

Prepared For:

One Stop Group
12042 Blanco Road, Suite 305
San Antonio, Texas

TRAFFIC IMPACT STUDY



Seneca West - 27 Acres
William Rancher Estates
County Block 4430
Leon Valley, Texas



Joe F. Nix
02/22/2024

Prepared For:
City of Leon Valley
6400 El Verde Road
Leon Valley, Texas 78238

TIA Report
Seneca West – 27 Acres
GOOD SAMARITAN PROPERTY
County Block 4430



February 2024

TRAFFIC IMPACT ANALYSIS
Proposed Seneca West Development
GOOD SAMARITAN PROPERTY
27 ACRES
County Block 4430

PROJECT SCOPE

As requested by the City of Leon Valley, a Traffic Impact Analysis (TIA) report has been prepared for the proposed rezoning and development of up to a maximum of 27 acres of land from R-1 single-family districts to R-6 Garden Home district. These 27 acres are located west of William Rancher Road as shown in figure 1 below.

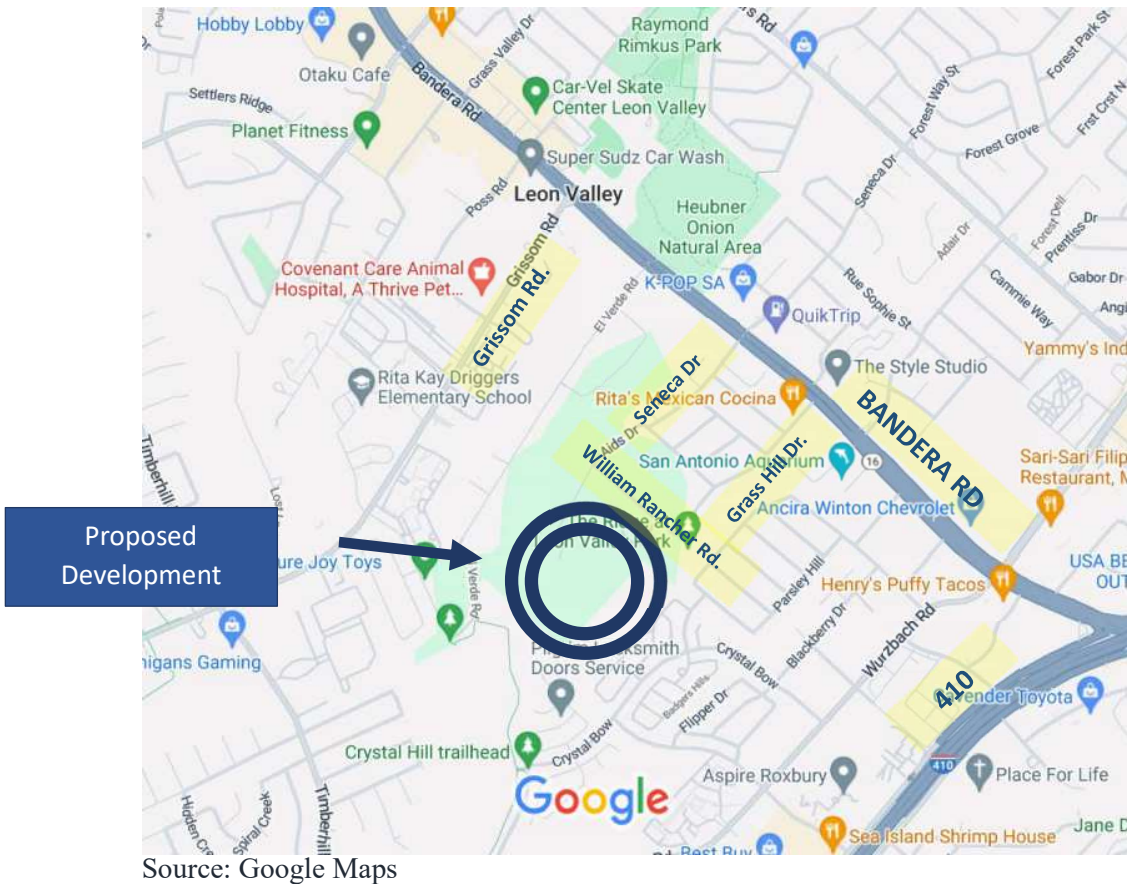


Figure 1. Location Map of proposed development

PROJECT DESCRIPTION

The proposed development encompasses approximately 27 acres located West of William Rancher Road within the City of Leon Valley. The new development, if constructed on all 27 acres, is proposed to consist of no more than 166 single family residential homes. The development would be accessed by two streets onto Bandera Road: Seneca Drive and Grass Hill Drive. The proposed conceptual plan for the development is shown in figure 2 and is attached.



Figure 2. Conceptual Plan for the Proposed Development

STUDY AND SURROUNDING AREA

The study area around the proposed development would generally be within a one-quarter mile radius of the property. The developed properties within and near the study area are the Seneca Estates residential neighborhood between the 27 acres and Bandera Road, The Ridge at Leon Creek, and the Villas at Ingram Hills south of the 27 acres. A branch of the Leon Creek separates the 27 acres from the residential area north of the Creek. The Seneca Estates neighborhood would be the only area impacted by the development. The attached aerial photo exhibit and the Bexar Appraisal Map exhibit illustrate the properties near the 27 acres.

EXISTING ROADWAYS

The existing roadways that would potentially be directly impacted by the proposed development include Seneca Drive, Grass Hill Drive, Aids Drive, and Samaritan Drive.

Seneca Drive is a neighborhood collector street serving the residential area West of Bandera Road. Seneca Drive extends west of Bandera Rd to William Rancher Road. Seneca Dr. extends east, across Bandera Road, to Evers Road. The intersection of Seneca Drive and Bandera Road is controlled by a traffic signal. No residential homes front Seneca Drive east of Pickering Drive.



Figure 3. Seneca Drive, westbound at William Rancher Road

Grass Hill Drive serves as a residential collector street extending from Bandera Road to Samaritan Drive. Grass Hill Drive does not extend east across Bandera Road. There has not been a median opening along Bandera Road for Grass Hill Drive; nor is a median opening planned in the future. The residential homes along the south side of Grass Hill Drive between William Rancher Road and Bandera Road front the residential collector street. Grass Hill Drive will lead to and end at the main entrance of the proposed development.

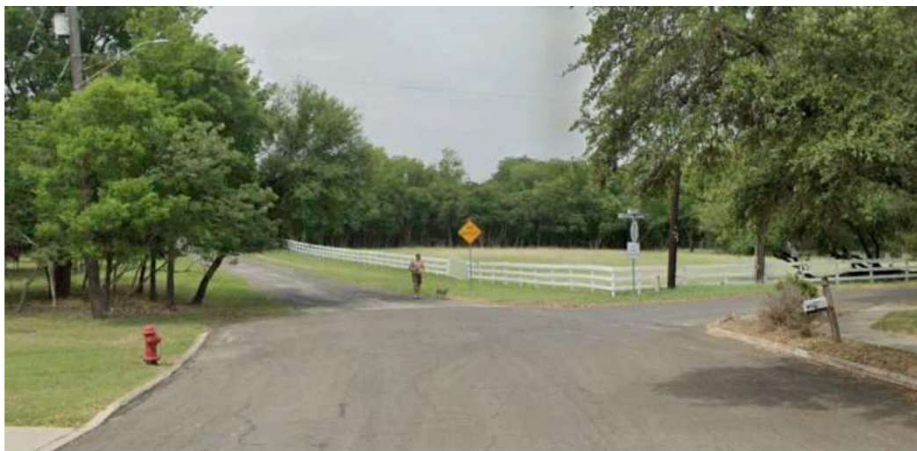


Figure 4. Grass Hill Drive, westbound at William Rancher Road

Aids Drive is a narrow, two-lane, uncurbed roadway extending west of William Rancher Road, dead ending approximately 700 feet west of Samaritan Drive. Aids Drive is proposed to be improved and be aligned with Seneca drive with the development of the 27 acres.



Figure 5. Aids Drive, eastbound at William Rancher Road

Samaritan Drive is a two-lane, uncurbed roadway connecting Aids Drive and Grass Hill Drive. It will be used as one of two access road for the proposed development, along with Grass Hill Drive.



Figure 6. Samaritan Drive, northbound

TRIP GENERATION

Table 1. Trip Generation for proposed development (166 lots)

TRIP GENERATION						
ITE Code	Weekday 24 Hours		Weekday AM Peak		Weekday PM Peak	
210	Single-Family Detached Housing					
Rate / Unit	9.43		0.7		0.94	
Units	166		166		166	
Trips	1565		116		156	
% Enter/Exit	50%	50%	25%	75%	63%	37%
# Enter/Exit	783	783	29	87	98	58

Source: *ITE Trip Generation Manual, Eleventh Edition*

TRIP DISTRIBUTION

Trip distribution for trips generated by the proposed development would be onto Seneca Drive and onto Grass Hill Drive. Due to the accessibility of Seneca Drive at Bandera Road, and the nature of the roadway, 75% of the trips would be expected to use Seneca Drive and 25% use Grass Hill Drive. Table 2 indicates the trip distribution to Bandera Road via Seneca Drive and Grass Hill Drive. The attached trip distribution exhibit illustrates the anticipated trip distribution at each of the access streets to the development.

Table 2. Trip Distribution for proposed development with 166 Lots

TRIP DISTRIBUTION					
Street		AM Direction		PM Direction	
		Enter	Exit	Enter	Exit
Seneca Drive	75%	22	65	74	43
Grass Hill Drive	25%	7	22	24	15

ANALYSIS

Seneca Drive and Grass Hill Drive can easily accommodate the additional traffic expected to be generated by the proposed development with as many as 166 lots. The additional traffic on Seneca Drive would be an average of less than one vehicle per signal cycle. The additional traffic on Grass Hill Drive would be an average of much less than one vehicle per minute. The traffic movements entering and exiting Grass Hill Drive at Bander Road. During the morning peak period on Seneca Drive, the anticipated additional traffic load would be an average of one vehicle per minute approaching the signalized intersection. During the evening., the average number of vehicles entering Seneca Drive from Bandera Road would be just more than 1 vehicle per minute.

CONCLUSION

The change in the levels-of-service of the two streets at Bandera Road would be insignificant with the addition of the anticipated traffic from 166 new homes in the proposed development.



Prepared by:

A handwritten signature in black ink, appearing to read "Joe F. Nix".

Joe F. Nix, P.E., P.T.O.E.
Tex Firm No. F-16308

Attachments:

- EXHIBIT A: AERIAL PHOTO OF THE SURROUNDING AREA
- EXHIBIT B: BEXAR APPRAISAL MAP OF THE SURROUNDING AREA
- EXHIBIT C: GOOD SAMARITAN CONCEPTUAL PLAN

EXHIBIT A

AERIAL PHOTO OF THE SURROUNDING AREA

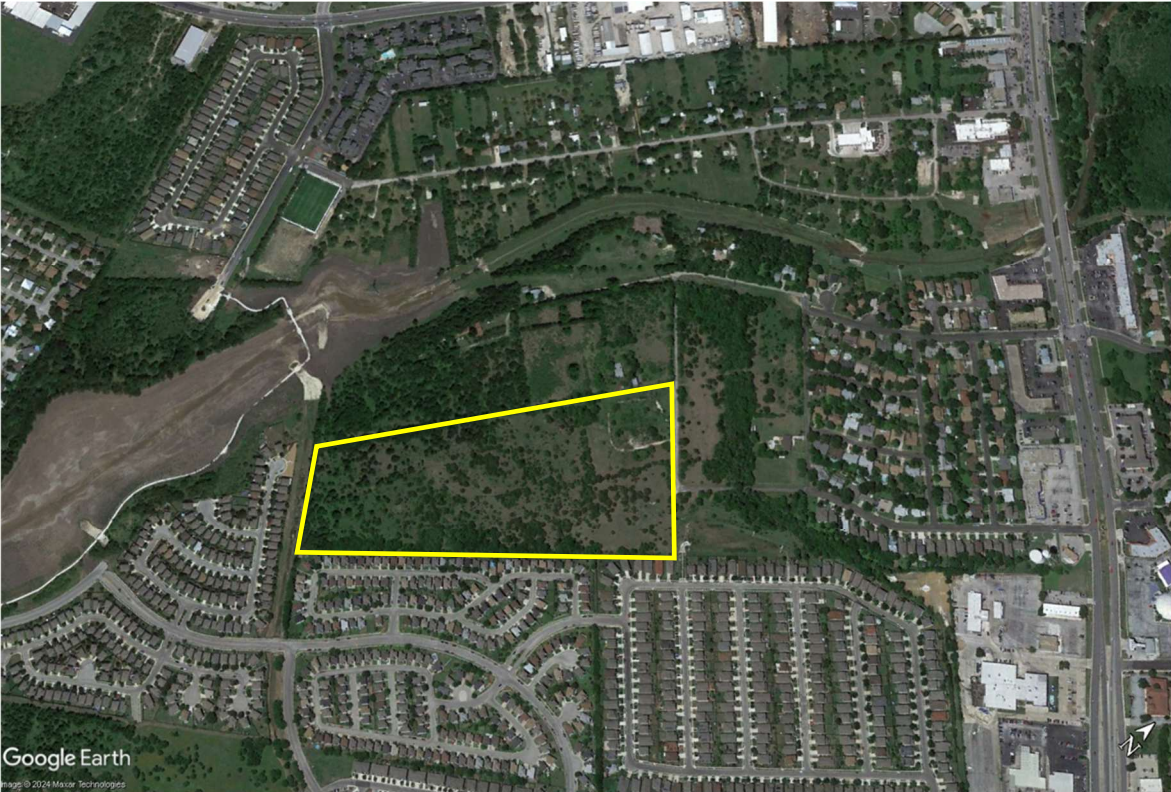


EXHIBIT B

BEXAR APPRAISAL MAP OF THE SURROUNDING AREA



EXHIBIT C

GOOD SAMARITAN CONCEPTUAL PLAN

