Correspondence Between Staff and Applicant

Approval Letter

14 May 2019

Phillip Kercher
Traffic Engineering & Operations Manager, City of Scottsdale
7447 East Indian School Road, Suite 205
Scottsdale, Arizona 85251

SUBJECT: PT COMMERCIAL
THOMAS ROAD/PIMA ROAD
TRIP GENERATION COMPARISON

Dear Mr. Kercher,

Please find enclosed a brief trip generation comparison (TGC) regarding the proposed PT Commercial project located on the northwest corner of Thomas Road/Pima Road in Scottsdale, Arizona. The site vicinity is located as shown in **Figure 1.** The project will consist of a 4,000 square foot retail building served by two existing access points, as shown in **Figure 2**.

The purpose of this comparison is to estimate the traffic generation associated with the proposed project and compare those trips with the estimated trip generation of a possible land use under the current zoning.

Trip Generation
Trip generation for the proposed project and existing zoning were developed utilizing nationally agreed upon data contained in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 10th Edition*, 2017. The PT Commercial project proposes the construction of a 4,000 square foot retail building. Trip generation for the PT Commercial project was based on ITE Land Use Code 814 (LUC 814), Variety Store. The expected weekday trip generation for the PT Commercial project is shown in **Table 1**.

Table 1 – Proposed Weekday Trip Generation

Time Period	Variety Store (LUC 814)	34 % Pass-By Reduction
AM Peak Hour, Inbound (vtph)	7	-2
AM Peak Hour, Outbound (vtph)	6	-2
Total AM Peak	**13**	**-4**
PM Peak Hour, Inbound (vtph)	15	-5
PM Peak Hour, Outbound (vtph)	13	-4
Total PM Peak	**28**	**-10**

vtpd - vehicle trips per day, vtph -

Variety Stores do not typically generate all new traffic on a roadway system. The ITE publication *Trip Generation, 10th Edition*, 2017 defines pass by trips as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Primary trips are trips where the primary purpose of the trip is to visit a specific location (i.e. variety store). Pass-by trips are trips where the secondary purpose of the trip is to visit the store, in conjunction with some other primary trip purpose (such as driving home from work). Pass by trips originate from roadways directly fronting the generator.

The ITE publication *Trip Generation, 10th Edition*, 2017 provides pass by trip percentages based on land use. ITE data estimates that 34% of trips to the variety store on the PT Commercial site will be from pass-by trips. The number of pass-by trips expected at the PT Commercial variety store are shown in **Table 2**.

Table 2 – Weekday Project Site Pass-By Trips

Time Period	Variety Store (LUC 814)	34 % Pass-By Reduction	New Trips (With Pass-By Reduction)
AM Peak Hour, Inbound (vtph)	7	-2	5
AM Peak Hour, Outbound (vtph)	6	-2	4
Total AM Peak	**13**	**-4**	**9**
PM Peak Hour, Inbound (vtph)	15	-5	10
PM Peak Hour, Outbound (vtph)	13	-4	9
Total PM Peak	**28**	**-10**	**18**

vtpd - vehicle trips per day, vtph - vehicle trips per hour

To contextualize the impact of the proposed project, a baseline trip generation can be established under the existing City of Scottsdale zoning. The project site is currently zoned as I-1 (Industrial Park) and may include uses such as data processing, storage, warehousing, light manufacturing, and educational land uses (excluding elementary and secondary school). Trip generation for a possible use on the site under the existing Scottsdale I-1 zoning was based on an assumed 10,000 square foot light industrial building and ITE LUC 110, General Light Industrial. The result is the expected weekday trip generation for the I-1 zoning, as shown in **Table 3**.

Table 3 – Scottsdale I-1 Zoning Weekday Trip Generation

Time Period	I-1 Zoning General Light Industrial (LUC 110)
AM Peak Hour, Inbound (vtph)	6
AM Peak Hour, Outbound (vtph)	1
Total AM Peak	**7**
PM Peak Hour, Inbound (vtph)	1
PM Peak Hour, Outbound (vtph)	6
Total PM Peak	**7**

vtpd - vehicle trips per day, vtph - vehicle trips per hour

Table 4 shows the difference in trip generation between the Scottsdale I-1 zoning and the proposed PT Commercial project.

Table 4 – I-1 Zoning and Proposed Project Weekday Trip Generation Comparison

Time Period	I-1 Zoning General Light Industrial (LUC 110)	Proposed Project	Difference
AM Peak Hour, Inbound (vtph)	6	5	-1
AM Peak Hour, Outbound (vtph)	1	4	3
Total AM Peak	**7**	**9**	**2**
PM Peak Hour, Inbound (vtph)	1	10	9
PM Peak Hour, Outbound (vtph)	6	9	3
Total PM Peak	**7**	**18**	**11**

vtpd - vehicle trips per day, vtph - vehicle trips per hour

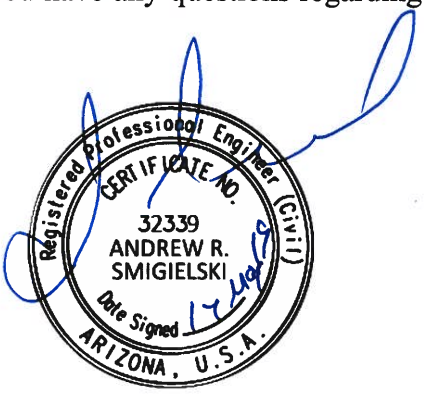
Conclusion

The proposed site is expected to generate two more trips in the AM peak hour and eleven more PM peak hour trips when compared to an allowable land use under the City of Scottsdale I-1 zoning. While the estimated trip generation for the proposed site is slightly higher when compared to the existing zoning, the trips are not expected to have a significant impact on the surrounding roadway network.

Various residential and recreational land uses neighbor the PT Commercial site. The proposed coffee shop and retail space would serve residents, supplement nearby recreation, and be in character with the surrounding land uses

Thank you again for your time and review of this TGC. If you have any questions regarding the TGC, please feel free to contact me at 602.266.7983.

Respectfully Submitted,

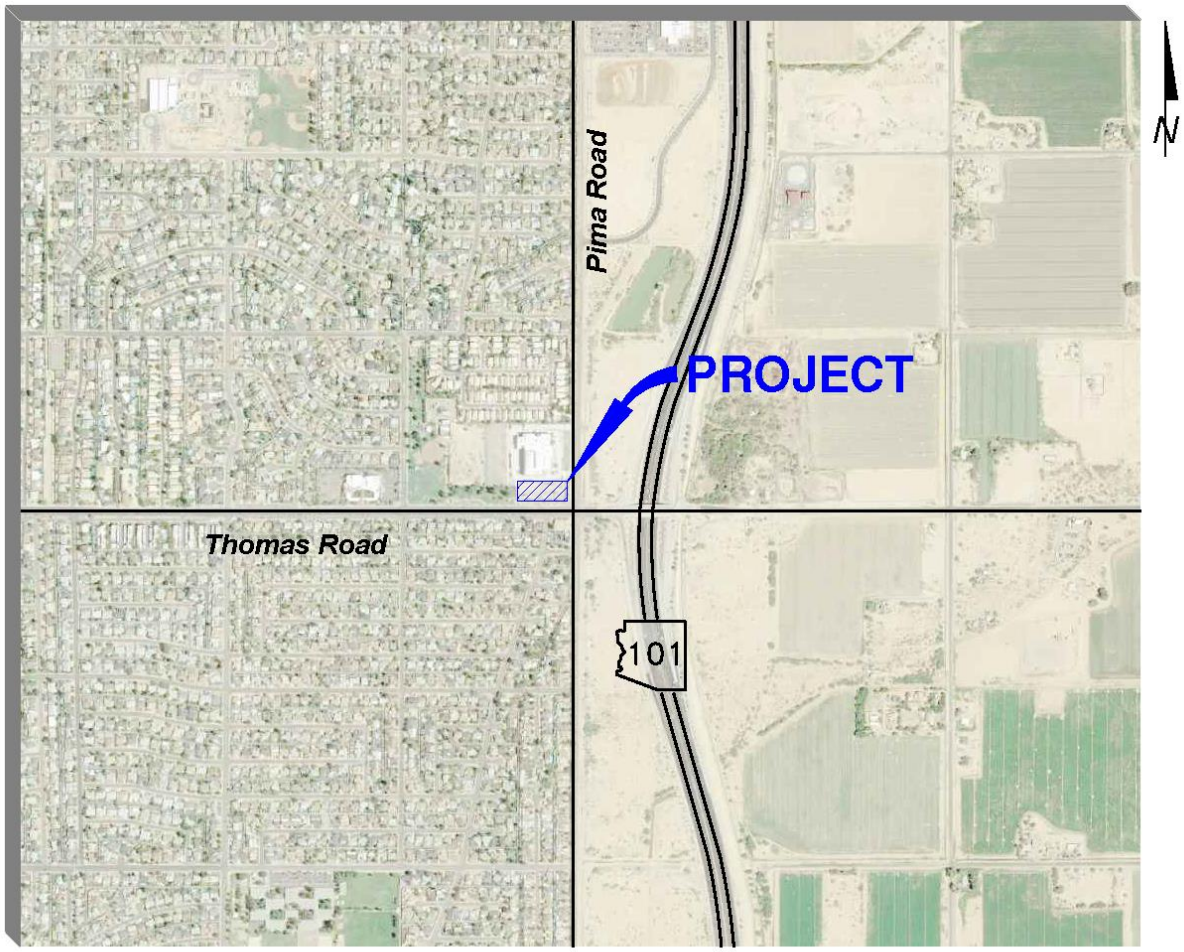


Andrew Smigielski, PE, PTOE, PTP
Southwest **T**raffic **E**ngineering LLC
Senior Traffic Engineer

cc: Justin Gregonis, Vertical Design Studios

Attachments: Figure 1 – Vicinity Map
Figure 2 – Site Plan
Trip Generation Calculations

Figure 1 – Vicinity Map

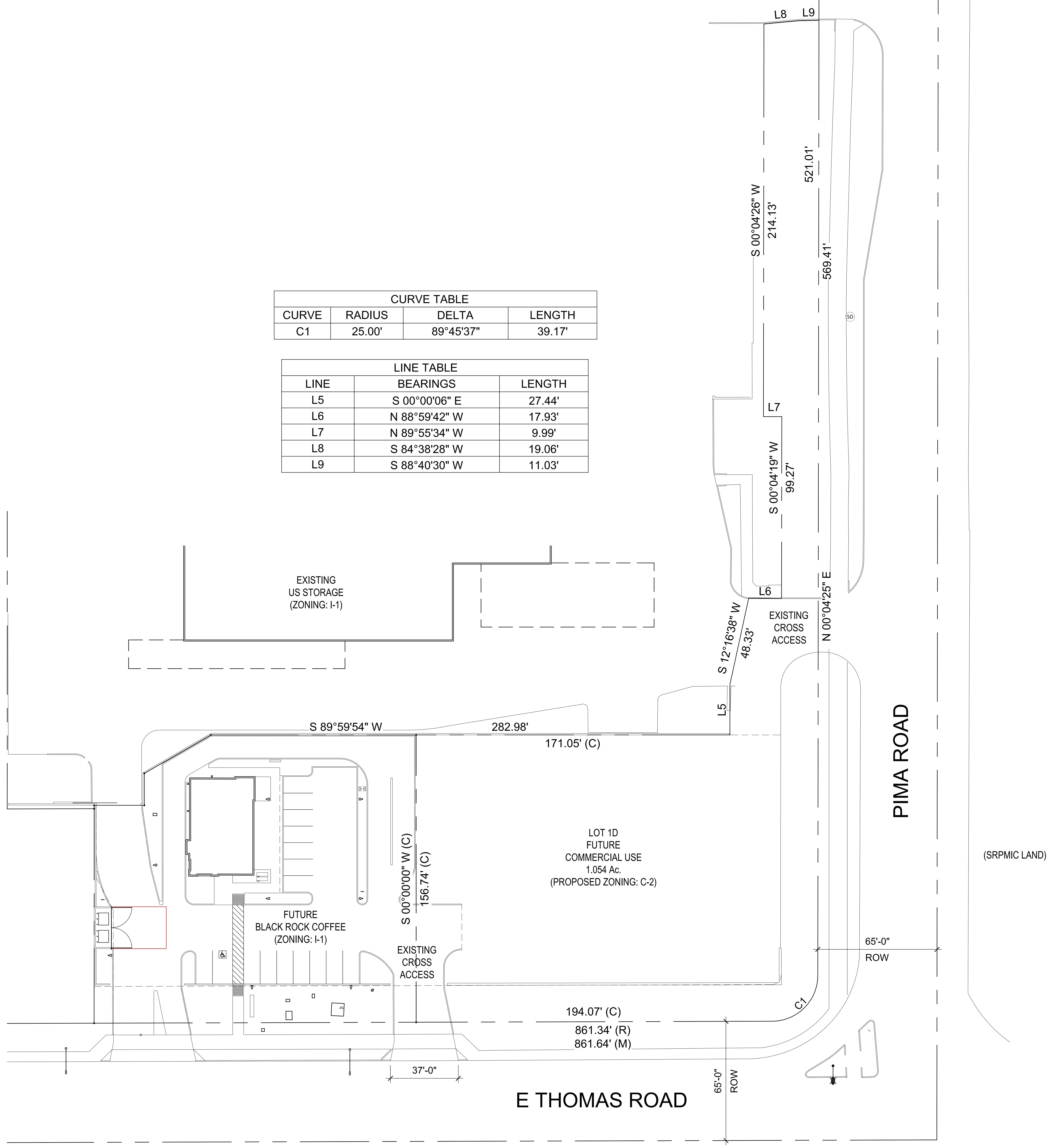


LEGEND:

= *New Access*

= *Existing Road*

= *Project Site*



CURVE TABLE			
CURVE	RADIUS	DELTA	LENGTH
C1	25.00'	89°45'37"	39.17'

LINE TABLE		
LINE	BEARINGS	LENGTH
L5	S 00°00'06" E	27.44'
L6	N 88°59'42" W	17.93'
L7	N 89°55'34" W	9.99'
L8	S 84°38'28" W	19.06'
L9	S 88°40'30" W	11.03'

(ZONING: R1-7)

OVERALL SITE PLAN

SCALE: 1' = 30'-0"

N

0' 30' 60' 120'

SCALE: 1" = 30'-0"

PROJECT DESCRIPTION

TO REZONE THE 1.054-AC SITE ON LOT 1D AT 8700 E THOMAS ROAD FROM I-1 TO C2 FOR A FUTURE COMMERCIAL BUSINESS USE.

PROJECT DATA

SITE AREA	: 45,927 SF (1.054 ACRES)
ASSESSOR PARCEL#	: 130-39-001L
ZONING (EXISTING)	: I-1, INDUSTRIAL PARK
ZONING (PROPOSED)	: C-2 COMMERCIAL
PROPOSED USE	: COMMERCIAL
PROPOSED LOT COVER (ALLOW)	: 36,741 SF (80% NET SITE AREA)
STREET YD SETBACK	: 0'-0"
REAR YD SETBACK	: 0'-0", 50' ADJ TO RESIDENTIAL
SIDE YD SETBACK	: 0'-0", 50' ADJ TO RESIDENTIAL
BLDG HT, ALLOWED	: 36'-0"

PROJECT TEAM

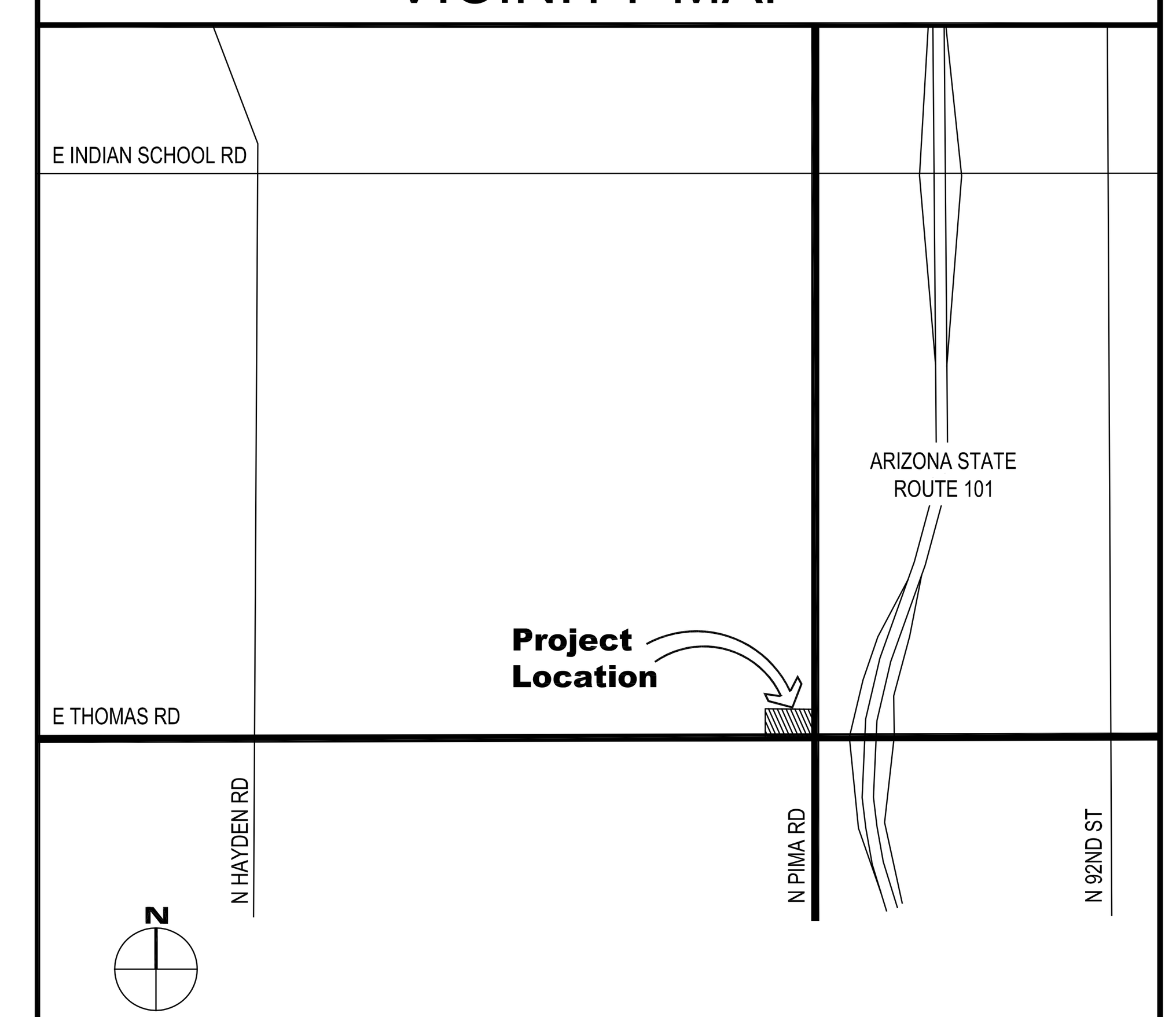
ARCHITECT

VERTICAL DESIGN STUDIOS, LLC.
4650 EAST COTTON CENTER BLVD, STE. 140
PHOENIX , ARIZONA 85040
PHONE: 602.395.1000, ext. 228
FAX: 602.395.1005
E-MAIL: jgregonis@verticaldesignstudios.com
CONTACT: Justin Gregonis

OWNER

SIMON CRE TORREON III, LLC
6900 E 2ND ST
SCOTTSDALE, AZ 85251
PHONE: 480-745-2460
FAX: 480-588-4150
E-MAIL: dan.biswas@simoncre.com
CONTACT: Dan Biswas

VICINITY MAP



APPROVAL STAMP

ARCHITECT

VERTICAL
DESIGN STUDIOS
4650 E. Cotton Center Blvd. Ste. 140
Phoenix . Arizona . 85040
Ph 602.395.1000 . Fax 602.395.1005

SEAL

REGISTERED ARCHITECT
CERTIFICATE NO.
50439
JUSTIN J.
GREGONIS
Date Signed 01/08/19
ARIZONA, U.S.A.
EXPIRES 12/31/20

CONSULTANT

OWNER

PROJECT DESCRIPTION

8700 E THOMAS ROAD, LOT 1D REZONE

E THOMAS ROAD AND N PIMA ROAD
SCOTTSDALE, AZ 85251

LEGAL NOTES::

DATE:

REVISIONS

NO.	DATE	ISSUE

SHEET TITLE

OVERALL SITE PLAN

PROJECT NUMBER

18136.00

A-001

Variety Store

Proposed

LAND USE: 4,000 Square Feet Variety Store

TRIP GENERATION CALCULATIONS ARE BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS' TRIP GENERATION, 10TH EDITION. THE ITE LAND USE CODE IS
Variety Store (814), General Urban/Suburban

Weekday

Average Rate = 63.47 Trips per 1000 Square Feet (sqft)

T = 63.47 Trips x 4000 sqft / 1000

T = 254 VTPD

ENTER: (0.5)*(254) = **127 VTPD**

EXIT: (0.5)*(254) = **127 VTPD**

AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)

Average Rate = 3.18 Trips per 1000 Square Feet (sqft)

T = 3.18 Trips x 4000 sqft / 1000

T = 13 VPH

ENTER: (0.57)*(13) = **7 VPH**

EXIT: (0.43)*(13) = **6 VPH**

PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)

Average Rate = 6.84 Trips per 1000 Square Feet (sqft)

T = 6.84 Trips x 4000 sqft / 1000

T = 28 VPH

ENTER: (0.52)*(28) = **15 VPH**

EXIT: (0.48)*(28) = **13 VPH**

*where, T = trip ends

TRIP GENERATION SUMMARY

SATURDAY	**254 VTPD**
AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)	**13 VPH**
PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)	**28 VPH**

General Light Industrial

Proposed

LAND USE: 10,000 Square Feet General Light Industrial

TRIP GENERATION CALCULATIONS ARE BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS' TRIP GENERATION, 10TH EDITION. THE ITE LAND USE CODE IS General Light Industrial (110), General Urban/Suburban

Weekday

Average Rate = 4.96 Trips per 1000 Square Feet (sqft)

T = 4.96 Trips x 10000 sqft / 1000

T = 50 VTPD

ENTER: (0.5)*(50) = **25 VTPD**

EXIT: (0.5)*(50) = **25 VTPD**

AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)

Average Rate = 0.7 Trips per 1000 Square Feet (sqft)

T = 0.7 Trips x 10000 sqft / 1000

T = 7 VPH

ENTER: (0.88)*(7) = **6 VPH**

EXIT: (0.12)*(7) = **1 VPH**

PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)

Average Rate = 0.63 Trips per 1000 Square Feet (sqft)

T = 0.63 Trips x 10000 sqft / 1000

T = 7 VPH

ENTER: (0.13)*(7) = **1 VPH**

EXIT: (0.87)*(7) = **6 VPH**

*where, T = trip ends

TRIP GENERATION SUMMARY

SATURDAY	**50 VTPD**
AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)	**7 VPH**
PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)	**7 VPH**