

JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A Hagood Avenue
Charleston, South Carolina 29403-5107

and

THE S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Office of Environmental Quality Control
Water Quality Certification and Wetlands Programs Section
2600 Bull Street
Columbia, South Carolina 29201

REGULATORY DIVISION
Refer to: P/N #2003-1G-122-C

30 MAY 2003

Pursuant to Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 et seq.) an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

BURROUGHS & CHAPIN CO. INC.
C/O AMANDA CARREL, WESI
2411 OAK STREET, SUITE 108
MYRTLE BEACH, SOUTH CAROLINA 29577

for a permit to place fill material in wetlands adjacent to the

ATLANTIC INTRACOASTAL WATERWAY (AIWW) & LEWIS OCEAN BAY

at a location, the proposed Grande Dunes West development, on a 900 acre tract of land west of the AIWW and 82nd Avenue north, in Myrtle Beach, Horry County, South Carolina (Latitude 33.7731° – Longitude -78.8153°)

In order to give all interested parties an opportunity to express their views

NOTICE

is hereby given that written statements regarding the proposed work will be received by both of the above mentioned offices until

12 O'CLOCK NOON, MONDAY, JUNE 30, 2003

from those interested in the activity and whose interests may be affected by the proposed work.

The proposed work consists of placing fill material in 0.94 acres of jurisdictional wetlands, placing fill material in 0.95 acres of non-jurisdictional wetlands, performing excavation in 4.5 acres of jurisdictional wetlands, and performing hand clearing in 0.11 acres of wetlands. As mitigation for the proposed impacts, the applicant proposes to perform off-site mitigation on the Long Farm Tract in Conway, South Carolina. The proposed off-site mitigation consists of preserving 57.31 acres of jurisdictional wetlands enhanced by 156.97 acres of upland buffers. In addition, the applicant proposes to purchase 12.5 restoration credits from the Historic Rice Fields Association In-Lieu-Fee mitigation program. The purpose of the proposed work is for residential development, access, and stormwater management.

NOTE: Plans depicting the work described in this notice are available and will be provided, upon receipt of a written request, to anyone that is interested in obtaining a copy of the plans for the specific project. The request

must identify the project of interest by public notice number and a self-addressed stamped envelope must also be provided for mailing the drawings to you. Your request for drawings should be addressed to the

**U.S. Army Corps of Engineers
ATTN: REGULATORY DIVISION
69A Hagood Avenue
Charleston, South Carolina 29403-5107.**

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions of the South Carolina Coastal Zone Management Act (15 CFR 930). The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review. Persons wishing to comment or object to State certification must submit all comments in writing to the S.C. Department of Health and Environmental Control at the above address within thirty (30) days of the date of this notice.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 6.39 acres of freshwater wetlands upstream of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the red drum, shrimp, and snapper-grouper management complexes. Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

Pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended), the applicant has provided a protected species survey for the property associated with the activity described above. Based upon this report, the District Engineer has determined that the project is not likely to adversely affect any Federally endangered, threatened, or proposed species or result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request for written concurrence from the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service on this determination.

The District Engineer has consulted the latest published version of the National Register of Historic Places for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein, and this worksite is not included as a registered property or property listed as being eligible for inclusion in the Register. Consultation of the National Register constitutes the extent of cultural resource investigations by the District Engineer, and he is otherwise unaware of the presence of such resources. Presently unknown archaeological, scientific, prehistorical, or historical data may be lost or destroyed by the work to be accomplished under the requested permit.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both

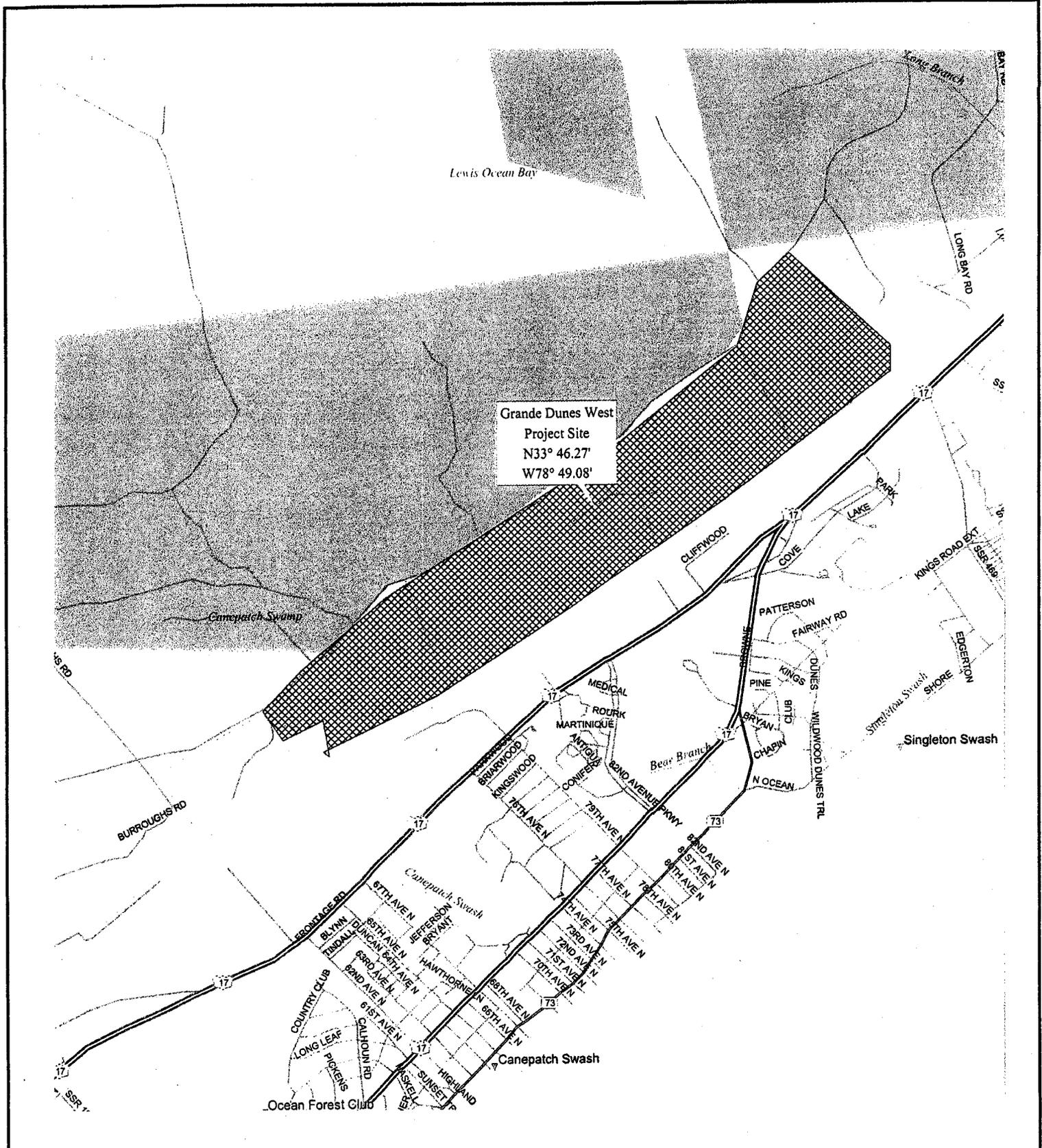
protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps of Engineers cannot undertake to adjudicate rival claims.

The Corps of Engineers 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 activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

If there are any questions concerning this public notice, please contact me at 843-329-8044 or toll free at 1-866-329-8187.



Mary Hope Glenn
Project Manager
Regulatory Division
U.S. Army Corps of Engineers



Grande Dunes West
 Project Site
 N33° 46.27'
 W78° 49.08'

Sheet Title: Vicinity Map	
Project Title: Grande Dunes West Permit Application	
Project Location: Myrtle Beach, South Carolina	
Applicant: Burroughs & Chapin Company, Inc.	
Authorized Agent: Amanda L. Carrel, WESI Consulting, Inc.	
Scale: not to scale	Date: 11 April 2003
Application # 2003-1G-122	Page: 1 of 24

Compensatory Mitigation
Credit Factors and Worksheets

ADVERSE IMPACT FACTORS FOR WETLANDS AND OTHER WATERS OF THE U.S. EXCLUDING STREAMS

Factors	Options					
	Type C 0.2		Type B 2.0		Type A 3.0	
Lost Type						
Priority Category	Tertiary 0.1		Secondary 0.2		Primary 0.4	
Existing Condition	Very Impaired 0.1	Impaired 1.0	Slightly Impaired 2.0	Fully Functional 2.5		
Duration	Seasonal 0.1	0 to 1 0.2	1 to 3 0.5	3 to 5 1.0	5 to 10 1.5	Over 10 2.0
Dominant Impact	Seasonal 0.2	Clear 1.0	Dredge 1.5	Drain 2.0	Impound 2.5	Fill 3.0
Cumulative Impact	0.05 x ΣAA _i					

Note: For the Cumulative Impact factor, ΣAA_i stands for the sum of the acres of adverse impacts to aquatic areas for the overall project. When computing this factor, round to the nearest tenth decimal place using even number rounding. Thus 0.01 and 0.050 are rounded down to give a value of zero while 0.051 and 0.09 are rounded up to give 0.1 as the value for the cumulative impact factor. The cumulative impact factor for the overall project must be used in each area column on the Required Mitigation Credits Worksheet below.

REQUIRED MITIGATION CREDITS WORKSHEET

Factor	Wetland #1 (fill)	Wetland #2 (excavate)	Wetland #2 (fill)
Lost Type	3.0	3.0	3.0
Priority Category	0.4	0.4	0.4
Existing Condition	2.5	2.5	2.5
Duration	2.0	2.0	2.0
Dominant Impact	3.0	0.5	3.0
Cumulative Impact	0.3	0.3	0.3
Sum of Factors	R ₁ = 11.2	R _{2a} = 8.7	R _{2f} = 11.2
Impacted Area	AA ₁ = 0.95	AA _{2a} = 4.50	AA _{2f} = 0.94
R x AA	10.64	39.15	10.53
Total Required Credits = Sum of all (R x AA) =			49.68
Total Acreage of Impact =			6.39

Sheet Title: Adverse Impacts	
Project Title: Grande Dunes West Permit Application	
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**Compensatory Mitigation
Credit Factors and Worksheets**

RESTORATION AND ENHANCEMENT MITIGATION FACTORS

Factors	Options				
	Minimal Enhancement		to		
Net Improvement	0.1		4.0		
Control	Not Applicable 0	Covenant Private 0.1	Covenant POA 0.2	Conservation Easement 0.4	Transfer Fee Title Conservancy 0.6
Temporal Lag	Not Applicable 0	Over 20 -0.3	10 to 20 -0.2	5 to 10 -0.1	0 to 5 0
Credits Schedule	Schedule 5* 0	Schedule 4 0.1	Schedule 3 0.2	Schedule 2 0.3	Schedule 1 0.4
Kind	Category 5 -0.1	Category 4 0	Category 3 0.2	Category 2 0.3	Category 1 0.4
Location	Zone 5 -0.1	Zone 4 0	Zone 3 0.2	Zone 2 0.3	Zone 1 0.4

*Use this option to calculate credits for enhancement by buffering.

Proposed Restoration and Enhancement Mitigation Worksheet

total preserved wetland acreage	57.28
total upland buffer acreage	156.97

Factors	Long Term
Net Improvement	2
Control	0.1
Temporal Lag	0
Credit Schedule	0
Kind	0.4
Location	0.4
Sum of M Factors	M _{if} = 2.9
Mitigation Area	AA _{if} = 57.28
M x A	166.11

Total "Indirect" Restoration and Enhancement Credits = Sum of all (M x A) = 166.11

Total Restoration and Enhancement Acreage = 57.28

Sheet Title: Restoration and Enhancement Credit Calculation	
Project Title: Grande Dunes West Permit Application	
Project Location: Myrtle Beach, South Carolina	
Applicant: Burroughs & Chapin Company, Inc.	
Authorized Agent: Amanda L. Carrel, WESI Consulting, Inc.	
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Compensatory Mitigation
Credit Factors and Worksheets

**PRESERVATION MITIGATION FACTORS FOR WETLANDS
AND OTHER WATERS OF THE U.S. EXCLUDING STREAMS**

Factors	Options				
	Priority Category	Tertiary 0.1		Secondary 0.2	
Existing Condition	Impaired -0.1		Slightly Impaired 0		Fully Functional 0.1
Degree of Threat	Low -0.1		Moderate 0.1		High 0.2
Control	Covenant Private 0	Covenant POA 0.1	Conservation Easement 0.4	Transfer Fee Title Conservancy 0.6	
Kind	Category 5 -0.1	Category 4 0	Category 3 0.1	Category 2 0.2	Category 1 0.3
Location	Zone 5 -0.1	Zone 4 0	Zone 3 0.1	Zone 2 0.2	Zone 1 0.3

Note: Preservation credit should generally be limited to those areas that qualify as Fully Functional or Slightly Impaired. Impaired sites should be candidates for enhancement or restoration credit, not preservation credit. In Special circumstances when Impaired sites are allowed preservation credit (e.g. within the scope of some OCRM wetland master planned projects), a negative factor will be used to calculate credits as per the matrix table.

Proposed Preservation Mitigation Worksheet

total preserved wetland acreage	8.44-acres	12.25-acres	57.28-acres
restoration/enhancement acreage	0-acres	0-acres	57.28-acres

Factors	GD West (Wetland #2)	GD West (Wetland #3)	Long Term Tract
Priority Category	0.4	0.4	0.4
Existing Condition	0.1	0.1	0.1
Degree of Threat	0.1	0.1	0.1
Control	0	0	0
Kind	0.3	0.3	0.3
Location	0.3	0.3	0.3
Sum of M Factors	M ₆ = 1.2	M ₇ = 1.2	M ₈ = 1.2
Direct Preservation Area	AA ₆ = 8.44	AA ₇ = 12.25	AA ₈ = 0.00
M x A	10.13	14.70	0.00

Total "Direct" Preservation Credits = Sum of all (M x A) = 24.83

Total Direct Acreage Preserved = 20.69

Sheet Title: Preservation Credit Calculation

Project Title: Grande Dunes West Permit Application

Project Location: Myrtle Beach, South Carolina

Applicant: Burroughs & Chapin Company, Inc.

Authorized Agent: Amanda L. Carrel, WESI Consulting, Inc.

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**Compensatory Mitigation
Credit Factors and Worksheets**

**MITIGATION SUMMARY WORKSHEET
WETLANDS AND OTHER WATERS OF THE U.S. EXCLUDING STREAMS**

Mitigation Summary Worksheet for Permit Application# _____

I. Required Mitigation

A. Total Required Mitigation Credits = **49.68** for 6.39-acres of impact

II. Non-Banking Mitigation Credit Summary

	Credits	Acres
B. Creation	0	0
C. Restoration and/or Enhancement (Non-Buffer Enhancement)	0	0
D. Restoration and/or Enhancement (Buffer Enhancement)	166.11	57.28
E. Total No Net Loss Non-Bank Mitigation = B + C + D	166.11	57.28
F. Preservation	24.83	20.69
G. Total Proposed Non-Bank Mitigation = E + F	190.94	77.97

III. Banking Mitigation Credit Summary

	Credits	Acres
H. Creation	0	0
I. Restoration and/or Enhancement (Non-Buffer Enhancement)	12.5	0
J. Restoration and/or Enhancement (Buffer Enhancement)	0	0
K. Total No Net Loss Bank Mitigation = H + I + J	12.5	0
L. Preservation	0	0
M. Total Proposed Bank Mitigation = K + L	12.50	0.00

IV. Grand Totals

	Credits	Acres
N. Total Preservation Mitigation = F + L	24.83	20.69
O. Total Non-Preservation Mitigation = E + K	178.61	57.28
P. Total Creation = B + H	0.00	0.00
Q. Total Restoration and/or Enhancement (Non-Buffer Enhancement) = C + I	12.50	0.00
R. Total Proposed Mitigation = G + M	203.44	77.97

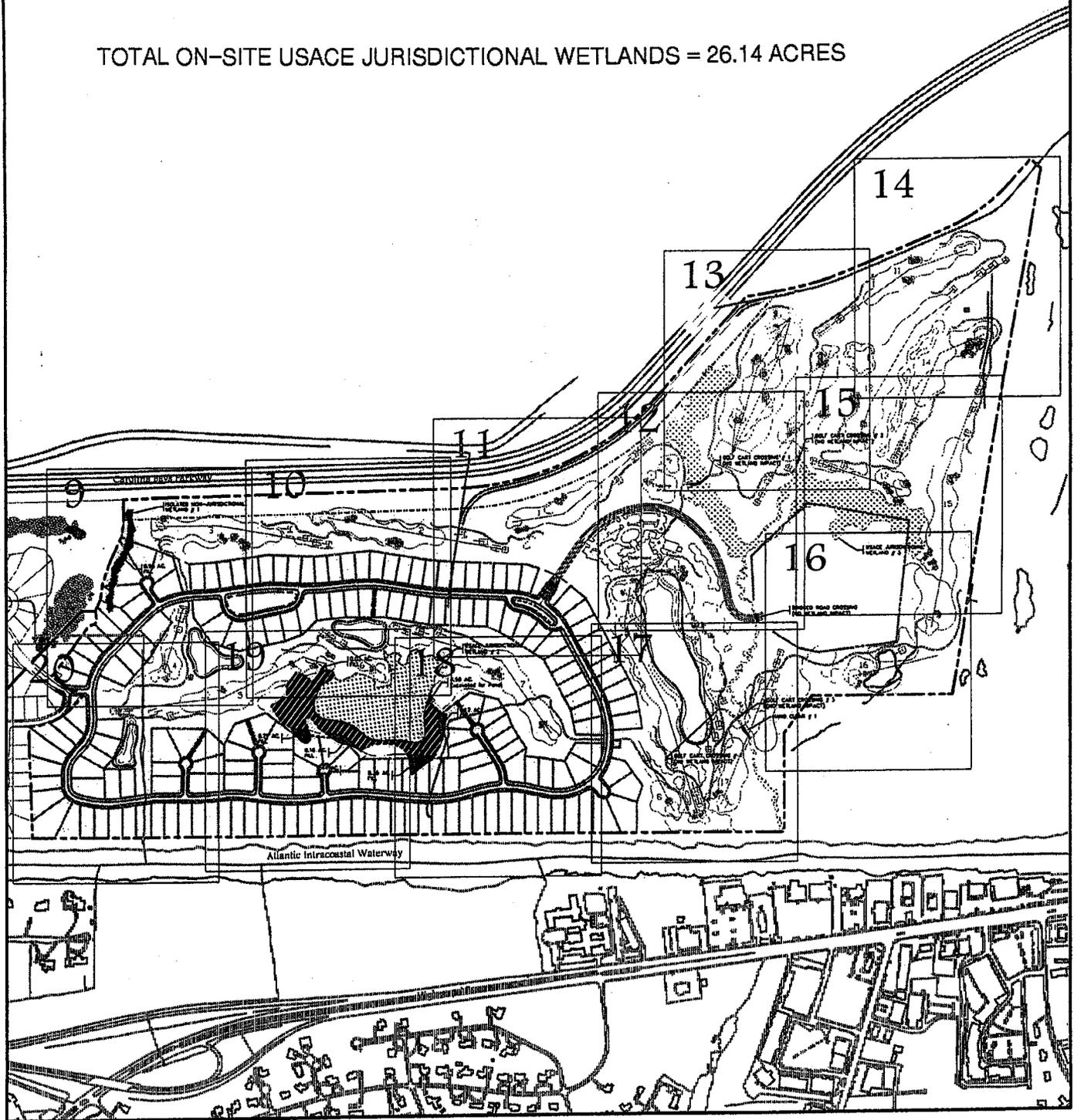
The total Mitigation Credits (Row R) should be equal to or greater than the total Required Mitigation Credits (Row A) for the proposed mitigation to be acceptable. The other requirements given in the SOP must also be satisfied, e.g., in the credits column, Row O must equal at least 50% of Row A and the addition of Row P and Row Q must equal at least 25% of Row A. If the answer to either of the questions below is NO, then the proposed mix and/or quantity of mitigation is not in compliance with the policy and the plan should be revised or rejected, unless a variance is approved.

	TRUE	FALSE
$PMC \geq RMC$ or in words Are the credits in Row R greater than or equal to Row A?	TRUE	
$PMC_{Non-Preservation} \geq 1/2 RMC$ or in words Are the credits in Row O greater than or equal to 50% of Row A?	TRUE	
$PMC_{Creation + Restoration/Enhancement (Non-Buffer Enhancement)} \geq 1/4 RMC$ or in words Are the credits in Row P plus the credits in Row Q greater than or equal to 25% of Row A?	TRUE	

Sheet Title: Mitigation Credit Summary	
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TOTAL ON-SITE ISOLATED NON-JURISDICTIONAL WETLANDS = 0.95 ACRES

TOTAL ON-SITE USACE JURISDICTIONAL WETLANDS = 26.14 ACRES



Sheet Title: Overall Site Plan

Project Title: Grande Dunes West Permit Application

Project Location: Myrtle Beach, South Carolina

Applicant: Burroughs & Chapin Company, Inc.

Authorized Agent: Amanda L. Carrel, WESI Consulting, Inc.

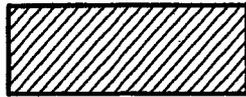
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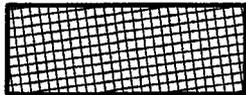
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GRANDE DUNES WEST SITE DATA AND LEGEND



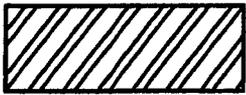
ISOLATED NON-JURISDICTIONAL
WETLAND TO BE FILLED

TOTAL ON-SITE ISOLATED NON-JURISDICTIONAL WETLAND
TO BE IMPACTED = 0.95 ACRES



USACE JURISDICTIONAL WETLAND
TO BE FILLED

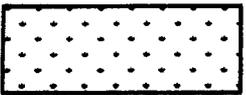
TOTAL ON-SITE USACE JURISDICTIONAL WETLAND
TO BE FILLED = 0.94 AC.



USACE JURISDICTIONAL WETLAND
TO BE EXCAVATED

TOTAL ON-SITE USACE JURISDICTIONAL WETLAND
TO BE EXCAVATED = 4.5 AC.

TOTAL ON-SITE USACE JURISDICTIONAL WETLAND AREA
TO BE IMPACTED = 5.44 AC.



USACE JURISDICTIONAL WETLAND
TO BE PRESERVED

TOTAL ON-SITE USACE JURISDICTIONAL WETLAND AREA
TO BE PRESERVED = 20.69 AC.

TOTAL ON-SITE ISOLATED NON-JURISDICTIONAL WETLAND AREA
TO BE PRESERVED = 0 AC.

TOTAL ON-SITE UPLAND BUFFER TO BE PRESERVED = 0 AC.

Sheet Title: Legend

Project Title: Grande Dunes West Permit Application

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Authorized Agent: Amanda L. Carrel, WESI Consulting, Inc.

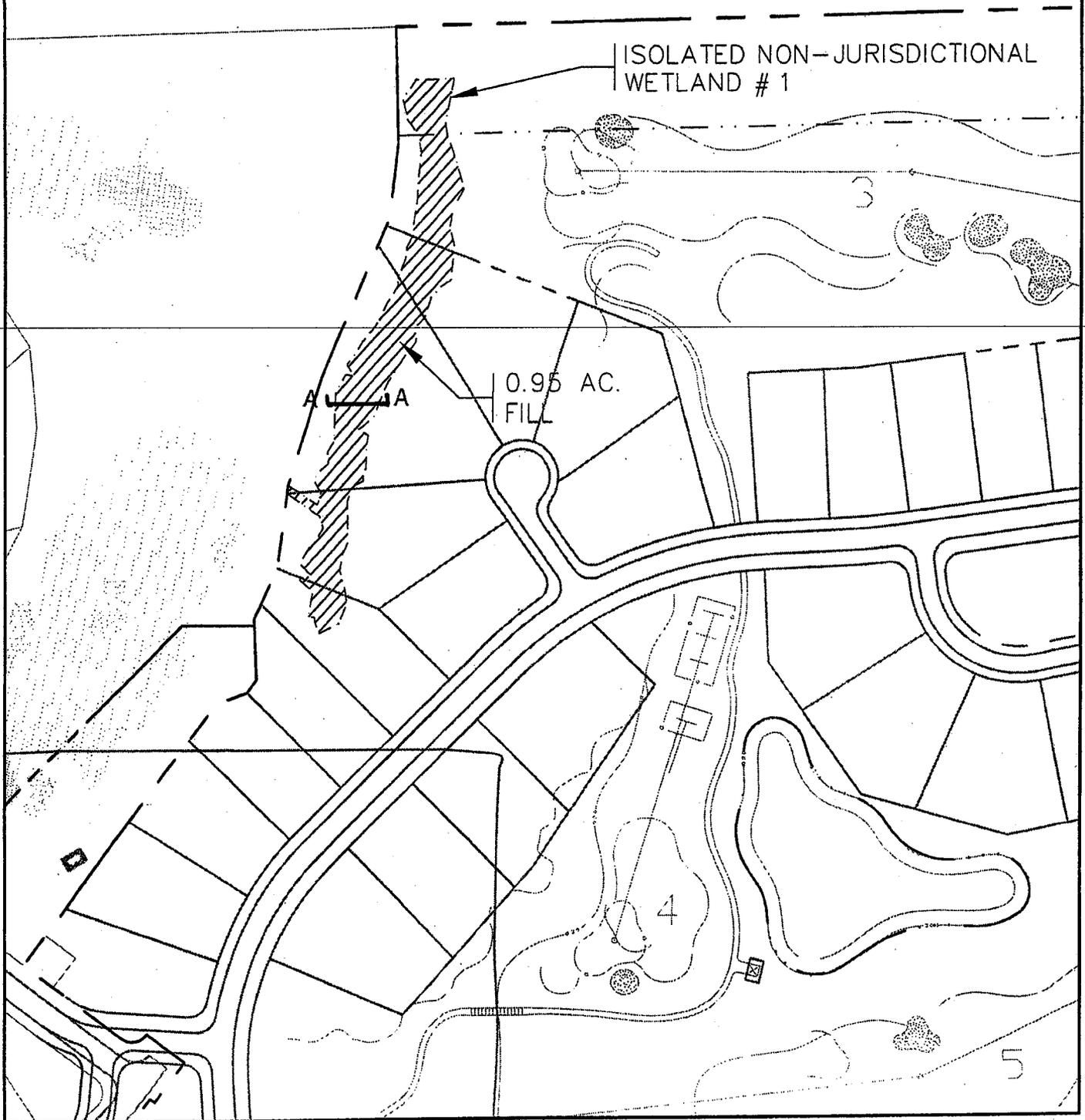
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Carolina Bays Parkway



Sheet Title: Site Plan Enlarged

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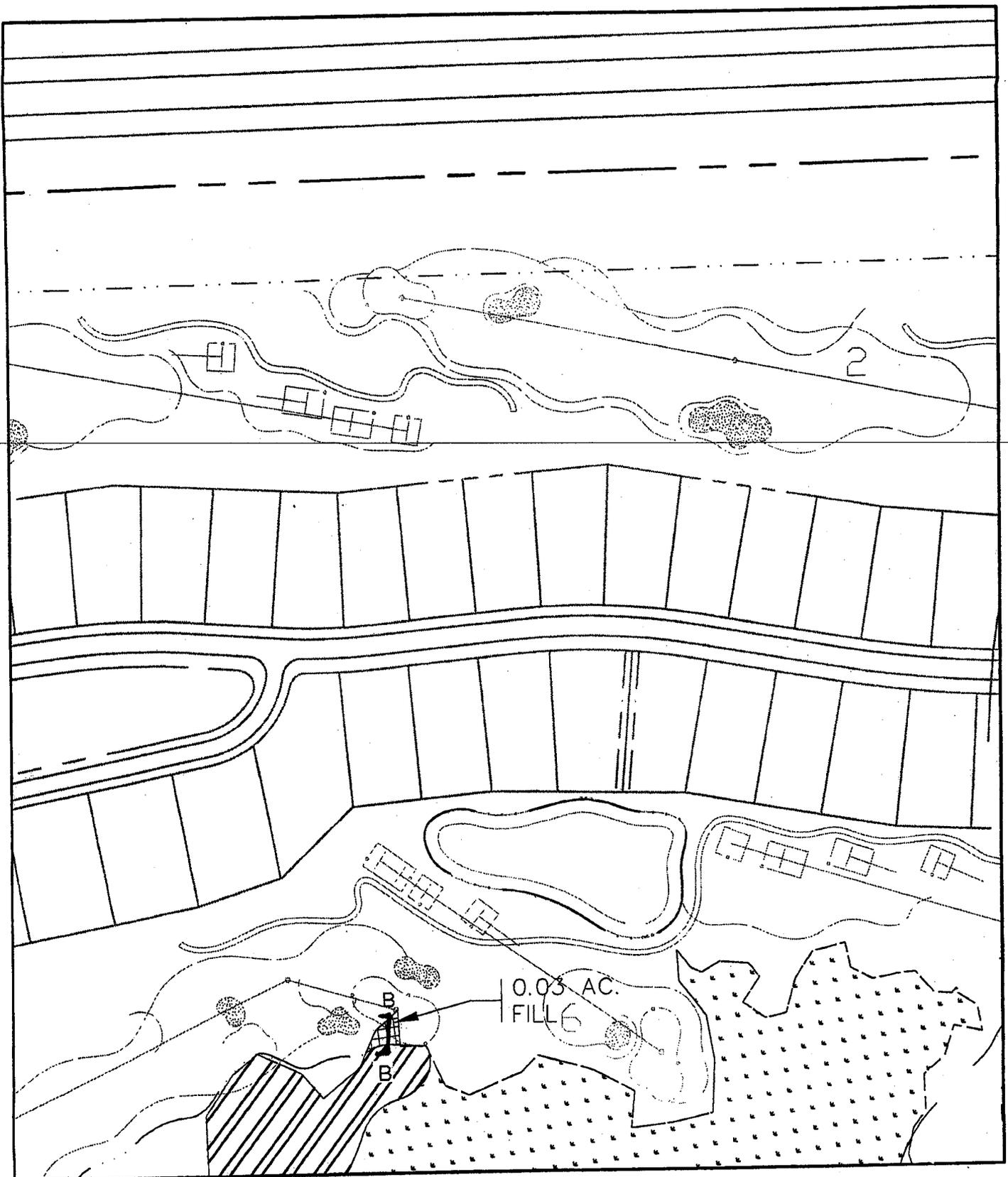
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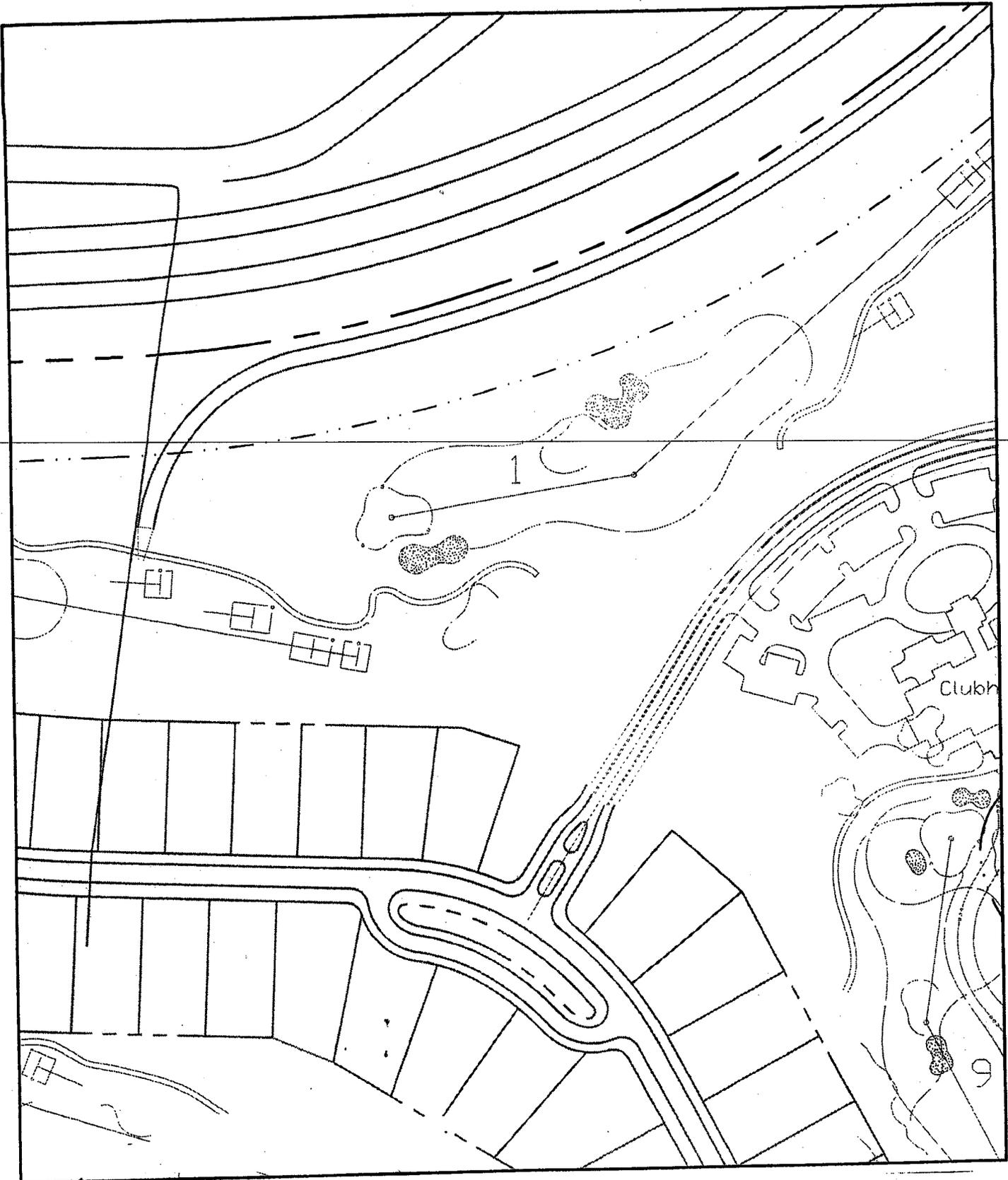
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Sheet Title: Site Plan Enlarged

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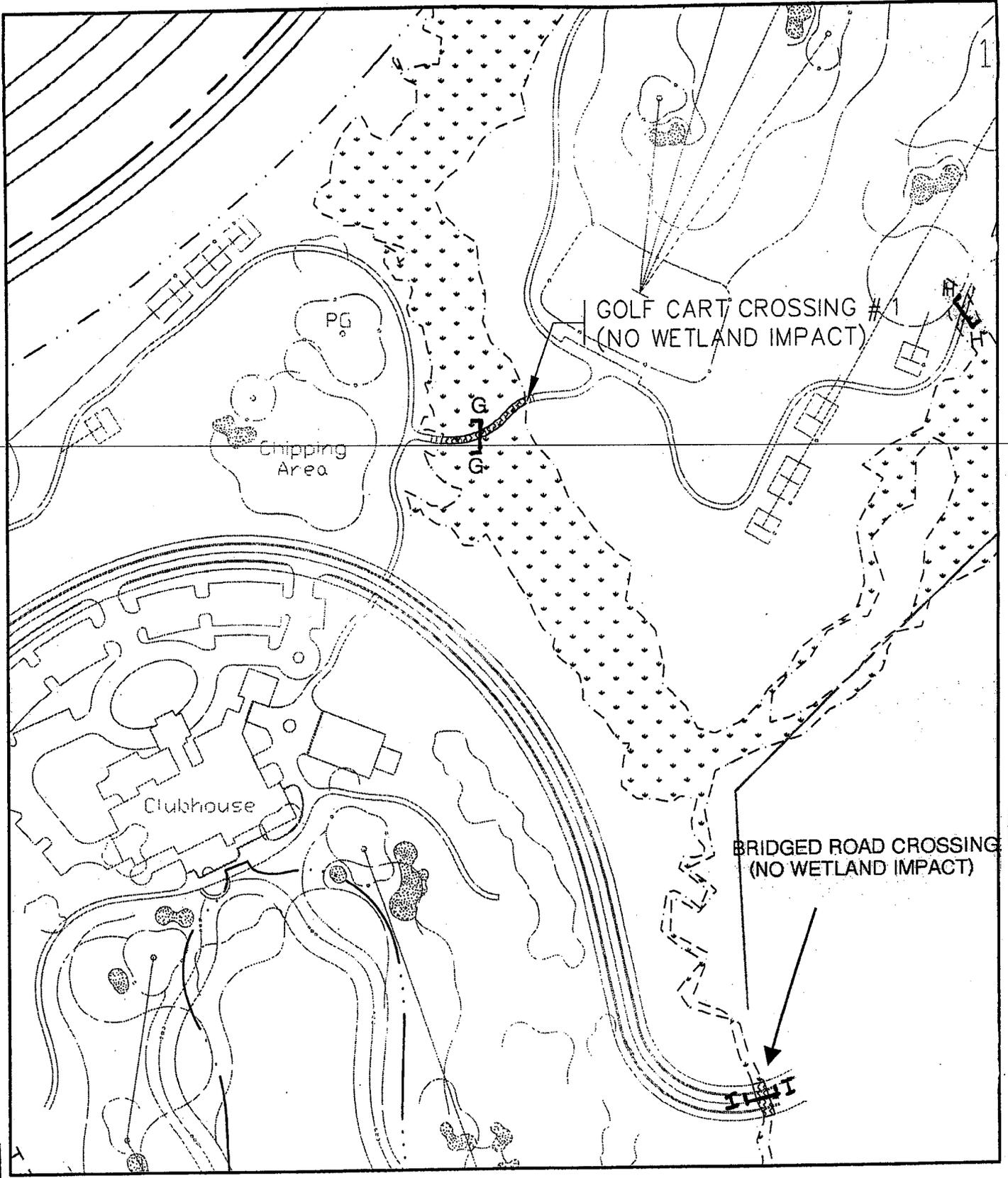
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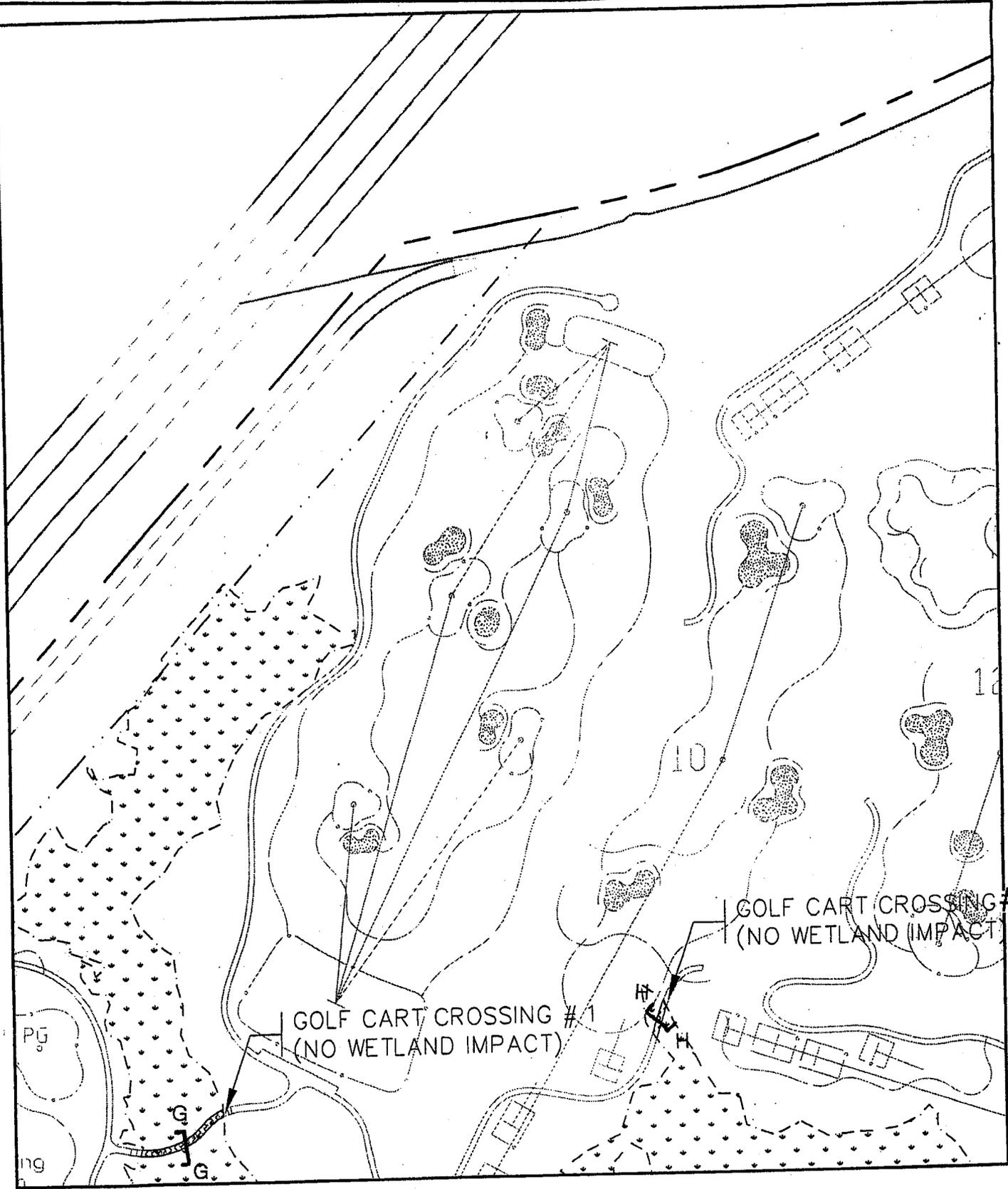
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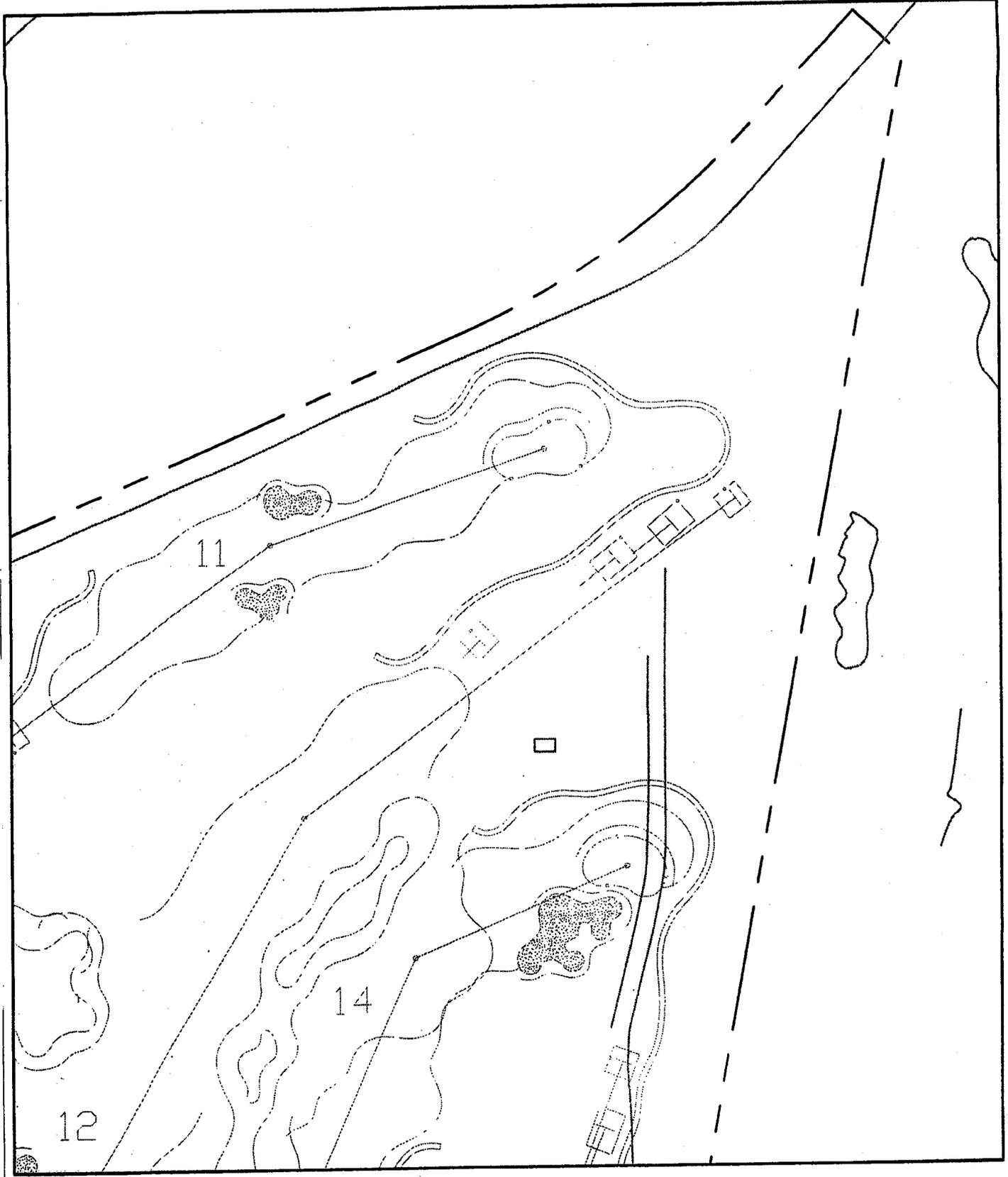
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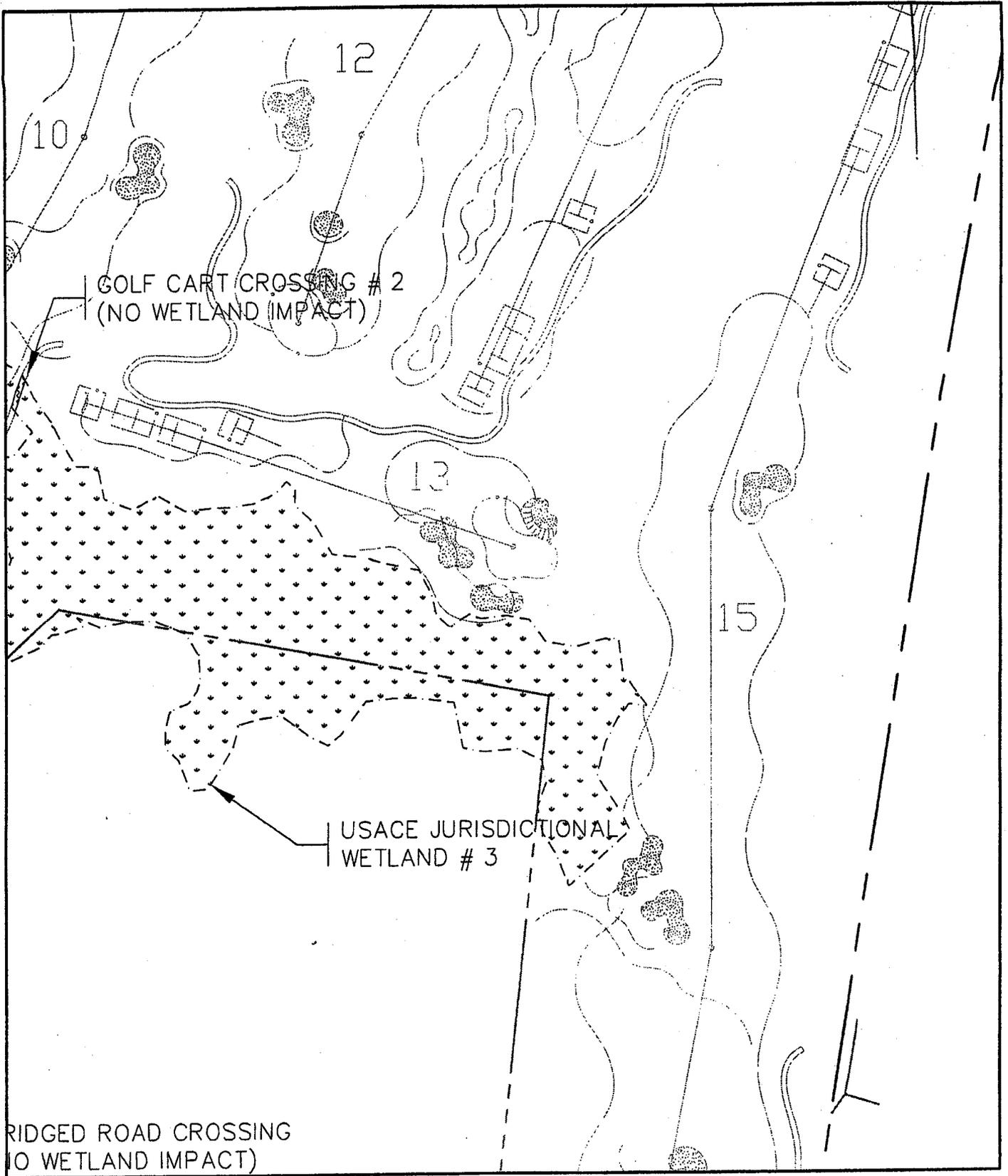
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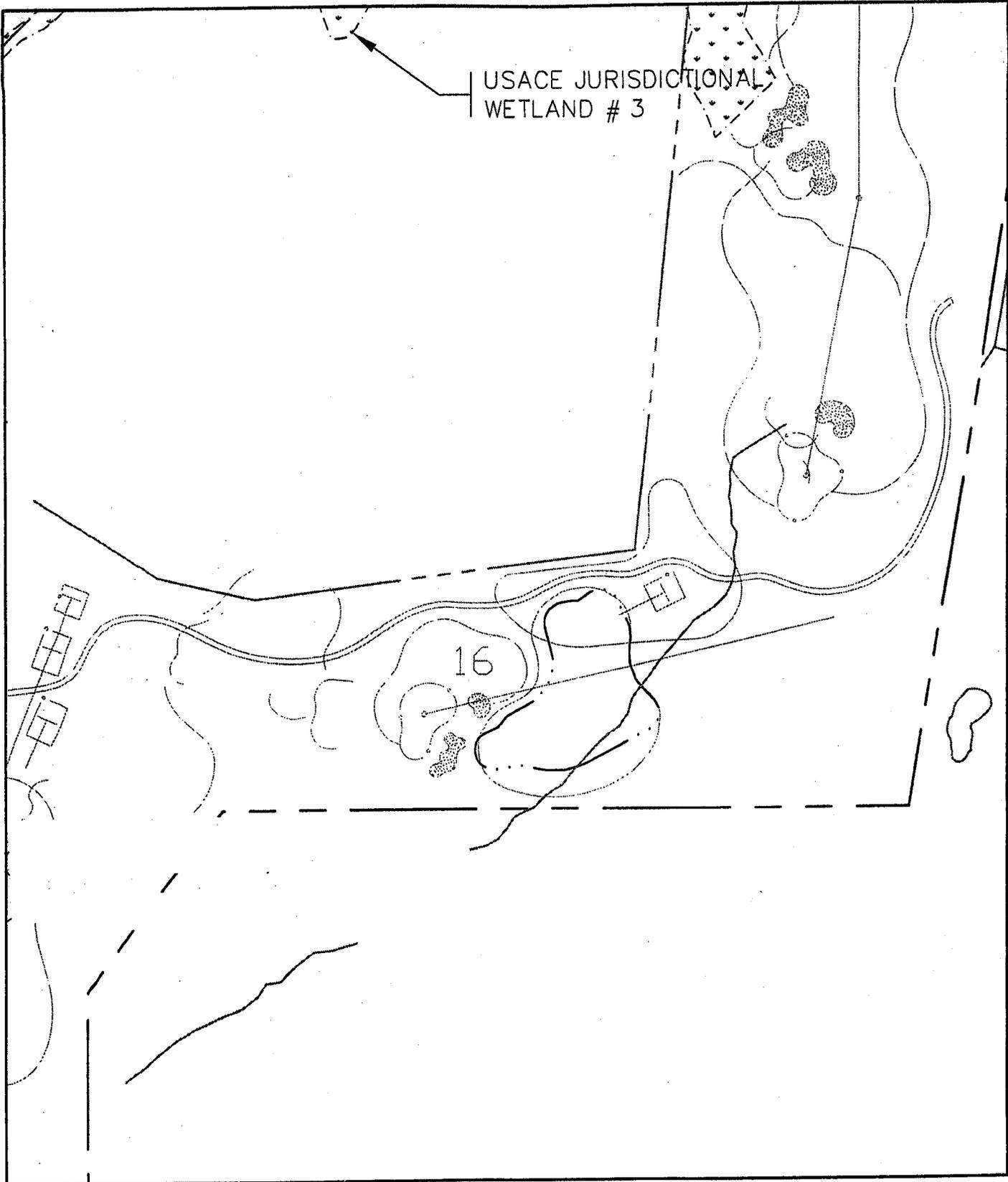
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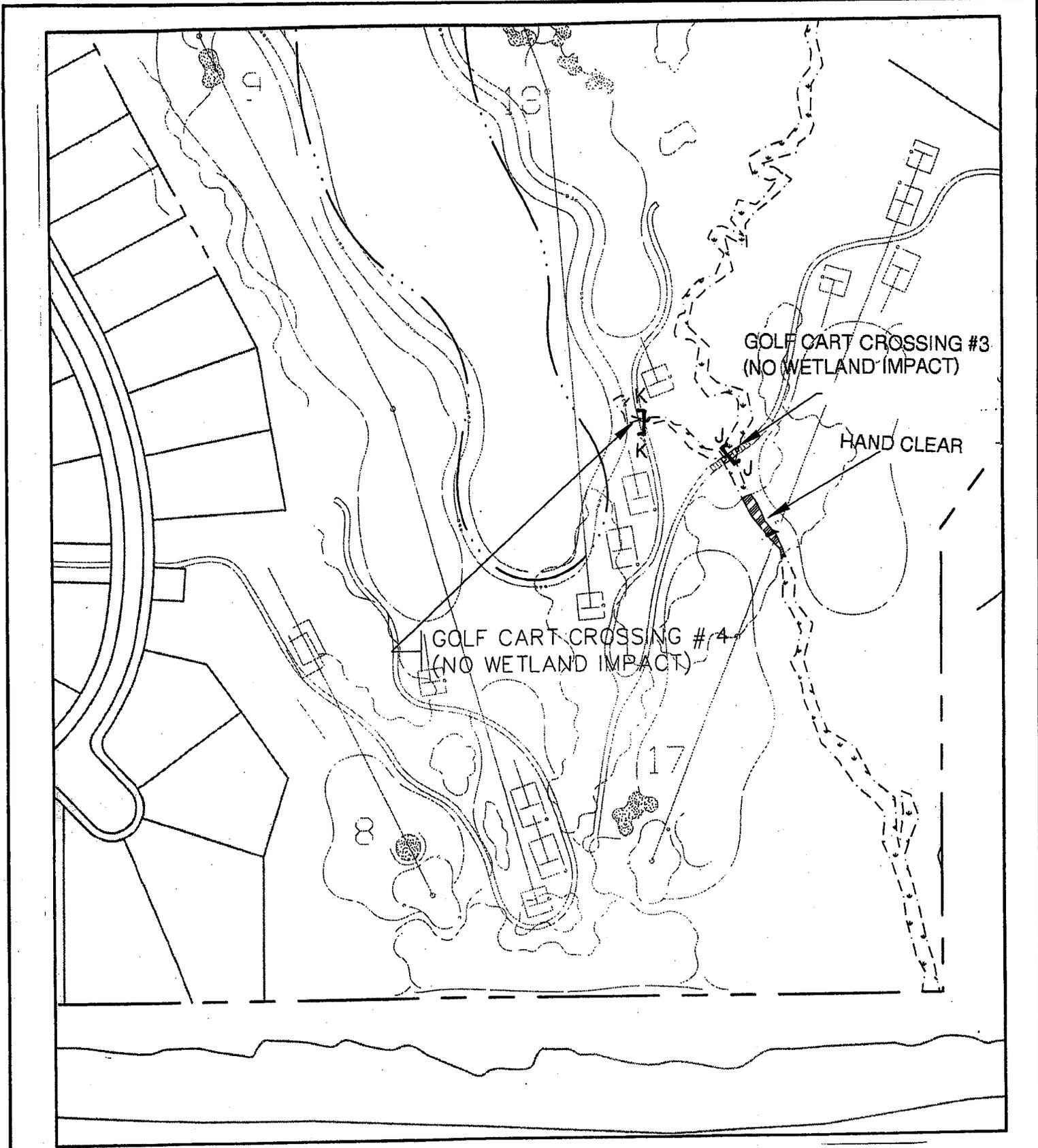
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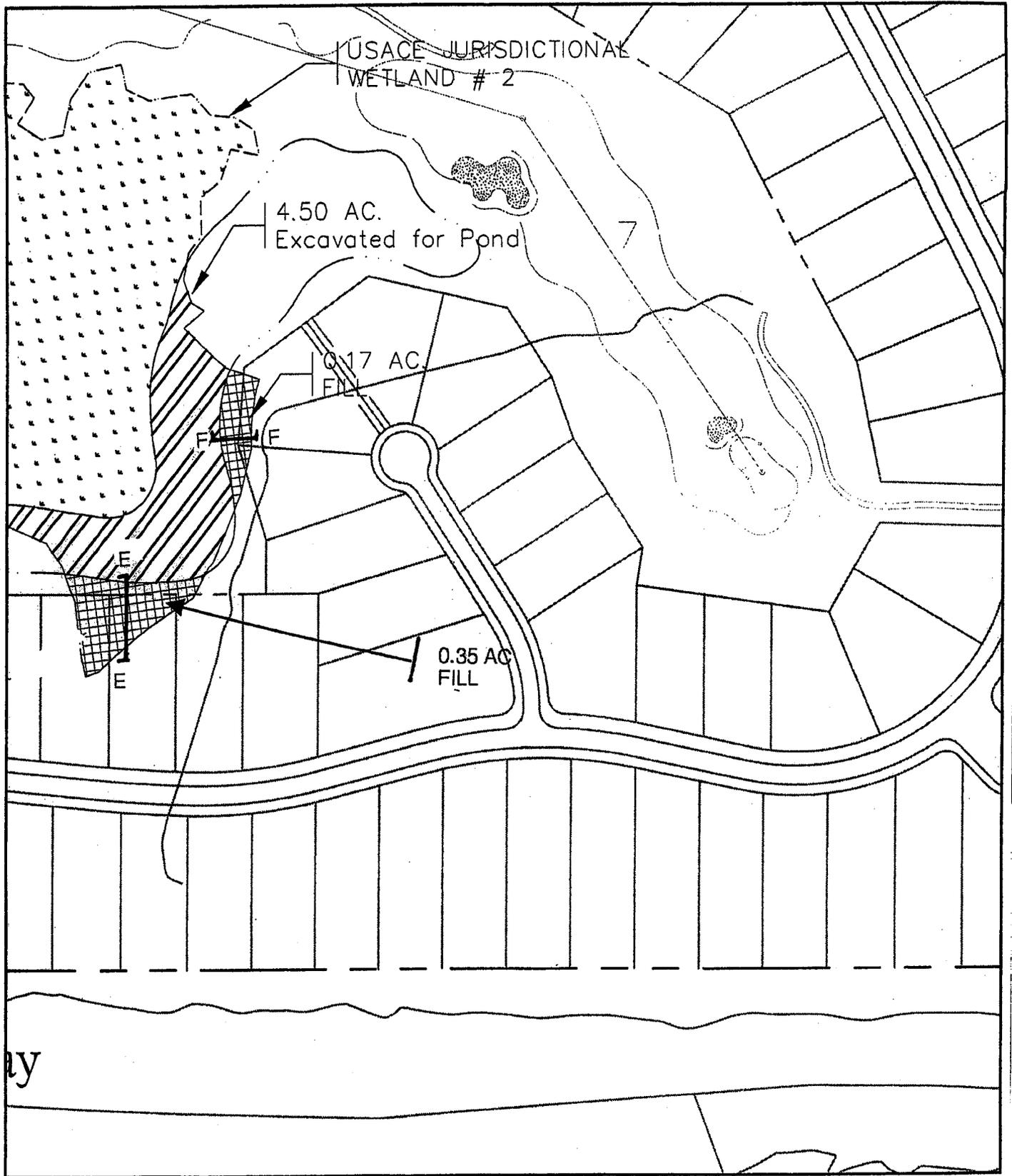
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Sheet Title: Site Plan Enlarged	
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Sheet Title: Site Plan Enlarged	
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Applicant: Burroughs & Chapin Company, Inc.	
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Sheet Title: Site Plan Enlarged

Project Title: Grande Dunes West Permit Application

Project Location: Myrtle Beach, South Carolina

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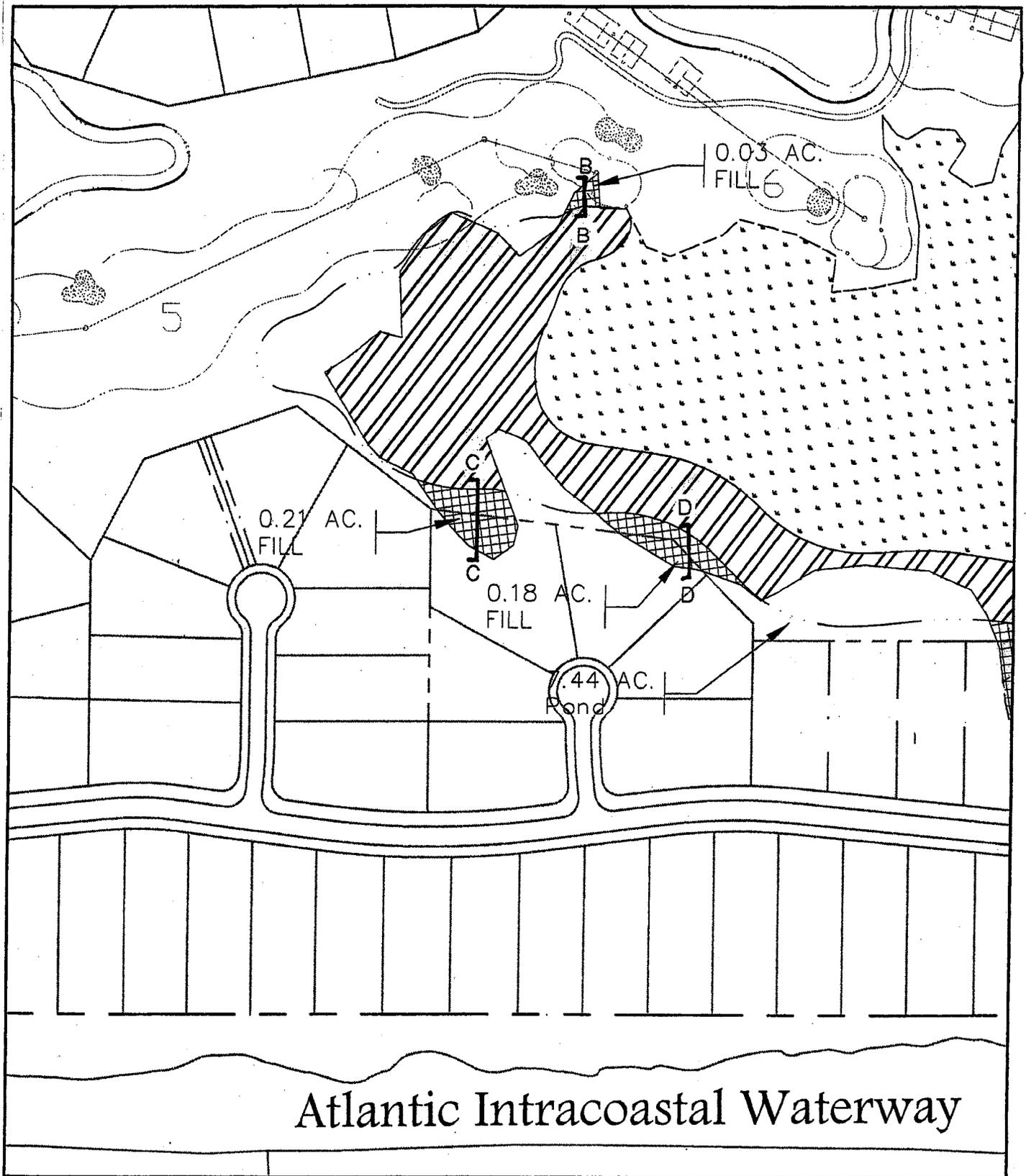
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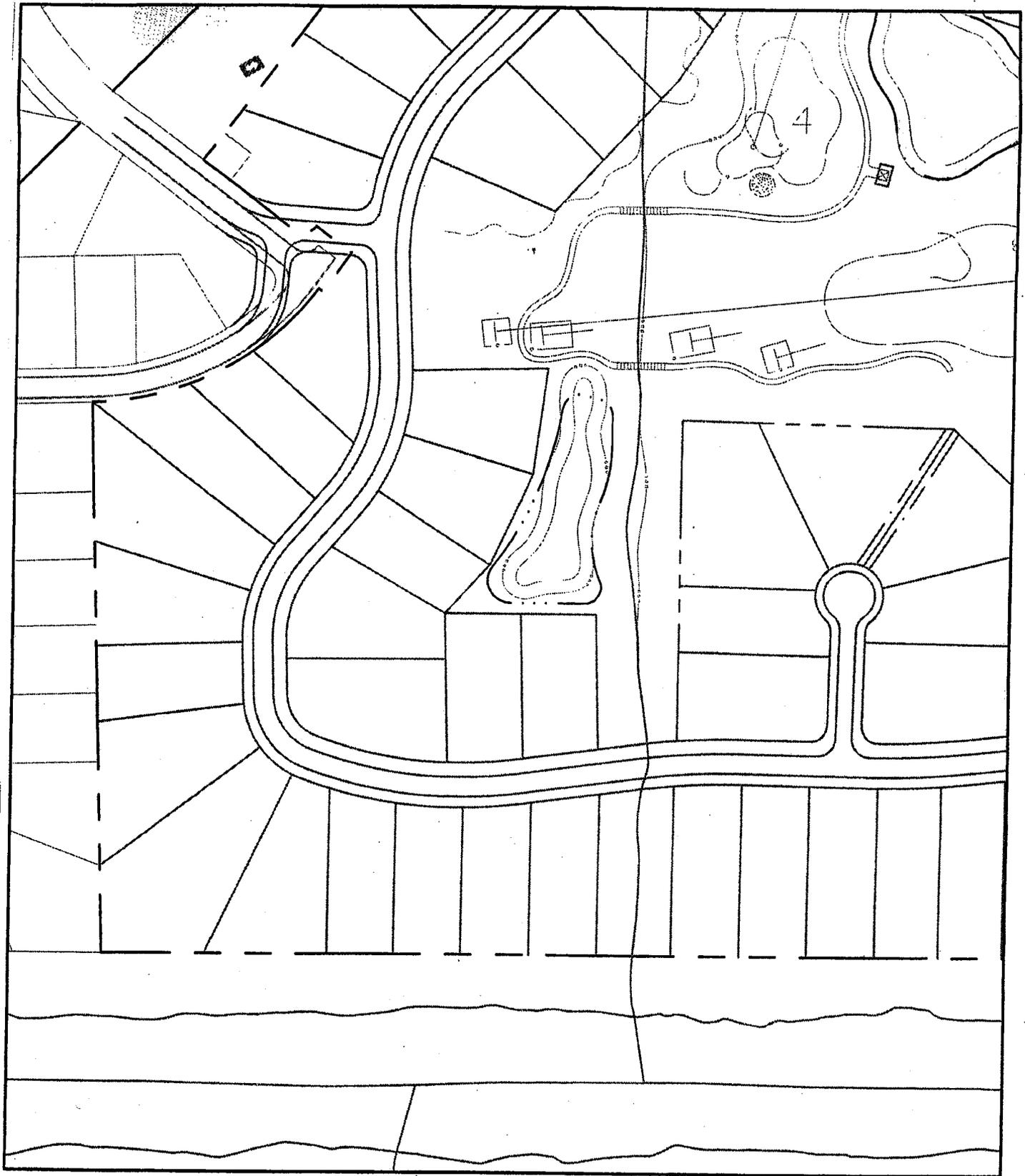
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Sheet Title: Site Plan Enlarged

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Applicant: Burroughs & Chapin Company, Inc.

Authorized Agent: Amanda L. Carrel, WESI Consulting, Inc.

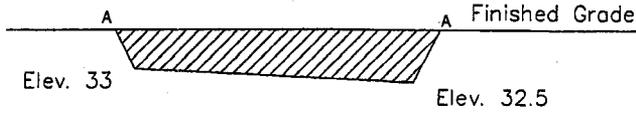
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Date: 11 April 2003

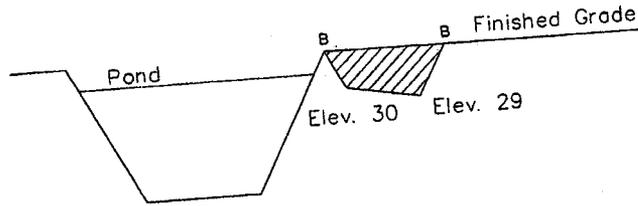
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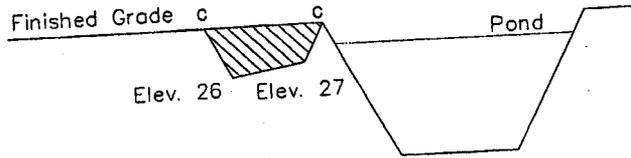
Wetland # 1



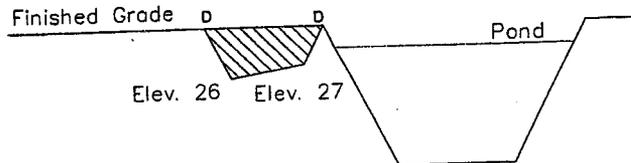
Wetland # 2



Wetland # 2

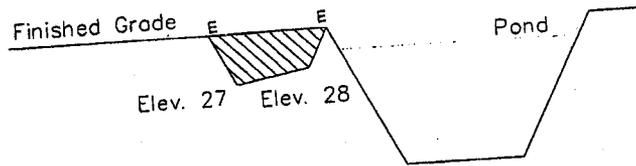


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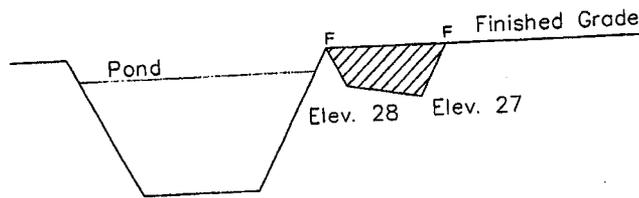


Sheet Title: Cross-Sections	
Project Title: Grande Dunes West Permit Application	
Project Location: Myrtle Beach, South Carolina	
Applicant: Burroughs & Chapin Company, Inc.	
Authorized Agent: Amanda L. Carrel, WESI Consulting, Inc.	
Scale: not to scale	Date: 11 April 2003
Application # 2003-16-12200	Page: 21 of 24

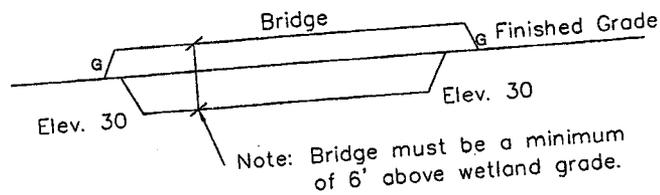
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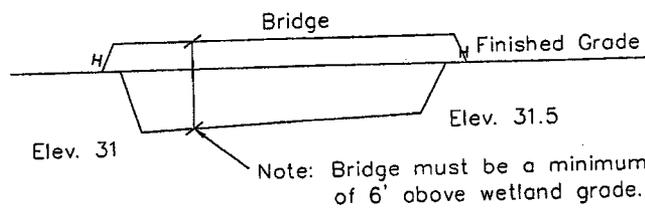
Wetland # 2



WETLAND #3 / GOLF CART CROSSING #1 - NO WETLAND IMPACT



WETLAND #3 / GOLF CART CROSSING #2 - NO WETLAND IMPACT



Sheet Title: Cross-Sections

Project Title: Grande Dunes West Permit Application

Project Location: Myrtle Beach, South Carolina

Applicant: Burroughs & Chapin Company, Inc.

Authorized Agent: Amanda L. Carrel, WESI Consulting, Inc.

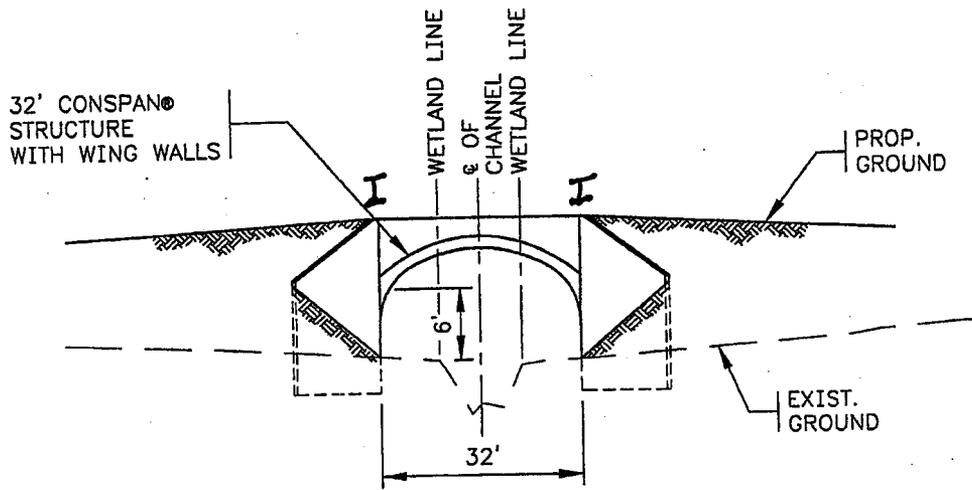
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Date: 11 April 2003

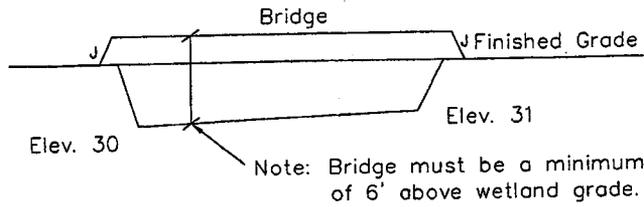
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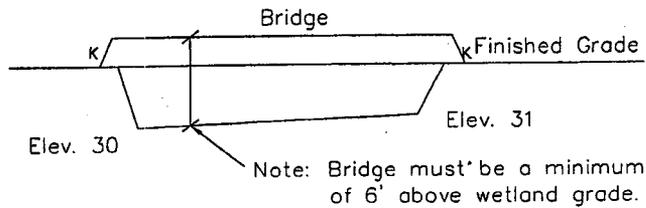
WETLAND #3 / BRIDGED ROAD CROSSING - NO WETLAND IMPACT



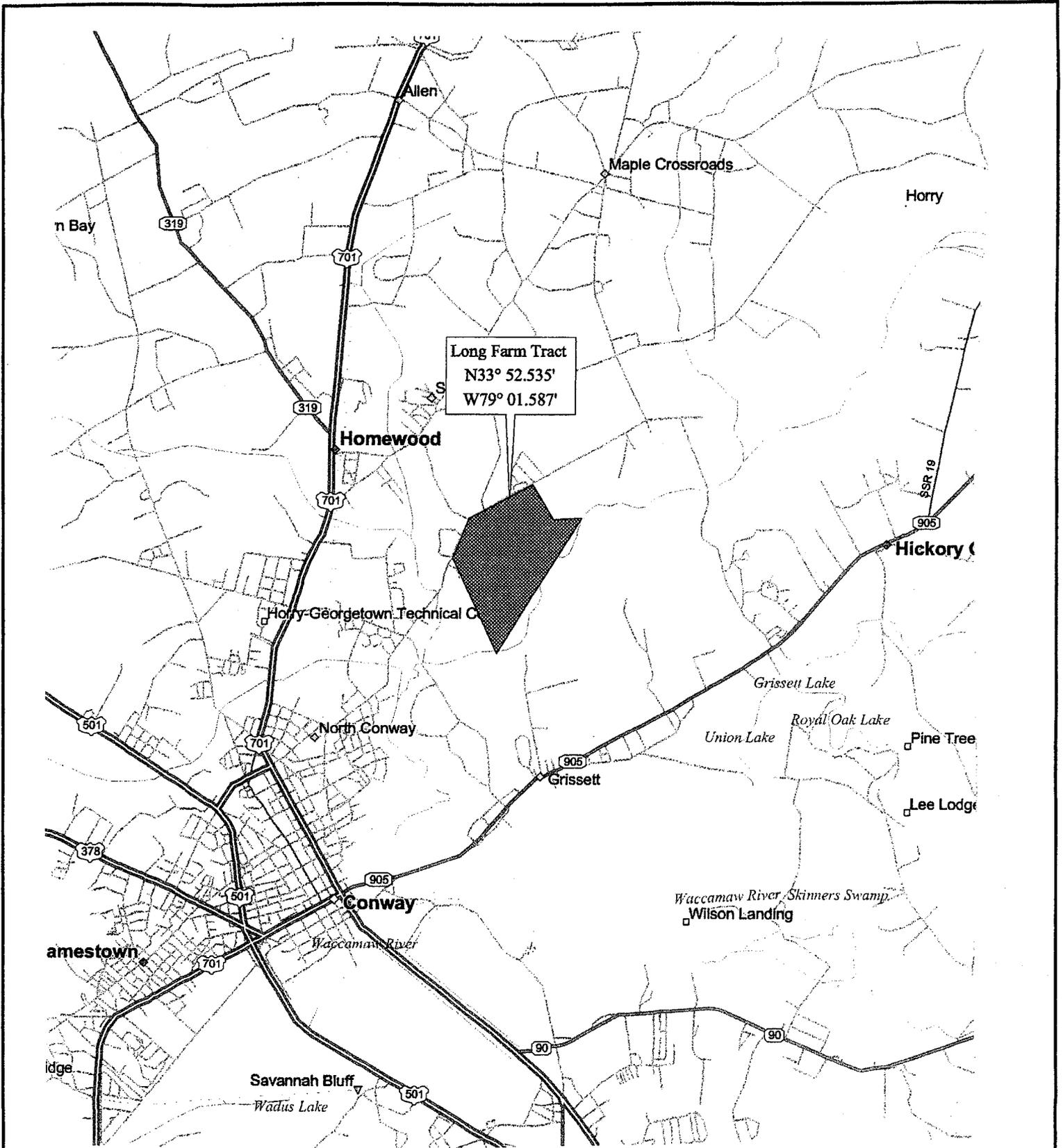
WETLAND #3 / GOLF CART CROSSING #3 - NO WETLAND IMPACT



WETLAND #3 / GOLF CART CROSSING #4 - NO WETLAND IMPACT

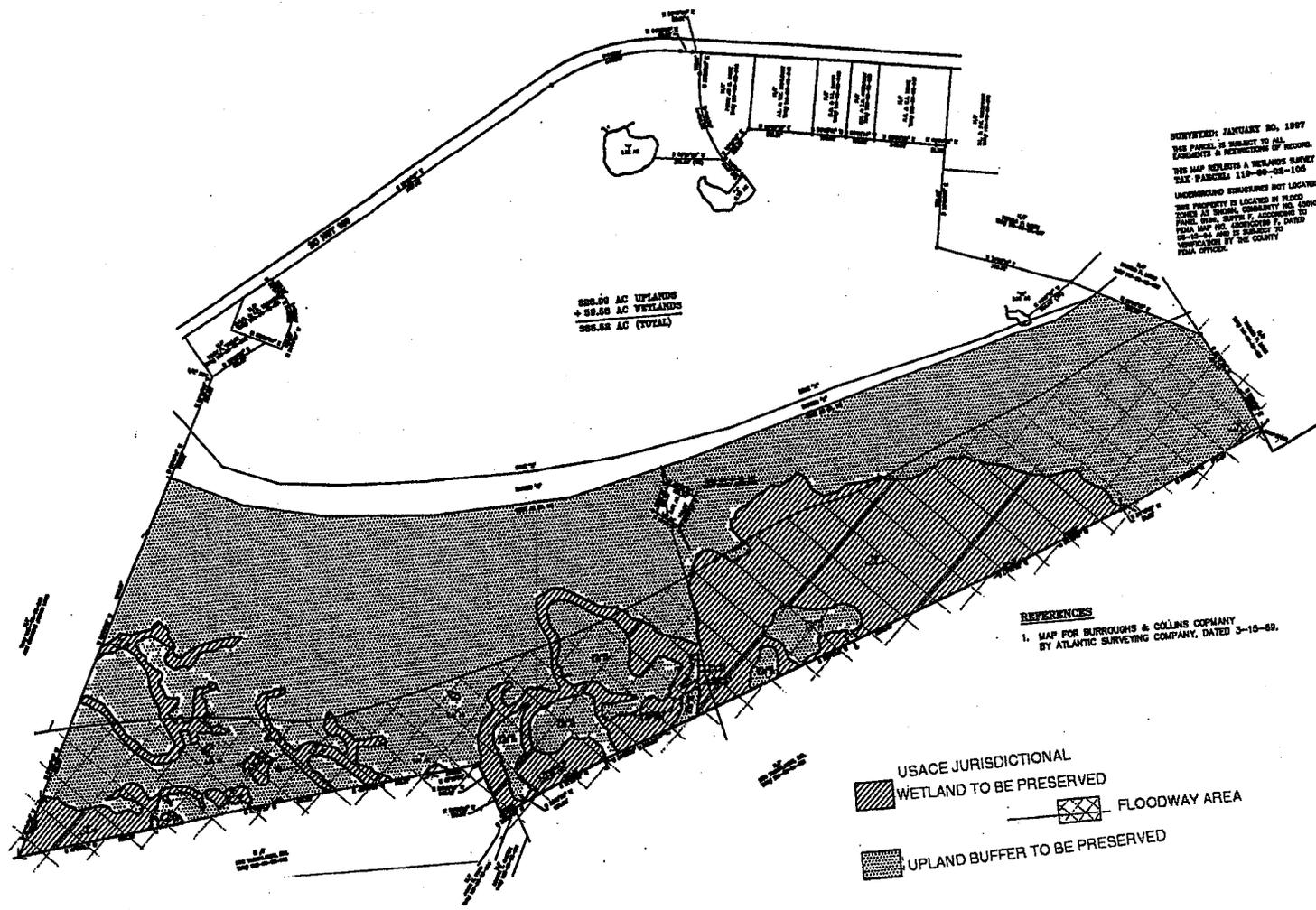


Sheet Title: Cross-Sections	
Project Title: Grande Dunes West Permit Application	
Project Location: Myrtle Beach, South Carolina	
Applicant: Burroughs & Chapin Company, Inc.	
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Scale: not to scale	Date: 11 April 2003
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Long Farm Tract
 N33° 52.535'
 W79° 01.587'

Sheet Title: Long Farm Vicinity Map (proposed off-site mitigation)	
Project Title: Grande Dunes West Permit Application	
Project Location: Myrtle Beach, South Carolina	
Applicant: Burroughs & Chapin Company, Inc.	
Authorized Agent: Amanda L. Carrel, WESI Consulting, Inc.	
Scale: not to scale	Date: 20 May 2003
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Total Long Farm Wetland Area to be Preserved = 57.28 Acres
 Total Long Farm Upland Buffer Area to be Preserved = 156.97 Acres
 Total Long Farm Isolated Non-Jurisdictional Wetland to be Impacted = 0 Acres
 Total Long Farm USACE Jurisdictional Wetland to be Impacted = 0 Acres

Sheet Title: Long Farm Site Plan (proposed off-site mitigation)	
Project Title: Grande Dunes West Permit Application	
Project Location: Myrtle Beach, South Carolina	
Applicant: Burroughs & Chapin Company, Inc.	
Authorized Agent: Amanda L. Carrel, WESI Consulting, Inc.	
Scale: not to scale	Date: 11 April 2003
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