

## TECHNICAL MEMORANDUM

11/4/2020

To: Garry Ford, P.E.  
City Engineer  
City of New Braunfels

From: Jeff Whitacre, P.E., AICP, PTP  
Kimley-Horn and Associates, Inc.  
TBPE Firm Number F-928

Date: November 4, 2020

Subject: Kramm Family Rough Proportionality Analysis  
City of New Braunfels, Texas



### Purpose

On October 13, 2020 the City of New Braunfels (City) received a request for the City Engineer to conduct a rough proportionality analysis for the Kramm Family proposed 1845 Subdivision. Under Section 118-46 (b) (2) “*whenever a tract to be platted borders on or embraces any part of any street shown on the thoroughfare plan, such part of such proposed street shall be shown on the master plan or the plat.*” The letter stated that a subdivision plan was submitted that did not comply with the Thoroughfare Plan after a previous meeting was held outlining this requirement. Currently a subdivision plan has not been submitted that complies with the Subdivision Platting requirements. However, the memo requests a proportionality analysis to be completed. For a rough proportionality assessment, a compliant plan should be presented to make an accurate determination. This determination will be made on the current submitted plan but should be revised once a compliant plan is submitted.

The purpose of this memorandum is to provide a “rough proportionality” calculation of the submitted Kramm Family proposed 1845 Subdivision. For roads, the rough proportionality calculation is a comparison of the capacity provided by a development to the traffic impacts of the proposed development.

### Proportionality Methodology

Traffic generation of new development impacts the area roadway system by using available capacity. To measure system impacts, an analysis using vehicle-miles of travel in the PM peak hour was conducted. Using the vehicle-miles of travel (demand), the cost of the provided by roadway improvements (supply) can be compared with the cost of traffic generated by a proposed development.

## Demand

Based upon information provided by the City from a March 16, 2020 Traffic Impact Analysis (TIA) worksheet (submitted after the October 13, 2020 letter) the Kramm Family proposed 1845 Subdivision will ultimately consist of the following land use and intensity:

- 125 single-family detached housing
- 18,000 square feet of commercial

Based on the adopted 2019 Roadway Impact Fee Study the following are the vehicle-miles traveled generated by the proposed development:

- 125 dwelling units \* 4.61 vehicle-miles/dwelling unit
  - 576.25 vehicle-miles
- 18.0 1,000 square feet \* 8.03 vehicle-miles/1,000 square feet
  - 144.54 vehicle-miles

**TOTAL DEMAND: 650.04 vehicle-miles**

The cost per vehicle-mile indicated in the 2019 Roadway Impact Fee Study is \$1,371 per vehicle mile in Service Area 5.

- 720.79 vehicle-miles \* \$1,371/vehicle-mile

**TOTAL DEMAND: \$988,203.09**

The total impact of the proposed development on the transportation network in the City of New Braunfels Service Area 5 is \$988,203.09.

## Supply

Based upon information provided by the City of New Braunfels and the applicant, the Kramm Family proposed 1845 Subdivision is requested to dedicate the right-of-way for the County Line Road minor arterial extension and potentially build two-lanes of the roadway to serve the proposed development. The current Thoroughfare Plan illustrates 120' of right-of-way for County Line Road extension the while a proposed amendment shows 100' of right-of-way. This would result in 4.861 (211,745 sq. ft.) acres or 5.819 acres (253,475 sq. ft.).

Based on the October 13, 2020 letter the land was approximately \$1 per square foot, so the right-of-way request would be between \$211,745 - \$253,475 which is below the demand calculated. Note Comal County Appraisal District shows a market value of \$630,690 which is 63% of the value indicated in the October 13, 2020 letter.

The remaining \$734,728.09 (\$988,203.09 - \$253,475). would be available to the construction of the needed County Line Road extension to serve this development. An updated site plan would need to be completed to evaluate this requirement.

## **Analysis**

Based on information provided by the applicant in the March 16, 2020 preliminary drainage site plan, TIA worksheet and October 13, 2020 letter the request for right-of-way dedication (\$253,475) is less than then demand of \$988,203.09 and as a result is a roughly proportional request.

It is anticipated that if the alignment was properly drawn three areas would be created, 15.437 acres, 4.523 acre tract, and 0.769 acre tract. The 0.769 acre tract is in the same location that was identified in the March 16, 2020 as a proposed water quality and detention pond and is anticipated could remain as such. The commercial tract could remain and the remaining residential areas would be to be revaluated.

## **Conclusion**

Based on the current information the request of the Kramm Family proposed 1845 Subdivision to dedicate right-of-way for the County Line Road minor arterial extension as requested is roughly proportionate to this development.

This analysis should be updated based on a compliant site plan that considers this roadway based on the guidance that was previously provided.