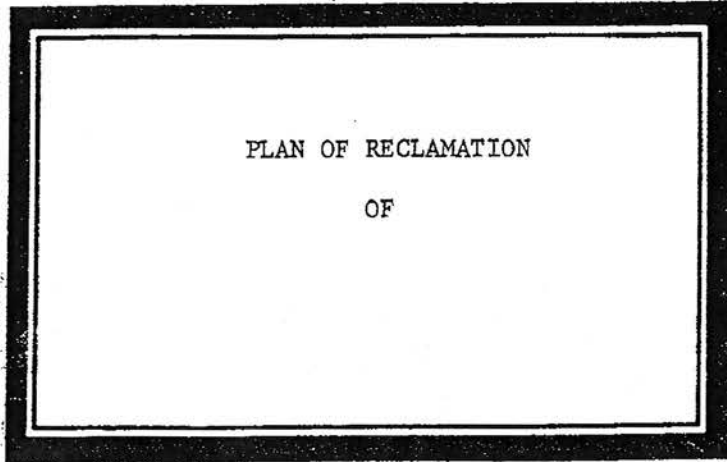


CHANCERY # 5736



PLAN OF RECLAMATION  
OF

# St. Johns Drainage District

1963

*Board of Supervisors*

*Holman R. Cloud - Chairman*

*Joseph H. Hale*

*Conrad Tuerk*

FILED  
OCT 23 1963  
BY \_\_\_\_\_  
Deputy Clerk

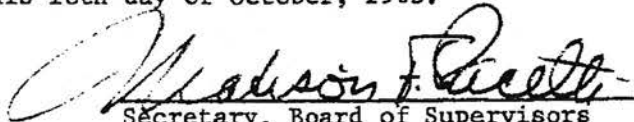
FILED BEFORE ME THIS  
23 DAY OF Oct 19 63  
*[Signature]*  
JUDGE

PREPARED BY

STATE OF FLORIDA        )  
                                  )  
COUNTY OF INDIAN RIVER )

I, MADISON F. PACETTI, Secretary of the Board of Supervisors of St. Johns Drainage District, hereby certify that this is a true and correct copy of Plan of Reclamation duly adopted by the Board of Supervisors of said District at a meeting held October 18, 1963, which meeting was duly and regularly called, and at which all of these supervisors were present and which was ordered by the Board to be filed in the Circuit Court of the Ninth Judicial Circuit, Indian River County, Florida.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the said District this 18th day of October, 1963.

  
Secretary, Board of Supervisors  
St. Johns Drainage District



## INDEX

<u>SUBJECT</u>	<u>PAGE NO.</u>
LETTER OF TRANSMITTAL	
REPORT:	Page 1 - Page 14
ESTIMATED CONSTRUCTION COSTS:	Page 15
COPY OF LETTER from Central and Southern Florida Flood Control dated April 5, 1962:	Page 16 - Page 17
COPY OF LETTER from Florida State Road Department dated April 6, 1962:	Page 18
COPY OF LETTER from Central and Southern Florida Flood Control dated May 2, 1962:	Page 19
RECOMMENDATIONS	Page 20
PLATES INCLUDED:	
Plate 1. Rainfall Distribution - 20 year period.	
Plate 2. Rainfall, Intensity, Frequency and Duration Curves.	
Plate 3. Run-off Velocity.	
Plate 4. Rainfall, Intensity, Duration, Frequency Curves for 10 year and 50 year storms.	
Plate 5. Location Map.	
Plate 6. Typical Subdivision of 640 acres.	
Plate 8. Quantity Flow Map.	
Plate 10. Typical 1/2 Section - Main Canal	

LLOYD AND ASSOCIATES

ENGINEERS AND SURVEYORS

REPORTS  
DESIGNS  
SUPERVISION  
APPRAISALS  
CONSULTATIONS

ROBERT F. LLOYD  
REGISTERED CIVIL ENGINEER 3538  
REGISTERED LAND SURVEYOR 944  
TELEPHONE JD 2-4112  
1835 20TH STREET  
VERO BEACH, FLORIDA

July 25, 1962

The Board of Supervisors  
St. Johns Drainage District  
Vero Beach, Florida

Subject: Plans for the Development of St. Johns  
Drainage District.

Gentlemen:

In accordance with your instructions, we  
are pleased to submit herewith Plans for the Develop-  
ment of St. Johns Drainage District.

This report contains the engineering data  
and studies for the development and utilization of  
the lands in the St. Johns Drainage District in the  
most economical and expeditious manner.

I would suggest that the Board of Super-  
visors meet at the earliest possible time and review  
these plans in detail.

Respectfully submitted,

LLOYD and ASSOCIATES

By:



Robert F. Lloyd  
Consulting Engineer

RFL/fe

## ST. JOHNS DRAINAGE DISTRICT

### HISTORY

In the evolution of the Florida Peninsula, the first land mass in this area was the ridge which lies between the Kissimmee River and the St. Johns Marsh. At a later date, the oceans receded and an additional land mass was formed which now can be identified as the ten mile ridge which runs parallel to the coast. At an even later date, the cycle has re-occurred and produced the Indian River. These changes in the shape of Florida are attributed to upheavals, delta deposits, receding of oceans and the formation of barrier reefs.

The end result of all these physical changes was the formation of a basin bounded on the West by the ridge, on the East by the ten mile ridge which formed the St. Johns River headwater and the North end of the Allapattah Flats. Water from this basin drained North and South depending on winds and the amount of rainfall in the respective areas within the basin. There also existed three outlets in the area comprising Indian River County, which flowed into Indian River during high stages of water in the St. Johns River Basin.

In the middle of the nineteenth century when Florida was first surveyed by the United States Government, there were numerous large hammocks which were dense forests, and the remainder of the area was a prairie.

Shortly after the turn of the century, small villages engaged in agriculture pursuits thrived in this area and attracted a great number of settlers. The growth pattern was given additional impetus with construction of the Florida East Coast Railroad by Henry M. Flagler. In turn, he promoted Florida's East Coast through the Model Land Company, in an effort to create more traffic for the Florida East Coast Railroad. The resultant increase in demand for agricultural lands was met by the formation of drainage districts in the Daytona Beach-Miami area. Within the tri-county area composed of Brevard, Indian River and St. Lucie some representative districts are: the Fellsmere Drainage District, the Sebastian Drainage District, the Melbourne Drainage District, the Indian River Farms Drainage District and the St. Lucie Drainage District, all of which were formed to provide additional lands suitable for agriculture use. Construction of these districts and others eliminated natural flow ways to the East, thereby creating high-water stages in the St. Johns River Basin which

can be alleviated only by movement of excess waters either northward along the total length of the St Johns River to a point of discharge into the Atlantic Ocean at Mayport, or by movement southward through the Allapattah Flats to Lake Okeechobee.

#### PURPOSE

The formation of a drainage district is the logical vehicle for providing adequate water control and roadways to all land owners in this area on an equitable, economical and orderly basis for the development and maximum utilization of all said lands.

#### AREA

The St. Johns Drainage District comprises all that land lying South of Highway 60 and West of the Indian River Farms Drainage District. It is bounded on the South by the County line, on the West by Range Line 36 and 37, less Sections 30 and 31, Range 37 and Sections 29, 33 and 34, Range 38, containing 27,720 acres.

## ELEVATION

Topographic maps from several sources show the land to be generally elevation 23 feet in the Northeast and decreasing to 22 feet in the Southwest. Upon completion of the project, the elevation of the ground in the Western area, having a muck blanket, will be lowered due to consolidation and oxidation of said muck. The rate and amount that this area will subside is a function of time, the extent of drainage, and the depth of the muck.

## SOILS

On the Eastern half the soils consist of sandy loam or sand underlaid by marl, which varies from 12 inches to 6 feet below the surface as observed in areas where canals have been dug. On the Western half, a muck blanket starts on the East and progressively increases in depth as one travels westward. Stratified limestone schist outcroppings are in evidence in some hammocks.



## RAINFALL

Rainfall in this area over the past 20 years has averaged 52.85" per annum, with the greatest percentage occurring during the months of June through October. The highest rainfall during the last 20 years occurred during September, 1960 when 20.29" fell. Plate 1. contained in this report includes data showing the mean monthly rainfall, the maximum yearly rainfall, the mean monthly rainfall and the maximum monthly rainfall during the 20 year period. Plate 4. contained in this report indicates the amount of rainfall that can be expected in the 10-year and 50-year storm in South Florida. Specific information of this type is not available for the area comprising the proposed water control district. However, the amount of rainfall would be slightly under those depicted on the curves, which are for South Florida.

## WEATHER

Winters are generally mild and summers are not excessively warm, resulting in a comparatively small range of extreme temperatures throughout the year. The highest temperatures rarely exceed 95° Fahrenheit. Freezing temperatures are of short duration. Relative humidity is generally quite high in the range of 60 percent to 85 percent.

(1) Subdivision of Property:-

Very little survey work has been done in this area since the middle of the nineteenth century. It is felt that little good can be accomplished by the re-establishing of section corners, as they would not be completely regular. Much time and money may be saved by surveying the perimeter and then subdividing this area into blocks one mile square. Boundaries of existing developments would be recognized and maintained.

(2) Perimeter Dike:-

A perimeter dike is to be constructed on all four sides to an elevation of 31 feet above M. S. L. Rights-of-way for this dike will be held by the District. The maintenance of these dikes will also be a Drainage District function.

Inasmuch as the security of all individuals operating within the District will be contingent upon adequate maintenance, the responsibility should not be placed upon the individual.

(3) Main Flood Plain:-

A main flood plain right of way is to be acquired 300 feet in width west of the East boundary of Range 37 to the West boundary of Section 29, Township 33 South, Range 37 East, and a 300 foot right of way through Sections 19 and 20, Township 33 South, Range 38 East; and 100 feet in Section 21, Township 33 South, Range 38 East. This right of way is to be acquired in fee title by the District. A levee will be constructed on the North and South sides of the right of way having an elevation of 31 feet M.S.L. on the West to an elevation of 34 feet M.S.L. on the East, thereby providing enough head to produce an hydraulic gradient to flow to the West. This flood way will have a design capacity of 4 inch run-off / 24 hours.

(4) Main Laterals:-

Laterals will be constructed every mile, more or less, running North and South. These laterals will have a minimum depth of 8 feet and have the capacity of 4 inch run-off / 24 hours. Water levels will be maintained in these laterals by the utilization of pumping stations which will be operated by the District. These laterals and the main flood way are the only laterals to be maintained by the District. Several areas have already been developed and the location of these laterals on the Flow Chart are for overall quantity, only. These rights of way shall be obtained in easement form and not fee title.

(5) Pumping Stations:-

Pumping stations shall be constructed. Multi-pumping units having a total firm capacity of approximately 2-inch run-off / 24 hours shall be installed. The discharge of these units shall be in a downstream direction.

The operation of these units and the elevation of water to be maintained within the lateral shall be the function of the District. Pumping of individual groves into these laterals shall be prohibited.

(6) Roadways:-

A 30-foot easement shall be reserved by the District on each mile-square block, thereby establishing a 60-foot roadway easement around perimeter of each square mile. Subdivision of any given section will be in an East-West direction. All owners will have ingress and egress on each of these East-West boundaries. Roads shall be graded marl. Arterial roads will be constructed on the lines between Ranges 37 and 38, and on the West of Sections 3, 10, 15, 22, 27, and 34. Arterial roads will bridge the main flood way, thereby providing accessibility to the District at three-mile intervals from State Road 60. Maintenance of these roads will be the function of the District.

(7) Bridges and Culverts:-

In establishing the roadways and drainage system parallel to one another, the construction of a multitude of bridges and culverts has been avoided. The two bridges over the main flood way shall be designed to carry heavy equipment for maintenance and shall have a loading criteria of H20-S16. Culverts under the roadway, to permit East-West travel, shall conform to the size stipulated by the Engineer to assure proper drainage. All such pipe or culverts entering or being discharged into the main flood way or lateral, operated by the District, shall be clear of the flow and shall be properly headwalled. Prior to the installation of any culvert or bridge across or into a District main flood way or lateral, the individual grove owner shall submit plans to the District together with request for approval. He shall obtain written approval by the Engineer of said District prior to commencement of construction.

(8) Reservoirs:-

Reservoirs are to be established in Sections 18 and 19, Township 33 South, Range 37 East. These reservoirs are to be filled by storing excess water which is to be pumped from the groves, and by the utilization of the irrigation pumps to be installed in the flood control structure in the West end of the main flood way.

(9) Irrigation System:-

To permit irrigation of any one block in a section, irrigation shall be done through ditches provided within the 60 foot North-South roadway easements. Each North-South easement shall terminate at the main flood way, at which point a control structure shall be established to permit water to be discharged from the main flood way into the irrigation lateral. Water shall then be directed into any or all groves abutting on the irrigation lateral. This system provides flexibility in enabling the individual grove owner to hold water within his property at the level he desires as the lateral and pumping stations will be operative during irrigation. Groves abutting roadways between the groves and the irrigation flood way shall install adequate culverts under the road to provide passage of water for irrigation.

During times when irrigation is necessary, it will be a District function to maintain the water elevations in the main flood way at an elevation adequate to provide irrigation.

It is anticipated that 10 percent of the groves can be irrigated at a time. This will enable each grove to be irrigated once every ten days, if necessary. Upon the completion of the irrigation of any particular grove, the water will discharge into the drainage ditch which in turn will pump it back up into the flood way. It is conservatively estimated that 50 percent of the water will be regained, the loss being made up by the operation of the irrigation pumps in the flood way control structure, which in turn will lead to the Blue Cypress Reservoir.

Note: See letter in this report.

Two sources of water shall be available for irrigation. The first is water that has been impounded in the reservoir. During times of drought, stored water shall be permitted to flow by gravity back into the main flood way by means of opening the gates between the flood way and the reservoir. When this water has been utilized to its fullest extent, the District irrigation pumps will be operated to provide additional water from canal leading to Blue Cypress Lake, which will be the second source of water for irrigation.

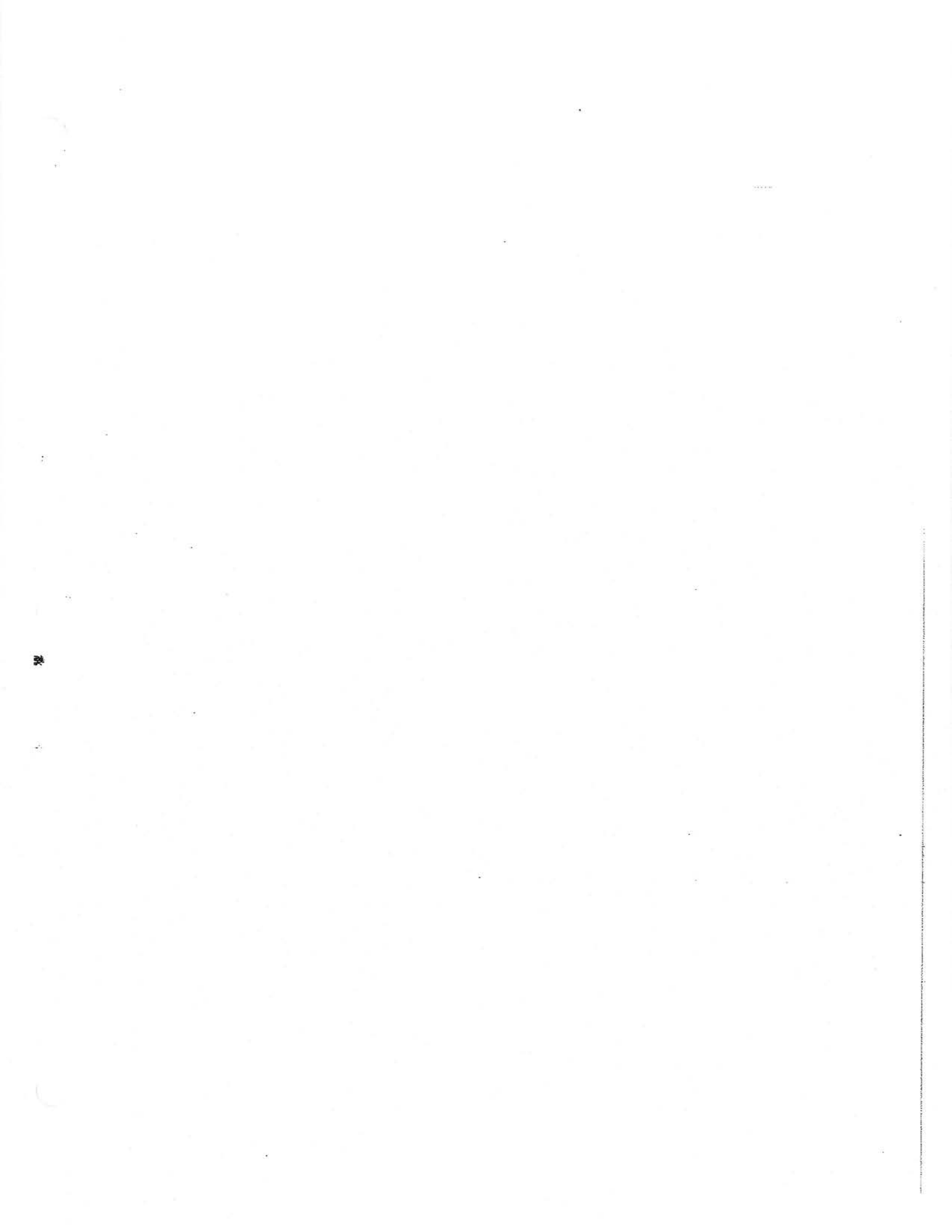
### FREEZE PROTECTION

The flexibility of this irrigation and drainage system is such that in cold weather the irrigation pumps in the main flood way together with the irrigation laterals and drainage pumps can all be operated simultaneously thereby creating a continuous flow of water throughout the groves providing some degree of protection to the citrus against freeze.

### CONSTRUCTION COMPLETION

A physical survey of those works completed which can be incorporated into this plan has been made and are shown on Page 15 of the drawings.





ST. JOHNS DRAINAGE DISTRICT  
Estimated Cost of Construction

Estimated Construction Cost			
	Total Units	Unit Cost	Total Cost
I. Land - Acquisition			
1. Floodway - Acres	302.07	100.00	\$ 30,207.00
2. Perimeter Dikes			
a. North - Acres	188.16	100.00	18,816.00
b. South - Acres	244.26	100.00	24,426.00
c. East - Acres (-7,900.00)	126.06	100.00	12,606.00
d. West - Acres	211.46	100.00	21,146.00
3. Reservoirs - Acres	1,192.30	100.00	119,230.00
II. Pumps - Drainage			
a. 3 Pump Installations with Shed	9	37,524.00	337,716.00
b. 5 Pump Installation with Shed	7	60,635.00	424,445.00
III. Control Structures			
Main Floodway	Each		126,000.00
IV. Culverts & Bridges			
A. Drainage			
(1) 66" Culvert, Headwall & Installation	7	600.00	4,200.00
(3) 40' Bridges	6	1,500.00	9,000.00
(4) 42' Bridges	8	1,800.00	14,400.00
(5) 49' Bridges	7	2,000.00	14,000.00
(6) Large Bridges	2	20,000.00	40,000.00
B. Irrigation Structures			
(2) 72" Culvert, Headwall, Installation	3	700.00	2,100.00
(7) 36" Culverts, Headwall, Installation	5	600.00	3,000.00
(7) 36" Culverts, Headwall, Installation & Screwgates	8	742.80	5,942.40
(8) 48" Culverts, Headwall, Installation	13	960.00	12,480.00
(8) 48" Culverts, Headwall, Installation & Screwgates	8	1,323.10	10,584.80
(9) 30" Culverts, Headwall, Installation	6	500.00	3,000.00
V. Clearing R/Ws Ac			
a. Floodway Ac			
b. Roads Ac	302.07	50.00	15,103.50
c. Perimeter Ac	441.21	50.00	22,060.50
d. Reservoir Perimeter AC	724.48	50.00	36,224.00
	48.48	50.00	2,424.00
VI. Earthwork - Cu. Yds. (Core, Grass & Shaping)			
1. Floodway	1,108,670.00	.18	199,560.60
2. Perimeter Dikes Cu. Yds.			
a. West - Cu. Yds. )	297,232.00	.18	53,501.76
b. North - Cu. Yds. ) Core, Grass & Shaping	411,840.00	.18	74,131.20
c. East - Cu. Yds. )	356,928.00	.18	64,247.04
d. South - Cu. Yds. )	440,232.00	.18	79,241.76
3. Irrigations Laterals & Roads - Cu. Yds.			
a. North - Cu. Yds.	1,774,080.00	.18	319,334.40
b. South - Cu. Yds.	1,406,592.00	.18	253,186.56
VII. Engineering - Field Work - Legal, Fiscal & Contingencies			
			362,000.00
			\$ 2,714,314.42
			- 7,900.00
			\$ 2,706,414.42



CENTRAL AND SOUTHERN FLORIDA FLOOD CONTROL DISTRICT

901 EVERNIA STREET

WEST PALM BEACH, FLORIDA

April 5, 1962

Mr. Robert F. Lloyd, Consulting Engineer  
Lloyd and Associates  
1835 20th Street  
Vero Beach, Florida

Ref: St. Johns Area

Dear Flip:

This will acknowledge receipt of your letter of March 21, 1962, transmitting copy of "Comprehensive Engineering Report for Development of St. Johns Drainage District". We wish to thank both Mr. Tuerk and you for making this report available to us for our review.

We also have a copy of your March 21st letter to Mr. Storter, relative to the eventual elimination of most of the Highway 60 bridges adjacent to the proposed drainage district.

The current plan for the Upper St. Johns area, which has just recently been completed by the Corps of Engineers, calls for the construction of the so-called Wilmington Drainage Canal between the St. Lucie County line and the proposed Lake Wilmington Reservoir. This canal was included in the plan at the specific request of this District.

The alignment of the canal follows the west boundary of the St. Johns Drainage District. It is estimated that 500 feet of right-of-way is required for the construction of this canal; 250 feet of which would be on the drainage district side. It is suggested that the above 250 feet be reserved by the drainage district for this purpose.

The preliminary canal design indicates that a cross-sectional area of 1960 square feet below a water surface elevation of 23.4 feet msl. would be required at the point where the canal passes through Highway 60.

I believe the above information is essentially responsive to your recommendation No. 5 on page 14 of the report. However, if further information regarding the St. Johns plan is required, please don't hesitate to call on us.

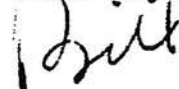
We have no further comments on your plan of development for the

Mr. Robert F. Lloyd  
April 5, 1962  
Page 2

proposed drainage district.

With best regards.

Yours very truly,



W. V. Storch  
Director, Engineering Division

WVS:ss

cc: Mr. Kirby Storter



MEMBERS

JOHN R. PHILLIPS  
CHAIRMAN

Fort Lauderdale, Florida

April 6, 1962

WARREN M. CASON  
RALPH POWERS  
WILLIAM T. MAYO  
JOHN H. MONAHAN  
A. MAX BREWERTAMPA  
LAKE CITY  
TALLAHASSEE  
FORT LAUDERDALE  
TITUSVILLESection: 88060 - State Road 60Mr. Robert F. Lloyd  
1835 20th Street  
Vero Beach, Florida

Dear Mr. Lloyd:

In answer to your letter of March 21, 1962, in relation to the organization and plans of the St. Johns Drainage District, it appeared that the drainage district would like to use State Road 60 as a dike on one of the boundaries of the drainage district.

After discussion in the district office, and with the State Engineer of Drainage, it is felt that the State Road Department would not want State Road 60 to be used as a dike. However, we will be glad to discuss it at some future date when your planning is further along, and water levels and plans for the north side of the road are available, as well as details of Central and Southern Florida Flood Control District plans for the upper St. Johns River Basin.

Yours very truly,

A handwritten signature in cursive script that reads "Clarence E. Davidson".

Clarence E. Davidson  
District Engineer

CED:CAW:jh



CENTRAL AND SOUTHERN FLORIDA FLOOD CONTROL DISTRICT

901 EVERNIA STREET  
WEST PALM BEACH, FLORIDA  
May 2, 1962

Mr. Robert F. Lloyd  
Consulting Engineer  
Arcade Building  
Vero Beach, Florida

Ref: St. Johns Area

Dear Flip:

Thanks for your letter of April 19, 1962, acknowledging receipt of the copies of the St. Johns Basin reports.

The reservoir south of State Road 60 was eliminated in the current report simply because the land required was not available for this use. As you know, we attempted for several years to work out some "modus operandi" with the several landowners in this area which would enable an effective reservoir to be created under our Project. Unfortunately, our ideas did not "take" and the present plan -- without the Project reservoir -- is the result.

With regard to discharge into Project, or District, canals we have inflow limitation criteria which are used in reviewing applications for permission to connect to our system. These criteria are usually not restrictive -- we generally find that the discharge which the individual landowner feels he can economically put into our system will fall close to, or below, that which would be permissible under our criteria. We have not as yet developed an area-discharge curve for the Wilmington Canal.

We have no specific policy established with regard to irrigation withdrawals from our canal system. We are working, however, toward some policy formulation in this regard. Some limitation on withdrawals from the Wilmington Reservoir will undoubtedly have to be put into effect in view of the limited supply available from that source.

Sincerely,

W. V. Storch

Director, Engineering Division

## RECOMMENDATIONS

1. It is recommended that the overall development of this District be divided into a minimum of two phases:

### Phase 1:-

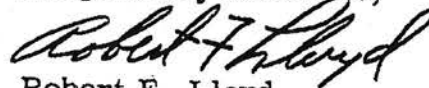
To incorporate all lands lying East of and including Sections 2, 11, 14, 23, 26 and 35, Township 33 South, Range 37 East, by the strengthening of the existing dike that now exists and the construction of a temporary flood control structure and irrigation pumps at this point. The partial construction of the flood way westward its complete length to provide an interceptor of the marsh area which will act as a reservoir until such time as the reservoirs are established and Central and Southern Florida Flood Control has started construction of their proposed canal to Blue Cypress Lake. The area in Phase 1 to be developed in accordance with the plans.

### Phase 2:-

This phase can be divided into any number of units of construction as the supervisors see fit, however, it is recommended that Phase 2 be completed as Phase 2a, and Phase 2b, in areas North and South of the flood ways respectively.

2. That the District authorize bonds necessary to complete the project.
3. That bonds be sold to cover construction of Phase 1 with the exception of pumping units which can be installed as needed.
4. That bids be let for the earth work involved in Phase 1.

Respectfully submitted,



Robert F. Lloyd  
Consulting Engineer



# ST. JOHNS DRAINAGE DISTRICT

VERO BEACH, FLORIDA

REPLY TO:

June 1963

## BOARD OF SUPERVISORS

Holman R. Cloud, *President*  
Joseph H. Hale, *Vice President*  
Conrad Turk, *Treasurer*

## PHILOSOPHY OF THE ST. JOHNS DRAINAGE DISTRICT

The St. Johns Drainage District is being formed to reclaim approximately 27,720 acres of land by the installation of a complete drainage and irrigation system which includes reservoirs.

The Board of Supervisors feel that this can be most readily accomplished by the District's acquiring in fee title, only, most of the lands required for perimeter dikes as well as the floodway. The remaining rights of way for roadways, laterals, etc., are to be acquired by easement.

Deeds have been drawn and are being held in escrow for these lands by the Indian River Citrus Bank and are to be exchanged for bonds at \$100.00 per acre when said bonds have been issued and validated.

Drainage and irrigation pumps and control structures will be owned and operated by the District. However, the pumps and installation of same will be borne by the land owners effected by these pumps and they in turn agree to accept bonds for these installations. The engineer's estimate for the total construction, including land acquisition involved in the District is \$2,700,600.00. It is the intent of the Supervisors that all lands within the District will be taxed to amortize the bonds issued for land acquisition.

The present demand indicates that the initial phase of development will be comprised of the following area:

- Southeast 1/4 of Section 5
- South 1/2 of Section 6
- All of Section 7
- West 1/2 of Section 8
- West 1/2 of Section 17
- All of Section 18
- All of Section 19
- West 1/2 of Section 20
- All of Section 29



PHILOSOPHY OF THE ST. JOHNS DRAINAGE DISTRICT

All of Section 30  
All of Section 31  
All of Section 32  
Township 33 South, Range 38 East  
and  
South 1/2 of Section 1  
All of Section 2  
All of Section 13  
All of Section 24  
All of Section 25  
All of Section 26  
All of Section 35  
All of Section 36  
Township 33 South, Range 37 East

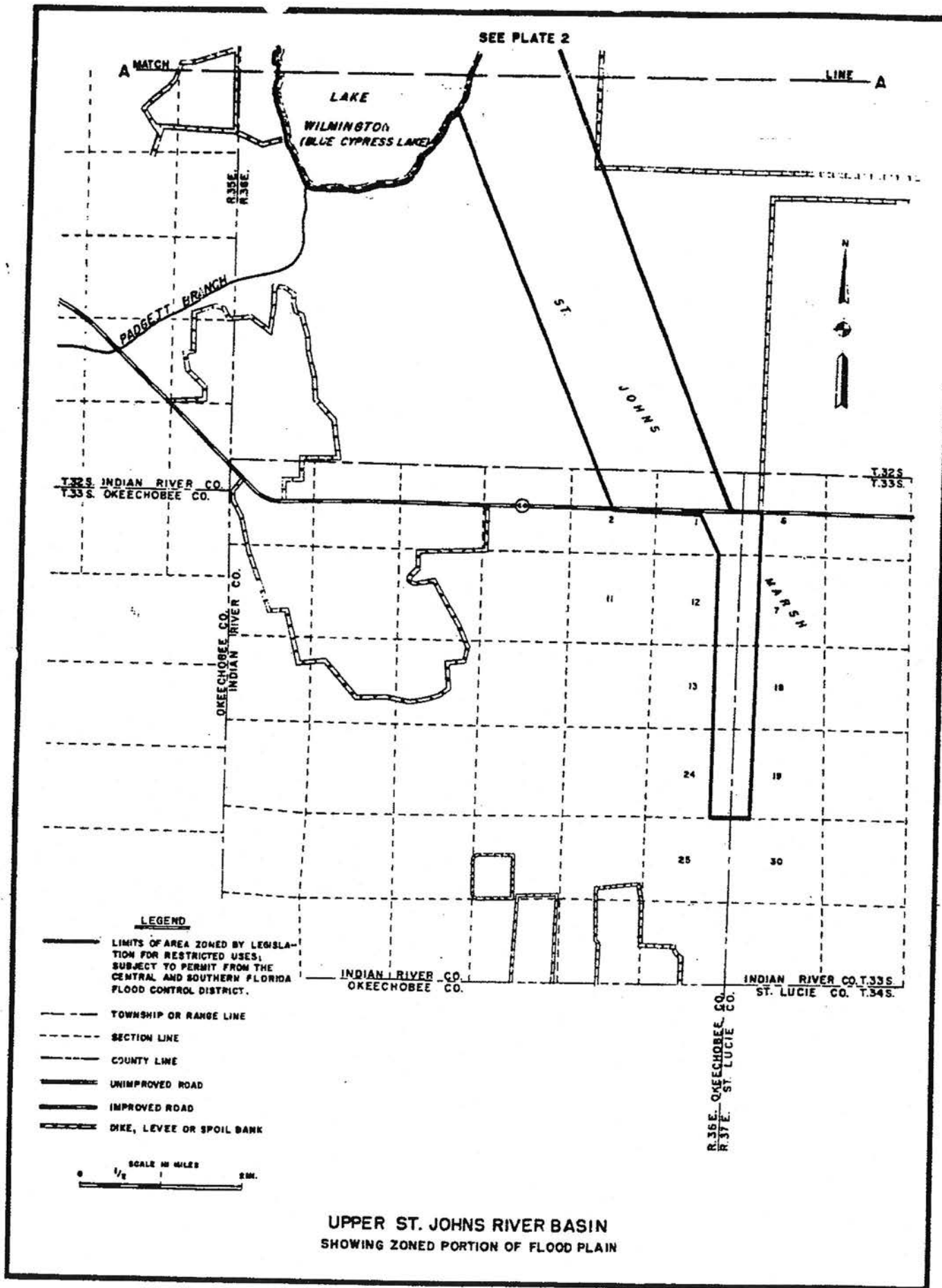
The above area containing approximately 10,720 acres gross.

The construction involved in Phase 1 will include the excavation of the floodway, installation of pumps, flood control structures and irrigation pumps to serve all lands within Phase 1. The total construction cost involved in Phase 1, including \$206,000.00, which represents total land acquisition costs for floodways, levee rights of way, as well as reservoirs is \$645,000.00.

All owners within the District will be taxed to amortize bonds issued for land acquisition. Owners within Phase 1 will have an additional tax to cover operation and amortize bonds issued for construction within Phase 1.

It is estimated that Phase 1 could be commenced within 45 days after a date for the validation of bonds has been set and construction would take approximately 200 days.

By BOARD OF SUPERVISORS





BLUE  
CYPRESS  
LAKE

FLOODWAY TO BLUE  
CYPRESS LAKE

S. R. 60

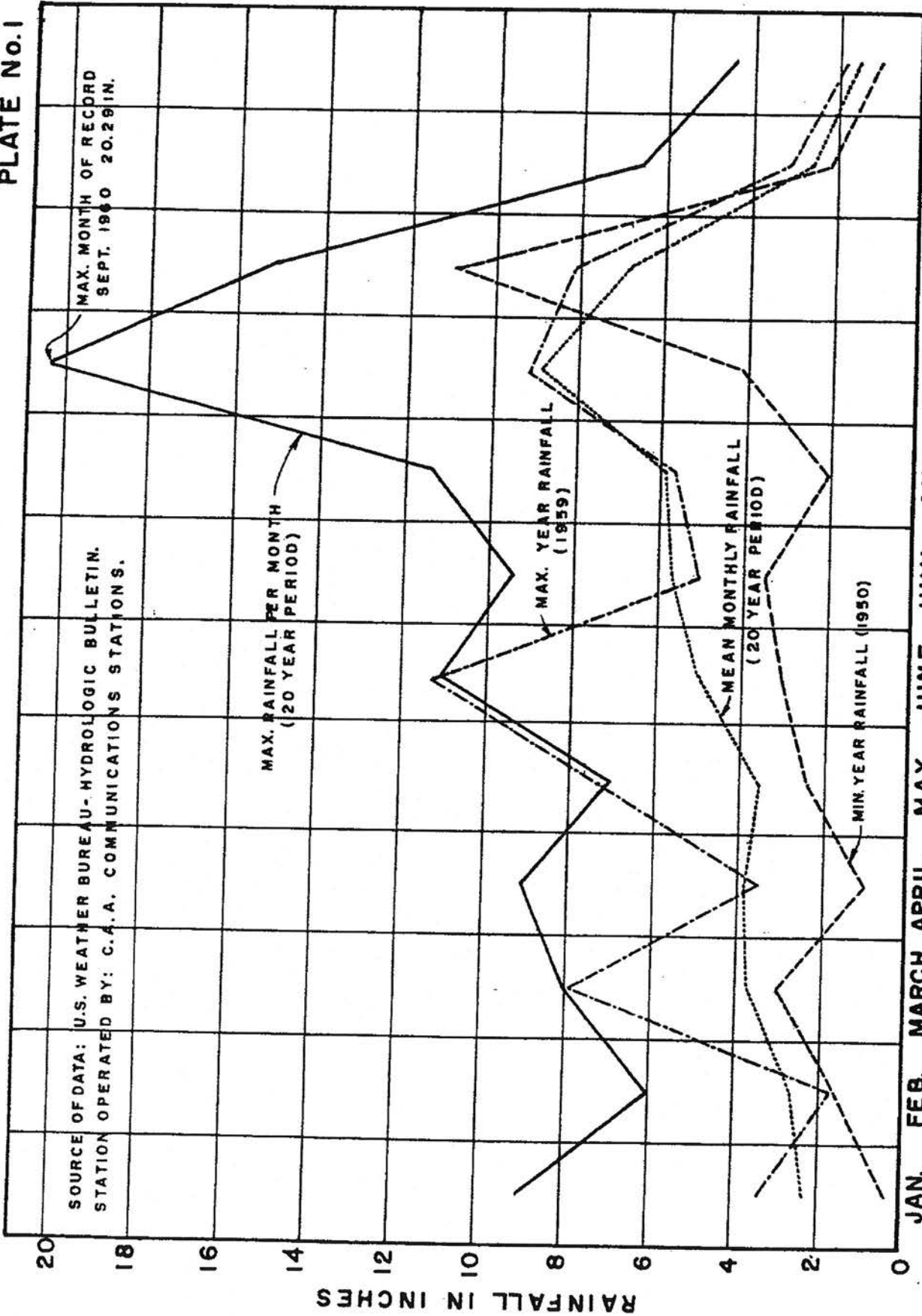


PROPOSED CIECD CANAL

ST. JOHNS  
DRAINAGE DISTRICT

INDIAN RIVER CO.  
ST. LUCIE CO.

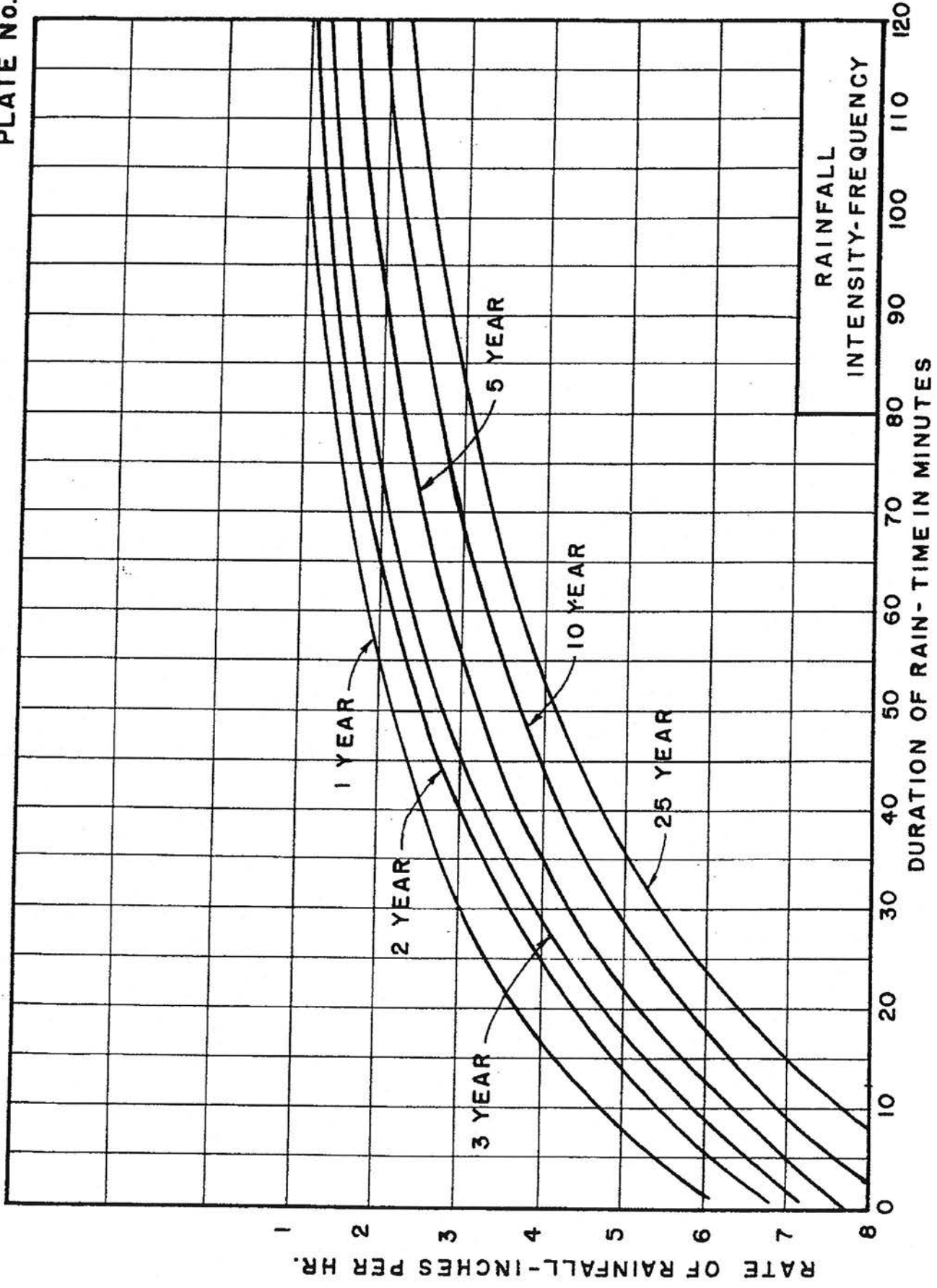
PLATE No.1



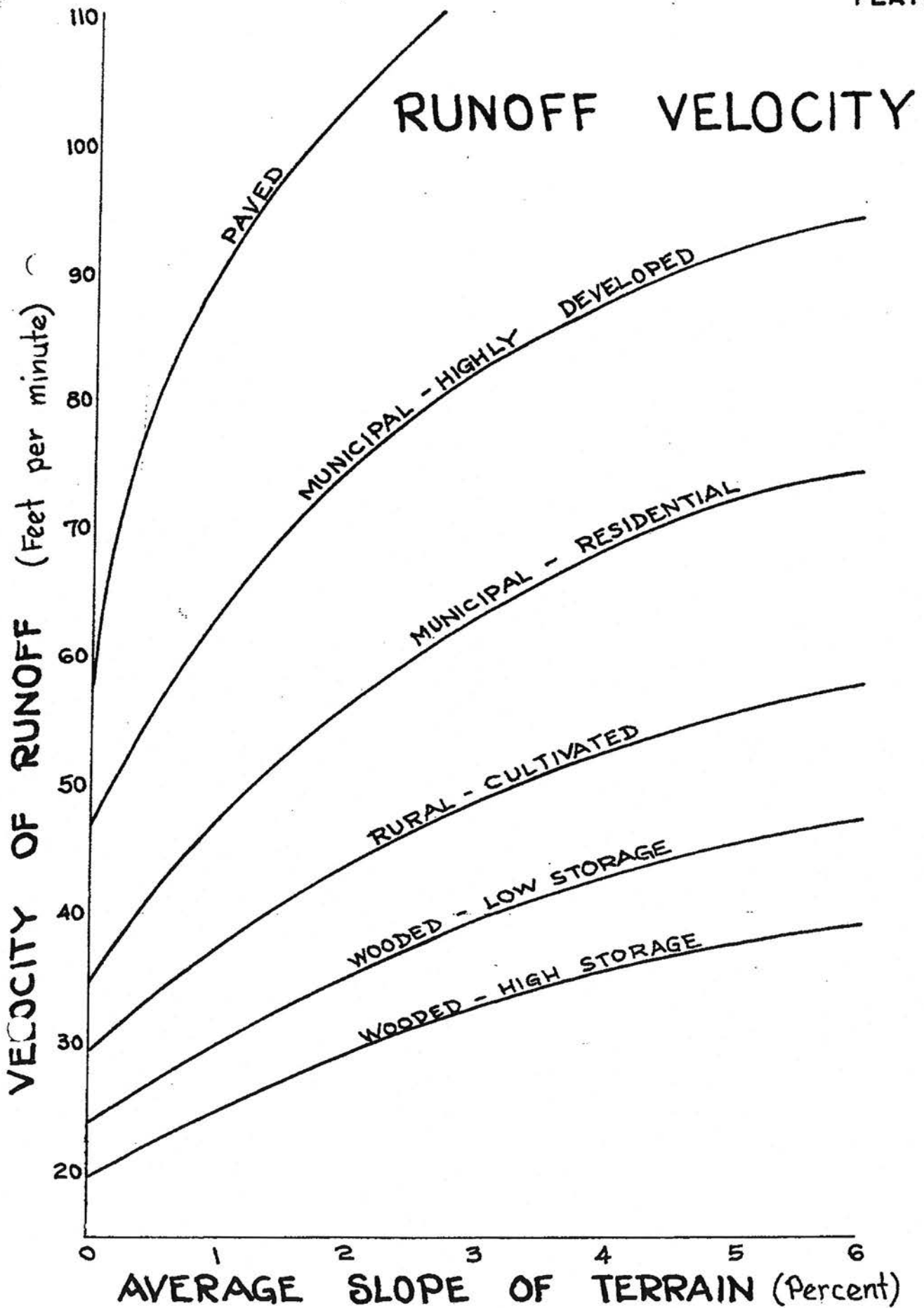
RAINFALL DISTRIBUTION AT VERO BEACH FLA. - 20 YEAR PERIOD - (1941 TO 1960 INCL.)

PREPARED BY LLOYD AND ASSOCIATES -

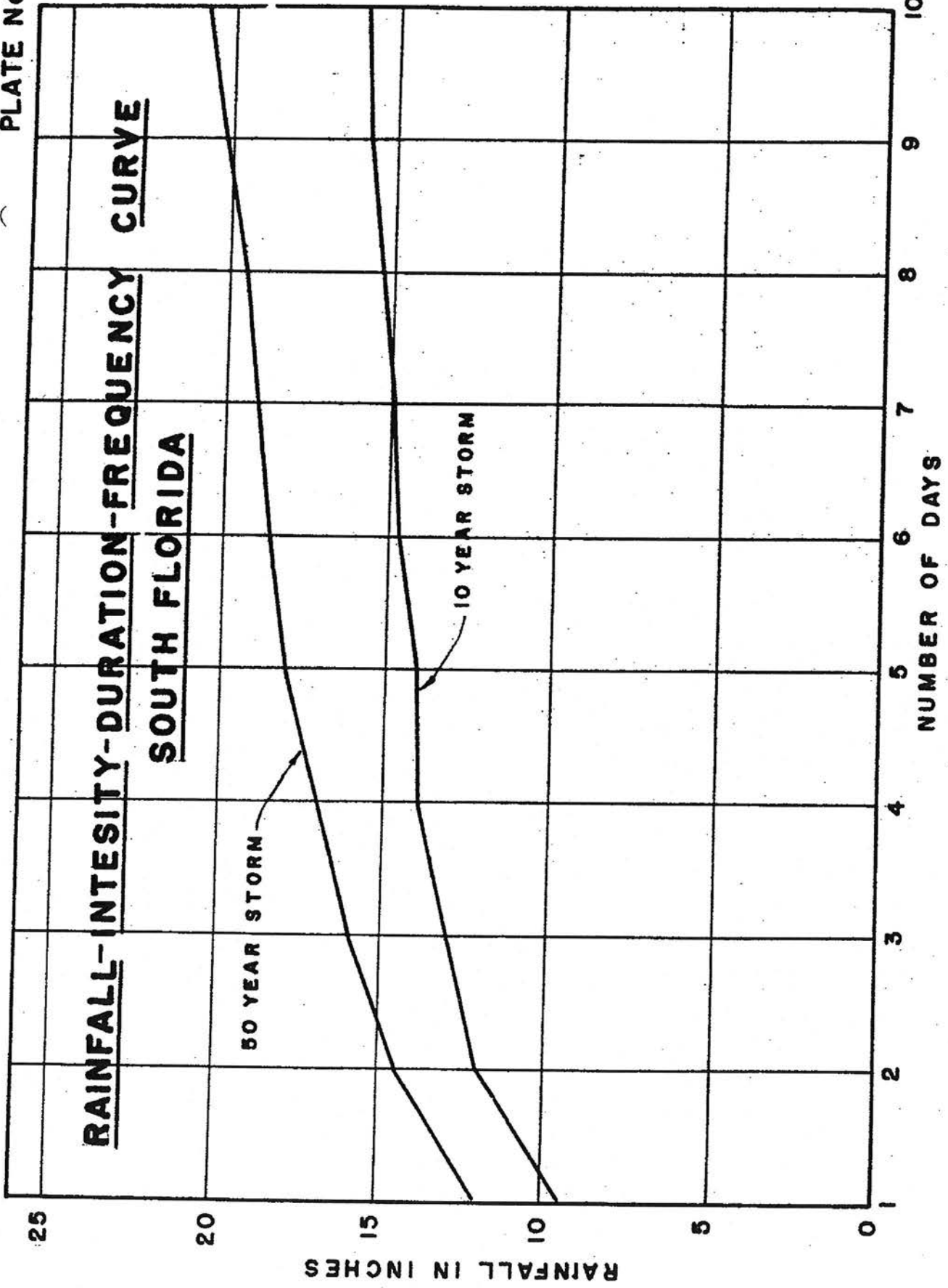
PLATE No.2



PREPARED BY LLOYD AND ASSOCIATES - INFORMATION SOURCE FOR STATE OF OHIO



RAINFALL-INTENSITY-DURATION-FREQUENCY  
SOUTH FLORIDA  
CURVE



50 YEAR STORM

10 YEAR STORM

25

20

15

10

5

0

1

2

3

4

5

6

7

8

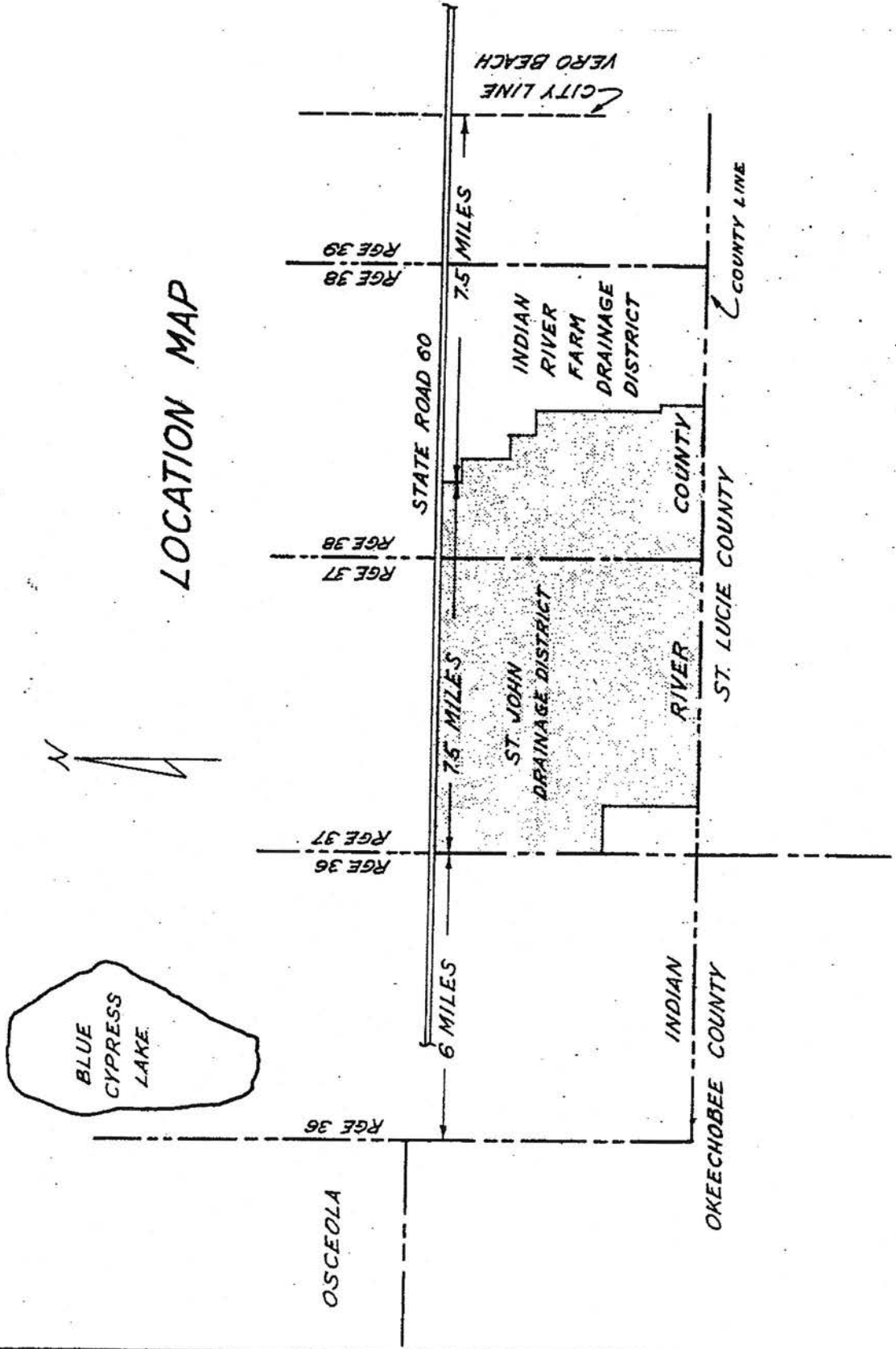
9

10

NUMBER OF DAYS

RAINFALL IN INCHES

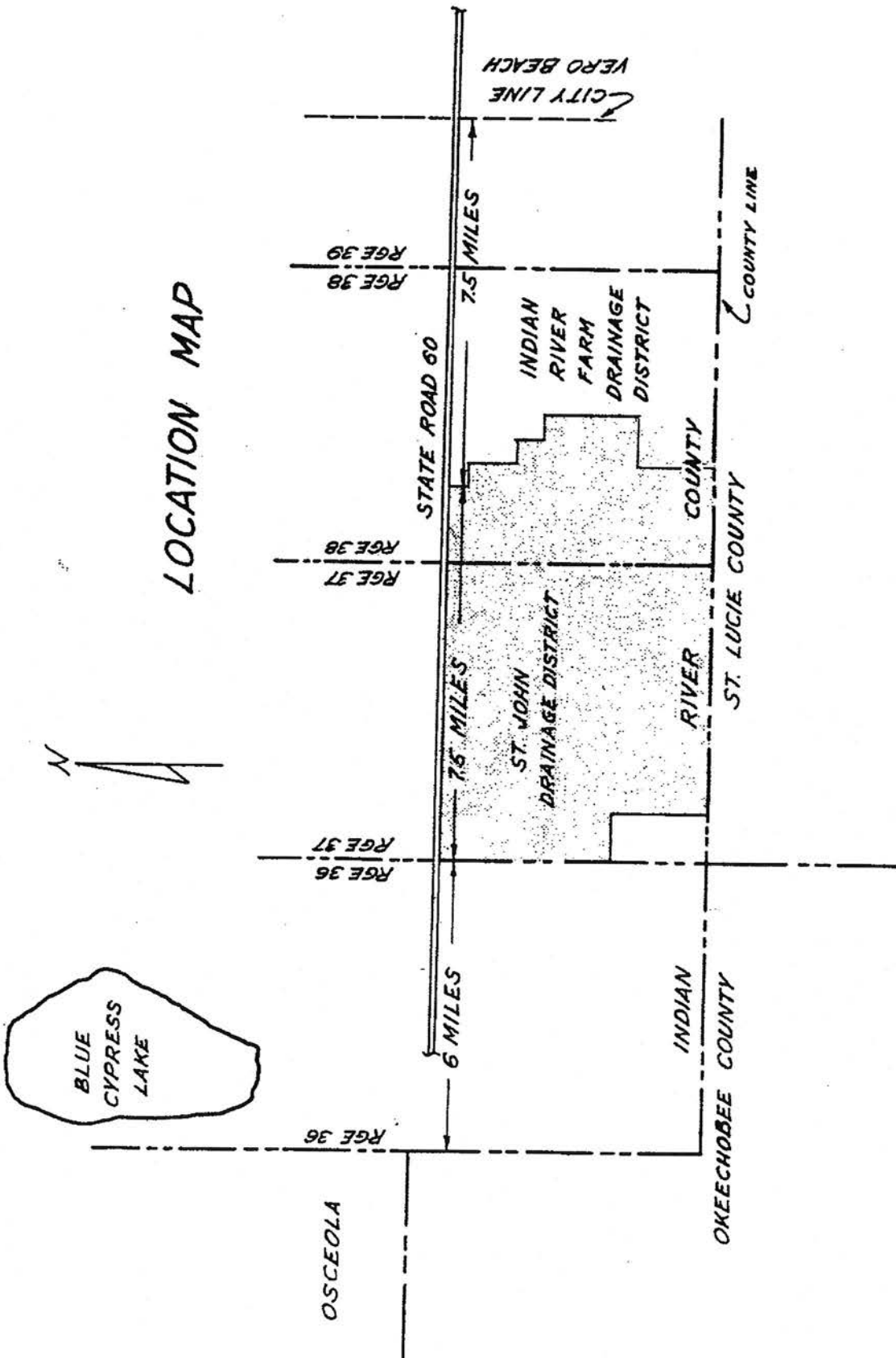
# LOCATION MAP



LLOYD AND ASSOCIATES  
VERO BEACH, FLA.

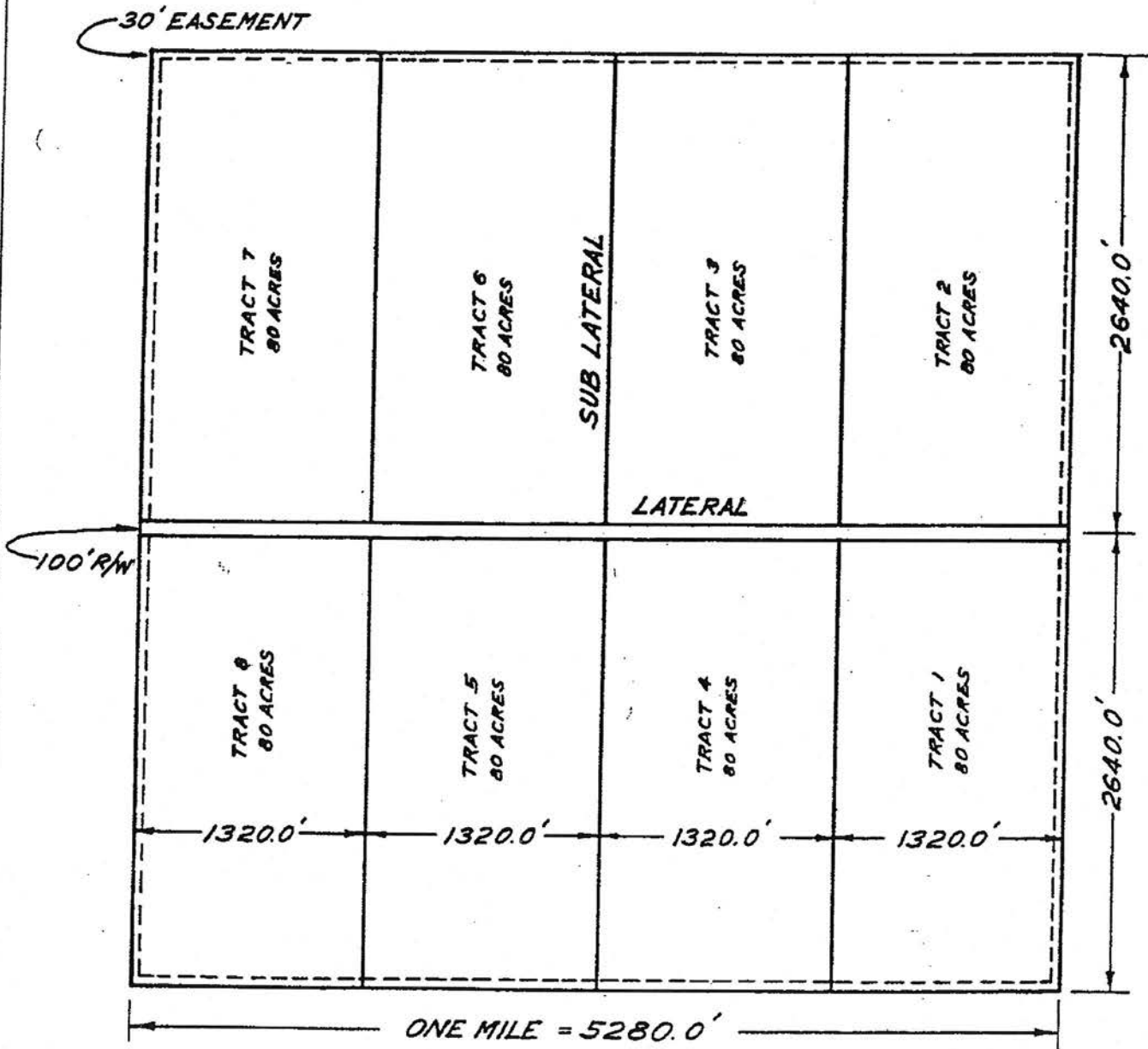


# LOCATION MAP



LLOYD AND ASSOCIATES  
VERO BEACH, FLA.

TYPICAL SUBDIVISION  
OF 640 ACRES

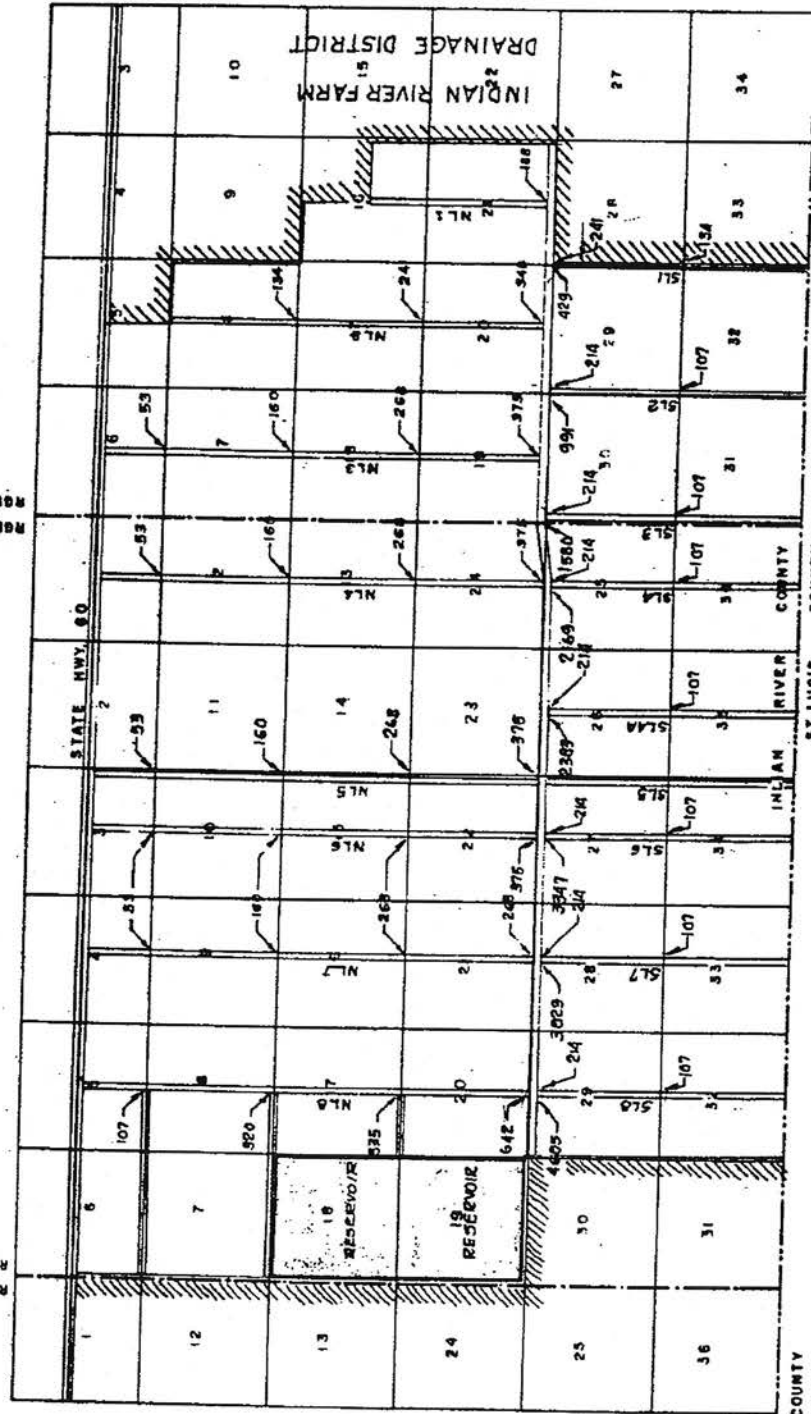


NOTE:  
DRAINAGE DISTRICT TO HAVE  
30' ROADWAY EASEMENT AND  
100' LATERAL EASEMENT.

LLOYD AND ASSOCIATES  
VERO BEACH, FLA.

# QUANTITY FLOW MAP

RGE. 36  
RGE. 37  
RGE. 38

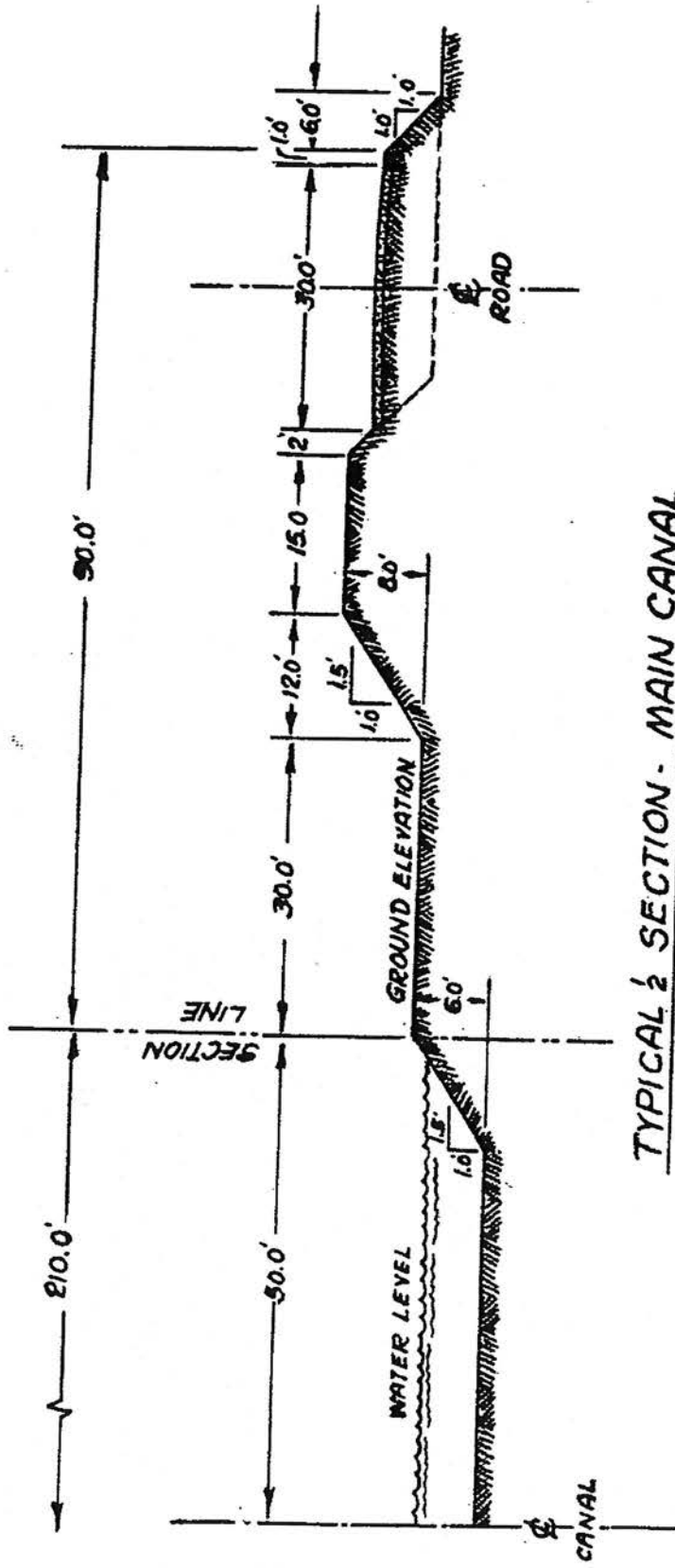


## ST. JOHNS DRAINAGE DISTRICT

UNITS - CUBIC FEET PER SECOND - cfs  
BASED ON 4 INCHES RAINFALL IN 24 HOURS

LLOYD AND ASSOCIATES  
VERO BEACH, FLA.

PLATE No. 6



TYPICAL 1/2 SECTION - MAIN CANAL

LLOYD AND ASSOCIATES  
VERO BEACH, FLA.

IN THE CIRCUIT COURT OF THE  
NINTH JUDICIAL CIRCUIT IN AND  
FOR INDIAN RIVER COUNTY, FLORIDA

IN RE: ST. JOHNS DRAINAGE DISTRICT.

DECREE INCORPORATING DRAINAGE DISTRICT

This cause coming on this day to be heard upon the Petition of FRED R. TIERK and others, praying that a contiguous body of wet and overflowed lands and lands subject to overflow, situated in the County of Indian River, State of Florida, with boundaries as described in said Petition, and which boundaries are hereinafter fully set forth, be declared and incorporated as a Drainage District under the provisions of Chapter 298, Florida Statutes, 1961, said Drainage District to be known by the name of "ST. JOHNS DRAINAGE DISTRICT", and to continue for ninety-nine years; and the Court finding that said Petition is in due and regular form and was filed in the office of the Clerk of the Circuit Court of Indian River County, Florida, on March 7, 1962; and the Court further finding from the sworn evidence submitted to the Court that the persons signing said Petition are the holders and owners of a majority in acreage of the lands embraced in said Drainage District; and the Court further finding from the sworn evidence submitted to the Court that the lands embraced within said Drainage District constitute a contiguous body of wet and overflowed lands and lands subject to overflow, and that it is necessary and proper that said body of land should be formed into a Drainage District for the purpose of having such lands reclaimed and protected from the effects of water, for agricultural purposes, by drainage; and the Court further finding from the Certificate of the Clerk of the Circuit Court of Indian River County, Florida, and from the sworn

①

affidavit of J. J. Schumann that due and regular notice in accordance with law was given by the Clerk of the Circuit Court of Indian River County, Florida, to all persons interested in the lands embraced within said drainage district to appear on the 30th day of April, 1962, to show cause, if any there be, why said Drainage District as set forth in said Petition shall not be organized as a public corporation of the State of Florida; and the Court further finding from the Certificate of said Clerk and from said Affidavits that said Notice in the form provided by law, was published in the Vero Beach Press Journal, a newspaper of general circulation published and circulated in Indian River County, Florida, for four consecutive weeks, and that said notice was published in said Vero Beach Press Journal on March 6, 15, 22 and 29, 1962; and the Court further finding that no objections have been filed either with the Clerk of the Circuit Court of Indian River County, Florida, or with the Judge of this Circuit Court, by any owner of the lands in said proposed District or by any person whomsoever resisting the organization and incorporation of said District or stating any reason why his lands or any part thereof should not be included within said Drainage District; or denying any of the statements in said Petition; and the Court being of the opinion that the establishment of said Drainage District and the improvements to be made therein will be to the advantage of the owners of the real property therein and that the same will be in the interest of the public health, convenience and welfare, and the Court finding it has jurisdiction of this cause and of the subject matter thereof and of the parties thereto and further finding that all the proceedings and steps preliminary to the making of this Decree, have been duly and regularly performed in accordance with the laws of the State of Florida, and the Court being fully advised in the premises,

IT IS THEREFORE ORDERED, ADJUDGED, DECREED AND DECLARED, that the body of lands situated within the County of Indian River and State of Florida, and embraced within the following boundary lines, to-wit:

From the center of Section 5, Township 33 South, Range 38 East, run West along the centerline of Highway 60 through Sections 5 and 6, and in Township 33 South, Range 37 East continue West along the centerline of State Highway 60 through Sections 1, 2, 3, 4, 5 and 6 to the West boundary of Section 6; thence South along the West boundary of Sections 6, 7, 18 and 19 to the Southwest corner of Section 19; thence East along the South boundary of Section 19 to the Southeast corner of said Section 19; thence South along the West boundary of Sections 29 and 32 to the Southwest corner of Section 32; thence Easterly along the South boundary of Sections 32, 33, 34, 35 and 36 to the Southeast corner of Section 36, all lying in Township 33 South, Range 37 East; thence in Township 33 South, Range 38 East, run Easterly along the South boundary of Sections 31, 32 and 33 to the Southeast corner of the West one-half (W 1/2) of the West one-half (W 1/2) of Section 34; thence run North to the Northeast corner of the West one-half (W 1/2) of the West one-half (W 1/2) of Section 34, Township 33 South, Range 38 East; thence run Westerly to the Southwest corner of Section 27, Township 33 South, Range 38 East; thence Northerly along the East boundaries of Section 28 and 21 and 16 to the Northeast corner of the Southeast one-quarter (SE 1/4) of Section 16, Township 33 South, Range 38 East; thence Westerly to the center of Section 16; thence Northerly to the Northeast corner of the Northwest one-quarter (NW 1/4) of Section 16; thence Westerly to the Southeast corner of Section 8; thence North to the Northeast corner of Section 8; thence Westerly to the Southeast corner of the Southwest one-quarter (SW 1/4) of Section 5; thence North to the center of Section 5 and the point of beginning; LESS HOWEVER, all rights-of-way and road easements of record.

Be and the same are hereby constituted, organized and incorporated into a public corporation of the State of Florida, under the provisions of Chapter 298, Florida Statutes of 1961, and all amendments thereto, and said corporation shall be known by the name of "ST. JOHNS DRAINAGE DISTRICT" and said Drainage District shall continue as such public corporation for a period of ninety-nine years from and after the date of this Decree.

DONE AND ORDERED at Chambers at Vero Beach, Indian River County, Florida, this 14th day of May, 1962.

151 D.C. Smith  
D. C. Smith, Circuit Judge

3

A BILL

TO BE ENTITLED

AN ACT RELATING TO ST. JOHNS DRAINAGE DISTRICT, A DRAINAGE DISTRICT IN INDIAN RIVER COUNTY, FLORIDA, CREATING SAID DISTRICT AND DETERMINING THE BOUNDARIES THEREOF; MAKING THE PROVISIONS OF CHAPTER 298, FLORIDA STATUTES APPLICABLE THERETO; APPROVING THE CREATION OF SAID DISTRICT UNDER SAID CHAPTER 298; PROVIDING FOR THE LEVY, COLLECTION AND ENFORCEMENT OF INSTALLMENT AND MAINTENANCE TAXES BY SAID DISTRICT AT THE SAME TIME AND IN LIKE MANNER AS COUNTY TAXES; PROVIDING THAT SAID TAXES SHALL BE EXTENDED BY THE COUNTY TAX ASSESSOR ON THE COUNTY TAX ROLL, AND SHALL BE COLLECTED BY THE TAX COLLECTOR IN THE SAME MANNER AND TIME AS COUNTY TAXES; PROVIDING FOR THE SAME DISCOUNTS AND PENALTIES AS COUNTY TAXES; AND PROVIDING FOR THE COMPENSATION OF THE TAX ASSESSOR AND TAX COLLECTOR; PROVIDING THAT DISTRICT TAXES SHALL BE A LIEN ON LANDS AGAINST WHICH TAXES ARE LEVIED OF EQUAL DIGNITY WITH COUNTY AND OTHER TAXES; PROVIDING THAT THE APPROVAL OF THE BOARD OF DRAINAGE COMMISSIONERS IS NOT REQUIRED TO ISSUE BONDS; PROVIDING FOR FLOATING INDEBTEDNESS OF THE DISTRICT; PROVIDING THAT PAYMENT OF TAXES IN ADVANCE IS NOT AUTHORIZED; PROVIDING THAT USE OF BONDS AND INTEREST COUPONS IN PAYMENT OF TAXES IS NOT AUTHORIZED; PROVIDING THAT WATER IS A COMMON ENEMY; PROVIDING FOR COMPENSATION OF THE BOARD OF SUPERVISORS; PROVIDING FOR SEVERABILITY OF THE PROVISIONS OF THE ACT; PROVIDING THAT THE ACT SHALL TAKE PRECEDENCE OVER ANY CONFLICTING LAW TO THE EXTENT OF SUCH CONFLICT; PROVIDING THE MANNER OF GIVING NOTICE OF INTENTION TO APPLY FOR THIS LEGISLATION; ENACTING OTHER PROVISIONS RELATING TO THIS SUBJECT; AND PROVIDING AN EFFECTIVE DATE.

House Bill-642 - Local Bill For  
St. Johns Drainage District

Passed House - April 27 - 1965  
Senate - April 29 - 1965



BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA:

Section 1. District Created and Boundaries Thereof. -- That for the purpose of reclaiming and draining the lands hereinafter described and protecting said lands from the effects of water by means of the construction and maintenance of canals, ditches, levees, dikes, pumping plants, and other drainage works and improvements, including roads and streets, and for the purpose of making the lands within said District available and habitable for settlement, subdivision, urban development and agriculture, and for the public convenience, welfare, utility and benefit, and for the other purposes stated in this Act, a drainage district is hereby created and established in Indian River County, Florida, to be known as the St. Johns Drainage District, a Drainage District, the territorial boundaries of which shall include the following land, to-wit:

From the center of Section 5, Township 33 South, Range 38 East, run West along the centerline of Highway 60 through Sections 5 and 6, and in Township 33 South, Range 37 East continue west along the centerline of State Highway 60 through Sections 1, 2, 3, 4, 5 and 6 to the West Boundary of Section 6; thence South along the West boundary of Sections 6, 7, 18 and 19 to the Southwest corner of Section 19; thence East along the South boundary of Section 19 to the Southeast corner of said Section 19; thence South along the West boundary of Sections 29 and 32 to the Southwest corner of Section 32; thence Easterly along the South boundary of Sections 32, 33, 34, 35 and 36 to the Southeast corner of Section 36, all lying in Township 33 South, Range 37 East; thence in Township 33 South, Range 38 East, run Easterly along the South boundary of Sections 31 and 32 to the Southeast corner of Section 32; thence run North to the Northeast corner of Section 29, Township 33 South, Range 38 East; thence run Easterly to the Southeast corner of Section 21, Township 33 South, Range 38 East; thence Northerly along the East boundaries of Sections 21 and 16 to the Northeast corner of the Southeast one-quarter (SE $\frac{1}{4}$ ) of Section 16, Township 33 South, Range 38 East; thence Westerly to the center of Section 16; thence Northerly to the Northeast corner of the Northwest one-quarter (NW $\frac{1}{4}$ ) of Section 16; thence Westerly to the Southeast corner of Section 8; thence North to the Northeast corner of Section 8; thence Westerly to the Southeast corner of the Southwest one-quarter (SW $\frac{1}{4}$ ) of Section 5; thence North to the Center of Section 5 and the point of beginning; LESS HOWEVER, all rights-of-way and road easements of record. Including 27,743.40 acres.

It is hereby determined, declared and enacted that said lands in their present condition are wet and subject to overflow, and that the drainage, reclamation and protection of said lands from the effects of water and thereby the making of said lands available for agricultural, settlements, urban and subdivision purposes by drainage, reclamation and improvement, and the creation

of said District with the powers vested in it by this Act, are in the interest of and conducive to public welfare, health and convenience.

Section 2. Provisions of Chapter 298, Florida Statutes, Made Applicable, and Approval of Creation of District under Said Chapter 298. -- The St. Johns Drainage District hereby created shall be a public corporation of this State. The provisions of the General Drainage Laws of Florida applicable to drainage districts or sub-drainage districts which are embodied in Chapter 298, Florida Statutes, and all of the laws amendatory thereof, now existing or hereafter enacted, so far as not inconsistent with this Act, are hereby declared to be applicable to said St. Johns Drainage District. The decree of the Circuit Court in and for the Ninth Judicial Circuit, Indian River County, Florida, entered in Case No. 5736 on May 14, 1962, creating and incorporating the St. Johns Drainage District, and the decree of said Court revising and correcting the boundaries of the District entered on October 25, 1963, and an Order correcting a clerical error in the decree revising and correcting the boundaries of the District on December 27, 1963, and all subsequent proceedings taken in said Circuit Court concerning said District are hereby ratified, confirmed and approved.

Section 3. Installment Taxes, Levied and Apportioned, and the Collection Thereof. -- Taxes shall be levied and apportioned as provided for in the General Drainage Laws of Florida, (Chapter 298, Florida Statutes, and amendments thereto), except that the provisions of Section 298.37, Section 298.38, Section 298.39, Section 298.40 and Section 298.41, Florida Statutes, and amendments thereto, shall not be applicable to said District. In lieu thereof, the following provision shall apply to the said District.

The Board of Supervisors shall determine, order and levy the amount of the annual installments of the total taxes levied under Section 298.36, Florida Statutes, which shall become due and be collected during each year at the same time that county taxes are due and collected, which said annual installment and levy shall be evidenced to and certified by the said Board, not later than August 1st of each year, to the Tax Assessor of Indian River County, Florida. Said tax shall be extended by the County Tax Assessor on the County Tax Roll and shall be collected by the Tax Collector in the same manner and time as county taxes, and the proceeds thereof paid to said District. Said tax shall be a lien until paid on the property against which assessed, and enforceable in like manner as county taxes.

Section 4. Maintenance Tax. -- Maintenance Taxes as provided for under Section 298.54, Florida Statutes; shall be apportioned upon the basis of the net assessments of benefits assessed as accruing for original construction, and shall be evidenced to and certified by the Board of Supervisors not later than August 31 of each year, to the Tax Assessor of Indian River County, and shall be extended by the County Tax Assessor on the County Tax Roll and shall be collected by the Tax Collector in the same manner and time as County Taxes and the proceeds therefrom paid to said District. Said tax shall be a lien until paid on the property against which assessed and enforceable in like manner as County taxes.

Section 5. Enforcement of Taxes and Discounts. -- The provisions of Section 298.45 and Section 298.46, Florida Statutes, and amendments thereto, shall not be applicable to said District. In lieu thereof, the following shall apply to said District.

The collection and enforcement of all taxes levied by said District shall be at the same time and in like manner as County taxes, and the provisions of the Florida Statutes relating to the sale of lands for unpaid and delinquent County taxes, the issuance, sale and delivery of tax certificates for such unpaid and delinquent County taxes, the redemption thereof, the issuance to individuals of tax deeds based thereon, and all other procedure in connection therewith, shall be applicable to said District and the delinquent and unpaid taxes of said District to the same extent as if said statutory provisions were expressly set forth in this Act. All taxes shall be subject to the same discounts as County taxes.

Section 6. When Unpaid Taxes Delinquent: Penalty. -- All taxes levied by the District shall be and become delinquent and bear penalties on the amount of said taxes in the same manner as County taxes.

Section 7. Compensation of Tax Assessor and Tax Collector. -- The County Tax Assessor of Indian River County shall be paid annually an amount equal to one (1) per cent of the total taxes of the District and the Tax Collector of Indian River County shall be paid annually an amount equal to one (1) per cent of the total taxes of the District collected, for their respective services to the St. Johns Drainage District in said County for respectively assessing and collecting said Drainage District taxes; provided,

however, the total amount to be paid to said Tax Assessor or said Tax Collector in any one year shall not exceed the sum of One Thousand, Five Hundred Dollars (\$1,500.00) to each.

The services of said County Tax Assessor and said County Tax Collector in assessing and collecting said Drainage District taxes are hereby declared to be special services performed directly for said District and the amounts paid therefor shall not be considered a part of the general income of their respective offices nor shall it come under the provisions of Section 116.03 and Sections 145.10 and 145.11, Florida Statutes. The personnel required to do said special work shall be paid for such special services by the Assessor or the Collector, as the case may be, from the receipts provided for such purpose.

Section 8. Taxes and Costs, a Lien on Land Against Which Taxes Levied; Taxes Levied a Lien of Equal Dignity with Other Taxes. -- All drainage taxes levied by the District, together with all penalties for default in payment of the same, all costs in collecting the same, shall constitute a lien of equal dignity with the liens for County taxes, and other taxes of equal dignity with County taxes, upon all the lands against which said taxes shall be levied. A sale of any of the lands within the District for County or other taxes shall not operate to relieve or release the lands so sold from the lien for subsequent installments of District taxes, which lien may be enforced against such lands as though no such sale thereof had been made.

Section 9. Approval of Board of Drainage Commissioners Not Required to Issue Bonds. -- The Board of Supervisors may issue bonds under the provisions of Chapter 298, Florida Statutes, without the approval of the Board of Drainage Commissioners of the State of Florida, as provided for in Section 298.47, Florida Statutes.

Section 10. Floating Indebtedness. -- Prior to the issuance of bonds under the provisions of Chapter 298, Florida Statutes, the Board of Supervisors may from time to time issue warrants or negotiable notes or other evidences of debt of said District, all of which shall be termed "Floating Indebtedness" in order to distinguish the same from the bonded debt provided for. The said notes or other evidences of indebtedness shall be payable at such times and shall bear interest at the rate of not exceeding six percent per annum, and may be sold or discounted at such price or on such terms as the said Board may deem advisable. The Board shall have the right in order to provide for

the payment thereof, to pledge the whole or any part of the taxes of the District, whether the same shall be theretofore or thereafter levied, and said Board shall have the right to provide that the said floating debt shall be payable from the proceeds arising from the sale of bonds, or from the proceeds of any such tax, or both. After the issuance of any bonds of said District, the power to create such floating debt and pledge the avails of taxes therefor shall continue, but the amount thereof which may be outstanding at any time shall be limited to five percent of the amount of bonds issued hereunder.

Section 11. Payment of Taxes in Advance Not Authorized. -- The provisions of Section 298.42, Florida Statutes, and amendments thereto relating to the payment of taxes in advance, shall not be applicable to said District.

Section 12. Use of Bonds and Interest Coupons in Payment of Taxes Not Authorized. -- The provisions of Sections 298.43, 298.44 and 298.73, Florida Statutes, and amendments and successors thereof, relating to the use of bonds and obligations in payment of drainage taxes, shall not be applicable to said District and its bonds, obligations and taxes.

Section 13. Water a Common Enemy. -- It is hereby declared that in said District, surface waters, which shall include rainfall and the overflow of rivers and streams, are a common enemy, and the said District and any individual or agency holding a permit to do so from said District, shall have the right to dike, dam and construct levees to protect the said District or any part thereof, or the property of said individual or agency against the same, and thereby divert the course and flow of such surface water and/or pump the water from within such dikes and levees.

Section 14. Compensation of Board. -- Each Supervisor shall be paid for his services a per diem of Twenty-Five Dollars (\$25.00) for each day actually engaged in work pertaining to the said District; but the said Supervisors shall not in any one month be paid more than One Hundred Dollars (\$100.00) each, except that in addition to the said per diem, they shall be paid ten cents per mile for each mile actually traveled in going to and from their place of residence to the place of meeting.

Section 15. Severability. -- In case any one or more of the sections or provisions of this Act or the application of such sections or provisions to any situation, circumstances or person shall for any reason be held to be unconstitutional, such unconstitutionality shall not affect any other sections

or provisions of this Act or the application of such sections or provisions to any other situation, circumstances or person, and it is intended that this law shall be construed and applied as if such section or provision had not been included herein for any unconstitutional application.

Section 15. Effect of Conflict. -- In the event of a conflict between the provisions of this Act and the provisions of any other Act, the provisions of this Act shall control to the extent of such conflict.

Section 17. Notice of Intention. -- It is found and determined that notice of intention to apply for this legislation was given in the time, form and manner required by the Constitution and by law. Said notice is found to be sufficient and is hereby validated and approved.

Section 18. When Act to Take Effect. -- This Act shall take effect immediately upon its approval by the Governor, or upon its becoming a law without such approval.

HB 642 -

House - April 27 1965  
Senate - April 29 1965