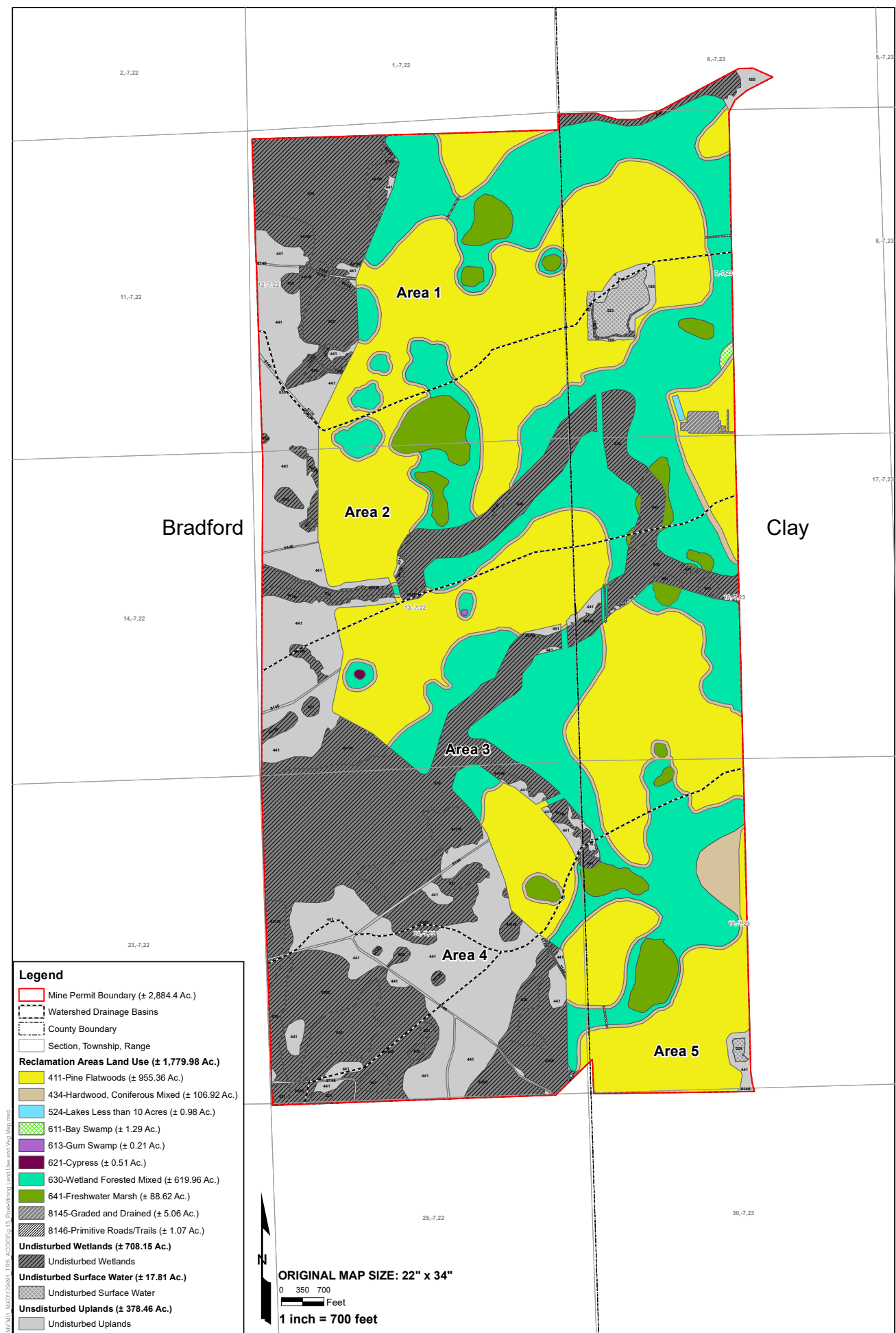
PROJECT NO. 129491.003  
DRAWN: 11/8/2019  
DRAWN BY: TRD  
CHECKED BY: DJH  
FILE NAME: See File Path

**Post-Mining Average  
Depth to Water**

Trail Ridge South  
The Chemours Company FC, LLC.  
Bradford and Clay Counties, FL

FIGURE

**12**



**Legend**

- Mine Permit Boundary (± 2,884.4 Ac.)
- Watershed Drainage Basins
- County Boundary
- Section, Township, Range
- Reclamation Areas Land Use (± 1,779.98 Ac.)**
  - 411-Pine Flatwoods (± 955.36 Ac.)
  - 434-Hardwood, Coniferous Mixed (± 106.92 Ac.)
  - 524-Lakes Less than 10 Acres (± 0.98 Ac.)
  - 611-Bay Swamp (± 1.29 Ac.)
  - 613-Gum Swamp (± 0.21 Ac.)
  - 621-Cypress (± 0.51 Ac.)
  - 630-Wetland Forested Mixed (± 619.96 Ac.)
  - 641-Freshwater Marsh (± 88.62 Ac.)
  - 8145-Graded and Drained (± 5.06 Ac.)
  - 8146-Primitive Roads/Trails (± 1.07 Ac.)
- Undisturbed Wetlands (± 708.15 Ac.)**
  - Undisturbed Wetlands
- Undisturbed Surface Water (± 17.81 Ac.)**
  - Undisturbed Surface Water
- Undisturbed Uplands (± 378.46 Ac.)**
  - Undisturbed Uplands

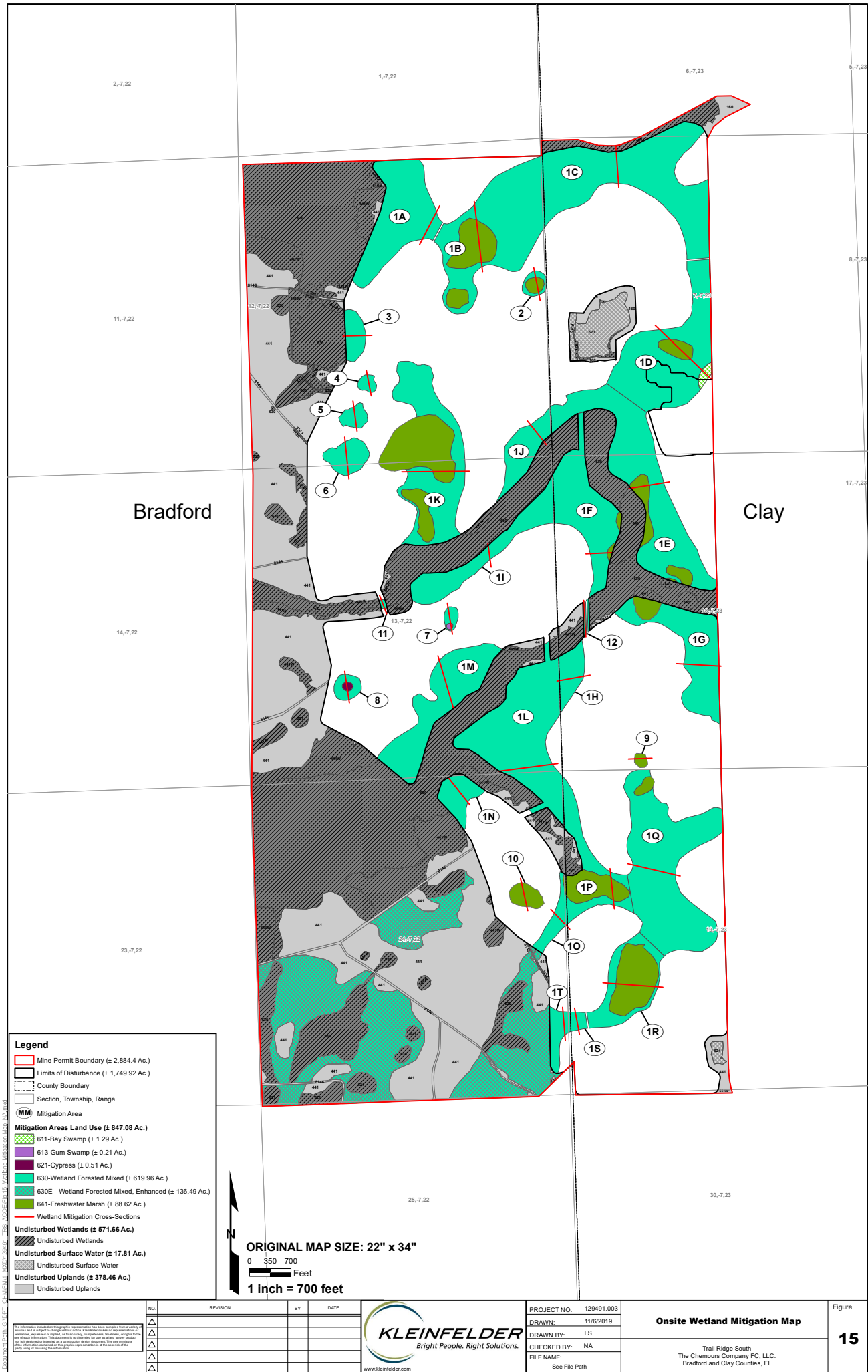
ORIGINAL MAP SIZE: 22" x 34"

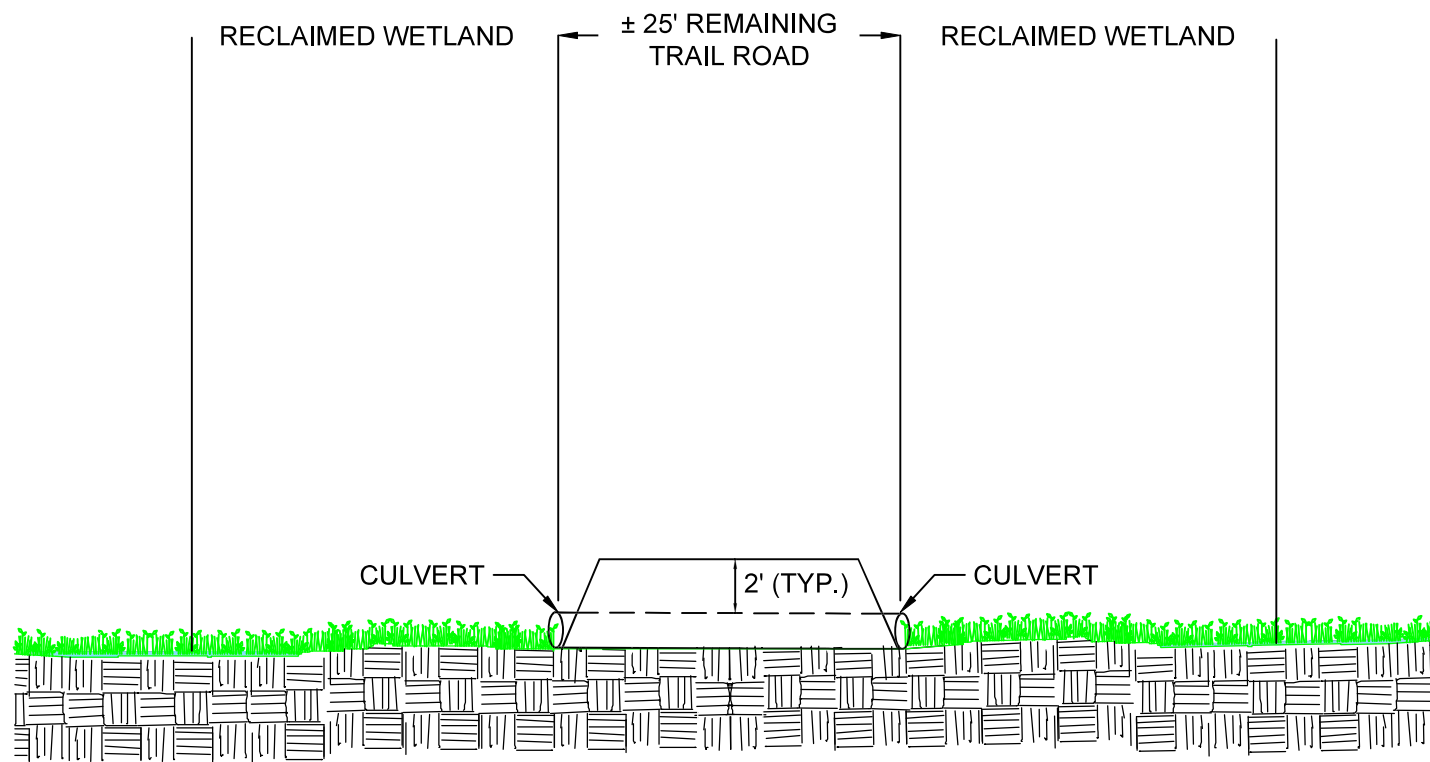
0 350 700 Feet

1 inch = 700 feet









**CROSS SECTION G-H - CULVERTED ROAD WETLAND CROSSING**  
NOT TO SCALE

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



PROJECT NO. 129491.003

DRAWN BY: YQ

CHECKED BY: TRD

DATE 11-08-2019

FILENAME: See file path

CROSS SECTION G - H

TRAIL RIDGE SOUTH  
THE CHEMOURS COMPANY FC, LLC.  
BRADFORD AND CLAY COUNTIES, FL

FIGURE

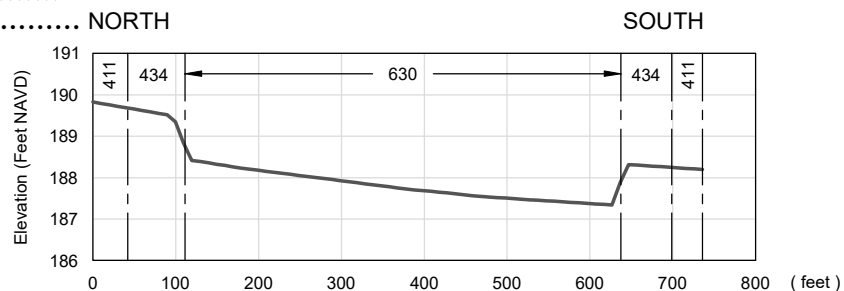
16

CAD FILE: \\weinfelder.com\Shares\MOUNTDORA-DATA\GIS\CAD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_Prot\_LU\_CrossSections.dwg LAYOUT: Wetland Mitigation1A & 1B PLOTTED: 11/12/2019 10:29 AM BY: tm.demaris

Note:

.....

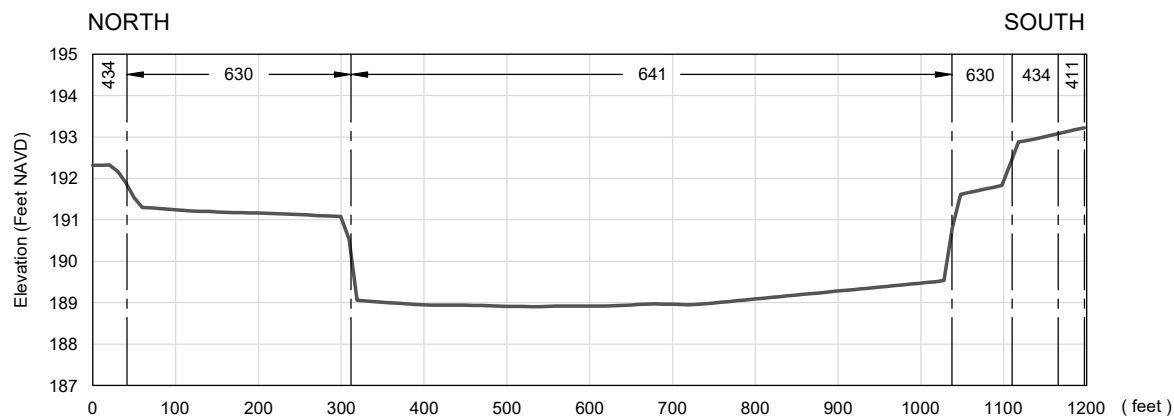
SLWE @ Or Below Ground Surface



## LEGEND

- POST-RECLAMATION GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 1A & 1B	FIGURE 16A
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-12-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
REVISED:		PAGE: 1 of 16

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

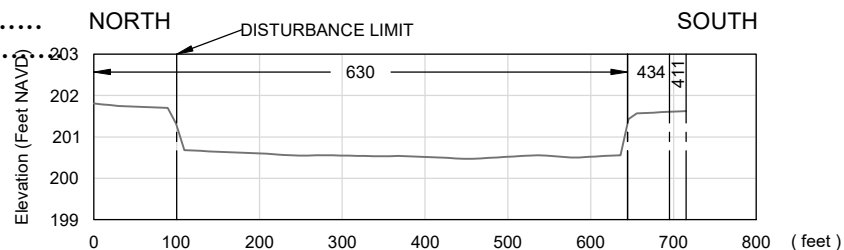
Note:

.....

.....

.....

SLWE @ Or Below Ground Surface

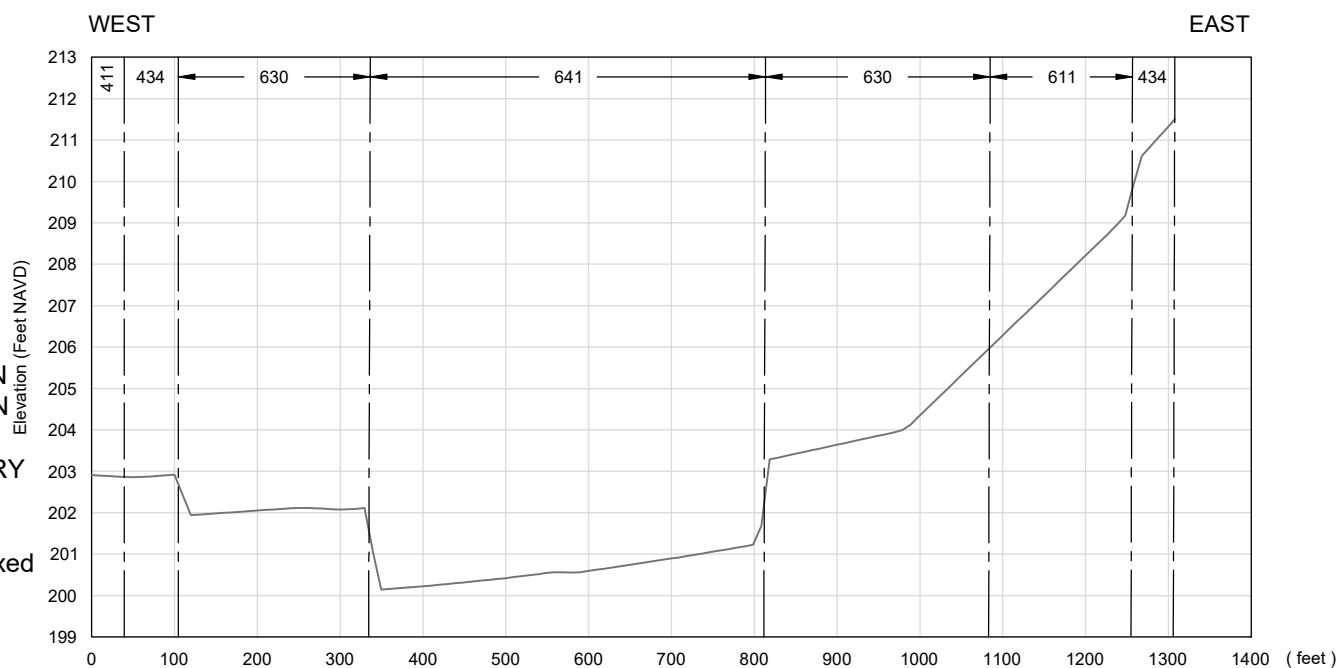


## LEGEND

—— POST-RECLAMATION  
GROUND ELEVATION

----- LAND USE BOUNDARY

411 - Pine Flatwoods  
434 - Hardwood-Coniferous Mixed  
611 - Bay Swamps  
613 - Gum Swamp  
621 - Cypress  
641 - Freshwater Marsh



SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A  
DRAWN BY YQ  
CHECKED BY TRD  
DATE: 11-12-2019  
REVISED:

WETLAND MITIGATION  
CROSS-SECTION 1C & 1D

Trail Ridge South  
The Chemours Company FC LLC  
Bradford and Clay Counties, FL

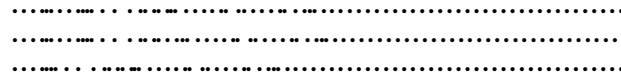
FIGURE

16B

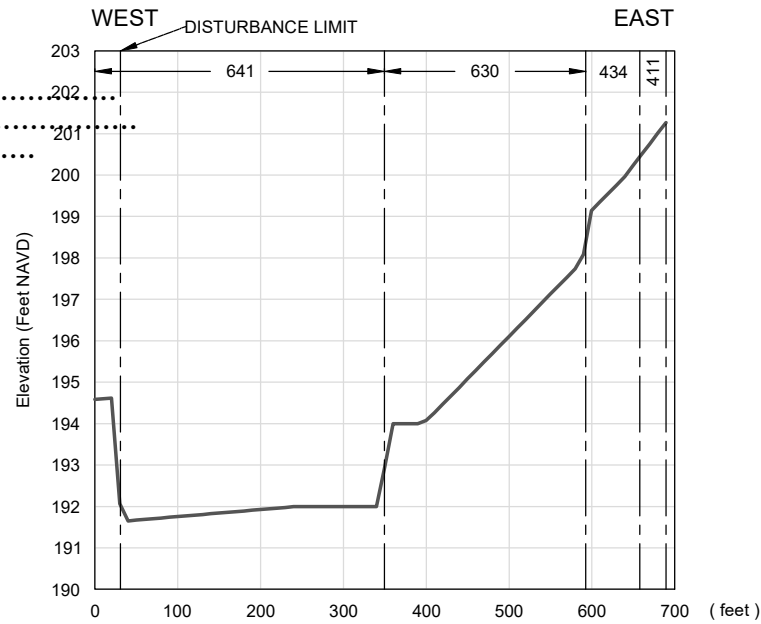
PAGE: 2 of 16

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

Note:



SLWE @ Or Below Ground Surface

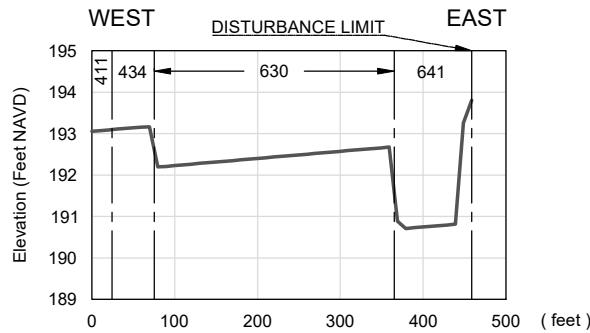


Cross-Section 1E

## LEGEND

- POST-RECLAMATION GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



Cross-Section 1F

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 1E & 1F	FIGURE  16C
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 3 of 16
DATE: 11-12-2019		
REVISED:		

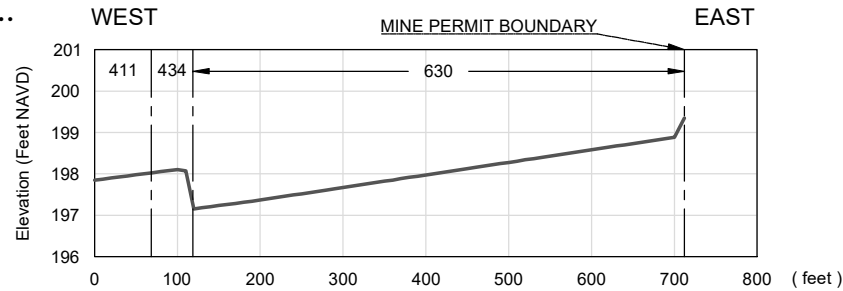
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

CAD FILE: \\weinfelder.com\Shares\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_Prot\_LU\_CrossSections.dwg LAYOUT: Wetland MitigationG & 1H PLOTTED: 11/12/2019 10:29 AM BY: tm.demars

Note:

.....  
.....  
.....

SLWE @ Or Below Ground Surface

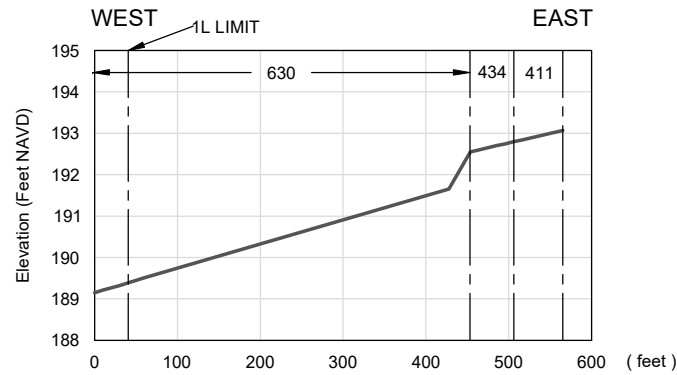


Cross-Section 1G

LEGEND

- POST-RECLAMATION  
GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods  
434 - Hardwood-Coniferous Mixed  
611 - Bay Swamps  
613 - Gum Swamp  
621 - Cypress  
641 - Freshwater Marsh



Cross-Section 1H

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'

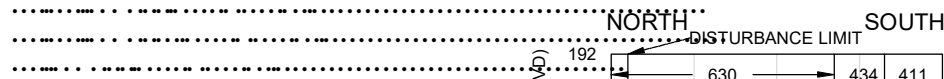


PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 1G & 1H	FIGURE
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-12-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	16D
REVISED:		PAGE: 4 of 16

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

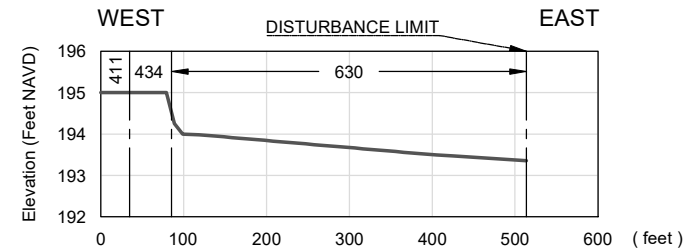
CAD FILE: \\weinfelder.com\Shares\MOUNTDORA-DATA\GIS\CAD\Chemours\_2018\00124191\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_Prot\_LU\_CrossSections.dwg LAYOUT: Wetland Mitigation 1 & 1J PLOTTED: 11/12/2019 10:29 AM BY: tm.demaris

Note:



SLWE @ Or Below Ground Surface

Cross-Section 1I

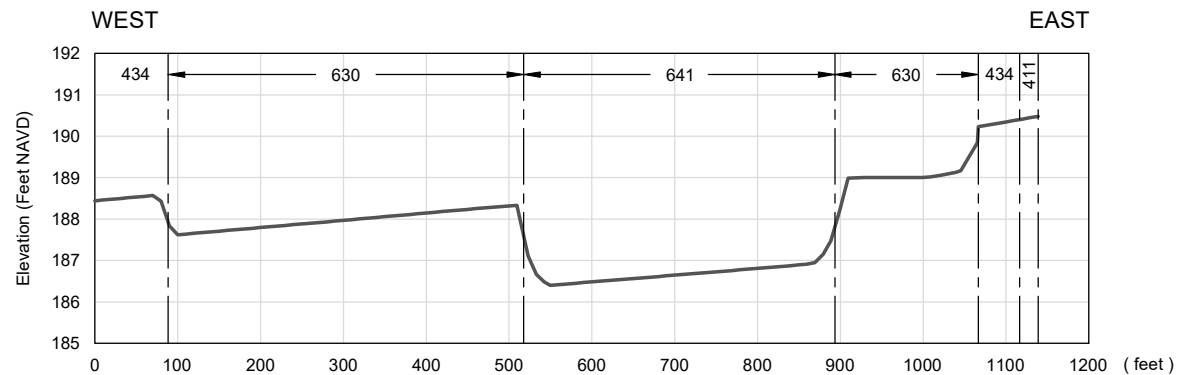


Cross-Section 1J

LEGEND

- POST-RECLAMATION GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



Cross-Section 1K

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 1I, 1J, 1K	FIGURE
DRAWN BY YQ		16E
CHECKED BY TRD		
DATE: 11-12-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
REVISED:		PAGE: 5 of 16

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

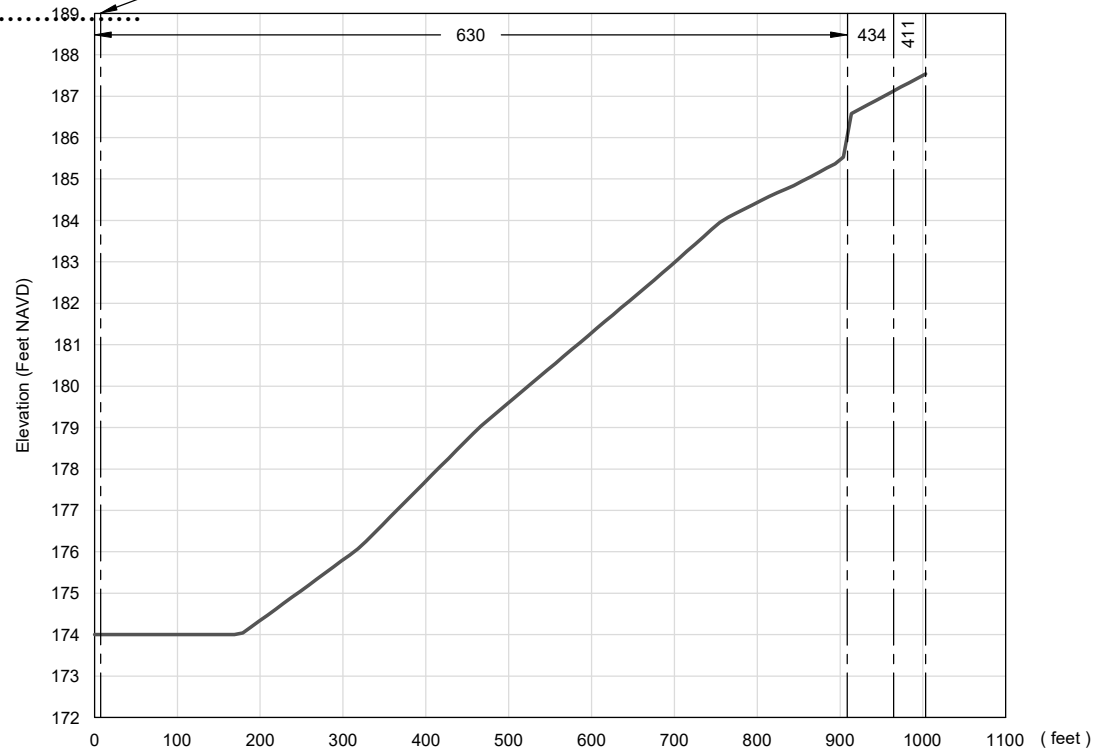


CAD FILE: \\weinfelder.com\Shares\MOUNTDORA-DATA\GIS\CAD\Chemours\_2019\00129491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_Prot\_LU\_CrossSections.dwg LAYOUT: Wetland Mitigation 1L & 1L PLOTTED: 11/12/2019 10:29 AM BY: tm.demaris

Note:

..... WEST ..... DISTURBANCE LIMIT ..... EAST

SLWE @ Or Below Ground Surface



## LEGEND

- POST-RECLAMATION GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh

Cross-Section 1L

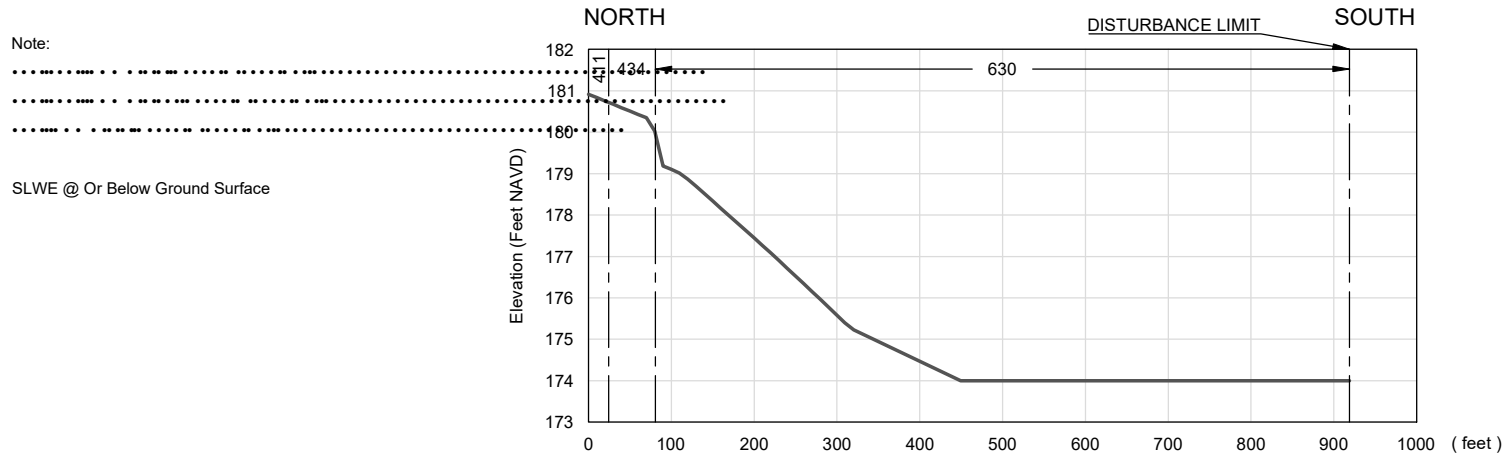
SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 1L	FIGURE 16F
DRAWN BY YQ	Trail Ridge South	
CHECKED BY TRD	The Chemours Company FC LLC	
DATE: 11-12-2019	Bradford and Clay Counties, FL	
REVISED:		PAGE: 6 of 16

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

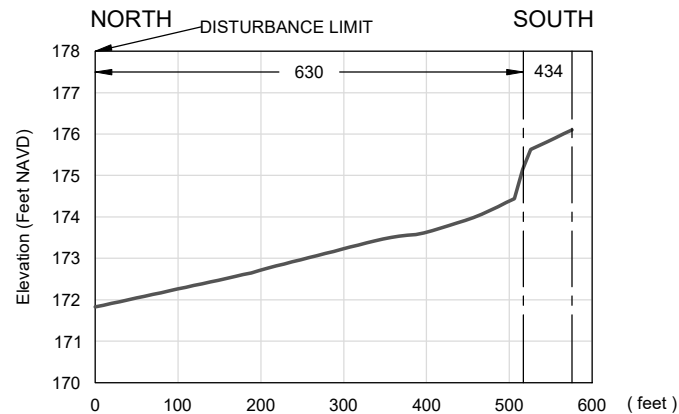
CAD FILE: \\weinfelder.com\Shares\MOUNTDORA-DATA\GIS\CAD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_JCOE\_Prot\_LU\_CrossSections.dwg LAYOUT: Wetland Mitigation1M & 1N PLOTTED: 11/12/2019 10:29 AM BY: tm.demaris



## LEGEND

- POST-RECLAMATION GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 1M & 1N	FIGURE 16G
DRAWN BY YQ	Trail Ridge South	
CHECKED BY TRD	The Chemours Company FC LLC	
DATE: 11-12-2019	Bradford and Clay Counties, FL	
REVISED:		PAGE: 7 of 16

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

CAD FILE: \\weinfelder.com\Shares\MOUNTDORA-DATA\GIS\CAD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_Prot\_LU\_CrossSections.dwg LAYOUT: Wetland Mitigation10 & 1P PLOTTED: 11/12/2019 10:29 AM BY: tm.demars

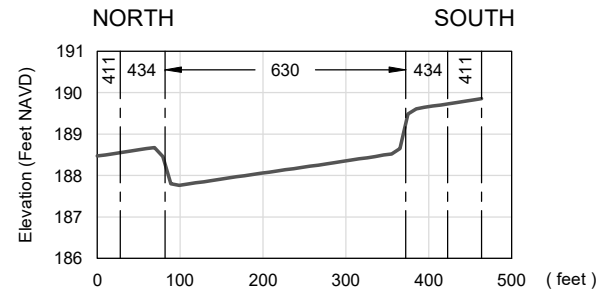
Note:

.....

.....

.....

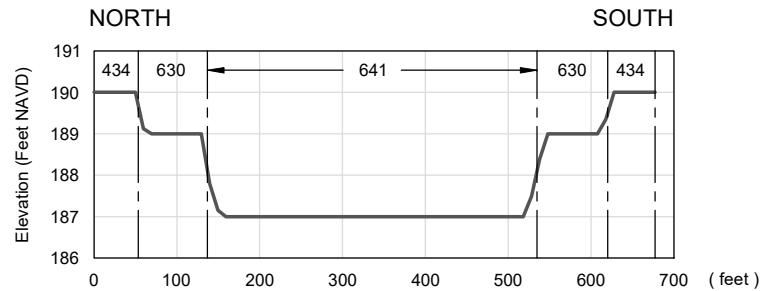
SLWE @ Or Below Ground Surface



## LEGEND

- POST-RECLAMATION  
GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'

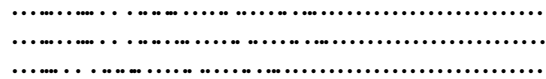


PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 10 & 1P	FIGURE 16H
DRAWN BY YQ	Trail Ridge South	
CHECKED BY TRD	The Chemours Company FC LLC	
DATE: 11-12-2019	Bradford and Clay Counties, FL	
REVISED:		PAGE: 8 of 16

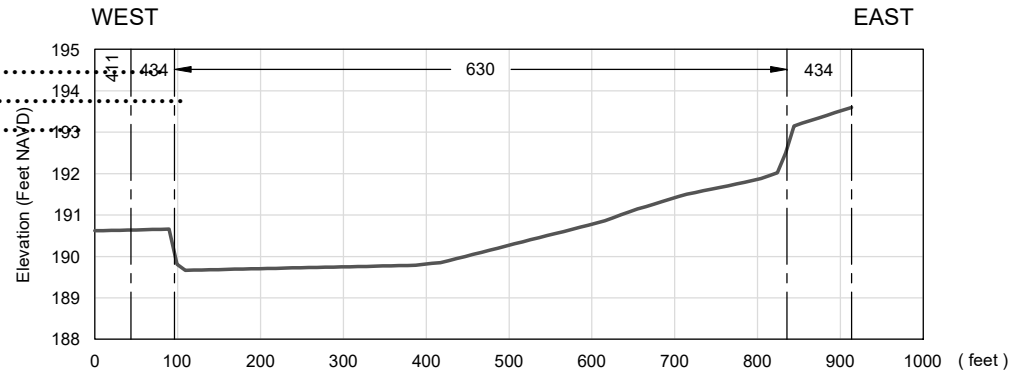
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

CAD FILE: \\weinfelder.com\Shares\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_Prot\_LU\_CrossSections.dwg LAYOUT: Wetland Mitigation1Q & 1R PLOTTED: 11/12/2019 10:29 AM BY: tm.demaris

Note:



SLWE @ Or Below Ground Surface

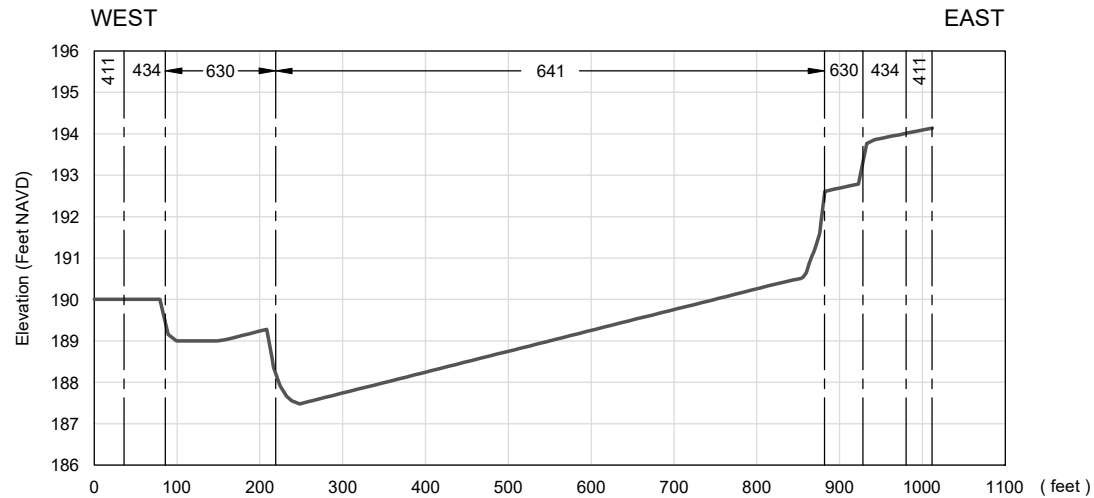


Cross-Section 1Q

## LEGEND

- POST-RECLAMATION GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



Cross-Section 1R

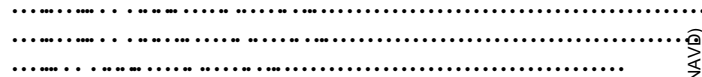
SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



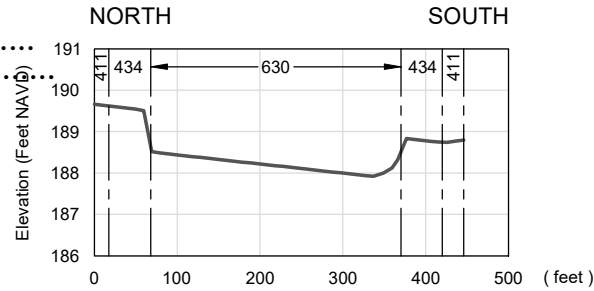
PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 1Q & 1R	FIGURE 161
DRAWN BY YQ	Trail Ridge South	
CHECKED BY TRD	The Chemours Company FC LLC	
DATE: 11-12-2019	Bradford and Clay Counties, FL	
REVISED:		PAGE: 9 of 16

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

Note:



SLWE @ Or Below Ground Surface

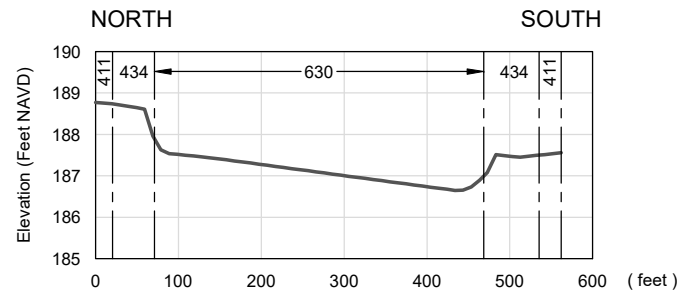


Cross-Section 1S

## LEGEND

- POST-RECLAMATION GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



Cross-Section 1T

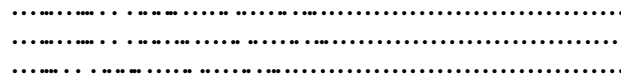
SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



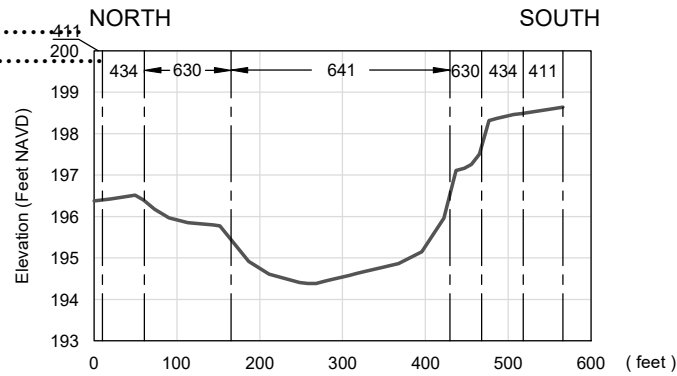
PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 1S & 1T	FIGURE 16J
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-12-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
REVISED:		PAGE: 10 of 16

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

Note:



SLWE @ Or Below Ground Surface

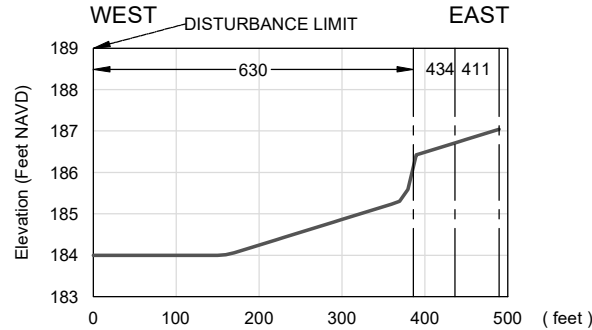


Cross-Section 2

## LEGEND

- POST-RECLAMATION GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



Cross-Section 3

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 2 & 3	FIGURE 16K
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-12-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
REVISED:		PAGE: 11 of 16

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

CAD FILE: \\weinfelder.com\Shares\MOUNTDORA-DATA\GIS\CAD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_JCOE\_Post\_LU\_CrossSections.dwg LAYOUT: Wetland Mitigation 4 & 5 PLOTTED: 11/12/2019 10:29 AM BY: tim.demars

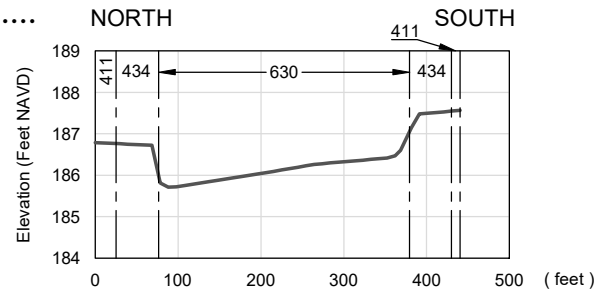
Note:

.....

.....

.....

SLWE @ Or Below Ground Surface

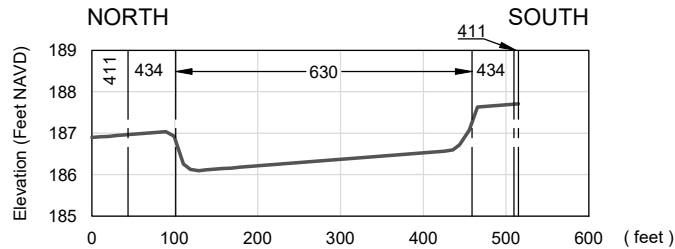


Cross-Section 4

LEGEND

- POST-RECLAMATION  
GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods  
434 - Hardwood-Coniferous Mixed  
611 - Bay Swamps  
613 - Gum Swamp  
621 - Cypress  
641 - Freshwater Marsh



Cross-Section 5

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'

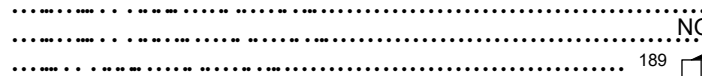


PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 4 & 5	FIGURE
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-12-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	16L
REVISED:		PAGE: 12 of 16

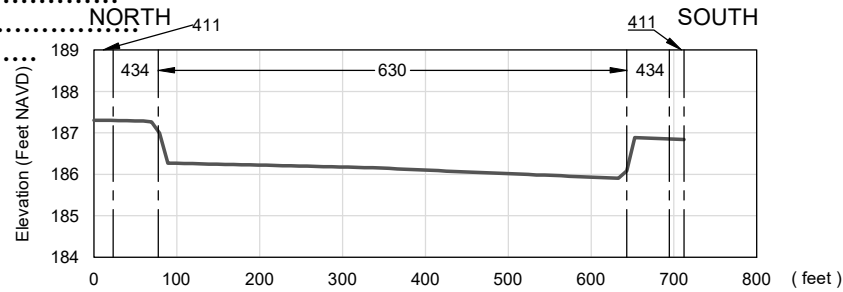
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

CAD FILE: \\weinfelder.com\Shares\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_Prot\_LU\_CrossSections.dwg LAYOUT: Wetland Mitigation 6 & 7 PLOTTED: 11/12/2019 10:29 AM BY: tim.demars

Note:



SLWE @ Or Below Ground Surface

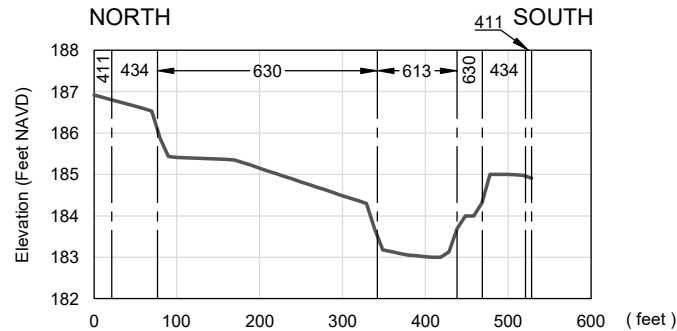


Cross-Section 6

LEGEND

- POST-RECLAMATION GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



Cross-Section 7

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



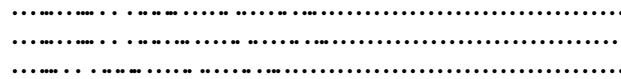
PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 6 & 7	FIGURE 16M
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-12-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
REVISED:		PAGE: 14 of 21

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

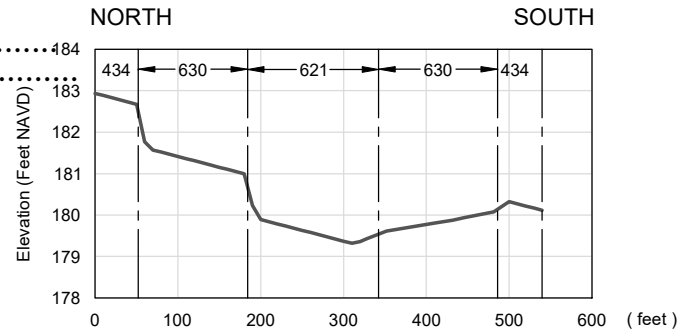


CAD FILE: \\weinfelder.com\Shares\MOUNTDORA-DATA\GIS\CAD\Chemours\_2018\00128491\_003A\_Chemours-FL-CY2019 Trail Ridge South\CAD\TR8\_ACOE\_Post\_LU\_CrossSections.dwg LAYOUT: Wetland Mitigation 8 & 9 PLOTTED: 11/12/2019 10:29 AM BY: tm-demaris

Note:



SLWE @ Or Below Ground Surface

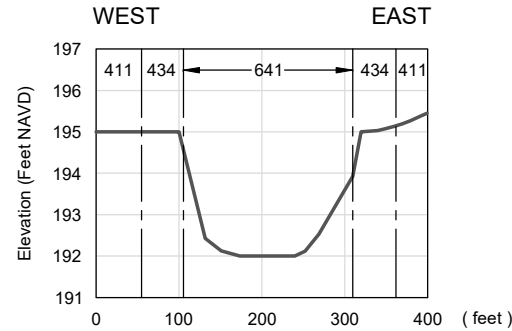


Cross-Section 8

## LEGEND

- POST-RECLAMATION GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



Cross-Section 9

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 8 & 9	FIGURE 16N
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-12-2019	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	
REVISED:		PAGE: 14 of 16

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

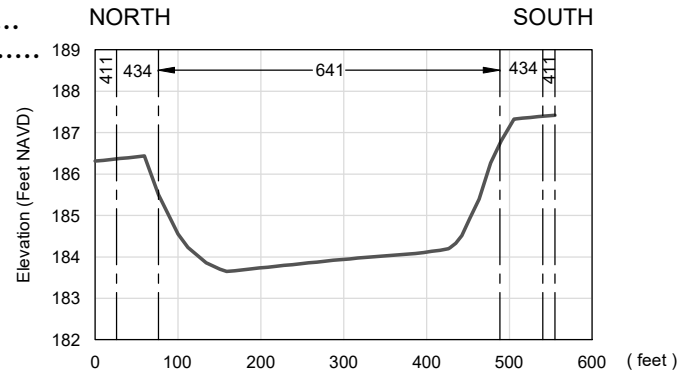
Note:

.....

.....

.....

SLWE @ Or Below Ground Surface

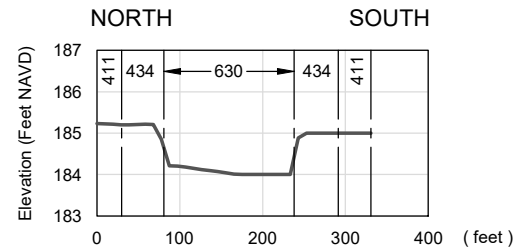


Cross-Section 10

## LEGEND

- POST-RECLAMATION  
GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods
- 434 - Hardwood-Coniferous Mixed
- 611 - Bay Swamps
- 613 - Gum Swamp
- 621 - Cypress
- 641 - Freshwater Marsh



Cross-Section 11

SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 10 & 11	FIGURE
DRAWN BY YQ		
CHECKED BY TRD		
DATE: 11-12-2019	Trail Ridge South	160
REVISED:	The Chemours Company FC LLC Bradford and Clay Counties, FL	

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

CAD FILE: \\kleinfelder.com\Share\MOUNTDORA-DATA\GIS\CADD\Chemours\_2018\00128491\_003A\_Chemours-FC-CY2019 Trail Ridge South\CAD\TR8\_JCOE\_Prot\_LU\_CrossSections.dwg LAYOUT: Wetland Mitigation 12 PLOTTED: 11/12/2019 10:29 AM BY: tm.demars

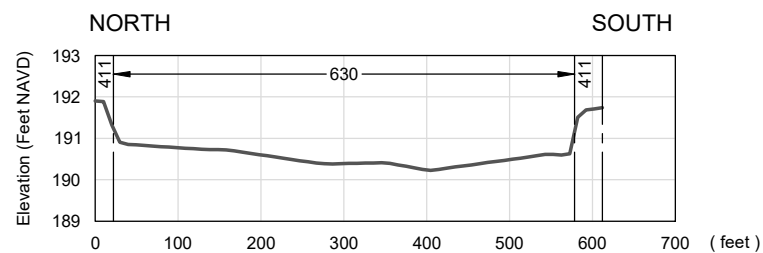
Note:

.....

.....

.....

SLWE @ Or Below Ground Surface



## LEGEND

- POST-RECLAMATION  
GROUND ELEVATION
- LAND USE BOUNDARY

- 411 - Pine Flatwoods  
434 - Hardwood-Coniferous Mixed  
611 - Bay Swamps  
613 - Gum Swamp  
621 - Cypress  
641 - Freshwater Marsh

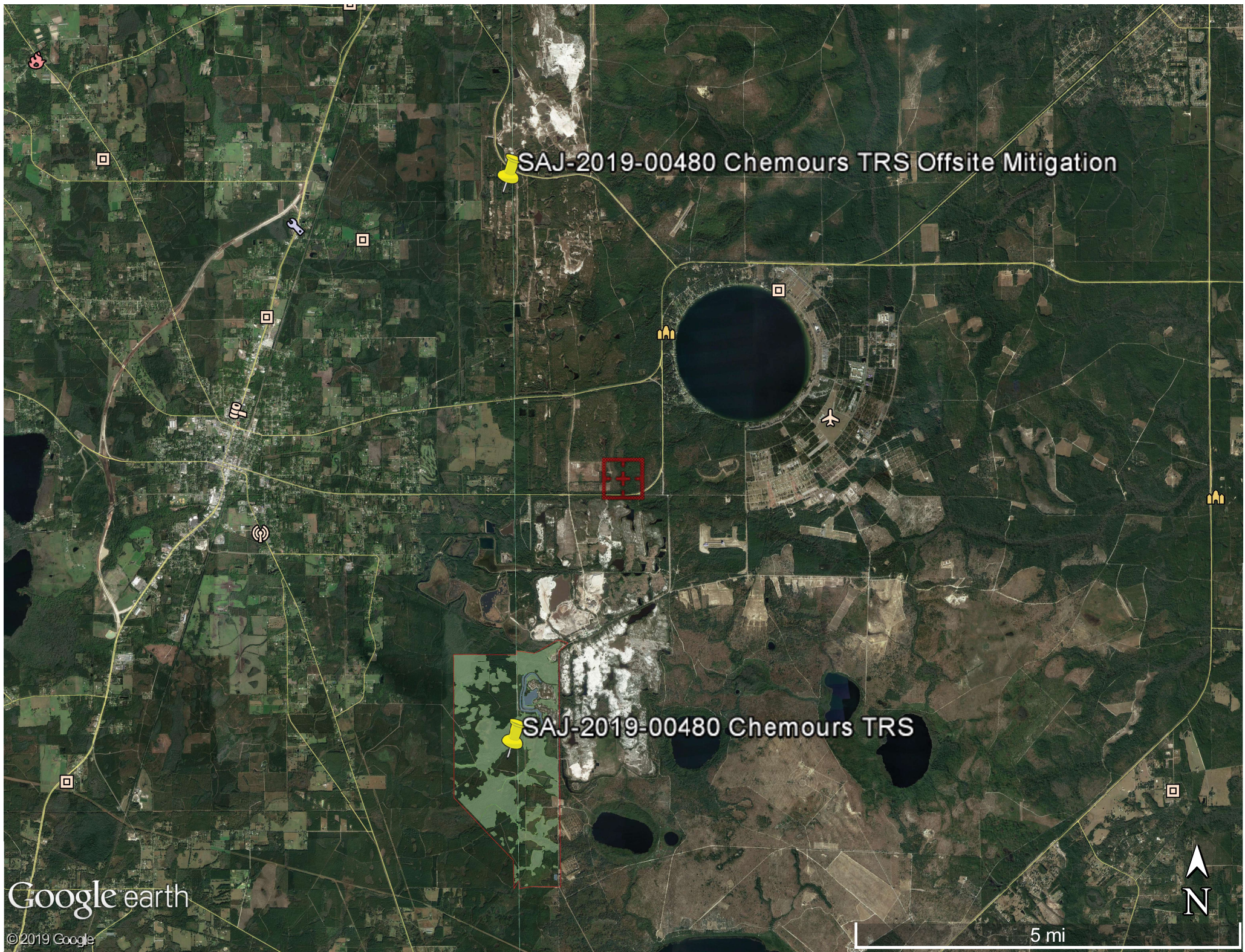
SCALE:  
HORIZ. 1"= 150'  
VERT. 1"=3'



PROJECT NO. 00129491.003A	WETLAND MITIGATION CROSS-SECTION 12	FIGURE 16P
DRAWN BY YQ		
CHECKED BY TRD	Trail Ridge South The Chemours Company FC LLC Bradford and Clay Counties, FL	PAGE: 16 of 16
DATE: 11-12-2019		
REVISED:		

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.





SAJ-2019-00480 Chemours TRS Offsite Mitigation

SAJ-2019-00480 Chemours TRS

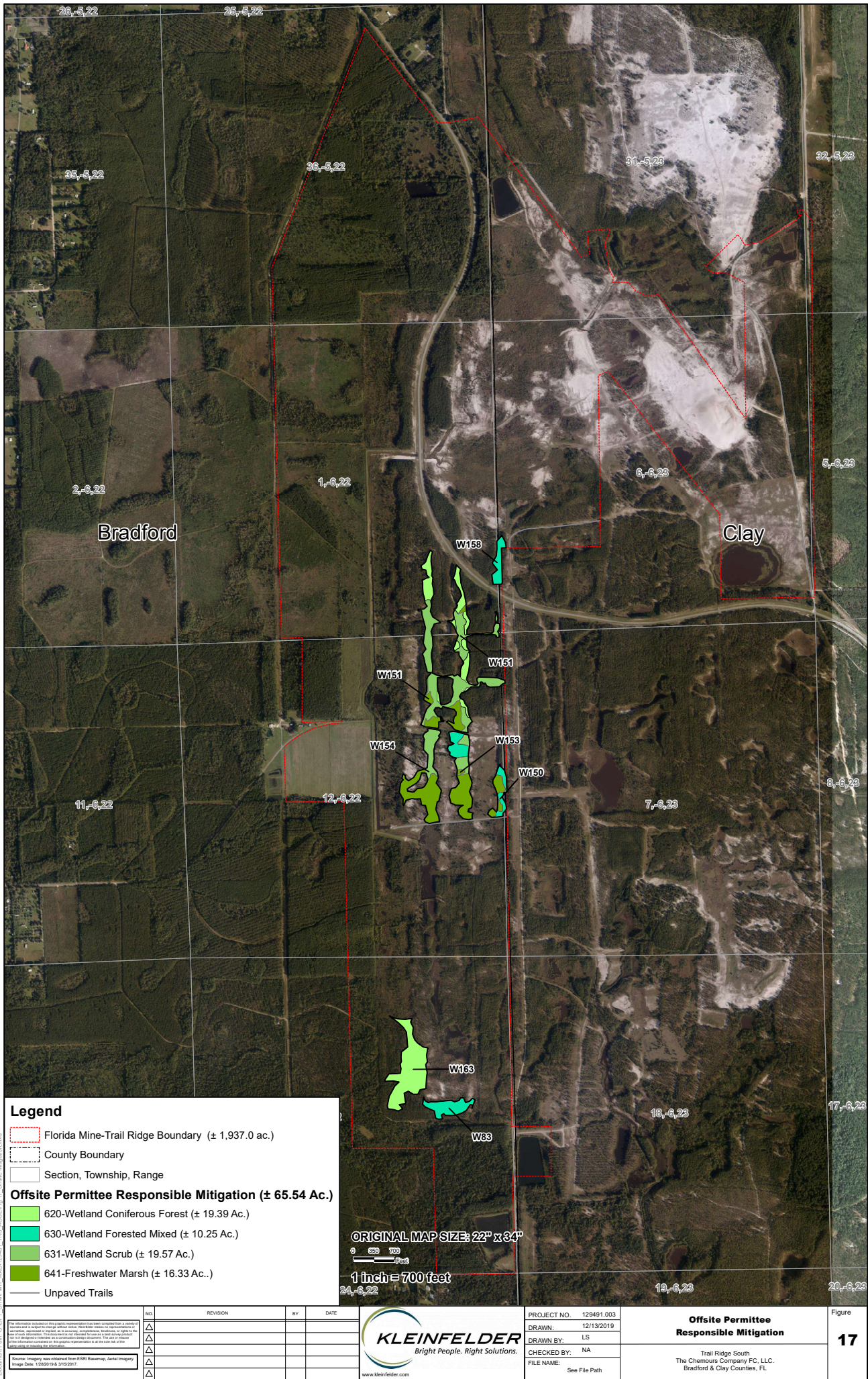
Google earth

© 2019 Google

5 mi

N





**Legend**

Florida Mine-Trail Ridge Boundary (± 1,937.0 ac.)

County Boundary

Section, Township, Range

**Offsite Permittee Responsible Mitigation (± 65.54 Ac.)**

620-Wetland Coniferous Forest (± 19.39 Ac.)

630-Wetland Forested Mixed (± 10.25 Ac.)

631-Wetland Scrub (± 19.57 Ac.)

641-Freshwater Marsh (± 16.33 Ac.)

Unpaved Trails

NO.	REVISION	BY	DATE
1			
2			
3			
4			
5			

Source: Imagery was obtained from ESRI BaseMap, Aerial Imagery.

Image Date: 12/2019 & 3/10/2017



**KLEINFELDER**  
Bright People. Right Solutions.  
www.kleinfelder.com

PROJECT NO.	129491.003
DRAWN:	12/13/2019
DRAWN BY:	LS
CHECKED BY:	NA
FILE NAME:	See File Path

**Offsite Permittee Responsible Mitigation**

The Chemours Company FC, LLC.  
Trail Ridge South  
Bradford & Clay Counties, FL



**Triangle Preserve  
North Florida Land Trust**

**.kmz from:  
Florida Natural Areas Inventory.  
Florida Conservation Lands,  
August 2019**

**Santa Fe Swamp  
Conservation Area  
SRWMD**

**Mike Roess Gold Head  
Branch State Park  
State of Florida**

**Camp Blanding  
State of Florida**

**Little Rain Lake Preserve  
North Florida Land Trust**

Google earth

© 2019 Google

3 mi

