THE STATE OF TEXAS
CITY OF RIO HONDO
COUNTY OF CAMERON

Juan Garza, Commissioner Place 1
Margaret Perez, Mayor Pro-Tem
Jose S. Cavazos, Commissioner Place 5

Esteban Bocanegra, Place 2
Olga Gallegos, Commissioner, Place 4

Gustavo Olivares
Mayor

City Commission of the City of Rio Hondo
January 23, 2024

Pursuant to Chapter 551, Title 5 of the Texas Government Code (the Texas Open Meetings Act), notice is hereby given that the governing body of the City of Rio Hondo, Texas will convene for a Regular Meeting, at **6:00 p.m.** on Tuesday January 23, 2024, at the City Commission Chambers on the Second Floor of the Rio Hondo Municipal Building located at 121 N. Arroyo Blvd., Rio Hondo, Texas 78583.

****

Call meeting to Order

PLEDGE OF ALLEGIANCE **UNITED STATES PLEDGE**

INVOCATION:

Regular Agenda:

1. Mayor's and Commissioners' Reports
2. Reports: Administrator, Library Report, Public Safety Report, Public Works Report, Senior Center Report

Pursuant to Texas Government Code Section 551.0415, the City Commission, without having provided notice, may make reports about items of community interest if no action is taken and possible action is not discussed regarding the information provided in the report. "Items of community interest" include: (1) expressions thanks, congratulations or condolence: (2) information regarding holiday schedules; (3) an honorary or salutatory recognition of a public official, public employee or other citizen, except the discussions regarding a change in the status of a person's public office agenda. Public employment is not an honorary or salutatory recognition for the purposes of the City of Rio Hondo; (4) a reminder about an upcoming event organized or sponsored by the governing body; (5) information regarding a social, ceremonial or community event organized or sponsored by an entity other than the City of Rio Hondo that was attend or is scheduled to be attended by a member of the governing body or an official or employee of the City of Rio Hondo; and (6) announcements involving an imminent threat to the public health and safety of people in the political subdivision that has arisen after the posting of the agenda

3. Public Comment Period: *Please Note- The Public Comment Period is designated for hearing concerns regarding City of Rio Hondo Public Policy or City of Rio Hondo business that is or is not on the agenda or items listed on the agenda.*

4. Approval of City Commission Minutes of January 9, 2024.

5. Audience with Friends of the Library. (6 minutes)

6. Status Report on Boat Ramp Park Project. (Chris Rodriquez, Eng. And City Administrator).

7. Financial Report. (City Administrator and Finance Manager)

8. Public Hearing on the Preliminary Plat of Montgomery Reservoir Subdivision; being 2.486 acres of land out of Farm 45 out Park Lot Q Acreage, Residence Garden and Orchard Lots of Cameron County Texas.

9. Consideration and Action and Action approving the Preliminary Plat of Montgomery Reservoir Subdivision.

10. Consideration and Action on issuing a letter of support for the development of Riverview Subdivision, a single family 24 lot development.

11. Presentation of the Old High School Structural Report.

12. Adjournment

Note: The City Commission for the City of Rio Hondo the right to adjourn into executive session at any time during this meeting to discuss any matters, as authorized by the Texas Government Code, including but not limited to Sections 551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices) and 551.087 (Economic Development).

Note: The Meeting is accessible to Americans with Disabilities. Persons with disabilities who plan to attend this meeting and who may need assistance, please call the City Secretary at (956) 748-2102, with at least twenty-four hours' notice prior to the meeting.

Gustavo Olivares
Mayor of the City of Rio Hondo

Posted: Friday, January 19, 2024, at 2:00 p.m.

I, City Secretary for the City of Rio Hondo, do hereby certify that this Notice of Meeting is a true and correct record and was posted in the bulletin board outside City Hall, and the bulletin board in the City Hall lobby, at 121 N. Arroyo Blvd, Rio Hondo, Texas 78583 and remained so posted continuously for at least 72 hours preceding the scheduled time

Item 4

MINUTES FROM A REGULAR MEETING ON JANUARY 9, 2024

The Government Body of the City of Rio Hondo, Texas met in a Regular Meeting January 9, 2024 at 6:00 pm in the Commission Chambers at City Hall, with Mayor- Gustavo Olivares Absent, Mayor Pro-Tem- Margaret Perez - Present, Commissioners Juan Garza- Present, Esteban Bocanegra- Absent, Olga Gallegos- Present, and Jose Cavazos- Present

Also Present: Ben Medina, City Administrator
Robert Drinkard, City Attorney
William Bilokury, Chief of Police
Lucy Garza, Finance Director
Murl Kemmerling, Public Works Director

INVOCATION: Led by Commissioner Juan Garza

Regular Agenda: Mayor Pro Tem Conducted the meeting.

1. Mayor's and Commissioners' Reports
2. Reports: Administrator Mr. Medina gave his report regarding projects, streets, and grants
3. Approval of City Commission Minutes of December 12, 2023.Commissioner Garza moved to approve the December 20, 2023 minutes and seconded by Commissioner Cavazos. The motion passed unanimously.
4. Audience with Friends of the Library. (6 minutes) Did not present
5. Presentation of 1st Quarter Financial Report. (City Administrator) Mr. Medina presented the 1st quarter Financial Report. No Action taken.
6. Status Report on Boat Ramp Park Project. (Chris Rodriquez, Eng. And City Administrator).Mr. Medina presented Pay Application Number 3, for the boat ramp expenses.
7. Consideration and Action accepting the Boat Ramp Park expenses. (City Attorney and Finance Manager).Mayor Pro Tem Perez motioned to approve the Boat Ramp Park expenses and seconded by Commissioner Gallegos and the motion carried unanimously.
8. Consideration and Action on the addition of a Grievance Policy to the City of Rio Hondo Personnel Manual. (City Administrator and City Attorney). The Commission moved that item be tabled until the Mayor was present and Seconded by Commissioner Cavazos and the motion passed unanimously.
9. Consideration and Action approving Resolution 2024-01 authorizing the submittal of a grant application to the Texas Governor's Office for a Police Car. (City Administrator). Mayor Pro Tem moved to approve Resolution 2024-01 and seconded by Commissioner Garza and the motion was carried unanimously.
10. Consideration and Action approving Resolution 2024-02 authorizing the submittal of a grant application to the Texas Governor's Office for Police Car cameras. (City Administrator). Mayor Pro Tem moved to approve Resolution 2024-02 and seconded by Commissioner Cavazos and the motion was carried unanimously.

11. Consideration and Action approving Resolution 2024-03 authorizing the submittal of a grant application to the Texas Governor's Office Homeland Security Division for security cameras. (City Administrator). Mayor Pro Tem moved to approve Resolution 2024-01 and seconded by Commissioner Garza and the motion was carried unanimously.

12. Consideration and Action on a Civic Center rental policy for a reduced rate for City Officials and City Employees. Mr. Medina presented a rental rate for the Civic Center only for employees and City leaders. The rate would be $400 instead of the $800 base rate. Mayor Pro Tem motioned to approved the reduced rate for employees and city leaders and seconded by Commissioner Garza and motion carried unanimously.

13. Adjournment

_____

Gustavo Olivares
Mayor of the City of Rio Hondo

Item 7

Financial Report

December and ending January 19, 2024

1. **Lone Star National Bank = $947,882.02 Bank Balance on 1/19/2024**
   - Ck#9034, MJA Construction – CDBG Match, CDV21-0190 - **$249,639.27**, came in on 12/19/2023

2. **Wells Fargo Bank – Pool Cash = $193,339.98**
   - Ck#22433, Cameron Co. Imprest (**Dogs/**Euth&Imp**) $480.00**, came in on 1/18/2024
   - Ck#22456, Sunbelt Rentals, $1,834.85, came in on 1/18/2024
   - Ck#22428, Railroad Commission, $**3,300**, came in on 1/18/2024
   - ACH Webfile – Court Criminal Costs & Fees paid $**6,520.66**, came in on 1/16/2024
   - Lowe's, $1,558.48, came in on 1/16/2024
   - Ck#22461, GNH Co - **$98,783.90**, came in on 1/12/2024
   - TMRS Dec2023 $11,217.17, came in on 1/12/2024
   - Payroll CK 01/12/2024, came in on 1/11/2024 $27,439.78

3. **Wells Fargo Bank – Grants = $790,175.41**
   - Parks & Wildlife 1/10/2024 $52,906.45 (*City Reimbursement – Boat Ramp*)
   - Wire Transfer 1/2/2024 $238,833.00 (*Loan – Co. Park Lights*)
   - TX Agriculture 12/29/2023 $261,994.35 (*Contractor, Grantworks, Engineer – to be paid out*)

- Valley Baptist 12/20/2023 $54,091.01 (*City Reimbursement – Boat Ramp*)

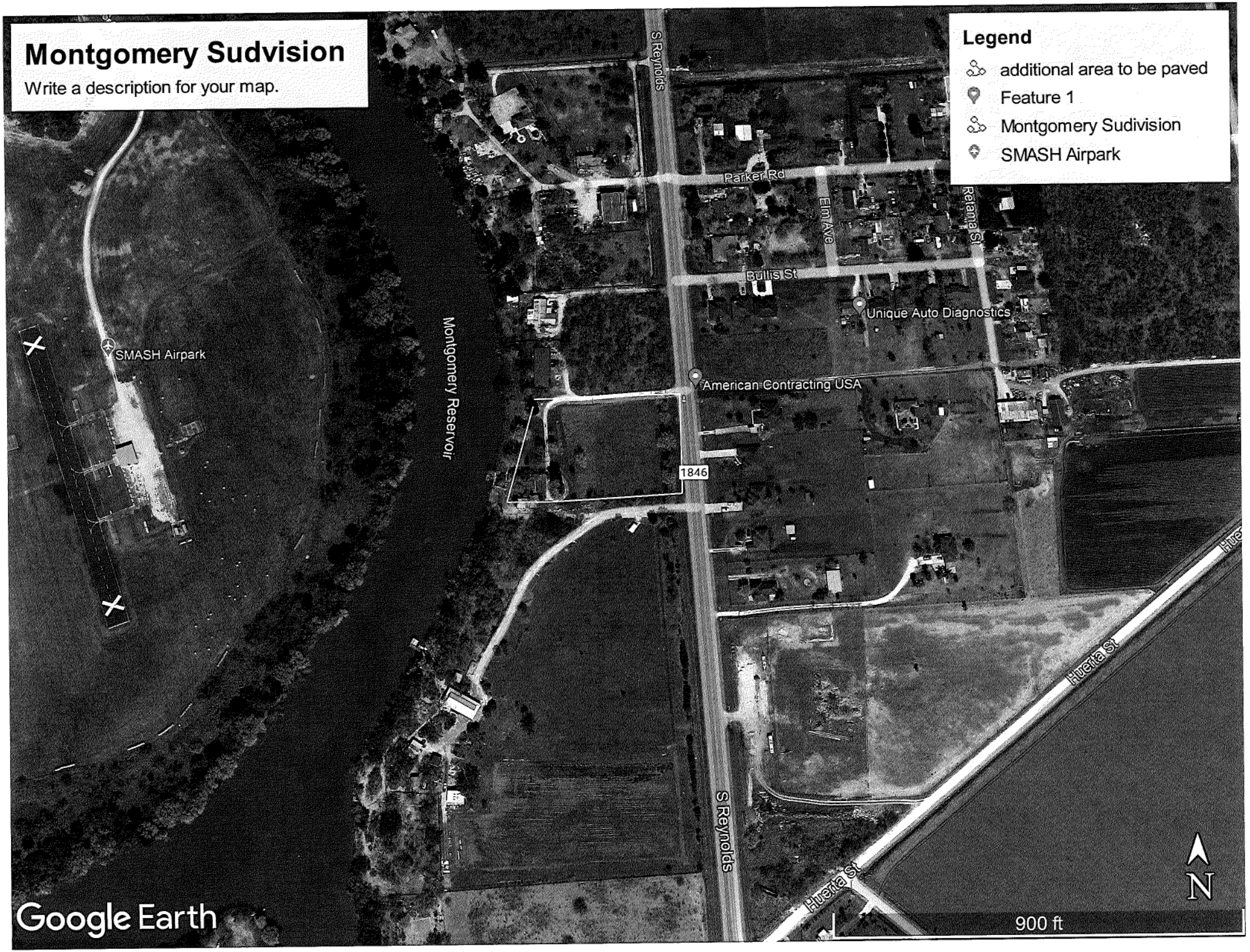
- BOK 11/01/2023 $108,035.46 (*City Reimbursement – Water Plant*)
- BOK 11/01/2023 $63,163.58 (*City Reimbursement – Water Plant*)

Funds to be transferred to Pool Cash

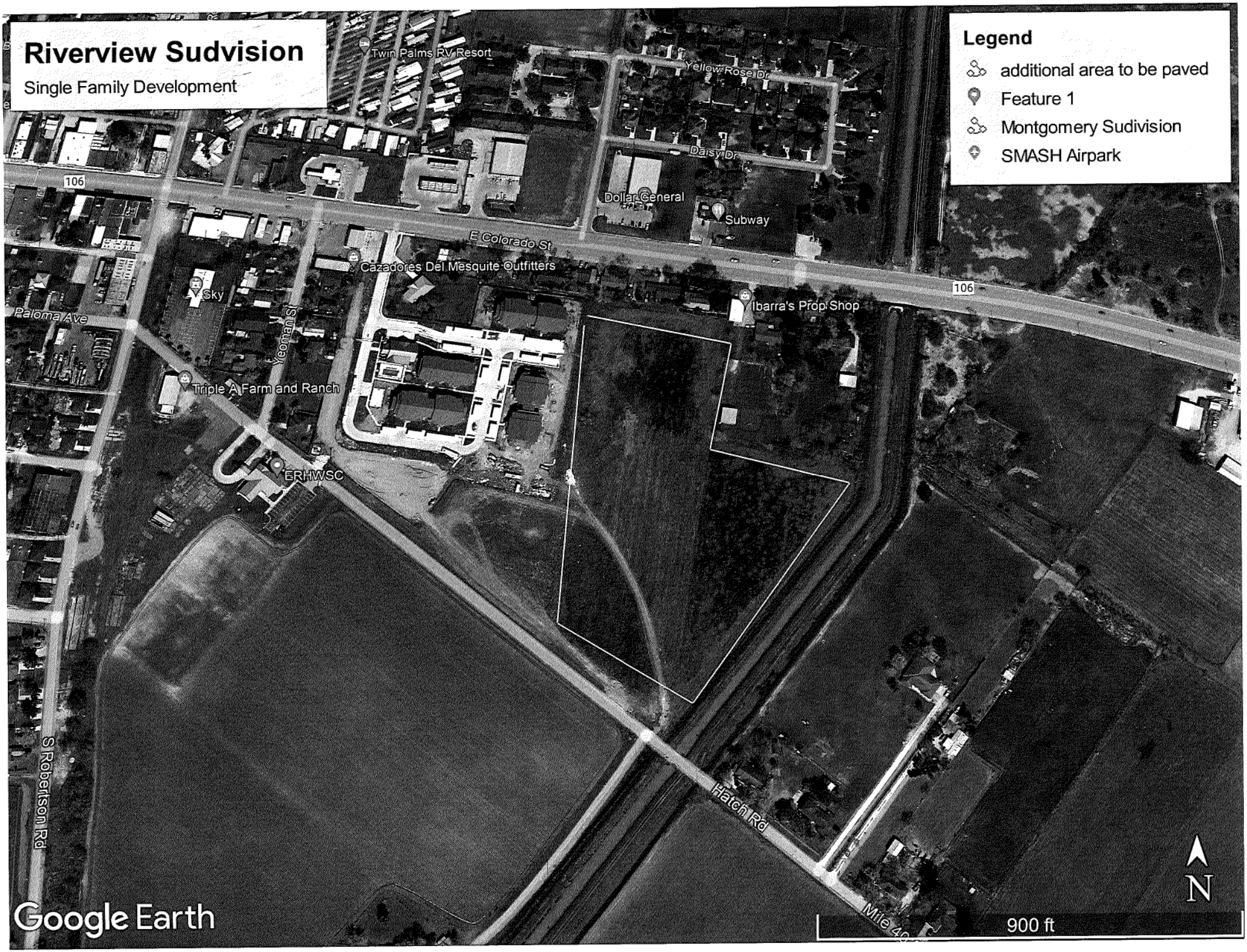
- **$52,906.45**
- **$54,091.01**
- **$108,035.46**
- **$63,163.58**

Total $278,196.50 for operations

Item 8


Montgomery Sudvision
Write a description for your map.
Legend
additional area to be paved
Feature 1
Montgomery Sudivision
SMASH Airpark
S Reynolds
Parker Rd
Elm Ave
Relama St
Bullis St
Unique Auto Diagnostics
SMASH Airpark
Montgomery Reservoir
American Contracting USA
1846
S Reynolds
Huerta St
Huerta St
N
900 ft
Google Earth

Item 10


Riverview Sudvision
Single Family Development
Legend
additional area to be paved
Feature 1
Montgomery Sudivision
SMASH Airpark
Twin Palms RV Resort
Yellow Rose Dr
Daisy Dr
106
Dollar General
Subway
E Colorado St
Cazadores Del Mesquite Outfitters
Sky
Paloma Ave
Yeoman St
Ibarra's Prop Shop
Triple A Farm and Ranch
ERHWSC
S Robertson Rd
Hatch Rd
Mile 4
N
900 ft
Google Earth

DRAINAGE STATEMENT

FOR

MONTGOMERY RESERVOIR SUBDIVISION

JANUARY 2024

Prepared by:

Moore Land Surveying, LLC

14216 Palis Drive,
La Feria, TX 78552

(956)245-9163

TBPLS Firm No. 10194186
TBPE Firm No. 19190

DRAINAGE STATEMENT
MONTGOMERY RESERVOIR SUBDIVISION

09 JANUARY 2024

Montgomery Reservoir Subdivision is a 2.50 ac. Tract of land. The property is located 300 feet South of the intersection of S. Reynolds St. (F.M. 1846) and Bullis St. The property is being developed into 3 single family residential lots. The property is currently undeveloped and is in brush condition with an existing homestead. The subdivision lies in Zone "X" according to FEMA's Flood Insurance Rate Map, Community Panel No. 480112 0300 F, Revised February 16, 2018. Zone "X" is an "area of Minimal Flood Hazard." The subdivision plat will call for the building's finished floor to be at elevation 29.0 MSL or 24" above the highest adjacent back of curb whichever is higher in order to ensure the finished floor elevation is above the 100-year flood plain in order to mitigate flood damage.

The soils are 83% clay and 2% water which is in hydrologic soil group "D" with very slow infiltration and 16% clay loam which is hydrologic soil group "C" with slow infiltration. (See excerpts from "Soil Survey of Cameron County, Texas").

Existing runoff of Montgomery Reservoir Subdivision is by surface flow in a Easterly direction until it flows into the existing roadside ditch, thence South then West, where it outfalls into the Arroyo Colorado, thence to the Laguna Madre. The subdivision has an existing runoff of 2.55 CFS during the 10-year storm frequency as per the attached calculations. The TXDOT Hydraulic Manual gave a less conservative pre-developed "C" value so previously used 0.16 was used in order to be more conservative and produce a larger detention volume.

The proposed drainage for Montgomery Reservoir Subdivision shall consist of keeping the existing drainage pattern by surface flow into an existing roadside ditch until it flows into the existing roadside ditch, thence South then West, where it outfalls into the Arroyo Colorado, thence to the Laguna Madre. Because only one homestead will be placed on these large lots, detention is negligible and is not proposed. The 3,482 CF of detention would only be 0.03' on the property and will likely be held in minor depressions on the property.

By: _____ 01/10/24

Emiliano Rosel, PE Date

MONTGOMERY RESERVOIR
Drainage Calculations
1/9/2024

2.50 AC

Pre-developed Conditions

Area =	2.50	AC
"C" =	0.16	(10) YR
Tc =54 min	6.38	(I10)=IN/HR
Q10pre =	2.55	CFS

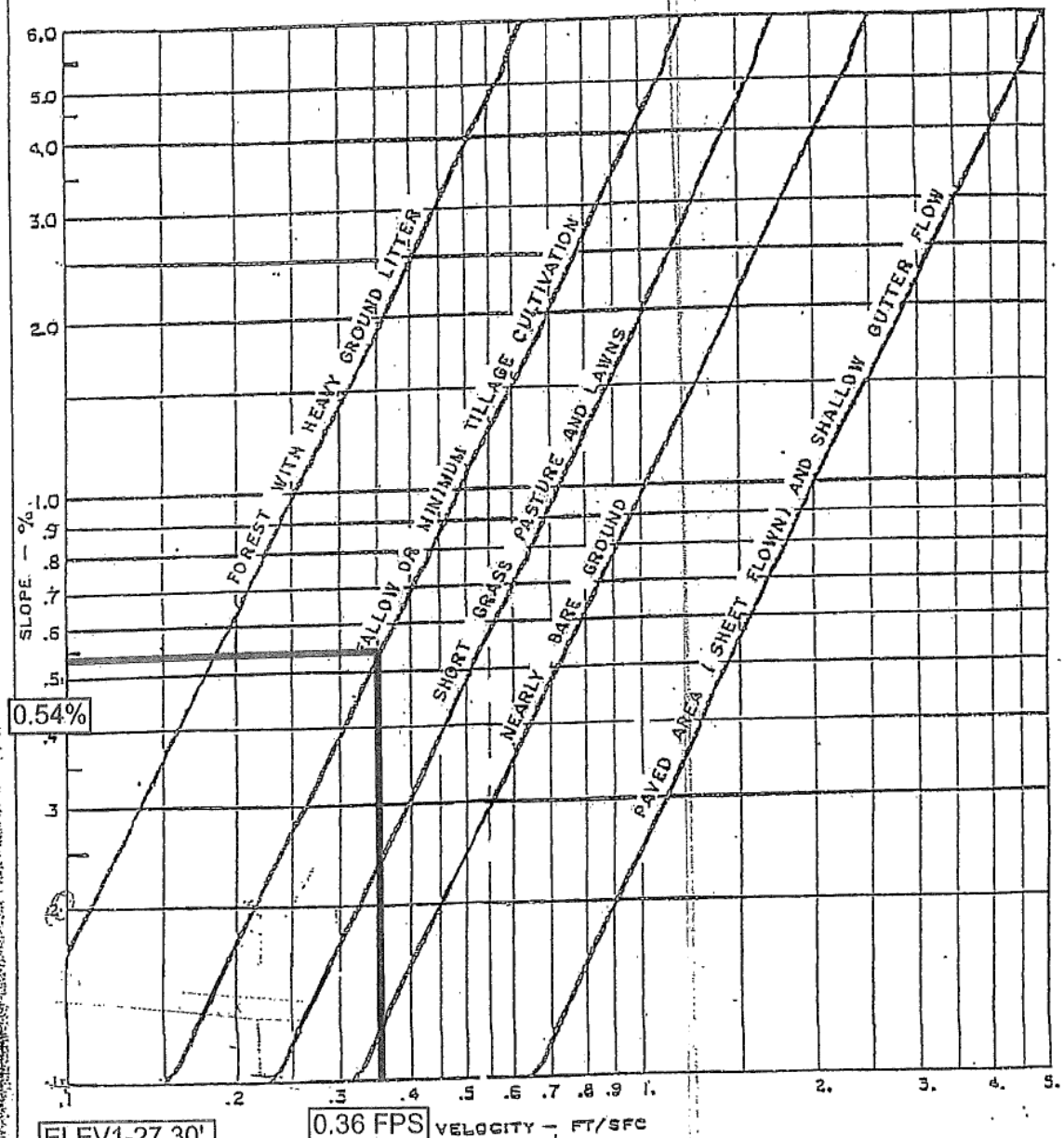
Developed Conditions

Detention...25 year storm

C FACTOR	STORM DURATION T (HR)		I (IN/HR)	DRAINAGE AREA A (AC)	INFLOW RATE Q1=CIA (CFS)	RELEASE RATE Qo (CFS)	STORAGE RATE Q1-Qo (CFS)	STORAGE REQ'D 1/12(Q1-Qo)xT (AC-FT)
0.3	0.08		9.00	2.50	6.75	2.55	4.20	0.03
0.3	0.17		7.80	2.50	5.85	2.55	3.30	0.05
0.3	0.25		6.68	2.50	5.01	2.55	2.46	0.05
0.3	0.33		6.50	2.50	4.88	2.55	2.32	0.06
0.3	0.50		5.96	2.50	4.47	2.55	1.92	0.08
0.3	0.67		4.80	2.50	3.60	2.55	1.05	0.06
0.3	0.83		4.25	2.50	3.19	2.55	0.64	0.04
0.3	1.00		3.77	2.50	2.83	2.55	0.28	0.02
0.3	1.50		3.00	2.50	2.25	2.55	-0.30	-0.04
0.3	2.00		2.35	2.50	1.76	2.55	-0.79	-0.13
0.3	3.00		1.72	2.50	1.29	2.55	-1.26	-0.32
0.3	4.00		1.70	2.50	1.28	2.55	-1.28	-0.43
0.3	5.00		1.50	2.50	1.13	2.55	-1.43	-0.59
0.3	6.00		1.07	2.50	0.80	2.55	-1.75	-0.87
0.3	12.00		0.62	2.50	0.47	2.55	-2.09	-2.09
0.3	24.00		0.38	2.50	0.29	2.55	-2.27	-4.53

Detention required = 0.08 Ac.-Ft. 3,481.17 CF

FIGURE 11



ELEV1-27.30'
ELEV2-25.60'
D=314
S=0.54%
V=0.36 FPS

V=D/T => T=D/V => T=(314) / (0.36 FPS)

T= 873 S => 15 min

AVERAGE VELOCITIES FOR ESTIMATING TRAVEL TIME FOR OVER LAND FLOW

Flow Capacity of Roadside Ditch

$$Q = VA = \left(\frac{1.49}{n}\right) AR^{\frac{2}{3}} \sqrt{S} \quad [U.S.]$$

$$Q = VA = \left(\frac{1.00}{n}\right) AR^{\frac{2}{3}} \sqrt{S} \quad [SI]$$

n	0.03	
A	8	ft^2
P	22	
R	0.363636	ft
S	0.0002	ft/ft
Q	**3**	**cfs**

Rainfall Intensity-Duration-Frequency Coefficients for Texas

Based on United States Geological Survey (USGS) Scientific Investigations Report 2004–5041
"Atlas of Depth-Duration Frequency of Precipitation Annual Maxima for Texas"

1. Select English or SI Units

English

2. Select or Enter a County

Cameron

3. Enter a Time of Conc.
Select Units

15 min

Coefficient	50% (2-year)	20% (5-year)	10% (10-year)	4% (25-year)	2% (50-year)	1% (100-year)
e	0.8589	0.8502	0.8436	0.8401	0.8368	0.8352
b (in.)	78.96	99.98	114.90	136.01	155.32	180.34
d (min)	14.80	14.84	15.78	16.64	17.19	18.60
Intensity (in./hr)	4.28	5.57	6.38	7.47	8.50	9.58

(Spreadsheet Release Date: August 31, 2015; data table reshuffle by Asquith July 14, 2016)

Table 4-10: Runoff Coefficients for Urban Watersheds

Type of drainage area	Runoff coefficient
Business:	
Downtown areas	0.70-0.95
Neighborhood areas	0.30-0.70
Residential:	
Single-family areas	0.30-0.50
Multi-units, detached	0.40-0.60
Multi-units, attached	0.60-0.75
Suburban	0.35-0.40
Apartment dwelling areas	0.30-0.70
Industrial:	
Light areas	0.30-0.80
Heavy areas	0.60-0.90
Parks, cemeteries	0.10-0.25
Playgrounds	0.30-0.40
Railroad yards	0.30-0.40
Unimproved areas:	
Sand or sandy loam soil, 0-3%	0.15-0.20
Sand or sandy loam soil, 3-5%	0.20-0.25
Black or loessial soil, 0-3%	0.18-0.25
Black or loessial soil, 3-5%	0.25-0.30
Black or loessial soil, > 5%	0.70-0.80
Deep sand area	0.05-0.15
Steep grassed slopes	0.70
Lawns:	
Sandy soil, flat 2%	0.05-0.10
Sandy soil, average 2-7%	0.10-0.15
Sandy soil, steep 7%	0.15-0.20
Heavy soil, flat 2%	0.13-0.17
Heavy soil, average 2-7%	0.18-0.22

Table 4-10: Runoff Coefficients for Urban Watersheds

Type of drainage area	Runoff coefficient
Heavy soil, steep 7%	0.25-0.35
Streets:	
Asphaltic	0.85-0.95
Concrete	0.90-0.95
Brick	0.70-0.85
Drives and walks	0.75-0.95
Roofs	0.75-0.95

Rural and Mixed-Use Watershed

Table 4-11 shows an alternate, systematic approach for developing the runoff coefficient. This table applies to rural watersheds only, addressing the watershed as a series of aspects. For each of four aspects, the designer makes a systematic assignment of a runoff coefficient "component." Using Equation 4-22, the four assigned components are added to form an overall runoff coefficient for the specific watershed segment.

The runoff coefficient for rural watersheds is given by:

$$C = C_r + C_i + C_v + C_s$$

Equation 4-22.

Where:

C = runoff coefficient for rural watershed

C_r = component of coefficient accounting for watershed relief

C_i = component of coefficient accounting for soil infiltration

C_v = component of coefficient accounting for vegetal cover

C_s = component of coefficient accounting for surface type

The designer selects the most appropriate values for C_r, C_i, C_v, and C_s from Table 4-11.

Table 4-11: Runoff Coefficients for Rural Watersheds

Watershed characteristic	Extreme	High	Normal	Low
Relief - C_r	0.28-0.35 Steep, rugged terrain with average slopes above 30%	0.20-0.28 Hilly, with average slopes of 10-30%	0.14-0.20 Rolling, with average slopes of 5-10%	0.08-0.14 Relatively flat land, with average slopes of 0-5%
Soil infiltration - C_i	0.12-0.16 No effective soil cover; either rock or thin soil mantle of negligible infiltration capacity	0.08-0.12 Slow to take up water, clay or shallow loam soils of low infiltration capacity or poorly drained	0.06-0.08 Normal; well drained light or medium textured soils, sandy loams	0.04-0.06 Deep sand or other soil that takes up water readily; very light, well-drained soils
Vegetal cover - C_v	0.12-0.16 No effective plant cover, bare or very sparse cover	0.08-0.12 Poor to fair; clean cultivation, crops or poor natural cover, less than 20% of drainage area has good cover	0.06-0.08 Fair to good; about 50% of area in good grassland or woodland, not more than 50% of area in cultivated crops	0.04-0.06 Good to excellent; about 90% of drainage area in good grassland, woodland, or equivalent cover
Surface Storage - C_s	0.10-0.12 Negligible; surface depressions few and shallow, drainageways steep and small, no marshes	0.08-0.10 Well-defined system of small drainageways, no ponds or marshes	0.06-0.08 Normal; considerable surface depression, e.g., storage lakes and ponds and marshes	0.04-0.06 Much surface storage, drainage system not sharply defined; large floodplain storage, large number of ponds or marshes
Table 4-11 note: The total runoff coefficient based on the 4 runoff components is $C = C_r + C_i + C_v + C_s$				

While this approach was developed for application to rural watersheds, it can be used as a check against mixed-use runoff coefficients computed using other methods. In so doing, the designer would use judgment, primarily in specifying C_s, to account for partially developed conditions within the watershed.

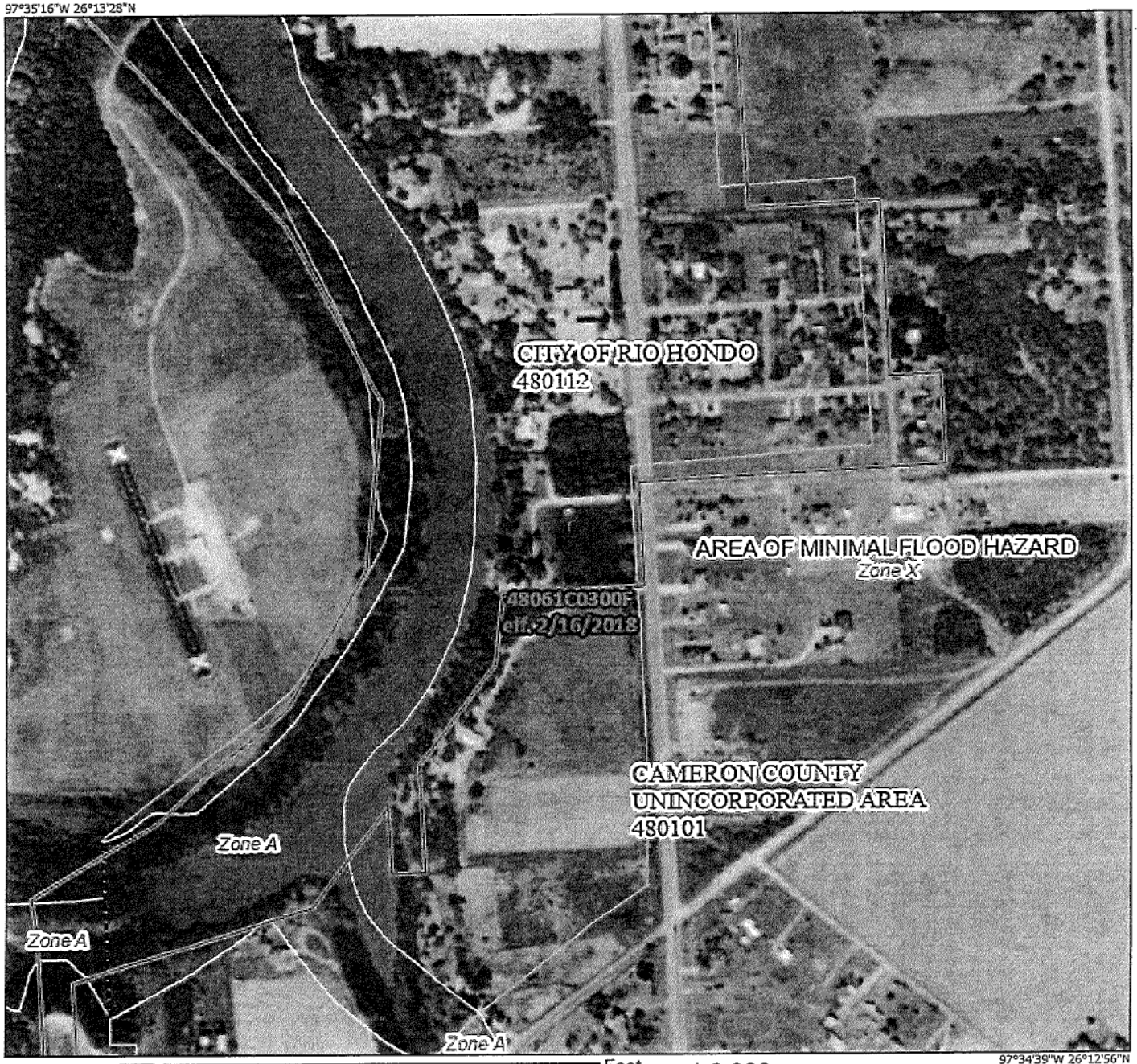
Mixed Land Use

For areas with a mixture of land uses, a composite runoff coefficient should be used. The composite runoff coefficient is weighted based on the area of each respective land use and can be calculated as:

National Flood Hazard Layer FIRMette

FEMA

97°35'16"W 26°13'28"N



97°34'39"W 26°12'56"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile Zone
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

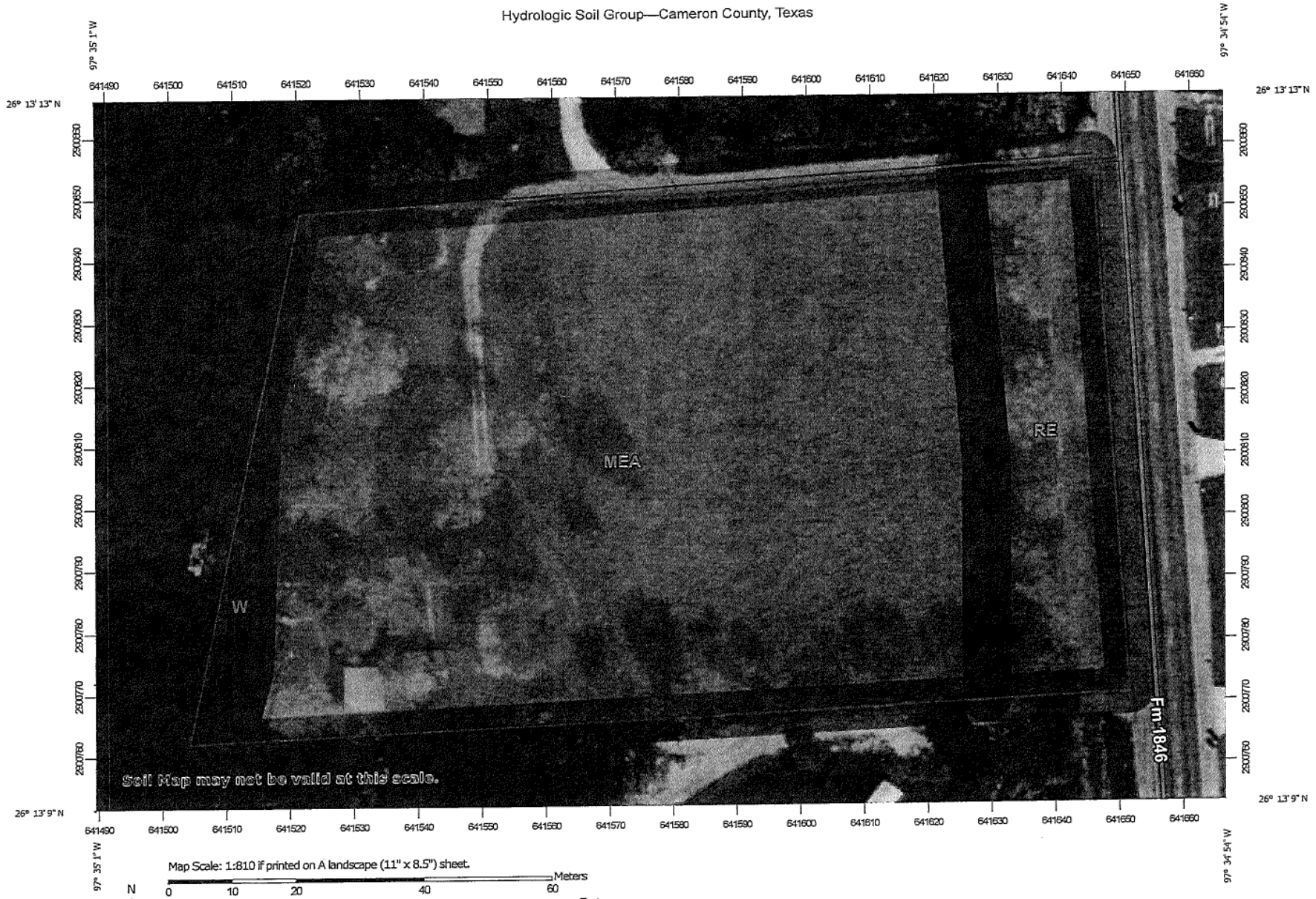
The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/9/2024 at 12:25 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Hydrologic Soil Group—Cameron County, Texas



Map Scale: 1:810 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 10 20 40 60

Feet: 0 35 70 140 210

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

USDA Natural Resources Conservation Service

Web Soil Survey
National Cooperative Soil Survey

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cameron County, Texas
Survey Area Data: Version 20, Aug 31, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 21, 2021—Mar 2, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
MEA	Mercedes clay, 0 to 1 percent slopes	D	2.4	82.8%
RE	Raymondville clay loam	C	0.4	15.4%
W	Water	D	0.1	1.9%
Totals for Area of Interest			**2.9**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher