

Clear Lake City Water Authority
Policy Manual

Number: DEV-100
Issued: 9/8/2005
Revision: No. 3
Effective: 11/14/2019

**POLICY OF CLEAR LAKE CITY WATER AUTHORITY REGARDING
DRAINAGE AND FLOOD CONTROL FOR NEW DEVELOPMENT**

1.01 INTRODUCTION

This Policy has been prepared to provide detailed criteria for the design of drainage and flood control facilities in the boundaries of the Clear Lake City Water Authority (“CLCWA” or the “Authority”), in Harris County, Texas. This policy will apply to all development projects within the boundaries of the CLCWA considered after this date.

1.02 BACKGROUND

In 1963, by act of the State Legislature, the CLCWA was created. As stated in the enabling legislation, the CLCWA was granted all rights, powers, and functions under the General Laws of the State pertaining to water control and improvement districts and is specifically granted the right, power, and authority to accomplish by any and all practical means drainage facilities or part of such systems or facilities and to make any and all necessary purchases, constructions, improvements, extensions, additions, and repairs thereto, and to purchase or acquire all necessary land, rights-of-way, easements, sites, equipment, buildings, plants, structures, and facilities and to operate and maintain same in accordance with §51.121 of the Water Code, and pursuant to its creation, the CLCWA has, among its founding purposes, “the control, storage, preservation, and distribution of its water and flood water and the water of its rivers and streams for irrigation, power, and all other useful purposes; and the control, abatement, and change of any shortage or harmful excess of water.” The same section of the Water Code expressly states that the purposes for the creation of the CLCWA “may be accomplished by any practical means.”

1.03 PURPOSE

The purpose of this drainage and flood control policy is to ensure that new development or redevelopment occurring within the jurisdiction of the CLCWA will provide appropriate mitigation

measures so that storm drainage from the new development (including redevelopment) will not adversely impact existing problems. There are currently flooding and storm drainage problems located within the CLCWA's boundary. It is the desire of the Authority that these problems not be worsened or that any new flooding and storm drainage problems be created by proposed new developments or by redevelopment of existing projects.

The Authority will utilize and consider the existing minimum criteria of other governmental agencies, such as the City of Houston and Harris County, which review and approve new development within the CLCWA's boundaries. However, the Authority believes that certain aspects of the Harris County Flood Control District's ("HCFCD") minimum drainage criteria for new development contained within HCFCD's Policy, Criteria, and Procedure Manual need upgrading refinements to address the existing drainage and flooding conditions already occurring within the Authority's boundaries. Therefore, the Authority has provided herein additional drainage criteria that must be met, besides those minimum criteria of the HCFCD and other governmental agencies, before new development will be approved by the Authority.

1.04 POLICY

It is the policy of the Authority as it relates to storm drainage and flood control that all new developments within the Authority's boundary shall fully mitigate any increases in runoff rates and volumes such that no new flood risk is created nor any existing flood potential is increased. This policy is consistent with the policies and intent of Harris County and the City of Houston.

In the past, the Authority has relied upon the minimum drainage criteria of the HCFCD, Harris County and the relevant City standards to meet this policy. However, it is now the belief of the Authority that such minimum criteria need to be enhanced and supplemented in order to achieve the Authority's policy of protecting the public interest.

Therefore, in addition to the minimum criteria and requirements of the HCFCD, the County, and the relevant City, all new developments (including redevelopments) will be required to comply with the Authority's criteria as contained herein.

1.05 CRITERIA

When proposed developers seek approval from the Authority for their new developments (including redevelopments), an additional requirement will have to be met by such developers, pertaining to storm drainage and flood control, in addition to the requirements of the HCFCD, Harris County, and/or City of Houston (or any other city with jurisdiction) as follows:

(1) All proposed developments will be required to provide detention ponds in order to mitigate the increases in runoff rates and volume associated with such development (including redevelopments) as compared to the current undeveloped conditions so that no new flood risk is created nor any increase in flood risk will occur off-site. The preliminary design of such ponds, including their location, will be submitted to the Authority for its review and approval.

(2) The “Maximum Allowable Outflow Rates” associated with the required detention ponds will be restricted to undeveloped 10-, 100-, and 500-year flow rates of 0.075 cfs/acre, 0.125 cfs/acre, and 0.179 cfs/acre, respectively.

(3) The “Minimum Detention Volume” required to be provided within the detention ponds, not including streets and culverts/pipes, will be 1.43 acre-feet per acre of area draining into the pond. All new development (including redevelopments) must drain into the pond, as well as any off-site drainage that had been or will be flowing into the area of the proposed development.

(4) The maximum design water level for detention and/or retention ponds, for storm events up to and including the 500-year event, will be less than the minimum gutter elevation in the adjoining street system.

(5) The rainfall amounts to be used for the 10-, 100- and 500-year storm events in applying the above criteria are those contained within the Effective FEMA hydrologic (HEC-HMS) models applicable to the Horsepen Bayou and adjacent watersheds.