

Exterior Building Color & Material Samples

Color Drawdowns

Archaeological Resources

Airport Vicinity Development Checklist

Parking Study

Trip Generation Comparison

Parking Master Plan

School District Determination of Adequate Facilities



City of Scottsdale Project Number: 485 -PA- 14

Project name: Papago Plaza
Project Location: Southwest corner of Scottsdale Road and McDowell Road
Applicant Name: George Pasquel III - Withey Morris, PLC Phone: 602.230.0600
Applicant E-mail: George@WitheyMorris.com Fax: 602.212.1787

School District: Scottsdale Unified
I, Doug Virgil hereby certify that the following determination has been made in regards to the Referenced project:

- The school district had adequate school facilities to accommodate the projected number of additional students generated by the proposed rezoning within the school district's attendance area; or
- The school district will have adequate school facilities via a planned capital improvement to be constructed within one year of the date of notification of the district and located within the school district's attendance area; or
- The school district has determined an existing or proposed charter school as contracted by the district can provide adequate school facilities for the projected increase in students; or
- The applicant and the school district have entered into an agreement to provide, or help to provide, adequate school facilities within the school district's attendance area in a timely manner (a copy said agreement is attached hereto); or
- The school district does not have adequate school facilities to accommodate projected growth attributable to the rezoning.

Attached are the following documents supporting the above certification:

- Maps of the attendance areas for elementary, middle and high schools for this location.
- Calculations of the number of students that would be generated by the additional homes.
- School capacity and attendance trends for the past three years.

Or;

I, _____, hereby request a thirty (30) day extension of the original discussion and response time.

Doug Virgil Interim CFO
Superintendent of Designee

4/2/18
Date

Planning and Development Services

7447 E. Indian School Road, Suite 105, Scottsdale, AZ 85251 ♦ www.ScottsdaleAZ.gov

Collaborative City and School Planning



Policies and Procedures

Basis: These policies and procedures have been adopted in compliance with the City of Scottsdale Zoning Ordinance (Ordinance 455), Article I., Administrative And Procedures, Section 1.1500, Collaborative City And School Planning, effective October 10, 2002.

Goal: To ensure that rezoning applicants communicate with school districts and obtain their comments on potential impacts of new development on school facilities.

Impact: Applicable rezoning cases shall follow the procedures and use the forms established by the City of Scottsdale for the purposes of this section, as attached hereto.

Criteria for Applicability:

The provisions of this section shall apply only to applications for residential rezoning which increase the projected number of students for any school district's school attendance area as a result of the proposed rezoning.

The applicability of this section includes requests for rezoning which:

- Change zoning classifications from non-residential to residential classifications, and/or
- Changes in residential zoning classifications or amended stipulations that result in greater residential densities, thereby increasing the number of potential students.

Applicant Responsibilities:

- 1) Thirty days prior to submittal the applicant shall provide to the superintendent(s) of the applicable school district(s) the following information (via registered mail), with a copy to the City of Scottsdale Planning and Development Services:
 - Cover Letter including a request for a meeting to discuss the proposed rezoning (see attached example)
 - Detailed project narrative including the current allowed and proposed number of residential units
 - Location map (see attached example)
 - 11x17 Site Plan
 - Contact Information, including name, mailing address, fax and e-mail.
 - School District Response form, with applicant and project information completed
- 2) *At submittal, the applicant shall provide with the rezoning application:*
 - A copy of the above materials and,
 - A copy of the school district(s) response regarding the adequacy of available facilities, or a request for a thirty (30) day extension of the discussion and response time

Planning and Development Services

7447 E. Indian School Road, Suite 105, Scottsdale, AZ 85251 ♦ Phone: 480-312-7000 ♦ Fax: 480-312-7088

Collaborative City and School Planning



Policies and Procedures

School District Responsibilities:

- 1) Upon receipt of the above information, the school district(s) shall review the materials and determine one of the following:
 - That the school district has adequate school facilities to accommodate the projected number of additional students generated by the proposed rezoning within the school district's attendance area; or
 - That the school district will have adequate school facilities via a planned capital improvement to be constructed within one (1) year of the date of notification of the district and located within the school district's attendance area; or
 - That the school district has determined an existing or proposed charter school as contracted by the district can provide adequate school facilities within the school district's attendance area in a timely manner; or
 - That the applicant and the school district have entered into an agreement to provide, or help to provide, adequate school facilities within the school district's attendance area in a timely manner; or
 - That the school district does not have adequate school facilities to accommodate projected growth attributable to the rezoning.
- 2) The school district shall determine the above with methodology approved and published by the appropriate school district. If a school district fails to establish a student per-household ratio methodology for projecting the number of new students resulting from an applicant's rezoning application, then the school district shall base its certification upon an authoritative source accepted within the education community and based upon the most recent published Census information.
- 3) If the school district(s) requests a thirty (30) day extension, such request must be made prior to the expiration of the original discussion and response time. Such requests must be made in writing and submitted to Current Planning Department of the City of Scottsdale Planning and Development Services.
- 4) In the event that the appropriate school district determines that there are not adequate school facilities for the proposed rezoning, the school district shall notify the applicant and the City of Scottsdale in writing that the school district determined that it does not have adequate school facilities to accommodate the rezoning.
- 5) Said Determination shall be communicated to the City via the form provided for that purpose.
- 6) In the event the City does not receive certification from the School District within five (5) days of the date of the application shall proceed on the basis of not finding on the adequacy of school facilities for the proposed rezoning. School District input thereafter may be sought by the City on the issue for consideration by the Planning Commission and City Council in making a decision on the rezoning application. (Per Section 1.1502.D)

Planning and Development Services

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Collaborative City and School Planning



Policies and Procedures

City of Scottsdale Responsibilities

- 1) The City shall review the school district(s) response and include the district's determination in the staff report prepared for the Planning Commission and City Council.
- 2) If the school district does not respond, the staff report will reflect no response on the part of the School District. The City may choose to contact the School District regarding the rezoning. (Per Section 1.1502.D)
- 3) The determination form, if returned by the school district, shall be included as an attachment to the said staff report.
- 4) The City shall continue to provide to the school district(s) notification of request for public hearing per the Early Notification policy.

Planning and Development Services

7447 E. Indian School Road, Suite 105, Scottsdale, AZ 85251 ♦ Phone: 480-312-7000 ♦ Fax: 480-312-7088



ARIZONA
TEXAS
NEW MEXICO
OKLAHOMA

April 19, 2018

Mr. Lee Mashburn
Papago Marketplace, LLC
7025 E. McDowell Road, Suite 10
Scottsdale, AZ 85257

Mr. Ian Swiergol
Alliance Residential Company
2525 E. Camelback Road, Suite 500
Phoenix, AZ 85016

RE: *Trip Generation Comparison and Preliminary Category 3 Information for the Papago Marketplace, SWC of McDowell and Scottsdale Roads in Scottsdale, Arizona*

Dear Mr. Mashburn and Mr. Swiergol:

This letter report is to serve as an interim Traffic Impact and Mitigation Analysis (TIMA) Category 1 analysis for the proposed rezoning and redevelopment of a parcel located at 7047 E. McDowell Road in Scottsdale, Arizona (Papago Marketplace). This letter has been prepared to satisfy the City of Scottsdale's site plan submittal requirements, part of which requires a traffic analysis report. This letter report is an interim document, agreed upon by City staff via email received from Mr. George Pasquel with Withey Morris, to satisfy the submittal requirements with an understanding the complete Category 3 TIMA report is due the week of April 30th.

This report is in response to initial study comments provided by the City's Traffic Engineering Department and delay in securing approval of preliminary TIMA Category 3 documentation and ability to obtain turning movement count data at the study area intersections. It is anticipated that potential site plan modifications resulting from review of the preliminary site plan submission and this report can be interjected into the forthcoming Category 3 TIMA report, resulting in a reduced set of traffic-related comments and a more comprehensive report, minimizing the need for subsequent submittals. This report provides the basic background traffic components that will be used in the future Category 3 TIMA report outlined in the City of Scottsdale's *Design Standards & Policy Manual (DS&PM)*.

Site Characteristics

Location

The subject site is situated at the southeast corner of the signalized McDowell/Scottsdale Roads intersection. The site parcel extends south from the McDowell Road right-of-way (ROW) line for approximately 870 feet along Scottsdale Road, ending about 250 feet south of the SkySong Boulevard signalized intersection. The

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6-ZN-2018
4/20/2018

Papago Marketplace
TIMA Category 1

site's frontage along McDowell Road extends about 930 feet west of the Scottsdale Road ROW line. The site's property encompasses approximately ±10.4 acres, excluding the existing Wells Fargo Bank building located directly at the hard corner of the McDowell/Scottsdale intersection.

A vicinity map of the site is provided as Figure 1.

Site Layout

The proposed site layout plan is provided as Figure 2. The plan indicates the property's existing two access points onto McDowell Road and three access points onto Scottsdale Road are to remain. No improvements to limit or modify turn movements or driveway operations are planned.

The proposed development is identified as a mixed-use development consisting of 274 multi-family dwelling units located on the west side of the property while the east side of the site is to consist of 6 commercial buildings accommodating a hotel (118 rooms), a grocery store (22,760 SF), and 4 restaurants totaling 20,646 SF of building area. The adjacent 5,710 SF walk-in bank at the corner is to remain, but its parking area is to be redesigned to match the current vision of the new development. A proposed parking structure is to be behind the grocery store and will provide the majority of the parking space requirements for the commercial area, supplementing the angled parking spaces located on the internal drive aisles near the store fronts. Previously, the site was a shopping center having 118,082 SF of gross floor area per the Maricopa County Assessors website.

Further review of the site layout indicates gated access to and from the residential portion of the site. This eliminates direct inbound/outbound access to and from westbound McDowell Road for the site's commercial traffic. The residential vehicles, however, will be able to utilize the commercial driveways permitting full, direct access to and from Scottsdale Road and McDowell Road. Additionally, no site access to and from 70th Street and Belleview Street is proposed. All site ingress and egress movements will be to and from McDowell or Scottsdale Roads.

Opening Year of Site and Site Analysis Years

For the purposes of this analysis, it will be assumed that the site will be constructed as a continuous single-phase development. Although this may or may not occur, analysis will assume the site to be fully constructed and operational for a 2020 opening year.

For the purposes of future study analysis, the opening year and a 5-year horizon after site opening (2025) will be analyzed, per COS Category 3 guidelines. Although the proposed development may generate trips in a similar manner to the shopping center currently on the subject site, the property has not attracted significant vehicle trips in years. Therefore, most of the traffic generated by the site traffic will be new trips that will be introduced onto the adjacent roadway network. The need to distinguish the difference in vehicle trips between the two site conditions is not a critical step in the analysis process, however, the trip generation comparison is made in the next section.

Trip Generation Comparison

An analysis was conducted to estimate the amount of traffic the subject site would generate under its proposed conditions and also what the site would generate under its current, but refurbished state. To estimate site trips, *Trip Generation, Tenth Edition*, published by the Institute of Transportation Engineers (ITE)

Papago Marketplace
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2017, was used to calculate the trip generation potential for the existing and the proposed site under their representative land use condition. The ITE Trip Generation Manual is the industry standard used by traffic and transportation engineers to estimate trip generation characteristics for different types of land uses. The trip generation data provided by ITE is segregated into individual land uses and provides an estimate of the number of trip ends similar land uses would generate. A trip end is defined as one entering or one exiting trip during a designated time period.

A number of trip reduction factors can be applied to the total ITE estimated number of trip ends based on the site's mix of land uses (internal site interaction), vehicles already on the adjacent roadway that are attracted to the site due to the convenience offered (pass-by trips), and availability of alternative travel modes that may be present.

Table 1 (attachment) displays the total Weekday, AM peak hour, and PM peak hour trip generation characteristics for the site. Most information is based on ITE's average trip rate data, unless trip equations were available with an R^2 value greater than 0.80. The orange shaded column represents the site under its existing/previous shopping center land use while the gray shaded column is for the existing bank, applicable to both existing and proposed site conditions.

Trip reduction due to internal site interaction was applied to the proposed site condition but is not applicable to the site's existing/previous shopping center land use due to its inherent mix of different land-uses. The City of Scottsdale Traffic Department reviewed an earlier version of the trip generation table and did not approve of the high internal site interaction percentage derived using the NCHRP Report 684 spreadsheet for the PM peak hour (50%) and therefore it has been capped at 30%. The daily site interaction reduction factor is the simple average of the AM and PM peak hour percentages. The pass-by trip reductions (which only reduce the number of new trips and not driveway volume) was estimated using the average rates found in the ITE Trip Generation Handbook (3rd edition). Although transit, walk, and bicycle trips are likely considering the density of surrounding land use, it was assumed all trips are made via automobile.

The results indicate the proposed development is estimated to generate about 72% more daily trips, 390 more AM peak hour trips and nearly the same number of PM peak hour trip ends (400) when compared to the trip estimates under the site's existing condition. The high disparity in daily and peak hour trips is due to the proposed restaurant land uses, which can have a significant volume impact depending upon the type of restaurant that occupies the individual lots. (Some restaurants do not offer breakfast, while others only offer breakfast and lunch.) The results are considered a conservative (high) estimate of site-generated trips.

Crash Data

A cursory analysis of crash occurrences has been conducted for the study area. A review of the ADOT ALISS database for the latest 3-year period, 2014 through 2016, was performed and summarized in two attachments. The first crash attachment identifies crashes by year while the second identified the crashes by severity. Overall, a total of 89 crashes were identified for the study area, approximately 30 per year, with the majority of crashes occurring at the Scottsdale/McDowell Roads intersection. A review of the crash severity indicated no incapacitating or fatal crashes have occurred.

Historical Traffic Volumes/Background Growth Rate

The City of Scottsdale’s historical average daily traffic volumes for the adjacent McDowell Road and Scottsdale Road were obtained from the City’s website and shown below. Calculations indicate study area traffic volumes since 2012 have increased on average by 1.88% per year. For the purposes of future analysis at this site, an average growth rate of 2% per year until the 2020 opening year will be used to account for ambient background traffic growth in the area, while a slightly reduced growth rate of 1.5% will be assumed from 2020 to 2025.

Roadway Segment	2012	2014	2016	Delta Change 2012 - 2016	Percent Growth	Yearly Growth
McDowell Road east of Scottsdale Road	30100	30900	30300	200	0.66%	0.17%
McDowell Road west of Scottsdale Road	28800	27700	30800	2000	6.94%	1.69%
Scottsdale Road north of McDowell Road	35400	35800	37700	2300	6.50%	1.59%
Scottsdale Road south of McDowell Road	32400	32000	37700	5300	16.36%	3.86%
Total	126700	126400	136500	9800	7.73%	1.88%

Adjacent Street Volumes

The study area for the proposed development has been identified by the City to encompass the following intersections:

1. Scottsdale Road and McDowell Road
2. Scottsdale Road and Sky Song Boulevard/Site Driveway
3. Scottsdale Road and Enterprise Drive/Belleview Street
4. McDowell Road and 70th Street
5. McDowell Road and first median break west of Scottsdale Road (D1)
6. Existing right-in/right-out site driveway on McDowell Road (D2)
7. Existing right-in/right-out site driveway on Scottsdale Road, south of McDowell Road (D3)
8. Existing right-in/right-out site driveway on Scottsdale Road, south of SkySong Blvd. (D4)

The City has recently provided peak period intersection turning movement counts at locations #1, #2, and #4 above. Lee Engineering anticipates collecting intersection turning movement counts at intersection locations #1, #2, #3, and #5. The newly collected count data will allow us the ability to adjust the City provided counts to current year conditions and permit us to calculate vehicle flow between intersections to analyze all 8 locations above.

Two-way daily traffic volumes for McDowell Road and Scottsdale Road were obtained from the City’s 2016 segment count map which indicated daily counts of 30,800 and 37,700 vehicles, respectively. Review of the traffic volumes at the Scottsdale/McDowell intersection suggests vehicles are equally distributed on the two arterial roadways, 25% to and from all cardinal directions. This will be considered the distribution of new site-related trips generated from the proposed site.

A cursory review of site adjacent conditions indicate a new Butters restaurant has recently or will soon be open within the SkySong property on the east side of Scottsdale Road, which is not anticipated to have a significant effect on the volume conditions in the area.

Figure 3 is provided showing the 2016 traffic volume conditions provided by the City of Scottsdale for the AM and PM peak hours and also the typical weekday 24-hour condition. The figure also shows the vehicle distribution assumptions that will be used to assign site-generated traffic to the adjacent roadway network.

Site Generated Trip Assignment

As indicated in the trip generation table, the subject site generates both new and pass-by trips. Figure 4 shows the assignment of the new site-related vehicle trips. The driveway choice for the new vehicle trips considered ease of access and the access points available to the residential and commercial drivers. Figure 5 shows the pass-by vehicle component. The pass-by trips are only generated by the commercial land uses. One vehicle is responsible to two trip ends (1 entering, 1 exiting) and were equally distributed to each travel direction on McDowell and Scottsdale Roads.

Total Site-Generated Trips

The combination of the new and pass-by trips equal the total number of vehicle trip ends the site is anticipated to generate. These volumes would be added to the adjusted 2020 and 2025 background volumes derived from the Scottsdale provided intersection turning movement counts or the newly collected (locations to be determined) intersection turn movements, establishing the total traffic conditions for the two analysis years.

Based on the site conditions and methodology to be used, any vehicles currently entering and exiting the subject site will not be considered under background conditions. Therefore, any traffic volumes indicated in Figure 3 (or captured during the intersection turning movement counts) that are entering or exiting the site are assumed to be zero.

Results and Conclusions

Initial site analysis included in this report has resulted in the following conclusions:

- Analysis indicates the proposed site is expected to generate approximately 8,500 daily trips with 644 occurring in the AM peak hour (312 in, 332 out) and 573 occurring in the PM peak hour (317 in, 256 out). This total consists of both traffic already on the adjacent roadway network (pass-by trips) and new vehicle trips that will be generated.
- Due to the residential portion of the site to be gated, the commercial-related trips will not have access to the McDowell Road west site driveway (D1). All commercial-related vehicles originating from westbound McDowell Road will have to use a Scottsdale Road driveway for ingress. Drivers destined to westbound McDowell Road (and northbound Scottsdale Road) will have to make an outbound left-turn movement at the signalized SkySong Boulevard (Int. #2) access. Residential traffic will have direct access to and from all travel directions.
- Historical traffic growth on the roadway segments adjacent to the site have grown at an average rate of 1.88% per year between 2012 and 2016. The future Category 3 TIMA will consider a background traffic growth rate of 2% per year to 2020 and a 1.5% per year growth between 2020 and 2025.
- An average of 30 crashes per year have occurred in the study area, with no incapacitating or fatal crashes.

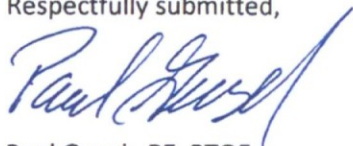
A forthcoming Category 3 TIMA report will provide additional detail and analysis of the subject site.

Papago Marketplace
TIMA Category 1

Closure

If you have any questions or comments, please feel free to contact me at (602) 955-7206.

Respectfully submitted,



Paul Guzek, PE, PTOE
Lee Engineering, LLC

attachments



EXPIRES 3-31-21

Table 1. Trip Generation Estimate - Papago Marketplace

Zoning / Land Use		Existing	Existing/Proposed	Proposed				
Description	Land Use	Shopping Center	Bank	Restaurant	Restaurant	Hotel	Retail	Residential
	ITE Land Use Code	820	911	934	932	310	850	220
	ITE Land Use Title	Shopping Center	Walk-in Bank	Fast-food w/Drive-thru	High-Turnover (Sit-Down) Restaurant	Hotel	Supermarket	Multifamily Housing (Low-Rise)
	Land Use Variable	1000 SF GLA	1000 SF GFA	1000 SF GFA	GFA	Room	1000 SF GFA	Dwelling Units
	Variable Amount (X)	118.082	5.71	8.064	12.4	116.000	22.760	274
Trip Rates	Weekday	37.75	0.00	470.95	112.18	8.36	106.78	7.32
	AM Peak Hour	0.94	0.00	40.19	9.94	0.47	3.82	0.46
	PM Peak Hour	$\ln(T) = 0.74\ln(X) + 2.89$	12.13	32.67	9.77	0.60	9.24	0.56
Inbound %	Weekday	50%	50%	50%	50%	50%	50%	50%
	AM Peak Hour	62%	52%	51%	55%	59%	60%	23%
	PM Peak Hour	48%	44%	52%	62%	51%	51%	63%
Total Trips	Weekday	4458	0	3798	1388	970	2430	2006
	AM Peak Hour Inbound	69	0	165	68	32	52	29
	AM Peak Hour Outbound	42	0	159	55	22	35	97
	PM Peak Hour Inbound	295	30	137	75	35	107	97
	PM Peak Hour Outbound	320	39	126	46	34	103	57
Internal Site Interaction Reduction Percent ⁽¹⁾	Daily	0%	20%	20%	20%	20%	20%	20%
	AM	0%	10%	10%	10%	10%	10%	10%
	PM	0%	30%	30%	30%	30%	30%	30%
External Trips	Weekday	4458	0	3038	1110	776	1944	1605
	AM Peak Hour Inbound	69	0	149	61	29	47	26
	AM Peak Hour Outbound	42	0	143	50	20	32	87
	PM Peak Hour Inbound	295	21	96	53	25	75	68
	PM Peak Hour Outbound	320	27	88	32	24	72	40
Pass-by Traffic ⁽²⁾	AM Peak Hour Pass-by Percentage	0%	0%	49%	0%	0%	0%	0%
	PM Peak Hour Pass-by Percentage	34%	0%	50%	43%	0%	36%	0%
	AM Peak Hour Trip Ends	0	0	143	0	0	0	0
	PM Peak Hour Trip Ends	209	0	92	37	0	53	0
New Trips	Weekday	3700	0	1534	871	776	1594	1605
	AM Peak Hour Inbound	69	0	78	61	29	47	26
	AM Peak Hour Outbound	42	0	72	50	20	32	87
	PM Peak Hour Inbound	191	21	50	35	25	49	68
	PM Peak Hour Outbound	216	27	42	14	24	46	40

Proposed Site Totals (without Bank)

10592
346
368
451
366

8473
312
332
317
256

143
182

6380
241
261
227
166

Source

1 Trip Generation Manual, 10th Ed, ITE, 2017. Daily site interaction estimated as the average of AM and PM values. The maximum site interaction reduction percentage for the PM has been capped at 30%

2 Trip Generation Handbook, 3rd Ed., ITE, 2017

CRASHES BY YEAR

Scottsdale Road and McDowell Road Intersection, 2014-2016

89 Crashes



LEGEND:



2014



2015



2016

Crash Analysis Limits:

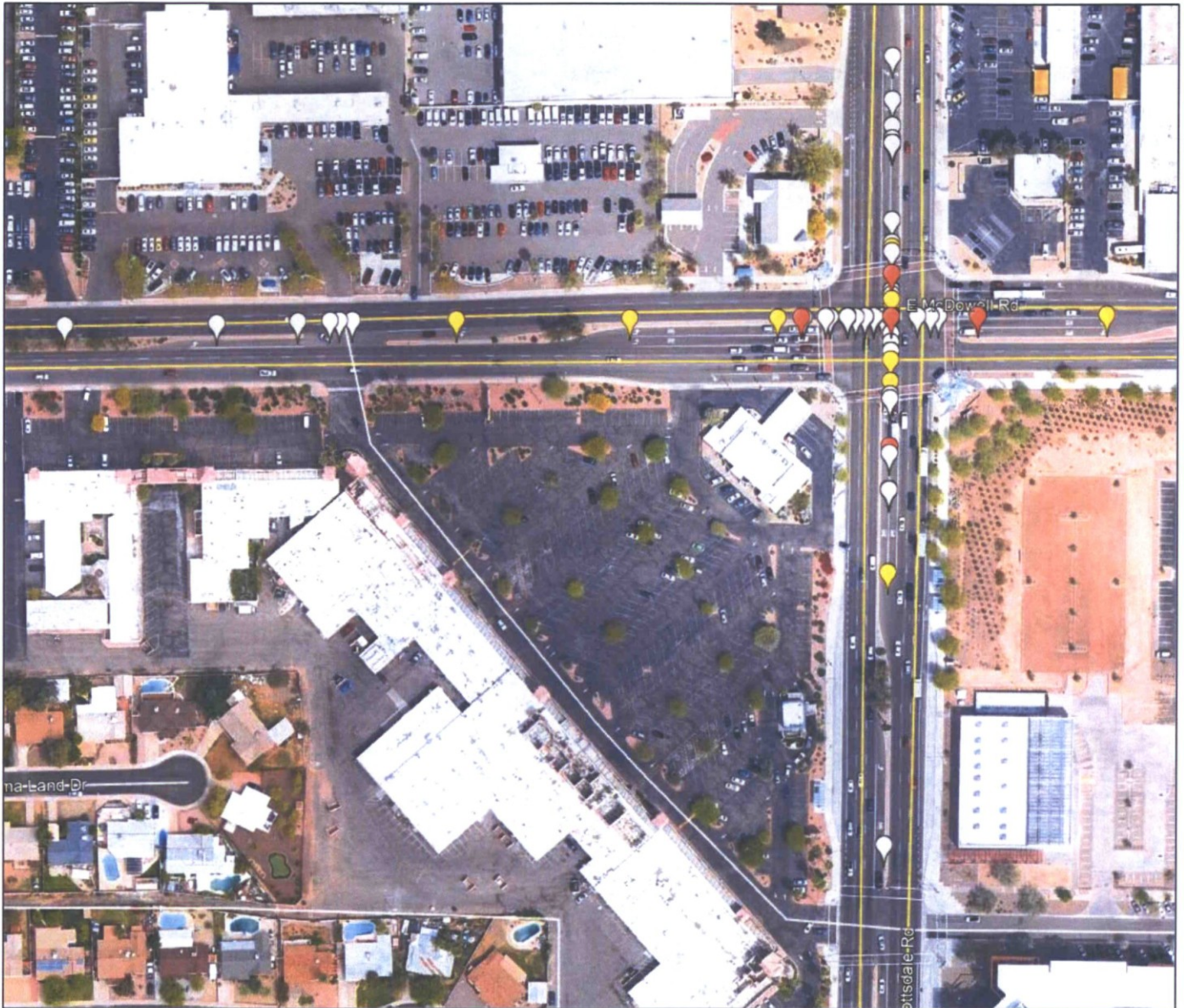
300 feet north and 300 feet east of the intersection
1,000 feet west and 1,000 feet south of the intersection




Year	Crashes
2014	32
2015	30
2016	27
Total	89

CRASHES BY INJURY SEVERITY

Scottsdale Road and McDowell Road Intersection, 2014-2016

89 Crashes



LEGEND:  No Injury  Possible Injury  Non-Incapacitating Injury

Crash Analysis Limits:
 300 feet north and 300 feet east of the intersection
 1,000 feet west and 1,000 feet south of the intersection

Injury Severity	Crashes
No Injury	64
Possible Injury	14
Non-Incapacitating Injury	11
Incapacitating Injury	0
Fatal	0
Total	89

To Water Resources



KLAND CIVIL ENGINEERS

September 28, 2018

City of Scottsdale
Greg Bloemberg

Phone: 480-312-4306
Email: gbloemberg@ScottsdaleAZ.gov

Re: Project: Papago Plaza
PROJECT # 6-ZN-2018, K17127

Dear Mr. Bloemberg:

The following are my response to the engineering comments from the second review.

Engineering

9.(from 1st review) All public water and sewer lines must be contained within a minimum 20-foot easement location(s). NOTE: Any proposed water and sewer to future subdivided parcels (if not public) will need to be private and provided for as part of a PSD application. And recorded property owner's association for billing, operation and maintenance of shared private infrastructure. Also note, per International Plumbing Code, shared private sewer line cannot be located underneath buildings.

Response: *We are showing one sewer line as public that will route into the site from Scottsdale road and service the hotel and grocery store. The remainder of the buildings have building service directly connecting to the sewer system in the streets. On our sewer map we have the lines labeled either public or service.*

Water and Waste Water

10. Water and Waste Water BOD's have not been accepted. Please revise to respond to/address the following:

- **Water:** The 8 inch waterline on Scottsdale Road must be upsized from to 12 inch along the entire east frontage of the property. Mile and half-mile alignments must be minimum 12-inch. Refer to Section 6-1.4000 of the DSPM
Response: *We have revised our concept plan to show a new 12 inch waterline on the west side of the street. During the DR process the exact location can be finalized.*
- **Waste Water:** Per the flow monitoring data provided and future sewer demands, the maximum d/D of 0.65 will be exceeded in the existing 8 inch line in the alley. The extent of upsizing and required diameter must be analyzed and presented by the engineer. The hydraulic analysis

should include an existing sewer slop verification and analysis. Offsite improvements will be the responsibility of the developer. The slopes provided in the current analysis are not identified on the site layout. Each manhole section must be analyzed and details provided up to the point where no hydraulic issues are determined to exist. Refer to Section 7-1.404 of the DSPM.

Response: *We are currently in the process of expanding our analysis. We have been directed to submit the plans and reports to the COS by Monday. We are acknowledging that after we have completed our study we may need to upsize some of the COS sewer system around the site. We will present our findings as soon as they are complete. Thanks,*

Engineering:

18. (from 1st review) Currently, size-on-size taps are proposed for tapping sleeves. Please revise plans accordingly to indicate cut-in fittings with appropriate valving Refer to Chapter 6 of the DSPM.

Response: *We have revised the connections to be cut in Tees.*

Sincerely,

KLAND CIVIL ENGINEERS



Leslie Kland, P.E., LEED AP
Principal

6-ZN-2018
10/01/2018

