

ORDINANCE 99-61

AN ORDINANCE OF BREVARD COUNTY, FLORIDA AMENDING THE CODE OF ORDINANCES OF BREVARD COUNTY, FLORIDA TO ADD A NEW CHAPTER ALLOWING FOR THE CREATION OF INDIVIDUAL DRAINAGE STANDARDS WITHIN AREAS OF SPECIAL STORMWATER CONCERNS; SPECIFICALLY ESTABLISHING REGULATIONS FOR THE GRANT-VALKARIA AREA OF SPECIAL CONCERN; PROVIDING SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS there are variable existing drainage and stormwater conditions in Brevard County; and

WHEREAS, there are insufficient Brevard County maintained stormwater facilities in certain areas to provide for orderly development of the existing platted lots; and

WHEREAS, the existing platted road rights-of-ways in many areas of the County are of insufficient width to include retention and conveyance facilities; and

WHEREAS, many areas of the Brevard County are in the 100-year floodplain; and

WHEREAS, as the land in many areas of Brevard County is extremely flat with unique conditions; and

WHEREAS, many areas of Brevard County experience routine flooding; and

WHEREAS, the soil conditions vary widely throughout Brevard County; and

WHEREAS, filling lots in the 100-year floodplain creates adverse impacts upon adjacent lots; and

WHEREAS, forthcoming State and Federal regulations will require additional stormwater treatment standards to protect certain waterbodies; and

WHEREAS, many existing platted subdivisions do not make adequate provisions for stormwater retention and conveyance in accordance with current development standards; and

WHEREAS, the Brevard County Board of County Commissioners wishes to address the concerns of health, safety and welfare of the residents throughout Brevard County; and

WHEREAS, the Brevard County Board of County Commissioners desires to provide a mechanism for construction of new homes and roads in an orderly manner to protect health, safety and welfare of the residents throughout Brevard County; and

WHEREAS, existing regulations do not fully address the unique needs for existing areas which experience flooding; and

WHEREAS, the Brevard County Board of County Commissioners desires to address the special needs and issues which have arisen during the implementation of existing regulations by

12/07/99

Officially filed with

The County Clerk, Brevard County, Florida

amending the Code of Ordinances of Brevard County, Florida and other land development regulations, as may be appropriate, to protect the health, safety and welfare of the residents of Brevard County; and

WHEREAS, the Local Planning Agency, on September 27, 1999 reviewed the proposed Ordinance and made recommendations; and

WHEREAS, the Brevard County Board of County Commissioners has reviewed the recommendations of the Local Planning Agency and has considered the comments of interested citizens in public hearing.

WHEREAS, the stormwater regulations in Brevard County have been developed upon the principal of creating uniform standards for equitable criteria among the various lands within the County. The presumption has always been that the County's stormwater infrastructure would be adequate to accept the discharges from land altering activities. Recent tropical events have unfortunately shown that there are many areas of the County which can experience flooding due to inadequate infrastructure, low, flat coastal topography, poorly draining soils, high groundwater conditions, and proximity to flood plains. Most of these conditions are beyond the ability of the County to remedy to an adequate level of health, safety and welfare for the public. In addition, State and Federal standards for water quality, in the form of National Pollutant Discharge Elimination Systems, Total Maximum Daily Loads and Pollutant Load Reduction Goals will be enacted in the near future requiring varying degrees of stormwater treatment for different drainage basins throughout the County. Therefore, it is apparent that a generic set of stormwater standards to address the varying conditions throughout the County is not feasible.

NOW, THEREFORE BE IT ORDAINED, by the Brevard County Board of County Commissioners, that the Code of Ordinances of Brevard County, Florida is hereby amended to create a new Chapter so that the following policies, rules and regulations shall hereby apply to all Special Areas of Stormwater Concerns in Brevard County.

SPECIAL AREAS OF STORMWATER CONCERNS

1.0 Purpose and Authority

The purpose of this Ordinance is to establish an enabling Ordinance which will allow for creating unique stormwater drainage standards within individual drainage basins or areas which demonstrate a need for water quantity or quality standards different than the existing stormwater regulations. These standards may apply to new subdivisions and site plans, existing platted lots or unplatted land, as needed.

As individual areas or drainage basins requiring unique stormwater management standards are identified, Brevard County will undertake adequate studies to determine the deficiencies of the area and additional stormwater standards needed to address these deficiencies. This Ordinance will then be amended to incorporate the standards for any particular deficient area.

Provisions for waivers shall be included within each individual Special Area of Stormwater Concern (SASC).

2.0 Identification of Special Areas of Stormwater Concerns

Upon direction by the Board of County Commissioners, Brevard County staff will investigate areas or drainage basins which have historic flooding or water quality problems to determine the necessity for enacting special stormwater regulations within that area. When the Board of County Commissioners determines this Ordinance should be amended for an additional SASC, Brevard County staff shall initiate the amendment to this Ordinance to develop SASC regulations.

3.0 Standards

As Special Areas of Stormwater Concerns are identified, Brevard County may elect to perform adequate studies or engineering analysis to determine the deficiencies with the SASC with respect to water quantity or quality concerns. Brevard County may then develop specific stormwater standards for new existing development for addressing the deficiencies within the SASC; including but not limited to volume limitations, increased discharge rate limitations, higher degrees of stormwater treatment, improving downstream infrastructure, individual lot detention, lot fill limitations, offsite mitigation and pollutant credit banking or mitigation. These proposed stormwater standards shall be approved by the Brevard County Board of County Commissioners through standard ordinance development procedures and shall be included as Appendices to this Ordinance. Appendix A, Grant-Valkaria Special Area of Stormwater Concern is hereby included in the Ordinance.

4.0 Enforcement Actions

1. The County shall be authorized to enforce all regulations for all SASC's upon adoption of the regulations as described in Section 3.0.
2. Nothing in this Ordinance shall be construed as a waiver of Brevard County's right to initiate enforcement actions under all applicable codes and Ordinances under the jurisdiction of Brevard County or other proceedings provided by law.
3. Brevard County shall have the authority to enforce compliance consistent with provisions of this section by appropriate legal action in a court of competent jurisdiction and/or by enforcement through Brevard County Code Enforcement.
4. No delay or failure on the part of Brevard County to exercise any right or remedy upon the occurrence of a violation shall affect any such right or remedy or preclude Brevard County from the exercise, thereof, at any time during the continuation of any event of violation.
5. Any person, firm, corporation, association or other group or body who shall violate any provision of this Chapter, shall be guilty of a misdemeanor, and, upon conviction thereof, be fined not more than five hundred dollars (\$500.00) or imprisoned in a County jail for not more than sixty (60) days, or both, and in addition, shall pay all costs and expenses involved in said case. Each day any such violation continues to exist shall be considered a separate offense.

5.0 Alternate Remedies

In addition to any other remedies, whether civil or criminal, for any violation of this Chapter, Brevard County may institute in a court of competent jurisdiction, any appropriate action or proceeding, including injunction, to prevent or remedy any such violation. Further, Brevard County may take such other lawful action, including code enforcement proceedings as may be necessary to prevent or remedy any such violation.

6.0 Permits Required by Other Agencies

Nothing in this Ordinance shall be construed to eliminate the need for property owners to meet all applicable Federal, State, or regional regulations and codes which are required by the administering agency.

7.0 Conflicting Regulations

In the case of direct conflict between any provision of this Chapter and any part or provision of any applicable Federal, State, or Brevard County regulation, the more restrictive shall apply.

8.0 Severability

If any provision of this Ordinance is held to be illegal or invalid, the other provisions shall remain in full force and effect.

9.0 Effective Date

A certified copy of this Ordinance shall be filed with the Office of the Secretary of State, State of Florida within ten (10) days of enactment. This Ordinance shall take effect upon adoption and filing as required by law.

10.0 Area Encompassed

This Ordinance shall take effect only in the unincorporated area of Brevard County, Florida.

11.0 Inclusion in Code

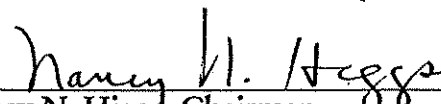
It is the intention of the Board of County Commissioners that the provisions of this Ordinance shall become and be made part of the Code of Ordinances of Brevard County, Florida; and that the Sections of this Ordinance may be renumbered or re-lettered and that the word "Ordinance" may be changed to "Section," "Article," or such other appropriate word or phrase in order to accomplish such intentions.

DONE, ORDERED AND ADOPTED in Regular Session this 30th day of
November 1999 .

ATTEST:

BOARD OF COUNTY COMMISSIONERS
BREVARD COUNTY, FLORIDA


Sandy Crawford, Clerk

BY: 
Nancy N. Higgs, Chairman
(as approved by the Board on 11-30-99)

APPENDIX A

GRANT - VALKARIA SPECIAL AREA OF STORMWATER CONCERNS

NOW, THEREFORE BE IT ORDAINED, by the Brevard County Board of County Commissioners, that the Code of Ordinances of Brevard County, Florida is hereby amended to create a new Appendix A, Chapter ____ so that the following policies, rules and regulations shall hereby apply to all development within the Grant-Valkaria Special Area of Stormwater Concerns.

Section 1. Determination of Grant-Valkaria Special Area of Stormwater Concerns

The Grant-Valkaria Special Area of Stormwater Concerns, which is subject to the provisions of this Ordinance is defined as all land lying east of Interstate Highway 95 within Sections 13, 14, 15, 22, 23, 24, 25, 26, 35, and 36, Township 29 South, Range 37 East; and Sections 19, 20, 28, 29, 30, 31, 32, 33, and 34, Township 29 South, Range 38 East and Sections 1 and 2, Township 30 South, Range 37 East, and Sections 4, 5, and 6, Township 30 South, Range 38 East, hereinafter referred to as the Grant-Valkaria Special Area of Stormwater Concerns. This Appendix shall be applied in the Grant-Valkaria Special Area of Stormwater Concerns in addition to all other provisions of the Code of Ordinances of Brevard County, Florida

Section 2. Road Construction

In the Grant-Valkaria Special Area of Stormwater Concerns, when new dirt or paved roads are built, retention requirements for areas outside of the road right-of-way shall not be met by use of the road right-of-way. Retention volumes within the road right-of-way shall only accommodate required retention for the roadway design.

Sections 3-5 below apply to building permit applications for existing platted lots which were platted prior to 1993, except in Pomello Ranch, Bear Creek, Cypress Creek, Hunters Run and Cypress Lake Subdivisions.

Section 3. Lot Fill

In the Grant-Valkaria Special Area of Stormwater Concerns, lot fill shall not cause additional drainage or ponding of water onto adjacent properties. When existing platted lots are in a 100-year floodplain, as defined by the Federal Emergency Management Agency (FEMA), fill should be limited to fill necessary for the septic tanks, house pads, driveways, and any required retention berms. No additional fill shall be placed on the lot without a waiver as provided in Section 7.

Section 4: Retention Requirements

In the Grant-Valkaria Special Area of Stormwater Concerns, the site drainage plan for building permit applications shall provide for detention storage of 1-inch runoff from the lot. Site storage may be accomplished with swales, berms, or ponds. The detention volume may be drawn down with a maximum 3" diameter pipe or structure. An engineered design is not required. Exhibit 1, shows typical designs that may be used for the required detention volumes. Alternate designs may

be used provided they are designed, signed and sealed by a Professional Engineer and deemed acceptable to Brevard County.

Section 5. Flag Lots and Access Easements

In the Grant-Valkaria Special Area of Stormwater Concerns, where a new flag lot or easement for driveway access is created, the lot shall meet the retention requirements shown in Section 4, and a legal positive outfall for the lot drainage shall be provided, which shall not adversely impact adjacent lots. Flag and easement lot drainage shall require review during the lot review process.

Section 6. Newly Platted Lots

In the Grant-Valkaria Special Area of Stormwater Concerns, newly platted subdivisions or site plans shall be required to match pre versus post runoff volumes for a 25-year storm in addition to other Brevard County code requirements.

Section 7. Waivers

1. Conditions: An applicant seeking a waiver for lot grading requirements shall submit a written request to the County Manager or designee for the waiver stating the reasons for the waiver and the facts which support such waiver. All requests for waivers must be submitted prior to or in conjunction with the application for building permit. The request for waiver shall be submitted to the County Manager or designee who shall schedule a hearing before the Board of County Commissioners within thirty (30) days of receipt of the written request. The request shall contain the basis for the waiver. The County Manager or designee and affected agencies shall not recommend approval of a waiver, unless they determine the following:
 - a) The particular physical condition, shape or topography of the specific property involved causes an undue hardship to the applicant, if the strict letter of the code is carried out, and
 - b) The granting of the waiver will not be injurious to adjacent properties;
 - c) The conditions, upon which a request for waiver are based, are particular to the property for which the waiver is sought and are not generally applicable to other property and do not result from actions of the applicant; and
 - d) The waiver is consistent with the intent and purpose of the land development regulations, the County land use plan and the requirements of this Appendix.
2. Waivers to Sections 1-6 of this Appendix may be granted or denied by the Brevard County Board of County Commissioners, based upon undue hardship or unusual lot configuration as discussed above. Waivers shall not be granted in violation of FEMA requirements.
3. If the Brevard County Board of County Commissioners approves a waiver, they may attach such conditions to the waiver to assure that the activity will comply with the intent and purpose of this section.

Section 8. Modifications

Modifications of all improvements approved by the County under this Ordinance shall require prior written approval from Brevard County. In areas with fill limitations per Section 3, no additional fill exceeding the limitations of Section 3 shall be placed upon the lot without a waiver as provided in Section 7.

Section 9. Conflicting Regulations

In the case of direct conflict between any provision of Appendix A, of this Appendix and any part or provision of any applicable Federal, State, or Brevard County regulation, the more restrictive shall apply.

DONE, ORDERED AND ADOPTED in Regular Session this 30th day of

November 19 99.

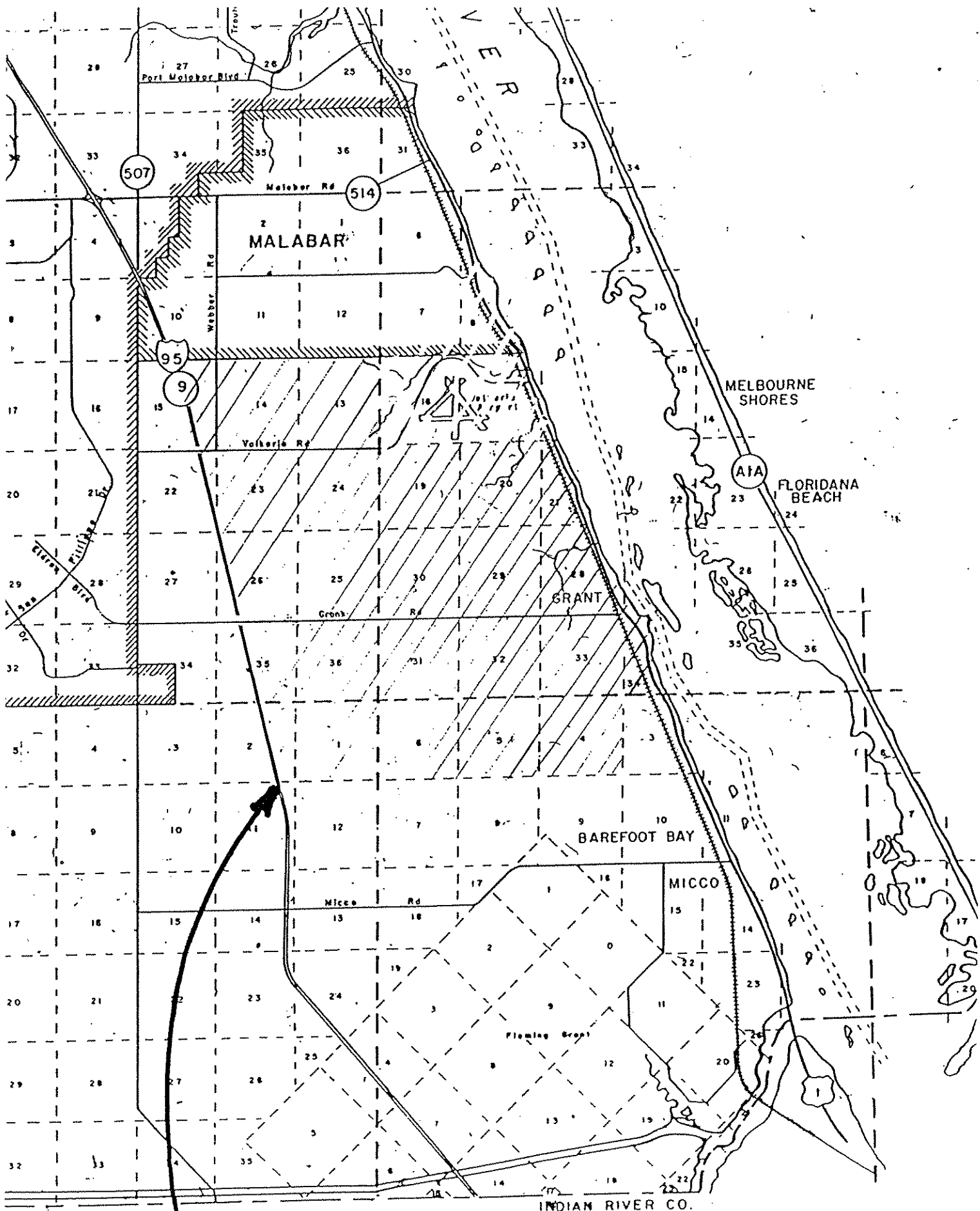
ATTEST:

BOARD OF COUNTY COMMISSIONERS
BREVARD COUNTY, FLORIDA

Sandy Crawford
Sandy Crawford, Clerk

BY: Nancy N. Higgs
Nancy N. Higgs, Chairman
(as approved by the Board on 11-30-99)

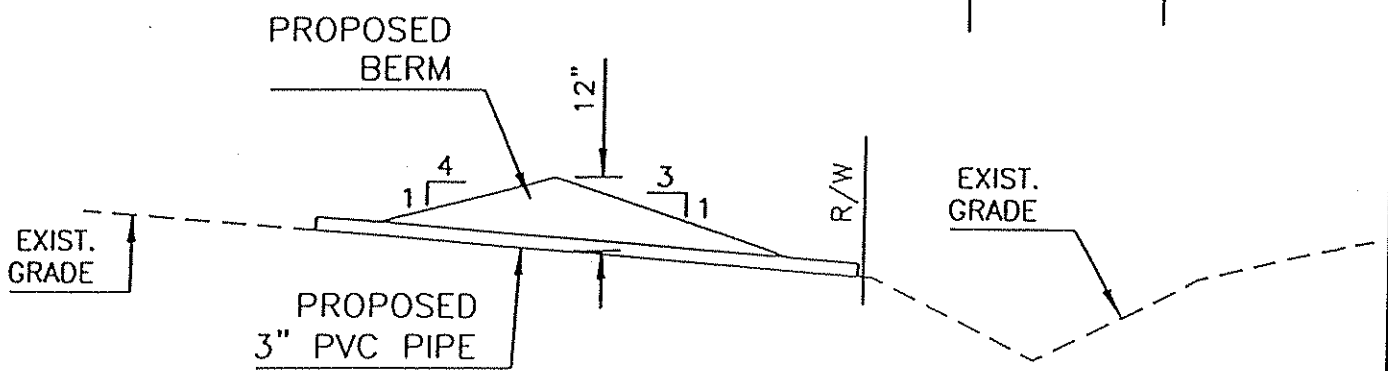
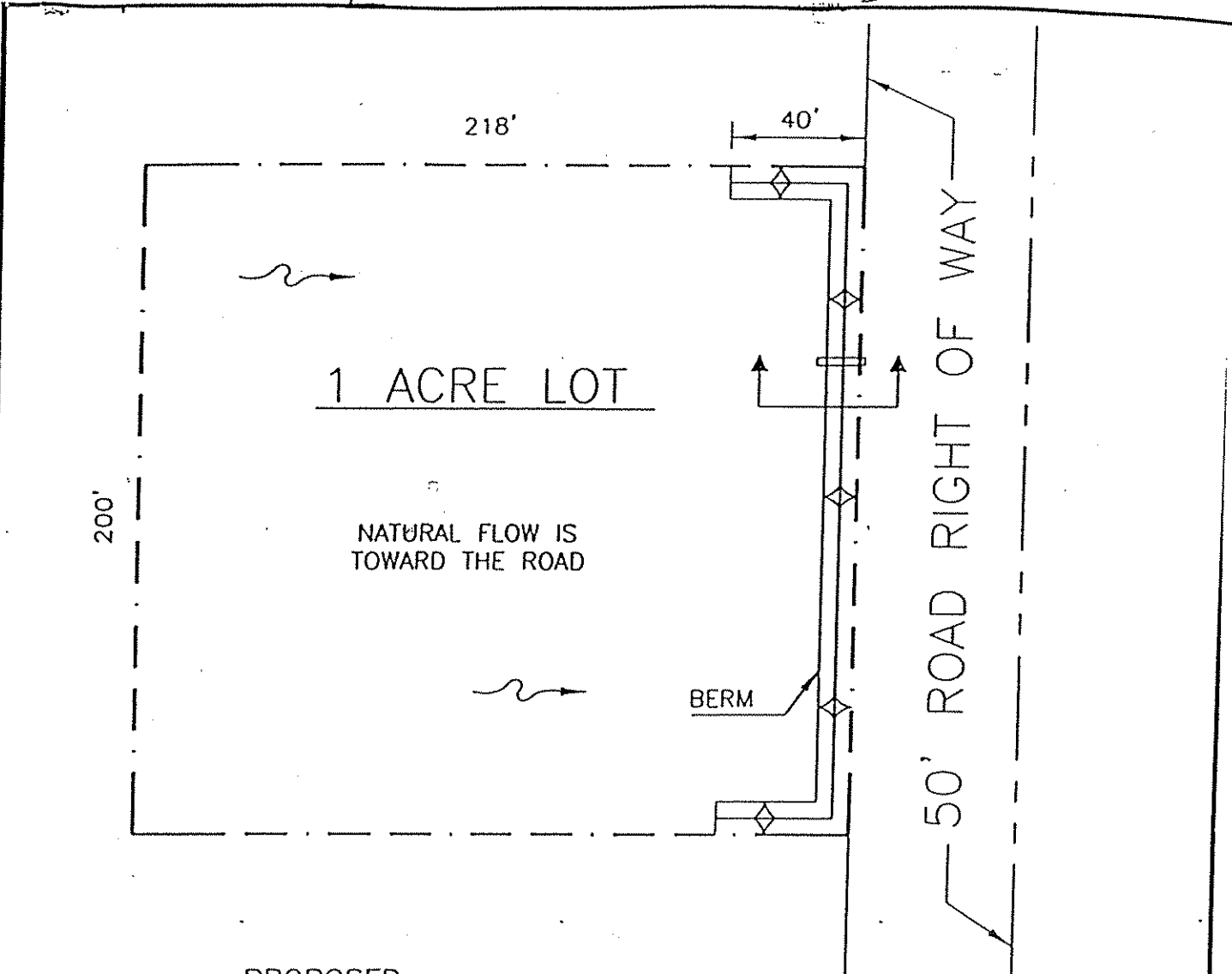




**GRANT - VALKARIA SPECIAL AREA
OF STORMWATER CONCERN**

R:37E

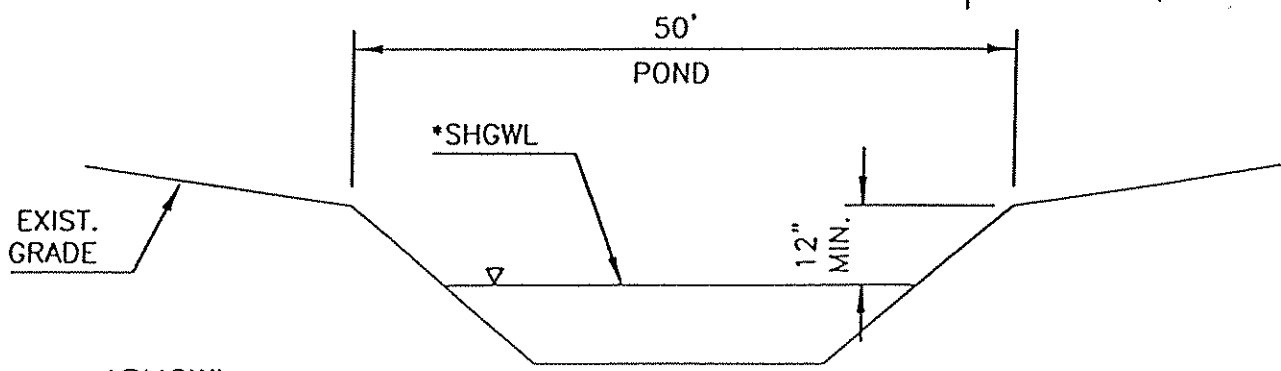
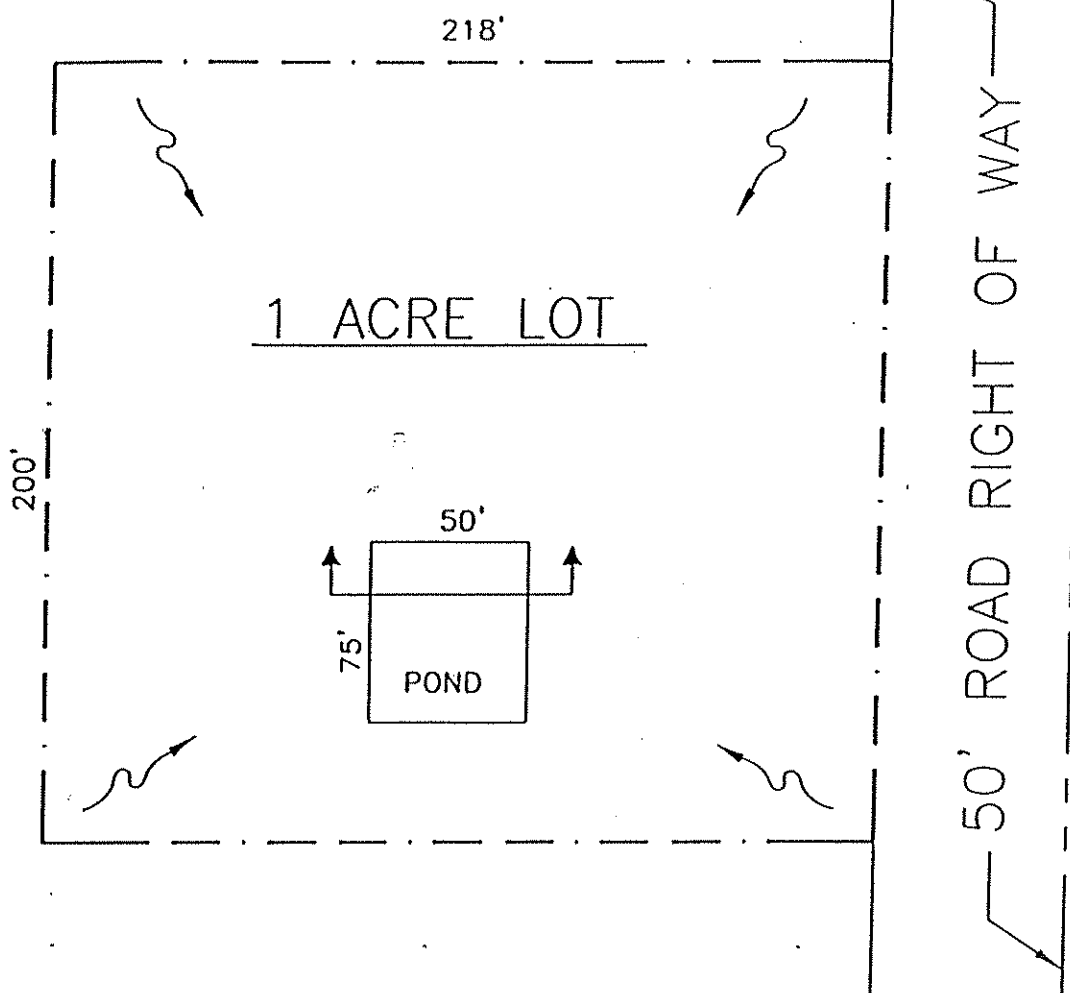




REQUIRED: 1" OF DETENTION VOLUME
 1 ACRE = 43560 SQ. FT;
 $1"/12 \times 43560 = 3630$ CU. FT.

TYPICAL DETENTION BERM

PREPARED BY: BREVARD COUNTY PUBLIC WORKS DEPARTMENT ENGINEERING DESIGN DIVISION	DATE: DEC., 1998 DWN BY: ADRIAN REV. _____	DWG. NO. 1 OF 3
---	--	---------------------------



*SHGWL =
SEASONAL
HIGH
GROUNDWATER
LEVEL

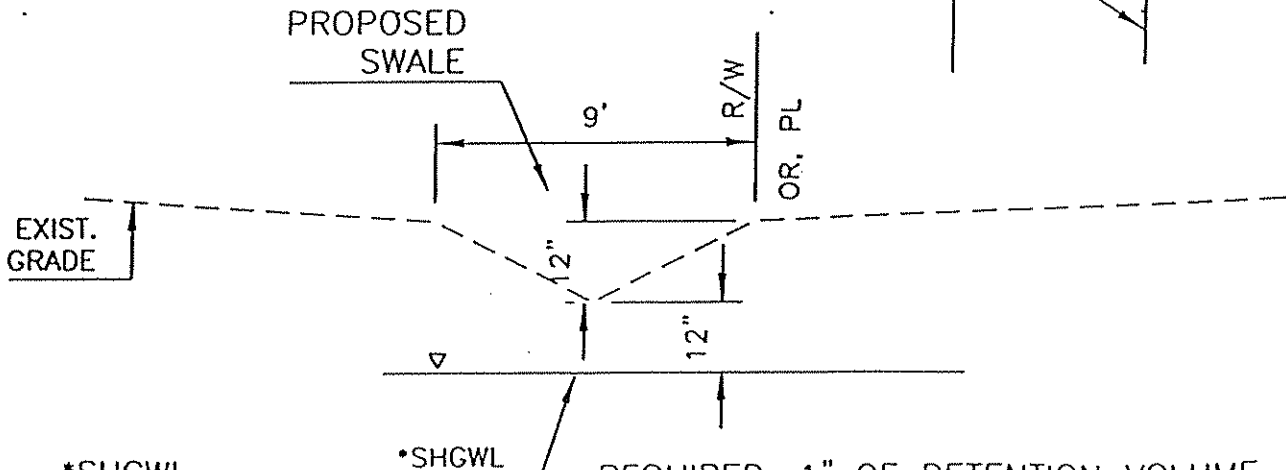
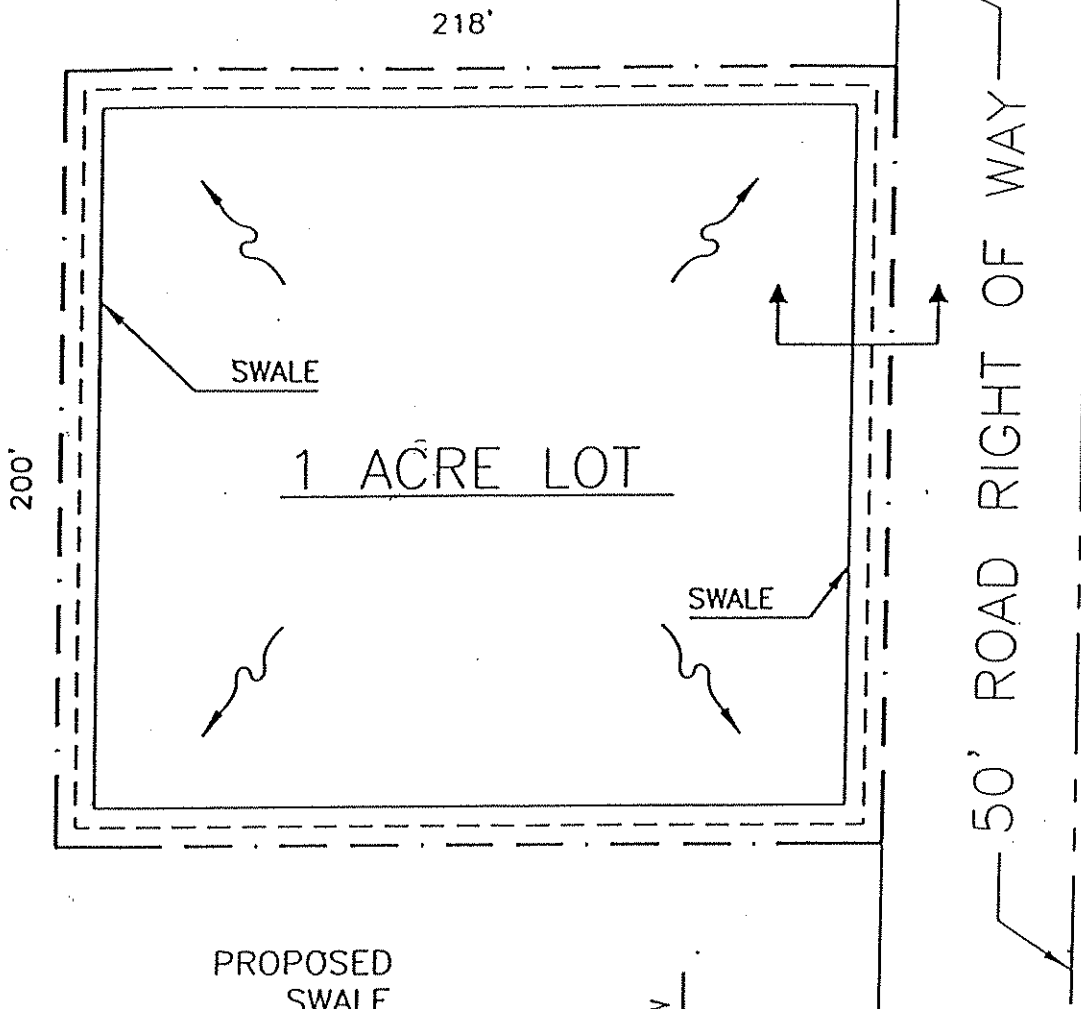
REQUIRED: 1" OF DETENTION VOLUME
1 ACRE = 43560 SQ. FT;
 $1"/12 \times 43560 = 3630$ CU. FT.

TYPICAL DETENTION POND

PREPARED BY:
BREVARD COUNTY PUBLIC WORKS DEPARTMENT
ENGINEERING DESIGN DIVISION

DATE: DEC., 1998
DWN BY: ADRIAN
REV.

DWG. NO.
2 OF 3



*SHGWL =
SEASONAL
HIGH
GROUNDWATER
LEVEL

REQUIRED: 1" OF DETENTION VOLUME
1 ACRE = 43560 SQ. FT;
 $1"/12 \times 43560 = 3630$ CU. FT.

TYPICAL DETENTION SWALE

PREPARED BY:
BREVARD COUNTY PUBLIC WORKS DEPARTMENT
ENGINEERING DESIGN DIVISION

DATE: DEC., 1998
DWN BY: ADRIAN
REV.

DWG. NO.

3 OF 3

BREVARD COUNTY AREAS OF SPECIAL DRAINAGE CONCERNS

1. GRANT-VALKARIA AREA - The area between Malabar and Barefoot Bay experiences routine flooding due to extremely flat topography and minimal drainage infrastructure. These problems are compounded by most of the area being platted with no consideration for the right-of-way for ditches or roadside swales. Much of this area is also in the 100 year floodplain. Only about 10% of the platted lots have been built upon, leaving the potential for new roads and lot fill to make flooding problems worse.

It is recommended that special requirements for homes, roads and new development be established to restrict lot fill in floodplain areas, to require homeowners to retain the first inch of runoff on their own lots, establish drainage requirements for new and dirt roads and require new development to restrict runoff volumes.

2. CANAVERAL GROVES - This area south and west of Port St. John is similar to the Grant area in that it has many old platted lots with substandard drainage infrastructures. Most of this area is in the St. Johns River floodplain and experiences perennial flooding when the river rises. Unlike the Grant area, there is an extensive canal system providing drainage for much of the area when the river is down.

Many of the drainage problems in this area are associated with maintenance of existing canals and roadside ditches. Most of these canals and roads have not been accepted by Brevard County for maintenance because they were not constructed to County standards and there is inadequate right-of-way to access them. Many of the old metal culverts under the roads have deteriorated and need replacement. In addition, the roadside ditches are rarely cleaned, leading to flooding and washouts of the roads. There is no homeowners association to provide maintenance of these facilities, leading to an ever increasing maintenance needs and problems.

The solutions to flooding in Canaveral groves are not so much the need for larger pipes and ditches, but for a source of funds for maintenance of the existing facilities. Being in the St. Johns River floodplain limits the structural remedies available for this area. Optimization of the existing facilities through routine maintenance would provide drainage improvements to Canaveral Groves during periods of low river levels. During periods of high river levels little can be done to relieve this area.

3. NORTH MERRITT ISLAND - This area has experienced widespread flooding after Tropical Storm Gordon due to low lying land, very flat topography and a limited drainage infrastructure. Because of this event, Surface Water Improvement had a consultant perform two (2) Stormwater Masterplans for this area.

The conclusions of these reports were that due to the physical limitations of the topography, complete resolution of the flooding problems was not feasible. It was proposed to provide partial remedies by constructing two (2) large pump stations, diverting canals into existing borrow pits and mosquito control impoundment's,

constructing bypass canals and constructing new stormwater detention ponds. These improvements would total over \$3,100,000.

This combination of improvements will provide a significant reduction in flooding duration and a partial reduction in the depth of flooding in most areas of North Merritt Island. It should be noted that these improvements were not designed for future development and in fact will not bring the drainage facilities in North Merritt Island up to current standards.

Therefore, it will be critical that new development not be designed to usurp the partial flooding improvements that will be constructed with these projects. Current development standards prevent an increase in stormwater discharge rates but do not prevent additional stormwater volumes from being discharged to County facilities. Some levels of increased development standards to prevent increased stormwater volumes will be necessary to protect the investment made with the proposed improvements.

4. CRANE CREEK - During Hurricane Erin much of the Crane Creek area experienced significant flooding for several days. A subsequent Master Stormwater Study showed that the canal systems in this area had inadequate capacities and Interstate 95 became a dam for waters trying to flow westward. Over \$3,000,000 of culvert and channel improvements were identified to reduce flooding depth and duration in this area. However, limitations due to Interstate 95 and the St. Johns River floodplain will prevent these systems from providing the level of service desired in the current stormwater regulations. In addition, relatively little money is collected in this District by the Stormwater Utility for project implementation.

Therefore, a certain level of volume controls for new development should be used to prevent exacerbation of the current problems.

5. POLICE FOUNDATION - The area west of Melbourne also has perennial flooding problems. This area has general problems of flat topography, high groundwater, poorly draining soils, undersized pipe and ditch systems and outfall canals controlled by the Melbourne Tillman Water Control District.

This area was platted many years ago into small lots and constructed with roadside swales. The lots tend to be low and require substantial fill to drain them to the streets. The capacity of the roadside ditches and culverts is generally substandard. Even if the ditches and culverts were improved, the Melbourne Tillman Canals are undersized and back up, which would negate any upstream improvements. Being already platted out and mostly built out, there are few areas where regional detention ponds could be constructed for flood storage. The roads have only 50 foot right-of-ways, which are too small for substantial roadside ditch improvements.

A persistent number of complaints are received from this area regarding lot fill issues. The lots are too small to provide significant individual lot stormwater storage, but limits on the amount of fill allowed on the lots would reduce complaints in this area. If the

Melbourne Tillman Water Control District were to improve their canal system in this area then upstream piping and ditch improvements could be made.

6. UPPER EAU GALLIE - During Hurricane Erin there was widespread flooding west of Wickham road between Suntree and Eau Gallie Boulevard. A study of this area has since been performed, called the Upper Eau Gallie Stormwater Masterplan. This study concluded that the flooding was caused by inadequate relief under Interstate 95, flat topography and inadequate drainage infrastructure. Over \$8,000,000 of improvements were identified to provide relief or this area.

However, these improvements will only provide partial relief for most flooding areas and will take many years to implement due to fiscal and permitting limitations.

There is a substantial amount of undeveloped land in this area, which will add additional stormwater volumes to the undersized system as it is developed. Therefore it would be prudent to have a level of stormwater volume restrictions for the Upper Eau Gallie Basin to minimize impacts of future development.