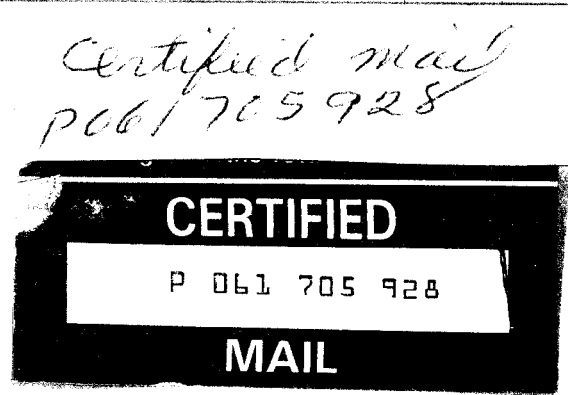




May 8, 1992

RECEIVED
WET RES. UNIT

MAY 12 1992

Ms. Trudy Bell
Florida Department of Environmental Regulation
Water Management Resource Section
2600 Blair Stone Road
Tallahassee, Florida 33688-2000

RE: HPS Transmission Line - Certification # PA 89-25. Wetland Mitigation
Proposal for the Hardee - Lee Segments.

Dear Ms. Bell:

Attached is a response to your insufficiency letter of April 28, 1992. We appreciate your assistance in permitting this project.

Sincerely,

A handwritten signature in cursive script that reads 'James R. Frauen'.

James R. Frauen
Environmental Engineer

cc: Hamilton Oven - DER

HARDEE POWER STATION
PA 89-25
MITIGATION PROPOSAL INCOMPLETENESS RESPONSE

In response to the incompleteness letter of April 28, 1992 we are providing the following responses. It appears that most of these questions stem from changes made in our March 27, 1992 submittal for Vandolah to Arcadia that explain the variations. Many of the changes are also due to several field visits by SWFWMD. Our responses are shown in italics below.

1. The December 23, 1991, post certification submittal for the Vandolah to Arcadia segment shows 1.16 ac. of forested wetland fill, while the April 17, 1992 letter indicates 0.27 ac. of forested wetland fill. Please explain this.

As indicated in comparisons of Table 1 in the two submittals, fill requirements or classification of the systems were changed in wetlands GG, KK, QQ, and SS. Due to field interpretations by SWFWMD wetland GG was re-classified as a Disturbed Shrub system in the area required for corduroy road, wetland KK was re-classified as an upland ditch where the fill would be required, wetland QQ was re-classified as a disturbed shrub system where the corduroy road was required, and wetland SS was re-classified as a forested system. The acreage values in the April 17, 1992 letter are correct.

2. Figure 40 (SC40) in the Arcadia to Lee post certification submittal indicates 0.48 ac. of forested clearing and 0.38 ac. of forested fill. In Table one the 0.48 ac. is shown as forested fill and the 0.28 ac. as marsh fill. Please determine whether the 0.48 ac. of impact is clearing or fill and whether the 0.28 ac. is forested or marsh fill.

The impacts to this area have been changed due to concerns over adequate design of the culverts and DNR easement considerations. Seminole has decided to move the structure outside of the wetlands and not construct the pad as shown in Figure 40. The only impacts to this area will now be clearing of 0.76 acres of forested wetlands.

3. The December 23, 1991, post certification submittal for the Vandolah to Arcadia segment shows 0.66 ac. of shrub fill, while the April 17, 1992, letter shows 1.03 ac. of shrub fill.

As indicated in comparisons of Table 1 in the two submittals, fill requirements or classification of the systems were changed in wetlands GG, JJ, QQ, SS, TT, EEE. Details of the changes are detailed below. The culverts in wetland GG were redesigned to be a corduroy road due to concerns over adequate sizing of culverts; the fill in JJ was deemed not necessary when access was determined to be adequate from the south; wetland QQ was reclassified by SWFWMD as a shrub system and the fill was changed from forested to shrub in the different submittals; wetland SS was reclassified by SWFWMD as two different communities which presented Seminole with the opportunity to minimize impacts by

RECEIVED
RES. MGT.

MAY 12 1992

locating the required fill in disturbed shrub areas; the culverts in wetland TT were deleted and changed to a corduroy road due to 100 year floodplain considerations thus changing the impacts; the wetland jurisdictional boundary was moved downhill by SWFWMD from the original Dames and Moore line thus minimizing wetland impacts. The acreage values in the April 17, 1992 letter are correct.

4. The December 23, 1991, post certification submittal for the Vandolah to Arcadia segment shows 0.06 ac. of marsh fill, while the April 17, 1992, letter shows 0.05 ac. of marsh fill.

The impacts were changed in wetland "PP" due to culvert requirements. The acreage values in the April 17, 1992 letter are correct.

5. The December 23, 1991, post certification submittal for the Vandolah to Arcadia segment shows 0.10 ac. of ditch fill, while the April 17, 1992, letter shows 0.11 ac. of ditch fill.

As indicated in comparisons of Table 1 in the two submittals, fill requirements were changed in wetlands KK, PP, and NNN. Due to field interpretations by SWFWMD wetland KK was re-classified as an upland ditch system in the area required for fill road, wetland PP impacts were not recognized as required in the original submittal, wetland NNN was redrafted to show the jurisdictional portion of the ditch which limited impact acreage. The acreage values in the April 17, 1992 letter are correct.

6. The December 23, 1991, post certification submittal for the Vandolah to Arcadia segment shows 11.29 ac. of forested clearing, while the April 17, 1992, letter shows 10.22 ac. of forested clearing.

As indicated in comparisons of Table 1 in the two submittals, clearing requirements were changed in wetlands GG, KK, OO, SS, XX, III, NNN, QQQ, SSS, TTT. Due to field interpretations by SWFWMD wetland GG was re-classified as open water, wetland KK impacts were reclassified by SWFWMD as having areas of disturbed shrub instead of all forested, wetland OO was reclassified by SWFWMD to have areas of trees that they wanted to be considered forested as shown in the Figure, wetland SS was reclassified by SWFWMD as having areas of disturbed shrub instead of all forested, wetland XX was reclassified by SWFWMD as being an open water system instead of forested, wetland III was a typographical error in the original submittal, wetland NNN was reclassified by SWFWMD as having areas of upland cut ditch instead of forested, wetland QQQ was reclassified as upland forest due to all species being upland species (Quercus virginiana), wetland SSS is isolated and not DER jurisdiction, and wetland TTT was reclassified as having disturbed shrub inclusions thus lowering forested acreage values. The acreage values in the April 17, 1992 letter are correct.

RECEIVED
WET. RES. MGT.

MAY 12 1992

7. The December 23, 1991, post certification submittal for the Vandolah to

Arcadia segment shows 13.36 ac. of shrub clearing, while the April 17, 1992, letter shows 3.49 of shrub clearing.

As indicated in comparisons of Table 1 in the two submittals, shrub clearing requirements were changed in wetlands N, P, R, U, W, BB, CC, DD, KK, OO, SS, TT, UU, VV, ZZ, DDD, EEE, FFF, GGG, HHH, JJJ, KKK, NNN, AND TTT. These changes were made in nearly every case due to a change in clearing technique which requires that only the center 20 ft. of ROW be cleared of shrubs. Exceptions to this include CC, DD, DDD which SWFWMD wanted included as having a narrow wedge of wax myrtles, wetland SS, NNN and TTT were reclassified by SWFWMD as being partially shrub, wetland GGG which has been cleared by the citrus grove owner for his citrus operations, and wetland JJJ which had the jurisdiction line revised by SWFWMD. The acreage values in the April 17, 1992 letter are correct.

8. The information submitted on January 27, 1992, for the Hardee to Vandolah shows 3.2 ac. of forested clearing, while the April 17, 1992, letter shows 2.66 ac. of forested clearing.

The 3.2 acres of clearing is the correct number for clearing acreage from Hardee Power Station to the Vandolah substation. We apologize for the error.

9. The post certification submittal for the Arcadia to Lee segment shows 3.26 ac. of forested clearing, while the April 17, 1992 letter shows 0.48 ac. of forested clearing.

The correct acreage value for forested clearing should be 3.42 acres which includes wetlands 2D-3, 2D-9, 2D-16, 2C-40 and 2L-80 which are the only DER jurisdictional forested wetlands on this portion of the line. Obviously, this value was transposed with the HPS to Vandolah clearing acreage, we apologize for the error. Please see the revised impact/ratio information.

10. Please clarify how the areas indicated as "existing wetland" are differentiated from the areas indicated as "DER jurisdictional" and what definition was used to delineated (sic) the "existing wetland".

Within the mitigation area "existing wetlands" is a term utilized to suggest areas claimed or anticipated to be claimed by SWFWMD and have been claimed as jurisdictional by the Corps of Engineers. The "DER jurisdictional" areas are areas field delineated by Mr. Rick Cantrell during his recent field visit to the area. The "existing wetland" area is taken from an approximate palmetto line that we believe indicates the historic wetland limits before ditching drained the area.

11. The weir for wetland #2 is set at 25.2 ft. Please clarify why the SHW in the creation area adjacent to wetland #2 is shown as 25.4 ft.

The elevations in the Mitigation Construction Plans show SHW at 24.9 within the creation area adjacent to Slough #2 in both the plan view and cross sectional drawings in the 8 1/2 x 11" and Construction drawings. This elevation was chosen based on cross sections 1 and 2 on the restoration plan details (Construction

RECEIVED
WET. RES. MGT.

MAY 12 1992

Drawings) which indicates that the historic SHW was approximately 24.9.

12. The weir for Wetland #3 is set at 24.2 ft. Please clarify why the SHW in the creation area adjacent to wetland #3 is shown as 24.9 ft.

The 24.9 SHW elevation represents the predicted historic condition in Slough #3 in a lobe of the slough system which is not expected to change with construction of the creation area. Seasonal High Water levels are higher in this area due an existing sill that is located approximately 1700 ft. east of the existing canal. This higher elevation location is observable in the field based on standing water levels, zonation of vegetation, and how it has limited the eastern scour activity (as shown on the DER jurisdiction in this area).

13. Please explain how 25.0 ft. was determined to be the SHGW in the creation area.

The Seasonal High Groundwater elevation was based on published soils information for the soils types within the area. Please note that this area is isolated hydrologically but not jurisdictionally since jurisdictional trees will easily connect this system to State waters.

14. Please provide a plan view showing the locations at which the core borings were taken.

Please see the attached drawing.

15. Please provide a table showing what portion of the mitigation plan is proposed to offset impacts to isolated wetlands.

To quantify the area available for credit toward DER mitigation, the acreage necessary to mitigate for isolated wetlands was subtracted from the total mitigation/creation/enhancement area available in the Webb. The following analysis is provided:

Hardee to Vandolah:

Wetlands A, B, F, G, and I are isolated with the following impacts.

<u>Wetland</u>	<u>Disturbed Shrub Clearing (ac)</u>	<u>Marsh Filling (ac)</u>
A	0.76	0
B	0.57	0
F	0	0.18
G	0.17	0.13
I	0	0.13
	<u>1.50</u>	<u>0.44</u>

RECEIVED
WET. RES. MGT.

MAY 12 1992

Using SWFWMD compensation ratios, we are required to provide the following compensation:

<u>Wetland Type</u>	<u>Impact (ac)</u>	<u>Ratio</u>	<u>Req'd Comp. (ac)</u>
Dist. Shrub Clearing	1.50	0.5:1	0.75
Marsh Fill	0.44	1.5:1	0.66

Compensation for the 0.75 acres of disturbed shrub clearing impact was approved and permitted by SWFWMD at a 1:1 ratio within a 6.77 acre restoration area in the western portion of slough #3, while the marsh fill impacts were compensated by 0.66 acres of marsh creation in the 20.0 acre mitigation/creation area. Therefore, the compensation acreage that remains available to DER is as follows:

<u>Comp. Area</u>	<u>Total (ac)</u>	<u>Iso. Wet. Reduction</u>	<u>Remaining (ac)</u>
Creat/Enhanc	116.99	- 0.75	= 116.24
Mit/Creat	20.00	- 0.66	= 19.34

Vandolah to Lee:

Wetlands JJJ, RRR, SSS, and 2D-7 are isolated with the following impacts:

<u>Wetland</u>	<u>Disturbed Shrub Clearing (ac)</u>	<u>Forested clearing (ac)</u>
JJJ	0.15	0.12
RRR	0	0.49
SSS	0	0.83
2D-7	0	0.60
	0.15	2.04

Using SWFWMD compensation ratios, we are required to provide the following compensation:

<u>Wetland Type</u>	<u>Impact (ac)</u>	<u>Ratio</u>	<u>Req'd Comp. (ac)</u>
Dist. Shrub Clearing	0.15	0.5:1	0.08
Forested Clearing	2.04	1:1	2.04
			2.12

The 2.12 acres of required compensation is provided within the creation/enhancement area using credit ratios established by SWFWMD for the restored areas. Two areas within slough #3 were used to obtain the required compensation area (see the Vandolah to Arcadia construction drawings for locations and verification of ratios).

<u>Rest. Area</u>	<u>Rest. Type</u>	<u>Rest. Ac.</u>	<u>Credit ratio</u>	<u>Credit Ac.</u>
Slough #3	Creation	3.26	4:1	0.80
Slough #3	Type A	10.55	8:1	1.32
		13.81		2.12

RECEIVED
WET. RES. M.
MAY 12 1992

To account for the creation/enhancement area remaining as credit for DER mitigation the 13.81 acres of restored area in slough #3 is subtracted from the previously calculated DER credit acreage available. The following calculation is provided:

Creation/enhancement area available = 116.24 - 13.81 = 102.43 ac.

In summary, the area available for mitigation credit for DER is:

Creation/enhancement area = 102.43 acres

*Mitigation/creation area = 19.34 acres **

** Of the 19.34 acres, 12.70 acres are forested creation and 6.64 acres are marsh creation.*

ED
- 1001

1001 1 2 1001

HPS TRANSMISSION LINE
HARDEE POWER STATION TO LEE SUBSTATION
FDER MITIGATION / COMPENSATION PLAN

Seminole Electric Cooperative, Inc. proposes to mitigate for the wetland impacts associated with the transmission line from the Hardee Power Station to the Lee Substation by creating and restoring wetlands within the Myrtle Slough basin in the northern part of the C.M. Webb Wildlife Management Area in Charlotte County. The wetland impacts associated with the transmission line include hand clearing of forested wetlands of varying quality, bush hog clearing of a 20 ft. wide path through shrub areas, installation of corduroy roads, installation of culvert/road crossings, and installation of structure pads for installation of the transmission line poles. These impacts for the entire 78 mile long transmission line are listed below by type of area disturbed.

Wetland Filling

	<u>Fill</u>	
Forested		
HPS to Vandolah	0	
Vandolah to Arcadia	0.27 acres	
Arcadia to Lee Sub	0	
	TOTAL	0.27 acres
Shrub		
HPS to Vandolah	0.84 acres	
Vandolah to Arcadia	1.03 acres	
Arcadia to Lee Sub	0	
	TOTAL	1.87 acres
Marsh		
HPS to Vandolah	0	
Vandolah to Arcadia	0.05 acres	
Arcadia to Lee Sub	0.69 acres	
	TOTAL	0.74 acres
Upland Ditches		
HPS to Vandolah	0.05 acres	
Vandolah to Arcadia	0.11 acres	
Arcadia to Lee Sub	0.45 acres	
	TOTAL	0.61 acres
TOTAL WETLAND FILL		3.49 acres

RECEIVED
WET. RES. MGT.
MAY 12 1993

Wetland Clearing

Forested

HPS to Vandolah	3.20 acres
Vandolah to Arcadia	10.22 acres
Arcadia to Lee Sub	3.42 acres
TOTAL	16.84 acres

Shrub (Predominantly Disturbed Shrub Areas)

HPS to Vandolah	4.19 acres
Vandolah to Arcadia	3.49 acres
Arcadia to Lee Sub	0.59 acres
TOTAL	8.27 acres

TOTAL WETLAND CLEARING 25.11 acres

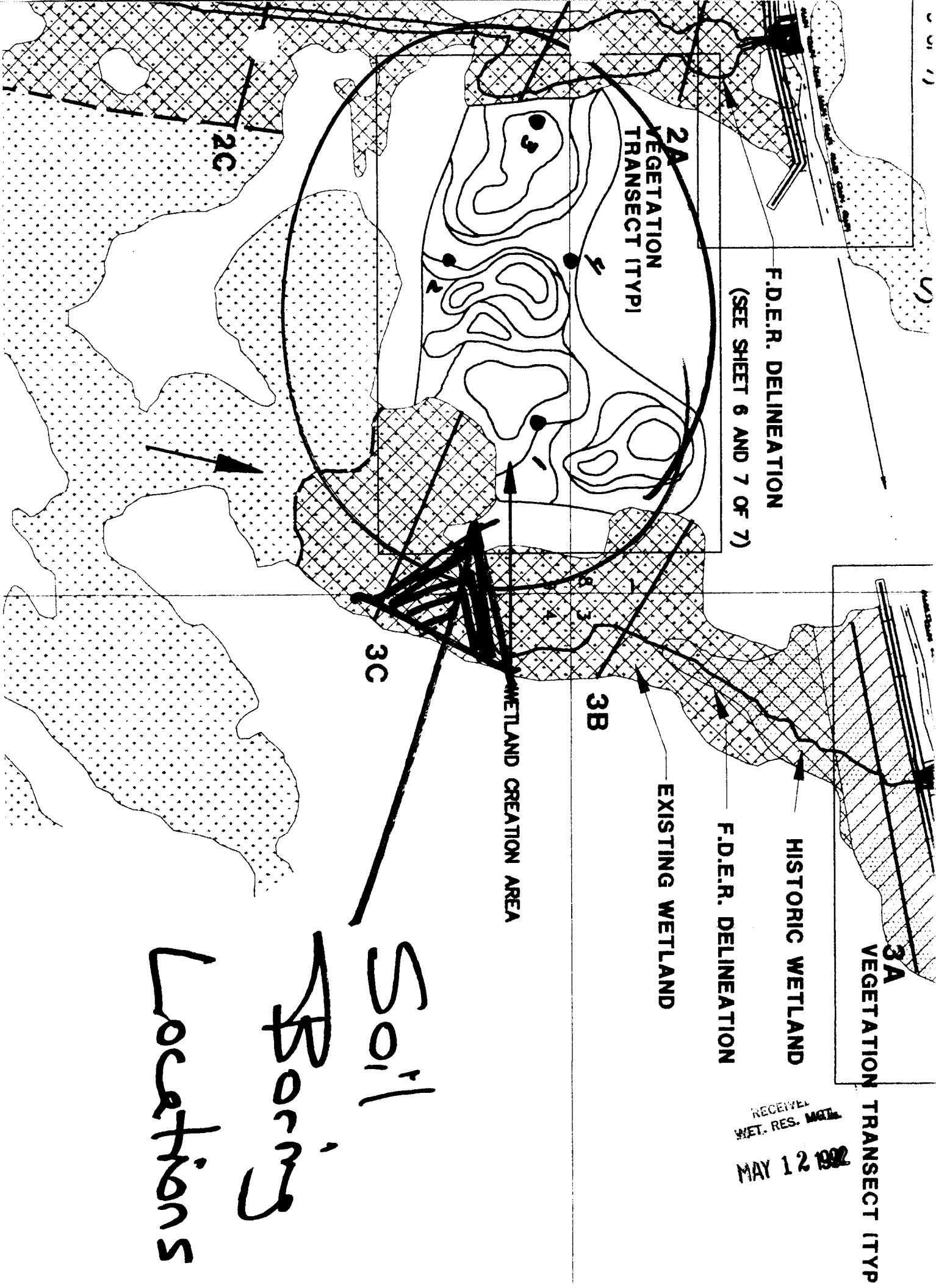
Seminole believes that the impacts associated with clearing activities are minor due to the method in which these wetlands will be cleared. Specifically, no soil disturbance will be caused by the wetland clearing activities which includes hand clearing (chain saws) without use of machinery and low ground pressure rubber tired vehicles such as a Feller-Buncher which shears the trees at the ground line and carries them to upland areas. SWFWMD has recognized our efforts at minimizing impacts due to clearing and have agreed that mitigation should be at the minimum level due to the clearing methodology. The Corps of Engineers are not requiring a permit due to our methodology fitting their Regulatory Guidance Letter on clearing activities.

Two types of compensation are proposed for these wetland impacts. Impacts for the total of 3.49 acres of fill are proposed to be mitigated for by the creation of 12.7 acres of forested wetland and 6.64 acres of herbaceous wetlands from uplands in the Myrtle Slough area (see attached Figures). Impacts for the total of 25.11 acres of clearing will be compensated for by the proposed creation of 109.30 acres of wetlands through enhancement of areas within the historic Myrtle Slough area and through enhancement of 7.69 acres of existing FDER wetlands within three sloughs in the Myrtle Slough basin for a total of 116.99 acres (102.43 acres of which are available for DER mitigation credit).

Proposed ratios are:

Forested/Shrub Fill 2.14 acres	Mitigation Creation 12.7 acres Forested	Ratio 5.9:1
Marsh/Upland Ditch Fill 1.35 acres	Mitigation Creation 6.64 acres Marsh	4.9:1
Forested/Shrub Clearing 25.11 acres	Creation/Enhancement (Restoration) 102.43 acres	4.1:1

RECEIVED
WET. RES. MGMT.
MAY 12 1992



F.D.E.R. DELINEATION
(SEE SHEET 6 AND 7 OF 7)

HISTORIC WETLAND
F.D.E.R. DELINEATION

EXISTING WETLAND

WETLAND CREATION AREA

Soil
Boring
Locations

RECEIVED
WET. RES. MGT.
MAY 12 1992