

FINAL

ENVIRONMENTAL IMPACT STATEMENT

City of Jacksonville, Florida
Wastewater Management Facilities
Arlington-East Service District

EPA PROJECT C120541



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IV
1421 PEACHTREE ST., N. E.
ATLANTA, GEORGIA 30309

AUGUST 1976

FINAL
ENVIRONMENTAL IMPACT STATEMENT

ARLINGTON-EAST SERVICE DISTRICT
WASTEWATER MANAGEMENT FACILITIES
JACKSONVILLE, FLORIDA
PROJECT NO. C120541

Prepared by:
U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV
1421 PEACHTREE STREET, N.E.
ATLANTA, GEORGIA 30309

Approved by:


Regional Administrator

August 6, 1976
Date

SUMMARY SHEET

Arlington-East Service District
Wastewater Management Facilities

City of Jacksonville, Florida

EPA Project No. C120541

☐ Draft
☒ Final

U. S. Environmental Protection Agency
Region IV
1421 Peachtree Street, N.E.
Atlanta, Georgia 30309

1. Name of Action

☒ Administrative Action
☐ Legislative Action

2. Brief Description of Action

The subject action of this Final Environmental Impact Statement (EIS) is the awarding of grant funds to the City of Jacksonville, Florida for the preparation of plans and specifications for regional wastewater treatment facilities to service the Arlington-East District. The project consists of a 10.0 million gallon per day (MGD) wastewater treatment plant located at Millcoie Road, 13,900 feet of outfall line terminating at the edge of the maintained shipping channel in the St. Johns River, and approximately 38,000 feet of force main which will be used to pump sludge across the St. Johns River to the Buckman Street incinerator. This plan, with the exception of the sludge force main, appears as alternative 1q in the Draft EIS.

3. Summary of Environmental Impact

The project will provide for:

- (1) The removal of inadequately treated wastewaters from tributary streams.
- (2) Treatment facilities to adequately service existing and future sources of wastewater.

(3) Alleviation of existing adverse conditions resulting from the operation of septic systems and small package plants.

(4) Allowance of orderly growth according to the Comprehensive Development Plan for 1990.

(5) Provision of adequate noise and odor controls. Since publication of the Draft EIS, the decision to forego heat treatment and incineration facilities at the plant site has eliminated major sources of unmitigated noise and odor.

(6) Construction only on the part of the site farthest from the nearby residential community and provision of a buffer zone of 114 acres adjacent to the site.

Adverse environmental effects are summarized as follows:

a. Construction Impacts

The construction of treatment facilities and interceptor lines represent a long-term commitment of 46.98 acres of land for the treatment plant site with subsequent loss of approximately half of this acreage as wildlife habitat. Short-term impacts due to construction will be minor but will include dust, noise, odor, vehicle emissions, traffic, and soil erosion. Construction activity in Mill Cove will cause the temporary disturbance of two acres of salt marsh and temporary impact on the aquatic animal community from sedimentation and turbidity. A short-term period of panic selling in the residential neighborhoods surrounding the plant site may also occur before the plant goes into operation. This impact will be of short duration since the demonstrated compatibility of the plant in its proposed location will not cause any long-term degradation of surrounding neighborhoods.

b. Operational Impacts

The operation of the waste treatment facility will cause the discharge of initially 10 MGD and ultimately 20 MGD of secondary treated wastewater to the St. Johns River and will have minor impacts related to resource use, operational noise and odor, and the movement of vehicles.

c. Secondary Impacts

Construction of the project will increase the potential for development of areas set aside for preservation and conservation and other sparsely populated sections of the service district with concomitant impact to terrestrial biota and wetland areas. Associated with this increased growth potential is the need for water supply, transportation, parklands, recreational areas, and other community services and facilities.

4. List of Alternatives Considered

The following system alternatives were considered in the Draft EIS and reconsidered primarily from a cost-effective standpoint in the final project recommendation appearing in this document:

(1q) Millcoie Road site and transmission system with Quarantine Island outfall.

(1b) Millcoie Road site and transmission system with Blount Island outfall.

(2q) Dunes Area site and transmission system with Quarantine Island outfall.

(2b) Dunes Area site and transmission system with Blount Island outfall.

(3) Dame Point-Fort Carolina Freeway Interchange site and transmission system.

(4) Site north of Craig Field and transmission system.

(5) Site east of Craig Field and transmission system "A".

(6) Site east of Craig Field and transmission system "B".

(7) Site inside eastern boundary of Craig Field and transmission system "B".

(8) Site inside eastern boundary of Craig Field and transmission system "B".

(9) Beacon Hills site and transmission system.

(10) Spanish Point site and transmission system.

(11) Quarantine Island site and transmission system.

(12) Site inside southern boundary of Craig Field and transmission system.

Non-structural systems, process subsystems, odor control, noise control, and effluent and sludge disposal alternatives were also analyzed in the Draft. The selected alternative for final sludge disposal appears herein as do some attendant modifications to noise and odor controls. In addition, the "no action" alternative was also given full consideration in the Draft.

5. Comments Received

Written comments on the Draft EIS were received from the following Federal, State, and local agencies and interested groups and individuals:

Federal

Department of Agriculture, Forest Service
Department of Agriculture, Soil Conservation Service
Department of Commerce, National Oceanographic and Atmospheric Administration
Environmental Protection Agency, Office of Water Program Operations
Department of Health, Education, and Welfare
Department of the Interior, Office of the Secretary

State

Florida State Clearinghouse
Department of Agriculture and Consumer Services
Department of Community Affairs
Department of Environmental Regulation
Department of Health and Rehabilitative Services
Department of Natural Resources
Department of State
Department of Transportation
Game and Fresh Water Fish Commission
St. Johns River Water Management District

Local

City of Jacksonville, Department of Public Works

Private Organizations

Florida Engineering Society, Jacksonville Chapter
Florida Wildlife Federation

Individuals

Mrs. R. E. Bowditch	Mrs. Patricia J. Pillmore
Mr. Thomas F. Brewer	Mrs. Charles Platt, III
Ms. Gwendolyn H. Brown	Dr. Bette J. Soldwedel
Mr. William Colville	Mr. John M. Stevens
Mr. Charles T. Morgan	Mrs. Nadine Stevens
Mr. Sam E. Newey	Mr. Melvin M. Summers
Mrs. Helen O'Quinn	Mr. F. J. Thibault, Jr.
	Mrs. Helen R. Werder

In addition, four comment letters signed by a total of 77 people were submitted to the Agency in the form of petitions.

6. This final environmental Impact statement was made available to the Council on Environmental Quality (CEQ) and the public on August 20, 1976.

TABLE OF CONTENTS

CHAPTER	PAGE NO.
Preface-----	ix
I. Additions, Revisions, and Verifications to Information Contained in the Draft EIS-----	1
A. Archaeological and Historical Survey-----	2
B. Vegetative Survey-----	2
C. Arboristic Cover Types-----	2
D. Revised Population Projections-----	3
E. Review of Sludge Disposal Alternatives-----	3
F. Noise, Odor, and Aesthetics-----	5
G. Cost-Effective Verification-----	6
II. Public Hearing on Draft EIS-----	23
EPA Response to Questions and Comments-----	97
1. Chlorination-----	98
2. Incineration-----	98
3. Deep Well Injection-----	99
4. No Action Alternative-----	101
5. Noise and Odor-----	101
6. Aesthetics-----	104
7. Further Consideration of Alternative 11	105
8. Further Consideration of Alternative 12	105
9. Exact Construction Site-----	105
10. Buffer Zone-----	106
11. Access Road Safety-----	106
12. Effects on Mill Cove-----	106
13. Transmission System Funding-----	107
14. Public Disclosure-----	107
15. Public Water Supply-----	108
16. Jacksonville Area Planning Board Policies and Standards-----	108
17. Impact on Major Landowners-----	108
18. Pressure from Major Landowners-----	109
19. Assistance Committee-----	109
20. EPA Contact with Other Agencies-----	109
21. 1990 Water Quality Management Plan-----	109
22. Projected Population-----	110
23. Compatability of Plant Site with Residential Area-----	110
24. Legal Requirements-----	110
25. Outfall Construction Permit-----	110
26. Decentralization of Treatment Facilities-----	111
27. Blount Island Outfall-----	111
28. Cost-Effective Verification-----	112
Associated Exhibits-----	113

III. Written Comments on Draft EIS with EPA Response-	133
A. Comments received from Federal, State, and local agencies and private organizations	134
B. Individual comments sent directly to EPA.	184
C. Individual comments sent to other parties and forwarded to EPA for reply-----	221
IV. Agency Decision-----	234

EXHIBITS

NO.	TITLE	PAGE
I-1	Archaeological and Historical Survey of Plant Site and Outfall Corridor--	11
I-2(a)	Plant Site and Interceptor Corridor Vegetative Survey-----	15
I-2(b)	Interceptor Corridor Vegetative Survey	16
I-2(c)	Interceptor Corridor Vegetative Survey	17
I-3	Arboristic Cover Types in the Arlington-East Service District-----	18
I-4	Sludge Handling and Disposal Alternatives-----	19
I-5	Sludge Force Main Route-----	22
II-1	Alternative 12 (Plant Site and Transmission System)-----	113
II-2	Buffer Zone-----	114
II-3	Safety of Plant Access Road (letter from Jacksonville Traffic Engineering Division)-----	115
II-4	Effects of the Project on the Water Quality of Mill Cove (letter from Jacksonville District, U. S. Corps of Engineers)-----	117
II-5	Effects of the Project on Future Navigation Projects (letter from Jacksonville District, U. S. Corps of Engineers)-----	118
II-6	Consistency of Site 1 with the <u>Policies and Standards Handbook</u> of the Jacksonville Area Planning Board (letter from JAPB)-----	121
II-7	Major Landowners in the Arlington- East Service District-----	123
II-8	Application for a Department of the Army Construction Permit by the City of Jacksonville-----	124

PREFACE

On December 26, 1975 the Environmental Protection Agency, Region IV, issued a draft Environmental Impact Statement (EIS) on the administrative action of awarding grant funds to the City of Jacksonville, Florida for the preparation of plans and specifications for regional wastewater treatment facilities to service the Arlington-East District. The EIS was filed with the Council on Environmental Quality (No. 51825) and circulated for review among various Federal and State agencies with expertise in the matters therein and made available to the public.

Contained herein are revisions and, in some cases, additions to the draft EIS. These revisions and additions are based upon comments from interested parties or further EPA information. Basically, however, the project has not changed from the alternative recommended by the Draft EIS. Plans and specifications will be prepared for a 10.0 million gallon per day wastewater treatment plant to be located at Millcoe Road and 13,900 feet of outfall line terminating at the edge of the maintained shipping channel in the St. Johns River. Since publication of the Draft, several changes to the project having to do with final disposal of sludge have been incorporated into the first phase design. These changes consist of foregoing construction of heat treatment and incineration facilities at Arlington-East and constructing an 8-inch sludge force main from the plant site to the Buckman Street treatment plant in order to utilize the existing capacity of the Buckman Street incinerator.

Rather than reprinting the text, figures, and tables of the Draft EIS, the Final EIS should be read in conjunction with the Draft. This document, when appended or inserted into the Draft EIS shall constitute the final environmental impact statement in accordance with the Guidelines of the Council on Environmental Quality, 40 CFR 1500, and with EPA's Final Regulations governing preparation of environmental impact statements, 40 CFR 6.

Chapter I contains additions, revisions, and, in the case of the comprehensive cost-effective analysis, verifications to the content of the Draft EIS.

A Public Hearing on the Draft was held in Jacksonville on January 26, 1976. Chapter II contains a transcript of

that hearing as well as an Agency response to all comments and questions raised.

Chapter III reproduces all written comments on the Draft EIS with appropriate response on all comments and questions. It is composed of three sections: Part A deals with correspondence received from Federal, State, and local agencies as well as private organizations; Part B with individual comments sent directly to EPA; and Part C with individual comments which were sent to other parties and forwarded to EPA for reply.

Finally, Chapter IV presents EPA's conclusions and administrative decisions concerning the City of Jacksonville's grant application.

Publication of this Final EIS on the awarding of grant funds for the preparation of plans and specifications for regional wastewater treatment facilities to service the Arlington-East District fulfills EPA's responsibilities under the National Environmental Policy Act and EPA's regulations for environmental review of construction grant applications. In accordance with these regulations, a Step 2 grant offer will be made to the City of Jacksonville thirty days after this Final EIS is filed with the Council on Environmental Quality and made available to the public. Anyone receiving this document who has not received a copy of the Draft may request a copy from:

John E. Hagan III, Chief
Environmental Impact Statement Branch
Environmental Protection Agency
1421 Peachtree Street, N. E.
Atlanta, Georgia 30309

CHAPTER I

ADDITIONS, REVISIONS, AND VERIFICATIONS TO INFORMATION CONTAINED IN THE DRAFT EIS

- A) Archaeological and Historical Survey
- B) Vegetative Survey
- C) Arboristic Cover Types
- D) Revised Population Projections
- E) Review of Sludge Disposal Alternatives
- F) Noise, Odor, and Aesthetics
- G) Cost-Effective Verification

A) Archaeological and Historical Surveys

An archaeological and historical survey of the Millcoe Road treatment plant site and the outfall corridor was conducted by the Florida Department of State, Division of Archives, History and Records Management. No archaeological or historical sites eligible for listing in the National Register of Historic Places or otherwise of national, State, or local significance were found. A letter from the Florida State Historic Preservation Officer describing the survey along with a map showing areas surveyed is included as Exhibit 1 of this chapter.

An archaeological and historical survey of the proposed sludge force main route was conducted during the week of August 2, 1976. Results of this survey were not available at the time of printing of this document. However, a condition shall be placed on the grant to require mitigation satisfactory to the State Historic Preservation Officer of any adverse impacts to significant sites identified by the survey. In addition, any interceptor lines funded by EPA grants in the Arlington-East Service District must also have survey work and appropriate mitigative measures as recommended by the State Historic Preservation Officer.

B) Vegetative Survey

A vegetative survey of the interceptor and outfall corridors has been conducted by the Florida Department of Agriculture and Consumer Services, Division of Forestry. Only naturally vegetated portions were surveyed and mapped; Exhibits 2(a), (b), and (c) of this chapter show the dominant cover types. All corridor portions along presently maintained roadway easements were excluded from the on-site survey.

No rare or unusually large trees or trees with special historical value were found. Mr. James A. Ehlers, Urban Forester, has indicated that the interceptor corridors will disturb a minimum of naturally vegetated systems.

C) Arboristic Cover Types

The map showing arboristic cover types in the Arlington-East Service District (see Figure 2-11 of the Draft EIS) is reprinted for clarity as Exhibit 3 of this chapter.

D) Revised Population Projections

The population projections presented in the Draft EIS for the Arlington-East Service District were based upon projections presented in the Water Quality Management Plan. These projections were agreed to at that time by the Jacksonville Area Planning Board (JAPB) and EPA.

Within the past year, the JAPB has undertaken an in-depth re-evaluation of their population projections throughout the county. The total county projection for the year 2000 has been lowered to 817,100 as a result of this study. Major causes for this decrease are a lowering of the birth rate and a lessening of the expected rate of immigration.

The current population of the Arlington-East area is about 104,000. This figure is nearly identical to that projected by the Water Quality Management Plan for 1975. There is, therefore, no reason to alter the 10.0 MGD design capacity of the first phase construction of the treatment plant. It does seem likely, however, that the year 2000 population of the service area will be significantly less than originally forecast. A twenty percent share of the total county population would mean about 167,000 people in the service area in the year 2000 instead of the approximately 219,000 projected by the Draft EIS. This would mean a decrease in the ultimate design capacity of the treatment facility from the 25.0 MGD shown in the Draft EIS to 20.0 MGD. Further evaluations of the population projections should be made when planning the expansion of the 10.0 MGD facility.

E) Review of Sludge Disposal Alternatives

The Draft EIS described the final method of sludge disposal for the Arlington-East facility as incineration followed by landfilling of the ash. A re-evaluation of the feasibility and cost-effectiveness of various alternatives to incineration has since been carried out by EPA and Flood & Associates, Inc. This investigation has shown that some alternatives are not implementable or desirable for use at the planned facility at this time.

The most desirable and cost-effective method of sludge disposal for the first phase of the Arlington-East plant is to forego construction of the heat treatment and

SLUDGE HANDLING AND DISPOSAL ALTERNATIVES

<u>ALTERNATIVE</u>	<u>ADVANTAGES</u>	<u>DISADVANTAGES</u>	<u>FLEXIBILITY</u>
A. Heat treatment, vacuum filtration, and incineration at Arlington; landfill ash	None	High capital and annual costs; incineration capacity not fully utilized until plant reaches ultimate design flow; does not provide resource recovery	Heat treated and dewatered sludge could be used for soil conditioning; commitment to incineration not compatible with eventual regional resource recovery system
B. Heat treatment and vacuum filtration at Arlington; landfill cake	Saves cost of incineration at Arlington	Relatively high capital and annual costs; does not provide resource recovery	Heat treatment and dewatered sludge could be used for soil conditioning; option of incineration at Arlington left open
C. Same as (A) except sized for present design only. Expansion to ultimate capacity accomplished by additional facilities	Full utilization of sludge handling and disposal facilities during first phase of operation	Relatively high capital and annual costs; does not provide resource recovery	Heat treated and dewatered sludge could be used for soil conditioning; incineration incompatible with regional resource recovery but less expensive than in (A)
D. Same as (B) except sized for present design only. Expansion to ultimate capacity accomplished by additional facilities	Lower capital costs; full utilization of sludge handling equipment during first phase of operation	High annual costs; does not provide resource recovery	Same as (B) above
E. Pelletization at Arlington	Provides resource recovery	Not cost-effective unless part of county-wide system; requires railway and truck loading facilities; depends upon demand from outside market	Compatible with eventual resource recovery system
F. Heat treatment and vacuum filtration at Arlington; use sludge as soil conditioner	Provides resource recovery	Requires commitment of suitable and adequate acreage	Same as (E) above
G. Heat treatment at Arlington; truck to Buckman Street; vacuum filtration and incineration at Buckman Street; landfill ash	Uses existing capacity of Buckman Street incinerator; saves cost of vacuum filtration and incineration at Arlington	Higher cost of hauling vacuum filtered sludge to Buckman Street (greater volume); does not provide resource recovery	Heat treated sludge could be used for soil conditioning; option of incineration at Arlington left open
H. Heat treatment and vacuum filtration at Arlington; truck to Buckman Street; incineration at Buckman Street; landfill ash	Lower cost of hauling vacuum filtered sludge to Buckman Street (smaller volume); uses existing capacity of Buckman Street incinerator; saves cost of incineration at Arlington	Relatively high capital and annual costs; does not provide resource recovery	Same as (G) above
I. Heat treatment and vacuum filtration at Arlington; truck sludge to Buckman Street for incineration or use as soil conditioner. Use same trucks for either option	Lower costs of hauling vacuum filtered sludge to Buckman Street or to soil conditioning site; could provide resource recovery; could use existing capacity of Buckman Street incinerator; saves costs of incineration at Arlington	Relatively high capital and annual costs; incineration option does not provide resource recovery	Provides option of using same trucks for incineration or soil conditioning; does not require firm commitment of acreage since incineration at Buckman Street serves as backup option
* J. Pump Arlington sludge to Buckman Street via force main; heat treatment, vacuum filtration, and incineration at Buckman Street; landfill ash	Most cost-effective alternative for Arlington plant; uses existing capacity of Buckman Street incinerator	Does not provide resource recovery	Provides option of using sludge force main in regional resources recovery system; does not expend capital costs for facilities not compatible with regional resource recovery

*Chosen alternative

incineration facilities and to utilize the existing reserve capacity of the incinerator at the Buckman Street treatment plant. Transportation of sludge to Buckman Street could be accomplished either by pumping via a force main or hauling by truck. Twenty-six trucks with a capacity of 6,000 gallons each would be required daily to haul heat-treated sludge from a 10.0 MGD facility. To haul heat-treated and dewatered sludge from a plant of that size would require eleven trucks per day with a capacity of five cubic yards each. In addition, the truck hauling option would necessitate unloading facilities at Buckman Street. On the other hand, construction of a sludge force main from Arlington-East to Buckman Street at a cost of approximately \$1 million, including a pump station, is more cost-effective for the first phase of the project. Cost-effectiveness is still maintained with the required added heat treatment and dewatering facilities at Buckman Street since this equipment will not be required at Arlington. Additionally, the force main option would also provide time to develop the most cost-effective and environmentally sound sludge disposal method for the entire Jacksonville regional system. The Buckman Street incinerator was originally designed to process sludge from the Buckman Street plant, the North District plant and the first phase of the Southwest District plant. The 201 Facilities Plan presently underway will develop the optimum sludge disposal method for the subsequent phases of all five regional treatment plants.

A letter from Flood and Associates, Inc. to EPA summarizing their sludge handling analysis including the cost-effectiveness of alternatives considered appears as Exhibit 4 of this chapter. Exhibit 5 shows the routing of the proposed sludge force main. The following table summarizes the alternatives considered by Flood as well as several others developed by EPA.

F) Noise, Odor, and Aesthetics

The previously described changes in sludge handling and disposal will eliminate some previously planned facilities at Arlington-East. Planned noise and odor controls for these processes were described in Chapter III of the Draft EIS. Now, however, the decision to pump Arlington sludge to Buckman Street for incineration has eliminated several sources of unmitigated noise and odor and, consequently, the need for associated structural noise and odor controls. The new design will eliminate the heat treatment and incineration building. This three-story structure was the

major potential noise source on the plant site (refer to Table 3-8 of the Draft EIS) due to the large equipment access doors and the high noise levels generated by sludge handling equipment located inside. Significant noise sources within the building which are now eliminated include boilers, centrifuges, sludge conditioning equipment, the multiple hearth incinerator, vacuum filters, ash conveyors, sludge blending tanks and pumps, and heating and ventilation equipment.

The potential for odor from sewage treatment facilities is due to the possible occurrence of malodorous inorganic (sulfides and ammonia) and organic (mercaptans) chemical compounds in reduced states. Such compounds occur during periods of septicity when dissolved oxygen concentrations in sewage are depressed to the point that oxygen is absent. The points within the sewage treatment plant's process sequence where septicity and consequent odor problems are most likely to occur are the raw influent and sludge handling processes. Measures to control odor from these processes have been described in Chapter III of the Draft EIS. Now, however, the decision to pump sludge to Buckman Street has eliminated the need for most sludge handling equipment at Arlington (centrifuges, vacuum pumps, vacuum filters, and sludge blending tanks). All structural odor control measures described in the Draft EIS not having to do with these particular components will remain. Specifically, these include enclosing the bar screen, preaeration tank, primary clarifiers, and sludge holding tank in a building and treating vapors from these sources with a chemical scrubbing system.

In addressing aesthetic impacts of the treatment plant at Millcoie Road, the Draft EIS stated that the 74-foot incinerator stack would, for practical purposes, not be visible by residents in the area. The decision to forego incineration at Arlington now eliminates any possible aesthetic impact of the incineration building and incinerator stack.

G) Cost-Effective Verification

Since publication of the Draft EIS, an independent investigation of the most cost-effective plant site and interceptor configuration has been completed by the Water Division of EPA, Region IV. The purpose of the study was to verify the least cost alternative for the proposed

wastewater regionalization system in the Arlington-East Service District. A cost optimum algorithm was employed. Capital cost data were obtained from curves developed from actual bid prices in the southeast. The majority of the treatment plant cost data were based on plants within the State of Florida. Operation and maintenance costs were derived from the EPA publication Guide to the Selection of Cost Effective Wastewater Treatment Systems. Treatment plant capital costs included site preparation. Other needed cost data were derived from the consultant's curves since no independent data sources were available. These included the capital costs of pump stations as well as the operation and maintenance of transmission lines and pump stations. All cost data were of necessity converted to forms usable by the algorithm. Following is a summary of the algorithm's history and use, the studied system, and the results of the study.

History and Use of the Algorithm. The cost optimum algorithm is a computer planning program that determines the present worth of the least cost wastewater regionalization system.

The computer executed methodology for optimization was developed in 1971-1972 by Dr. Martin P. Wanielista, Florida Technological University, and was published in the Journal of the Water Pollution Control Federation in December, 1973. The algorithm has been used to determine the least cost regional wastewater treatment systems for three 3-C studies: Jacksonville, Orlando and Palm Beach.

The program has its utility in planning in that it is able to analyze a multitude of alternatives. Because many different configurations reflecting various treatment, disposal, and transmission schemes are required to accurately represent all possible alternatives, the model input data must be displayed in a graphical nodal diagram. Each node represents a treatment site or a collecting point such as a pump station. If there are "n" nodes representing possible plant site locations, and "m" transmission lines, then there are $n! \times m!$ (factorial) theoretical solutions to the problem with the optimum solution being the least cost alternative scheme.

The program determines the least cost alternative by evoking an operation research technique called the "simplex algorithm." The simplex algorithm procedure is an iterative (repetition) method for solving linear programming problems

by finding successive basic-feasible solutions and testing them for optimality. Simply, the simplex algorithm can be regarded as a systematic and efficient procedure for optimizing problems that are not limited by large numbers of variables and restrictions.

The important input data into the simplex algorithm consists of the following items:

- (1) Development of an accurate and detailed nodal network which represents all possible transmission lines, pump stations and plant site locations;
- (2) Definitive and current cost curve data for the various components (treatment, transmission and disposal) needed to represent the indicated networks. The cost curves should reflect economies of scales for larger treatment facilities and lines, i.e., the curve profile should be concave.

The Studied System. The wastewater treatment regionalization network studied consists of 47 nodes, 124 pipes, and 12 proposed wastewater treatment plants located at 10 different nodes, or locations, with 2 plants each located at 2 nodes. This network represents all configurations addressed in the Draft EIS (refer to Figures 3-1 through 3-11 of that document and Chapter II, Exhibit 1 herein) for an ultimate design capacity of 20 MGD.

Results. The least cost system shown by the algorithm accounts for the present worth and the operation and maintenance of both a wastewater treatment plant and its associated collection system. Present worth calculations were based on an interest rate of 6 1/8 percent and a planning period of 20 years. Following are the rankings of the first four most cost-effective configurations for the project as described in the Draft EIS:

20 MGD with Quarantine Outfall

<u>Ranking</u>	<u>Alternative</u>	<u>P.W. x 10⁶</u>
1	1	70.6950
2	3	70.6985
3	2	73.1556
4	4	73.6687

20 MGD with Blount Island Outfall

<u>Ranking</u>	<u>Alternative</u>	<u>P.W. x 10⁶</u>
1	1	72.0650
2	3	72.6850
3	4	73.1556
4	2	74.4023

For the project as now planned (elimination of incineration, heat treatment, and sludge handling at Arlington and construction of a sludge force main to Buckman Street) the cost rankings are as follows:

20 MGD with Quarantine Outfall

<u>Ranking</u>	<u>Alternative</u>	<u>P.W. x 10⁶</u>
1	3	62.7955
2	1	62.9820
3	2	65.4426
4	4	66.0557

20 MGD with Blount Island Outfall

<u>Ranking</u>	<u>Alternative</u>	<u>P.W. x 10⁶</u>
1	1	64.6220
2	3	65.1734
3	4	66.0557
4	2	66.9350

As may be seen, Alternative 1 is the most cost-effective for the project as described in the Draft EIS. For the project as presently planned, however, Alternative 3 is slightly less expensive. This is due to the shorter sludge force main to Buckman Street which would be associated with site 3. Notwithstanding this slight edge in cost-effectiveness, site 3 has not been chosen due to overriding environmental considerations (refer to rankings appearing in Chapters III and VIII of the Draft EIS).

A detailed description of all configurations considered including interceptor lengths, flows, slopes, capital costs, and operation and maintenance is given in the EPA, Region IV report Results of the Cost Optimum Algorithm for the Jacksonville-Arlington East Environmental Impact Statement. This report is available for review in the EPA, Region IV office in Atlanta and in the office of the Deputy Director of Public Works for the City of Jacksonville.

The capital cost for in-plant odor control for the first phase of the planned facility has been estimated by Flood and Associates, Inc. at \$.2 million. This will cover the chemical scrubber system and brick and masonry building to house the remaining potential sources of odor. Piping and electrical requirements are included.



STATE OF FLORIDA
Department of State
THE CAPITOL
TALLAHASSEE 32304

BRUCE A. SMATHERS
SECRETARY OF STATE

April 5, 1976

ROBERT WILLIAMS, DIRECTOR
DIVISION OF ARCHIVES, HISTORY, AND
RECORDS MANAGEMENT
(904) 488-1480

IN REPLY REFER TO:

Deputy Director of Public Works
City of Jacksonville
220 East Bay Street
Room 1207
City Hall
Jacksonville, Florida

Attn: Joe Hyatt

Re: Archaeological survey of Arlington Wastewater Management
Facility, Alternate #1, Duval County, Florida.

Dear Sir:

The Florida Department of State, Division of Archives, History and Records Management conducted an archaeological and historical survey of the proposed Arlington Wastewater Management Facility, Alternate #1, in Duval County, Florida in fulfillment of an agreement between the Division of Archives, History and Records Management and the City of Jacksonville. The purpose of this survey was to locate and inventory any sites eligible for inclusion in the National Register of Historic Places which might be adversely affected by the proposed treatment facility.

The survey was divided into two parts: the treatment plant site itself, consisting of 46.98 acres, and the 13,900 linear feet of outfall. The sewage treatment plant site is rectangular in shape (running N/S) and contains two marsh areas, one near the center of the property and one in the northeastern corner. It also contained three elevated areas, one in the area centrally north of the marsh; another in the area northwest of the first elevated area; and the entire area at the southern end of the property (see attached figure 2). The southern area was covered predominantly with scrub oak while the areas near the marsh and to the north contained pine and palmetto. It might be noted that the entire southern area of the treatment plant site contained trash deposits including such things as junked cars, stoves, refrigerators, bottles, cans and other debris which indicated that the area had been used extensively as a dump in recent times.

Deputy Director of Public Works
April 5, 1976
page 2.

The survey methodology consisted of a physical walk-over with the use of compass lines by James Chafin of this office. The compass lines involved walking lines separated by approximately fifteen feet, parallel to the eastern and western boundaries of the property in a north-south direction until the entire area south of the central marsh area had been covered thoroughly.

The two areas of higher elevation to the north of the marsh area were also covered by the use of compass lines walked at intervals of fifteen feet. However, these were covered by east-west lines perpendicular to the eastern and western boundaries of the property. Intermittent test holes were also excavated with the use of a shovel. This involved random test pitting in areas of higher probability of site location, such as areas of higher elevation, and especially those near the marsh and in the southern area of the acreage. These test pits were usually dug to a depth of 18 inches and were approximately 8 inches in diameter. Approximately fifty test pittings were done, one-half in the area south of the marsh and one-quarter each in the two elevated areas in the north of the property.

Also surveyed was the 13,900 linear feet of outfall area extending north-northwest from the north west corner of the sewage treatment plant site area to the Merrill Road and on into the Mill Cove area of the St. John's River (see attached figure 1). Areas of higher elevation were surveyed more intensively than marsh areas because of the higher probability of locating a site. It has been found that due to human preferences for settling on dry, well-drained surfaces, archaeological sites are most often located on higher ground. The marsh areas, however, were covered, though not with compass lines, with a simple physical walk-over.

Research on property title deeds was done in the office of the Clerk of the Duval County Court to determine if any mention was made of historical sites of significance possibly located in the area. The research revealed that early property ownership records burned in the Jacksonville fire of 1901, and recordings prior to this date were only to be obtained through a private firm (Title & Trust Co., Jacksonville, Fla.). The cost of obtaining these records was not authorized in the survey budget. Thus, the title deed research revealed nothing of interest. However, during the actual walk-over, notice was made of any architectural remains in the area. One collapsed wooden structure, elevated on concrete blocks, was located. The building was nailed with steel nails, roofed with tin, and was estimated to date between 1930 and 1960. This structure was located

Deputy Director of Public Works
April 5, 1976
page 3.

approximately 760 feet north and 50 feet west of the SE corner of the sewage treatment plant tract. It is of no particular historic importance, though it was reported to the Historic Preservation Section of this office.

No archaeological or historical sites eligible for listing in the National Register of Historic Places or otherwise of national, State, or local significance were found in the course of the survey. Thus the Arlington Wastewater Management Facility, Alternate #1, may proceed without further involvement of this office.

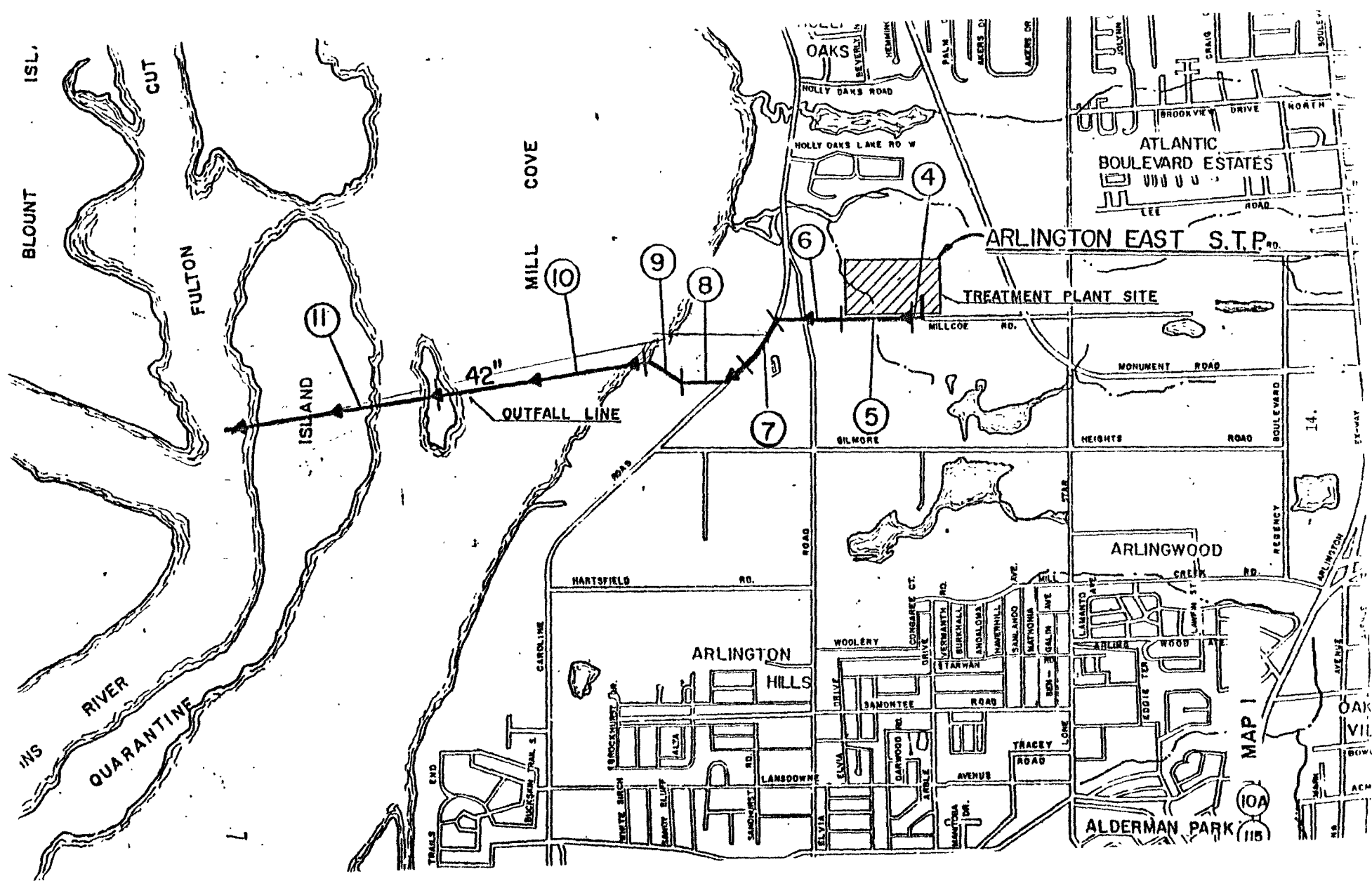
This letter will serve as our final report on the Arlington project and, as per the agreement, our office will shortly be sending an invoice for this project in the amount of \$560.90.

Thank you for your interest in Florida's historical resources. If we can be of further service in answering questions about the Arlington survey, please do not hesitate to write or call.

Sincerely,

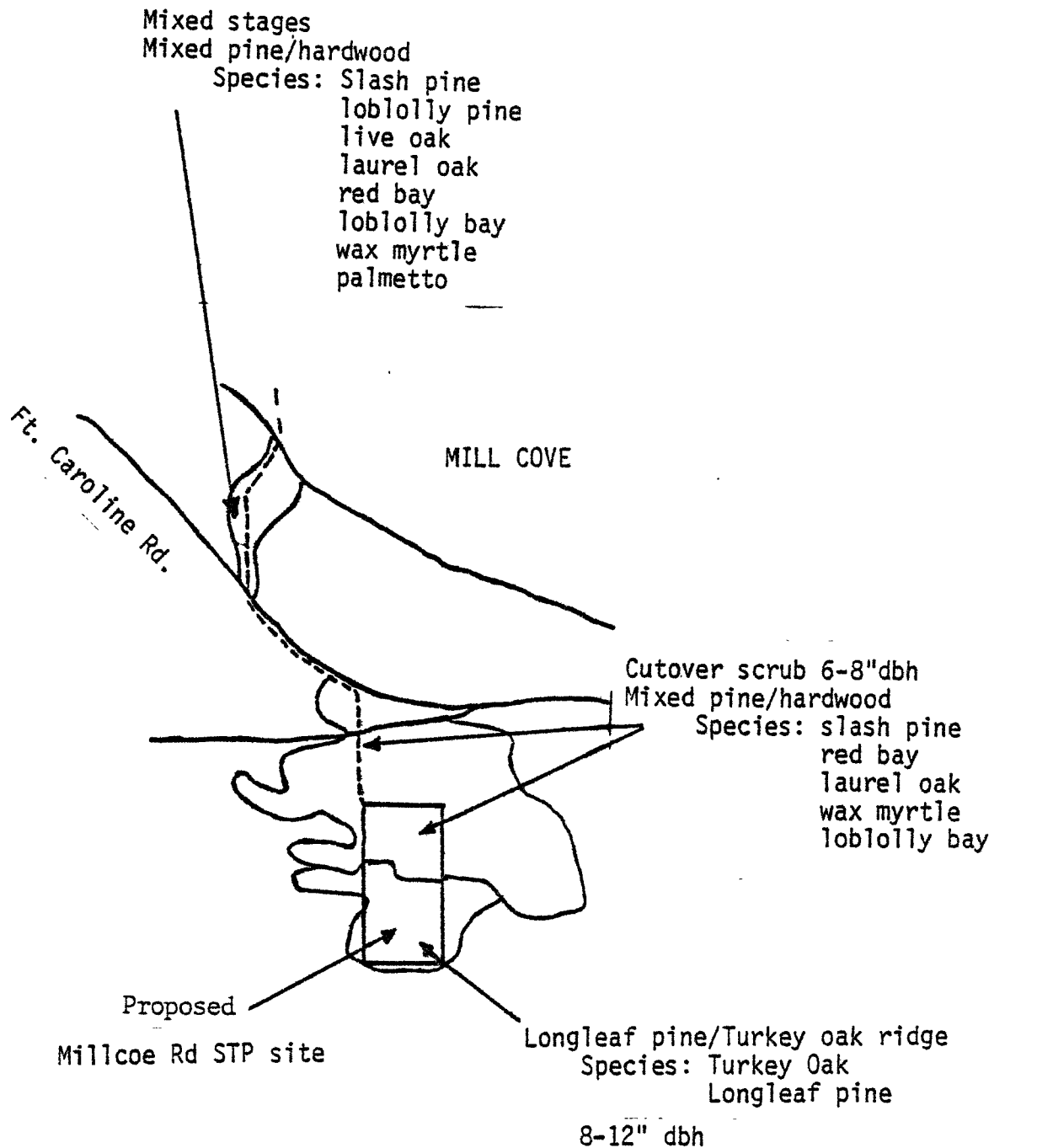
Robert Williams
State Historic Preservation Officer

RW/Csh



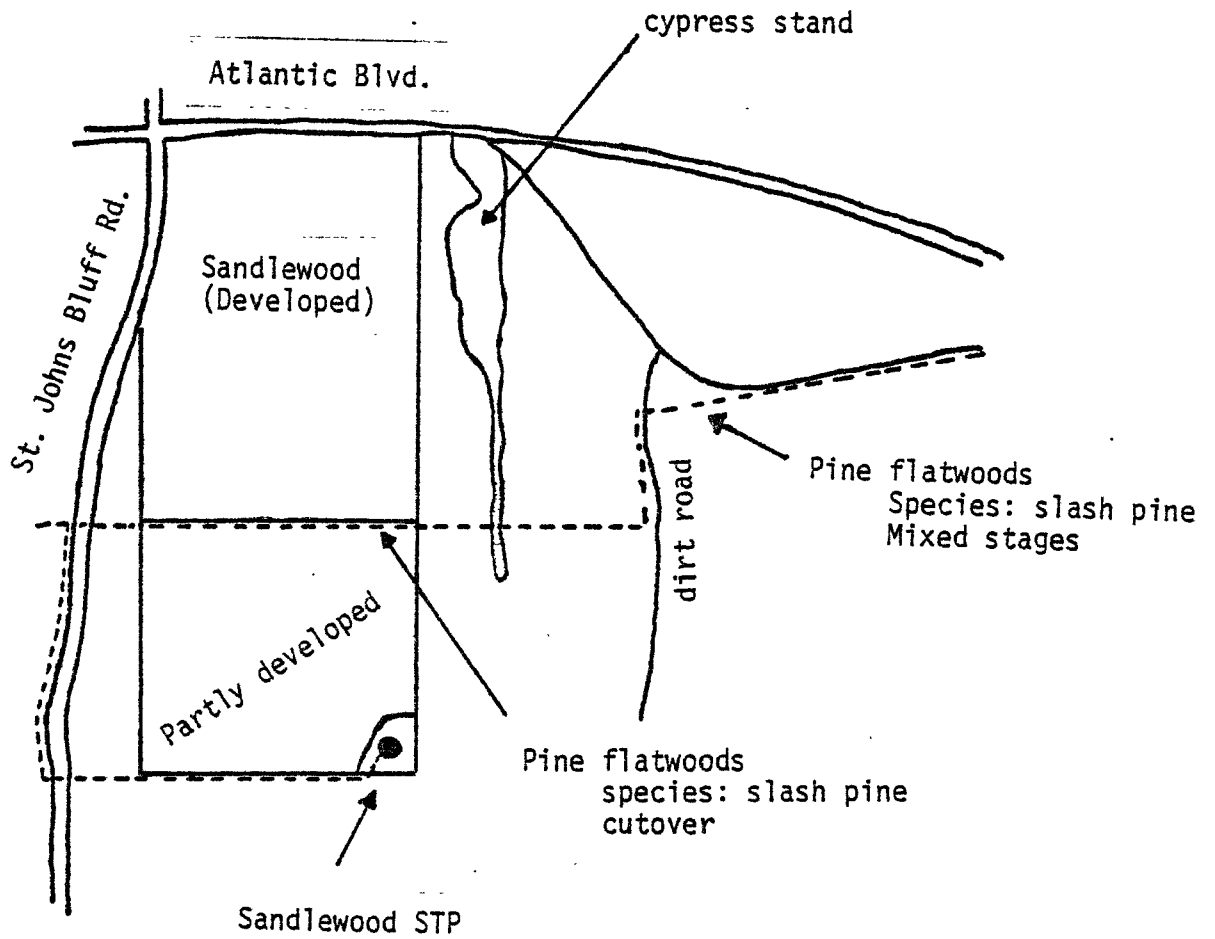
1
Exhibit 2(a)

Arlington-East District
Interceptor Corridor Vegetative Survey



1
Exhibit 2(b)

Arlington-East District
Interceptor Corridor Vegetative Survey

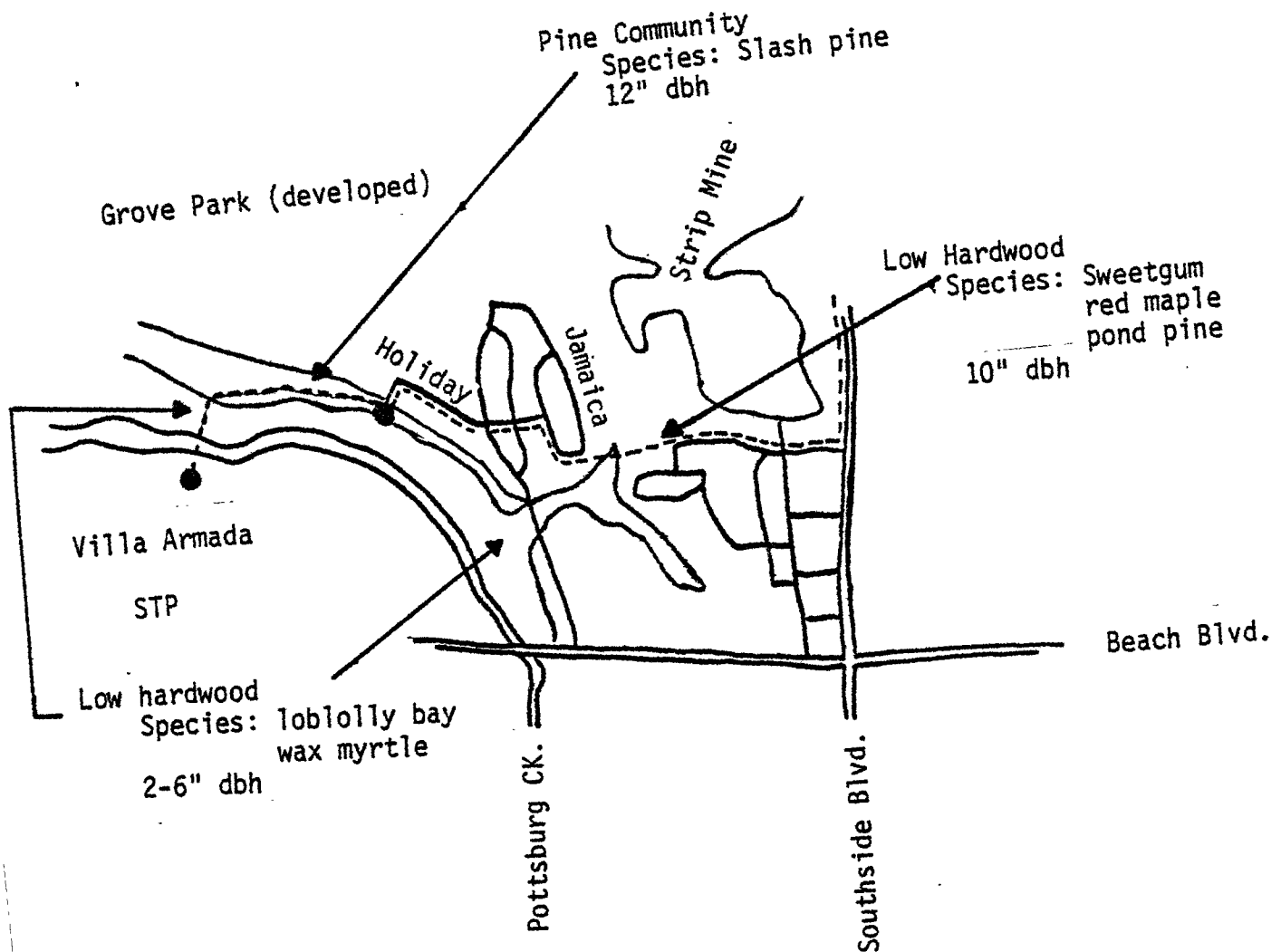


Interceptor shown by dotted line

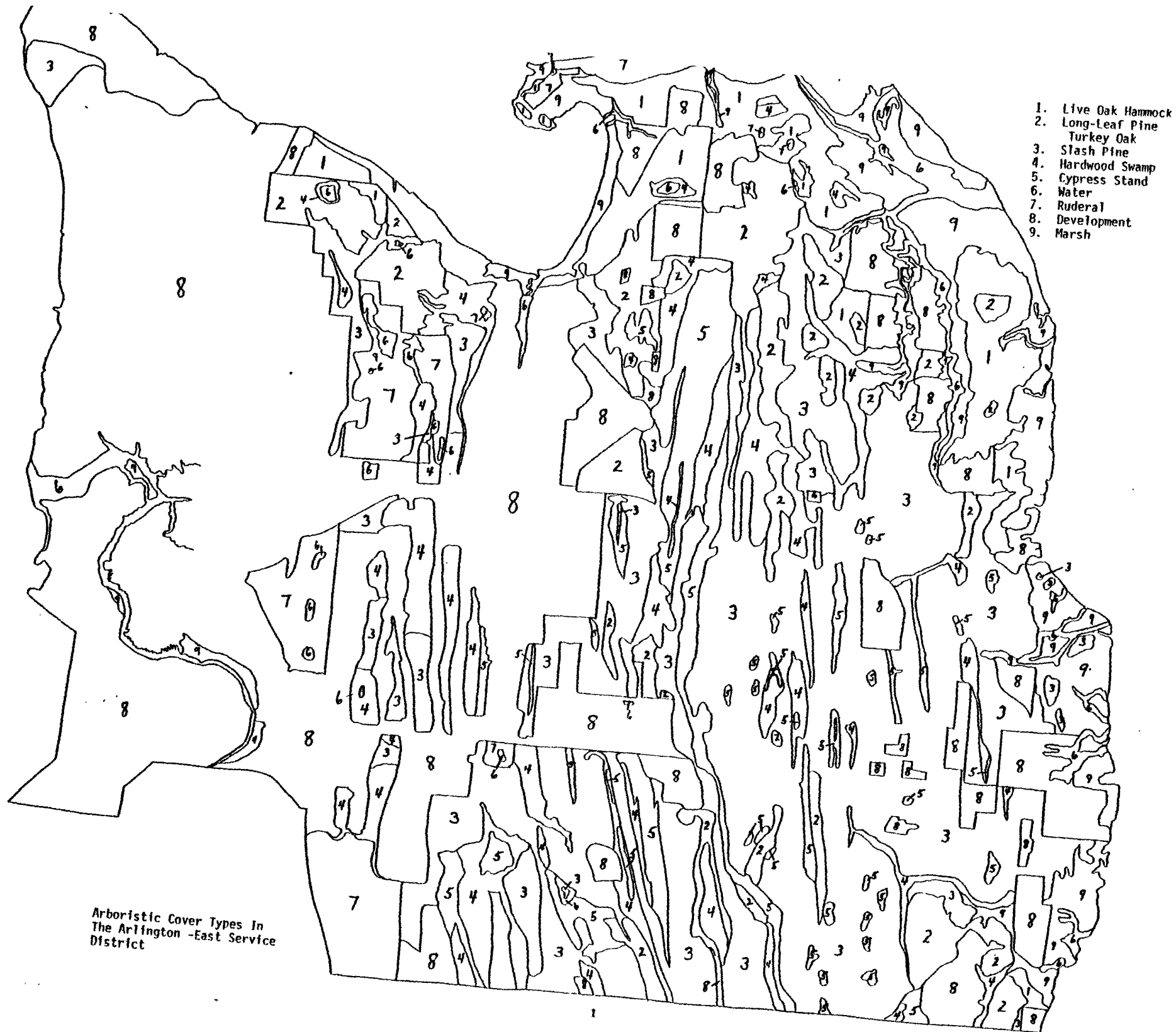
Scale 1" = 2000'

1
Exhibit 2 (c)

Arlington-East District
Interceptor Corridor Vegetative Survey



Interceptor shown by dotted line
Scale 1" = 2000'



FLOOD & ASSOCIATES, INC.
Consulting Engineers

OFFICERS
JOHN H. FLOOD, JR., P.E.
BILL L. BRYANT, P.E.
ROBERT L. BATES, JR., P.E.
JAMES S. ENGLISH, P.E.
ROBERT V. TSUMPES

May 21, 1976

ASSOCIATES
BRUCE A. BELL, Ph.D., P.E.
ROBERT E. DE LOACH, JR., P.E.
L. THOMAS HUBBARD, P.E.
TED B. MALINKA, P.E.

OFFICES
JACKSONVILLE
ATLANTA
PENSACOLA

Mr. Diaz Callahan
Environmental Protection Agency
1421 Peachtree Street, NE
Atlanta, Georgia 30309

Re: City of Jacksonville, Florida
Arlington-East Sewage Treatment Plant
EPA Project No. C12054010
City No. JS-40.1
Engineers' Project No. 7316

Dear Mr. Callahan:

This letter will provide a discussion of sludge handling for the subject project.

We have generally reviewed the sludge pelletizing process developed by Ecological Services Products, Inc. While the basic process is similar to that used in Milwaukee and Chicago, resulting in a disinfected, dried sludge, the relatively dust free nature of the Ecological Services Products process offers significant market advantages. However, analysis and evaluation of the subject project indicates that sludge drying operations are not implementable at Arlington-East at this time.

The dried sludge product, of any type, must be delivered to fertilizer manufacturers by rail. There are no rail facilities available in the Arlington East area. Thus, a truck loading facility would be required on the plant site and a remote rail loading facility would need to be constructed. Preliminary investigations of this operation as part of an overall sludge study for the City of Jacksonville, presently underway, indicate the most cost effective method sludge drying would be a central drying and rail loading facilities located at the proposed Mandarin-San Jose plant site. The City does not presently own the proposed plant site and Mandarin-San Jose plant will not be built until the mid-1980's at the earliest.

Sludge drying operations are being considered in the Jacksonville sludge study but in addition to the impracticability of implementing sludge drying on the Arlington-East site, there are significant technical questions that remain:

1. Ecological Services Products are unable and/or unwilling to offer fuel, power and polymer guarantees.

Mr. Diaz Callahan
May 21, 1976
Page Two

2. Since the supplier refuses to provide anything but a turn-key package there is no opportunity to utilize optimum equipment selection.
3. There is some question as to whether the Belt press is superior to Vacuum filters for this application.
4. There is very limited operational data on which to base operating cost and performance.
5. The present situation, with a patent pending on the process, makes it impossible to ascertain the nature and extent of the patent protection and whether or not similar processes by other manufacturers may become available in the near future providing a choice of equipment and a competitive situation.

For the reasons delineated above, the sludge drying alternative has been eliminated from consideration for Arlington-East. The remaining alternatives are delineated below.

— Alternate A-1 - Heat Treatment of sludge followed by vacuum filtration and incineration with waste heat recovery. This alternate is sized as to require a minimum of later and total expense for expansion to ultimate capacity.

— Alternate A-2 - Heat Treatment of sludge followed by vacuum filtration and cake hauled to landfill. This alternate is sized in a similar manner to A-1.

Alternate A-3 - Flowsheet identical to alternate A-1 except that sizing is based on present design only. Expansion to ultimate capacity would be by additional, duplicate facilities.

Alternate A-4 - Flowsheet identical to alternate A-2, sizing identical to alternate A-3.

Alternate B - Pump sludge to Buckman Street for heat treatment and incineration. This alternate is an interim solution which "borrows" against future capacity at Buckman Street.

Presented in the Table on the following page are the capital and operating costs of the significant items for each alternative. Capital cost has been assumed to be amortized at 6% for 20 years. Operating cost has been estimated for 10 MGD plant exclusive of labor.

Mr. Diaz Callahan
May 21, 1976
Page Three

SLUDGE HANDLING ALTERNATIVES

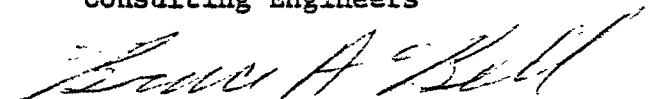
<u>Alternate</u>	<u>Capital Cost \$</u>	<u>Amortization \$/Yr.</u>	<u>Operating Cost \$/yr.</u>	<u>Annual Cost \$/yr.</u>	<u>Cost to expand to ultimate c</u>
A-1	8,713,000	759,599	69,802	829,401	600,000
A-2	5,913,000	515,495	262,211	777,705	N/A
A-3	7,153,000	623,599	69,969	693,568	6,140,000
A-4	5,038,000	439,213	275,689	714,902	N/A
B	4,450,000	387,951	69,053	457,004	N/A

As may be seen from the Table, Alternate B, pumping of sludge to Buckman Street is highly attractive from a cost standpoint. Additional savings will be realized if Alternate B is chosen due to savings in labor costs which are not included in the Table.

We recommend the adoption of Alternate B. Based on our discussions of May 17, 1976 we are proceeding with finalization of plans and specifications for the plant including Alternate B. Should you have any questions or desire any additional information, please advise.

Sincerely,

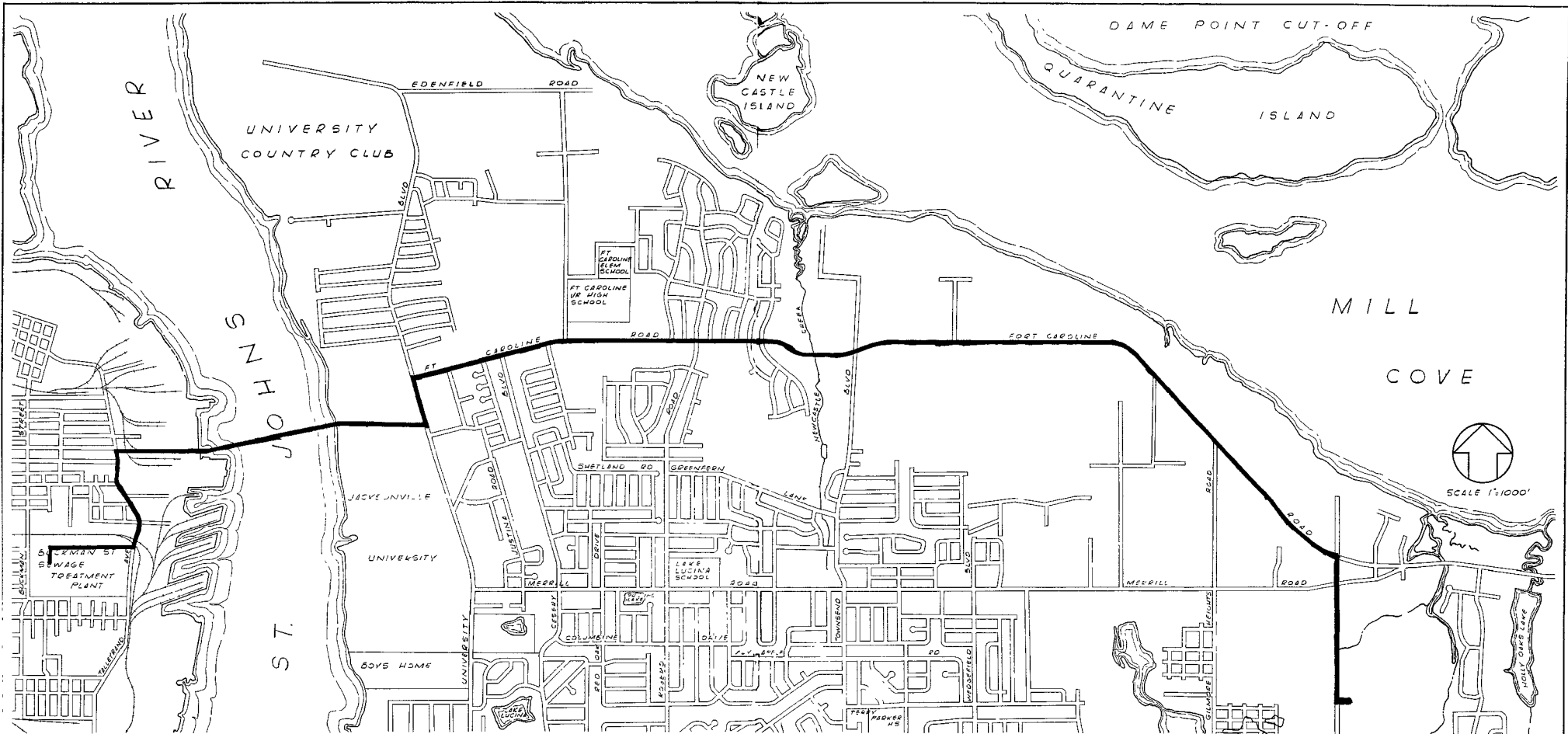
FLOOD & ASSOCIATES, INC.
Consulting Engineers



Bruce A. Bell, Ph.D., P.E.
Vice President

BAB/cr

cc: Mr. J. H. Hyatt, P.E.
Mr. Troy Mullis
Mr. James C. Jones, Jr., P.E.



SLUDGE FORCE MAIN ROUTE

CHAPTER II

- Public Hearing on Draft EIS
- EPA Response to Questions and Comments
- Associated Exhibits

1 ENVIRONMENTAL PROTECTION AGENCY
2 DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR
3 THE ARLINGTON-EAST SERVICE DISTRICT
4 WASTEWATER MANAGEMENT FACILITY
5 PUBLIC HEARING
6
7
8

9 City Hall
10 Jacksonville, Florida
11 January 26, 1976
12
13
14

15 FRAN PHILLIPS, Chairman

16 DEBORAH H. BISHOP, Official Reporter
17
18
19
20
21
22
23
24

25 **L. LEE LAWSON & ASSOCIATES, INC.**

(Court Reporters)

87 Walton St., N.W., Suite 400

Atlanta, Georgia 30303

Phone (404) 522-4600

C O N T E N T S

OPENING REMARKS:

Ms. Phillips

3

STATEMENTS:

By Mr. Howard

5

By Mr. Johansen

12

By Mr. Adams

13

By Mr. Wilson

20

By Mr. Thomas Brewer

21

By Ms. Pillmore

24

By Mr. Hammack

28

By Ms. O'Quinn

29

By Mr. Buck

31

By Mr. McGauley

33

By Mr. Spohrer

35

By Mr. Poggie

39

By Mr. Revels

39

By Mr. Don Brewer

43

By Mrs. Lockerman

47

By Mr. Cruce

48

By Mrs. Black

49

By Mr. Werder

49

By Ms. Webb

49

By Dr. Soldwedel

50

By Mr. Evans

62

P R O C E E D I N G S

1
2 MS. PHILLIPS:

3 May I call the meeting to order, please? Good
4 evening, and welcome to this public hearing on the Draft
5 Environmental Impact Statement for the Arlington-East
6 Service District Wastewater Management Facility.

7 The National Environmental Policy Act of 1969 re-
8 quires an agency of the federal government to prepare an
9 Environmental Impact Statement whenever that agency pro-
10 poses to take a federal action significantly affecting
11 the quality of the human environment. The City of
12 Jacksonville, Florida applied for a grant from the
13 Environmental Protection Agency to construct the pro-
14 posed Arlington-East Sewage Treatment Plant. EPA,
15 responding to the mandate of the National Environmental
16 Policy Act, determined that the issuance of funds for
17 the design of proposed Arlington-East Wastewater Manage-
18 Facility was a major federal action significantly affecti-
19 the quality of the human environment. Accordingly, on
20 October 8, 1974, EPA issued a notice of intent to prepare
21 an Environmental Impact Statement. This public hearing
22 is being held pursuant to the guidelines of the Council
23 of Environmental Quality and the regulations of the
24 Environmental Protection Agency with regard to the pre-
25 paration of Environmental Impact Statements.

1 The purpose of the public hearing is to receive
2 comments from the public on the Draft Environmental
3 Impact Statement. This Draft is being discussed in a
4 public forum to encourage full participation of the
5 public in the EPA decision making process, to develop
6 greater responsiveness of governmental action to the
7 public's concerns and priorities, and to develop improved
8 public understanding of federally funded projects. An
9 official report of these proceedings will be made and
10 become a part of the record.

11 Notice of the public hearing was published in the
12 Jacksonville Times-Union and Jacksonville Journal on
13 January 5 and January 23. On December 26, 1975, Draft
14 Environmental Impact Statement was submitted to the
15 Council of Environmental Quality and made available to
16 the public.

17 I would now like to introduce the hearing panel.
18 To my right and your left, Joe Franzmathes, director of
19 the Division of Water Programs of Region IV; and seated
20 next to him, on your right and my left, is John Hagen,
21 chief of the Environmental Statement Branch for Region IV;
22 and I am Fran Phillips, Regional Council.

23 People that I would also like to introduce that are
24 not part of the hearing panel are Cal Callaway, chief of
25 the Florida Products Council, Mr. Hay with the EPA, down

1 with the Florida section, and Mr. Harold Rhodes, with the
2 State. Where is Mr. Rhodes?

3 MR. RHODES:

4 [Standing.]

5 MS. PHILLIPS:

6 Before we begin citizen testimony, Bob Howard,
7 chief of the Environmental Statement Preparation section,
8 will give us a brief summary of the project.

9 MR. HOWARD:

10 The Draft Environmental Impact Statement for the
11 Arlington-East project addresses alternatives for treating
12 and disposing of municipal wastewater generated in the
13 Arlington-East District of Jacksonville, Florida. The
14 objectives of constructing these facilities are: (1) The
15 attainment and preservation of high quality waters for
16 recreational, fish, and wildlife, and aesthetic uses,
17 and (2) The provision of treatment facilities to adequate
18 service existing and future sources of wastewater.

19 The proposed treatment plant site is a forty-seven
20 acre tract located between Merrill and Monument Roads on
21 the east side of the proposed Millco Road. The plant is
22 designed for an initial capacity of ten million gallons
23 per day and an ultimate capacity of 25 million gallons
24 per day. The wastewater will be treated at the plant by
25 screening, preaeration, grit removal, primary

1 settling, activated sludge aeration, secondary settling,
2 and effluent chlorination. Treated effluent is to be
3 transported through 13,900 feet of 48-inch force main,
4 including 7,500 feet of subaqueous line across Mill Cove,
5 and discharged in the main channel of the St. Johns River
6 off Quarantine Island.

7 The estimated total cost of the project, including
8 the wastewater collection system, is \$48,559,307. The
9 EPA is proposing to contribute \$25,031,367 of this cost.

10 The objectives of the Environmental Impact Statement
11 are to evaluate all reasonable alternatives for meeting
12 project objective, to inform the public of the environ-
13 mental consequences of these alternatives, and to form a
14 basis for future decisions on federal funding.

15 Considerable effort was placed on community involve-
16 ment in the preparation of this EIS. On November 14,
17 1974, the EPA held a public hearing in this room, which
18 many of you attended, to solicit comments on the proposed
19 project. In addition, a citizens' committee provided
20 input into the alternative analysis. Three meetings were
21 held with that committee, and the input obtained was used
22 to weight environmental categories and to identify and
23 evaluate potential impacts.

24 In this evaluation, ten cites were considered. They
25 are: alternative one, which is the Millcoe Road site --

1 you can't see them back here, but it's the Millco Road
2 site; site two was the Dunes Area site; site three, the
3 Dames Point/Fort Caroline Road site; site four the site
4 north of Craig Field; sites five and six, or alternatives
5 five and six, the sites east of Craig Field; sites seven
6 and eight are sites on the eastern edge of Craig Field;
7 site nine is the Beacon Hills site; site ten, the Spanish
8 Point site; site eleven, Quarantine Island; and site
9 twelve, a site south of Craig Field.

10 The analysis of alternatives found that the site
11 south of Craig Field, the Millco Road site, the Dunes
12 site, and the site east of Craig Field, and the site
13 north of Craig Field were all relatively close in environ-
14 mental desirability. Construction costs at the Millco
15 Road, Dunes area, and Dames-Point sites were found to
16 be within five percent of each other. For these reasons,
17 the site at Millco Road which was proposed by the City
18 was considered to be an environmentally reasonable, cost
19 effective solution to providing wastewater treatment and
20 disposal facilities for the Arlington-East area.

21 Various measures have been proposed to be taken to
22 mitigate potential adverse impacts associated with the
23 project. Comprehensive odor and noise controls are to
24 be utilized. The provision of the odor controls is ex-
25 pected to result in all major sources of odor being brought

1 under control. Minor sources will be effectively con-
2 trolled by good operational and maintenance practices,
3 and no adverse odors are anticipated to be noticeable
4 outside the plant boundaries. Modelling has shown that
5 with the use of the proposed noise controls, expected
6 noise levels will be below 45 decibels at all residences.
7 This level is approximately equal to existing minimum
8 background levels.

9 A two-hundred foot wide buffer zone and vegetative
10 screen on the east side and a one-hundred foot buffer
11 zone on the north, west, and south sides will be
12 retained. Additionally, a 114-acre wooded area north
13 and east of the plant site will be purchased by the City
14 and dedicated as a recreational area.

15 The adverse environmental effects of the proposed
16 project may be summarized as follows: (1) The commitment
17 of 47 acres and loss of about one-half of this land as a
18 natural wildlife habitat; (2) Minor short-term dust, noise,
19 vehicle emissions, traffic, and soil erosion impacts
20 during construction; (3) Temporary disturbance of two
21 acres of salt marsh during construction of the effluent
22 outfall; (4) Disposal of initially ten million gallons
23 per day and ultimately 25 million gallons per day of
24 secondarily treated wastewater to the St. Johns River;
25 and (5) Secondary effects of development pressure on areas

1 set aside for preservation and conservation.

2 The major beneficial impacts of the project are:
3 removal of inadequately treated wastewater from tribu-
4 tary streams in the Arlington-East area; attainment and
5 preservation of high quality waters in the Arlington-East
6 area; provision of treatment facilities for existing and
7 future sources of wastewater; alleviation of adverse
8 conditions resulting from the operation of septic systems
9 and small package plants; and allowance of orderly growth
10 according to the Comprehensive Development Plan for
11 1990. Thank you, Fran.

12 MS. PHILLIPS:

13 Thank you, Bob. I understand there are some coun-
14 cilmen in the audience that I didn't have an opportunity
15 to meet before the hearing, and I would like to intro-
16 duce them at this time, if they would please stand and
17 state their name. I'd like for the City councilmen to
18 please stand and state their names. Don Pruitt just
19 stepped out the door.

20 Also, I would like to express sincere apologies from
21 Jack E. Ravan because he's not able to attend the hearing
22 tonight. He was called to jury duty, and he is on a
23 federal jury, and is in a motel room somewhere in Atlanta
24 held over with the jury, and that is why he could not
25 attend.

1 Procedures for receiving public comment will be as
2 follows: everyone who is registered to speak will be
3 given an opportunity to be heard. We will hear from
4 speakers in the order of registration. If you wish to
5 speak and have not registered, please do so at this time.
6 We will ask you to limit your remarks to ten minutes.
7 You may have additional time after everyone desiring to
8 speak has had an opportunity to be heard. I will ask
9 Cal to stand, signalling that you have used eight minutes
10 of your time, and then you can be seated, Cal. You're
11 welcome to submit any written statements of any length,
12 and the record will remain open for fifteen days for
13 this purpose. There will be no questions to the panel
14 from the speaker. You may submit questions in writing,
15 which will be answered in the final Environmental Impact
16 Statement. We reserve the ability to ask you to limit
17 your remarks to relevant issues, and I will ask you to
18 submit your statements in writing if those remarks are
19 not so limited. Formal rules of evidence will not apply
20 here. There will be no oath of witnesses. There will be
21 no cross-examination or direct questions to the speakers;
22 however, if there is a point that needs clarifying or
23 data is submitted that needs further documentation, I
24 will ask one of the members of the panel to address a
25 question to the speaker for purposes of clarification only

1 There will be no questions by the audience of any persons
2 who make statements here. If you wish to rebut any remarks
3 made, either register to speak again or submit rebuttal
4 in writing. When you're called on to speak, please present
5 a copy of your written statement if you have one to the
6 court reporter and another copy to us. Stand at the
7 speaker's podium, give your name and address, the title
8 or group of which you are associated, if any.

9 We are now ready to begin. Our first speaker is
10 Mr. David K. Evans.

11 MR. EVANS:

12 Good evening. My name is David K. Evans. I live
13 at 10832 High Ridge Road, Jacksonville, Florida. I
14 represent myself and the Holly Oaks Community Club and
15 Civic Association. Before going any further, I'd like
16 to ask one question. We were not advised of a ten-minute
17 time limitation. Dr. Soldwedel and I have spent a great
18 many hours over the past two years in going through this
19 material, and I don't think it is humanly possible for
20 anyone to make a reasonable explanation and ask the questions
21 necessary for us to come up with any opinion tonight; and
22 it's just impossible to do it in the ten-minute time limit.
23 May we have a ruling?

24 MS. PHILLIPS:

25 Yes, sir, Mr. Evans, you may have a ruling. If your

1 statements are in a written form, you may submit written
2 statements of any length, which will become part of the
3 Environmental Impact Statement's official record. Because
4 of the great number of people who have registered tonight,
5 eighteen people, in fact, we are going to have to initially
6 limit our presentations to ten minutes. If you would
7 like to speak again and for a second time, you can feel
8 free to do so. If you would like to take some additional
9 time now to cut down your presentation to the relevant
10 points, I would be glad to defer your presentation to
11 the last one on the list.

12 MR. EVANS:

13 I choose to defer my entire presentation until the
14 last one on the list. I do want the people to be heard.
15 Thank you.

16 MS. PHILLIPS:

17 Mr. Johansen.

18 MR. JOHANSEN:

19 I'm Councilman Johansen of District I, which is the
20 Millcoe Road area we're talking about. Approximately two
21 years ago, I was a member of the Affairs Committee of this
22 council; however, before the rezoning of that tract of
23 land for the sewer land, I did that on the basis of the
24 professional, expert statements that were given us in the
25 many, many hours of testimony. There would be no odor;

1 there would be no spillage; there would be no noise; and
2 they had the Urban Affairs Committee completely convinced

3 Approximately a year later, we had a meeting with
4 the people from the EPA, and they just reversed the
5 statement. Now, there could be odors; there could be raw
6 spillage; there could be noise. I think that the Urban
7 Affairs Committee two years ago was just necked down the
8 pants, and I certainly object to having a sewer plant of
9 that type that we could have odors and we could have
10 spillage in any way, shape, and form. Thank you.

11 [Applause.]

12 MS. PHILLIPS:

13 Thank you, Mr. Johansen. Dr. Betty Soldwedel.

14 DR. SOLDWEDEL:

15 I do not choose to speak now. I defer to Mr. Evans
16 and I'll be last.

17 MS. PHILLIPS:

18 Mr. R. H. Adams.

19 MR. ADAMS:

20 Ladies and gentlemen, thank you for the opportunity
21 of addressing all of you tonight. I'm not going to try
22 to recap all the names of those who are here. I will
23 render a copy to the court reporter and to you at the end
24 of my presentation.

25 Ladies and gentlemen, my name is Robert Hall Adams.

1 My residence address is 10585 Lakeview Road, East-Holly
2 Oaks, Jacksonville, Florida.

3 I have carefully reviewed both the Environmental
4 Assessment Statement, dated September, 1974, and the
5 Environmental Impact Statement, dated December, 1976, and
6 received by special delivery four days ago.

7 These two documents are, of course, but the tip of
8 the iceberg. The engineering drafts, blueprints, cor-
9 respondence, charts, et cetera, would fill a small room
10 indeed; and it all started, publicly, at least, with a
11 very, very small four-line ad on November 5, 1973, which
12 was the notice of public hearing in the Jacksonville
13 Times-Union. This, then, was the birth of Project
14 number C120541.

15 Since all the prenatal work had already been ac-
16 complished without the public's general knowledge, I think
17 it is fair to consider this new arrival as a candid an-
18 nouncement of the project, born out of wedlock and certainl
19 without the benefit of clergy. At that point in time,
20 the impact of this proposed plant and its environmental
21 effects, specifically those pronounced in Section 102(2)(c)
22 of the National Environmental Policy, became public.

23 As the record will reveal, nearly everything regarding
24 this proposed plant has changed. Thank you, Mr. Johansen.
25 Costs, number of plants to be phased out, mitigating

1 conditions, evaluation criteria, et cetera. The distinct
2 purpose for its being, that is wastewater improvement, to
3 which any reasonable person would agree, sounds like a
4 distant bugler playing taps.

5 Following my review of these documents, participation
6 at several meetings and hearings, I finally, on Sunday,
7 January 19, of this year, did what I should have done a
8 long time ago. I visited the site, walked most of its
9 boundaries, rented a small airplane, flew over the area
10 affected, and the following Monday, visited with Mr. Joe
11 Hyatt, department director for the Jacksonville Depart-
12 ment of Public Works, at his offices for a period of
13 over two hours. He was extremely helpful and furnished
14 me a large scale map of the proposed plant (indicating)

15 As a result of the above, I present here conclusions
16 which are significant to me. I'm speaking in my own

17 **9** behalf. (1) The actual plant site and the proposed buffer
18 **10** zone is virtually unknown to most public officials, many
19 EPA personnel, adjoining landowners, and other affected
20 citizens. As a matter of fact, a property owner whose
21 land abuts the site proper had no exact idea as to its
22 exact location, but was interested enough to spend three
23 hours with me walking the woods and swamps trying to locate
24 the markers, base lines, and boundaries. We succeeded in
25 finding only two relevant points: base line marker at

1 elevation number 31, and the southwest corner of the
2 plant property, which incidentally is within talking dis-
3 tance of several mobile homes, whose owners were equally
4 baffled as to the exact plant location.

5 Some of the ground and aerial photos I took depict
6 the borrow pit to the east of the site which many of my
7 neighbors mistook to be preliminary construction of the
8 site. While this is in effor, it, of course, does point
9 out that insufficient information and improper delineation
10 of the site caused a degree of panic. Unless those
11 affected can readily locate the actual plant site, most
12 of the documentation furnished, which is voluminous,
13 becomes completely secondary.

14 **11** (2) Of concern to me, also, is the proposed design
15 location of the main entrance road to the plant. It is
16 not shown on the plans; it is, however, shown on this map
17 over here (indicating). As drawn, it merges with Monument
18 Road at a most hazardous point, where slope and turn change
19 require prudence under current conditions. The addition
20 of heavy truck traffic at this point is not consistent
21 with sound road design. When I asked the reason for this
22 layout, the answer was even more frightening. It is being
23 located where it is for the sole convenience of a large
24 land developer who prefers not to lose the valuable road
25 frontage.

1 (3) Under current federal public law restrictions,
2 public laws -- I'm sorry, I do not have the number -- I
3 am advised that no project is eligible for funding if
4 actual construction has begun on that particular phase
5 without prior granting of the funds. Specifically, in
6 **13** the case of the Millco plant, none of the proposed trans-
7 mission lines are eligible at present for 75 percent
8 granting because of lack of funds at the federal level.
9 I asked Mr. Hyatt where, then, these funds would come
10 from. I was advised that in the interim between be-
11 ginning of plant construction and its completion, that
12 if federal funds were not available, local monies would
13 have to be used -- another unknown quantity.

14 (4) On page four of the EIS, I note the proposed
15 acquisition cost of the plant at \$63.00 per acre and the
16 buffer zone at \$63.22 per acre. The two decimal point
17 typographical error is moot. I'm not trying to render
18 anyone culpable for that. The actual costs as reported
19 are \$6,300.00 per acre and \$6,322.00 per acre, respective

20 I have no expertise in real estate values, but I
21 was knowledgeably advised that less desirable land to
22 the southwest and south are realistically valued at
23 \$15,000.00 per acre plus and up. Quick mathematics need
24 **10** not be computed here except that the bottom-line cost of
25 the buffer zone could be one million, five -- I

1 beg your pardon -- \$1,154,292.00. I'll repeat that figure
2 \$1,154,292.00 more than anticipated by the City government
3 if, indeed, 125 acres are valued at more realistic values
4 than those shown on page four. This variance in actual
5 **28** plant cost could shift the fiscal advantages of Millco
6 to another plant alternate.

7 If, on the other hand, the City will arbitrarily
8 through the process of condemnation by virtue of eminent
9 domain confiscate beautiful wooded lands at lower than
10 real values, then this whole mess will have reached its
11 apogee and become further proof of preferential, blatant
12 inequities and irresponsible action on the part of our
13 elected officials; and at least I, who voted for consoli
14 dation, will be asking himself, "Whose real fault is it?
15 The "book", if you will, on the Millco plant will then
16 become required reading by all political aspirants, in-
17 cumbent officials, real estate brokers, and junior law
18 clerks.

19 **10** How many here tonight know that a large home, facing
20 a beautiful, stocked pond, is being constructed within
21 the proposed buffer zone -- the house, a probably \$95,000.0
22 value?

23 The way things look now -- I missed a paragraph,
24 excuse me. In summary, no public official, at any level
25 of government, should be permitted to cast a vote or

1 profess an opinion on this matter until he has reviewed
2 both documents, visited the site, and listened to his
3 constituents.

4 The way things look now, if this plant is approved,
5 the groundbreaking ceremonies will coincide nearly to the
6 day, I'm advised, with the two hundredth anniversary of
7 this democracy. Although I fail to find that in any
8 document, I rather envision the affair as being held at
9 3 a.m. without press coverage or benediction, attended by
10 only one council member whose name will be drawn by
11 secret ballot the day before, the junior VP from the large
12 land developer to the south, the general contractor,
13 representatives from the consulting firms, a freshman
14 draftsman from Public Works, and the mail clerk from
15 the regional EPA offices, who will swing a two-gallon
16 bottle of Nutri-Gro against base line marker number 31.
17 I just couldn't resist that after finding base line marker
18 number 31.

19 I hope common sense will prevail, and that we may
20 regain some confidence in those we have selected, all of
21 you, to protect us from ourselves because, quite frankly,
22 I don't think I can stand any more protection of my
23 environment. Thank you very much.

24 [Applause.]

25 MS. PHILLIPS:

1 Thank you, Mr. Adams. Our next speaker will be
2 Mr. Frank Wilson.

3 MR. WILSON:

4 My name is Frank Wilson. I reside at 7272 San Jose
5 Boulevard. I am here tonight speaking on behalf of the
6 Florida Engineering Society, the Jacksonville chapter,
7 of which I am vice-president, and there are approximately
8 240 members in the Jacksonville area.

9 As we will all controversial projects, we have
10 presented this project to a sub-committee for study and
11 for reporting back to the executive committee. Their
12 report, passed on to the general membership, and the
13 implementation was passed out to the members in general
14 of the chapter, and at our last meeting, this resolution
15 was overwhelmingly approved. I wish to read this
16 resolution now.

17 January 20, 1976 -- Whereas, the Jacksonville Chapter,
18 Florida Engineering Society, is an organization of profes-
19 sional engineers with a vital interest in community
20 activities; and whereas, the proposed Arlington Sewage
21 Treatment Plant of the City of Jacksonville is a major
22 engineering project affecting the environment, economy,
23 and quality of life in Jacksonville; and whereas, the
24 construction of this plant will phase out a significant
25 number of smaller plants and systems presently discharging

1 waste to tributary streams in the Arlington area; and
2 whereas, the design of this facility has incorporated:
3 a buffer zone of 118 acres to be used as a passive re-
4 creation area, and provisions of noise and odor controls;
5 and whereas, detailed environmental assessments and impact
6 studies of the proposed site and fourteen alternate system
7 and sites have determined the original site would cause
8 no significant and environmental damage; and whereas,
9 this site would save the citizens of Jacksonville ap-
10 proximately \$4,000,000.00 and be an operative facility one
11 year sooner than any other site.

12 Now, therefore, it is resolved that the Jacksonville
13 Chapter of the Florida Engineering Society endorses the
14 proposed Environmental Impact Statement Draft as pre-
15 pared by the Environmental Protection Agency which
16 approved locating the Arlington Sewage Treatment Plant
17 at the Millcoie Road site with Quarantine Island outfall.
18 Thank you.

19 MS. PHILLIPS:

20 Thank you, Mr. Wilson. I would ask the audience to
21 please be quiet. Our next speaker will be Mr. Thomas
22 Brewer.

23 MR. BREWER;

24 My name is Thomas F. Brewer. I reside at 4807 Water
25 Oak Lane in Jacksonville. I represent the Jacksonville

1 Area Chamber of Commerce, and in that capacity served on
2 the Citizens' Advisory Committee to the EPA for the study
3 of the Arlington-East Wastewater Treatment Plant.

4 **21** First of all, I would like to make a comment to the
5 engineers in that they approved the original site and
6 the original site was not, in fact, the site that the
7 Environmental Protection Agency has rendered its approval
8 to.

9 On this committee to review the proposed site and
10 various alternatives, we had five people from City
11 government, five people from the "unaffected area," and
12 five interested citizens. That committee reviewed each
13 site, each alternative, both environmentally and cost-
14 wise. We used a formula that may be questioned, but at
15 the end of the committee meeting, we decided that perhaps
16 we should ask the environmental protection agency to
17 select a particular site rather than throw all of our
18 figures into a hat and let them review them.

19 The committee chose to recommend to the Environmental
20 Protection Agency that they select Dunes site two.

21 **28** Now, there's a question of dollars involved. We're
22 talking about -- I heard a figure a moment ago of four or
23 five million dollars -- we're talking about a four percent
24 differential between the selection of Dunes site two and
25 the Millco site. That's not a great deal of money.

1 The Chamber of Commerce does not feel that we should
2 construct a commercial plant within a residential area.

3 [Applause.]

4 We also would like to point out that once the biased
5 members of the committee, meaning those people who repre-
6 sent the Holly Oaks area and those people who represent
7 the City of Jacksonville and that one person on the com-
8 mittee who represents the landholder at the Dunes site,
9 once those people are eliminated, the vote of the quote,
10 end-of-quote, "impartial citizens" on the committee was
11 three to one in favor of choosing the Dunes site as
12 opposed to the Millcoie site.

13 The Draft EIS mentions the fact that the committee
14 voted in the way it did, mentions the fact that there was
15 no citizen on that committee from a residential area that
16 would be affected by the treatment plant in the Dunes
17 area. That's not true. There was a member of the commit-
18 from the Arlington area who lives just a few blocks from
19 Dunes site two. He voted in favor of Dunes site two as
20 opposed to the Millcoie site.

21 In summary, the City of Jacksonville, in my opinion,
22 has not been concerned with the feelings of the citizens
23 of the area in which the plant is to be built. The
24 Chamber of Commerce feels that citizens have the right to
25 choose their own environmental destiny, and we ask that

1 they be given that right.

2 [Applause.]

3 MS. PHILLIPS:

4 Our next speaker will be Pat Pillmore.

5 MS. PILLMORE:

6 My name is Pat Pillmore. I live on 3826 Tara Hall
7 Drive. It's near Holly Oaks; it's not in Holly Oaks.
8 I'm not representing anyone but myself.

9 It is my opinion and the expressed opinion of others
10 in this room that EPA has not followed through with this
11 impact study in a completely impartial manner. The
12 EPA's responsibility is to environmentally sound, long-
13 range planning, not only to flora, fauna, endangered
14 species, et cetera, but also to mankind. The EPA is a
15 relatively new agency and should be concerned with providing
16 it can provide environmental protection. The EPA's strength
17 and continued success lies in its integrity, not in its
18 ability to appease or compromise local politics.

19 Instead of choosing the most environmentally sound
20 area, by their own admission, a site has been chosen that
21 the Department of Natural Resources and the Corps of
22 Engineers has determined to be unacceptable because of its
23 influence with Mill Cove. Instead of concentrating on
24 more environmentally favorable site, they have tried to
25 engineer themselves around what was environmentally

1 unacceptable. Irrespectful of the fact that this proposed
2 treatment plant will be built in a residential community.

3 In a letter from Flood and Associates on page 401
4 in the Impact Study which was a rebuttal to the Department
5 of Natural Resources in its concern over Mill Cove, and
6 this letter seems to me to be taken as a fact in the
7 study. The quote from the letter is, quote "The outfall"
8 construction and continuing operations will not introduce
9 additional solids directly into Mill Cove." We are not
10 concerned with whether or not the solids are directly or
11 indirectly introduced or by the way which they are
12 introduced to the cove. This is irrelevant. Why weren'
13 **12** there any waterflow tests done on the cove to see what
14 exactly the outflow will have on the cove?

15 I tried to research this, and in a telephone
16 conversation with Flood and Associates, I was told this
17 type of follow-through would be done by the Environmental
18 Protection Agency. The problem is that the cove is filling
19 up and the cove is dying and it's becoming shallower and
20 shallower every day. On the telephone, someone in the
21 EPA office told me that the information I was looking for
22 on waterflow charts that would affect Mill Cove was
23 available in the 1974 assessment statement. They told
24 me -- let's see -- and further investigation on my part,
25 I found the information was available, but it was not

1 where they told me it was. It was in the U. S. Geological
2 Study done for the area planning board, and there were
3 no waterflow charts or tidal information in this study.
4 There was only topographical information which doesn't
5 make any difference in this particular study. This is
6 just one example of convenient oversight by the EPA Impact
7 Study, an oversight that could affect property owners on
8 the cove, a three-hundred member family-branch YMCA,
9 people who use the cove for recreation, and could perman-
10 ently affect the environmental life of the cove
11 **12** indefinitely. I'm questioning the outflow from the
12 outflow pipe into the channel and the tidal effects on
13 Mill Cove.

14 **12** Also, in a telephone conversation with the Corps
15 of Engineers, I was told that the Corps is having a
16 waterflow model done, and the results of this study,
17 which won't be available until 1978, may determine
18 engineering necessary to restore navigation to Mill Cove.
19 I was told that if the proposed outflow pipe is in the
20 way of their engineering project, the City will have to
21 move and reroute the outflow pipes at the City's own
22 expense. There is no mention of this in the Draft going
23 to Washington.

24 In a letter from the Corps of Engineers on page 397,
25 in reference to the Army permit to construct the outflow

1 pipe, quote, "We suggest that alternates four through
2 ten would have a more likelihood of obtaining a permit
3 without objection since those plans involve a minimum
4 amount of underwater disturbance." Alternates four
5 through ten do not include the Mill Cove site, obviously.
6 Without a permit to construct the outflow pipe, there
7 cannot be construction done on the regional plant. What
8 guarantee is there at this point that there will be con-
9 struction done on the proposed site considering the fact
10 **25** that there has been no request made for the permit,
11 which is not outlined, and the Corps does not at this
12 point recognize the merits of the Mill Cove site?

13 It seems the conclusion of this Impact Statement
14 has been determined by cost rather than environmental
15 **26** factors. If the Environmental Protection Agency is so
16 concerned about money, why can't low-interest loans be
17 given to the small sewage plant owners to facilitate
18 upgrading plants rather than giving the money to the City
19 to build a regional plant? It's a known fact that
20 private enterprise is more efficient than government
21 bureaucracy.

22 [Applause.]

23 The most obvious injustice is to the residents in
24 the Holly Oaks area. The ability of private citizens to
25 maintain or even control the quality of life in their

own neighborhood does not exist. This situation proves that government exists for the few, but the question is: which few? Thank you.

[Applause.]

MS. PHILLIPS:

Our next speaker will be Al Hammack.

MR. HAMMACK:

I'm Al Hammack. I live at 422 Osbrick Point. I'm chairman of the Jacksonville Environmental Protection Board, but I'm speaking only for myself tonight. This matter has not been brought before our full board.

There are only three points that I'd like to make.

28 First of all, the least cost site should be selected.

We can solve any environmental problem given enough money, but that's just the problem. There isn't enough money. Unless we continue to raise our water and sewage rates in Jacksonville, for the sake of the environment as well as the taxpayer, the site you selected is the best choice.

5 Number two, all reasonable noise and odor abatement systems have been designed into this plant. It provides good protection for its neighbors.

Number three, we need to get on with the job of cleaning up our streams in Jacksonville. Any other site selection will cause unnecessary delays.

1 I believe you've done a thorough job, and I support
2 your decision. Thank you.

3 MS. PHILLIPS:

4 Helen O'Quinn.

5 MS. O'QUINN:

6 Hi, I'm Helen O'Quinn. I live at 10605 Lakeview,
7 Northeast. I recently read in the January 16 Washington
8 Post that the EPA in Washington, D. C. had asked that the
9 contractors of the regional sewage treatment plant known
10 as Blue Plane to modify the design from secondary treat-
11 ment to alternative methods because of the high energy
12 2 use of the incineration process, and yet you are recom-
13 mending an incineration process for Jacksonville.

14 1 I know you are aware of the dangers of chlorination
15 in the process because it was brought up at a citizens'
16 committee meeting at which I attended, and yet you are
17 proposing this chlorination process for this plant.

18 The printed media and the mayor have done an excel-
19 lent job in trying to convince the citizens of consolidat
20 Jacksonville that a small group of selfish Holly Oak
21 residents are continually costing them more money by de-
22 laying the building of this plant; however, if the truth
23 were told, the citizens of Jacksonville would realize tha
24 it is the alert, aware, and informed Holly Oaks' resident
25 who are trying to save them untold millions of dollars.

1 The people of Jacksonville need to know what is really
2 being imposed upon them.

3 According to the City's own economic feasibility
4 study, this plant will cost not just fifty million dollars
5 to build, but at least eleven million dollars every year
6 for twenty years just to get it paid for, and then, five
7 million dollars per year for maintenance operation, and
8 heaven knows what repair bills after twenty years.

9 For you to recommend to impose on the people of
10 Jacksonville an annual cost of eleven million dollars
11 for a plant -- only one of a proposed five, by the way --
12 that is outdated before it is even built, since all of
13 the latest plants are against large, regional plants
14 that employ treatment processes that may be dangerous
15 and that uses the most costly form of sludge treatment,
16 incineration, which contributes only to wasteful use of
17 energy, leads me to believe that in responding to the
18 pressures on you to select this site, you have abdicated
19 your agency's basic responsibility to protect the quality
20 of the human environment and have, in fact, exploited
21 the residents of Holly Oaks in an effort to appease the
22 local administration.

23 I submit that this proposed plant is an imposition
24 on the citizens of Jacksonville and that the entire project
25 **4** should be withdrawn. The residents of Holly Oak don't

1 want you, and the citizens of Jacksonville can't afford
2 you.

3 [Applause.]

4 MS. PHILLIPS:

5 Thank you, Ms. O'Quinn. Our next speaker is
6 Mr. James Buck.

7 MR. BUCK:

8 Madame Chairman, my name is James O. Buck. I reside
9 at 1922 Holly Oaks Ravine Drive. I'm the president of
10 Buck and Buck, Incorporated. That's the developer of
11 Holly Oaks Forest.

12 I received also my big volume of mail last Thursday
13 and I have looked at it somewhat since then, and I no-
14 **17,** tice that the report says that there are five companies
15 **18** who will gain from this treatment plant. One -- the
16 first being Stockton, the second someone else, and the
17 third being Buck and Buck, Incorporated. Well, I can
18 tell you, lady and gentlemen, that we will not gain one
19 thing.

20 The only thing that can happen that can benefit us,
21 if you might call it a benefit, would be the taking of
22 some of our land as this buffer zone, which we by letter
23 to this group sometime back advised that it was not for
24 sale. If the City wanted to take it, they had the right
25 to do it, then, naturally, they could so do.

1 Now, I -- so this is wrong in the report. I have
2 no other lands over on that part of the property at all,
3 and after all, this is a collection point for sewage
4 plants, and we have the Jacksonville Suburban Facilities
5 had the franchise for that area, and has a plant over at
6 the foot of St. Johns Bluff Road and Fort Caroline that
7 has a million gallon capacity now. So we are in many
8 respects taken care of, and I just wanted this to be
9 right on the record.

10 I also wanted to say that of the sites that are
11 in the book, the number of sites that have been investi-
12 gated by the committee and considered, there's one site
13 that was never really considered in the past because it
14 was said that the smokestack was such that it would have
15 some bearing on the use of -- I mean, of the location of
16 the plant there, and that was on the south end of Craig
17 Airport, which is your item number twelve, your site
18 number twelve. Now, I notice in your report, your environ-
19 mental people place that as number one environmentally as
20 the place to put the plant, but I want to say to you that
21 the lands bordering Craig Field on the south are presently
22 either commercial now or will be commercial, and that you
23 will not have a problem from a residential standpoint,
24 **8** and I want to urge that this committee go back and review
25 this thing, and select site number twelve.

[Applause.]

MS. PHILLIPS:

The next speaker will be Robert McGauley.

MR. MCGAULEY:

My name is Robert McGauley. I'm the vice-president of the Alderman Park Civic Association. I live at 7711 Valley View Drive.

It had been my intention to endorse the remarks of Mr. Dave Evans, who was supposed to be the first speaker, but inasmuch as he is now going to be toward the end, I'll have to endorse his remarks in advance.

We appreciate the fact that a regional sewage treatment plant is planned to relieve the difficult sewage problems in the area east of the St. Johns River. We compliment the parties involved in the design and the funding of this plant; however, we find it difficult to understand how or why a facility of this nature, with this potential for malodorous air pollution, and I'm reminded of Mr. Howard's remarks earlier that all is being done to alleviate this problem, but in my opinion the potential still lies there, that a plant with this potential must be located so close to a residential area where home values run as high as \$75,000.00 to \$100,000.00. Actually, I should say, for that matter, where it shouldn't be located near any residential area regardless of the

values.

After reviewing maps of the proposed installation, it appears that several of the alternate sites would be equally as effective. Two that come to mind: the Quarantine Island and the site east of Craig Field. Granted that both of these sites may be more expensive to build, but it seems to us that the one thing that's being overlooked in this present formula for locating the plant is the voice of the people. I will not believe that it is the intent of EPA or any other agency, whether it be federal, state, or local, to ignore the mandate of the people affected in locating projects of this type.

I am reminded of what happened in the City of Boston some 22 years ago. They had a tremendous sewage problem right in Boston, the towns right in Boston Harbor. To solve that problem, they took an island out in the harbor -- it couldn't have been more than half a mile or a mile outside of Boston proper -- and they built a huge sewage treatment plant there. They collected sewage from shore and pumped it from the mainland and pumped it out onto the island where it was treated and then shipped out by outfall out into the harbor. I would think that Quarantine Island would deserve another look on this basis, that that be the location of the site.

Therefore, speaking for the Alderman Park Civic

1 Association, although we're not directly involved, I feel
2 we must give vocal and moral support to our residential
3 neighbors. We heartily endorse the petition of the
4 people of Holly Oaks community, and recommend to you that
5 the facility not be located at the intersection of Millico
6 Road and Fort Caroline Road.

7 [Applause.]

8 MS. PHILLIPS:

9 Thank you. Our next speaker will be Mr. George
10 Spohrer. Did I pronounce that correctly?

11 MR. SPOHRER:

12 Madame Chairman, my name is George Spohrer. I live
13 at 12850 Deep Lagoon Place in Jacksonville, which,
14 incidentally, is not in the Holly Oaks community. I'm
15 a former resident of that area. I retain interest in
16 these hearings, although I will not be in the so called
17 affected area.

18 I have some questions that I would appreciate being
19 answered and realize that you won't answer them this
20 evening, but I would appreciate some sort of written
21 response. I'm sure that Dr. Soldwedel will cover some
22 of these in her talk, but I haven't had the benefit of
23 hearing her yet, so I may duplicate these a little bit.

24 First of all, I would like to ask the Environmental
25 Protection Agency to review the propriety of accepting

1 all of the cost data from their consulting engineers. As
2 28 nearly as I can ascertain from the Draft study, they've
3 pretty well taken the City's figures right down the line,
4 and I'm wondering if the integrity of your programs can
5 be maintained by accepting those figures; particularly
6 since I understand that the decision to approve the
7 Millco Road site is based largely on cost, and I say that
8 because I believe Mr. Hammock earlier said the recommended
9 site, and as I understand the study, it's not the recom-
10 mended site. I believe the wording is that it's an
11 acceptable alternative; however, environmentally, I be-
12 lieve it was second or fifth, if I understand.

13 I also appreciate the remarks of this man from the
14 Engineering Society being here this evening. I really
15 don't understand the relevance of it. I'll let you rule
16 on that, but it's rather, in my opinion, like the
17 munitions manufacturers endorsing the second World War.
18 I don't understand why it's important.

19 [Applause.]

20 14 The other question I have is regarding the federal
21 freedom of information act. I would like to know if this
22 act would apply to all of the correspondence received by
23 the EPA between not only the residents, which we have
24 printed, of course, in the assessment statement, but also
25 between the EPA and the City of Jacksonville and particular:

1 between the City of Jacksonville and any other interests
2 in the City of Jacksonville regarding this plan. I would
3 like to have the opportunity of reviewing that correspon-
4 dence if you decide that this would be appropriate.

5

Mr. Howard made a statement that was quoted in the
6 Times-Union that I'm not attesting to the accuracy of it,
7 but it was a quote, that the concern of the Holly Oaks
8 residents was based on fear, and that fear was that the
9 plant would emit an odor, and that it would be noisy, and
10 so forth, whereas he states that the Environmental
11 Protection Agency's staff recommendation is based on the
12 knowledge that it will not be. That's an interesting
13 assurance, particularly since my understanding of the
14 consultants for the EPA's review of the plants in Canton
15 Ohio, and I believe Fort Lauderdale didn't really
16 indicate this. In those plants, there are problems. I
17 understand this is going to be a model plant. There will
18 be none other like it, and this one will not have any of
19 these problems, but I've yet to find one that, you know,
20 operates like that. I'd like to know if there is one
21 somewhere in the world.

22 The other thing I would like to do for your record,
23 Madame Chairman, is ask if I might have a show of hands
24 of those in the audience who are from the so called affec
25 area? Let's call it the Holly Oaks community. Could we

1 have a show of hands?

2 [Show of hands.]

3 This is the group that the City refers to as a small,
4 but vocal, minority.

5 MS. PHILLIPS:

6 Sir, I'm going to ask you for the record -- could
7 we have a -- we will have a count from those who registered
8 at the door of those people who are from the Holly Oaks
9 community because I think this is important for the
10 record.

11 MR. SPOHRER:

12 Yes, I think so. I'm particularly interested in
13 the fact that it's important to determine -- this is
14 two years, you know, down on the road on this thing.
15 Many of these people have been to at least fifteen
16 different hearings, which is interesting to see their
17 tenacity and how strongly they are opposed, in fact, to
18 the Holly Oaks site.

19 [Applause.]

20 I'm not going to review all of this with you. I'm
21 particularly interested in hearing Dr. Soldwedel's
22 remarks and Mr. Evans'. You mentioned in your opening
23 remarks about the wishes of the people on it. This is
24 part of your charter and your charge as the Environmental
25 Protection Agency. We're particularly concerned about

1 that, also, I think by virtue of the turnout at this
2 hearing and at all of the other hearings by virtue of the
3 recommendations of the City Advisory Panel, which was
4 impaneled by the EPA. I think it's clear that the wishes
5 of the people are that you not permit the City of
6 Jacksonville to construct a plant of this magnitude in a
7 residential community. Thank you.

8 [Applause.]

9 MS. PHILLIPS:

10 Our next speaker is Mr. Victor Poggie.

11 MR. POGGIE:

12 I pass at this time.

13 MS. PHILLIPS:

14 Our next speaker is Mr. Del Revels.

15 MR. REVELS:

16 For the record, I am Del Revels. I live at 4411
17 Charter Point Boulevard in Jacksonville. I am president
18 of the Greater Arlington Civic Council, comprised of all
19 known organized civic groups in Arlington.

20 I would like to approach -- first, I would like to
21 say that I was privileged to have the opportunity to sit
22 on the committee that studied all of the problems in re-
23 lation to the Arlington-East Sewage Treatment Plant, and
24 as Bob talked with me before I consented to serve, I
25 said, "Bob, do you think there's any idea of the citizens

1 here, those who do serve, will have a chance to give
2 some meaningful input?" and upon being reassured that we
3 would be, I agreed to accept, and it was quite an
4 experience.

5 I would like to, tonight as I speak to you from the
6 Greater Arlington City Council, address it basically in
7 two areas: one is odor, another is land use; and quote
8 to you very briefly from some of your documents. The one
9 that I will read, page 35, of the Sewage Report for EPA
10 203, dated October 20 of '75, and it said -- it says
11 **5** that when the incinerator is in operation, speaking of
12 the sewage treatment plant, this is an excellent means
13 of odor control. However, normal operating procedures
14 will inevitably result in the incinerator being out of
15 operation while the rest of the sludge-handling equip-
16 ment is still in use. During these periods, no odor
17 control would be utilized.

18 Continuing on to page 41 of that same document, it
19 says that an estimated 90 percent of the potential odor
20 emissions should be removed by these treatment techniques.

21 **5** That's great for the 90 percent, but what about the re-
22 maining 10 percent? It goes on to say that a very low,
23 yet detectable odor will probably be noticeable on the
24 plant site for short periods of time under certain atmos-
25 pheric and plant operating conditions. This type of odor

1 episode would be generally due to operator error, equip-
2 ment failure, or oversight and should be correctable once
3 detected. It is not possible to completely eliminate
4 this type of minor odor episodes; however, going on to
5 page 42 of the same report, it says that a well-operated
6 and maintained sewage treatment plant will generate a
7 minimum amount of odors at a low frequency of occurrence.

8 **5** However, the proximity to nearby residents, the inherent
9 variability, and uncontrolled error based entirely on
10 human operator control, and the potential for odor
11 episodes due to wastewater effluent searchlightings
12 and vast experience of three similar sewage treatment
13 plants indicate that this controlled strategy will not
14 substantially -- I repeat -- will not substantially
15 reduce potential odor emissions at the source, and
16 consequently, will not substantially mitigate the poten-
17 tial impact of the Arlington-East Regional Sewage Treatme
18 Plant.

19 **5** Going back to 36, it reviews what you all did as you
20 looked at a controlled area where they do have one of
21 these plants in Canton, Ohio, and although that one was
22 not perfect and this one is going to be perfect, this is
23 what your record says on page 36. Of this group that
24 was questioned, it said 18.4 percent seriously considered
25 moving because of odor pollution from the sewage treatment

1 plant, and 36.8 percent felt that the value of their
2 homes had been reduced. If you were to take that and
3 apply that to Holly Oaks, it would be quite an impact.
4 Some say, you know, it's one plant. Well, according to
5 your report on page 37, it says -- it further indicates
6 that people will identify the plant as the major source
7 of odor up to a distance of 4,750 feet.

8 Leaving odor and going on to land use, on page 87 of
9 that same report, you said the comparability of a sewage
10 treatment plant located on each of the alternate sites
11 with the surrounding land use lists must also be

12 23 considered. As can be seen on the tables that you had
13 in here, it says most of this development is located in
14 such a single-family residential, particularly, and I
15 go on here, it's sites one, three, nine, and twelve are
16 closest to the largest amount of residential development.

17 Going on to another report, and that's the one that
18 we were sent -- this large notebook that Mr. Buck spoke to
19 you about earlier. On page 343 in that, I think we must
20 agree from reading your own report or excerpt from it, it
21 won't benefit the single-family residence too much.

22 17, Let's look at who you say it will benefit. On page
23 18 343, you say under "Economics", the construction of this
24 project will provide the greatest economic benefit to major
25 land developers in service area. The project will remove

1 wasteater treatment as a constraint to development and
2 allow it to proceed as it otherwise would. The major
3 landholders in the service area are as follows: SWD, the
4 Intriknik [sic], Buck and Buck, the Brent Hodges family,
5 the Coppage family; and it went on, summing up by saying
6 these landowners will realize significant economic
7 benefit. Well, one of those landowners has told you what
8 he thinks about your statement. Maybe if you were to
9 consult the others, they might feel the same way.

10 [Applause.]

11 In summary, I would just like to say that the
12 Greater Arlington Civic Council opposes placing this
13 regional plant of 46 acres with a 79-foot high stag in
14 or near any residential neighborhood. Thank you.

15 [Applause.]

16 MS. PHILLIPS:

17 Thank you. Our next speaker will be Mr. Don Brewer.

18 MR. BREWER:

19 Thank you. I'm Don Brewer, city councilman for
20 District II, which comprises most of Arlington and abuts
21 the District I testimony that Mr. Johansen just spoke for
22 earlier this evening. I won't try to be political because
23 I can't top what I've heard. People who represent the
24 people directly and live out there have spoken fairly
25 clearly, I think, to this point, and I think that what I

1 might try to do is bring some common sense to what's
2 happening here.

3 I think we're missing two problems. First of all,
4 the problem of developing regional sewage systems, I think
5 that's something that we've needed to do in Jacksonville,
6 probably in this country, for some time. We're trying to
7 meet that problem head-on, however, with the placement of
8 a sewage treatment plant of a regional nature in a resi-
9 dential neighborhood, and I don't think that's compatible,
10 and I think that history shows, and the current history
11 shows, that it just doesn't work.

12 We have an experimental plant. They tell you it's
13 new, and it's never been done. It's different and
14 better. That means it's experimental to me and I think
15 to most of the community, and I think to our council.

16 Now, Mr. Johansen, by the way, who spoke for this
17 plan at the time the council passed it is now against it,
18 and I think you'll find some similar changes elsewhere in
19 the City Council today.

20 The end doesn't justify the means. I'm for reason-
21 able sewage treatment, too, just as the mayor is, just as
22 the Water Sewer Department is. I'm for it. I've supported
23 it in my five years on the City Council, but I won't
24 support it to the extreme that it does degradation to a
25 residential community, and that's not what the environment

1 is all about. That's not what sewage treatment is all
2 about, particularly when there's a way in this area to
3 get the result we want without creating environmental
4 damage, and the human -- there's a lot of effort spent in
5 this environmental report to talk about the amphibians,
6 the mammals, the reptiles, and the plants, but the single
7 greatest element of the environment, as far as I'm con-
8 cerned, these people behind of me and in front of you are
9 concerned, are human beings; and it's one thing to tell
10 these people -- now, as you see, they're very articulate
11 as a group. You don't often see this kind of group at
12 a public hearing. It's one thing to tell them that a
13 sewage treatment plant has to go in their neighborhood,
14 but it's something else to tell them it's not going to
15 stink.

16 [Applause.]

17 You know, that's -- they're just not going to be-
18 lieve that, and if you look at your maps when this thing
19 first came about, I wondered why we were going to put a
20 plant so far east and yet not serve the beaches. If you
21 look at your map, this plant location is fairly close to
22 the Jacksonville beaches area, and you see no line, no
23 transmission line, out there or you see transmission line
24 coming there back to this plant, all of those areas to the
25 east, all of it to the east. The plant should be built

1 as far to the east as we can build it to accommodate
2 twenty years down the road. It's not being built for
3 1976 only, but 1977. This plant is going to last a hell
4 of a long time. We hope forty years. We can't afford it.

5 22 We ought to build it to accept the growth. Twenty years
6 ago there was nothing at Arlington. There may have been
7 3,000 people east of the St. Johns area, in what we call
8 the St. Johns area. Now, in 1950 -- today, there are
9 some 130,000 people in that general area, and the beaches
10 area, the area east of where this plant is located is
11 still basically highly unpopulated, desolate land that
12 will be developed. It will be developed during the
13 lifetime of this plant, and it doesn't make any sense to
14 me to go through this same question, through these
15 same problems, ten years down the road because we didn't
16 have the foresight to see where the growth was coming
17 in the year 2000 when it was so obvious to all of us.

18 So, let me say in our -- I think in our effort, in
19 our sincere effort to meet current environmental problems
20 to phase out a number of inefficient, polluting water
21 sewage treatment plants. We've made a major mistake in
22 seeing one part of the problem, the need to go regional,
23 and being totally blind to the humanistic problems, to
24 the fact that the people just ain't ready to have sewage
25 treatment plants in their neighborhood areas. I've never

1 seen one successful. We've done it in Jacksonville. We
2 5 have an Anheuser Busch plant out here. We have a plant
3 that's serving Anheuser Busch that was supposed to be
4 the most wonderful thing going, create tremendous problem
5 with people. We have the Buckner Street plant now, which
6 is under construction now, the latest thing available.
7 We keep upgrading that plant, still we have recurring
8 problems with it.

9 Sewage treatment plants aren't to the extent now
10 where they are trouble-free, and the ones we have now
11 are currently in industrial areas. Put in a middle of
12 a residential area, and we'll never hear the end of it,
13 and I would hope that it's not going to be my fault.
14 I've supported the concept involved in this site location
15 in this Impact Statement pretty much because that supports
16 the concept, and I think bends a little to support this
17 site as an acceptable site, and I would hope that in the
18 long run, in the end, we'll be wise enough not to try to
19 make the end justify a fairly unpopular and impractical
20 and irrational means. Thank you.

21 [Applause.]

22 MS. PHILLIPS:

23 Thank you, Mr. Brewer. Our next speaker will be

24 Mrs. Frances Lockerman.

25 MRS. LOCKERMAN:

1 I'd like to give some of my time to Mrs. Soldwedel
2 or some of the other people who haven't spoken.

3 MS. PHILLIPS:

4 Thank you -- yes, ma'am. Our next speaker will be
5 Reese Cruce.

6 MR. CRUCE:

7 I'm Reese Cruce. I live at 2215 Holly Oaks Drive.
8 I represent myself and my family, and practically every-
9 thing I touch on I was thinking about saying has been
10 said by those who are much more at ease with words than
11 I am. I do want to thank them and particularly those
12 elected representatives who have very gratifyingly come
13 around to our point of view, to those of us who've been
14 opposed to this for so long.

15 I go along with the fact that you can't find a fail-
16 safe sewage plant, and I simply have nightmares relative
17 to a power failure some ten years from now, when we're
18 25 million gallons per day level, and you can't pump this
19 stuff, and you can't burn it.

20 If silence is consent, I want to be on record as
21 totally opposing the project and leave heel marks all the
22 way to the gallows. Thank you.

23 [Applause.]

24 MS. PHILLIPS:

25 Thank you. Mrs. Rudolph Black.

1 MRS. BLACK:

2 Madame Chairman, this is just a humorous remark tha
3 I'd like to ask. Would it be possible to construct this
4 plant in Bay Meadows under you-know-whose doorstep?

5 [Applause.]

6 MS. PHILLIPS:

7 Our next speaker will be Mr. Robert Werder.

8 MR. WERDER:

9 I wish to give my allotted time to Dr. Soldwedel
10 when she speaks.

11 MS. PHILLIPS:

12 Our next speaker will be Alice Webb.

13 MS. WEBB:

14 I'd like to relinquish my time to Dr. Soldwedel,
15 please.

16 MS. PHILLIPS:

17 Thank you. That is the end of the official regis
18 tion list. We will return to Mr. David Evans, who has
19 ten minutes of his time, in addition to which he has t
20 minutes of Mrs. Soldwedel's time. Mr. Evans, you have
21 thirty minutes time given to you by the citizens.

22 MR. EVANS:

23 Madame Chairman, I accede to Dr. Soldwedel first
24 and I will follow her.

25 MS. PHILLIPS:

1 Thank you.

2 DR. SOLDWEDEL:

3 My name is Ethel Merman, and I'm here for Act Two.
4 I'm Betty Soldwedel. I live at 1716 Ormond Road, and I
5 represent myself and some of my neighbors. I will attempt
6 to be as brief as possible. I have several major points
7 to make, and I wanted to develop these rather fully, so
8 I will not dwell at this time on other enormously inade-
9 quate procedures and statements in this Environmental
10 Impact study. Each should be developed, however, and
11 for that reason I enter them into the record now for
12 your response in the final document.

13 5 These are as follows: (1) Your agent, Mr. Howard,
14 told me before this Environmental Impact study was
15 begun that he would find the best sewage treatment plant
16 in the country and show us how people there felt about
17 odor and noise. Well, apparently the best plant he could
18 come up with was a twenty-year-old model in Canton, Ohio,
19 where people did indicate odor and noise problems.

20 5 (2) What treatment was given to the data from Canton,
21 Ohio, by the EPA? A generalized writeoff that some per-
22 centage of people will always smell odors or think they
23 hear noises, whether they do or not.

24 6 (3) We are now told not to worry about visual
25 aesthetics because your people launched a balloon from

L. LEE LAWSON & ASSOCIATES, INC.

1 the Mill Cove site and couldn't see it from our neighbor-
2 hood. A balloon -- there is very little resemblance to
3 a plant of the magnitude you intend to build, and I wish
4 our Jacksonville residents and the City Council would go
5 down to see the new plant on Buckner Street to see exactly
6 what this is all about.

7 (4) You formed a citizens' committee, which eventually
8 voted nine to four to move -- depending on whether you
9 count the absentees or not -- to move the plant away from
10 Mill Cove, and then, in this Environmental Impact study,
11 make the shockingly absurd statement that the committee
12 is really not representative because there were no members
13 from the Dunes or any other site. What kind of logic is
14 19 this? Do you set the committee up so that any recommen-
15 dation would be nullified unless it supported the Millcove
16 Road location?

17 5 (5) You have the nerve to state in this Environmental
18 Impact study that the citizens' vote to move was based on
19 fear, principally of odor and noise, and that your conclusion
20 is based on knowledge. You never once acknowledged that
21 what the citizens may have been voting on was lack of
22 confidence and the unconvincing nature of the materials
23 which your people had developed and presented to us. I
24 think, for example, of the discussion of modern technology
25 in those committee meetings, which was illustrated among

1 more adequate slides with the picture of one lone worker
2 standing with a bucket of Odor-kill over a chlorine trap.

3 (6) We were asked, in committee, to review the
4 evaluative criteria on your list and to bring the suggestion
5 at the second meeting for others. When at that second
6 meeting attention was called to the fact that the human
7 element had been ignored in the criteria, we were told by
8 the EPA, and you will find this to be true if you review
9 the tape of that meeting, that the human element was im-
10 plicit in all criteria. We were also coached that it
11 would be necessary to make trade-offs in our evaluation
12 of science. Yet when we evaluated the sites in relation
13 to criteria and then assumed that all other factors
14 being equal -- the desirability of water quality, for
15 example -- that the ratings should be -- the ratings of
16 the sites should then be based on proximity of the plant
17 site to people, which is what we did. Mr. Howard shamed
18 us that we had not taken our task seriously, never once
19 asking anyone for our rationale in those evaluations.

20 (7) And where in your study do you give any specific
21 attention to people affected? Nowhere, except to speculate
22 about real estate depressions in the event of panic
23 selling. You are required by the National Environmental
24 Policy Act to use methods which will insure that un-
25 quantified environmental amenities are given appropriate

1 consideration. Yet nowhere in this study do you address
 2 the desirability of one site over another in terms of
 3 impact on people who are living there, except you referen
 4 population tables, and to persist in insisting that the
 5 plant won't smell. We note with interest, parentheticall
 6 that when you talk about smell, you are always careful to
 7 repeat that that does depend on maximum efficiency of
 8 operation. When you talk about people, you insist there
 9 will be some noise, but will only affect those who are
 10 sensitive to noise, and nowhere do you give serious dis-
 11 cussion to land use, which will inevitably have a
 12 deteriorating effect on existing residential communities
 13 **23** The only thing compatible with the huge regional sewage
 14 treatment plant is heavy industry and warehouses. You
 15 know it, and we know it, and we think you have chosen
 16 to minimize this factor in this Environmental Impact
 17 study.

18 [Applause.]

19 Let me comment just briefly on your correspondence.

20 **20** Do you mean to really suggest to us in this study that i
 21 a year and a half you have corresponded with only four
 22 interested agencies and even then, only on their prelimi
 23 **24** assessments? Have you had no contact with a court
 24 authority, for example, which would be involved in any
 25 evaluation of at least six of the twelve sites? If you

1 have, where is that correspondence, and if you have not
2 made contact, can you make us believe that you seriously
3 14 evaluated the alternate sites? We would like to see all
4 of your related correspondence.

5 Now, let's take a look at your conclusion that site
6 1Q is a reasonable alternative. I find it interesting
7 but not surprising that after a year of study, you came to
8 such a weak conclusion, a reasonable alternative. It is
9 not the best site, you say by your own evaluation. You
10 say that site 12 on Craig Field is the best site
11 environmentally. Well, we'll buy that. We are not be-
12 holden to the Dunes site, unlike City officials who
13 appear to have a death grip on the Millco Road property
14 we are aware that in your infinite wisdom and with your
15 knowledge, you are undoubtedly right that the Craig
16 Field property is the most desirable location.

17 You've spent a year studying environmental impacts,
18 and we are vastly disappointed that you come to us now
19 and say, as you do, that it is merely cost that makes
20 8 the difference. You say site 12 is the best. Then, are
21 you not obligated to give serious attention to the
22 feasibility of site 12? Nowhere in this document can you
23 even find a map that details the site 12's total system.
24 Nowhere in this document can you find even a paragraph
25 that describes the pressure manifold system that would be

L. LEE LAWSON & ASSOCIATES, INC.

1 required to support site 12. Nowhere in this document
2 **20** do we find evidence that you even asked the Corps of
3 Engineers or the State of Florida, Department of Natural
4 Resources, or the Department of Interior to even speculate
5 on the adequacy of site 12. From reading their correspon-
6 dence, it is apparent that they were not even asked to
7 comment on site 12, and why weren't they? This is your
8 best site environmentally. We would like answers to
9 those questions.

10 Let us look further at your treatment of site 12.
11 The only thing in the world you hang your hat on is a
12 statement that site 12 will cost more than the Millcoe
13 Road location. We are not buying that. The cost figures
14 **28** that you present in this document are the identical cost
15 figures supplied by the City's own paid consultants. It
16 is obvious that the City seems to have a total and un-
17 compromising stranglehold on that Mill Cove real estate.
18 So, what if the City's consultants say that a plant at
19 site 12 would cost \$3,000,000.00 more to build? We don't
20 know that to be true because neither are there cost
21 figures in your study to document that fact in detail nor
22 do we have any evidence that the Environmental Protection
23 **28** Agency made a serious attempt to do a detailed and inde-
24 pendent cost analysis at the City's consultants' figures
25 If Winn-Dixie were trying to sell me a ten-pound bag of

1 potatoes, I wouldn't rely solely on Winn-Dixie to tell me
2 how much that ten-pound bag of potatoes was going to cost
3 at Publix.

4 [Applause.]

5 We do not suggest that the figures are in error be-
6 cause we do not have the technical expertise to make such
7 an analysis nor do we impugn the veracity of these
8 consultants; but we do find it inconceivable to believe
9 that any federal agency would spend one year studying the
10 flora, the fauna, the swamps, and terrestrial vegetation
11 only to base its decision on presumed cost differentials
12 between science and then to know that those cost dif-
13 ferentials supplied by the City's paid consultants
14 reappear, dollar for dollar, in what is purported to be
15 an EPA study, with no indication that those cost figures
16 **28** have been rigorously audited by qualified cost analysts.

17 Let me give you just one example of the crying need
18 for an audit. Let's take site 1Q and 1B and 2Q and 2B.
19 The difference between the plant cost between 1Q and 1B
20 is \$2,659,778.00. The difference between the plant cost
21 for 2Q and 2B is \$2,659,848.00, virtually the same,
22 virtually no difference. If you subtract the differences
23 of site 1 and site 2, that's a difference of \$70.00. Now,
24 if you look at the supporting narrative about sites 1Q
25 and 1B and 2Q and 2B, you find that the differences in the

1 number of feet of pipe required -- site 2 requires 5,000
2 more feet of pipe than site 1. Page 186 to 188, 5,000
3 more feet of pipe, the difference in cost is \$70.00. Do
4 you really believe that you are going to get nearly one
5 mile of pipe for \$70.00?

6 [Applause.]

7 If so, you had better snatch up that Dunes site,
8 because that is some kind of bargain. We think, rather,
9 it is some kind of error. We think that you are obliged
10 **28** to perform a thorough cost analysis on all sites.

11 While I am on cost, let me also note something
12 about the cost differences between Millcoe Road and the
13 Dunes site. By the City's consultants own figures,
14 there is only a difference of \$9,400.00 to the taxpayers
15 at the City of Jacksonville between Mill Cove and the
16 Dunes location -- \$9,400.00. Furthermore, the figures
17 supplied by the City's consultants show that the annual
18 operating expense for this plant is cheaper at the Dunes
19 location by some \$12,530.00 a year. This is over a
20 quarter of a million dollars for the life of this plant,
21 and those annual operating expenses will have to be born
22 specifically by the taxpayers of the City of Jacksonville.

23 No one will ever convince me that if the people of
24 Jacksonville had the true costs about these costs, that
25 there is any reasonable -- the true facts about these

costs that there is any reasonable taxpayer who would say they preferred the Millcoie Road location to the Dunes location because of this \$9,400.00 cheaper to build, especially when that initial difference is going to be returned in less than one year by savings to the taxpayers of Jacksonville in annual operating costs to which the federal government contributes nothing. As for the difference in whether you are going to contribute federally and that is only to the construction of the plant itself, I'll leave that to you to determine, but as a contributor to that vast pot of federal tax dollars, I surely think that a careful federal audit is essential.

25

Now, let me conclude with a scenario. I have wondered for some time why the City has not applied for a Department of Army permit to cross Mill Cove. Particularly since it is obvious from the letters in this book that you are going to have trouble getting such a permit. It has finally dawned on me what you may be doing, and I think that this may come as a shock to the City Council, the Urban Affairs Committee, the people east on Fort Caroline Road, the people in the harbor, and the people in Beacon Hills. This is not a hearing only on site 1Q, crossing Mill Cove to Quarantine Island. This is a hearing tantamount to endorsing both 1Q and 1B alternatives. This is a hearing to grant approval to the

1 City to draw up plans and specifications that lock us
2 into a site location. In other words, if this grant is
3 made, the location becomes fixed.

4 This leads me to my scenario, and I suggest it
5 merely as a hypothesis. I suggest that perhaps you now
6 know you are going to have trouble getting a permit to
7 cross Mill Cove and that possibly, that is why Mr. Howard
8 casually asked us to rate the B alternatives when the
9 advisory committee met, never once giving us detailed
10 specifications. The City people undoubtedly think that
11 there is going to be trouble getting site 1Q approved
12 because if you look at the way they voted, page 376, you
13 will see that they did not vote for the plan that they
14 have been advocating around here for two or three years,
15 the 1Q methodology. They voted first for 1B. By that
16 very vote, they admit that the plan they sold the Urban
17 Affairs Committee and the City Council was not such a
18 red-hot idea after all.

19 Now, what is plan 1B? It is a plan to run thousands
20 of feet of pipe up Fort Caroline Road, past the harbor,
21 out Fulton Road, through Beacon Hills, to eventually
22 dump in the St. Johns River at a point east of Blount
23 Island. You people have very carefully rated this method
24 second-best environmentally.

25 What I see happening down the road is this. You will

1 have the 1Q method denied by those related agencies that
2 are involved in the decision, but in the meantime, by the
3 fact of this grant, you will have approved the location,
4 so you will come back perhaps, and say, "Well, method 1B
5 is a reasonable fall-back position," and so, we are not
6 really talking about the cheapest plant here tonight.
7 We may be talking about a plant scheme that is very likely
8 to cost something on the order of \$37,000,000.00. I see
9 this as a piecemeal attempt to push through a project to
10 get this site locked up first, and no matter what
11 happens with the Corps of Engineers and other agencies
12 later on, you step in with you fall-back strategy to
13 construct twenty thousand, twenty-five thousand, or
14 thirty thousand more feet of force mains, running the
15 thing up, and tearing up Fort Caroline Road, past the
16 harbor, out Fulton Road, through Beacon Hills.

17 If that scenario is correct, and as I say, it is
18 merely a hypothesis, I think it is an example of what
19 you must not be allowed to do. To divide this project
20 **27** up into split-up segments, to introduce very late in the
21 day an alternate method of sludge disposal, running up
22 through Beacon Hills that has never been brought to the
23 attention of the Urban Affairs Committee or in the City
24 Council, to secure location approval and thereby sidestep
25 serious thought and careful consideration of where this

1 plant should really be located if you are not allowed to
2 cross Mill Cove, and with that we come right back to your
3 best site, site 12, which does not propose to cross Mill
4 Cove in the first place, and which is virtually the same
5 cost as 1B, and less costly than 2B to begin with. Nor
6 does it propose to rip up the streets that people use and
7 impose on them the debilitating consequences of construct
8 We would like to see the B alternatives removed from the
9 study on the grounds that there is no detailed documenta-
10 tion in your study to support a conclusion that they
11 are satisfactory environmental alternatives, and that
12 these B alternatives were never considered by the Urban
13 Affairs Committee and the City Council when they voted
14 on this project. Nor have the people on Fort Caroline
15 Road, the harbor, or Beacon Hills been adequately ac-
16 quainted with these B alternatives. In other words,
17 **27** the City proposed originally site 1Q, and that is what
18 the City Council bought, so let the City administration
19 live with it, and if 1Q turns out to be not such a good
20 idea, as far as we are concerned, it is back to the
21 drawing boards, unless you are willing to recommend site
22 12 or one of the original site alternatives.

23 Although you may not be required to do so by
24 bureaucratic procedures, we think it would be prudent, to
25 say the least, to obtain a specific determination of the

1 appropriateness of your plan to cross Mill Cove before
2 you spend one dime on planning.

3 Those are my comments on your study, and yet, if
4 you persist in using only cost figures and possibly
5 cunning maneuvering to make a major determination that
6 affects our lives directly, I can only pity us all. What
7 is this city, after all? It is people more than it is
8 politicians. It is our homes more than it is sewer plants.
9 It is a binding sense of community and not political
10 puffery. We may well ask ourselves and you, "What good
11 is your pseudo-cost effectiveness if in the process you
12 ignore the will, and you break the spirit, of the
13 people?"

14 [Applause.]

15 MS. PHILLIPS:

16 Mr. Evans.

17 MR. EVANS:

18 My name is David K. Evans. I live at 10832 High
19 Ridge Road, Jacksonville, Florida. I represent the Holly
20 Oaks Community Club.

21 Good evening, Ms. Phillips, members of the EPA,
22 Councilmen Brewer and Johansen, and ladies and gentlemen.

23 Over the last two years, we have spent a seemingly
24 endless number of hours reading and reviewing fact, figures,
25 and other data pertaining to the Arlington-East Sewerage

1 Facility. We have, in fact, participated in committees
2 and discussions and learned a great deal about such
3 facilities. In fact, at times we and even I tended to
4 agree that this was a good plan and would not have an
5 adverse effect upon our community, only to investigate
6 and read further that what was presented to us was incorrect
7 or distorted.

8 To clarify some of these points, we have prepared
9 some questions, many of which are still unresolved.

10 Was it not the responsibility of the citizens
11 committee appointed by the EPA to review the environmental
12 criteria and to analyze the alternatives? Was it within
13 19 their scope to make recommendations? Didn't the EPA
14 themselves appoint this committee? Didn't you state in
15 your report that this committee was "not representative"
16 since none of the committee lived near the Dunes site or
17 any of the other sites? Do you by chance know where
18 Mr. Wilkens and myself live? I live closer to another
19 alternative. Don't you state in this report that you,
20 the EPA, knows more than the people? And if not, how
21 would you interpret this statement: "The ratings given
22 by committee members were fully considered prior to
23 giving the impact ratings for each alternative. The
24 scores given by the citizens group indicate a fear that
25 there will be adverse effects on the Holly Oaks community."

1 due to construction and operation of the proposed sewage
2 treatment plant. The ratings prepared by EPA indicate
3 5 the knowledge that the plant will not produce offensive
4 6 odors, noise, or be visually offensive to the surrounding
5 community"?

6 21 Does the EPA require that we follow the guidelines
7 of the 1990 Water Quality Management Plan? What are
8 these guidelines? Who ruled they were feasible? Why
9 aren't our local leaders familiar with these dictates?
10 What is the 1990 Water Quality Management Plan going to
11 16 cost? Are you aware of the policies and standards
12 handbook of the Jacksonville Area Planning Board?

13 5 Isn't it true that there will be occasion -- isn't
14 it true that there will occasionally be odor from this
15 facility? Isn't it true that a solid majority of the
16 respondents in the Canton, Ohio, test area identified
17 their plant as a source of odor? Isn't it true that in
18 excess of 35 percent of the respondents felt that the
19 value of their homes had been reduced by their plant?
20 Isn't it true that 18 percent of the people who responded
21 seriously considered moving because of odor pollution
22 from their sewage treatment plant? Isn't it true that
23 your test cities, namely, Canton, Ohio, and Fort Lauderdale,
24 do not compare with Holly Oaks? Aren't you asking us
25 to accept a plant that all admit will smell from time

1 to time? Can you flatly state that all potential odor
 2 problems can be anticipated and prevented? How do you
 3 propose to control unknown causes of odor? How do you
 4 propose to control the septic odors that will occur when
 5 they store raw sewage within the manifold system when
 6 breakdowns occur? Isn't this what Mr. Hyatt said they
 7 would do in such a situation?

8 Didn't Frederick R. Harris, Inc., consulting engineer
 9 originally site this plant in the Dunes as the most cost
 10 effective? Wasn't it also more environmentally suitable
 11 **18** than Millco? Has there been any pressure from large
 12 landowners to site this plant in Millco rather than the
 13 Dunes? Have the landowners in the Dunes taken any
 14 position on the Dunes site? Isn't it true that there is
 15 a planned urban development that the Dunes siting would
 16 interfere with? Why does it always come back to Millco?
 17 **15** Isn't the Millco site's closest neighbor the suburban
 18 utilities water supply well for this area? Hasn't there
 19 been problems with that well developing cracks in the
 20 casing? This is their closest neighbor. Why doesn't
 21 the Environmental Impact study say anything about this?

22 Would you classify Holly Oaks as a residential
 23 area? What would you classify a regional sewage treat-
 24 ment plant as? Is it not the purpose of any comprehensi-
 25 **23** land plan to avoid spot zoning? Is this plant not a case

1 of spot zoning? Didn't Mr. Kenneth Black, Regional
2 Director of the Department of Interior Fish and Wildlife
3 Service, state that, quote, "Treatment plant siting on
4 Quarantine Island would detract from a quality recreation
5 experience"? Would you call this a good neighbor? Isn't
6 it true that of all the localities that the City and the
7 EPA have cited as comparable treatment plants, that all
8 of these other facilities were located in an industrial
9 area or alongside an interstate expressway, or in fact,
10 the plant was there and the community developed around
11 it?

- 12 **28** Is it not the duty of the EPA and their responsi-
13 bility to check the criteria, the alternatives, and the
14 fiscal effectiveness of any plan such as the Arlington-
15 East Sewage Treatment Plant to be presented to it for
16 **27** an Environmental Impact study? Is it not within your
17 responsibility to determine if there might be other
18 feasible alternatives? Would my assumption be correct
19 that if there is cause to question the cost figures, that
20 you confirm the project figures with the appropriate
21 authorities, namely, in this case, the City and its
22 consultants? Did you do this in the case of the Arlington-
23 East Sewage Treatment Plant? Would it in the case of
24 **28** large cost differentials be within your responsibility
25 to seek outside opinions to justify these differentials

1 and determine why such differentials exist? Who was the
2 authority with whom you discussed this? Would you agree
3 a \$26,000,000.00 increase on a project originally estimated
4 at less than \$23,000,000.00 is excessive? Is inflation
5 the real culprit for this increase in cost? What is the
6 total cost of this project, and does that include the
7 second phase of the project, and does that include the
8 debt service? I don't find these figures. How much is
9 the total cost including debt service? How much is it
10 really going to cost each household? Would you agree
11 any plan that reduced the cost and still produced the
12 end result could be more cost effective? Define cost
13 effective, please.

14 Was any consideration given to the capacity of the
15 private utilities in the area? Wouldn't this be con-
16 sidered a viable alternative if they could relieve the
17 **26** problem? Why wasn't it considered a viable alternative?
18 Did you discuss the feasibility of expansion of any of
19 these utilities? Isn't it true that some of these
20 utilities have additional capacity available at this time?
21 Isn't it true that some of these are now meeting the EPA
22 requirements of the future; and if not, then why did the
23 Public Service Commission imply this with their recent
24 rate increases? In fact, aren't some of these private
25 utilities considering using their effluent for productiv

1 purposes?

2 Gentlemen, ladies, when these questions are answered
3 and discussed with the public, the creditability of this
4 project will then be ascertained. However, public projects
5 with little or no input from the citizenry will never
6 scale these heights. I might add that the citizenry is
7 what we have long called the human element.

8 Of all the agencies and organizations that have pro-
9 vided input and mandated portions of this plan, the
10 Jacksonville Area Planning Board's policies and standard
11 handbook is the only one that has recognized the value
12 of the human element and accepted the advises of
13 citizens' advisory committees. In fact, the siting of
14 **16** this heavy industrial complex in a residential area is
15 in violation of this manual's guidelines. I submit that
16 the above-mentioned manual become a part and parcel of
17 this and any other plan for a regional sewage treatment
18 plant in this city.

19 **26** In fact, when speaking of plans, nowhere in the
20 volumes that have been printed on this plant do the plans
21 take advantage of the assets of the private enterprise
22 system. We have been told some of the private utilities
23 in the area are now meeting the standards of the EPA and
24 could alleviate the emergency nature of this project if
25 an orderly plan were followed with an eye to the future.

1 Such a plan would include a joint effort of both
2 private and public utilities. Our crying need is not
3 the private utilities but the City owned and operated
4 utilities, most of which are not located in the Arlington
5 area, even, but are located for the most part south of
6 the expressway and Atlantic Boulevard.

7 You are asking the people of Holly Oaks to shoulder
8 a burden that is not even their's and then have not made
9 a sincere attempt to listen to us.

10 Obviously, time would not permit me to explain such
11 a plan tonight when other alternatives have been met with
12 total disdain and discrimination. The City has shown
13 **28** any alternatives to be more costly, but in fact, had the
14 primary plan been one of the alternate sites, they would
15 have been able to show it as the most cost effective.
16 The administration has continually told the people that
17 the residents of Holly Oaks are responsible for the
18 increases in cost.

19 We were told that the cost figures as presented in
20 the Environmental Assessment Statement and to City
21 Council and its committees were derived from the Engineer
22 News and Records Periodical. Isn't it true that these
23 cost figures did not include all the sophisticated equip
24 ment that heat treatment and incineration require?

25 **2** If it did, explain to us why the heat treatment

1 units are projected to cost 7.6 million dollars and the
2 solids-handling units 8.2 million. I would like to point
3 out that the cost of either one of these units is greater
4 than the entire projected cost of the whole plant itself
5 as recently as October of 1974.

6 We don't believe that the 1974 Environmental Assessment
7 Statement included cost estimates for the facility as
8 they described it. So far, they have been unwilling to
9 show us detailed cost estimates. Perhaps City Council
10 should take a look at the figures that were presented
11 to them and ask the administration what happened.

12 The plan as submitted discounts deep well injection
13 because of a lack of available knowledge.

14 The statement, "The solution to pollution is
15 dilution," we all agree is obsolete, yet the plan we
16 are discussing still professes such a concept. Secondary
17 treatment by anyone's standards is solution by dilution
18 when it is returned directly to our fresh water tributaries.
19 The City, its consultants, and the EPA have consistently
20 ignored any alternative to dilution as too costly, yet
21 **3** recent developments in other areas show that deep well
22 injection is not only more cost effective, but less
23 hazardous to our environment. Why don't we have cost
24 figures for deep well injection?

25 It is our contention that the cost figures presented

1 for the alternate sites were merely modifications of the
2 Millco plan and were not produced as a primary alternat
3 system.

4 **28** We challenge these alternate cost figures. We can
5 find no creditability to this plan. We know the real
6 answer to siting this plant in Millco. We know the rea
7 answer to the cost figures. We know the real answer to
8 all the questions that have been asked. The answer is
9 politics.

10 [Applause.]

11 Not cost effectiveness, not the environmental
12 aspects and impacts, not land use planning, and not even
13 the human element, but politics. We challenge this
14 **26** attempt at the takeover of the private enterprise system
15 **19** We challenge the EPA's statement that their own committee
16 was not representative; but in reality, the people were
17 **21** trying to be heard. We challenge the 1990 Water Quality
18 Management Plan and its dictates. We challenge the
19 **23** selection of the Millco site. We challenge the siting
20 **16** an industrial complex in a residential area. We
21 **28** challenge their cost figures. We think the City owes
22 the Holly Oaks community an apology. Thank you.

23 [Applause.]

24 MS. PHILLIPS:

25 Mr. Evans, thank you for your comments, and as

1 chairman, may I say that I appreciate your patience in
2 complying with the hearing procedures.

3 Let the record reflect that we have received testi-
4 mony from all citizens wishing to speak on the Draft
5 Environmental Impact Statement for the Arlington-East
6 service district. It is my opinion that the concerned
7 citizenry have raised significant questions which EPA
8 must review, consider, and respond to prior to awarding
9 grant funds on this project.

10 [Applause.]

11 Therefore, although only a thirty-day interval is
12 required from this date until publication of the final
13 EIS, I am requesting, as chairman of this public hearing
14 and as a member of the hearing panel, that EPA take at
15 least an additional fifteen days as a minimum and
16 thereafter whatever time is necessary to respond to these
17 public comments. Mr. Howard, do you understand?

18 The U. S. Environmental Protection Agency wishes
19 to thank you for attending this public hearing and your
20 comments.

21 [Applause.]

22 [Whereupon, the above-entitled hearing was concluded.]
23
24
25

L. LEE LAWSON & ASSOCIATES, INC.

Responses to the questions and comments raised at the previously presented Public Hearing on the Draft Environmental Impact Statement are presented in this section. To facilitate reply, these questions and comments have been grouped into major subject headings (e.g. noise and odor, costs, etc.). The questions and comments made at the hearing have been assigned numbers which correspond to the major subject heading discussion containing the reply to that question. These numbers appear in the left margin of the Public Hearing text next to the pertinent question or comment. Major subject headings are as follows:

1. Chlorination
2. Incineration
3. Deep Well Injection
4. No Action Alternative
5. Noise and Odor
6. Aesthetics
7. Further Consideration of Alternative 11
8. Further Consideration of Alternative 12
9. Exact Construction Site
10. Buffer Zone
11. Access Road Safety
12. Effects on Mill Cove
13. Transmission System Funding
14. Public Disclosure
15. Public Water Supply
16. Jacksonville Area Planning Board Policies and Standards
17. Impact on Major Landowners
18. Pressure from Major Landowners
19. Assistance Committee
20. EPA Contact with Other Agencies
21. 1990 Water Quality Management Plan
22. Projected Population
23. Compatability of Plant Site with Residential Area
24. Legal Requirements
25. Outfall Construction Permit
26. Decentralization of Treatment Facilities
27. Blount Island Outfall
28. Cost-Effective Verification

1. Chlorination

Chlorine is a common element best known as a heavy, greenish-yellow, irritating and, under certain conditions, toxic gas of disagreeable odor. It is widely used as a disinfecting agent in water purification and, when used in municipal waste treatment, also reduces odor production. In the Arlington-East Plant it will be employed in the pretreatment and final disinfection processes. In pretreatment, chlorination serves as one of the processes necessary to render the wastewater more amenable to primary treatment. In the final disinfection stage it is necessary to kill or render harmless the bacterial organisms and viruses in the effluent. Ozonation and chlorination are the two methods of disinfection commonly used. Chlorination has been chosen for use in the Arlington-East plant since it is significantly cheaper than ozonation and uses less power.

2. Incineration

Alternative methods of final sludge disposal have been addressed in Chapter III of the Draft EIS. Previous studies have rejected these alternatives for use in Duval County on the basis of prohibitive environmental and/or cost considerations. One method of final disposal to which the Draft EIS gave particular attention was the use of the thickened, dewatered, and heat-treated sludge for a combination land spreading and land reclamation operation involving the extensive and barren strip-mined areas which exist in the Arlington-East Service District. Such a plan would eliminate the costs of constructing and operating a multiple-hearth incinerator. Major obstacles to this operation, however, are the costs of transport to the site, the cost of tilling the sludge, and, most significantly, the unavailability of a commitment of lands for this purpose.

A new analysis covering the feasibility and cost-effectiveness of various alternatives to the formerly proposed incineration of sludge at Arlington-East has been conducted by EPA and Flood and Associates, Inc. Results of this study along with a description of the sludge disposal method now planned are given in Chapter I.

3. Deep Well Injection

Chapter III of the Draft EIS discussed structural subsystems available for treated effluent disposal. Among these subsystems were shallow and deep well injection. Shallow well injection has been eliminated from consideration primarily by geologic limitations and the need for protection of the shallow aquifer as a potable water supply. On the other hand, the EIS is clear in stating that deep well injection has not been discounted and is considered a "potential viable disposal alternative in Jacksonville." The EIS goes on to discuss areas of concern which must be adequately addressed before deep well injection could be carried out and states only that this disposal method is considered "non-viable for immediate and large-scale applications in Duval County."

In June, 1970 the Federal Water Quality Administration (now the EPA) published a policy statement limiting the disposal or storage of wastewaters or other wastes by injection. Since that time, the Florida Department of Natural Resources has adopted this statement as Department policy. The policy states, in part, that "subsurface disposal or storage should, at no time, be authorized simply because it may appear to be the easiest and least expensive alternative for the waste producer. It could well result in serious pollution damage and require a more complex and more costly solution on a long-term basis."

For certain municipalities and in certain locations, the underground injection of wastes may well be the most environmentally acceptable practice available. In many areas where water resource management problems are forecast, the EPA has recognized the need to begin conserving wastewater having a potential for reuse by future generations whenever practical to do so. This method of subsurface "storage" is particularly adoptable and acceptable when the planned reuse is for agricultural or other non-potable demands. In Jacksonville, however, any such potential reuse would most surely be for potable purposes. The Administrator's Decision Statement Number 5 (Subsurface Emplacement of Fluids; April 9, 1974) states that "EPA will oppose emplacement of materials by subsurface injection without strict controls and a clear demonstration that such emplacement will not interfere with present or potential use of the subsurface environment, contaminate groundwater resources, or otherwise damage the environment."

It is true that deep well injection is being used in some parts of the country to combine effluent disposal and

water reuse. In both California and New York, wastewater is used to recharge the potable groundwater supply and to create a hydraulic barrier against salt water intrusion. However, this effluent is of very high quality and, in the case of California, meets virtually all of the U. S. Public Health Service standards for drinking water. Further, in both of these cases, travel through a fine-grained aquifer ensures against the survival and transmission of any bacteria and viruses remaining in the tertiary treated effluent. The Floridan aquifer, however, generally consists of cavernous limestone and dolomite. The lateral passage of injected water through this media does not provide any positive filtration for microorganism removal. Therefore, any residual viruses or bacteria in treated effluent would not be subject to removal by passage through the aquifer media. It would likely be possible for the injected effluent to be carried via a subterranean cavern or open fissure directly to a nearby water well. Of course, if the effluent were treated to a higher degree than is now planned, injection into the Floridan aquifer might eventually be given consideration. Such treatment, however, is generally prohibited by cost except in those cases where there is no other alternative.

The recently enacted Safe Drinking Water Act (Public Law 93-523) has, for the first time, established a detailed technical approach to protection of groundwater by the federal government. The Act provides for the placement of primary enforcement responsibility for protection of public water systems on the individual states and is specific with respect to actions that must be taken to protect groundwater from unrestricted injection of wastes. One of these requirements (regarding the issuance of a temporary permit for underground injection) is that the State must show "that injection of the fluid would be less harmful to health than the use of other available means of disposing of wastes or producing the desired product." Disposal of secondary treated and disinfected waste to the St. Johns River will not pose a health hazard nor will it carry with it the potential for aquifer contamination. It does not embody the concept of "solution to pollution by dilution" since it entails the discharge of treated and disinfected waste in compliance with applicable state and federal laws and regulations concerning discharge to surface waters.

4. No Action Alternative

The "no action" alternative was considered throughout the alternative analysis process of the Draft EIS. This alternative was rejected primarily because it does not:

- a) Provide for the removal of inadequately treated wastewaters from tributary streams;
- b) Provide treatment facilities to adequately service existing and future sources of wastes;
- c) Provide for alleviation of existing adverse conditions resulting from the operation of septic systems and small package plants; and
- d) Provide for allowance of orderly growth according to the Comprehensive Development Plan for 1990.

5. Noise and Odor

As originally designed, the Arlington-East facility had a higher potential for emission of nuisance odors. Had this original design been retained, EPA would undoubtedly have given greater consideration to the possible effects of odor on surrounding residents in its analysis of site suitability. However, the odor production from operation of the controlled plant as presented in the Draft EIS was expected to result in no detectable nuisance odors off the plant site. Structural, as well as non-structural, measures to achieve this objective have been detailed in Chapter III of the Draft EIS. Changes in the selected method of sludge disposal since publication of the Draft have, however, eliminated several sources of unmitigated noise and odor. These changes, along with modifications to structural noise and odor controls, are discussed in Chapter I.

The probability of a very low, yet detectable odor on the plant site for short periods of time under certain atmospheric and plant operating conditions has been acknowledged in the Draft EIS for the controlled facility as proposed in that document. However, the provision of several backup systems, also so described, would have prevented noticeable odors from leaving the plant site.

The effect of a worst case condition odor episode on surrounding residents from the controlled plant with sludge handling and incineration has been addressed in the Draft EIS. Such an occurrence would likely have involved low

intensity odor being detected off the plant site with possible identification as a nuisance by residents. Once again, however, planned odor control measures and backup systems made this situation highly unlikely. Further, the removal of incineration and virtually all sludge handling facilities at the plant makes this possibility even more remote.

At present there is no "model" plant in existence comparable to the facility which was proposed in Arlington with noise and odor controls. There are, however, plants in existence similar to the Arlington-East facility as previously proposed without noise and odor controls. Two of these (the Canton and the Ft. Lauderdale facilities) were selected by EPA's contractor for use in his analytical reports on noise and odor. The plants were never intended to represent the "best" sewage treatment plants in the country. They were selected as being similar in size and operation to the Arlington-East facility with incineration and sludge handling and without, once again, the noise and odor controls which are now incorporated into the design of that plant. While it is true that the Canton facility is twenty years old, it has been upgraded and is similar to the Arlington plant as proposed in the Draft EIS in wastewater characteristics, treatment processes, and sludge handling.

Residents in the vicinity of the Canton and Ft. Lauderdale plants were surveyed as a "test" group to enable a comparison with the survey of the "control" group in Holly Oaks. Thus, the responses of the people in Canton and Ft. Lauderdale reflect exposure to treatment facilities without the noise and odor controls planned for the Arlington-East plant. These responses demonstrated the need for the subsequent development and costing of a control strategy to be applied to the Arlington plant. The noise and odor production of these uncontrolled plants bears little resemblance to that which would have been emitted by the controlled plant as described in the Draft EIS and even less resemblance to the noise and odor production from the plant without incineration and sludge handling. Similarly, the EPA's staff recommendation for the Millco Road site is based on the knowledge that noise and odor from the plant will be controlled to the levels described earlier in this section.

Further confusion in the understanding of the Odor Control section of Chapter III is apparent from several of the comments made at the Public Hearing. Concern was

expressed over the following statement quoted here from the Draft EIS:

"In summary, the combined vapor from the centrifuges, vacuum pumps and filters and sludge-blending tanks are proposed to be routed to the inlet air fan of the multiple health incinerator. When the incinerator is in operation, this is an excellent means of odor control. However, normal operating procedures will inevitably result in the incinerator being out of operation while the rest of the sludge handling equipment is still in use. During these periods, no odor control would be utilized."

This statement represents a description of odor control as originally proposed for the Arlington facility. The section of the EIS entitled "Additional Odor Controls" describes the measures planned for inclusion into the plant design at the time the Draft EIS was written.

The portion of the Odor Control section of Chapter III of the Draft stating that "this control strategy will not substantially reduce potential odor emissions at the source and consequently will not substantially mitigate the potential impact of the Arlington-East Regional Sewage Treatment Plant" clearly refers to "a control strategy based solely on operator dependent measures". It does not refer to the control strategy involving structural design modification.

The section of Chapter II describing additional odor controls does state "an estimated 90 percent of potential odor emissions should be removed by these treatment techniques." This represents "all major potential odor sources being brought under control." The remaining 10 percent consists of "minor sources of potential odor emissions (which) should be effectively controlled by good operational and maintenance practices." The additional odor controls proposed for the plant in the Draft EIS were a combination of structural and non-structural measures. The EIS is very clear in stating that non-structural measures alone for the plant as described in that document "will not control potential odors from the Arlington-East Regional Sewage Treatment Plant below the threshold of annoyance in the surrounding Community."

Regarding plant breakdowns and the necessity for storage of raw sewage within the pressure manifold system, the resulting odors would depend in large part upon the length of time of storage. Under these conditions, odors escaping the manifold system would most certainly have similar impact under each alternative since all alternatives are very similar in terms of numbers of pump stations and feet of force main. Should the breakdown be exceedingly long, the option of temporarily bypassing the plant might be considered rather than risk backup of raw sewage beyond the manifold system.

Existing point sources of annoying odor in the area have been described in Chapter II of the Draft EIS. These sources are largely industrial. While it is true that odor emissions from the Sewer District No. 2 and Buckman Street regional sewage treatment plants have caused sporadic citizen complaints, it must be recognized that these odor problems are largely caused by the industrial wastes which these plants treat (see page 32 of Draft EIS). The proposed Arlington-East facility will not be required to treat any such problem industrial wastes. Further, the Arlington facility is now being designed with odor controls lacking in the other two plants and without incineration and sludge handling facilities.

6. Aesthetics

Chapter III of the Draft EIS contains an assessment of plant visibility at Site 1 using a weather balloon which was raised to the height of the highest structure (the incinerator stack) of the plant as originally designed. Admittedly, there is little resemblance between a sewage treatment plant and a balloon. The purpose of the weather balloon study was, however, to determine the visibility of the highest portion of the plant--the part which might be visible to surrounding residents over the treetops. Results indicated that the vegetative buffer zone would, for practical purposes, screen the plant and the incineration facilities from the view of even the closest residents. In addition, any possible aesthetic impact is now even further mitigated with the decision to forego construction of the heat treatment and incineration facilities at Arlington-East.

7. Further Consideration of Alternative 11

The Quarantine Island plant site is located on the east end of the island. Reasons for not choosing this alternative are implicit in Chapter III of the Draft EIS. Briefly, however, the plant site requires dewatering, piling support, and a considerable amount of sand fill to raise the plant site and the perimeter road to elevations not subject to flooding. Other necessary measures unique to this alternative include the construction of an 800 foot access bridge and raw sewage force main across the narrow channel between Reed and Quarantine Islands, the ultimate construction of two parallel force mains across Mill Cove, the construction of an additional master pumping station at the intersection of Millcoe Road right-of-way and Fort Caroline Road, and the construction of some 9,000 feet of new roadway providing access to the site through Beacon Hills.

8. Further Consideration of Alternative 12

Regrettably, the draft impact statement was printed without benefit of a map showing the total transmission system associated with Alternative 12. The screens and negatives necessary for such a map were unavailable at that time since the transmission system was not specifically laid out for this alternative. These have since been produced and a map showing the entire Alternative 12 system is included as Exhibit 1 of this chapter. Lack of a system map notwithstanding, it was known that the number of pumping stations as well as overall force main lengths and configurations were similar to Alternatives 7 and 8. This enabled Alternative 12 to be considered throughout the alternative analysis process in the impact statement from both a monetary and environmental standpoint. Consideration of the feasibility of Alternative 12 was thus implicit in the alternative analysis process.

9. Exact Construction Site

The exact location of the proposed plant site as well as the location of the facilities on that site appears in the Draft EIS as Figure 4-1. .

10. Buffer Zone

The cost of the 46.98 acre plant site was set in court condemnation proceedings at \$6,300 per acre. Since the buffer zone is immediately adjacent to the plant site, it is reasonable to assume that a similar value will be placed upon that land. The appraiser hired by the City has, in fact, recommended a price slightly lower than the \$6,300 per acre figure used in the cost analysis. Condemnation proceedings are expected to begin as soon as the grant offer is made to the City by EPA. The owner of the dwelling now under construction within the proposed buffer zone will be permitted to occupy the house if he so desires.

A map showing the plant site location as well as the land to be included in the buffer zone appears as Exhibit 2 of this chapter.

11. Access Road Safety

The Jacksonville Traffic Engineering Division has been contacted to review the safety of the proposed location for the plant access road. Their findings, as documented by Exhibit 3 of this chapter, indicate no traffic safety problems are foreseen in the location of the proposed facility access road.

12. Effects on Mill Cove

Effects on Mill Cove from both outfall construction and plant operation were considered throughout the alternative analysis portion of the Draft EIS. While it is true that the Mill Cove Model Study presently being carried out by the U. S. Army Corps of Engineers is not complete, preliminary data indicates that effluent from the proposed treatment plant will not significantly affect Mill Cove (refer to Corps of Engineers letter dated March 2, 1976 which appears as Exhibit 4 of this chapter).

Engineering necessary to restore navigation to Mill Cove has not been completely finalized. The Corps has commented specifically on the relationship of the outfall across the cove to any future navigation projects. These comments appear as Exhibit 5.

13. Transmission System Funding

The Environmental Protection Agency finances 75 percent of eligible project costs. Certain appurtenant costs, not related to the treatment plant itself, are presently ineligible for Federal funding. Among these costs are those associated with force mains and pumping stations. It is not known at this time if a portion of these costs will be eligible for federal funding during the period of treatment plant construction. This determination will depend on the amounts of money appropriated to the EPA's construction grant program for fiscal year 1977. The construction of the actual treatment facilities is presently the first priority of available federal funds. Similarly, the State of Florida's priority system presently precludes most interceptor funding. However, interceptors appurtenant to the treatment works may be funded in part under the State priority system. The recently completed cost analysis conducted by EPA shows the present worth of Alternative 1q to be \$34,521,500. Of this, \$8,630,375 will be financed by local monies. The analysis also shows the present worth of the total system associated with Alternative 1q as \$62,982,000. Of this, \$28,460,500 represents costs of the transmission system. Portions of this cost may be included in the project for Federal grant funding.

14. Public Disclosure

It is the policy of EPA to make the fullest possible disclosure of records to the public consistent with the rights of individuals to privacy, the rights of persons in trade secrets and other information entitled to confidential treatment, and the need for EPA to promote frank internal policy deliberations and to pursue its official activities without undue disruption. Any written request to EPA for existing records shall be deemed to be a request for records pursuant to the Freedom of Information Act, 5 U.S.C. 552. Treatment of such requests by EPA will be in accordance with the regulations governing them as they appear in Part 2 of Chapter I of Title 40 of the Code of Federal Regulations published in the Federal Register, Vol. 40, No. 45, Part I, dated Thursday, March 6, 1975.

15. Public Water Supply

No land disposal of effluent or sludge will occur at the Millco Road site. Also, standard precautions will be taken concerning raw sewage overflow (spills). Plant capacity will be designed to accommodate surge flows. Facilities will be provided for the chlorination of plant effluent, and emergency power facilities will be provided at key locations in the event of an external power failure. The plant will be manned twenty-four hours a day and with the aid of computerized monitoring of operational features, as well as telemetric input from tributary pumping stations, reliability of operation should be maintained at a maximum.

In any case, the suburban utilities water supply well for the area must, by law, have a sealed casing to ensure against contamination from all sources. Any known defects in the casing of this well should be reported to the local health department and appropriate measures taken.

16. Jacksonville Area Planning Board Policies and Standards

The Jacksonville Area Planning Board does not feel that the selected site contradicts its Policies and Standards Handbook for the following reasons:

- 1) There is presently no development on the south, west, and north sides of the proposed plant location.
- 2) By ensuring retention of existing vegetation and by providing for additional tree planting, the proposed 114 acre buffer zone included in the project will provide adequate visual as well as environmental protection to surrounding areas.

The position of the Planning Board in this matter is documented by Exhibit 6 of this chapter.

17. Impact on Major Landowners

If a regional system is not implemented, the development which could be supported would be limited in some parts of the service area because of septic tank restrictions (pages 343 and 344 of Draft EIS). The land most affected is located south and east of Craig Airport. Extensive development would also be more difficult to achieve in those areas now discharging into the tributaries because of the present virtual moratorium on new discharges into these

streams (page 157 in Draft EIS). Therefore, the project will benefit major land developers who own land in these areas. Major landowners as they existed in 1971 in the areas in question are shown in Exhibit 7 of this chapter.

Development could potentially proceed without the project in the northern portion of the service area with small plants discharging directly into the St. Johns River.

18. Pressure from Major Landowners

The Stockton, Whatley, and Davin Company does plan extensive development in the dunes area and is opposed to the choice of site 2 for construction of the waste treatment facility. EPA's selection of site 1, however, has been based strictly upon the environmental and cost effective analyses presented in Chapter 3 of the Draft EIS and verified in Chapter 1 of this document.

19. Assistance Committee

The Assistance Committee was established to provide citizen input into the decision making process by identifying areas of citizen concern and evaluating project alternatives based upon these concerns. The alternative selected by the committee (No. 2) was strongly considered by EPA along with Alternatives 1 and 12. In addition, the relative weighting of environmental criteria (identified concerns) developed by the committee was used by EPA in its own evaluation.

20. EPA Contact with Other Agencies

In preparation of the Draft EIS, contact was made with every local, state, and federal agency concerned with the project (see references cited in that document beginning on page 377). In addition, EPA has met all requirements for the review of the Draft EIS by other agencies.

21. 1990 Water Quality Management Plan

EPA has approved the 1990 Water Quality Management Plan (WQMP) for the City of Jacksonville. Exact plant site recommendations, however, were not required to be made at

the time of this approval. The sites shown in the WQMP are generalized locations based upon projected centers of flow. Extensive consideration in areas such as cost effectiveness and environmental impact are not made in the WQMP but in the 201 Facilities Plan. Exact site recommendations are thus made in the 201 Plan and finalized, if necessary, in the EAS/EIS procedure.

22. Projected Population

The projected future population throughout the project service area was considered in the site selection process (see Figures 2-25 and 2-27 and page 364 of the Draft EIS). Population projections for the service district have been changed since publication of the Draft. These changes are explained in Chapter I. Although they represent a revision in projections for Duval County and Arlington, these changes do not affect the future population center of the service area.

23. Compatability of Plant Site with Residential Area

Noise and odor controls, elimination of incineration and sludge handling facilities, and distance between the site and the surrounding community will mitigate adverse impacts. Locating the treatment plant on the Millcoe Road site is not considered "spot" zoning because of the extensive vacant surrounding land. The Jacksonville Area Planning Board concurs with EPA in that the Millcoe site is suitable for the proposed facility.

24. Legal Requirements

EPA has fulfilled all legal requirements in the preparation and review of both the Draft and Final EIS's.

25. Outfall Construction Permit

The Army Corps of Engineers is the federal agency responsible for issuance of the outfall construction permit. Since publication of the Draft EIS, application has been made for this permit by the City of Jacksonville. The Corps has been asked to comment specifically on the likelihood of permit issuance. Their reply appears as Exhibit 5 of this

chapter. A copy of the City's construction permit application appears as Exhibit 8.

26. Decentralization of Treatment Facilities

Under present regulations, it is not possible to give low interest federal loans or construction grants of any type to agencies either public or private who are planning construction or improvement of a wastewater treatment facility which is not a part of an approved wastewater facilities plan. The "no action" alternative was considered throughout the alternative analysis of the Draft EIS. This alternative would require expansion and upgrading of the many small and privately owned treatment facilities discharging to the tributaries. Associated costs would have to be borne by the private parties involved. Further, the advantages of centralized versus decentralized wastewater treatment was considered throughout the alternative analysis. Briefly, these advantages are:

- 1) lower cost
- 2) increased efficiency and dependability
- 3) removal of discharges from the tributaries
- 4) greater ease in meeting possible higher water quality standards in the future.

27. Blount Island Outfall

The Blount Island outfall was considered as an integral part of several alternatives in the Environmental Assessment Statement prepared by the general and design consultants of the City of Jacksonville. This EAS was completed and submitted to the City long before the preparation of EPA's Draft EIS and was a major source--but by no means the only source--of information used in the preparation of that document.

The National Environmental Policy Act of 1969 (Public Law 91-190) requires that every environmental impact statement prepared on major Federal actions significantly affecting the quality of the human environment specifically address several major issues. Among these are:

-the environmental impact of the proposed action

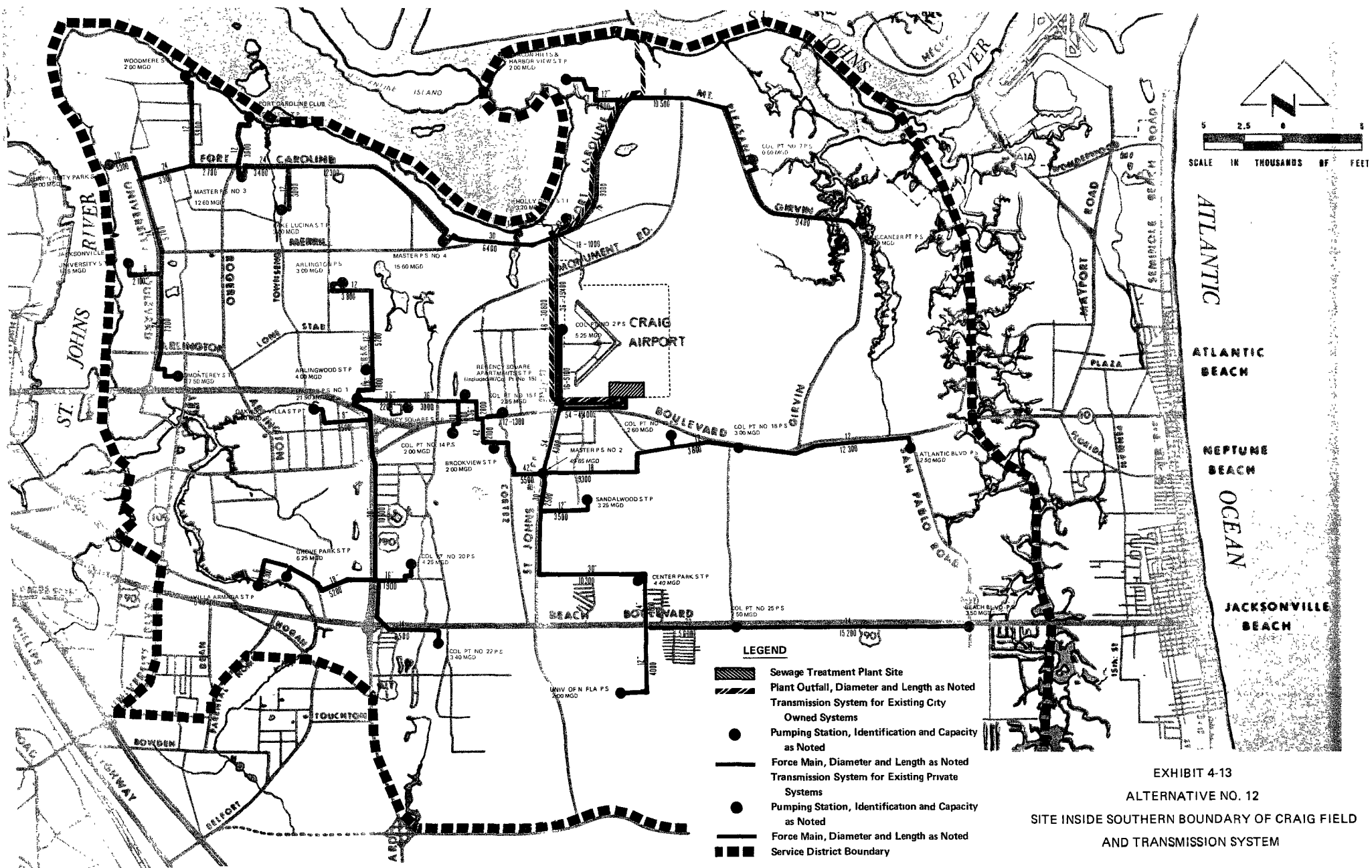
-alternatives to the proposed action

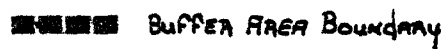
In this case, the action proposed by the City of Jacksonville in their application for federal funds was Alternative 1 with a Quarantine Island Outfall. As required, the Draft EIS evaluated the environmental impact of that alternative as well as others. During preparation of the Draft it became apparent that consideration should also be given to the Blount Island outfall in combination with sites 1 and 2, notwithstanding the fact that this had not been previously considered. This was not an attempt to split the project into segments in order to avoid foreclosing on possible future options regarding final plant site selection. It was, rather, an opportunity for EPA to comply to the best of its ability with the letter and spirit of the National Environmental Policy Act in considering all feasible alternatives.

28. Cost-Effective Verification

An independent investigation of the most cost-effective plant site and interceptor configuration has been completed by the Water Division of EPA, Region IV. Methodology and results are presented in Chapter I.

Chapter II
Eibiket 1





II
Exhibit 3

DEPARTMENT OF PUBLIC WORKS
Engineering
Streets and Highways
Water and Sewer
Sanitation
Public Buildings
Traffic Engineering



February 18, 1976

Mr. Robert Cooper
Environmental Protection Specialist
Environmental Protection Agency
1421 Peachtree Street, N.E.
Atlanta, GA 30309

Dear Mr. Cooper:

Concerning the City of Jacksonville's Arlington-East Wastewater Management Facility (EPA Project C 120 541), Mr. Joe Hyatt requested that I review the vehicular access and the intersection of the proposed facility access road and Monument Road.

Plant staffing will be:

Three Shifts:	7:30 A.M. - 4:00 P.M.	35 Persons
	3:00 P.M. - 11:00 P.M.	5 Persons
	11:00 P.M. 7:30 A.M.	<u>5</u> Persons
	TOTAL	45 Persons

Vehicles in and out will be:

	<u>IN</u>	<u>OUT</u>
Staff personnel cars and pickups	45	45
10 Service Trucks - leave at 8 AM and return at 4 PM	10	10
Materials Delivery - four trucks per day	4	4
Ash Haul-out - two trucks per day	2	2
Sludge Dumping - two trucks per hour	<u>18</u>	<u>18</u>
TOTAL	79	79

Monument Road in the vicinity of the proposed facility access road is a two-lane road built to state highway standards and is posted with a 55 MPH speed limit at the present time. The terrain is rolling and there is no development along the roadway. A motorist entering Monument Road from the proposed facility access road has a 1,500 foot sight distance in each direction, which



Mr. Robert Cooper
February 18, 1976
Page 2

is more than adequate for the various types of vehicles that will travel to and from the proposed facility. Sludge disposal trucks are dumping off of Monument Road about 2,500 feet to the south of the proposed intersection at the present time. We can foresee no traffic safety problems in the location of the proposed facility access road.

Very truly yours,



George S. Adams, P.E., Chief
Traffic Engineering Division

GSA/cds

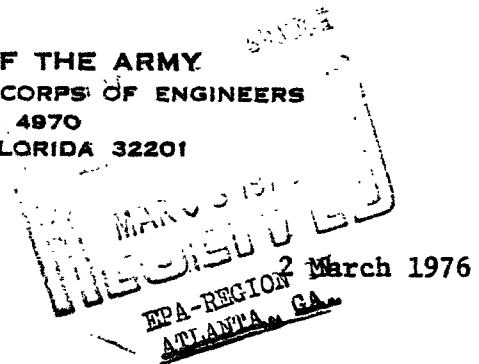
cc: Mr. Joe Hyatt
Public Works

II
Exhibit 4



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32201

SAJEN-EE



Mr. F. Theodore Bisterfield
Ecologist
U. S. Environmental Protection Agency
Region IV
1421 Peachtree Street, N. E.
Atlanta, GA 30309

Dear Mr. Bisterfield:

This is in reply to your letter of 18 February 1976 relative to EPA's Jacksonville, Arlington-East District Draft Environmental Impact Statement.

The Mill Cove Model Study, which is expected to contribute greatly to our knowledge of the circulation patterns in the area, is not complete. However, preliminary data gathered in connection with the study indicates that the proposed sewage plant effluent probably would not significantly affect Mill Cove.

Based on available velocity and cross-section data, approximately 10 percent of the total river flow on flood and ebb tides moves through Mill Cove. Assuming uniform effluent discharge from the outfall divided evenly between ebb and flood tides, Mill Cove would receive a certain amount of effluent. Rough estimates taking into account distance to the ocean, travel time of the ebb current, and mixing action indicate that about 9 percent of the total effluent discharged would move through the cove. Due to the location of the proposed outfall line, no newly discharged effluent would move directly through Mill Cove but only that portion already mixed in the river system.

In view of the fact that this effluent is to receive secondary sewage treatment, the effect on water quality in Mill Cove would appear to be minimal.

We hope this information will be of assistance to you. If we can be of further help, please let us know.

Sincerely yours,

A handwritten signature in cursive script, which appears to read "James L. Garland", is written over the typed name.

JAMES L. GARLAND

Chief, Engineering Division

II
Exhibit 5



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32201

SAJEN-DL

17 March 1976

Mr. John A. Little
Deputy Regional Administrator
United States Environmental Protection Agency
Region IV
1421 Peachtree St., N.E.
Atlanta, Georgia 30309

RECEIVED
MAR 21 1976
CORPS OF ENGINEERS
JACKSONVILLE DISTRICT

Dear Mr. Little:

This is in reply to your 8 March 1976 letter which requested information concerning your Wastewater Treatment Project, Arlington-East District (Department of the Army permit, Application No. 76M0112) in Jacksonville, Florida.

Information requested is presented in the same order as in your letter.

1. The Mill Cove model study is presently in the early testing phase. Therefore, we are unable to state, at this time, whether or not modifications to Quarantine Island will be required which would be interfered with by your proposed outfall line. If the outfall line is installed and the model study shows that the line interferes with necessary modifications to the island, the outfall line would have to be relocated by the owner. Based on the present model study schedule, detailed information would be available in mid-calendar year 1977 which would provide data to answer your question.

2. Based on the permit application which indicates that the outfall line would be placed across our upland disposal area on Quarantine Island to a top elevation of approximately -2.0' m.l.w., we do not foresee interference with our continued use of the area. However, our continued future use of the area could cause some subsidence of the existing underlying material. The type of installation used for the outfall line across the island should take this into consideration in order to avoid possible failure of the line which could cause serious damage to future dikes constructed around the area.

SAJEN-DL
Mr. John A. Little

17 March 1976

3. The outfall line crossing of Mill Cove as presented in the permit application, would place the top of the pipe a minimum of 9.0 feet below mean low water for a distance of 800 feet. This is acceptable to us since these clearances will allow reasonable tolerance in establishing the proposed Mill Cove navigation channel location in the future. It should be noted that the Mill Cove model study is to determine means to promote increased circulation of water through the cove. By increasing the circulation of water, depths may be reestablished along the previously existing natural channel in Mill Cove and this could leave the outfall line suspended in the water.

4. Based on the permit application the proposed outfall line termination point provides 160 feet of clearance from the edge of the existing 38-foot channel bottom. It would also provide about 110 feet of clearance from the channel bottom for a 45-foot project. The above clearances from the existing 38-foot project channel and proposed 45-foot project channel are acceptable. The outfall line should remain at least 100 feet from the proposed 45-foot project channel bottom. This should prevent damage during any blasting or dredging operations.

5. See comment 4 above for acceptable clearance of outfall line from the proposed 45-foot project channel bottom.

6. The location and dimensions of the proposed turning basin have not been established to date and it may be several years before the exact location and dimensions are finalized. We therefore cannot state at this time whether or not the location of the outfall line as presented in the permit application would interfere with the proposed turning basin. If, after finalization of the turning basin location and dimensions, the outfall line interferes with the construction or safe use of the basin, the outfall line will have to be modified by the owner.

7. Based on engineering data furnished with the permit application and that the end of the outfall line would not be closer than 100 feet to the proposed 45-foot project channel bottom, the effluent velocities would be dispersed and would not create cross currents that would be hazardous to navigation. Therefore the plan shown in the permit application or the use of a "T" at the pipe end would both be acceptable.

It should be noted that the use of a surface discharge, via a spillway, as an alternative method of discharge as presented in our 15 July 1975 letter to you, was merely a suggestion for your consideration due to

SAJEN-DL
Mr. John A. Little

17 March 1976

the possible conflicts with the use of a submerged outfall. Since that time the engineering data furnished with the permit application shows that the conflicts have been resolved, except as discussed in comments 1 and 6 above. In our opinion, if the effluent has received secondary treatment, there should be no greater adverse impact to water quality, littoral biota and aesthetics, by use of a spillway than by use of a submerged outfall.

We foresee no further technical problems which would delay your issuance of a permit to the city of Jacksonville.

We trust that our response has provided the information that you need. If we can be of any further help please let us know.

Sincerely yours,


JAMES L. GARLAND
Chief, Engineering Division

II
Exhibit 6

JACKSONVILLE AREA PLANNING BOARD

February 25, 1976



EIS Branch
Environmental Protection Agency
1421 Peachtree Street
Atlanta, Georgia 30309

ATTN: Bob Cooper

Dear Bob:

This has reference to your phone call on February 18, 1976. The Policies and Standards Handbook, prepared by this agency in 1973 and adopted by the Jacksonville City Council on 2/10/76, includes the following policies re the location of sewage disposal facilities:

Section 2.420 b page 38. General Policies
(INSTITUTIONAL AND GOVERNMENT USE)

- b. Facilities such as warehouses, refuse disposal facilities, sewage treatment plants, city asphalt plants, etc., should be located in industrial or remote areas. Some, such as water or sewer pumping stations, must be located in residential areas, and in these cases landscaping should be provided.

Section 6.131 c page 77 - Sewage Disposal Policies
(WATER AND SEWER UTILITIES)

- c. Location of treatment plant facilities should be reviewed by JAPB for conformity with the comprehensive plan, projected impact on surrounding areas, and suitability of site plan.

The proposed location of the Arlington East Treatment Plant (Site #1 - Mill Coe Road) was reviewed by this agency for Metropolitan Clearinghouse and for re-zoning reviews. Finding that the plant and its location were in accord with area-wide plans and policies, the staff gave favorable reviews in each case (RPCBP-3 date 8/31/73) and Ord. 73-1548 dated 1/15/74. The staff also participated in the citizens committee meetings organized by EPA.

121.



AREA CODE 904 / 633-2690 / ROOM 401-COURTHOUSE / JACKSONVILLE, FLORIDA 32202

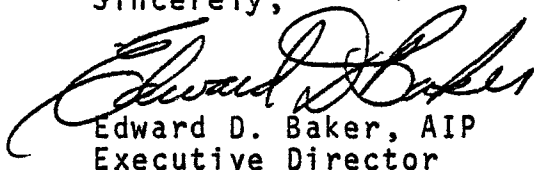
Mr. Bob Cooper
February 25, 1976
Page Two

The factors that led to the determination that the site (#1) fulfills the intent of the above mentioned policies are listed below:

1. Presently, there is no development on the south, west, and north sides of the proposed location.
2. The residential development on the east is separated by an existing lake.
3. The proposed 114 acre buffer included in the project, for ensuing retention of existing trees and for additional tree planting and landscaping provides adequate visual as well as environmental protection to surrounding areas.

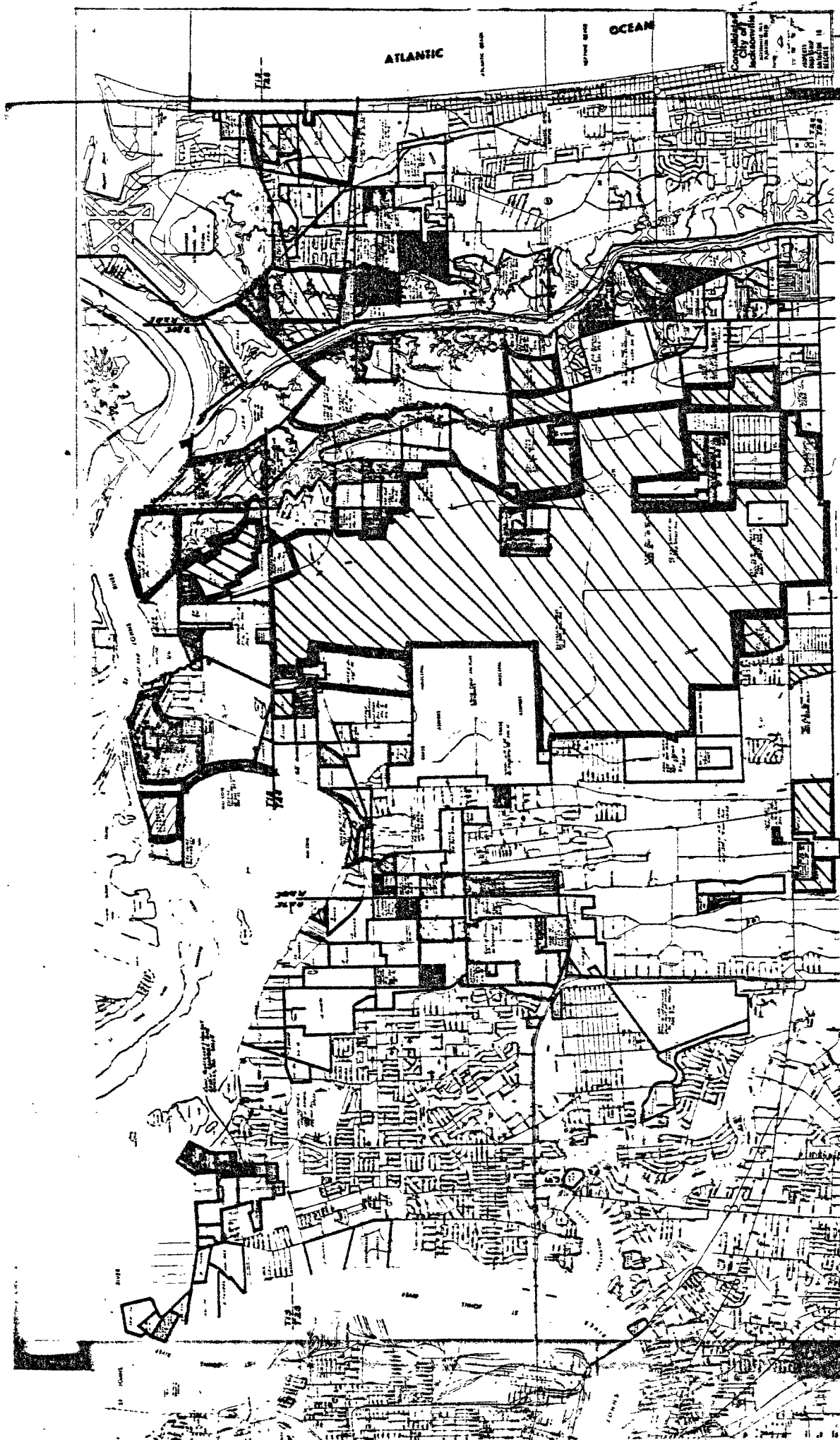
I hope this clarifies our stand on this program. If you need any further information, give me a call.

Sincerely,



Edward D. Baker, AIP
Executive Director

EDB:BKM:fj



II
Exhibit 7

APPLICATION FOR A DEPARTMENT OF THE ARMY PERMIT

One set of original drawings and two copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and checklist).

1. Application number (To be assigned by Corps). <div style="font-size: 1.5em; font-family: cursive;">76 M0112</div>	2. Date. <div style="text-align: center;"> <div style="display: inline-block; text-align: right;">5</div> <div style="display: inline-block; text-align: left;">Feb. 1976</div> </div> <div style="display: flex; justify-content: space-around; font-size: 0.8em;"> Day Mo. Yr. </div>	3. For official use only.
4. Name and address of applicant. City of Jacksonville Department of Public Works 220 East Bay Street Jacksonville, Florida 32202 <div style="display: flex; justify-content: space-between;"> Telephone number <u>904/633-2920</u> Social Security No. <u>N/A</u> </div>		
5. Name, address, and title of applicant's authorized agent for permit application coordination. Sverdrup & Parcel and Associates, Inc. 11 East Forsyth Street Jacksonville, Florida 32202 <div style="text-align: right;">Telephone Number <u>904/356-5503</u></div>		
6. Describe the proposed activity, its purpose and intended use, including a description of the type of structures, if any to be erected on fills, or pile or float-supported platforms, and the type, composition and quantity of materials to be discharged or dumped and means of conveyance. Construct sewage treatment plant subaqueous outfall force main extending across Mill Cove, Marion Island and Quarantine Island into the St. Johns River for discharge of secondary treated effluent. Disturbed area to be returned to natural elevation.		
7. Proposed use. <div style="display: flex; justify-content: space-between; align-items: center;"> Private <input type="checkbox"/> Public <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Other <input type="checkbox"/> (Explain in remarks) </div>		
8. Name and addresses of adjoining property owners whose property also adjoins the waterway. (Cont'd - Item 15) <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> City of Jacksonville 220 East Bay Street Jacksonville, Florida 32202 James O. Buck 1709 St. Johns Bluff Road Jacksonville, Florida 32211 </div> <div style="width: 45%;"> Herbert B. Moller, Jr. Post Office Box 41 Atlantic Beach, Florida 32233 Lois P. Tindell Post Office Box 8787 Jacksonville, Florida 32211 </div> </div>		
9. Location where proposed activity exists or will occur. <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> From Sec. 1 Sec. 41 </div> <div style="width: 30%;"> Twp 2 South Twp 1 South </div> <div style="width: 30%;"> Rge 27 East, to Rge 27 East </div> </div> <div style="text-align: right; font-size: 0.8em;">(Where applicable)</div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 30%;"> <u>Florida</u> <small>State</small> </div> <div style="width: 30%;"> <u>Duval</u> <small>County</small> </div> <div style="width: 30%;"> <u>Jacksonville</u> <small>In - City or Town</small> </div> <div style="width: 10%; text-align: right;"> <small>Near - City or Town</small> </div> </div>		
10. Name of waterway at location of the activity. <u>Mill Cove and St. Johns River</u>		

FORM 4345 REPLACES ENG FORMS 4345 AND 4345-1 (PART A), MAY 71 (EP 1145-2-1)
 ENG 1 APR 74 AND 4345-1 (PART B), JUN 71, WHICH ARE OBSOLETE.

11. Date activity is proposed to commence. Unknown
Date activity is expected to be completed. Unknown

12. Is any portion of the activity for which authorization is sought now complete? Yes ☐ No ☒
If answer is "Yes" give reasons in the remarks section. Month and year the activity was completed _____ . Indicate the existing work on the drawings.

13. List all approvals or certifications required by other Federal, interstate, state or local agencies for any structures, construction, discharges, deposits or other activities described in this application.

Issuing Agency	Type Approval	Identification No.	Date of Application	Date of Approval
D.E.R.	Water Quality & Utility Installation Permit		Application being prepared	
E.P.A.	Application to construct pollution source		3 Feb. 76	Pending

14. Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein? Yes ☐ No ☒ (If "Yes" explain in remarks)

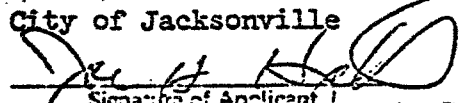
15. Remarks (see paragraph 3 of Permits Pamphlet for additional information required for certain activities).

Item No. 8 (Cont'd)

Thomas C. Mundy, Sr.
9133 Fort Caroline Road
Jacksonville, Florida 32211

16. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

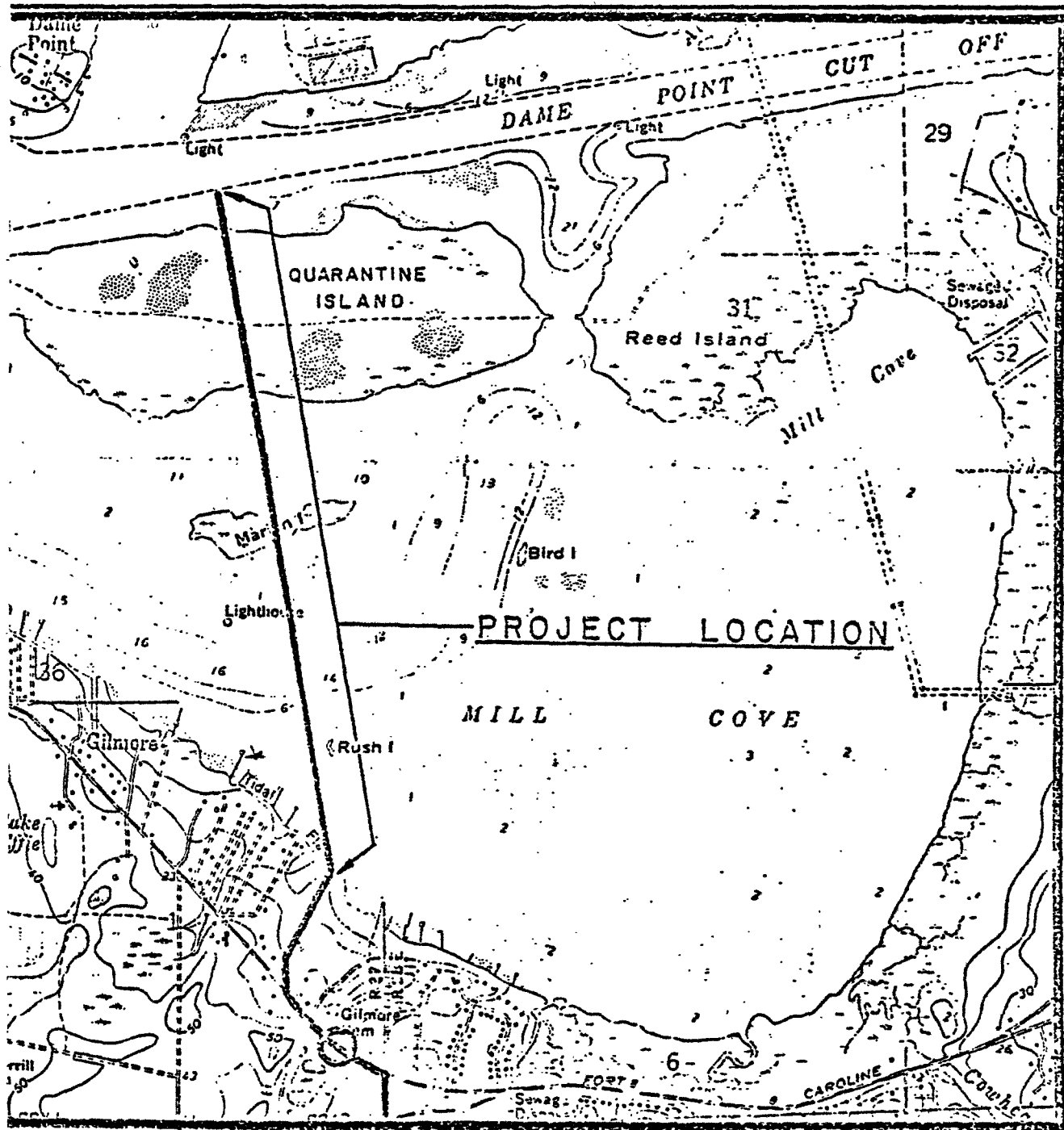
City of Jacksonville


Signature of Applicant
Joe H. Hyatt, P.E. Deputy Director
Department of Public Works

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

The application must be signed by the person who desires to undertake the proposed activity; however, the application may be signed by a duly authorized agent if accompanied by a statement by that person designating the agent and agreeing to furnish upon request, supplemental information in support of the application.

If the activity includes the discharge of dredged or fill material in navigable waters or the transportation of dredged material for the purpose of dumping it in ocean waters, the application must be accompanied by a fee of \$100 for quantities exceeding 2500 cubic yards and \$10 for quantities of 2500 cubic yards or less. Federal, State and local governments are excluded from this requirement.



LOCATION MAP

FROM
EASTPORT QUADRANGLE
AND
ARLINGTON QUADRANGLE
7.5 MINUTE SERIES
U.S. GEOLOGICAL SURVEY MAP
scale in feet

2000 1000 0 2000

126.

JS-40.2, ARLINGTON EAST DISTRICT
CUTFALL FORCE MAIN

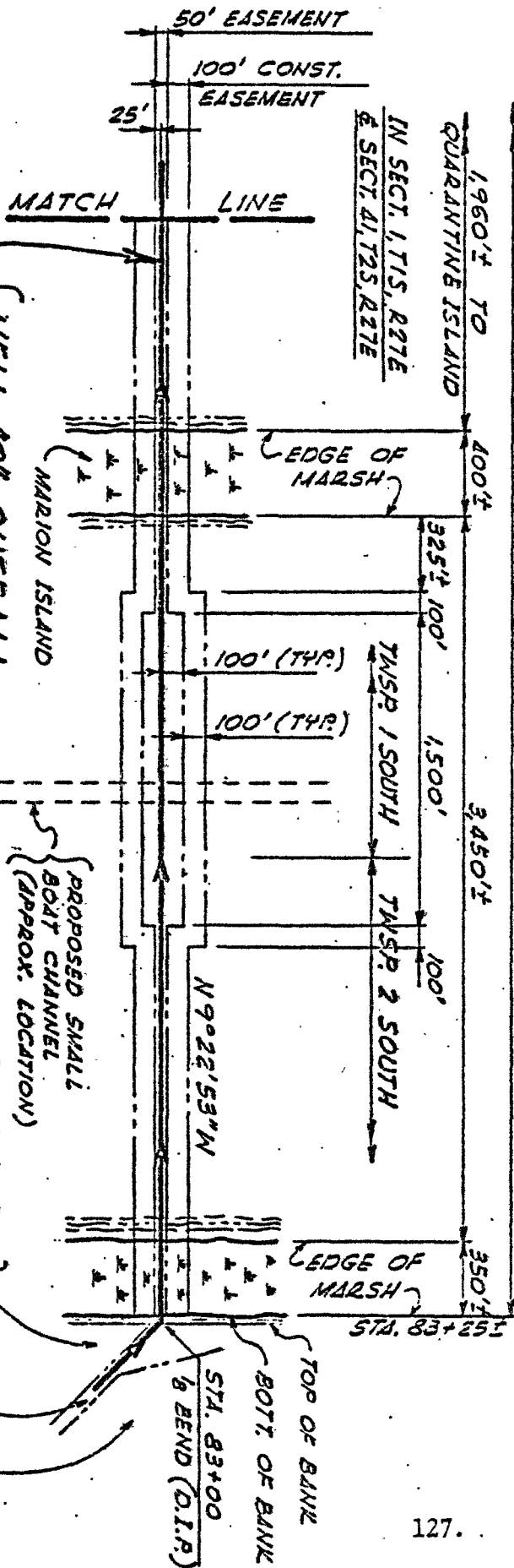
SVERDRUP & PARCEL AND ASSOC., INC.
GENERAL CONSULTANT

CITY OF JACKSONVILLE
DEPARTMENT OF PUBLIC WORKS

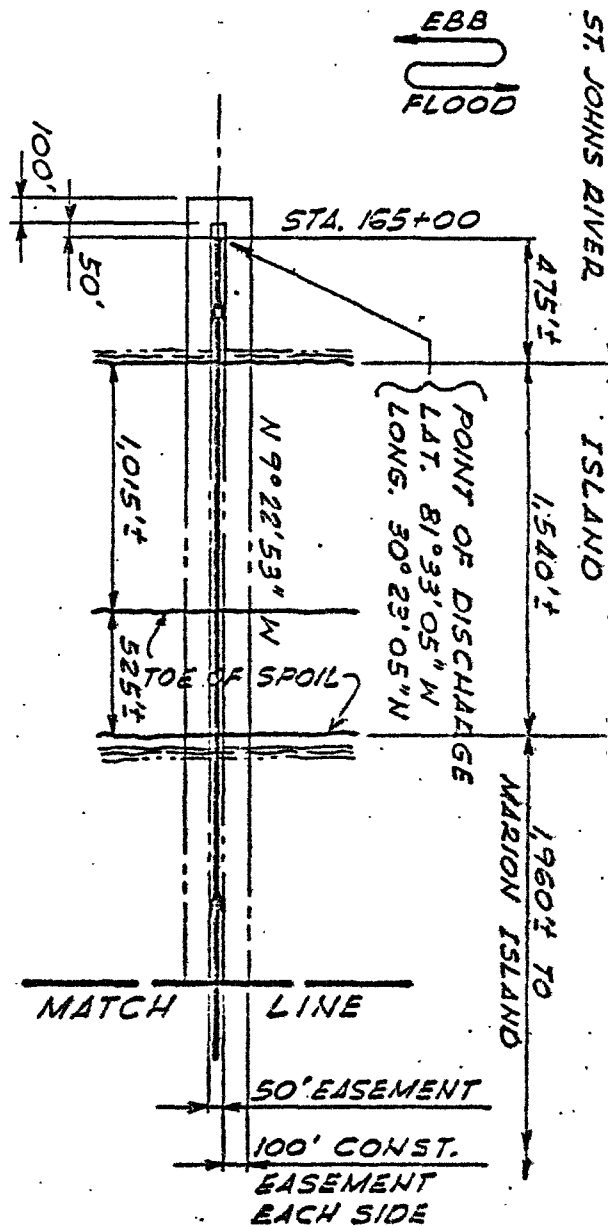
PROPOSED SUBAQUEOUS CUTFALL
FORCE MAIN CROSSING MILL COVE
& EXTENDING INTO ST. JOHNS RIVER
JACKSONVILLE, FLORIDA

DATE: FEBRUARY 5, 1973

SHEET 1 OF 6



PLAN



JS-40.2, ARLINGTON EAST DISTRICT
OUTFALL FORCE MAIN

SVERDRUP & PARCEL AND ASSOC.
GENERAL CONSULTANT

CITY OF JACKSONVILLE
DEPARTMENT OF PUBLIC WORK

PROPOSED SUBAQUEOUS OUTFALL
FORCE MAIN CROSSING MILL COVE
& EXTENDING INTO ST. JOHNS RIVER
JACKSONVILLE, FLORIDA

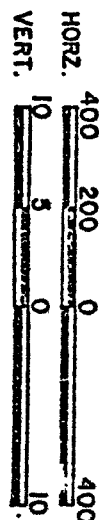
127.

DATE: FEBRUARY 5, 1976

SHEET 2 OF 2

PROFILE

scale in feet



PROPOSED SMALL
BOAT CHANNEL (APPROX. LOCATION)

NOTE: ESTIMATED MEAN RANGE IN
MILL COVE IS 2.8 FEET

MILL
COVE

JS-40.2, ARLINGTON EAST DISTRICT
OUTFALL FORCE MAIN

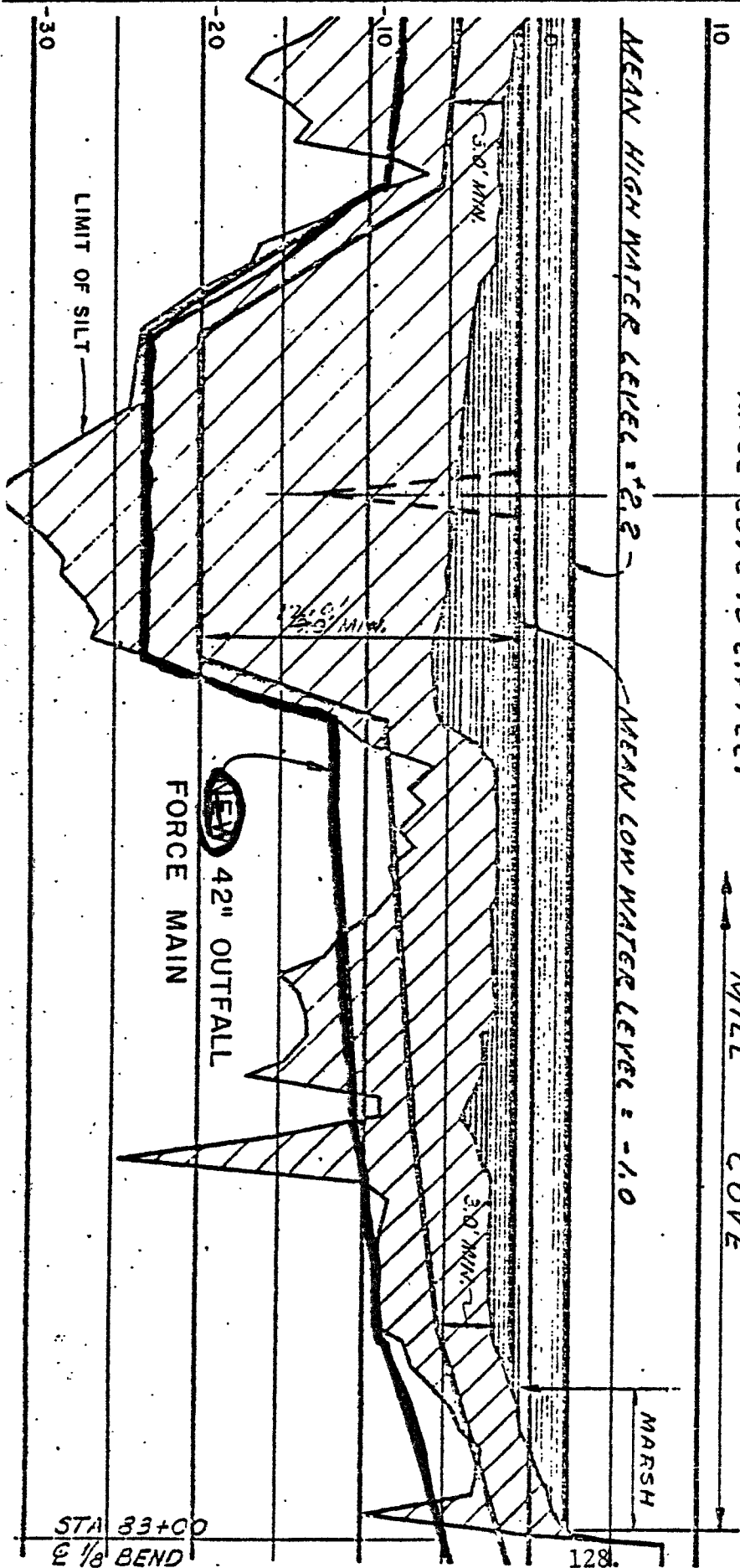
SVERDRUP & PARCEL AND ASSOC., IN
GENERAL CONSULTANT

CITY OF JACKSONVILLE
DEPARTMENT OF PUBLIC WORKS

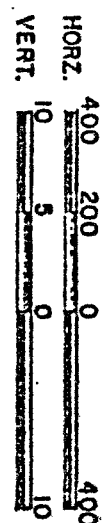
PROPOSED SUBAQUEOUS OUTFALL
FORCE MAIN CROSSING MILL COVE
& EXTENDING INTO ST. JOHNS RIVER
JACKSONVILLE, FLORIDA

DATE: FEBRUARY 5, 1975

SHEET 3 OF



GUARANTINE
ISLAND



MILL COVE

MARION
ISLAND

JS-40.2, ARLINGTON EAST DISTRICT
OUTFALL FORCE MAIN

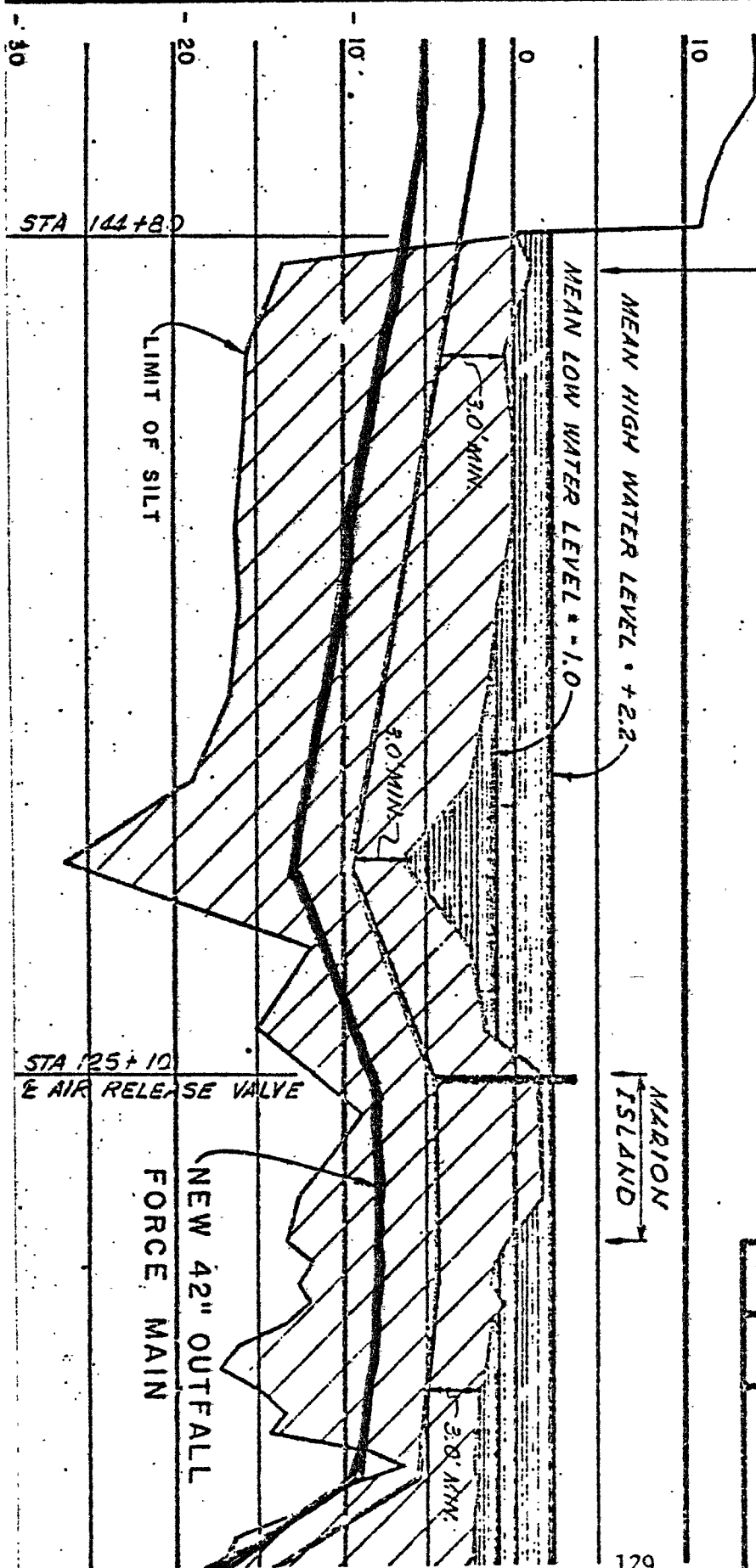
SVERDRUP & PARCEL AND ASSOC., INC.
GENERAL CONSULTANT

CITY OF JACKSONVILLE
DEPARTMENT OF PUBLIC WORKS

PROPOSED SUBAQUEOUS OUTFALL
FORCE MAIN CROSSING MILL COVE
& EXTENDING INTO ST. JOHNS RIVER
JACKSONVILLE, FLORIDA

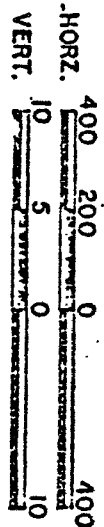
DATE: FEBRUARY 5, 1976

SHEET 4 OF



PROFILE

Scale in feet



MAIN CHANNEL
ST. JOHNS RIVER

QUARANTINE ISLAND

MEAN HIGH WATER LEVEL = +2.2

MEAN LOW WATER LEVEL = -1.0

5.0 MIN.

NEW 42" OUTFALL
FORCE MAIN

STA 160+50
AIR RELEASE VALVE

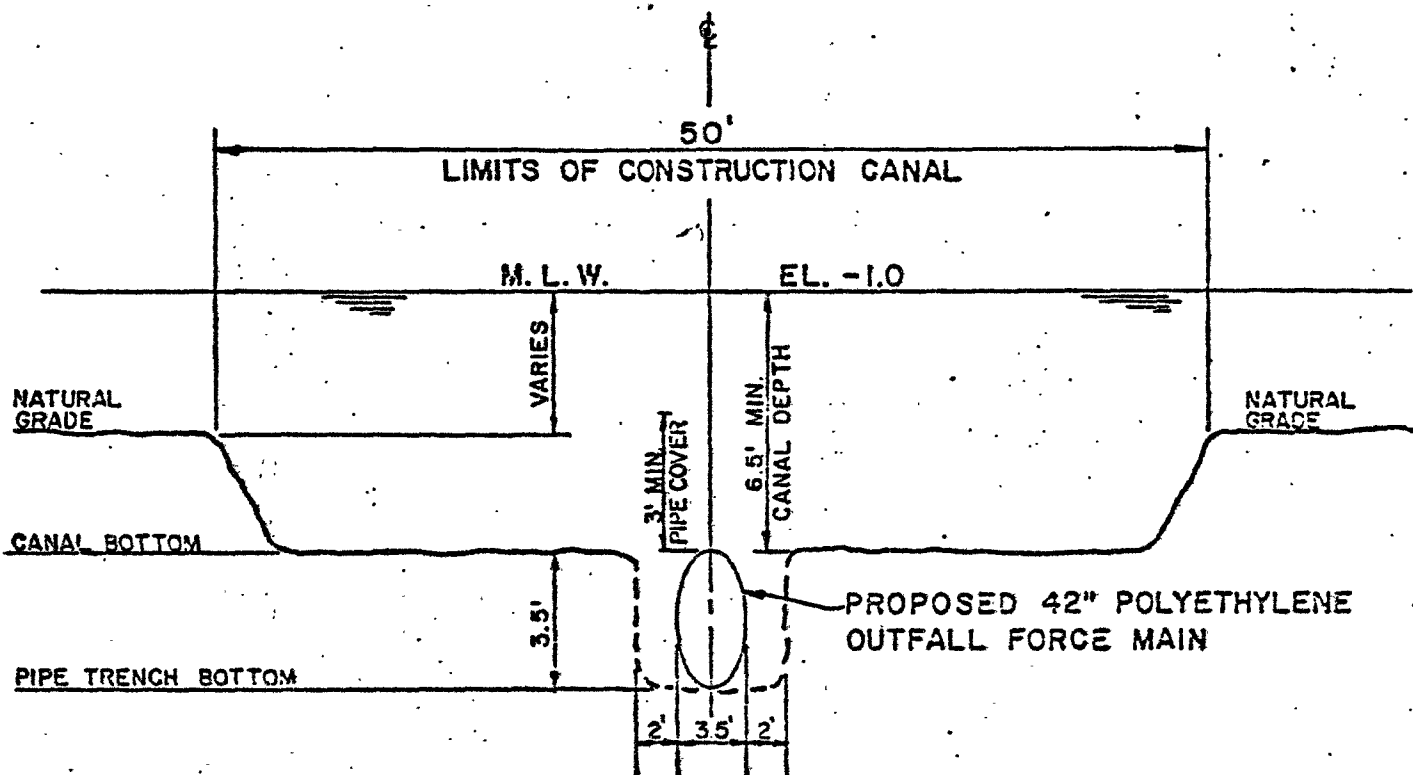
INV -35.00

STA 144+80

SVERDRUP & PARCEL AND ASSOC., INC.
GENERAL CONSULTANT

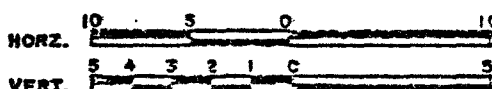
CITY OF JACKSONVILLE
DEPARTMENT OF PUBLIC WORKS

PROPOSED SUBAQUEOUS OUTFALL
FORCE MAIN CROSSING MILL COVE
& EXTENDING INTO ST. JOHNS RIVER
JACKSONVILLE, FLORIDA



TYPICAL SECTION

SCALE IN FEET



NOTES:

EXCAVATE PIPE TRENCH WHERE REQUIRED.
PROVIDE 3' MIN. COVER OVER PIPE.

CANAL TO BE FILLED WITH MATERIAL
REMOVED, RETURNING DISTURBED AREA
TO NATURAL ELEVATION.

131.

JS-40.2, ARLINGTON EAST DISTRICT
OUTFALL FORCE MAIN

SVERDRUP & FARCEL AND ASSOC., INC.
GENERAL CONSULTANT

CITY OF JACKSONVILLE
DEPARTMENT OF PUBLIC WORKS

PROPOSED SUBAQUEOUS OUTFALL
FORCE MAIN CROSSING MILL COVE
& EXTENDING INTO ST. JOHNS RIVER
JACKSONVILLE, FLORIDA

DATE: FEBRUARY 5, 1976

SHEET 6 OF 6

30. SHEETING, STEEL OR WOOD

30.1 It is to be understood that the cost for all sheeting, that has been driven and pulled by the Contractor, as specified in Section 2B, shall be included in the unit price for pipe work. Steel sheeting driven and left in place for all depths when authorized by the Engineer or called for on the Contract Drawings, will be paid for at the unit price bid in the Proposal.

30.2 All sheeting used for trenches ten ft. in depth or less, is for the Contractor's benefit only, whether steel or wood and will not be a payable item. If wood sheeting is used for excavations 10 feet or less in depth, it shall be left in place and cut off, a minimum of 30 inches below grade and will not be a payable item. If the Contract Drawings and Documents call for steel sheeting to be left in place for depths 10 feet or less or as authorized by the Engineer, then it will be paid for at the unit price bid in the Proposal.

31. SILTATION AND EROSION

31.1 The Contractor shall take steps and make suitable provisions to minimize siltation and erosion of waterways which may result from, or as a result of, operation during the course of construction of this project.

31.2 The Contractor is cautioned that during the excavation and/or maintenance of the subject project, creation of turbidity in the excess of fifty (50) Jackson Units (measured in accordance with the State of Florida's Department of Pollution Control Technical Memorandum 4-4) above the background level and/or directly or indirectly affecting the water quality in any waterway in such a manner as to exceed the limitation on the concentration of various constituents for such waters as prescribed in Chapter 17-3, Florida Administrative Code, is a violation of the Water Quality Standards of the State of Florida.

31.3 Turbidity shall not exceed fifty (50) Jackson Units as related to standard candle turbidimeter above background within one hundred (100) feet of the construction activity.

31.4 The Contractor is hereby advised that silt barriers are to be used at all waterway crossings or at any time during construction that "Siltation or Erosion may occur."

31.5 The Contractor shall submit to the Engineer for written approval, prior to construction, the method to be used to control the turbidity as stated in paragraph 31.3. The Engineer's approval of the method to be used in no way relieves Contractor of liability in case of a citation by the Department of Environmental Regulation.

End of Section 1A

CHAPTER III

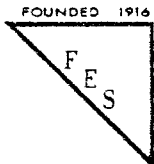
WRITTEN COMMENTS ON DRAFT EIS WITH EPA RESPONSE

- Part A; Comments received from Federal, State, and local agencies, and private organizations.
- Part B; Individual comments sent directly to EPA.
- Part C; Individual comments sent to other parties and forwarded to EPA for reply.

PART A

AGENCY COMMENTS ON THE DRAFT EIS

Presented herein are all letters of comment received by EPA on the Draft EIS from Federal, State, and local agencies as well as private organizations. The letters are presented in the order in which they were received. Responses have been made individually.



JACKSONVILLE CHAPTER FLORIDA ENGINEERING SOCIETY

affiliated with
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS



January 20, 1976

Environmental Protection Agency
Region IV
1421 Peachtree St. N. E.
Atlanta, Georgia 30309

RESOLUTION

- WHEREAS, The Jacksonville Chapter, Florida Engineering Society, is an organization of professional engineers with a vital interest in community activities; and
- WHEREAS, The proposed Arlington Sewage Treatment Plant of the City of Jacksonville is a major engineering project affecting the environment, economy and quality of life in Jacksonville; and
- WHEREAS, The construction of this plant will phase out a significant number of smaller plants and systems presently discharging waste to tributary streams in the Arlington area; and
- WHEREAS, The design of this facility has incorporated: a buffer zone of one hundred eighteen acres to be used as a passive recreation area, and provisions of noise and odor controls; and
- WHEREAS, Detailed environmental assessments and impact studies of the proposed site and fourteen alternate systems and sites have determined the original site would cause no significant and environmental damage; and
- WHEREAS, This site would save the citizens of Jacksonville approximately \$4,000,000 and be an operative facility one year sooner than any other site.

A.1.a. NOW, THEREFORE, it is resolved that the Jacksonville Chapter of the Florida Engineering Society endorses the proposed Environmental Impact Statement Draft as prepared by the Environmental Protection Agency which approves locating the Arlington Sewage Treatment Plant at the Millcoke Road Site with Quarantine Island Outfall.

Respectfully submitted,

Carl W. Crist
Carl W. Crist, President

Edward R. Joyce, Jr.
Edward R. Joyce, Jr., Secretary

A.1. Response to comments by the Jacksonville Chapter of the
Florida Engineering Society

Response A.1.a.

None required

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

State Office, P. O. Box 1208, Gainesville, FL 32602

February 6, 1976

Mr. John E. Hagan, III
Chief, EIS Branch
Environmental Protection Agency
1421 Peachtree Street, N. E.
Atlanta, GA 30309

Dear Mr. Hagan:

RE: Draft Environmental Impact Statement on Arlington-East Service
District, Wastewater Management Facilities, Jacksonville, Florida
EPA Project No. C120541


Our staff has reviewed the subject statement and we offer the following comments:

A.2.a. The corresponding mitigation numbers, beginning with impact number 14, page 355, should be corrected for clarity.

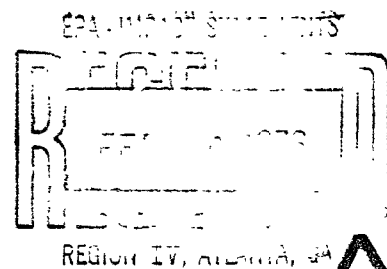
The statement is well done and we have no further comments to offer.

We appreciate the opportunity to review and comment.

Sincerely,


William E. Austin
State Conservationist

cc: R. M. Davis
F. G. Maxwell



A.2. Response to comment by U. S. Department of Agriculture,
Soil Conservation Service

Response A.2.a.

Chapter VI of the Draft EIS summarized unavoidable adverse impacts and available mitigative measures. Impacts 1 through 13 correspond to mitigative measures 1 through 13. However, the mitigative explanation for adverse impact No. 14 was inadvertently omitted, hence confusion in correlating the remaining impacts and mitigative measures. When the mitigative explanation for adverse impact No. 14 (slight water quality degradation in a small mixing zone at the point of discharge in the St. Johns River) is inserted, the remaining mitigative measures (14-28) should each be advanced one number. There will then be a total of 29 unavoidable adverse impacts and corresponding mitigative measures.

Mitigative measure No. 14 should read:

"Large dilution factors, thorough mixing afforded by strong tidal currents, and the ability of pollutants to exit the estuary on ebb tidal cycles, will ensure minimal effect on water quality and maintenance of accepted water quality standards."

FLORIDA WILDLIFE FEDERATION

AFFILIATED WITH NATIONAL WILDLIFE FEDERATION
4080 NORTH HAVERHILL ROAD, WEST PALM BEACH, FLORIDA 33407
PHONE: (305) 683-2328

Executive Director
JOHN C. JONES



President
C. RICHARD TILLIS
2812 Roscommon Drive
Tallahassee, FL 32303

1st Vice President
WILLIAM M. BLAKE
P. O. Box 9066
Tampa, FL 33604

2nd Vice President
WALTER BRANDON
2321 Fairway Drive
West Palm Beach, FL 33401

Secretary
HERBERT R. PRUETT
1408 S.E. Bayshore Drive
Apt. 1201
Miami, FL 33131

Treasurer
FRANK COLLINS
148 Abaco Drive
Palm Springs, FL 33460

Region 1 Directors
HERB ALLEN
1801 Pasadena Drive
Ounedin, FL 33528

DOROTHY SAMPLE
200 Sunset Drive
St. Petersburg, FL 33707

Region 2 Directors
SEN. LEW BRANTLEY
422 Copeland Street
Jacksonville, FL 32204

DR. FRANK PHILPOTT
420 N.W. 25th Street
Gainesville, FL 32601

Region 3 Directors
W. CARROLL HIXSON
206 West Lloyd Street
Pensacola, Florida 32501

DAVID E. LA HART
Rt. #12, Box 978
Tallahassee, FL 32304

Region 4 Directors
WILLIAM F. COLEMAN
7287 Pioneer Road
West Palm Beach, FL 33406

RALPH E. JOHNSON
295 N. W. 188th Street
Miami, Florida 33169

Region 5 Directors
CHARLES E. FORD
4109 Merryweather Drive
Orlando, FL 32809

ROBERT W. HOPWOOD
275 Gray Road
Melbourne, FL 32901

Directors-at-Large:

T. N. ANDERSON
JAMES WINDHAM
JEANNE NISWONGER
MURRAY OVERSTREET, JR.
O.L. "Sonny" PEACOCK

February 18, 1976

Mr. Jack E. Ravan
Regional Administrator
Environmental Protection Agency
1421 Peachtree Street N. E.
Atlanta, Georgia 30309

Dear Mr. Ravan,

The Florida Wildlife Federation has reviewed the Environmental Impact Statement on the Arlington-East Waste Treatment Facilities in Jacksonville, Florida.

We recommend that you prohibit any use of these facilities to serve developments --present or future-- in any coastal wetland areas. The service area for the proposed facility which is being considered for a federal grant includes coastal wetlands, particularly in its eastern portion. A.3.a

The Environmental Protection Agency has frequently stressed the need to protect wetlands, both tidal and fresh, in many actions. It also has specific responsibilities to do so under Section 404 of the NEPA. It is a concordant step for EPA to require in its grants for waste water treatment facilities equal protection of those vital areas. A.3.b

We have not been able to attend the local hearings on this matter and therefore ask that you include this letter of recommendation in your hearing record on the Arlington-East Waste Treatment Facilities.

Sincerely,

John C. Jones
Executive Director

A.3. Response to comments by the Florida Wildlife Federation

Response A.3.a.

EPA most strongly agrees that the coastal wetland areas located, for the most part, in the eastern portion of the Arlington-East Service District should not be developed. However, it must be recognized that EPA has no control over local zoning. Most of the area in question is currently not zoned for any type of development (refer to figure 2-30 in Draft EIS). This means that any future development in these areas must be approved and zoned appropriately. The Development Plan for 1990 developed by the Jacksonville Area Planning Board (refer to figure 2-29 in Draft EIS) has designated the wetland areas in the service district, as well as other extensive wetland areas throughout the county, as preservation or conservation zones. This Development Plan, as well as the Short Range Development Plan, provide direction for efficient land use development and for protection of these environmentally sensitive areas as well as for proper phasing of required community facilities.

Throughout its analysis of alternatives, the EPA gave strong consideration to effects on environmentally sensitive areas. These areas are shown on figure 2-37 of the Draft EIS. By referring to figure 3-1 of that document, it may be seen that such consideration is not in conflict with the ultimate interceptor system associated with the planned facilities.

Response A.3.b.

Although the need to protect wetlands is implicit in the letter and spirit of the National Environmental Policy Act of 1969, the Act does not contain a Section 404 nor any section dealing with wetlands in particular. Section 404 of the Federal Water Pollution Control Act as amended, however, does address shellfish beds, fishery, wildlife, and recreational areas but only as they might be affected by dredging and spoil disposal. No such activities are associated with the planned Arlington-East project. In any case, any such future activities planned for navigable waters would require a permit from the U. S. Army Corps of Engineers.



A.4.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
REGION IV
50 7TH STREET N.E.
ATLANTA, GEORGIA 30323
February 19, 1976

OFFICE OF THE
REGIONAL DIRECTOR
HEW-627-1-76

John E. Hagan, III
Chief, EIS Branch
Environmental Protection Agency
1421 Peachtree Street, N.E.
Atlanta, Georgia 30309

Subject: Arlington-East Service District
Wastewater Management Facilities
City of Jacksonville, Florida
Project No. C120541

Dear Mr. Hagan:

We have reviewed the subject draft Environmental Impact Statement. Based upon the data contained in the draft, it is our opinion that the proposed action will have only a minor impact upon the human environment within the scope of this Department's review.

A.4.a. The impact statement has been adequately addressed for our comments.

Sincerely yours,

Philip P. Sayre
Regional Environmental Officer
DHEW - Region IV

A.4 Response to comments by the U. S. Department of Health,
Education and Welfare

Response A.4.a.

None required

DEPARTMENT OF PUBLIC WORKS
 C.C. Holbrook, P.E., Director
 Engineering
 Streets and Highways
 Water Services
 Sanitation
 Traffic Engineering

February 25, 1976



Mr. John E. Hagan III, Chief
 Environmental Impact Statement Branch
 U. S. Environmental Protection Agency
 1421 Peachtree Street, N.E.
 Atlanta, Georgia 30309

Dear Mr. Hagan:

Draft Environmental Impact Statement on the Arlington-
 East Service District, Wastewater Management Facilities
 Jacksonville, Florida, EPA Project No. C 120 541 010

I refer to your letter of December 26, 1975, enclosing
 a copy of the Draft Environmental Impact Statement for
 the subject project and requesting comments on the
 Impact Statement.

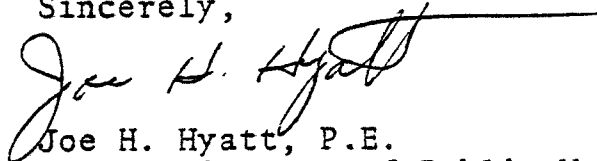
The Department of Public Works has reviewed the Draft
 Environmental Impact Statement in its entirety and
 attended the January 26, 1976, public hearing held
 on the draft statement at 7:00 p.m. in the Council
 Chambers, 15th floor, City Hall, Jacksonville, Florida.
 The statement thoroughly evaluates the environmental
 effects of the proposed action and if no action is
 taken. The statement provided a complete disclosure
 of potential impacts of all the alternatives. The
 draft statement revealed that Alternative 12 (South
 edge of Craig Field), Alternative 1 (Millcoe Road),
 Alternative 2 (Dunes area), Alternatives 4 and 5
 (East of Craig Field), Alternative 3 (Dames Point--
 Ft. Caroline Freeway), Alternative 11 (Quarantine
 Island) and Alternative 4 (North of Craig Field),
 were all reasonably close with regard to environ-
 mental effects and that Alternative 1 was shown
 to be the least costly. In the final analysis,
 there were no appreciable adverse environmental
 effects on any of the sites evaluated. However,
 there were considerable differences in the costs
 ranging from \$2 million, difference between Millcoe
 site and the Dunes area (the second most costly
 site) and \$16.4 million, difference between the
 Millcoe site and the Beacon Hills site (the most
 costly).



John E. Hagan III
February 25, 1976
Page Two

B.5.a. We concur with the administrative action of awarding grant funds to the City of Jacksonville, Florida, for the preparation of plans and specifications for a 10 MGD Wastewater Treatment Plant to serve the Arlington-East District to be located at Millcoie Road, Alternate 1a, and 13,900 feet of outfall line terminating at the edge of the maintained shipping channel in the St. Johns River.

Sincerely,

A handwritten signature in dark ink, appearing to read "Joe H. Hyatt", with a long horizontal flourish extending to the right.

Joe H. Hyatt, P.E.
Deputy Director of Public Works

JHH/ns

A.5. Response to comments by the City of Jacksonville,
Department of Public Works

Response A.5.a.

None required

A.6.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

1720 Peachtree Road, N. W.
Atlanta, Georgia 30309

8400
February 27, 1976



Mr. John E. Hagan, III
Chief, EIS Branch
Environmental Protection Agency
Atlanta, Georgia 30309

Dear Mr. Hagan:

Here are United States Forest Service, State and Private Forestry comments on the draft environmental statement entitled, "City of Jacksonville, Florida, Wastewater Management Facilities, Arlington - East Service District".

Generally, project impacts on forest lands and resources are adequately described and evaluated. We especially commend project use of a professional forester to check proposed interceptor corridors for rare and/or large tree specimen. We assume, also, that the statement on page 333 relative to the absence of any unusually large or rare trees on the proposed plant site is based on a professional forester's examination.

A.6.a.

Since the Service Area is already deficient in recreational lands and project induced growth is expected to double the present demand by Year 2002, the 144 acres of woodland proposed for buffer zone should be considered for more than passive recreational use. We recommend consultation with the local representative of the Florida Division of Forestry relative to management of the tree cover on the 200 feet wide buffer strip and the 114 acre buffer zone for aesthetic and recreational purposes.

A.6.b.

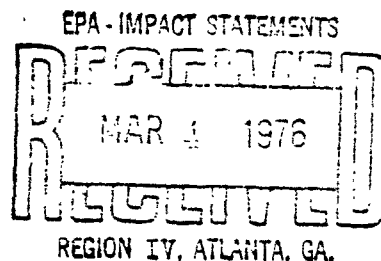
Thank you for the opportunity to review and comment on this excellent draft EIS.

Sincerely,


ROBERT K. DODSON

Area Environmental Coordinator

cc: Florida Division of Forestry



A.6. Response to comments by the U. S. Department of Agriculture, Forest Service

Response A.6.a.

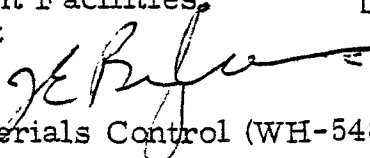
The Millcoe Road plant site as well as all other alternative sites were visited and evaluated by an EPA terrestrial biologist. His findings show no unusually large or rare species of trees existing in the area to be cleared.

Response A.6.b.

The buffer zone will initially be maintained as a passive recreation area by the City of Jacksonville Department of Recreation. Eventually, the Department will evaluate recreational needs in the area and, if warranted, propose a plan for recreational development of the buffer zone to the City Council.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SUBJECT: Review of Draft EIS for the City of Jacksonville,
Florida Wastewater Management Facilities,
Arlington-East Service District

FROM: Kenneth E. Biglane, Director 
Division of Oil and Special Materials Control (WH-548)

TO: Jack Ravan, Regional Administrator
Region IV

Attn: John E. Hagan, III
Chief, EIS Branch

DATE: MAR 2 1976

The comments of the Office of Water Program Operations on the subject EIS are enclosed. Should any of the issues raised in these comments require clarification, please contact Geraldine Werdig, Chief, Environmental Evaluation Branch (202) 245-3054.

Project Description

Location: Jacksonville, Florida on the ocean side of the St. Johns River

Proposed Action: A 10 MGD wastewater treatment plant and 13,900 feet of outfall line terminating at the edge of the maintained ship channel in the St. Johns River. The project includes interceptor lines, a sludge incinerator, and provisions for land spreading of sludge.

Fourteen alternatives were evaluated, including different sites, transmission systems, and outfalls. A citizens committee was assembled to provide input into the analysis and assist in the ranking of the alternatives.

Major Issues: Potential noise and odor impacts from a wastewater treatment plant were the main areas of concern. Extensive discussion was provided on these two areas.

OWPO Project Reviewer: David A. Eberly

Enclosure

Office of Water Program Operations
Comments on
Draft EIS for the
Wastewater Treatment Facilities,
Arlington-East Service District

This is a very good example of an issue-oriented EIS, with the primary emphasis being on the noise and odor factors. These are the areas that have apparently been of the greatest concern to the citizenry. Considerable effort has gone into an in-depth examination and evaluation of the potential effects of the alternatives as regards noise and odor. We commend the region on preparing such a good issue-oriented statement and encourage you to continue and expand the use of this approach in future EIS's. We have only a few minor comments to offer.

- A.7.a. 1. The discussion on wastes from watercraft (p. 87) should reference the proposed EPA regulations for a Marine Sanitation Device Standard (Federal Register, Vol. 40, No. 198; Friday, October 10, 1970).
- A.7.b. 2. The population increases attributed to the Westinghouse Company's Offshore Power Systems project do not quite agree with the figures in the U.S. Nuclear Regulatory Commission final EIS for Floating Nuclear Power Plants. This document should also be included in the references.
- A.7.c. 3. The second paragraph on page 321 should refer to alternatives 5 and 6 rather than 4 and 5.
- A.7.d. 4. The project cost on page 326 should be \$48,559,307, not \$48,449,307.
- A.7.e. 5. The chlorinated effluent will cause a localized kill of the animal segment of the plankton (p. 337). Although this is expected to be negligible, provisions should be made for dechlorination should the effects be greater than anticipated.

A.7 Response to comments by U. S. Environmental Protection Agency, Division of Oil and Special Materials Control

Response A.7.a.

In the Federal Register, Vol. 40, No. 198 of Friday, October 10, 1975, the EPA published proposed standards of performance for marine sanitation devices. These standards do not require the installation of a toilet facility on any vessel not so equipped but apply only to vessels on which a marine toilet facility has been installed. The U. S. Coast Guard has the statutory responsibility to implement the EPA vessel sewage standard, promulgated certification procedures, and design and construction requirements for marine sanitation devices.

Response A.7.b.

The Draft EIS states that the Westinghouse Company's Offshore Power Systems (OPS) project will employ up to 14,000 people directly and 20,000 indirectly, for a total of approximately 34,000. The U. S. Nuclear Regulatory Commission's Final EIS relating to the manufacture of floating nuclear power plants by OPS (October, 1975) agrees with this direct employment figure and goes on to assume that an in-migration of some 90,000 persons "may occur due to operation of the (floating nuclear power plant) facility and related service operations" at a rate consistent with the direct employment figure. The effects of operation of the facility on population growth in the Jacksonville area are difficult to assess. Some of the complex factors bearing upon such an assessment are discussed in the NRC impact statement. It is, however, feasible that the creation of 34,000 new jobs could bring about a total in-migration of some 90,000 persons.

Response A.7.c.

Correct; reference should have been made to alternatives 5 and 6 rather than 4 and 5.

Response A.7.d.

Correct; the project cost should read \$48,559,307 rather than \$48,449,307.

Response A.7.e.

Only as much chlorine as is needed for effective final disinfection will be used. The Jacksonville Department of Public Works expects no adverse impacts (i.e., localized plankton kill) as the result of residual chlorine in the effluent. The large dilution factors which will be present in the outfall line will ensure a zero concentration of residual chlorine at the point of discharge.



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

PEP ER-76/56

MAR 12 1976

Dear Mr. Hagan:

Thank you for the letter of December 26, 1975, requesting our views and comments on the draft environmental impact statement for Wastewater Management Facilities, City of Jacksonville, Arlington-East Service District, Duval County, Florida. Our review indicates that the proposal is adequate as it relates to mineral and cultural resources. However, several additional areas of concern are discussed below.

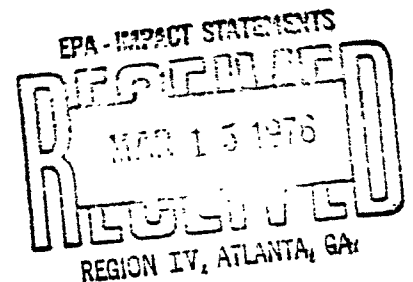
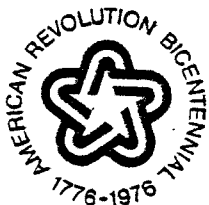
From the information provided, it appears that there will be no adverse impacts to existing public recreation areas from the plant and its interceptor line, outfall lines, and sludge disposal sites. Of the 12 alternative plant sites evaluated, only Site 10 has a recreational area within 3,000 feet.

However, there is a well-recognized secondary impact of increased growth potential in the area from the completion of this facility (see page ii, c., Secondary Impacts). The prospect of accelerated development would place a heavier strain on the existing recreational areas, which are already deficient by 700 acres (pages 131-133), to fulfill resident needs. With this in mind, we are pleased to note that the City plans to purchase and dedicate a 114-acre wooded area for recreation purposes as part of the total project (page 2 and page 303), but we would like the statement to elaborate on proposed plans for this area. Similarly, the statement should include plans for the 200-foot-wide buffer zone with vegetative screen (page 2), as this tract could also help meet some of the recreation needs mentioned on pages 131-133. In addition to the passive use anticipated in the buffer zone and the 114-acre area (page 303), the statement should address the potential for some active recreation development.

A.8.a.

A.8.b.

There may also be some potential for trail development or improved public access along rights-of-way associated with the sewer lines. The final statement should address this in the same section.



- "A 98-acre wooded area" proposed for purchase and use as a recreational area has been referred to (page 187, paragraph 1), while elsewhere it has been stated that "a 114-acre wooded area will be purchased by the City and dedicated as a recreational area" (page 2, paragraph 5). A reference has been made to a "buffer zone of 118 acres adjacent to the site" (page ii, paragraph 3), while elsewhere a reference is made to "a 114-acre buffer between the plant site and the surrounding community" (page 339, last paragraph). As far as we are able to determine, the 98-acre, 114-acre, and 118-acre areas referred to are identical. It would be advisable either to make the figures consistent or to clarify what areas are referred to.
- A.8.c.
- Figure 2-11, page 48, Arboristic Cover Types, is not helpful because the symbols for several tree types are indistinguishable from one another.
- A.8.d.
- The Flood Prone Areas map (page 58, Figure 2-13) should indicate the location of the wastewater treatment facilities to facilitate evaluation of effects of flooding. Also, potential effects of tidal flooding of the St. Johns River resulting from hurricanes and extratropical storms should be discussed.
- A.8.e.
- The statement should evaluate impacts on the shallow aquifers, although we anticipate that the net impacts would be beneficial. We also do not find any conclusions as to the effects of exporting from the area as sewage effluent much of the groundwater pumped from the Floridan aquifer; presumably this will be a necessary environmental cost; but the amounts involved should be put into perspective with the total amount available from the aquifer and with other related considerations. We find no information on sewer infiltration, inflow or exfiltration; presumably modern materials and specifications will make such losses and their effects negligible, but a proper appraisal of the project should include these aspects. The incineration method of sludge processing seems adequately described and should greatly reduce potential impacts on groundwater, if implemented (page 2, 200). We note, however, that disposal by land spreading is also under consideration to avoid costs of construction and operation of the incinerator (page 203). The statement mentions potential impacts of this less expensive method but should more specifically evaluate them. The document should also indicate mitigating measures for impacts from sludge disposal, including methods for collecting, isolating, and/or beneficiation of leachates and plans for monitoring.
- A.8.f.
- A.8.g.
- A.8.h.
- A.8.i.

A.8.j.

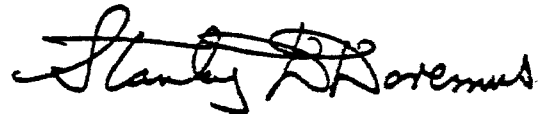
Correspondence in Appendix III discusses possible conflicts between the proposed outfall and navigation channels in St. Johns River (page 396, paragraph 3-8). The environmental statement mentions that the effluent would be disposed of in approximately 38 feet of water at a point approximately 500 feet off Quarantine Island (page 328, paragraph 3). Although potential conflicts between the outfall pipeline and the diked dredge spoil disposal area on Quarantine Island have been discussed (page 337, paragraph 1), we have found no discussion of potential conflicts with navigation channels, including the possibility of a future enlarged 45-foot-deep channel that has been referred to on page 396.

We appreciate your acceptance of our previous suggestions (letter of July 15, 1975) pertaining to acceptable plant sites and outfall locations. Furthermore, we believe that construction methods as outlined on page 358 will minimize biological damage.

We hope these comments and suggestions will be of assistance to you.

Sincerely yours,

Acting
Assistant


Secretary of the Interior

Mr. John E. Hagan, III
Chief, EIS Branch
Environmental Protection Agency
1421 Peachtree Street, N.E.
Atlanta, Georgia 30309

A.8 Response to comments by U. S. Department of the Interior,
Office of the Secretary

Response A.8.a.

Refer to response 3.6.b.

Response A.8.b.

The largest portion of the rights-of-way associated with the sewer lines are located along city streets. EPA agrees with and encourages the concept of trail development and improved public access along sewer line rights-of-way where feasible. It is, however, the responsibility of the City of Jacksonville to take such action where appropriate.

Response A.8.c.

The three buffer zone areas referred to are identical. The correct acreage is 114; refer to Exhibit 2 of Chapter II for the exact location.

Response A.8.d.

Figure 2-11 (Arboristic Cover Types) of the Draft EIS is reprinted for clarity as Exhibit 3 of Chapter I.

Response A.8.e.

The U. S. Army Corps of Engineers has conducted flood frequency studies of the St. Johns River estuary and has determined that tidal stages of approximately ten feet M.S.L. can be anticipated in the vicinity of Quarantine Island at a frequency of once in fifty years. Regulatory agency requirements and the dictates of good design practice necessitate construction of the proposed treatment facility at elevations not subject to floodings. The very small scale of figure 2-13 (Flood Prone Areas) of the Draft EIS would make it extremely difficult to accurately pinpoint the construction site. However, the U. S. Geological Survey in Jacksonville has indicated that the proposed construction site, with an elevation of approximately forty feet M.S.L., would be safe from not only the fifty year but the 100 year frequency flood as well.

Response A.8.f.

The shallow aquifer system supplies a much smaller amount of the total water used in Duval County than does the Floridan aquifer. Some 10 to 25 MGD are withdrawn from the former while the latter supplies 150 to 200 MGD plus an additional 50 to 70 MGD at Fernandina Beach (pages 72 to 73 of the Draft EIS). Ten to sixteen inches of rainfall annually is estimated as necessary to recharge the shallow aquifer system in Duval County. Rainfall in the area averages 53.4 inches per year. Impact of the proposed project on water quality of the shallow aquifer system is not expected to be adverse. Indeed, the shallow aquifer is becoming increasingly attractive as a source of water supply as the potentiometric surface of the Floridan aquifer declines. It is to be noted that withdrawal through wells is not the only source of discharge from the shallow aquifer. Springs and seeps, evapotranspiration, and downward percolation to the Floridan aquifer also act to deplete water quantity. Nevertheless, the shallow aquifer retains a more than adequate supply of water for current and projected uses.

Regarding quality of the shallow aquifer, the project is expected to have a beneficial impact since it will minimize the need for future installation of septic tank systems in areas not entirely suitable for their proper operation. This would decrease the possibility of seepage to, and subsequent contamination of, the shallow water aquifer (see pages 290-291 of Draft EIS).

Response A.8.g.

Amounts of water being withdrawn from the Floridan aquifer in Duval County, as well as the effects of this withdrawal, have been documented in Chapter II of the Draft EIS (refer to pages 72 through 75). The deepening cone of depression in the potentiometric surface of the aquifer centers around downtown Jacksonville (refer to figure 2-17 of the Draft EIS). In fact, throughout most of the Arlington area, the aquifer maintains a potentiometric head between 35 and 40 feet M.S.L. The growth supported by the proposed regional system will increase the present water supply demand by the year 2002 by approximately seventy-five percent as the population of the service area increases to a projected 167,000. However, it is to be remembered that even without the regional system, the population of the service district could increase to perhaps 185,000 (see page

343 of the Draft EIS). Thus, the year 2002 population project of 167,000 with the regional system represents no induced growth in Arlington. Further, if not allowed to take place in Arlington, this growth would undoubtedly not be eliminated but would only be dispersed to other areas of Jacksonville.

Response A.8.h.

An infiltration and inflow analysis for the Arlington-East District was completed by Sverdrup & Parcel and Associates, Inc., general consultants on the project, in December, 1973. The study investigates the extraneous water flow entering existing collection system elements which will be tributary to the proposed treatment plant. Excessive infiltration/inflow is defined as being present in a sewer system if the cost estimate for its treatment would be greater than the cost estimate for its correction. Based on this economic analysis, infiltration/inflow is not excessive in any of the areas tributary to the proposed Arlington-East treatment facility.

Response A.8.i.

The greatest environmental drawbacks to the use of sewage sludge in land spreading operations are odor and possible effects on groundwater. Methods of mitigating disagreeable sludge odors both at the treatment plant and at the land spreading site are discussed on pages 202 and 203 of the Draft EIS. As discussed in Chapter I of this document, a review of sludge disposal alternatives has been conducted to evaluate alternatives to incineration. These alternatives include land spreading, land filling, and pelletization.

Response A.8.j.

Refer to U. S. Army Corps of Engineers letter dated March 17, 1976 which appears as Exhibit 5 of Chapter II of this document.



A.9.

UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Science and Technology
Washington, D.C. 20230

March 19, 1976

Mr. John E. Hagan, III
Chief, EIS Branch
Environmental Protection Agency
1421 Peachtree Street, N.E.
Atlanta, Georgia 30309

Dear Mr. Hagan:

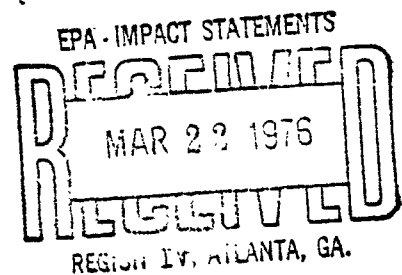
This is in reference to your draft environmental impact statement entitled, "City of Jacksonville, Florida Waste-water Management Facilities, Arlington-East Service District." The enclosed comments from the National Oceanic and Atmospheric Administration, National Marine Fisheries Service, are forwarded for your consideration.

Thank you for giving us an opportunity to provide these comments, which we hope will be of assistance to you. We would appreciate receiving six (6) copies of the final statement.

Sincerely,

Sidney R. Galler
Deputy Assistant Secretary
for Environmental Affairs

Enclosure - Memo from: NOAA, National Marine Fisheries Service
(2-17-76)





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, FL 33702

February 17, 1976

FEB 27 1976 FSE21/JRH

TO: Director
Ofc of Ecology & Environmental Conservation, EE

THRU: *for Robert L. Schuler*
Associate Director for
Resource Management, F3

FROM: William H. Stevenson *WHS*
Regional Director

SUBJECT: Comments on Draft Environmental Impact Statement -- City
of Jacksonville, Florida, Wastewater Management Facilit-
ies Arlington-East Service District (EPA) (DEIS #7601.33

The draft environmental impact statement for City of Jacksonville, Florida, Wastewater Management Facilities Arlington-East Service District that accompanied your memorandum of January 27, 1976, has been received by the National Marine Fisheries Service for review and comment.

The statement has been reviewed and the following comments are offered for your consideration.

GENERAL COMMENTS:

The statement would be much improved if assertion, conclusion, conjecture, or judgmental decision were identified as such. Modifying terms such as "significant, insignificant, healthy, marginally, and poorly" used throughout the narrative should be defined.

SPECIFIC COMMENTS:

II. The Environment Without the Proposed Action

A. The Natural Environment

3. Wetlands and Water/Land Interface

b. Biota



- A.9.a. Page 60, paragraph 1 - Inasmuch as the intertidal survey results by Tone in 1972 are cited and qualified by terms "marginally productive" or "unproductive," the statement should make an effort to
- A.9.b. denote by what comparison such conclusions are formed. Inclusion of sampling methods, the degree of taxonomical efforts used by Tone and a citation of this work in the reference section would help to clarify this viewpoint.
- A.9.c. Tone's findings show inordinately low benthic invertebrate populations, however, later in the statement, (Table 2-25, pages 109-111) sampling in Mill Cove reported by the Corps of Engineers (intertidal station 3D) showed at least 13-16 taxa and 14,758-21,910 organisms per square meter. That Tone reported 2-3 species and 128-3440 organisms/m² and used the term "marginally productive" seems incongruous to later observations that numerous species and organisms have been found in the area.
- A.9.d. Page 60, paragraph 2 - Since the term "insignificant" is used to describe benthic populations in the beach zone, the statement should point out the basis by which insignificance is concluded.
- A.9.e. Similarly, does a catch of 23 species truly indicate good diversity of fish and the great importance of shallow near-shore areas?
- A.9.f. Page 60, paragraph 4, Marsh Flora - Advanced waste treatment capabilities should be added to the benefits attributed to salt marshes. In a study of the work done and value accruable to salt marshes, potential waste assimilation work valued up to \$2500 per acre per year has been calculated.^{1/}

4. Water

b. Biota

- A.9.g. Page 99, paragraph 1 - The statement is unclear in reference to rough and game fish production in the St. Johns River. The source of the data, its application to the proposed facility, and how it relates to the commercial fishery and its purported reduction in catch per unit of effort or time should be given.

III. Alternatives

C. Development of Viable System Alternatives

^{1/} Gosselink, J.G., Odum, E.P., and R.M. Pope. 1974. The value of the tidal marsh. Center for wetland res., Louisiana St. Univ., Baton Rouge, LSU-SG-74-03. 30p.

- A.9.h. Page 257, paragraph 3 - If the routing of the outfall along Fort Caroline Road up to a disposal point opposite Ebunt Island is worthy of consideration, the route line should be depicted on one of the figures. We find this alternative particularly attractive, since it would avoid entrenching the outfall line across Mill Cove. It is stated (page 337, paragraph 1) that a 14-foot deep trench of unknown width would be dug some 7,000 feet across Mill Cove with implementation of proposed Alternative 1Q. The statement further relates that a "huge quantity" of spoil would be placed alongside the trench, but does not describe the methodology. We suggest, therefore, that the statement include:
- A.9.i.

- (a) the amount of material to be excavated;
- (b) a description of the excavation methods ; and
- (c) the fate of excess spoil materials once the pipeline is emplaced.

- In regard to point (c), it should be considered that a 7,000 by 4-foot outfall pipe across Mill Cove will replace a volume of material at least equal its own. This would be at least 88,000 cubic feet (3.1416 x 4' x 7,000') or about 3,259 cubic yards of spoil. The EIS should consider placement of this material to a location where it would not impair circulation, navigation, or biota in Mill Cove or adjacent waters.
- A.9.j.

The DEIS should, therefore, completely discuss the alternative of routing the outfall pipe along Fort Caroline Road to a disposal point opposite Blount Island (Alternative 1B). This alternative would forego construction difficulties in Mill Cove, concomitant losses of estuarine resources, and possibly allow easier repair of the line if needed in the future. We further note that Alternative 1B had the second highest EIS rating (Table 3-20, page 317) and was the third least expensive for project costs (Table 3-23, page 325).

9. Aquatic Flora and Fauna

- A.9.k. Page 292, paragraph 2 - Documentation should be provided for the contention that the chlorinated effluent will cause a very localized planktonic kill, that significant biostimulation is unlikely, and that contact by fishes with the outfall plume will not be detrimental.

VI. Adverse Impacts which Cannot be Avoided and Available Mitigative Measures

A. Adverse Impacts

- A.9.1. Page 355, number 15 - The DEIS should include more specific descriptions of the impact on the aquatic animal community during and after construction. The trench across Mill Cove will run about 7,000 feet, will be about 14 feet deep, and will possibly require digging a work channel. Also, once the pipe is emplaced, a location for an estimated 3,200 cubic yards of spoil must be found.

B. Mitigative Measures to Adverse Impacts

- A.9.m. Page 358, number 13 - In the event that the proposed Mill Cove plant is built, plans should seriously consider rerouting the proposed outfall line away from Marian Island, not placing spoil on adjacent marsh, and progressive backfilling of the cut. In our opinion, however, the best mitigative effort would be to reroute the outfall line along Fort Caroline Road to an exit point opposite Blount Island (Alternative 1B).

It is requested that one copy of the Final EIS be sent our Area Supervisor, Environmental Assessment Division, NMFS, P.O. Box 4218, Panama City, FL 32401.

cc:
F34, NMFS, Washington, D.C. (3)
FSE213, Panama City, FL

A.9. Response to comments by U. S. Department of Commerce,
National Oceanic and Atmospheric Administration,
National Marine Fisheries Service

Response A.9.a.

Reference is made to Table 2-10 of the Draft EIS. One species was collected at Clapboard and Brown's Creeks and none at Back River. These results were interpreted as an indication of a lack of biologic productivity. Six species were collected in Mill Cove leading to an interpretation of the area as marginally productive.

Response A.9.b.

Reference is made to the final report entitled "An Ecological Survey of Blount Island with Particular Reference to Back River" prepared by Frederick C. Tone of Battelle, Inc. for the Jacksonville Port Authority. The report covers the period January 6, 1972 through March 31, 1972 and was completed April 28, 1972. Tone's report was appended to the Final EIS for Blount Island Development completed by the U. S. Army Corps of Engineers, Jacksonville, in August 1973. This EIS was cited as a reference in the Arlington-East Draft but the Tone report was not cited separately.

Response A.9.c.

Refer to the last paragraph of page 109 of the Draft EIS.

Response A.9.d.

Refer to the last paragraph of page 57 of the Draft EIS.

Response A.9.e.

The Tone survey which yielded 23 species of fish did indicate a good diversity per se; that is, at the time of the survey. Admittedly, however, neither one nor several catches is sufficient to assess the population and utilization of the near shore area. A comprehensive sampling effort of 1 to 2 years would be needed for this purpose. Available information was used by EPA in the Draft EIS (i.e., the Tone survey); more extensive efforts were, unfortunately, not available.

Response A.9.f.

The value of the marsh-estuarine aquatic system in providing advanced waste treatment has been discussed in the Draft EIS (refer to page 54). Further, the reference cited by NOAA in their letter of February 17, 1976 was used and cited by EPA as a reference (see page 380 of Draft EIS).

Response A.9.g.

The source of the data is shown on page 99 of the Draft EIS as the Water Quality Management Plan for the City of Jacksonville. The application of the data to the proposed facility is to show one aspect (i.e., declining productivity) of an estuary long subjected to excessive waste loadings. Finally, the Draft EIS is clear in stating that the fisheries catch realized by each fisherman is decreasing for equal time spent.

Response A.9.h.

The Blount Island outfall would be installed parallel to Fort Caroline Road thence northward across the Beacon Hills subdivision entering the St. Johns River near the southeast corner of Blount Island as shown on maps for alternatives 4 through 8 in the Draft EIS and alternative 12 in this document.

Response a.9.i.

Refer to Exhibit 8 of Chapter II for outfall line construction details and conditions.

Response A.9.j.

All excess spoil will be placed on Quarantine Island at a site approved by the Corps of Engineers.

Response A.9.k.

Refer to response A.7.e. for discussion of the effects of residual chlorine in the effluent. Significant biostimulation (i.e., plankton blooms) as well as adverse effects to fishes are unlikely due to the level of treatment the effluent will have received and due to the large dilution factors available at the point of discharge.

Response A.9.1.

Impact on the aquatic animal community during and after construction of the outfall across Mill Cove has been addressed in the Draft EIS. Refer to pages 291, 293, and 337 of that document.

Response A.9.m.

Crossing Marian Island with the outfall line will result in temporary disturbance of approximately two acres salt marsh*. From the outfall location map included in Exhibit 8 of Chapter II, it may be seen that routing the outfall around the island would result in considerably greater disturbance (i.e., trenching) of the bottom of Mill Cove. Further, Marian Island is submerged at mean high tide (refer to engineering drawings included in Exhibit 9 of Chapter II) and should thus be very responsive to natural restoration after completion of mechanical restoration by the contractor.

*(about one-half acre on Marian Island itself).

STATE OF FLORIDA



Department of Administration

Division of State Planning

660 Apalachee Parkway - IBM Building

TALLAHASSEE

32304

(904) 488-2401

 Reubin O'D. Askew
GOVERNOR

 R. G. Whittle, Jr.
STATE PLANNING DIRECTOR

 Lt. Gov. J. H. "Jim" Williams
SECRETARY OF ADMINISTRATION

March 23, 1976

Mr. Jack E. Ravan, Regional Administrator
U.S. Environmental Protection Agency - Region IV
1421 Peachtree Street, N.E.
Atlanta, Georgia 30309

Dear Mr. Ravan:

Functioning as the state planning and development clearinghouse contemplated in U.S. Office of Management and Budget Circular A-95, we have reviewed the following draft environmental impact statement:

City of Jacksonville, Florida, Wastewater Management Facilities
Arlington-East Service District SAI #76-1373E

During our review, we referred the environmental impact statement to the following agencies, which we identified as interested: Department of Agriculture and Consumer Services, Department of Community Affairs, Department of Environmental Regulation, Department of Health and Rehabilitative Services, Department of Natural Resources, Department of State, Department of Transportation, Game and Fresh Water Fish Commission and the St. Johns River Water Management District. Agencies were requested to review the statement and comment on possible effects that actions contemplated could have on matters of their concern. Letters of comment on the statement are enclosed from the Department of Community Affairs, Department of Environmental Regulation, Department of Natural Resources, Game and Fresh Water Fish Commission and the St. Johns River Water Management District. The Department of Agriculture and Consumer Services, Department of Health and Rehabilitative Services, Department of State, and Department of Transportation reported no adverse comments by telephone.

We have reviewed the draft document and the agencies' review comments thereon. Based upon this review and conference held in Tallahassee on March 12, 1976, attended by representatives from state, regional and city agencies, we find that considerable planning and design work has already been completed for proposed Alternative One. We further find that

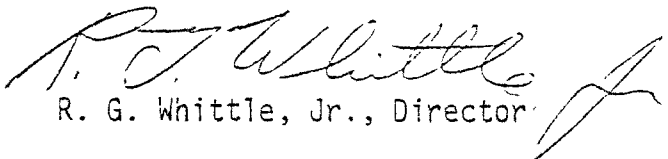
Mr. Jack E. Ravan
March 23, 1976
Page Two

after evaluating the overall economic and environmental factors relating to the twelve proposed alternatives, Alternative One is generally acceptable and, if immediately implemented, may abate a critical pollution problem. However, we recommend that the effluent discharge at the outfall line on Quarantine Island be re-evaluated after the Corps of Engineers has completed their river modeling study to determine its affect on Mill Cove..

In accordance with the Council on Environmental Quality guidelines concerning statement on proposed federal actions affecting the environment, as required by the National Environmental Policy Act of 1969, and U.S. Office of Management and Budget Circular A-95, this letter, with attachments, should be appended to the final environmental impact statement on this project. Comments regarding this statement and project contained herein or attached hereto should be addressed in the statement.

We request that you forward us copies of the final environmental impact statement prepared on this project.

Sincerely,


R. G. Whittle, Jr., Director

RGW:k:em

Enclosures

cc: Mr. John Bethea
Mr. Charles Blair
Mr. Robert Williams
Mr. J. Landers
Mr. Joe Hyatt

Mr. Harmon Shields
Mr. William Ravenell
Mr. Wayne Voigt
Mr. Jack Merriam
Mr. W. N. Lofroos

Mr. H. E. Wallace
Mr. Walter O. Kolb

State of Florida



DEPARTMENT OF NATURAL RESOURCES

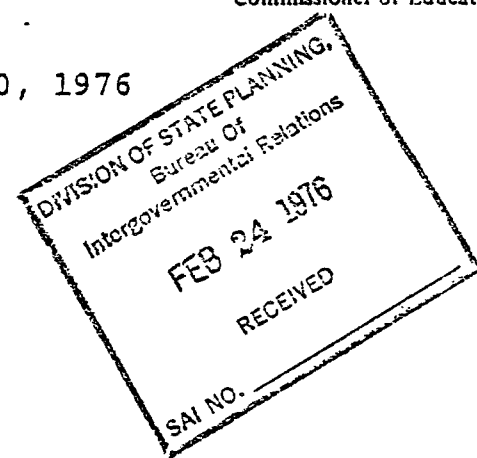
HARMON W. SHIELDS
Executive Director

CROWN BUILDING / 202 BLOUNT STREET / TALLAHASSEE 32304

REUBIN O'D. ASKEW
Governor
BRUCE A. SMATHERS
Secretary of State
ROBERT L. SHEVIN
Attorney General
GERALD A. LEWIS
Comptroller
PHILIP F. ASHLER
Treasurer
DOYLE CONNER
Commissioner of Agriculture
RALPH D. TURLINGTON
Commissioner of Education

February 20, 1976

Mr. Wayne C. Voigt, Chief
Bureau of Intergovernmental Relations
Division of State Planning
660 Apalachee Parkway, IBM Building
Tallahassee, Florida 32301



Dear Mr. Voigt:

Reference is made to your memorandum dated February 4 requesting review and comments on SAI 76-1373E -- Draft Environmental Impact Statement, City of Jacksonville, Wastewater Management Facilities, Arlington-East Service District.

Pursuant to your request the Department staff has reviewed the Draft Environmental Impact Statement and provides the following comments for your consideration:

"The staffs of the Bureau of Coastal Zone Planning and the Bureau of Marine Science and Technology have reviewed the environmental impact statement. The following comments represent the composite views of both bureaus:

A.10.a.

1. Alternatives 1, 2 and 3 do not appear to be the most preferable for a project of this magnitude. The necessity of crossing Mill Cove, a water body currently suffering sedimentation problems as well as water quality problems, with a 13,800 foot outfall line does not appear to be consistent with the goals and objectives of either bureau. It is our concern that the amount of construction within the water body and the subsequent environmental destruction could seriously affect an area whose health is already marginal. Moreover, the end of the

Mr. Wayne Voigt
Page Two
February 20, 1976

pipe itself will jut into the St. Johns River at one of the narrowest strictures of the commercial ship channel. While this may be a minimal safety concern it would be sounder planning to locate any outfall pipe at a wider portion of the river.

- A.10.b. 2. Alternatives 6, 7 and 8 also appear to be inappropriate for a project such as the one at hand. These alternatives would necessitate modification of a large freshwater swamp immediately east of Craig Airfield. Because of the water retention, filtration, recharge and wildlife habitat functions of large swamps, it appears that the environmental trade-offs involved in destroying the integrity of this habitat could override the benefits of an integrated sewage system for the Arlington area.
- .10.c. 3. Staff recommends against Alternatives 9 and 11. The Florida Coastal Zone Management Atlas indicates that both sites are located within the statistical 100 year hurricane flood zone. The amount of investment necessary to protect such a large public work does not seem to be warranted and would not be sound coastal zone management.

.10.d. The bureau staffs would, therefore, recommend consideration of Alternatives 4, 5 and 10 as the most feasible. We do note that Alternative 4 contains some swamp area. It appears, however, that the swamp comprises no more than 1/4 to 1/5 of the area to be utilized. Further, the swamp is not part of a major system such as the swamp east of Craig Field, but appears to be a remnant area, modified by past development and contributing little environmental value to the area. Alternative 4 would also offer the advantage of utilizing lands adjacent to a moderately busy airfield (more than 100,000 flights annually) in a compatible land use design. The environmental trade-offs notwithstanding, it appears that Alternative 4 should definitely receive serious consideration.

Alternative 5 appears to be quite suitable for this activity and should be considered seriously as well. Since the area in question has extremely sparse development presently,

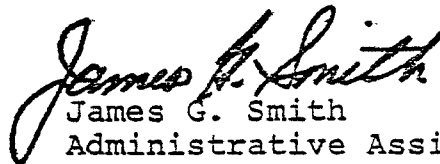
Mr. Wayne Voigt
Page Three
February 20, 1976

planning should insure that compatible land uses develop in and around this site as the area grows.

Finally, Alternative 10 offers most of the advantages of either Alternative 4 or 5. Additionally, it offers the benefit, in case of an accident or spill, of location close by a large relatively natural marsh system should it be necessary to dispose of untreated or semi-treated effluent in cases of peak overload, the assimilative capacity of the marsh itself could be used to take up this overload without affecting the St. Johns River itself. While it is recognized that the St. Johns River along this reach is Class III waters and would never be used for commercial shellfishing, etc., it is our opinion that the maintenance and improvement of St. Johns River water quality could conceivably be aided by building in this safety feature.

The combined staffs of the bureaus would, therefore, recommend consideration of the three afore-mentioned alternatives as most feasible for the project at hand."

Sincerely,

A handwritten signature in cursive script, reading "James G. Smith".

James G. Smith
Administrative Assistant

JGS:rt

DEPARTMENT OF COMMUNITY AFFAIRS
Division of Technical Assistance

A-95 COMMENTS

Originator U.S. Environmental
Protection Agency

Subject Wastewater Management
Facilities for Jacksonville

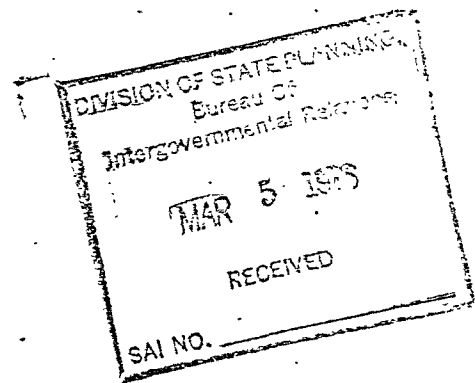
AI # 76-1373E

Reviewer J. H. Sayes

Date 3/2/76

Staff review has been made of the Environmental Impact Statement. The project would meet the goals and objectives of this Department. Therefore, we would have no adverse comments.

- 10.e. We would note that the facilities are planned for or will pass through areas prone to the 100 year flood. We will assume that the facilities will be flood proofed as required.





STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

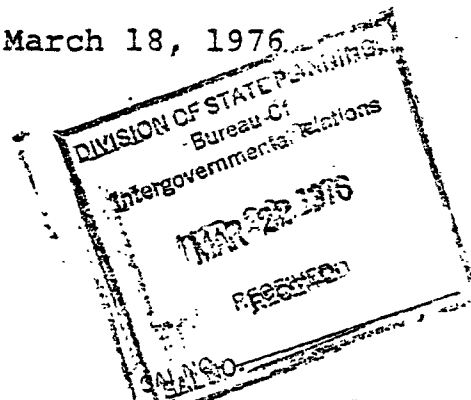
2562 EXECUTIVE CENTER CIRCLE, EAST
MONTGOMERY BUILDING
TALLAHASSEE, FLORIDA 32301

REUBIN O'D. ASKEW
GOVERNOR

JOSEPH W. LANDERS, JR.
SECRETARY

March 18, 1976

Mr. Wayne Voigt
660 Apalachee Parkway
Division of State Planning
Department of Administration
Tallahassee, Florida 32304



Re: Environmental Impact Statement
Wastewater Management Facilities
Arlington East District,
Jacksonville
S.A.I. Project No. 76-1373E

Dear Mr. Voigt:

Our Department has reviewed the subject environmental impact statement and is generally in agreement with the final conclusions. Planning for this particular project started about 1970 and as a result of this planning effort, our Department certified to the Environmental Protection Agency, a Step 2 grant application (for development of project plans & specifications) on April 9, 1974. Since our Step 2 certification, some controversy arose from residents in the area concerning the proposed plant location on Millco Road. This site location controversy prompted the Environmental Protection Agency (EPA) to declare and produce the subject environmental impact statement.

The project consists of a 10 MGD activated sludge treatment facility (25 MGD ultimate year 2002) located on a 46.98 acre site. The plant will discharge effluent through a 13,900 ft.-48 inch outfall including 7,500 ft. of subaqueous line across Mill Cove and Quarantine Island to a 35 ft. depth on the near slope of the shipping channel on the St. Johns River. This particular discharge point was chosen by city coordination with the U.S. Corp of Engineers. In an attempt to further isolate the plant, the city of Jacksonville will purchase 114 acres adjacent to the plant site to be used by area residents as a passive recreation area. The proposed site on

Mr. Wayne Voigt
Page Two
March 18, 1976

Millcoe Road has the advantage of being near the centroid of the service area, which translates into the shortest possible lengths of transmission lines in order to get sewage flow to the plant. This particular fact is why alternative No. 1 (Millcoe Road site) is nearly 2.0 million dollars less than the next nearest alternative. Since almost any project such as buildings, roads, bridges, treatment systems, etc., causes environmental damage to some degree, it is an advantage to the environment to keep sewage line lengths as short and direct as possible.

The proposed sewage treatment outfall line construction will cause some short term stream erosion and sedimentation, however, no long term impacts are anticipated from those now existing. It will improve the tributary streams however.

This project will immediately, upon completion, phase out four of six city owned treatment systems in this service area presently discharging to tributaries and eventually will phase out other systems in the service area.

The estimated project cost for this project in 1974 was about 26 million dollars. The current estimate of the project cost is 48.5 million. The project cost has almost doubled in about two years. Any further delay in the project (for example change in treatment plant site and/or outfall location) will not only prolong below-standard pollution discharges in the area, but will also mean escalation in project costs with the necessity or higher sewer service charges for area customers.

In summary, it is our concern to:

- 1) Abate pollution in the area by removal of below-standard discharges to tributaries of the St. Johns River.
- 2) Preservation of high quality waters and other environmental factors.
- 3) Alleviation or prevention of groundwater contamination.

It is our opinion based on voluminous data presented in the environmental impact statement, that the proposed Millcoe Road project will meet these goals with a minimum of environmental damage, and, further, it is the most cost effective alternative of those presented.

Sincerely yours,

Howard L. Rhodes

Howard L. Rhodes, P.E.
Chief, Wastewater Management
and Grants

HLR/tmh
cc: Robin Fletcher

FLORIDA GAME AND FRESH WATER FISH COMMISSION

RANDOLPH R. THOMAS, Chairman
Jacksonville

E. P. "SONNY" BURNETT, Vice Chairman
Tampa

HOWARD ODOM
Marianna

DONALD G. RHODES D.D.S.
Satellite Beach

GEORGE G. MATTHEW
Palm Beach

DR. O. E. FRYE, JR., Director
H. E. WALLACE, Deputy Director
R. M. BRANTLY, Deputy Director



FARRIS BRYANT BUILDING
620 South Meridian Street
Tallahassee, Florida 32304

March 19, 1976

Mr. Wayne C. Voigt
Bureau of Intergovernmental Relations
Department of Administration
620 South Meridian Street
Tallahassee, Florida 32304

Re: SAI 76-1373, City of Jacksonville
Arlington-East Service District
Wastewater Management Facilities

Dear Mr. Voigt:

We have reviewed the draft environmental impact statement for the proposed Arlington-East Service District Wastewater Management Facilities and offer the following assessment. Our comments are provided relative to our responsibilities of protecting the state's fish and wildlife resources.

The City of Jacksonville, in conjunction with Flood and Associates consulting firm and Sverdrup and Parcel engineering firm, proposes to construct regional wastewater treatment facilities to service the Arlington-East District. The project will provide for (1) the removal of inadequately treated wastewater that presently flows into tributary streams and the St. Johns River, and (2) reduction of adverse conditions resulting from the operation of septic tank systems.

The operation of the waste treatment facility will discharge 10 million gallons per day and ultimately 25 million gallons per day of secondary treated wastewater into the St. Johns River and will have other minor impacts such as operational noise and odor. The construction of the project will probably increase the potential for development of areas that do not have this potential presently.

The primary concerns of this agency are related to the potential impact of the project on water quality in Mill Cove and problems with plant site placement. This assessment is not intended to restrict the progress of the project, since implementation will be a significant factor in reducing the problems of the St. Johns River. Rather, the purpose for our concerns and recommendations is to reduce, as much as possible, the potential problems associated with the construction of the plant and the discharge into the river.

The City of Jacksonville has recommended alternative #1 (Millcoe Road System) as the most viable site for construction of the proposed plant. This site is located between Merrill Road and Monument Road, about 2.5 miles due south of Mill Cove. It is about 47 acres in size and has an average elevation of 40 feet mean sea level, the southern portion being well above the highest flood stage of the extreme lower St. Johns River.

The treated plant effluent would be discharged through 13,900 feet of 48 inch outfall line, including 7,500 feet of subaqueous line, north across Mill Cove and Quarantine Island to the main channel of the St. Johns River.

The portion of the tract to be affected is a sand ridge, vegetated by long leaf pine and turkey oak. Wire grass is the primary ground cover. The upper sand ridge slopes to a marshy area through which a small creek runs. Several hydric species of plants occur here including pickerel weed, bulrush and cinnamon fern. Maples, gums and scattered cypress occur in this area. The applicant has indicated this zone will not be affected.

Inasmuch as the area proposed for the plant is within a fairly populated and developed area, and trends show the population increasing in this vicinity, it is our opinion that the low to moderate wildlife habitat that exists now will soon be lost to community expansion. We have no objections to the plant being built at this site. We do, however, have several concerns regarding the outfall pipe that traverses Mill Cove and Quarantine Island. After discussing the matter with representatives from the City of Jacksonville, it is our opinion that several extremely pertinent factors have not been adequately examined. First, there have been no studies involving the fate of the effluent after discharge into the river 10.f.(DEIS, page 363, paragraph 2), and it is our opinion that the possibility of backflow into Mill Cove is considerable. This possibility is heightened by two factors: (1) There will be a barrier placed riverward of the outfall which is designed to disperse the effluent. It appears to us that this will keep the treated water close to shore and thus will accentuate movement into Mill Cove as the tide fluctuates, and (2) the effluent can enter Mill Cove at two points, one at the east end of Quarantine Island and the other at the west end of Quarantine Island. In fact, this point of discharge is probably the site location with the highest potential of allowing backflow into Mill Cove.

The Corps of Engineers has constructed a model of the lower St. Johns River basin and is studying the hydrographics of this area. These results are due in the next few months and this may aid the concerned agencies in the answer to questions relative to the water movements into Mill Cove. We feel it is important to consider this point since the pipe will discharge 2,500 pounds (and ultimately about 6,300 pounds) of BOD per day into the river. Since Mill Cove has incurred considerable silting in the past few years it is recognized that the system has problems with adequate circulation, and if backflow of the effluent would occur, these problems would only be compounded by further water quality degradation.

Mr. Wayne C. Voigt
Page three

Regarding plant siting, we feel that the City of Jacksonville and the consultants should have considered the possibility of utilizing available natural systems for points of discharge for the outfall pipe. For instance, site #5 is located on a xeric pine ridge that slopes quickly to a series of tidal creeks and marshes that ultimately dissipate into the St. Johns River. While we are uncertain of the effects of this volume of water being discharged into this marsh area, there remains the possibility that this system could accomodate this flow and could provide a free filtration system for the effluent before it reaches the river. If this is a viable option, the potential problems of damaging the St. Johns River system with the effluent BOD and suspended solid loads would be considerably reduced.

In conclusion, the aims and goals of this agency would not be served by delaying this project for another year. On the other hand, we want the best possible solutions to the problems of the St. Johns River. If feasible, we feel that the applicants should attempt to relocate the outfall pipe away from the openings into Mill Cove and possibly to a site where natural filtration systems could be utilized to further cleanse the effluent. If further assistance is required, please contact us.

Sincerely,



H. E. Wallace
Deputy Director

HEW/GAH/dg

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

ROUTE 2 BOX 695
PALATKA, FLORIDA 32077

TELEPHONE 904-325-5383

March 23, 1976

MEMO TO: Mr. Walter Kolb

FROM: Jack Merriam *JM*

SUBJECT: Arlington East Sewage Treatment Plant

As an outcome of the information provided in the March 12 meeting which you held in Tallahassee, I would like to modify my original comments to you on this project. The environmental impacts of sites number 1 and 2 are not different enough to warrant additional time delays and costs. However, the two disposal sites may have significantly different environmental impacts. My analysis favored the Blount Island site over the Quarantine Island site.

A.10.h. There are still some unanswered questions concerning the impact of the Quarantine Island disposal alternative upon Mill Cove. It seems imperative that the impact of the Quarantine Island outfall upon Mill Cove be adequately assessed before construction is begun. If it can be demonstrated that the outfall will not cause new problems in Mill Cove or exacerbate existing problems, I would be better able to support the Quarantine Island site over the Blount Island site.

JM/jba

A.10. Response to state agency comments forwarded by
the State Planning and Development Clearinghouse (A-95)

Response A.10.a.

Refer to Exhibit 4 of Chapter II for comments relative to the project's impact on water quality of Mill Cove. Refer to Exhibit 5 of Chapter II for comments relative to the relationship between the outfall line and the commercial ship channel in the St. Johns River.

Response A.10.b.

Choice of site 7-8 would eliminate approximately 46 acres of wetland habitat while site 5-6 is covered predominantly with longleaf pine and turkey oak. Site 7-8 is ranked lower than site 5-6 primarily due to its effects on freshwater wetlands. In any case, both sites are not among the highest rated alternatives from an environmental standpoint (refer to impact ratings shown in Chapter 3 of the Draft EIS).

Response A.10.c.

Sites 9 and 11 are both less than 10 feet above mean sea level and measures which would be necessary to prepare them for construction are described in the Draft EIS (pages 193 and 194). Once again, both sites are not among the higher rated alternatives from an environmental standpoint.

Response A.10.d.

The alternative analysis appearing in Chapter III of the Draft EIS gave serious consideration to all alternatives. It is noted that the choice of site 4 would eliminate 31 acres of cypress swamp (page 279 of Draft) while the choice of site 10 would eliminate approximately 46 acres of mature hammock, the cover type least abundant within the service district (page 280 of Draft). As seen in the environmental impact ratings, site 5-6 was rated relatively high environmentally; choice of either of these alternatives, however, would also incur relatively high costs.

Response A.10.e.

Refer to response A.8.e.

Response A.10.f.

Refer to Exhibit 4 of Chapter II.

Response A.10.g.

As stated on page i of the Draft EIS, and discussed at length throughout that document, the project will provide for the removal of inadequately treated wastewaters from tributary streams.

Response A.10.h.

Refer to Exhibit 4 of Chapter II.



STATE OF FLORIDA

Department of Administration

Division of State Planning

660 Apalachee Parkway - IBM Building

TALLAHASSEE

32304

(904) 488-2401

Reubin O'D. Askew
GOVERNOR

R. G. Whittle, Jr.
STATE PLANNING DIRECTOR

Lt. Gov. J. H. "Jim" Willis
SECRETARY OF ADMINISTRATION

March 29, 1976

Mr. Jack E. Ravan, Regional Administrator
U.S. Environmental Protection Agency - Region IV
1421 Peachtree Street, N.E.
Atlanta, Georgia 30309

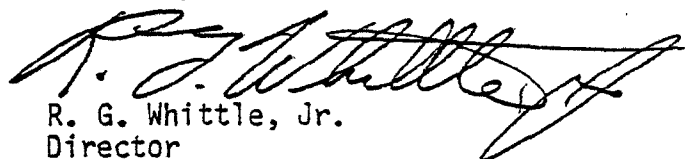
Dear Mr. Ravan:

In a letter dated March 23, 1976, we reviewed and commented on the following draft environmental impact statement:

City of Jacksonville, Florida, Wastewater Management
Facilities Arlington-East Service District SAI # 76-1373E

Since that time we have received amended comments from the Department of Natural Resources which we are forwarding to you. We request that you consider these comments along with those previously sent.

Sincerely,


R. G. Whittle, Jr.
Director

RGW:K:ga

Enclosure

cc: Mr. John Bethea	Mr. Joe Hyatt	Mr. W. N. Lofroos
Mr. Charles Blair	Mr. Harmon Shields	Mr. William Ravenell
Mr. Robert Williams	Mr. Wayne Voigt	Mr. H. E. Wallace
Mr. J. Landers	Mr. Jack Merriam	Mr. Walt Kolb

State of Florida



DEPARTMENT OF NATURAL RESOURCES

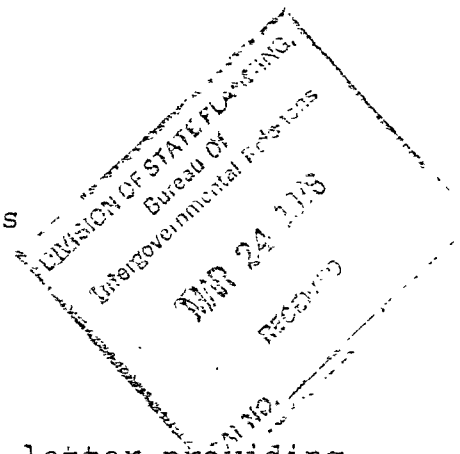
HARMON W. SHIELDS
Executive Director

CROWN BUILDING / 202 BLOUNT STREET / TALLAHASSEE 32304

REUBIN O'D. ASKEW
Governor
BRUCE A. SMATHERS
Secretary of State
ROBERT L. SHEVIN
Attorney General
GERALD A. LEWIS
Comptroller
PHILIP F. ASHLER
Treasurer
DOYLE CONNER
Commissioner of Agriculture
RALPH D. TURLINGTON
Commissioner of Education

March 19, 1976

Mr. Wayne C. Voigt, Chief
Bureau of Intergovernmental Relations
Division of State Planning
660 Apalachee Parkway, IBM Building
Tallahassee, Florida 32301



Dear Mr. Voigt:

Reference is made to our February 20 letter providing comments on SAI 76-1373E -- Draft Environmental Impact Statement, City of Jacksonville, Wastewater Management Facilities, Arlington-East Service District.

The attached modified comments by our Bureau of Coastal Zone Planning are provided for your consideration.

Sincerely,

James G. Smith
James G. Smith
Administrative Assistant

JGS:rt

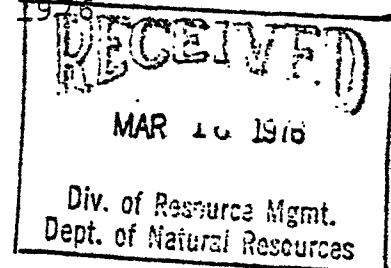
Enc.



State of Florida
DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE MEMORANDUM

March 15, 1976



TO: Charles M. Sanders, Director
Division of Resource Management

FROM: Bruce Johnson, Chief
Bureau of Coastal Zone Planning *BJ*

RE: March 12, Clearinghouse, Subject: SAI 76-1373E, Arlington
East Wastewater Treatment Facility

As a result of additional information provided by the Jacksonville Public Works Department and their consultants on the Arlington East Wastewater Treatment Facility, the Bureau of Coastal Zone Planning and the Bureau of Marine Science and Technology wish to offer the following modified comments as their recommendation to the Clearinghouse on this project:

- A.11.a. 1. It does appear that alternate 1 is a feasible site particularly in light of the total cost as compared with that of the other sites considered. If this site is chosen, however, we would prefer that all possible consideration be given to rerouting the outfall pipe through the Beacon Hills section rather than through Mill Cove and across Quarantine Island.
- A.11.b. 2. It is also apparent that sites 5 and 6 are suitable as well as site 10. In case of the impossibility of utilizing site 1 these alternatives would be more preferable than any of the others herein presented.

It is, therefore, our opinion that there is little difference between alternates 1, 5, 6, and 10 with the exception of the potential detriment associated with the proposed outfall line of alternate 1 now crossing Mill Cove. We would, then, recommend realignment of the outfall if at all possible.

Thank you for the opportunity to comment.

BJ:tls

A.11. Response to amended comments from the State of Florida
Department of Natural Resources forwarded by the State
Planning and Development Clearinghouse (A-95)

Response A.11.a.

Chapter III of the Draft EIS gave extensive
consideration to the Blount Island outfall. For further
information relative to the project's impact on Mill Cove
refer to Exhibits 4 and 8 of Chapter II.

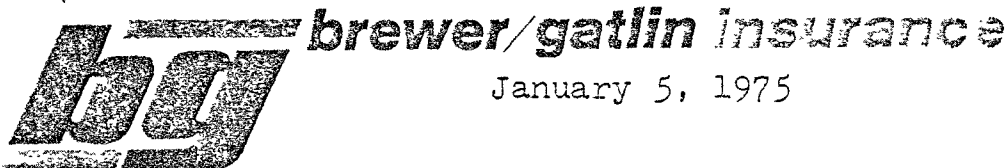
Response A.11.b.

Refer to response A.10.d.

PART B

INDIVIDUAL COMMENTS ON THE DRAFT EIS

Presented in this section are those letters sent directly to EPA by private individuals commenting on the Draft EIS. The issues raised by these people have been addressed elsewhere in this document and/or in the Draft. In addition, most of these letters have been answered directly under separate cover. Those that have not are answered herein. Presentation is made in the order in which the letters were received by the Agency.



brewer/gatlin insurance

January 5, 1975

1056 OAK STREET
JACKSONVILLE, FLORIDA 32204
(904) 358-3372

Mr. Jack E. Ravan, Regional Administrator
United States
Environmental Protection Agency
Region IV
1421 Peachtree Street N.E.
Atlanta, Georgia 30309

Re: EPA Project C 120541
Arlington East Service District
Waste Water Management Facilities
Jacksonville, Florida

Gentlemen:

As a member of the citizens advisory committee appointed by your agency to review alternative sites for the above referenced facility I am extremely disappointed with your approval of the Mill Coe site. As your records indicate, I do not live within the affected area. I represented the Jacksonville Area Chamber of Commerce and was one of five committee members representing the community at large.

After numerous hours of reviewing environmental and cost data for the proposed Arlington East facility the committee recommended a site in the Dunes area north of Regency Square. The only committee members not agreeing with this site selection were City of Jacksonville officials. Four of the five city representatives voted against the committee site recommendation. The fifth official, a councilman representing the Arlington area voted in favor of the committee recommendation.

While I understand the manner in which the data was weighed in order to arrive at your final decision to approve the Mill Coe site, I do not feel that the Environmental Protection Agency gave sufficient weight to the input of the community. Since the citizens on the committee (other than city officials) all agreed that the Dunes area was most favorable and the cost differential was negligible, it would seem that that site would have been the logical choice. It is certainly the best site environmentally according to your survey.

Have we arrived at the point in time where people are not served by government but mandated by it? I certainly hope not. I personally feel that the intent of the advisory committee was good and that if the Mill Coe site be finally



Page 2

Mr. Jack E. Ravan
Environmental Protection Agency
January 5, 1976

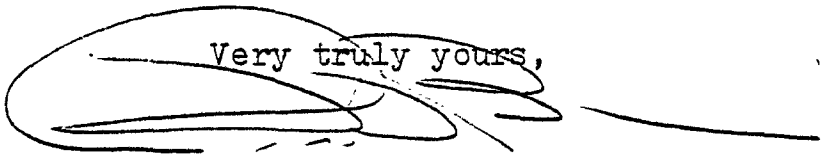
selected that not only have we as committee members wasted a great deal of time, but that your Agency and the City of Jacksonville would be making a sham of the process intended to aid citizens in the selection of their community environmental destiny.

Obviously I intend to be present at the public hearing on January 26, 1976 and make my feelings known. I'm not sure that the outcome of this hearing will be given much credence since the committee recommendation certainly was not.

I urge that you reconsider the approval of the Mill Coe site and that the original site selected by the City of Jacksonville and later selected by the advisory committee, Dunes Area I, be approved as the final site for this most important facility.

Thank you for your consideration.

Very truly yours,



Thomas F. Brewer

TFB/ft

CC: Hon. Hans Tanzler, Mayor
City of Jacksonville

Hon. Charles E. Bennett
Congressman

Assistance Committee Members

1924 Holly Oaks Lake Road West
Jacksonville, Florida
January 9, 1976

President Gerald Ford
1600 Pennsylvania Avenue NW
Washington, D. C.

Dear Mr. President:

As a citizen of a small community, Holly Oaks Forest, a subdivision in Jacksonville, Florida, I, along with I'm sure all of our residents, wonder if we any longer have any voice in our Government.

The City of Jacksonville purchased 46 acres adjoining our community to build a major Sewage Treatment Plant. If we were to overlook all of the obvious reasons for not wanting this plant, the size alone makes it totally incompatible with our residential area.

We requested an Environmental Impact study, and the EPA finally selected a 15-man Citizens Committee to study the 12 sites under consideration: 5 city members, 5 interested parties, and 5 disinterested. After much study on their part, the site chosen was not our Milloco site but a sand dune area devoid of homes and wildlife and ideal for heavy industry. Among those voting for this sand dune was a Chamber of Commerce member and a representative from the League of Women Voters, both among the five disinterested citizens. Only 4 of the 5 city members voted for our site. The final citizens vote taken at its last official meeting recommended the dunes site by a vote of 9 to 4.

In spite of the Citizens Committee study and recommendation, the EPA has now issued its study which supports the city's preselected site: our adjoining property.

We have requested help thru all channels including our Congressman who was quoted in our Times-Union newspaper as saying "it was a political decision and he could not see why a Federal Agency was getting involved in it; and he though such decisions should be left to local officials." This makes us wonder why we have an EPA.

It is impossible to relate our two years of frustration. We believe this site will set a precedent by putting this plant in a residential neighborhood.

Where do people go to be heard if we've tried everyone but our President?

cc: Russell Truitt, Administrator

Sincerely yours,
Helen R. Werder
Helen R. Werder

Patricia Jean Pillmore
3826 Tara Hall Drive
Jacksonville, FL 32211

January 13, 1976

Mr. John R. Quarles, Jr.
Deputy Administrator
Environmental Protection Agency
401 M. Street N.W.
Washington, D.C. 20460

Dear Mr. Quarles:

In reference to the Waste Water Management Facilities, Arlington East Sewer District, Jacksonville, Florida, I am questioning the E.P.A. approval of the plant sight at Mill Cove Road.

The citizen committee chosen by the E.P.A. of 5 city representatives, 5 partial and 5 impartial members did not even consider the proposed sight on Mill Cove Road in the first 6 chosen sights.

Also the Mill Cove sight and one other will affect Mill Cove on the St. Johns River. A study quoted on page 398, Dept. of Natural Resources, and page 401, Flood and Associates, Inc., "These alternate sights have in common a proposed fall out in or quite close to Mill Cove. At present Mill Cove is suffering serious sedimentation problems due to construction at either end caused by continuous maintenance spoilage associated with adjacent ship channel. Navigational charts less than 10 years old indicate less than 15 feet throughout the cove while existing depth probably does not exceed 6 feet except in isolated spots. The staff is therefore concerned about additional sediment build up in the cove as well as possible pollution problems associated with the extremely poor circulation of the cove if these alternates were implemented."

Mill Cove is a protected marshland, many private homes are built along the Cove and a plus 300 member family branch YMCA utilizes the cove for recreational sports. These factors seem to have been ignored and I feel further studies should be carried out before the city begins construction on the Arlington East Sewer Plant at Mill Cove Road. At present construction will probably begin after January 26 the date of the last public hearing on the proposed sight, As Mayor Hans Tanzler has already publicly announced that the Mill Cove Sight is the final decision.

Sincerely yours,



Pat Pillmore



brewer/gatlin insurance

January 13, 1976

1056 OAK STREET
JACKSONVILLE, FLORIDA 32204
(904) 358-3372

Jack E. Ravan, Regional Administrator
United States Environmental Protection Agency
Region IV
1421 Peachtree Street
Atlanta, Georgia 30309

Re: Draft Environmental Impact Statement
EPA Project C 120541
Waste Water Management Facilities
Jacksonville, Florida

Dear Mr. Ravan:

It has been brought to my attention that there will be considerable citizen input at the public hearing pertaining to the above referenced draft EIS (January 26, 1976). The draft denotes preliminary approval of the Mill Coe site as requested by the City of Jacksonville. Since public sentiment seems to favor the Dunes site (as did the citizens advisory committee) the following questions arise:

- 1) Should, after the public hearing, the City of Jacksonville request approval of the Dunes site, would it be necessary to have additional studies made by EPA?
- 2) Should the City of Jacksonville request approval of the Dunes site, would EPA approval be imminent? If not, could you approximate the time frame for approval?
- 3) How is the input of the public hearing to be weighed?

I would appreciate any assistance which your Agency could offer in answering these questions for me. Thank you for your assistance.

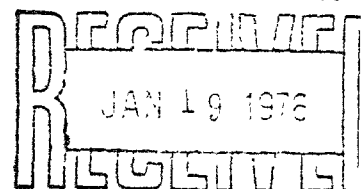
Very truly yours,

Thomas F. Brewer

TFB/ft

189.

EPA-IMPACT STATEMENTS



January 15, 1976

Mr. Russell Train
Administrator
Environmental Protection Agency
401 M Street, N. W.
Washington, DC 20460

Re: Sewer Plant in Arlington East
Jacksonville, Florida

Dear Mr. Train:

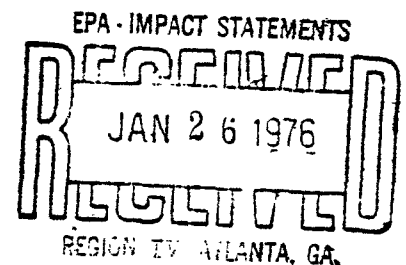
I object to the E.P.A.'s support and approval of the site selected by the City of Jacksonville, Florida, for the location of a large sewerage disposal plant. The plant's site is adjacent to the Holly Oaks Forest residential area and is very much opposed by the local residents. This opposition brought about an investigation by the E.P.A. from Atlanta, Georgia. The E.P.A. created a committee of 15 members, five from the city, five from Holly Oaks Forest and five from Duval County to determine possible alternatives. Using the criteria selected by the E.P.A., the committee, by a vote of 11 to 4, found that the site selected by the City was harmful to the environment and selected another one. Your Department then over-ruled the findings of your committee on the basis of economics. Economics was one of the criteria your men selected for the committee to consider in making their choice. It seems that the committee has a higher regard for the impact on the environment of the local area than does your Department.

Sincerely,


William Colville

WC:bs

William Colville
10238 Lakeview Road West
Jacksonville, FL 32211



January 20, 1976

Mr. Russell Train, Administrator
Environmental Protection Agency
401 M St., N. W.
Washington, D. C. 20460

Dear Sir:

In 1969 we purchased our present home which is located in the Holly Oaks section of Jacksonville within sight of the present location being considered as the first choice of the Arlington East Sewage Treatment Plant.

We have heard various promises, claims and counterclaims that the proposed sewage plant would NOT endanger the environment, would NOT create a health problem or be a public nuisance. I DO NOT believe any of these promises and cite as an example a study made by the EPA. A review of this lengthy study discloses that had this plant been constructed as originally proposed it would have resulted in noise and air pollution. However, supposedly these hazards will be reduced except during short periods of time (according to EPA).

The people of Holly Oaks are at a loss to explain or understand WHY such a plant has to be placed in a populated area of upper to middle income homes (or any residential area) when there are vast stretches of unpopulated land to the East or 1 mile south which seem more suitable except for economic reasons. We do not feel it is fair to place such a burden on our families by its construction at the proposed location.

If the plant is constructed in our neighborhood what guarantee do we have against the possible noise and air pollution not to mention the economic impact on our residences. If these fears prove to be true we feel we would get the deaf ear treatment and that our only recourse would be to move at a considerable financial loss.

We appeal to you by all that is right and decent not to approve the city of Jacksonville's recommendation for the site of the Arlington Plant but to relocate it AWAY from populated areas. Let those who live near it do so by choice and not by force.

Sincerely,

J. C. Whitaker
J. C. Whitaker
1703 Cellar Circle
Jacksonville, Fla. 32211

January 23, 1976

Mr. Russell Train, Administrator
Environmental Protection Agency
401 M Street NW
Washington, D. C. 20460

Re: Arlington-East Regional
Sewage Treatment Plant

Dear Sir:

The Environmental Impact Statement prepared by the people from your Atlanta office gives the weakest kind of approval to the Mill Coe Road site, calling it "a reasonable alternative."

Many people in Holly Oaks have fought for two years to establish their position that a regional sewage treatment plant does not belong within 1000 feet of an established residential community. However, it appears that the E.P.A. is yielding to intense pressures coming from--where?--the city administration? the land developers?

We are writing to ask you for a full review of the whole affair before you approve the Atlanta Environmental Impact statement. The people are not getting fair consideration of their wish to live undisturbed by encroachment of a heavy industrial-type plant.

Very truly yours,

Nadine Stevens - 1724 Armand Rd., Jacksonville 322
Mr & Mrs. Robert Gulsey - 1715 Armand Rd., Jacksonville 322
Mr & Mrs Jimmie C. Whitaker - 1703 Cedar Ave, Jax.
Merwin M. Summers 1727 CRITTEND Road, Jax 322
Ora Mae Summers 1727 Armand Rd. " "
Mr & Mrs. John L. Dyer 11505 Beacon Dr. " 322
Mrs A.T. Waterman 11414 Starboard Dr. 322
Mary Rose Galloway 3676 Ariel Ct. Jax 322
Sally M. Crow 1433 PALM LAKE JAX 322
ER Hollis
Mrs. E. W. Fitch 1127 Brookman Ave 322
Mr & Mrs Gerald Hall 1047 Cedar Circle Jacksonville
Mrs. Richard L. Lingo 1013 Starboard Dr. W. Jax, Fla
192.

Jacksonville, Florida

January 23, 1976

Mr. Russell Train, Administrator
U. S. Environmental Protection Agency
401 M Street N. W.
Washington, D. C. 20460

Dear Mr. Train:

I am writing in regard to the East Arlington Regional Sewage Treatment Plant in Jacksonville, Florida, which is now purported to be located in the residential area of Holly Oaks Forest.

Could you tell me why the E.P.A. would send representatives from Atlanta to hold public and semi-public meetings; would hire experts to study and report on the environmental factors of twelve alternate sites; would compile, at great expense, an immense impact study, containing many factual errors; would ask a committee of selected Jacksonville citizens, Holly Oaks residents, and city government representatives to spend hours studying this voluminous report in order to rank a group of environmental factors on a scale of one to ten; would compare these rankings on all twelve alternate sites - to find that the committee had ranked the Holly Oaks site as sixth and then would turn around and say that they had decided that the plant should be put in Holly Oaks because that was the cheapest site?

For heaven's sake, we all knew that from the beginning! E.P.A. was requested to make its own study because we thought that your function was protecting the environment and quality of life of people - not saving money.

It is a sad commentary on our government when the citizens must go to Washington for protection from their local officials, but it is even sadder when they can't get it.

Has all this been an expensive game, played with federal funds (which seem so important, all of a sudden)? Has all this activity been merely a ploy to hide the fact that the residents of Holly Oaks are being exploited by the E.P.A. in order to appease our local administration, with which it has had so many other disagreements?

If so, I have more respect for armed robber, who at least is honest enough to put the gun in your face and say, "This is a stick-up."

If you are truly interested in protecting the environment for now - and the future - you will do a little digging for facts and will find out why certain factions want the plant on that site. Is it because they want our waterfront along Fort Caroline Road for future industrial expansion, and they know that

this plant is the first step in eventually changing the character of the neighborhood from residential to industrial, gradually forcing the residents out and industry in - something they could never otherwise accomplish?

At the risk of repeating myself, let me once again remind you that Holly Oaks Forest is a relatively small, secluded community of naturally wooded, small estate sized lots, many of which surround our peaceful and serene lake. Its residents are a closely knit group - almost like a large family - who, with their own hands, built their own Community Club building and fire house, chipping in money to buy their own fire engine and pumper. They have never asked the government for anything. The greater part of them are the original home owners, who felt twenty-five years ago, as they do now, that the privacy, the peace, the serenity of this beautiful wooded area with its pretty little lake was well worth the added mileage to and from work. They are not rich, but have done without other things in order to have the kind of home and community they could relax in and enjoy.

If the main reason for protecting the environment is the benefit and protection of people, then you cannot, in good conscience, approve this site and still justify your agency's existence. It all boils down to this - Is the development of large industrial complexes, pouring more pollution into the rivers and air really more important than the peace of mind and the tranquility of the spirit of people? Do only murderers, rapists, traitors, and welfare recipients have civil rights any more? High-handed activities such as this are responsible for the growing frustration and resentment of the average citizen toward his government.

In other words - Is this government, with its many agencies, responsive to the will of its citizens; do we, in fact, have a government by consent of the governed?

The government spends all sorts of money to support wasteful programs here and abroad; now, when we, the very people who work to support these programs, and oftentimes sacrifice, say to our government, "Please, let us preserve this peaceful and serene community for our children and grandchildren to come," surely our government will not reply, "Sorry, we don't have the money."

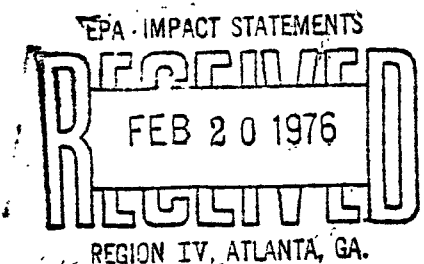
Sincerely,

(Mrs.) Helen Fender O'Quinn

Helen O'Quinn

Mailing Address -
10605 Lakeview Road East
Jacksonville, Fla. 32211

CC: President Gerald R. Ford
Governor Reuben Askew
Senator Richard Stone
Secretary of State Bruce Smathers
State Senator Dan Scarborough



January 25, 1976

With reference to: Arlington-East
Sewage Treatment Plant, Jacksonville, Fla.

Mr. Russell Train
Administrator
Environmental Protection Agency
Washington, D. C.

Sir:

It is inconceivable to us to learn that a federal agency - yours - could spend one year studying the flora, fauna, swamps, and terrestrial vegetation of our area, only to base its final conclusion with regard to plant location on presumed cost differentials between sites..

We now know that the cost figures, supplied by the city's consultants, reappear dollar for dollar in the EPA Environmental Impact Study. Are we to believe that the Atlanta office rigorously audited these figures and that the auditing was done by qualified cost analysts?

When your own Atlanta office rated another site (South of Craig Field) as more environmentally desirable but then relented in its decision in favor of costs, we think a full scale cost audit is called for.

We shall appreciate a response from you on this matter.

Sincerely yours,

Howard B. Hall - 1647 Cellar Circle - 32211
O.H. Haller 1634 Kelly Oaks Lake Rd - 32211
J. Malton Smith III 1652 Cellar Circle - 32211
Herbert M. Lass 1571 Cellar Circle - 32211
John L. Dyer 11505 Bacon Dr 32215
Henry J. Krager 10770 Executive Dr. 32225

January 25, 1976

Mr. Russell Train, Administrator
Environmental Protection Agency
401 M Street NW
Washington, D. C. 20460

Re: Arlington-East Regional
Sewage Treatment Plant,
Jacksonville, Fla.

Dear Sir:

If you read the letters in the appendix of the Environmental Impact Study prepared by the Atlanta E.P.A. office, you will discover that not only the people but several governmental agencies have questions about the propriety of crossing Mill Cove and extending discharge pipes through Quarantine Island. These include the Corps of Engineers, the Department of Natural Resources for the State of Florida, and the Department of Interior.

We believe that you are obligated to insure that all necessary permits and approvals have been obtained before you plunge ahead with approval of the construction and design plan. To do less would be to support piecemeal approvals which are not in the public interest and which often can have a coercive affect on other agencies to "go along."

Can you advise us whether or not the permits and approvals will be obtained before the site supported by the E.P.A. is approved?

Very truly yours,

Helene E. Hanson 1716 Ormond Rd., Jacksonville, Fla 32
Ray E. Dauler 2504 Ralphin Ave, Jacksonville, Fla 32
Kathleen Dorman, 3132 Alameda Rd, Jacksonville, Fla 32
Mrs & Mrs Edward Griegs 7557 Arlington Expy Jacksonville
Mrs. Norma E. Lucas 1700 Leon Rd Lf 81 - Jacksonville, Fla
Mrs. Lizzie L. Marshall 4642 Kent Knight Dr N. Jacksonville, Fla
Wendell D. Harts 718 Arlingwood Ave Jacksonville, Fla 32
Mr. & Mrs. Gary D. Johnson 8451 Ephraim Dr E Jacksonville
Mr & Mrs. Dale Carter 3146 Halliday Ln Jacksonville
Mrs Mrs John E. Kiser 5747 Dood St. Jacksonville
Mrs Ruby Morgan 585 E. 58th St. Jacksonville
Mr & Mrs. [illegible] 1044 St

Eden Wadford 830P Shuter Lane 32205

Marilee Thompson 3310 Nancy St. 32209

Mary L. Joyce 5209 Bunkerhead Rd. 32210

Jean Dunbar - 3207 Phoenix Ave 32206

Lilabel Mears - 10525 Monaco Dr. 32218

Mr + Mrs C O Trippen 1755 Hootch Blvd. 32216

Philip L. Wamton - 2879 Olga Place 32205

William M. Cookson 6731 Seaboard Ave. Oak, Fla.

Luzzy L. Smiley 11102 Kennedy Blvd Oak Fla. 3.

Jane M. Brigida 2911 4th Ave Oak, Beach. Fla.

Mr + Mrs R S Nichol 3710 Johnston Ave Rd Jacksonville 32223

Betty McCard - 5302 Dodge Rd. 32209

Mr. + Mrs H. Debuty - 1011 Highland Rd. N.Y. Oak, Fla. - 32233

Mr. + Mrs C. E. Harper - Rt 2 Box 419 - E Oak. Fla. 32224

Mrs. Bernice H. James 6210 Woodburn Ct. 32209

John M. Brown 3235 Casey Blvd 32211

Robert L. Howard 3235 Casey Blvd 32211

Mr + Mrs Elmo E. Johnson 1140 Carlotta Rd. W. 32211

Mr + Mrs. Chas. R. Brown 4365 Keenya Dr. 32207

Mr + Mrs Wm. J. Reese 4204 Carroll Ave 32209

Mr. + Mrs. Leslie C. Fowler 1847 Holly Oaks Lk. Rd. W. 322

Mr + Mrs W. P. Brown 1841 Holly Oak Lake Rd W. 32211

Mr. + Mrs. W. J. Bryson Jr 1801 Holly Oaks Lake Rd W. 32211

Sam E. Newey Real Estate

949 ARLINGTON ROAD

JACKSONVILLE, FLORIDA 32211

PHONE AC 904/724-1688

724-2191

January 27, 1976

Mr. Fran Phillips
U.S. E.P.A.
1421 Peachtree Street, N.E.
Atlanta, Ga., 30309

Dear Mr. Phillips :

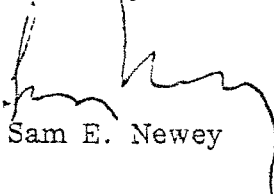
Having read the newspaper this morning I am extremely disappointed that we are once again having a stall by your agency to make the final decision to go ahead with the sewer plant on Merrell Road. It is obvious that a small vocal group from the Holly Oaks area dominates the thinking of your agency.

We have had continued postponements at great sacrifice of the developement of south-side Jacksonville and a tremendous increase in the cost because of the delay.

I am a property owner within a thousand feet of this plant and again wish to go on record that we are for this site and against any further delays.

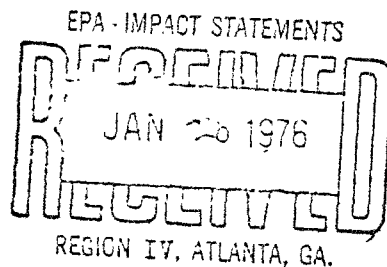
Trusting to hear from you with a go ahead after this delay .

Sincerely,



Sam E. Newey

SEN/kb



198.

SALES

INVESTMENTS

APPRAISALS

PUBLIC RELATIONS

DEVELOPER

Melvin M. Summers
1727 Ormond Road
Jacksonville, Florida

February 12, 1976

Mr. Russell Train, Administrator
Environmental Protection Agency
401 M Street, N. W.
Washington, D.C. 20460

Dear Mr. Train:

I am a resident of and property owner in the community of Holly Oaks which is just easterly of the site of the proposed Arlington East Sewage Treatment Plant. This is a beautiful area of over 300 homes valued from \$40,000 to \$100,000.

To my astonishment, your Atlanta Office has recently approved this site for the Sewage Treatment Plant. This approval was given despite your agency appointed 15 member advisory committee's recommendation of a site further removed from our area. The reason the recommended site was not approved was that the corporation which owns this land is politically powerful in Jacksonville. Therefore, they only had to say, "No, not on our land", and their wishes were obeyed. We are not that powerful politically but we do have a vote and we intend to use it. The Atlanta Agency has recommended Site 12 which is at the Southeast corner of Craig Air Field. The sewage treatment plant at this location would harm no one. This is where it should be built.

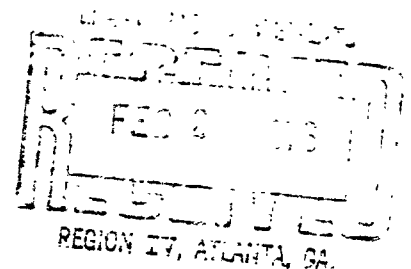
We are aware of the need for this facility in Jacksonville, but we do not feel that it is necessary or right that it should be built so close to this fine residential area and thereby destroy it. We were of the opinion that the function of your Agency is to prevent this sort of thing from happening. If you become a part of this plot to destroy us, then I would say most emphatically that your Agency's name is a misnomer and that it should be rightfully known as the "Environmental Pollution Agency".

We are still hoping that justice will prevail here.

Very truly yours,


Melvin M. Summers

cc: Mr. Robert L. Sansom



Jacksonville, Florida

February 25, 1976

Mr. Russell Train, Administrator
Environmental Protection Agency
401 M Street, N. W.
Washington, D. C. 20460

Dear Mr. Train:

As residents of Holly Oaks, we appreciate your completing the environmental study of the Arlington East Sewage Treatment Plant. Frankly, we are puzzled, are not people and their homes part of the environment? There are several factors in your study that do not make sense and which we cannot understand.

Your agency formed a Citizens Committee that voted nine to four to move the plant from the Millcoie Site, as it was not environmentally suitable. Apparently this fact was completely ignored in your study. In a newspaper article, your Atlanta agency stated that people are more important than money; that is why you initiated the environmental study. However, in your final decision you moved back to the Millcoie Site because of the cost factor, which is highly inaccurate, using the City's own figures.

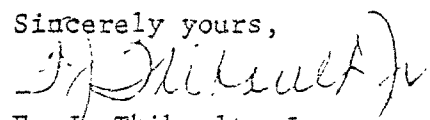
We feel your agency made the correct selection in Site #12 as the most environmentally suitable, but made a complete reversal of all your findings and your basic commitment to the environment by bowing to the cost factor, which appears to be erroneous.

It is inconceivable to believe that your agency would allow the city to build this plant so close to a residential neighborhood, thereby destroying a beautifully wooded area and the homes of hundreds of people -- gentlemen, you are not protecting the human element in your decision!

We do not deny the need for sewage disposal, but we do deny the City's choice of a site for a huge regional plant neighboring on a residential area, when by present day thinking, this type of plant is obsolete before it is built. We do not suggest that any residential area should be subjected to this down-grading when there are many desirable sites that would not be offensive to any human element.

We, who live in this area, can only stake our future in the credibility of your agency doing a proper study and our dependence on the very basics of the Environmental Protection Act.

Sincerely yours,


F. J. Thibault, Jr.

Residence Address -

10626 Fort Caroline Road
Jacksonville, Fla. 32211

February 24, 1976.....Page 2

Copies to:

Mr. Robert Zener, General Counsel
Environmental Protection Agency

Mr. David R. Hopkins, Chief, EIS Branch
EPA - Atlanta, Ga.

Senator Richard Stone
Senate Office Building
Washington, D. C.

Senator Dan Scarborough
State Capitol
Tallahassee, Fla.

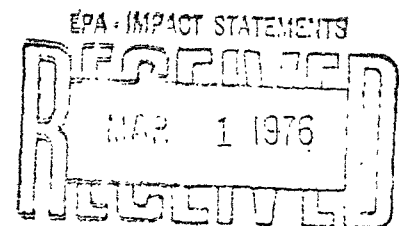
February 27, 1976

John E. Hagan III
Chief, Environmental Impact Statement Branch
1421 Peachtree Street NE
Atlanta, Georgia 30309

Dear Mr. Hagan:

The enclosed series of articles by Mike Clark, Jacksonville Journal Governmental Affairs Staff, are enclosed for your examination. These articles raise questions pertinent to the Environmental Impact Statement prepared by the EPA in relation to the Arlington-East Sewage Treatment Plant. We submit the following articles and questions, therefore, for your attention and response in the rebuttal to criticisms which your office is preparing to submit to the Council on Environmental Quality.

- B.1.a. (1) What justification is there for the excessive cost differentials, on a per gallon basis, between the Arlington-East plant and the plants at Tampa, Tallahassee, Miami?
- B.1.b. (2) The City of Jacksonville cost figures are suspect, to say the least. Has the EPA made a complete cost analysis of the City of Jacksonville estimates, anywhere as detailed as that made by this newspaper reporter.
- B.1.c. (3) Is there tacit agreement to expand the Arlington-East plant to a 50 to 60 million gallons per day plant, thus eliminating the necessity for other proposed Jacksonville regional plants not yet under construction?
- B.1.d. (4) Would your agency approve expansion of the Arlington-East plant to a capacity exceeding the planned 25,000,000 gallons per day capacity?
- B.1.e. (5) Would your agency have authority to prevent the City of Jacksonville from expanding the Arlington-East plant beyond the 25,000,000 capacity once the initial plant is constructed?
- B.1.f. (6) What is the meaning of Mr. Hyatt's statement (February 9 article) that "The southwest plant cost so little because the EPA would not fund much construction there?"
- B.1.g. (7) Why are you people supporting an incineration process which is known to be a source of air pollution?
- B.1.h. (8) Your team objected to sites east of Craig Field because of existing cypress swamps. What merit is there in Professor Odum's research



(University of Florida) which suggests cypress swamps can actually be enhanced and sewage adequately disposed of, without resorting to expensive regional, heat treatment?

What specific attention are you people giving to less costly, although unconventional methods of sewage treatment?

B.1.i.

- (9) Please comment on the article of February 10 in its entirety. You may want to demure that you have not had an opportunity to review bidding specifications because your grant under consideration is "to develop plans and specifications." Yet these specifications apparently do exist already and have been reviewed by a newspaper reporter. Inasmuch as the cost escalations are a key issue in this plant location debate, and since the cost estimates are available which seem to have gold-plated the plant at other locations, we want to insist that a preconstruction audit be performed before you make a final determination on the site.

B.1.j.

- (10) As a matter of information to this community, please advise how many other sewage projects have you on record as approved by your office that use equipment or construction services or contracts from the following companies:

BIF Instruments
The Taulman Company
EIMCO
Envirotech
or any subsidiaries or affiliated groups
of any of the above

B.1.k.

- (11) Two articles indicate that Mr. Robert Howard is analyzing the costs. If this information is correct, can you provide us with information as to Mr. Howard's qualifications as a cost analyst? We would like to know:

- (a) What is Mr. Howard's major field of study?
- (b) Where did he complete his collegiate study?
- (c) What previous experience has he had in directing environmental impact studies?
- (d) Who provided supervision of his work in Jacksonville?
- (e) Please describe the nature of that supervision.

B.1.l

- (12) Please describe the qualifications of others in EPA in the area of cost analysis and the nature of their reports on cost figures for the twelve alternate sites.

B.1.m.

- (13) Please provide us with information as to the number of days Mr. Howard or other Atlanta EPA staff or consultants to EPA have been on assignment in Jacksonville on per diem, the purposes of their trips, and copies of their trip reports for the period covering November 1, 1974 through February 15, 1976.

page three

- B.1.n. (14) Can you state without qualification of any nature that Site 12 IS more costly than either Sites 1 or 2? Please give us your rationale.
- B.1.o. (15) What attention does your agency pay to "cost benefit" as opposed to "cost effectiveness"? Your study appears to be concerned only with the cheapest possible costs. Can you tell us what regard you have given to cost-benefit ratios for the 12 sites with the "human element" calculated in that analysis?
- B.1.p. (16) In view of the fact that the Rules Committee of the Jacksonville City Council has now seen fit to approve introduction of legislation to revoke authorization for the Millco Site and to return the Council to a neutral posture to review all sites again, what is your justification to press ahead with a grant authorization on this maximally controversial site? (Reference the above as a follow-up to the February 17 article.)

We expect that these questions merit a full response in the final Environmental Impact Study.

Sincerely yours,

Mr. & Mrs. Robert Werder

Mr. and Mrs. Robert Werder
1924 Holly Oaks Lake Road West

Mr. & Mrs. William Colville Jr.

Mr. and Mrs. William Colville Jr.
10238 Lakeview Road South

Mr. & Mrs. John Stevens

Mr. and Mrs. John Stevens
1724 Ormond Road

Mr. & Mrs. Howard Hall

Mr. and Mrs. Howard Hall
1647 Cellar Circle

Mr. & Mrs. Raynor E. Bowditch

Mr. and Mrs. Raynor E. Bowditch
1700 Holly Oaks Lake Road West

Mr. & Mrs. Robert Hulsey

Mr. and Mrs. Robert Hulsey
1715 Ormond Road

cc: Fran Phillips
Jack Ravan

B.1. Response to comments by Mr. and Mrs. Robert Werder, Mr. and Mrs. John Stevens, Mr. and Mrs. Raynor Bowditch, Mr. and Mrs. William Colville, Jr., Mr. and Mrs. Howard Hall, and Mr. and Mrs. Robert Hulsey.

Response B.1.a.

There are, in this case, three primary reasons for cost differentials on a per gallon basis. First, the other plants mentioned were upgraded or expanded from existing facilities whereas the Arlington-East plant will be completely new. Second, two of the other plants have much larger design capacities than does the Arlington plant. Sewage treatment generally becomes cheaper on a per gallon basis as the volume to be treated increases. Third, sludge handling and disposal facilities at the Arlington plant originally accounted for about one third of planned capital costs. These facilities (heat treatment and incineration) have now been eliminated from the design.

Response B.1.b.

Refer to the cost-effective verification section in Chapter I.

Response B.1.c.

The Water Quality Management Plan for Duval County approved by the Jacksonville Area Planning Board, the Florida Department of Environmental Regulation, and EPA recommended five regional treatment plants for the Jacksonville area. Based on current population projections, the design capacity of the Arlington-East plant is expected to be 20 MGD in the year 2000. Any deviation from the Plan or any other plan for periods beyond the year 2000 would require approval by all parties concerned.

Response B.1.d.

Refer to previous response.

Response B.1.e.

Any plant expansion using EPA funds must be based on an approved Facilities Plan. The City of Jacksonville could, however, expand the plant at its own expense if it obtained the necessary discharge permits.

Response B.1.f.

The Southwest plant has a much smaller design capacity than Arlington-East, has no sludge handling and disposal facilities as did the original Arlington design, and was funded before inflation rates escalated capital costs to their current levels.

Response B.1.g.

Refer to the section of Chapter I dealing with review of sludge disposal alternatives.

Response B.1.h.

Some research has been done concerning the ability of wetlands to assimilate domestic wastes. In Jacksonville, however, cypress swamps do not exist in sufficient quantity to be considered as a means of regional sewage treatment and disposal (refer to Figure 2-37 of the Draft EIS). Further, the swamps that do exist are very close to developed areas and will become even closer as development proceeds eastward in Arlington. Finally, the ability of these areas to function as water retention and groundwater recharge areas must be protected.

EPA regulations require the consideration of alternatives to meet the requirements of best practicable waste treatment technology. Refer to Chapter III of the Draft EIS for a discussion of non-structural and structural alternatives considered.

Response B.1.i.

EPA regulations prohibit specifications that contain proprietary, exclusionary, or discriminatory requirements other than those based upon performance unless such requirements are necessary to test or demonstrate a specific operation, or provide for necessary interchangeability of parts and equipment, or at least two brand or trade names of comparable quality or utility are listed and are followed by the words "or equal." While companies and specific manufacturers can be listed as a part of the specifications, the term "or equal" allows any other companies or suppliers of like equipment to be utilized.

The plans and specifications referred to have not been reviewed and certified to EPA by the Florida Department of

Environmental Regulation. Upon receipt, EPA will take the necessary steps to ensure maintenance of competitive bidding opportunities.

Regarding the requested preconstruction audit, refer to the cost-effective verification section in Chapter I.

Response B.1.j.

The companies referred to are among those listed in specifications in accordance with the previously described regulations. For further information regarding these firms in connection with federally funded wastewater treatment projects, refer to the procedures outlined in the section of Chapter II dealing with public disclosure.

Response B.1.k.

All costs were analyzed by the Water Division of EPA, Region IV. The cost study and results were then supplied to the EIS staff.

Response B.1.l.

Sources of costs used in the cost optimum algorithm are described in Chapter I. These costs were compiled by civil and sanitary engineers in the Florida Section of EPA Region IV's Water Division. All costs were then supplied to the Technical Support Branch of the Water Division where the algorithm was carried out by graduate sanitary engineers. Further information concerning the qualifications of all personnel involved in the cost analysis is available by following the procedures outlined in the section of Chapter II dealing with public disclosure.

Response B.1.m.

EPA, Region IV staff members have been in Jacksonville on seven occasions for public hearings, consultation with local agencies, and meetings with the Citizens Assistance Committee. Approximately 28 man-days have been expended in Jacksonville by six members of the EIS Branch. The only consultants to EPA who have been in Jacksonville are personnel of the firm of Environmental Science and Engineering, Inc. of Gainesville, Florida who carried out the noise and odor analytical report described in the Draft EIS. For more detailed information concerning EPA personnel

visits to Jacksonville, refer to the procedures outlined in the section of Chapter II dealing with public disclosure.

Response B.1.n.

As may be seen in the summary of the cost effectiveness verification presented in Chapter I, site 12 was not ranked in the top four most cost-effective alternatives for any flow or outfall configuration, as were sites 1 and 2. While the treatment plant and effluent pumping station costs are virtually the same for sites 1, 2, and 12, major cost differences are found in site preparation and outfall construction. Total costs for site preparation and outfall construction for each of these sites are as follows:

Site 1	\$2.6 million
Site 2	\$4.8 million
Site 12	\$6.4 million

The major cost differential between site 12 and sites 1 and 2 is due to the length of the outfall required to discharge to the St. Johns River. The total length of the outfall for site 12 would be 30,800 feet versus 17,700 feet for site 2 and 13,900 feet for site 1. Remaining differences in costs between site 12 and sites 1 and 2 are due to differences in transmission line lengths and number of pumping stations.

Response B.1.o.

The EPA does not determine cost-benefit ratios for wastewater treatment projects which it funds. Rather, the total cost of each alternative is developed and the primary and secondary impacts of each are determined and evaluated. Alternatives are then ranked according to cost and environmental impact with the final selection dependent upon the most cost-effective and environmentally sound project.

Response B.1.p.

A Step II application for plans and specifications was certified to EPA by the Florida Department of Pollution Control (now the Florida Department of Environmental Regulation) in April, 1974. Shortly thereafter, a decision was made by EPA to prepare an EIS due to the significant controversy surrounding the proposed project. Both the Draft and Final EIS recommend funding of the project at the site originally proposed by the City of Jacksonville. EPA

has had no correspondence from an official representative of the city requesting termination of review of the Step II application as submitted.

February 27, 1976
 10559 Lakeview Rd. E
 Jacksonville, Fla 32211

John E. Hagan III
 Chief, Environmental Impact Statement Branch
 1421 Peachtree Street NE
 Atlanta, Georgia 30309

Dear Mr. Hagan,

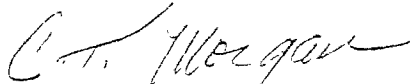
RE: EPA Project C120541
 Arlington East Sewage Treatment
 Plant

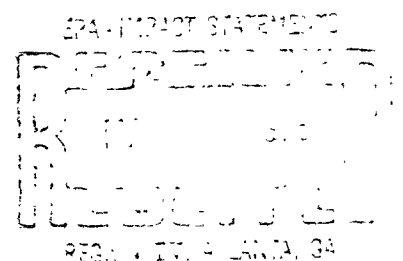
In regards to the above plant, I have some unanswered questions.

- B.2.a. (1) Is it not true, that the specifications as written on this plant can be construed as closed specifications, in that their very nature eliminates competitive bidding?
- B.2.b. (2) Page 327 of the Draft Impact Statement shows an Electric Sub-Station. Is this designed so that only one supplier can bid competitively?
- B.2.c. (3) Is Mr. Howard of your office by coincidence, the same Mr. Howard, who was once employed by the design consultants of this project?
- B.2.d. (4) How do you justify, the high cost of this secondary treatment plant, when more sophisticated AWT plants in other cities cost less on a per gallon basis?

I would anticipate that these questions and their answers will appear in your final Impact study.

Very truly yours,


 Charles T. Morgan



B.2. Response to comments from Charles T. Morgan.

Response B.2.a.

Refer to the first paragraph of response B.1.i.

Response B.2.b.

No; refer to the first paragraph of response B.1.i.

Response B.2.c.

No.

Response B.2.d.

Cost curves have been developed by EPA, Region IV from actual bid prices on similar projects in the southeast and in Florida. Each facility, however, has irregularities or features which can act to raise or lower the capital cost of the total project. Such variables include outfall length, site preparation, sludge disposal facilities, and, in the case of upgraded or expanded plants, reusable equipment. It is conceivable that an advanced waste treatment plant in another area could cost less on a per gallon basis than Arlington-East. However, without examples it is impossible to comment specifically.

Re, the proposed Arlington-East service district's wastewater management facility in Jacksonville, Florida = EPA Project No. C12

2/24/76

Dear Mr. Hagan:

The League of Women Voters of Jacksonville was both pleased and honored to be selected as one of five Jacksonville organizations represented on the Committee that studied the environmental impact and cost data on the twelve possible sites for the proposed Arlington-East sewage treatment plant in Jacksonville: EPA project no. C120541. As the League's representative I found the material and the meetings extremely interesting and informative, and I certainly commend Mr. Hagan and his assistants for briefing the Committee so thoroughly.

I am writing this at "zero hour"* to assure you that silence from our League on this subject does not indicate a lack of interest or concern. (I understand that at least three of the organizations represented on the Committee made statements at the public hearing held at the City Hall on January 26th, and you easily may have heard from others since that time.) Our organization may be unique (among those involved with this project) because all statements made by any League must be based upon a league "stand" (national, state, or local) which in turn is based upon study followed by consensus or concurrence of its members.

I first took this matter up with our League's Executive Board of Directors, and subsequently with the entire Board, and the final decision re, sending a statement to

* Mailing deadline for comments on this is 3/1/76, according to Mr. Ragan's letter of 12/26/75.

the Environmental Protection Agency was negative. The League Board quite rightly feels that although we have studied and reached consensus on local area planning and subsequently have endorsed the Jacksonville Area Planning Board's Comprehensive Plan (to 1990), we have no concrete land-use data on which to base an objection to placement of this plant in the Holly Oaks area, or to support its placement in "the dunes area", because no specific mention was made in "the 1990 Plan" of the proper location of this facility. ("The 1990 Plan" does list "the dunes area" as one of the five "centrifuges" for sewage treatment in Duval County, however.)

Although I was on this Committee representing the League of Women Voters, my decisions on this matter had to be based upon my own sincere effort to weigh objectively the two view-points ("Holly Oaks" and "the City's") involved. Since my rankings of the twelve sites are listed in the EPA's Environmental Impact Statement (see pages 372-3), and especially because I seconded the motion (made by Tom Brewer) to approve "the 'dunes area' site on November 4th, 1975 (see page 412; this does not agree with the voting results listed on page 374 -- 2 negative votes must have been obtained subsequently from the 2 absent members) I would like to state my reasons for doing so here.

Even granted Mr. Howard's claim (to me after our final meeting) that this sewage treatment plant will make "a good neighbor," so many Holly Oaks residents have disagreed with this contention that it ^{seems} safe to suppose that many of these residents will wish to sell their homes

even before this plant is completed, and that the demand for houses in this area will decline for the same reason, thus causing a decline in property values. It did not (and does not) seem fair, in my opinion, to risk the devaluation of much real estate by placing this plant in one of Jacksonville's most pleasant residential areas when there is another site which meets all the environmental criteria - according to the material given in the Environmental Impact Statement - which is much less developed now and is scheduled for mixed residential and commercial development in "The 1990 Plan" (according to information given the Committee): "the dunes area", the EPA's second choice.

Moreover, while "the dunes area" site would cost \$2,055,700 more than the Millcoe Road site, because the federal government would contribute \$2,046,370 more to it than it would to the Millcoe Road site, Duval County residents would pay only \$9,400 more for "the dunes area" site. [My opinion is based on the figures given the Committee at our last meeting rather than those listed in the Environmental Impact Statement (Table 7-6, page 376) because only the former table is broken down into City and federal contributions.] This difference seems slight (\$9,400) when compared to the total project cost.

Thus, as far as my own vote is concerned, I disagree with the EPA's comment ^{made in its} Environmental Impact Statement, page 37: last 7 lines, because even if absolutely no offensive odors are produced.

* The material provided us convinced me that the noise would be fairly small and that the plant would not be visually offensive, but that there would be some odor up to 4,000 feet (approximately 3/4 mile) from the site of the plant (Figure 3-16, page 220, Environmental Impact Statement). 215.

there will still be "adverse effects on the Holly Oaks community due to construction"* of this plant because merely having a sewage treatment plant, no matter how excellent, in a residential area is considered detrimental by many Jacksonville residents at this time. This present attitude, then, will very probably cause property to be devaluated in the Holly Oaks area.

Granted the Holly Oaks representatives on the Committee were prejudiced; but so were the City's employees (^{thus} excluding Mr. Hammack whose position is not salaried) who quite naturally all voted in support of the City's decision to place the plant at Millcoke Road! Therefore would it not perhaps be more effective in the future to have as objective a citizens' committee as possible (comprised solely of impartial representations from Duval County organizations) meet before an actual site (for any type EPA project) is proposed by the EPA and City officials? At these meetings representative opinions from both factions (affected communities and the City) could be presented to the Committee so that each member could weigh "both sides of the coin" as fairly as possible.

My profound apologies for the length of this letter, and many thanks for your kind attention in this matter!

Very Sincerely,

Mary B. Black
(Mrs. Charles Black, ~~etc~~)

P.S. Apologies also for my writing and not typing this. (Our typewriter is "on the blink"!) Also I have "filched" some of my son's school paper in an effort to make my scrawl more legible!)

* Environmental Impact Statement, page 375.

Pat Pillsbury
 3826 Tara Hall Dr.
 Jacksonville, Fla.
 32211

John E. Hagen
 Chief E. & S. Branch
 E. P. D.

1421 Peachtree St. N.E.
 Atlanta, Ga. 30309

Sir:

In reference to the Arlington E. Treatment Plant;

3.a.

① after the plant is built what is to prevent the city from tying in future district plants ie: District II plants' tying in with the the Buckman St. Plant?

3.b.

② where is the proposed land fill for ash from incineration? and, how much ash remains from one day at 10 mil. gal.?

3.3.c.

③ Would the proposed Water District

Amendment, which would group Jacksonville with other counties that use the St. Johns River for drinking water, have any implications to the dumping treated effluent in the river?

B.3.d.

④ What percentage of primary and waste activated sludge reach the centrifuge and the incinerator?

What percent will be effluent out fall at 10 mil. gal. a day and at 25 mil. gal. a day capacity?

B.3.e.

⑤ Why couldn't a plant like the one in San Diego County, Calif, Santa Water District have been proposed, as that plant has PROVEN it CAN be a good neighbor, rather than the experimental plant proposed for Arlington East?

Sincerely yours
Ruthven Palmer

B.3. Response to comments from Patricia Pillmore.

Response B.3.a.

The Water Quality Management Plan for Duval County recommended five regional plants for the Jacksonville area. Included in the Plan was the treatment and incineration of District II plant sludge at the Buckman Street plant. There are no plans to tie in any future regional plants to Arlington-East. The City of Jacksonville is presently engaged in a Section 201 Facilities Planning study. Acceptance of the 201 Plan and/or any deviation from the present Water Quality Management Plan must be preceded by a public hearing and approval of the Jacksonville Area Planning Board, the Florida Department of Environmental Regulation, EPA, and the public.

Response B.3.b.

As described in Chapter I, it is now planned to incinerate Arlington-East sludge at the Buckman Street plant. Ash from this incinerator will be disposed of in the proposed 516 acre North Sanitary Landfill to be located on the east side of New Berlin Road and just south of Cedar Point Road. Approximately 2.5 tons of ash per day would be produced by the incineration of sludge from 10 million gallons per day of domestic waste.

Response B.3.c.

The Water Quality Management Plan for Duval County determined that the discharge of secondary treated effluent from recommended facilities would not have a detrimental effect on the water quality of the St. Johns River. The assimilative capacity of the river is such that the projected discharge of treated wastewater from the entire Jacksonville area throughout the planning period will not cause a violation of water quality standards nor preclude intended uses of the river. Further, the lower St. Johns River is a tidal estuary. The City of Jacksonville obtains its entire water supply from the Floridan aquifer system (see page 73 of the Draft EIS) and has no plans to use another source.

Response B.3.d.

Changes in the sludge handling equipment at Arlington-East have been described in Chapter I. Among these changes are the elimination of centrifuges and incineration facilities. The proposed level of treatment will remove ninety percent of BOD and ninety percent of suspended solids on a monthly average.

Response B.3.e.

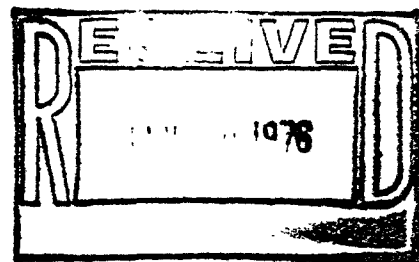
The secondary treatment process has a history of high reliability. The Arlington-East facility is not experimental. Moreover, controls for remaining noise and odor sources will effectively prevent any annoyance to residents in the area. The referenced plant in San Diego County, California is an advanced waste treatment facility providing reusable water. Such a plant would be considerably more expensive in terms of capital costs and operation and maintenance than the proposed Arlington-East facility.

PART C

INDIVIDUAL COMMENTS ON THE DRAFT EIS RECEIVED INDIRECTLY BY EPA

This section reproduces those individual letters of comment which were sent to other offices and forwarded to EPA for reply. The issues raised have been addressed elsewhere in the Final EIS and/or in the Draft. Each of these letters has, however, been individually answered under separate cover. Presentation is made in the order of receipt.

January 13, 1976



A134

Mr. Laurance Rockefeller, Chairman
Citizens Advisory Committee on
Environmental Quality
1700 Pennsylvania Avenue N.W.
Washington, D.C. 20006

RE: EPA Project C120541010
Waste Water Management Facility
Arlington-East Service District
Jacksonville, Florida

Dear Sir:

Following two years of controversy over the site selection for the above project, the Atlanta EPA office concluded that the Milcoe Road site, originally selected by the city of Jacksonville, was the most desirable. In reaching this decision the EPA made a mockery of a Local Citizens Advisory Committee selected by their own Atlanta EPA office.

This committee of citizens was made up of five representatives from the affected area, five city officials and five impartial citizens. The five impartial citizens represented such groups as the Chambers of Commerce and the League of Women Voters. After lengthy study of cost and environmental factors, the committee voted (by majority) to support an alternate site- The Dunes.

The Atlanta EPA office in reaching their decision in favor of the Milcoe Road site, based on cost factors, issued a statement that the recommendations by the Citizens Advisory Committee was not a valid representation of persons affected. Their explanation for this was no one living at the Dunes was represented. I submit to you that the integrity of the EPA is on the line. Let me explain that the owners of the Dunes property had a representative on the committee, and secondly no one lives closer to the Dunes area than the community of citizens objecting to the Milcoe Road site. The Dunes site is less than a mile down the road from the Milcoe Road site, but by moving the proposed project to the Dunes there would be no established residence affected. I might add there is no wildlife and little vegetation there as it is nothing but sand that is dead from mineral mining. It is interesting to note that one of the members represented a community far removed from the Milcoe Road site, but as close as a mile and one half to the Dunes site. This person voted for the Dunes site.

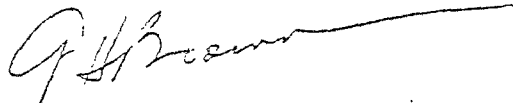
- Page 2 -

May I conclude by saying that although the Atlanta EPA office based their selection of the site on cost factors alone, I can find no place in their Environmental Impact Study where they have provided cost findings other than cost factors identical to those submitted by the City of Jacksonville from their consulting firm, Flood and Associates.

If this matter is within the area of your concern I would appreciate your committee investigating the mockery of the Citizens Advisory Committee, especially those disinterested members who spent several months in an impartial study of this undertaking.

Thank you for your time and concern.

Yours truly,



Ms. Gwendolyn H. Brown
1841 Holly Oaks Lake Road West
Jacksonville, Florida 32211

cc: Mr. Robert Zener
General Council of EPA
401 "N" Street, N.W.
Washington, D.C. 20464

Enclosure

1716 Ormond Road
Jacksonville, Florida
January 20, 1976

Congressman Charles Bennett
2113 Rayburn Office Building
Washington, D. C. 20515

Letter in reference to the Arlington-East Sewage Treatment
Plant, Jacksonville, Florida

Dear Congressman Bennett:

After some thought whether or not to bother you again about this subject, I have decided to write you because I remain deeply disturbed. I wonder if we have really come to the point where government agencies - whether local or federal - will be allowed to say that they know better than the people what is best for the people?

For two years, as you know, the residents of Holly Oaks have protested every step of the way that a 10 to 25 million gallons per day sewage treatment plant is simply not compatible with our residential environment. Just briefly and as you know, the city's original assessment statement was evidently deemed inadequate by the Atlanta E.P.A. office a year ago, and the Atlanta office recently completed its Environmental Impact Statement. Four particular areas of concern in that study, I believe, need your attention.

1. First, Atlanta E.P.A. formed a Citizen's Advisory Committee to review their preliminary draft of the study. I was one of those individuals. The committee consisted of 15 people: five from the city, five from the affected area (so called by the Atlanta EPA although only three of us actually live in Holly Oaks. The other two represented the Arlington Civic Club and the Greater Arlington Civic Association and reside several miles from our area), and five from impartial groups of greater Jacksonville, including, ironically, an Urban Planner from Stockton, Whately, and Davin, the company which heads the list (reference page 343 in your copy of the Environmental Impact Study) of those who will benefit most economically from the construction of the facility.

At any rate, after considerable hours of meetings and study, this Advisory Committee voted 9 to 4 to move the site to a dunes area less than a mile down the road but more than a mile from the Holly Oaks community. With the exception of one city councilman who was included among the five "city representatives", only the city representatives refused to vote for the alternate dunes site, in spite of the fact that this dunes site was their own second choice in their rankings. (reference page _____ in the study). One can only wonder why in the world the city is so intransigent and beholden to that Mill Coe property.

Voting with the affected area people to move the site were the impartial representatives from the Chamber of Commerce of Jacksonville, the League of Women Voters and the St. John's River Water Management Board. After the meeting, and this is not represented in the Atlanta E.I.S. study, two

page two

people who were absent were polled and voted not to move. They were the SWD man and a man from an architectural association. The final vote, in either case, was to move, 9 to 4 or 9 to 6, depending on how you look at the vote and how you feel about the fact that the absentees did not participate in or benefit from the committee discussion prior to vote-taking.

Now, in spite of the citizen's expressed wishes, Atlanta E.P.A. concludes in its study that the Citizen's Advisory Committee acted based on fear and the E.P.A. was making its decision based on knowledge. (Reference page 375). I personally think this is an affront to the intelligence of people and that such a conclusion smacks of a totalitarian attitude on the part of government workers: We have the knowledge; we know best. .

Fear is not the basis for ranking, but rather the rankings, I believe, are based on our knowledge that the E.P.A. study materials which they provided did NOT convince the readers - affected area or impartial - that the Mill Coe road site was the best alternative.

2. To add further insult, the E.P.A. Impact study states (Reference page 375) that the Advisory Committee was really not representative because there was no one on the committee from the dunes area. What kind of logic is this to justify dismissing the Committee's vote? The E.P.A. itself formed the Committee. Did they set it up so that any recommendation would be nullified unless it supported the Mill Coe road location?
3. The third major area of concern deals with costs. The E.P.A. decision to support the site is based on costs, which the study implies would be cheapest at the Mill Coe site. (You are probably aware of the fact that the E.P.A. staff did NOT rate this site as most environmentally suitable. They rated it 6th.) While I do not suggest that the cost figures are wrong, I do think that the E.P.A. should be required to perform a comprehensive audit by qualified cost analysts, inasmuch as the cost figures which appear in the E.P.A. Impact Study are the identical cost figures supplied by the City's consultants at the final meeting of the Advisory Committee. I think we should know to what extent E.P.A., as they are required to do by requirements of the National Environmental Protection Act, conducted a comprehensive review of the grant applicant's (the City) consultants' cost figures. This is essential in view of the fact that the E.P.A.'s decision to go along with Mill Coe seems to be based on cost differentials.
4. Please be advised further that NO correspondence included in the Environmental Impact Study appendices supports the Mill Coe location: not from the State of Florida Department of Natural Resources; not from the Corps of Engineers; not from the U. S. Department of Interior Fish and Wildlife Service. The treatment of letters by E.P.A. (Reference pages 367-368) is completely inadequate and perfunctory, in my judgment. With regard to the U. S. Department of Interior letter, the E.P.A. response completely ignores Interior's first recommendation: "We believe that the least biologically damaging alternative would involve con-

page three

struction of the plant at the unvegetated strip mine area...." which is the dunes location.

With regard to the objections raised by the State of Florida Department of Natural Resources, the Environmental Impact Study notes that the Department of Natural Resources had insufficient maps and data to justify their criticisms. This is an interesting response from the E.P.A. in view of the fact that the E.P.A. apparently supplied the materials which the Department of Natural Resources used! (Reference pages 367 and 406).

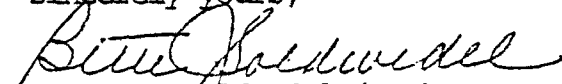
With regard to the Corps of Engineers objections, the E.I.S. says in response: "Latest communication indicates no problems are foreseen." Oh, really? These "latest communications" are not contained in the Environmental Impact Study. Further, I am told by an individual here in Jacksonville that no Department of Army permit has been sought nor have detailed plans or the Environmental Impact Study itself been forthcoming to the district Corps office. (As late as last Friday, 1/16/76.)

I regret the length of this communication but I am appalled that in view of the foregoing this Environmental Impact Study has been forwarded to the national office of E.P.A. and to the Council on Environmental Quality for approval. We have a public hearing next Monday, but, after reviewing the E.P.A. responses to the public in the past, I have very little expectation that the report of that hearing will be any more than superficial.

Can you, as our representative, communicate to the E.P.A. that when government agencies ask for citizen participation in decision-making they are obligated to pay attention to what the majority says; that in the interest of minimal objectivity, an audit is required to determine if in fact there is any significant cost difference among the sites; that all necessary permits, permissions, approvals, and/or reviews by related governmental agencies MUST BE IN HAND before construction plans are authorized and funded and the first spade is turned. Otherwise fragmented approval of a piece of a total project too frequently leads to irreversible consequences..

I shall appreciate your consideration.

Sincerely yours,


Bette J. Soldwedel (Dr.)

Patricia Jean Pillmore
3826 Tara Hall Drive
Jacksonville, Florida
32211
January 20, 1976

US Senator Charles Bennett
Rayburn Building
Washington, D.C. 20510

Dear Rep. Bennett,

AS a private citizen I am becoming increasingly concerned by the actions of the E.P.A. concerning the Environmental Impact Study, Arlington East, Regional Treatment Facility, Jacksonville, Florida. The statement is obviously biased to the interests of a few members of the city government rather than pointing out the environmental aspects of the total impact area.

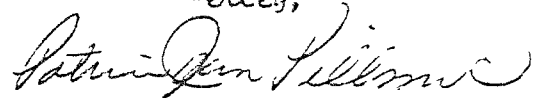
There were 11 possible plant sites to consider in the statement and all of the extensive research seems to have been on the one plant site that the city began to take by eminent domain before the citizens of the area asked for an impact study. The Fla. State Department of Natural Resources and the Army Corps of Engineers, both did not approve the Mill Cove site because of strong environmental evidence.

The Mill Cove site which the E.P.A. says is a "reasonable alternative," is the only alternative that was considered in depth in the study.

My other concern is the maintenance of the free enterprise system in my city, state and country. The federal environmental guidelines I believe are necessary to continue a quality of life necessary for continuing life on this planet and in this country, but, it should not be at the expense of the small businessman.

When a business is forced to meet Federal Regulations, and to do so must borrow the money at, in some instances at 16%, and the Federal Government can GIVE millions of dollars to a municipality that can enable that municipality to take over a small business one by one, is this how we are going to maintain free enterprise? Some of the EPA give-away is my tax money, therefore, I am paying for this municipal takeover and I am going to have to pay again for the upgrading of the smaller sewer plants and I will have to pay again for the tie-in to the regional plant. The implications of this program seem to me to bring us one step closer to Socialism.

Sincerely,



Patricia Jean Pillmore

January 21, 1976

U.S. Representative Charles Bennett
2113 Rayburn Office Building
Washington, D.C. 20515

Reference: EPA Project C120541010
City of Jacksonville
Wastewater Management Fac
Arlington-East Service Di

Dear Sir:

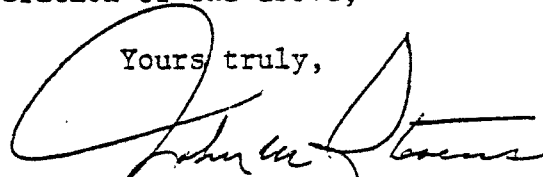
The Atlanta E.P.A. Office has recently concluded an Environmental Impact Study following two years of controversy over the site selection for a regional sewage treatment plant. While the Atlanta Office of E.P.A. concluded that the Millcoe Road site was not most environmentally desirable, cost factors of the alternative sites were said to be over-riding determinants, and the subsequent selection by Atlanta E.P.A. was the Millcoe site. This was their conclusion, in spite of the fact that a Citizen's Advisory Committee, formed by Atlanta E.P.A., voted by majority and after lengthy study of cost and environmental factors, to support an alternate site.

If you have the opportunity to examine the Environmental Impact Study, you will note that the cost figures adopted by Atlanta E.P.A. as their own appear to be the identical costs developed by the grantee's consultant. While I understand that the courts have ruled inconsistently in several suits dealing with this practice, I am writing to ask your opinion of the integrity of this procedure in this particular case since those costs were used to support the site preselected by the grantee (the City of Jacksonville) over the strenuous objections of those who live in the immediate vicinity and the majority of the Citizen's Advisory Committee.

Finally, can you advise me whether or not the national office of the Environmental Protection Agency will require a preconstruction audit before acting on the Atlanta E.P.A. Environmental Impact Study? Such an audit, which is consistent with recommendations in the E.P.A. document Review of the Municipal Waste Water Treatment Works Program (Nov. 30, 1974) appears to be appropriate to maintain the integrity of the construction grants program.

Thank you for your time and consideration of the above,

Yours truly,



John M. Stevens
1724 Ormond Road
Jacksonville, Florida
32211

JMS:fs

cc: Lawton Chiles
Richard Stone
William Chappell
Reubin Askew
Robert Shevin
Harmon Shields

U. S. Representative William Chappell
1124 Longworth Building
Washington, D. C. 20515

JAN 22 1976

Dear Congressman Chappell:

The Citizens Committee formed by E.P.A. to review the Arlington-East Sewage Treatment Plant Sites and costs in Jacksonville voted 9 to 4 to move the plant to the isolated area north of Regency Square, away from the site adjacent to Holly Oaks property owners. The four voting against the move were all City representatives who apparently will support nothing but the Holly Oaks site. Of the five designated as "affected area" representatives on this committee, only three actually reside in Holly Oaks. The other two, plus the impartial representatives of the Chamber of Commerce, the League of Women Voters and the St. Johns River Water Management Board, joined with the Holly Oaks residents in the judgment that the site should be moved.

The E.P.A. later polled two people who did not attend the meeting and recorded their votes (as though they were there for the discussion of alternatives) as negative.

In spite of the foregoing, the E.P.A. Atlanta office appears ready to support the City's preselected site.

We now ask you to lend your support by affirming to the national E.P.A. office that the will of the people, as evidenced by this vote, be honored in its decision-making.

Very truly yours,

Mrs. Madeline Starnes

Address:

*1724 Almond Road
Jacksonville Fl. 32211*

United States Senator Lawton Chiles
2107 New Senate Office Building
Washington, D. C. 20510

Dear Senator Chiles:

The Citizens Committee formed by E.P.A. to review the Arlington-East Sewage Treatment Plant Sites and costs in Jacksonville voted 9 to 4 to move the plant to the isolated area north of Regency Square, away from the site adjacent to Holly Oaks property owners. The four voting against the move were all City representatives who apparently will support nothing but the Holly Oaks site. Of the five designated as "affected area" representatives on this committee, only three actually reside in Holly Oaks. The other two, plus the impartial representatives of the Chamber of Commerce, the League of Women Voters, and the St. Johns River Water Management Board joined with the Holly Oaks residents in the judgment that the site should be moved.

The E.P.A. later polled two people who did not attend the meeting and recorded their votes (as though they were there for the discussion of alternatives) as negative.

In spite of the foregoing, the E.P.A. Atlanta office appears ready to support the City's preselected site.

We now ask you to lend your support by affirming to the national E.P. office that the will of the people, as evidenced by this vote, be honored in its decision-making.

Very truly yours,

Joan Bowditch
(Mrs. R.E.)

Address:

1700 Holly Oaks Lake Rd
Jacksonville, Fla. 322

. Patricia Jean Pillmore
3826 Tara Hall Drive
Jacksonville, Florida 32211

US Senator Lawton Chiles
2107 New Senate Building
Washington, DC

The intention of this letter is to present some of the questionable practices of the Environmental Protection Agency concerning their dealings with the City of Jacksonville in their environmental impact study on a regional sewer plant, and their flagrant ignoring of Environmental Agencies recommendations as well as distasteful treatment of local citizens.

The Environmental Protection Agency's, Jacksonville, Florida, Arlington East Sewer System Impact Study of December 15, 1975, that will be submitted to the Washington Office after the last public hearing January 26, 1976, states that the City of Jacksonville has purchased the land at the Mill Cove plant site. When in fact the plant site is not owned by the City. As the city's agreement for this proposed site deals almost exclusively with cost, over-riding environmental consideration, is this not a gross misrepresentation of facts that could influence cost factors, availability of land, assumption of approved permits and questionable practices of the E.P.A.

As recommended by E.P.A. regulations a 15 member committee was chosen by the E.P.A. composed of 5 city representatives, 5 disinterested members and 5 interested citizens. But the committee was not chosen at the beginning of the impact study, only after local citizens committees had expressed opposition to the Mill Cove Site. After much time and study the committee recommended sites other than Mill Cove sites, all for environmental reasons. The citizens committee has been sighted by the E.P.A. as invalid because there was no committee representative from the Dune Site area, their first choice of plant sites. The Citizens Committee was allowed only 5 interested members and there were 11 sites to evaluate.

Do private citizens have any voice in how their Federal Tax Monies are spent? When a Federal Agency can be swayed by local government is there any integrity in the Federal Agency that is handing out millions of dollars of Federal Money earmarked for Environmental Improvement?

With 11 sites to choose from that did not have people in close proximity to the site. The city and the E.P.A., while admitting are not the best environmentally sound choices, recommend that the said plant be built on the Mill Cove Site, in the middle of a residential area, because of a 2 million dollar cost factor. Isn't the E.P.A. designed to help communities overcome the cost barrier to environmentally sound planning?

Before a final public hearing, required by law in an Environmental Impact Study, both the Mayor of Jacksonville and the E.P.A. announced publicly that the site selection has been finalized and the plant will be built on the Mill Cove Road site. This final hearing is designed for community input and is the last opportunity for the citizens to express support or objection to the E.P.A. on this project.

Have the citizens of Jacksonville rights been abridged or violated by virtue of the fact that the E.P.A. and the city government announced the final site selection before they received all community input required by law?

Both State of Florida Department of Natural Resources and the Corp of Engineers have expressed concern about the possible pollution problems associated with using the Mill Cove Site. The City of Jacksonville Department of Public Works proposes to run a pipe containing treated sewerage out-fall across Mill Cove and across Blount Island, and into the main channel of the St. Johns River.

Mill Cove is slowly dying as a result of silt and matter infiltration. Mill Cove is a tidal cove and as a result of this infiltration the tidal flow is becoming increasingly restricted. Both of the above mentioned agencies are concerned about the life of Mill Cove if increased matter is allowed to be pumped into the main channel itself which washes into the cove.

The primary source the E.P.A. used for the rebutal of the above is a letter from the consulting firm of Flood and Associates stating that the construction of the out-fall pipe for treated sewerage will not introduce solids directly into Mill Cove, but they do not show how it could indirectly introduce solids into the cove. At this point we are unable to locate both the results of the study made on water flow in Mill Cove by Flood and Associates or any mention in the E.P.A. Study of its use of Flood and Associates findings. Flood and Associates said, refer to the E.P. Arlington East Sewer Study, the E.P.A. said to refer to September 1974 Assessment Study, the Assessment Study referred to a water quality Management Study and that study offered no explanation of water flow in Mill Cove.

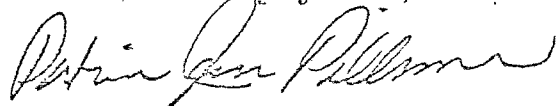
A construction permit is required from the Corp of Engineers before the out-fall structure can be built through the cove and extended into the main channel of the St. Johns River. The Corp has already informed the E.P.A. that they have an objection to the use of Mill Cove since only the Mill Cove sites create the most underwater disturbance.

The Corp is currently working on a Model Study of the water flow to be completed by 1978, with specific interests in the cove. If the Corp deems it necessary to alter Mill Cove due to findings from this study, the city's proposed out-fall pipe would have to be moved and re-routed at the city's expense.

In view of the fact that the Corp of Engineers has already stated that approval of the out-fall pipe planned for the Mill Cove may not be issued and the Corp's future plans cannot be predicted on further engineering in the Cove, how can the E.P.A. and the City government go ahead with the Mill Cove Site for a regional sewerage treatment plant facility?

Representations of your publication are most welcome to come and see for yourselves whether E.P.A. is really working for environmental quality or is it just another Federal give-away program. Is this the way E.P.A. operates throughout the country?

Respectfully yours,



Patricia Jean Pillmore

PJP:md

CHAPTER IV

AGENCY DECISION

Based on the information, analyses, and findings presented herein and in the Draft EIS, the Environmental Protection Agency will offer a Step II grant to the City of Jacksonville, Florida for the preparation of plans and specifications for regional wastewater treatment facilities to service the Arlington-East District. The project will consist of a 10.0 MGD wastewater treatment plant located at Millcoe Road, 13,900 feet of outfall line terminating at the edge of the maintained shipping channel in the St. Johns River, and approximately 38,000 feet of force main which will be used to transport sludge across the St. Johns River for incineration at the Buckman Street Wastewater Treatment plant incinerator. This plan, with the exception of the sludge force main, appears as Alternative 1g in the Draft EIS.

Special conditions of the grant will be that the City of Jacksonville complete its 201 facilities plan of which this project has been determined to be a component part, that it agree to continue to pursue the most cost-effective and environmentally sound method of sludge disposal for all facilities existing and planned, that it obtain for use as a passive recreation park and additional buffer zone the 11⁴ acre tract shown herein as Exhibit 2 of Chapter II, and that it carry out any mitigative measures recommended by the archaeological and historical survey of the sludge force main route.

This decision concerning the Step II grant constitutes a commitment for a Step III construction grant when an acceptable Step III grant application is received by EPA.