

MEMORANDUM

To: Kenneth Davis, P.E.
Vice President
Peloton Land Solutions

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

Date: February 11, 2019

Subject: River Park Drive Land Use Comparison
Fort Worth, Texas

PURPOSE AND NEED

This technical memorandum documents a trip generation comparison as a supplement to the traffic impact analysis being performed for the proposed multifamily residential development located at the northwest corner of the intersection of Bryant Irvin Road and River Park Drive in the City of Fort Worth, Texas.

The proposed 6.52-acre site is currently zoned as a Zone "G", Intensive Commercial, land use. The developer is now proposing a multifamily residential development. The purpose of this memorandum is to compare the number of trips a multifamily residential development produces to that of an Intensive Commercial development.

The anticipated trip distribution and assignment for the proposed multifamily residential development will also be presented in comparison to the trip distribution and assignment for an Intensive Commercial development.

TRIP GENERATION COMPARISON

Trip generation was completed for the currently zoned Intensive Commercial land use and the proposed multifamily residential development for comparison purposes. A floor area ratio (FAR) was used when approximating the Intensive Commercial development's square footage. The assumed FAR to estimate the Intensive Commercial land use was 0.25. To estimate the trips generated by the proposed development, trip generation rates from the 10th edition of the *ITE Trip Generation Manual* were used.

Multifamily Housing Land Use

The proposed 270-unit multifamily (mid-rise) residential development is anticipated to generate 1,469 daily trips with 97 trips in the AM peak hour (25 entering, 72 exiting), and 119 trips in the PM peak hour (73 entering, 46 exiting). A site plan is provided in the **Appendix**.



Intensive Commercial Land Use

The proposed site is on 6.52-acres; which is approximately 285,000 square feet. Using a FAR of 0.25 results in approximately 71,000 square feet of Intensive Commercial land use. Off the 71,000 square feet, it was assumed that 12,000 square feet would be AM eateries. An Intensive Commercial development of this size is anticipated to generate 3,573 daily trips with 174 trips in the AM peak hour (99 entering, 75 exiting), and 271 trips in the PM peak hour (130 entering, 141 exiting).

Comparison

The results of the trip generation comparison, as detailed in **Table 1**, show that the site would generate significantly less traffic if developed as a multifamily residential development versus the existing zoning of Intensive Commercial. When considering daily traffic, the multifamily residential development is anticipated to generate less than half the traffic of the Intensive Commercial land use. During the peak hours, the multifamily residential development is anticipated to generate less traffic by 77 trips and 152 trips during the AM and PM peak hours, respectively.

Table 1: Trip Generation Analysis

Land Uses	Amount	Units	ITE Code	Daily One-Way Trips	AM Peak Hour One-Way Trips			PM Peak Hour One-Way Trips		
					IN	OUT	TOTAL	IN	OUT	TOTAL
Multi-Family Housing (Mid Rise)	270	Dwelling Units	221	1,469	25	72	97	73	46	119
Intensive Commercial	71	1,000 Sq Ft GLA	820/932	3,573	99	75	174	130	141	271

ANTICIPATED TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution and assignment was completed for the currently zoned Intensive Commercial land use and the proposed multifamily residential development for comparison purposes. The trip assignment was obtained by applying the global trip distribution to the trip generation anticipated for the respective type of development.

Multifamily Housing Land Use

The multifamily development is anticipated to have one (1) access point along River Park Drive and one (1) right-in, right-out access point along Bryant Irvin Road. The distribution favors the access along Bryant Irvin Road as residents who are attempting to access floors 2-4 are anticipated to use this access due to the parking garage design. **Exhibit 1** presents the anticipated trip distribution and resulting assignment.

Intensive Commercial Land Use

If the site were to develop as Intensive Commercial, it is anticipated to have one (1) access point along River Park Drive providing access to surface parking for the entire site. The trip generation from the Intensive Commercial land use in **Table 1** was used for this analysis. **Exhibit 2** presents the anticipated trip distribution and resulting trip assignment.

Comparison

Under the existing zoning, a Bryant Irvin Road access point is not anticipated. However, for the multifamily residential development, a secondary access point is proposed for parking garage access along Bryant Irving Road. The results of the trip distribution and assignment comparison show that the site would concentrate all the entering and exiting traffic along River Park Drive if Intensive Commercial land use were to be carried out. This impact to River Park drive is lessened with the proposed multifamily residential development due to the project access off of Bryant Irving Road.



This additional access point is anticipated to account for 60% and 65% of the entering and exiting traffic, respectively, of the development while the remaining 30% and 35% of the entering and exiting traffic, respectively, would utilize River Park Drive.

If the site were to build out with Intensive Commercial land use, rather than the proposed multifamily residential development, site traffic along River Park Drive, west of Bryant Irvin Road, is anticipated to increase by about 113 vehicles during the AM peak hour and by about 198 vehicles during the PM peak hour.

Exhibit 1: Multifamily Trip Distribution and Assignment

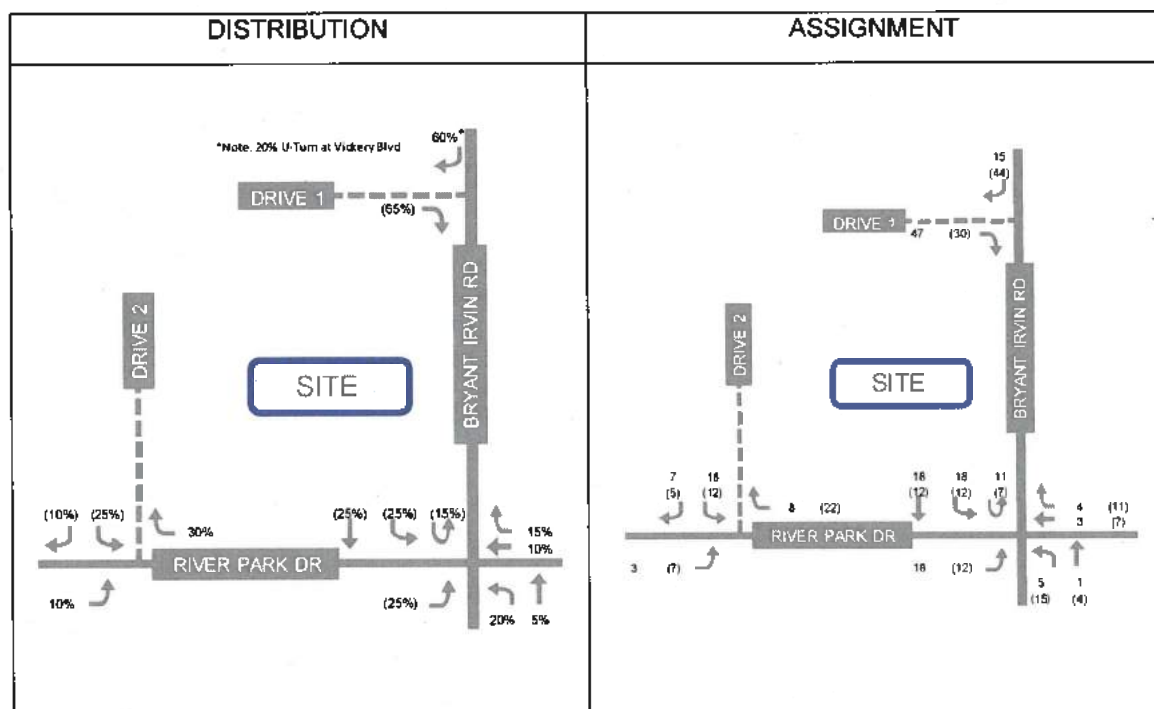
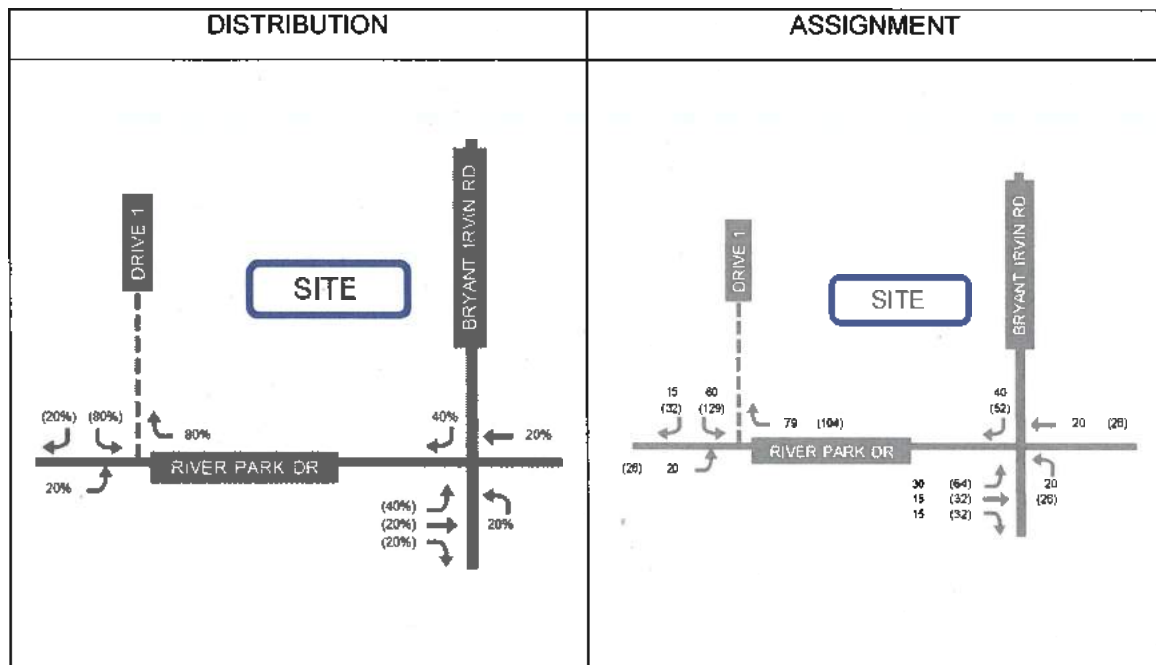


Exhibit 2: Intensive Commercial Trip Distribution and Assignment



FINDINGS AND CONCLUSIONS

When comparing the anticipated trip generation for the proposed site as multifamily residential or Intensive Commercial land use, the anticipated daily traffic volumes are less than half. The multifamily residential land use is anticipated to have less of an impact than the currently zoned Intensive Commercial land use. During the AM peak hour, the multifamily residential development is anticipated to generate 97 and 119 peak hour trips during the AM and PM peak hours, respectively. With the currently zoned Intensive Commercial land use, the development is anticipated to generate 174 and 271 peak hour trips during the AM and PM peak hours, respectively.

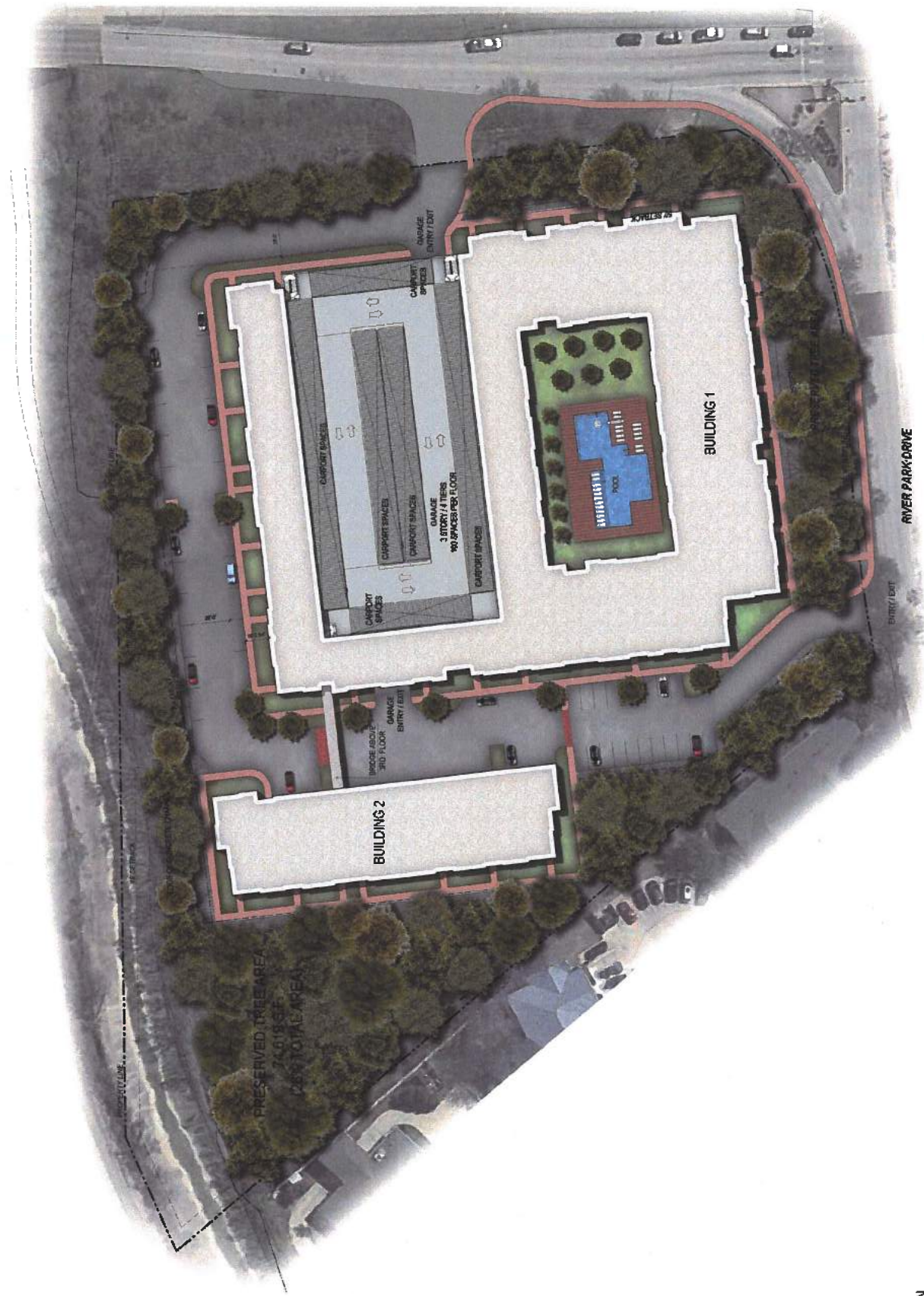
The proposed multifamily residential development is anticipated to have two project access locations while if the site were to build out as Intensive Commercial land use, one site drive is anticipated along River Park Drive. The additional connection with the proposed multifamily residential development is anticipated to decrease the traffic along River Park Drive by 113 vehicles during the AM peak hour and by about 198 vehicles during the PM peak hour when compared to the Intensive Commercial land use.

Based on the comparison, it is anticipated that the proposed multifamily residential development will have less of an impact on traffic than the currently zoned Intensive Commercial. If you have any questions, please contact me at jeff.whitacre@kimley-horn.com or by phone at 817-339-2254.



APPENDIX

River Park Site Plan



SCALE: 1" = 30'-0" (24"x36" SHEET)

0' 30' 60' 120'

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EMBREY

ARCHITECTURAL SITEPLAN
 SCHEME 16
 December 16, 2018

A201

River Park
 TARRANT COUNTY, TX
 HPAM 18153