

### **ITEM # 3.0**

#### **PRELIMINARY & FINAL PLAT APPROVAL:**

Bryan's Landing Subdivision (Private)  
A 27.969 acre tract of land out of Lot 29-10,  
West Addition to Sharyland  
R-1A  
Developer: Omar Garcia  
Engineer: Izaguirre Engineering Group, LLC

### **REVIEW DATA**

#### **PLAT DATA**

This site is located on the east side of Bryan Road and is approximately 920' north of E. Mile 2 Road. — see **vicinity map**. The developer is proposing a private 103 single family residential lot subdivision. — see **plat for actual dimensions, square footages, and land uses**.

#### **VARIANCE**

The developer is requesting variances on area requirements for 2 lots (Lot 78 & 103). The minimum lot area for a corner lot is 9,000 sqft. per Zoning Code - Article VIII - Sec.1.37 - No. 5 - Area requirements. Currently, the lots are 8,029.13 sq. ft. and 8,661.01 sq. ft., respectively.

#### **WATER**

The developer is proposing to connect to an existing 4" water line with a proposed 12" line located along the west R.O.W. of Bryan Rd. and extend an 8" water line thru the subdivision providing 1" water services to each lot and looped to an existing 8" main line along the south R.O.W. of Mile 2 Road. There is a total of 12 proposed fire hydrants via direction of the Fire Marshal's office. – see **utility plan**.

#### **SEWER**

The developer is proposing to connect to an existing 8" line along and within the R.O.W of Bryan Road. A proposed 8" Sanitary Sewer line will run through the subdivision and collect from each lot through a 4" front and center stub out service. The Capital Sewer Recovery Fee is required at \$200.00/Lot which equates to \$20,600.00 (\$200 x 103 Lots).

#### **STREETS & STORM DRAINAGE**

The subdivision will have 2 accesses both from Bryan Road, with all internal streets being 32' Back-to-Back within 50' Right of Ways.

Utilizing the 50 year frequency storm event, after development of this subdivision storm water runoff will be detained in a detention pond positioned at the southeast corner of the site and maintained by the HOA. The development surface is to be graded to direct storm water surface runoff towards proposed paved curb and gutter streets. Said storm water will be intercepted by type "A" inlets which will outfall into the detention pond. An outfall pipe will be jack and bored under the existing irrigation canal and bleed out into the City of Mission system at the existing 10 year storm event runoff. The City Engineer has reviewed and approved the drainage report.

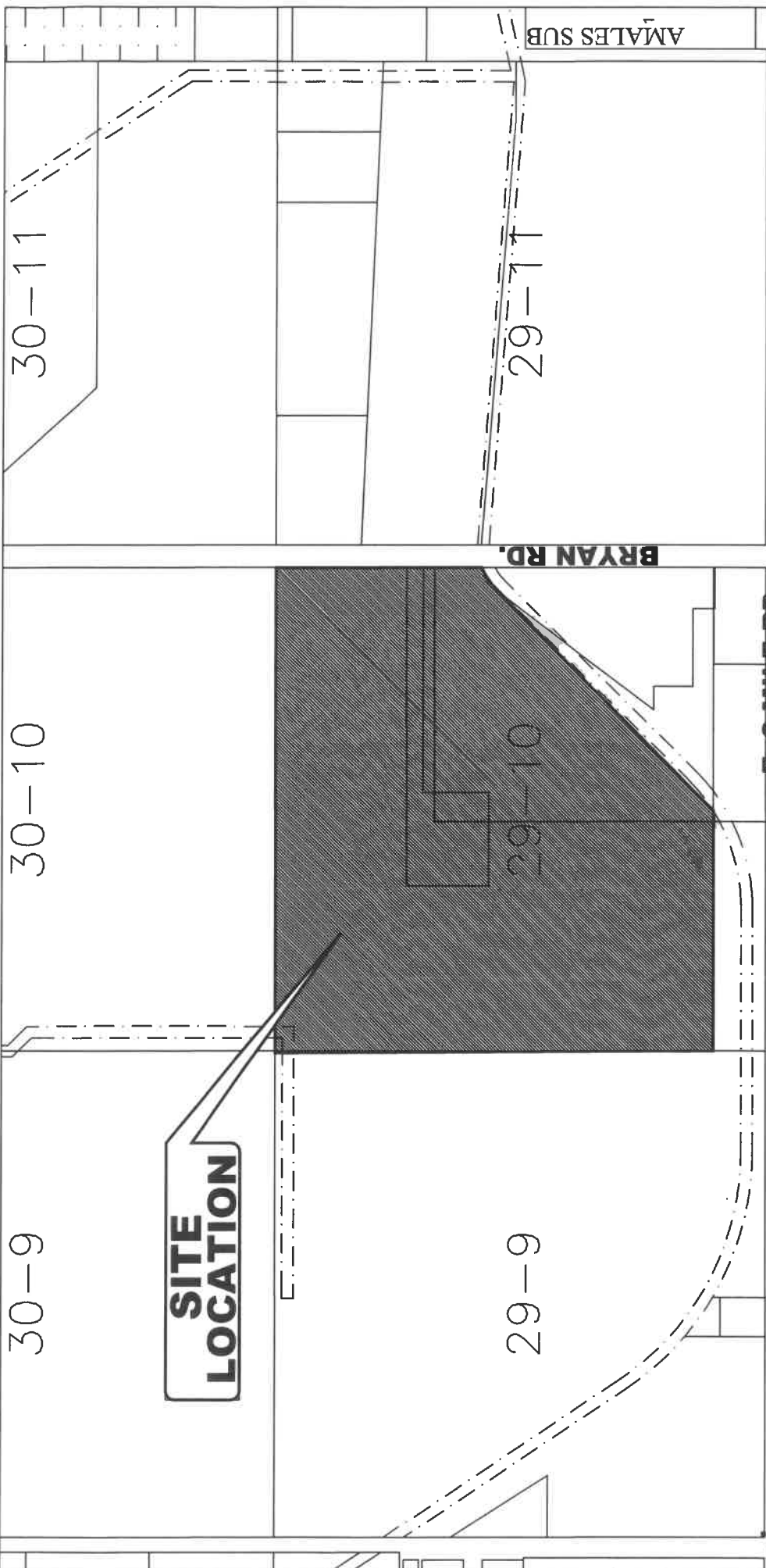
### **OTHER COMMENTS**

- Water District Exclusion, Assignment of Water Rights or payment of \$3000 per ac. ft.
- Escrow Park fees (103 Lots x \$500 = \$51,500.00)
- Must Comply with all other format findings

### **RECOMMENDATION**

Staff recommends to approval of the plat and its variance subject to:

1. Capital Recovery Sewer Fees
2. Payment of Park Fees
3. Water District Exclusion
4. Assignment of Water Rights



186 185 184 183 182 181 180 179 178 177 176 175 174 173 172 171 170 169 168 167 166

FRONTIER ESTATES

SANDSTONE DR. PHASE III

187

28-10

BRYAN ROAD CHURCH

E. 2 MILE RD.

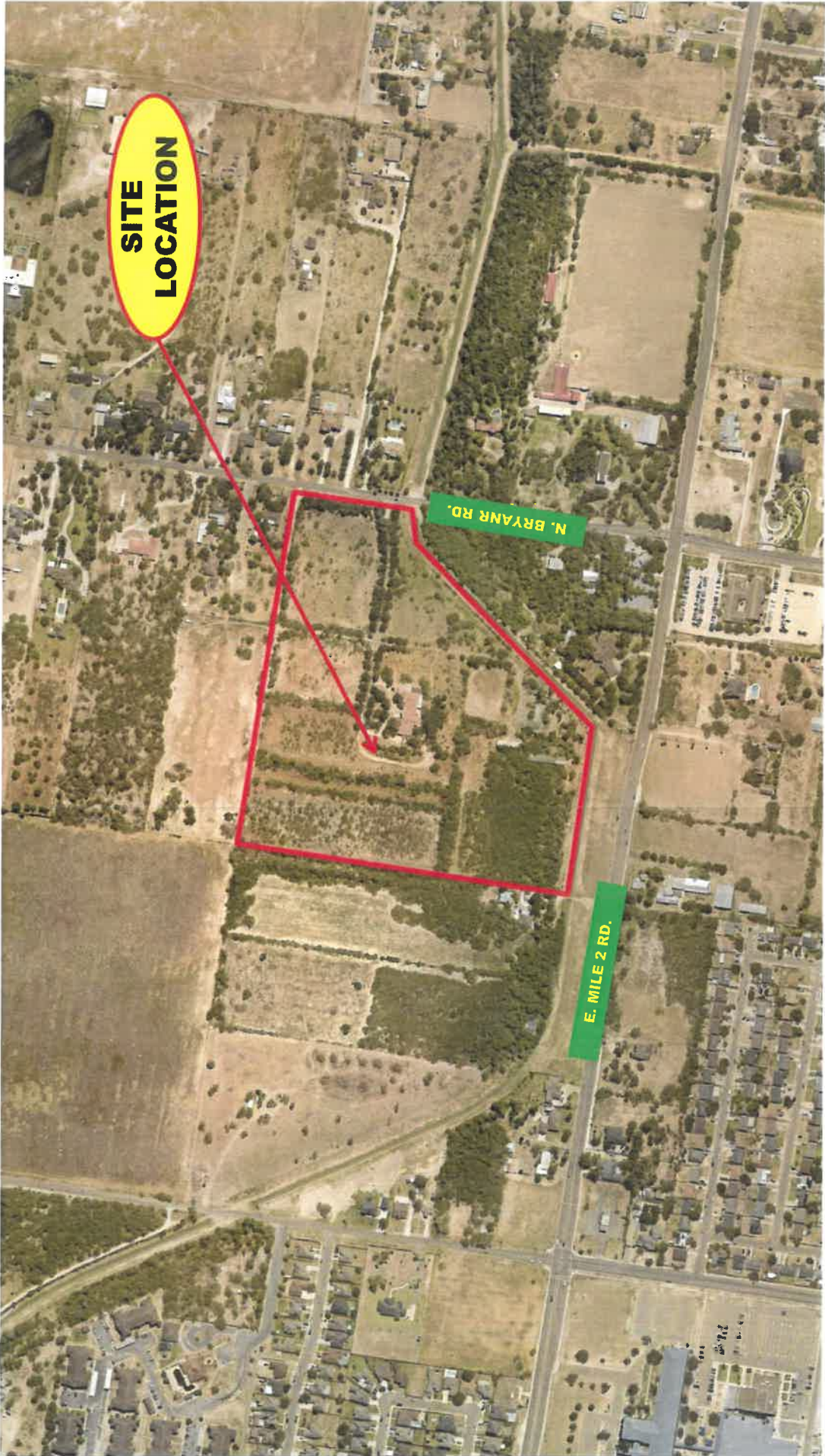
BRYAN RD.

1 CELESTE ESTATES

2

**CITY OF MISSION**  
 HIDALGO COUNTY, TEXAS  
 1201 E. 8th Street  
 MISSION, TX 78572  
 PH: (956) 580-8672  
 FAX: (956) 580-8680

No.

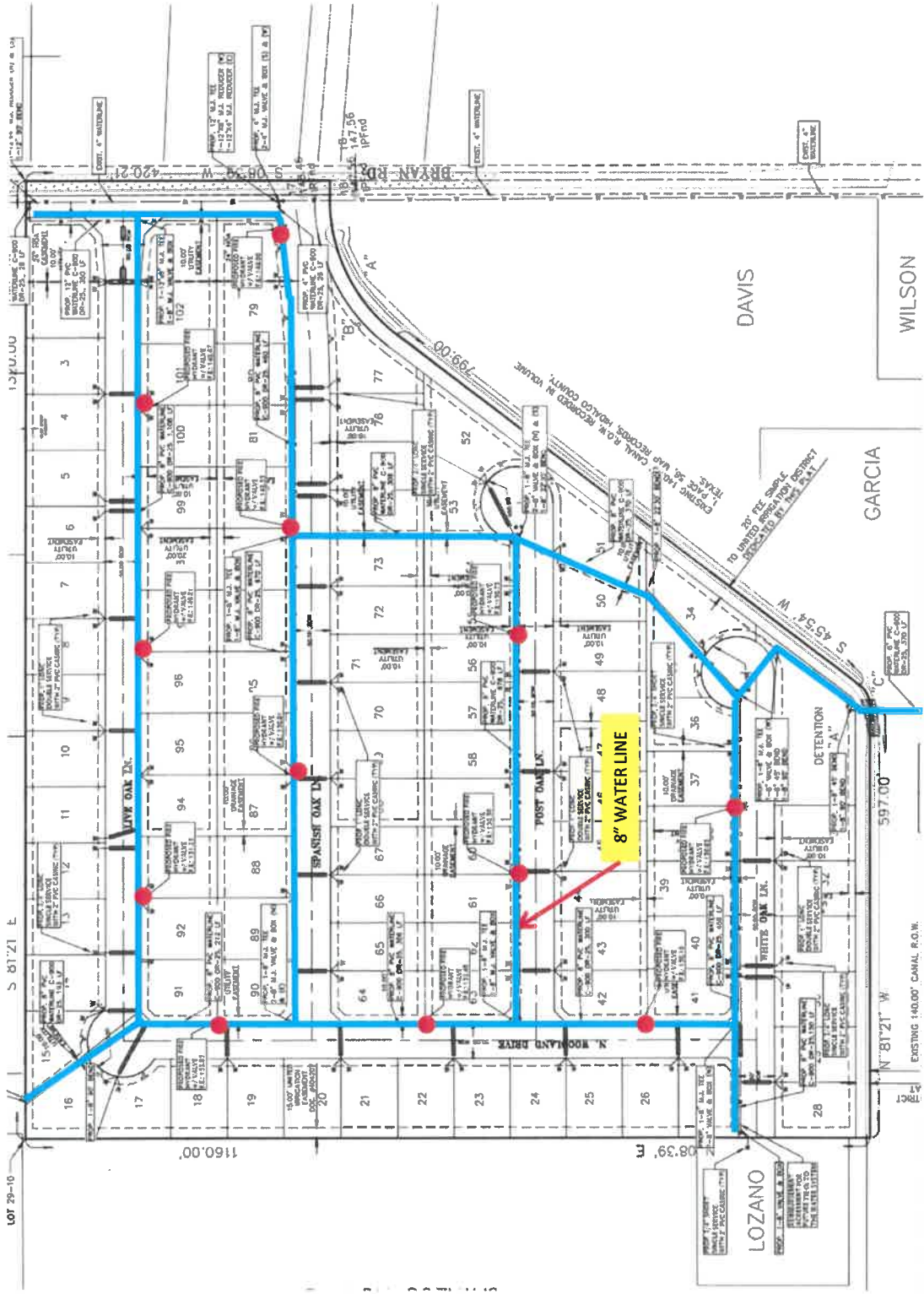


**SITE  
LOCATION**

**N. BRYANR RD.**

**E. MILE 2 RD.**





DAVIS

WILSON

GARCIA

8" WATER LINE

LOZANO

EXISTING 140.00' CANAL R.O.W.

LOT 29-10 S 81'21" E 1360.00'

EXISTING CANAL R.O.W. RECEIVED BY YOU/US

EXISTING CANAL R.O.W. RECEIVED BY YOU/US

EXISTING CANAL R.O.W. RECEIVED BY YOU/US

EXISTING CANAL R.O.W. RECEIVED BY YOU/US

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EXISTING CANAL R.O.W. RECEIVED BY YOU/US







# DRAINAGE REPORT NARRATIVE

## FOR BRYAN LANDING

### I. PROJECT LOCATION

This 27.969 gross-acre subdivision consists of one hundred and eleven (111) single family residential lots. This site is located within the City of Mission, Texas, on the east side of Bryan Rd. and is approximately 920 feet north of E Mile 2 Rd. Said 27.969 gross-acre tract is out of Lot 29-10, West Addition to Sharyland, Hidalgo County, Texas. According to the map or plat thereof recorded in Volume 1, Pages 56, of the Map Records of Hidalgo County, Texas.

### II. FLOOD PLAIN

Referring to the attached Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel No.480334 0400 C, effective date January 2, 1981, revised November 16, 1982. This site is located within the Flood Zone "C" (unshaded), which is an area determined to be of minimal flooding.

### III. SOIL CONDITIONS

A review of the U.S. Soil Conservation Survey of Hidalgo County indicates that of the subject site soil is classified as Hidalgo-25 (fine sandy loam) and Hidalgo-28 (sandy clay loam).

Hidalgo-25 soil (Hydrologic Group B, Unified Class CL), typically found with 0-1% slopes, consists of a surface layer of dark grayish-brown fine sandy loam about 17 inches thick. The next soil layer down, from 17 to 28 inches thick, is brown sandy clay loam. The next soil layer down, from 28 to 38 inches thick, is pale brown clay loam. The soil down thereafter, to approximately 80 inches, is very pale brown clay loam. This soil: a) is calcareous throughout, b) is well drained, c) has medium available water capacity, d) has slow surface runoff, e) has moderate permeability, f) has an overall moderate shrink-swell potential. See attached Soil Survey Report(s) from the Soil Conservation Service.

Hidalgo-28 soil (Hydrologic Group B, Unified Class CL), typically found with 0-1% slopes, consists of a surface layer of dark grayish-brown sandy clay loam about 17 inches thick. The next soil layer down, from 17 to 28 inches thick, is brown sandy clay loam. The next soil layer down, from 28 to 38 inches thick, is pale brown clay loam. The soil down thereafter, to approximately 80 inches, is very pale brown clay loam. This soil: a) is calcareous throughout, b) is well drained, c) has high available water capacity, d) has slow surface runoff, e) has moderate permeability, f) has an overall moderate shrink-swell potential. See attached Soil Survey Report(s) from the Soil Conservation Service.

### IV. EXISTING CONDITIONS

Existing runoff from the subject site is by form of sheet runoff that is intercepted by the Bryan Rd. roadside ditch. Runoff then flows south into existing City of Mission inlets located on E Mile 2 Rd. Said inlets drains into drainage ditch located on the south side of E Mile 2 Rd approximately 1,220 feet east of Bryan Rd. Drain ditch is connected to Mission Lateral section 1064. The Mission Lateral is owner and maintained by HCDD1 drain ditch network that ultimately outfalls into the Arroyo Colorado.

The Rational Method was utilized to determine the existing **10-year** frequency event storm water runoff to be  $Q_{\text{exist}} = 26.80\text{cfs}$  for this site.

### V. PROPOSED CONDITIONS


Utilizing the **50-year** frequency storm event (NOAA Atlas 14), after development of this subdivision storm water runoff will be  $Q_{\text{dev}} = 103.17\text{cfs}$  for an increased  $Q = 76.37\text{cfs}$ . Therefore, the total proposed detention volume, in accordance with the City of Mission's and HCDD1's development drainage requirements and policies, is **125,199cubic feet (2.87acre- feet)** (Refer to attached Drainage Calculations).

In accordance with the county of Hidalgo's drainage requirements, 125,199 cubic feet (5,028.36 cubic yard) of runoff detention will need to be detained for a 50-year storm event. Detention pond will be positioned at the southeast corner of the development which will be maintained by The Oaks on Bryan HOA.

The development surface is to be graded to direct storm water surface runoff towards proposed paved curb and gutter streets. Said storm water surface runoff will be intercepted by proposed type "A" curb inlets to be installed at appropriate locations. Curb inlets will be connected to an appropriately sized drain pipeline system, which will out fall into a proposed detention pond facility. An outfall pipe will be jack and bored under existing irrigation canal. This system will bleed out into City of Mission system at the existing 10-year storm event runoff to ensure no increase of runoff.

All drainage improvements shall be in accordance with the drainage requirement, regulations, and policies of the City of Mission and Hidalgo County Drainage District No.1.



<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>        </u>	<u>        </u>
H.C.D.D. NO. 1	DATE

*Gilberto A. Gracia*

GILBERTO A. GRACIA, P.E.      Date: May 10, 2024