

AUG 01 1983

A RESOLUTION CONCERNING THE DESIGN AND OPERATION OF RAPID INFILTRATION BASINS ("R.I.B.s") IN SOUTHWEST ORANGE COUNTY; PROVIDING WATER QUALITY GUARANTIES AND DESIGN STANDARDS PERTAINING TO THE WATER CONSERV II PROJECT; PROVIDING LIMITS ON EFFLUENT DISPOSAL CAPACITY; PROVIDING A MONITORING PLAN; PROVIDING PROTECTION FROM ABNORMAL EVENTS; LISTING POSSIBLE FUTURE DISPOSAL ALTERNATIVES; ADOPTING DESIGN STANDARDS; PROVIDING GUARANTEES CONCERNING ON-SITE STORAGE FACILITIES; PROVIDING LIABILITY AGAINST IMPROPER DESIGN AND OPERATION; PROVIDING LIMITS ON CONDEMNATION; PROVIDING FOR A SINGLE MANAGEMENT UNIT; RECOGNIZING THE AVALON ASSOCIATION; PROVIDING AN EFFECTIVE DATE.

PREMISES

1. On February 15, 1983, the Board of County Commissioners of Orange County adopted Resolution No. 83-SW-04 selecting a preferred wastewater management alternative for "Southwest Orange County" regarding the Water Conserv II Project, which includes a combination of citrus irrigation and rapid infiltration basins, and assures that productive citrus groves or dwelling units located within "Southwest Orange County", as defined in Resolution No. 83-SW-05, will not be the subject of condemnation proceedings except as set forth therein.

2. The residents and other landholders of that community have expressed, through the Lake Avalon Home & Property Owners Association ("Avalon Association"), concerns about the implementation of the Water Conserv II Project and the need for assurances concerning the safety, health and welfare of the residents in the area, and the need to minimize potential adverse environmental impacts which may be caused by the Project.

3. The Growers' Executive Committee and the Avalon Association have requested and received assurance that the Rapid Infiltration Basins ("R.I.B.s") to be located within Southwest Orange County will be designed and operated in an environmentally and aesthetically acceptable manner.

4. The Avalon Association and property owners will rely upon representations made by the City of Orlando and Orange County as to the design and operation of the R.I.B.s for the Water Conserv II Project.

BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF ORANGE COUNTY:

SECTION 1. WATER QUALITY GUARANTEES. The quality of effluent to be distributed to the R.I.B.s shall meet all

applicable standards established by the Florida Department of Environmental Regulation ("FDER") contained in Fla. Admin. Code Ch. 17-6, and in no case shall be less stringent than the effluent disposal characteristics set forth in Exhibit "A" attached hereto. In no event shall the disposal of treated effluent cause a health or environmental hazard to the residents of Southwest Orange County, or damage to commercial foliage establishments or residential properties.

SECTION 2. EFFLUENT DISPOSAL CAPACITY. The Water Conserv II Project shall deliver to Southwest Orange County, as defined in Resolution No. 83-SW-05, no more than 50 million gallons per day, average annual basis ("50 MGD") of treated effluent for both citrus irrigation and R.I.B.s unless reasonable notice is first given to the Avalon Association. Any increased flow above 50 MGD for application in Southwest Orange County may be delivered only as requested by a landowner for beneficial use and storage in accord with delivery practices established by approved grower's agreements referenced in above described Resolutions heretofore adopted by the City of Orlando and Orange County.

SECTION 3. MONITORING PROGRAM. Regular testing as required by the approved FDER Fla. Admin. Code Chs. 17-6 and 17-19 monitoring plans shall be done under the auspices of the FDER, and the method, frequency, and results of the testing shall be available for public inspection at the local office of FDER or another location agreed upon to ascertain that the effluent does not violate the standards set forth in Section 1 hereof, or that the Project shall not cause health or environmental hazard to groundwater located within the described Southwest Orange County. If a violation of the above is detected, it shall be communicated to the Liaison Committee Chairman of the Avalon Association within 24 hours. In addition, a copy of the written FDER Report of such violation shall be mailed to the Chairman of the Liaison Committee of the Avalon Association.

SECTION 4. EFFLUENT DISPOSAL; ABNORMAL EVENTS. In the event (a) the effluent does not meet the standards defined in Section 1 hereof, or (b) standing water or "bog effects" in areas are

demonstrated to be a result of the R.I.B.s, the effluent shall be disposed of in accordance with FDER provisions for abnormal events.

SECTION 5. LAKE LEVELS. If the Project causes an overload of the surficial aquifer which results in an increase in lake levels to a point eighteen inches (18") below the 100-year flood elevation, then the Southwest 201 Project shall begin transferring flows to RIBs located more remote from those lakes being impacted or may take such other actions, including those contemplated in Section 4 hereof, to prevent effluent from contributing to an exceedance of the 100-year flood elevation.

SECTION 6. ALTERNATIVE METHODS OF EFFLUENT DISPOSAL. The design of the pipeline system from the plants to the distribution center located in Southwest Orange County shall include provisions for utilization of rapid infiltration basins or other land application methods along the pipeline route. The County and the City will pursue the utilization of treated wastewater for the benefit of homeowners, agricultural interests and other potential users of irrigation, such as spray irrigation of highway rights-of-way.

SECTION 7. DESIGN STANDARDS. The size and location restrictions contained in Orange County Resolution No. 83-SW-05 dated April 11, 1983, and the design and construction of that portion of the Water Conserv II Project within Southwest Orange County shall be substantially in accordance with those provisions outlined in the attached Exhibit "B", S.W. 201 Design Standards, which are intended to preclude the project from becoming a public health, environmental hazard, or creating a loss to neighborhood property values.

SECTION 8. ON-SITE STORAGE FACILITIES. The City and the County shall comply with all FDER requirements regarding the suitability of on-site storage facilities within groves, farms or other non-public lands, in relation to leakage, overflow, direct penetration to the Floridan Aquifer, sink-hole development or other public health or environmental hazards.

SECTION 9. LIABILITY FOR IMPROPER DESIGN AND OPERATION. The City and the County agree to be responsible for all liability for

damage to property or injury to persons within Southwest Orange County resulting from improper design or operation of the Water Conserv II Project by the City and the County. The City and the County hereby waive immunity for such above-described liability consistent with state statute. The prevailing party(ies) in any lawsuit filed to enforce this Section shall be entitled to reasonable attorneys' fees and court costs.

SECTION 10. LIMITS ON CONDEMNATION. The eminent domain or condemnation restriction contained in Orange County Resolution No. 83-SW-05 dated April 11, 1983, relating to dwellings and producing groves shall apply to property on which there are commercial improvements and substantial commercial activities are regularly conducted. No condemnation proceedings for R.I.B.s to be constructed in Southwest Orange County shall be instituted after December 31, 1986, in connection with the Water Conserv II Project.

SECTION 11. SINGLE MANAGEMENT UNIT. The City and the County agree to form a single management unit for the operation of the Water Conserv II Project which shall receive and address all grievances of the citizens of Southwest Orange County relating to the operation and maintenance of said Project. This single agency will serve as interface to the Liaison Committee of the Avalon Association and all other involved agencies of both Orange County and the City of Orlando in such manner that various other agencies need not deal directly with every concern and that the citizens need not first determine and then contact the particular agency with jurisdiction of a particular matter.

SECTION 12. RECOGNITION OF AVALON ASSOCIATION. The County and the City recognize the Avalon Association and its elected Liaison Committee as an appropriate entity of the concerned citizens of Southwest Orange County. The Board of Commissioners of Orange County and the Orlando City Council shall make available to said Liaison Committee all data pertaining to the Southwest 201 or Water Conserv II Projects, including and especially the Water Quality Monitoring results whenever called upon by that committee, in accordance with Chapter 119, Fla. Stat. The

Liaison Committee shall have the right to periodically review the basin design and provide comments to the County with regard to the incorporation of warranted design improvements in the Southwest 201 Basin Design Standards as set forth in Exhibit "B". Further, regular meetings shall be established, as needed, to be held in the Avalon Community, and shall include the Project Manager, representatives of the City of Orlando and Orange County, the Liaison Committee of the Avalon Association, and interested citizens, for the purposes of review of progress of construction and, if the parties determine that it is necessary, monitoring of performance after the Project is operational.

SECTION 13. EFFECTIVE DATE. This Resolution shall take effect upon adoption.

RESOLVED this 1<sup>st</sup> day of August, 1983.

ORANGE COUNTY, FLORIDA

By:   
Chairman, Board of County  
Commissioners

ATTEST: THOMAS H. LOCKER,  
CLERK TO THE BOARD OF COUNTY  
COMMISSIONERS

By:   
Deputy Clerk

EXHIBIT A

RAPID INFILTRATION EFFLUENT DISPOSAL CHARACTERISTICS

<u>Parameter</u>	<u>Maximum Concentrations Level (1) (mg/l)</u>
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Fluoride	1.4-2.4
Endrin	0.004
Lindane	0.004
Methoxychlor	0.01
Toxaphene	0.005
2,4-D	0.10
2,4,5-TP	0.01
Coliforms	<20
Ra 226	5pCi/l
Ra 228	5pCi/l
Chlorides	250
Copper	1.0
pH	6.5-8.5
Manganese	0.05
Sodium	250
Sulfate	250
Total Dissolved Solids	500
Zinc	5
Biological Oxygen Demand	20
Total Suspended Solids	20
Phosphorus	10
Total Nitrogen	30

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(1) Unless Noted Otherwise.

EXHIBIT B

SW 201 PROJECT DESIGN STANDARDS

I. INTENT

To establish aesthetic and functional design guidelines for siting and construction of the Southwest 201 Water Conservation Project (SW 201 Project) in Southwest Orange County to ensure minimal impacts to the community and environment resulting from implementation of the project.

II. SITE REQUIREMENTS

A. Buffer Requirements

The wetted perimeter of the Rapid Infiltration Basins ("RIBs") shall not be located less than 100 feet of an adjoining property line; except for 500 foot buffers as shown on Attachment #1 hereto.

B. Basin Overflow Requirements

The RIBs shall be designed with sufficient freeboard above the normal wetting depth to allow for containment of excess precipitation. The RIB operating plan shall provide contingencies for management of excess flows above normal project quantities due to weather conditions.

C. Mosquito Control/RIB Sites

The SW 201 Project will be designed, constructed and operated in such a manner that no areas will encourage, support, or provide the opportunity for the breeding of mosquitoes. The regular use of pesticides is not considered a proper design control.

D. Flood Zone

The RIBS shall be designed and operated, and loading rates developed based on site specific computer modeling and operational monitoring in order to ensure that RIB impacts are less than the 100-year flood plain elevation.

. Basin Configuration

All RIBs shall be designed in a naturalistic manner. Layouts shall follow existing land contours with the intent of creating RIBs of irregular shapes and edge patterns. The basin berms and landscaping shall be designed to create amorphous basin edges.

F. Noise

Any and all permanent functions or installation appurtenant to the Project (excluding construction equipment or other devices not normally in operation for more than thirty (30) days at one time) shall produce no continuous sound which exceeds 63 dBA at the property line of the site on which it is located. Any other facilities which generate noise shall be designed to reduce noise production, as practical.

G. Odors

The SW 201 Project shall be so operated as to prevent the emission of objectional or offensive odors in such concentration as to be readily perceptible at any point at or beyond the property line of the project.

III. LANDSCAPE REQUIREMENTS FOR RAPID INFILTRATION BASINS AND DISTRIBUTION CENTER

A. Plant Material

Canopy trees and shrubs for buffering shall equal the standards for Florida No. 1 as given in "Grades and Standards for Nursery Plants" Part 1, 1963, and Part II, State of Florida Department of Agriculture. The perimeters of all sites and areas where there is high visibility from off-site areas shall have a combination of trees and shrubs installed such that within 2 years after installation it shall have reached a height of 3' and obtained opacity. There shall be a minimum average of three (3) trees planted per sixty (60) linear feet of perimeter area no less than 3 inches in caliper.

Nothing herein shall require the removal or "clear

cutting" of existing trees and vegetation, where such existing trees and vegetation are consistent with these Design Standards.

B. Grading

No berm or ground plane shall have a slope greater than 4:1 except as noted below, unless naturally occurring or necessary due to confining site constraints. Areas adjacent to public rights-of-way or existing or proposed residential areas shall have landscaped earthen berms (with maximum slope of 6:1) no less than 5 feet higher than the elevation at the adjoining property lines. Berm centerlines shall form a gentle meander; repeating or emphasizing naturally occurring landforms where appropriate.

C. Fencing

Any security fencing shall occur behind the landscape screens and buffer areas.

D. Landscape Cover

Areas not utilized for basins, parking, roads or built structures shall have a coverage of plant material including trees and grass as described in the Conserv II RIB's Reforestation Plan. The Reforestation Plan shall be designed and implemented to maximize the benefits of a diversified ecologically balanced reforestation. In order to insure a successful reforestation, the 201 project shall contract an ecological consultant experienced in the flora and fauna of the Avalon area. The selection of the consultant shall be subject to the review of the Avalon Association.

E. Acceptable Plant Materials

Plant material used shall generally be indigenous to Central Florida and in particular the Avalon area of West Orange County.

F. Maintenance

All landscaped areas shall be on a regular maintenance schedule to ensure a healthy vigorous project.

G. Irrigation

All planted areas throughout the project shall be provided with necessary irrigation systems, fully functional at all times.

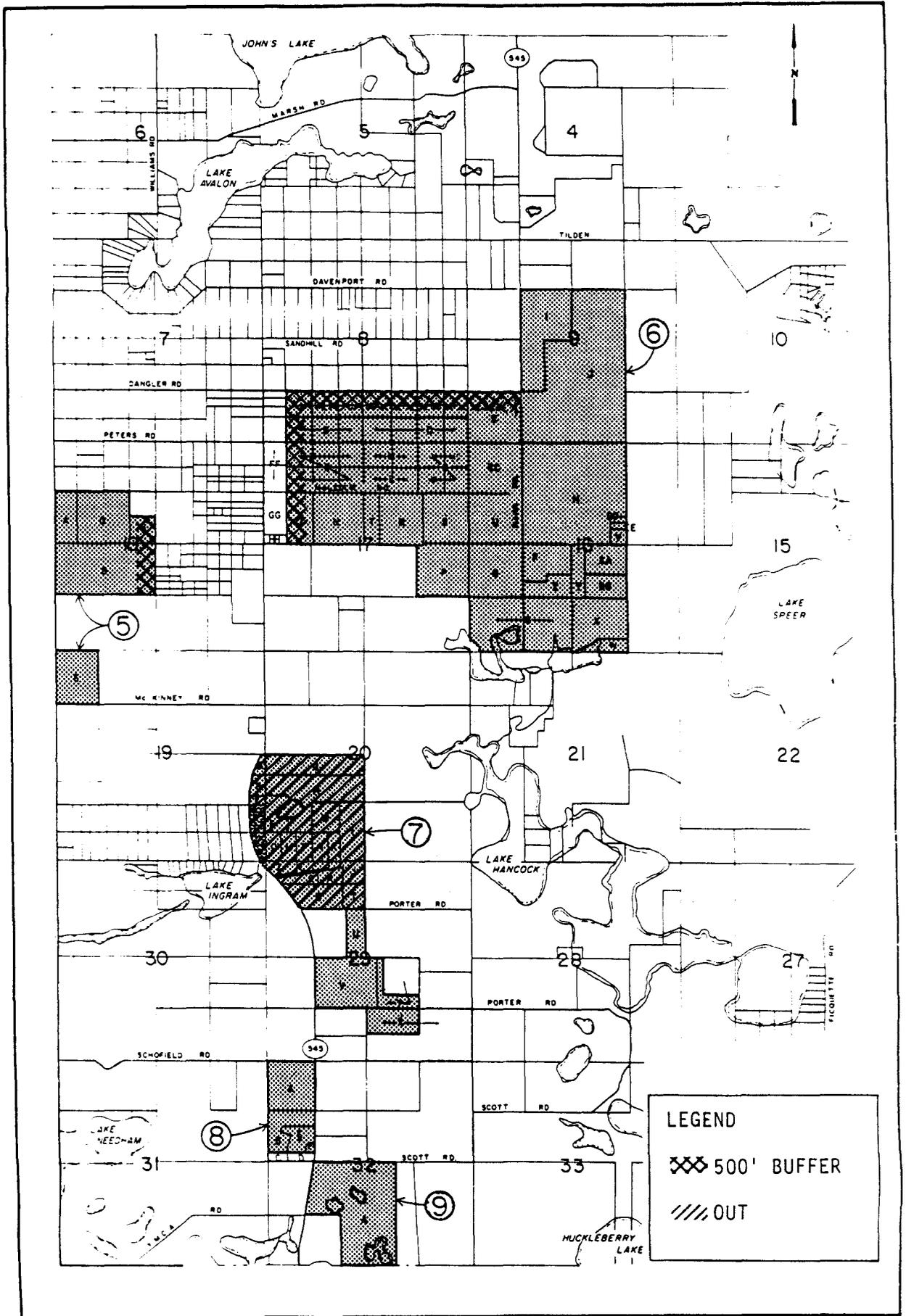
H. Timing

The Landscape Program and Reforesting Plan shall be completed as an integral component of the SW 201 Project construction program.

IV. REVIEW

All portions of the SW 201 Project covered by the above SW 201 Design Standards shall be submitted to the Liaison Committee of the Avalon Home and Property Owners Association and the Growers Executive Committee for review prior to completion of final construction design. The Avalon Committee will provide written comments to the County within one week of receipt of the design drawings. The County and/or City shall respond in writing to written comments within one week of receipt of comments.

The same process shall occur at the completion of construction documentation and prior to submission for any permits. The Liaison Committee or the Growers Executive Committee have the right to request intermediate reviews as they deem necessary to insure timely opportunities to provide community input.



Attachment No. 1