

ORDINANCE NO. 2459

AN ORDINANCE ESTABLISHING DESIGN CRITERIA FOR FLOOD DETENTION FACILITIES WITHIN THE CITY OF DEER PARK, AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DEER PARK:

I.

Design criteria for flood detention facilities are hereby established for property being developed within the City as follows:

1. Basic Standards:

Detention requirements of area not more than 50 acres shall be calculated by using the chart below which is calculated by using the curve for the drainage area and storage coefficient.

<u>Altered Area</u>	<u>Capacity in Acre Feet (AF)</u>
0 to 3 acres	0.20 AF per acre
3 to 10 acres	0.45 AF per acre
20 acres	9.5 AF
30 acres	15.0 AF
40 acres	21.0 AF
50 acres	27.5 AF

For intermediate values between 10 to 50 acres, the acre-foot capacity may be established by multiplying the acreage by a storage coefficient factor (Cs) which may be calculated as $Cs = .45 + (0.0025 \times Ac)$ where Ac is equal to the total drainage acreage minus 10.

For drainage areas being developed which are 50 acres or larger, the detention facility design and criteria shall be approved by the Director of Planning and Development.

2. Additional Standards: The detention facility shall be designed for easy maintenance, every consideration shall be given to designing of the facility for multi-purpose use, such as playgrounds, ballfields, miniparks, etc., to assure that maintenance will be accomplished, the design shall include the following:

- a. a twenty foot maintenance roadway shall encompass the perimeter of the detention facility and shall be considered a part of the facility

- b. a twelve foot wide concrete access ramp shall be provided into the basin for maintenance equipment access
- c. an earthen detention basin shall have a minimum on side slopes of 4:1 and minimum bottom width of ten feet
- d. a minimum of a five foot wide, six inch thick, reinforced concrete trickle channel shall be constructed through the basin bottom to accommodate low flow and allow fast drying
- e. the bottom of the detention basin shall have a minimum of 0.25 percent cross slope to facilitate quick drainage
- f. inlets and outlets and required trash racks shall be located so as to be easily accessible
- g. inlet and outlet pipes shall have erosion control devices
- h. high overflow shall be constructed (6" above the design water surface) when is necessary
- i. detention shall be designed in order to have a minimum of 12" free board
- j. the detention basin, maintenance roadway, and right-of-way shall be hydro-mulched with bermuda seed and watered to facilitate full grass coverage
- k. provide for ingress/egress (dedicated right-of-way if necessary) to the detention basin.

II.

It is hereby officially found and determined that the meeting at which this Ordinance was adopted was open to the public and that public notice of the time, place and purpose of said meeting was given, all as required by Chapter 551, Government Code of the State of Texas.


III.

The City Council finds that this Ordinance relates to the immediate preservation of the public peace, health, safety and welfare, in that it is necessary that the design criteria provided for by this Ordinance can become effective at the earliest possible moment, so as to prevent flooding within the City, thereby creating an emergency, for which the Charter requirement providing for the reading of ordinances on three (3) several days should be dispensed with, and this Ordinance be passed finally on its introduction; and, accordingly, such requirement is dispensed with and this Ordinance shall take effect upon its passage and approval by the Mayor.

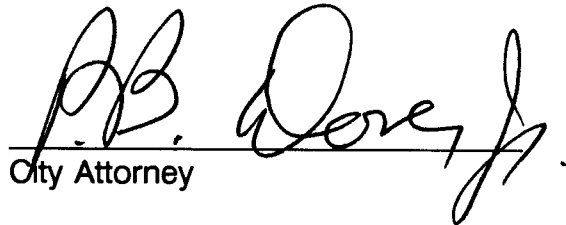
PASSED, APPROVED AND ADOPTED on the first and final reading, this 1 day of October, 1996 by a vote of 7 "ayes" and 0 "noes", this Ordinance having been read in full prior to such vote.


MAYOR, City of Deer Park

ATTEST:


City Secretary

APPROVED:


City Attorney