

PLAT

LOT USE LEGEND



347 -- SINGLE FAMILY RESIDENTIAL LOTS
99 -- TOWNHOUSE LOTS
1 ---- MULTI- FAMILY LOTS
3 ---- GREEN/ COMMON LOTS
6 ---- DRAIN DITCH/ COMMON LOTS
4 ---- CIVIC LOTS
3 ---- COMMERCIAL PARKING LOTS
12 ---- COMMERCIAL LOTS

475--- TOTAL LOTS

AERIAL PHOTO



STORM WATER STATEMENT



TBPELS Firm # F-1435
TBPELS # 10096900

MELDEN & HUNT INC.

CONSULTANTS • ENGINEERS • SURVEYORS

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DRAINAGE STATEMENT EL MILAGRO SUBDIVISION

Date: February 3, 2021

EL MILAGRO SUBDIVISION is a 176.574 acres situated in the City of Mission, Hidalgo County, Texas, consisting of 176.574 acres Being part or all of Lot 9-7, 9-8, 9-9, 9-10, 10-7, 10-8, 11-7, 11-8, 11-9 West Addition to Sharyland Subdivision, according to the plat thereof recorded in Volume 1, Page 56, Hidalgo County Map Records, The tract is currently vacant with a proposed land use of 347 Residential lots, 99 Townhouse lots, 1 Multi-family lot, 3 Green landscape/common lots, 6 Landscape Drain ditch/ common lots, 4 Civic lots, 3 commercial parking lots, and 12 commercial tracts for a total of 475 planned development lots and is located in the County of Hidalgo in the City of Mission. This subdivision is in Zone "C" (Unshaded) in FEMA's Flood Insurance Rate Map, Community Panel No. 480334 0400 C, Map Revised November 16, 1992. Zone "C" (Unshaded) areas of minimal flooding.


The soils are Camargo silt loam (5), moderate infiltration rate, Hydrologic Group "B", Harlingen clay loam (19) very slow infiltration rate, Hydrologic Group "D", Matamoros silty clay (34) slow infiltration rate, Hydrologic Group "C", Reynosa silty clay loam (55) moderate infiltration rate, Hydrologic Group "B, and Runn silty clay (64), which are in Hydrologic Group "C" respectively. For the purposes of this report the site falls mostly in Runn silty clay (64), which are in Hydrologic Group "C". (See excerpts from "Soil Survey of Hidalgo County, Texas")

Existing runoff is by surface flow in a northeasterly direction and has a runoff of 28.88 C.F.S. during the 10-year storm frequency as per the attached calculations. Proposed runoff after development is 430.25 C.F.S., during the 50-year storm frequency, per the attached calculation, which is an increase of 401.37 C.F.S.

The proposed drainage for **EL MILAGRO SUBDIVISION** shall consist of surface runoff from the lots into proposed streets and parking areas. Runoff shall flow into proposed Type "CC" and Type "A" inlets, connected with storm drain pipes that vary from 24" pipe through 54" pipe. This drainage system will have four key discharge locations the north, south, east & west area. These four areas shall flow into the proposed Madero drain ditch system as part of the March 2008 Sharyland Plantation Development Drainage Master Plan Restudy. Proposed widening of the Madero drain will move proposed runoff north which will ultimately discharge into the Mission Inlet.

In accordance with the City of Mission's drainage policy, the peak rate of runoff in the subdivision will not be increased during the 50-year rainfall event due to the improvements in this subdivision. Therefore, as per attached calculations, 1,567,722 cubic feet of detention is required for Phase I. There is also 686,918 cf of volume within the existing HCDD No. 1 Madero Ditch with portions of the ditch that will be filled in. There are six (6) proposed Drainage Ditches to be excavated within the boundaries of this subdivision that will create a volume of 4,014,954 cf for detention. This results in leaving 1,760,314 cf of excess detention that may be used for future phases.

The developer will maintain the ditches using a Municipal Management District (MMD) including some amenities within the ditches ROW such as walking trails, benches, sidewalks, grass and trees.

<input type="checkbox"/> REJECTED	
<input checked="" type="checkbox"/> APPROVED FOR SUBMITTAL	
<input type="checkbox"/> TO H.C. PLANNING DEPT.	
<input checked="" type="checkbox"/> TO CITY	
<input checked="" type="checkbox"/> DISCHARGE PERMIT REQUIRED	
<input type="checkbox"/> DISTRICT FACILITY	
<input checked="" type="checkbox"/> CITY FACILITY	
<input type="checkbox"/> OTHER	
<u>Hector Garcia</u>	<u>2/5/21</u>
H.C.D.D. NO. 1	DATE

By:

Fred L. Kurth, P.E.

