



Andretti Kart Racing Facility

Albuquerque, New Mexico | Desert Surf Circle North & Alexander Blvd.

Traffic Impact Study

September 29, 2022

DRAFT

Received
9/29/2022



A handwritten signature in blue ink that reads "Terry O. Brown".

Presented to:
City of Albuquerque
Transportation Development

Terry O. Brown, P.E.
5571 Midway Park Pl. NE
Albuquerque, NM. 87109
(505) 883-8807



A handwritten signature in blue ink that reads "Ron R. Bohannon".

Prepared for:
Andretti Indoor Karting & Games
9299 Universal Blvd.
Orlando, FL 32819

Ronald R. Bohannon, P.E.
5571 Midway Park Pl. NE
Albuquerque, NM. 87109
(505) 858-3100

Andretti Kart Racing (Desert Surf Circle North / Alexander Blvd.) Traffic Impact Study

Executive Summary

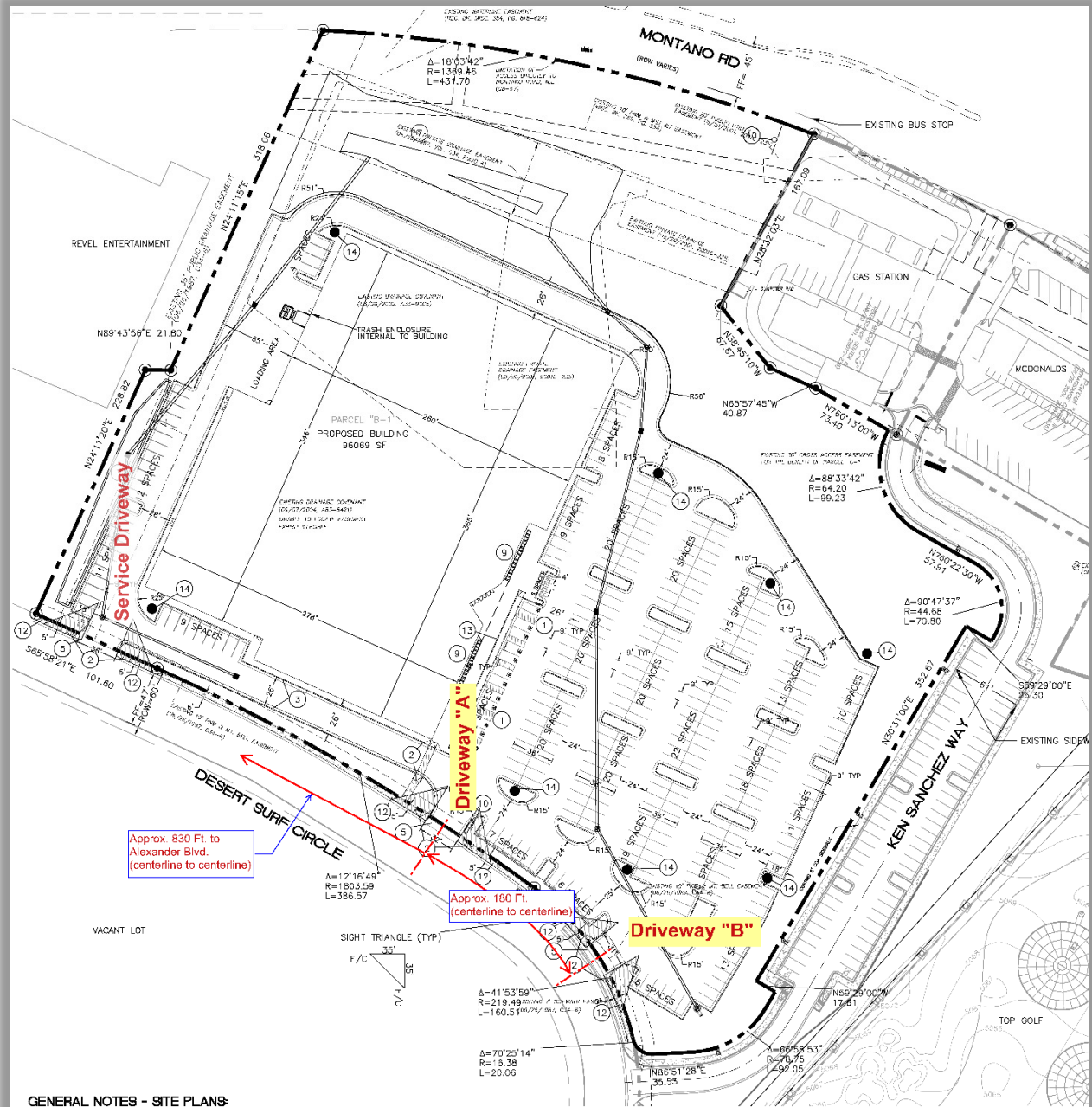
The purpose of this Study is to determine the impact of the proposed Andretti Kart Racing facility and to make recommendations to mitigate any significant adverse impact resulting from implementation of the new facility. This Study is being prepared to meet the requirements of the City of Albuquerque Transportation Development Section of the Planning Department and the New Mexico Department of Transportation (District 3). The New Mexico Department of Transportation has minimal interest in this project since they will be starting construction of the new interchange at Montgomery Blvd. / I-25 in the near future.

The new Andretti Kart Racing facility is located along the north side of Desert Surf Circle North approximately 700 feet east of Alexander Blvd. in Albuquerque, NM. The project will be constructed on Parcel B-1-A, Correction Plant of Parcels C-1-A, C-1-B, and B-1-A, Renaissance Center III containing approximately 9.23 acres. Following is a vicinity map of the project:



The Andretti Kart Racing facility is a 96,069 s.f. building in which clients can participate in various indoor gaming events such as racing karts, bowling, arcade games, laser tag, etc. Groups can schedule parties, meetings, and events at the center and participate in gaming and other entertainment events.

Access to the new Andretti Kart Racing facility will be via two full access unsignalized driveways along the north side of Desert Surf Circle North. Driveway "A" is located approximately 830 feet east of Alexander Blvd. (centerline to centerline). Driveway "B" is located approximately 180 feet east of Driveway "A" (centerline to centerline). Following is the conceptual site plan for the project:



The Andretti Kart Racing facility will not open until 10:00 am. Therefore, an AM Peak Hour analysis will not be required for this Study. The PM Peak Hour trip generation rate anticipated for the project is summarized in the following table:

Andretti Racing - ABQ, NM

Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
DESCRIPTION	GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet					
Multipurpose Recreational Facility (435)	Units 96.07	N/A	-	-	189 155

No pass-by trip adjustment is anticipated for this particular use.

Even though this is considered a commercial use, the method of determining trip distribution and trip assignments will be based on Mid-Region Council of Governments' socio-economic data regionally inversely proportional to the distance of the Subarea from the project.

Analysis was conducted using Synchro software (version 11.1.2.9) by Trafficware (a CUBIC company). Synchro software generally complies with the methodology outlined in the Highway Capacity Manual, 6th Edition (HCM6). A summary of the results of the intersection and driveway analysis for this project are summarized in the following table:

Executive Summary Results Table

			2023 Conditions	
Intersection No. / Name	Signalization	Case	AM Peak	PM Peak
1 - Desert Surf Circle North / Alexander Blvd.	Unsignalized	NO BUILD	N/A	B - 12.0
		BUILD	N/A	C - 19.6
2 - Desert Surf Circle South / Alexander Blvd.	Unsignalized	NO BUILD	N/A	B - 14.2
		BUILD	N/A	B - 14.4
3 - Desert Surf Circle North / Driveway "A"	Unsignalized	NO BUILD	N/A	N/A
		BUILD	N/A	A - 9.3
4 - Desert Surf Circle North / Driveway "B"	Unsignalized	NO BUILD	N/A	N/A
		BUILD	N/A	A - 8.9

The analysis contained in this Study demonstrates that the proposed Andretti Kart Racing facility will have no significant adverse impact on the adjacent transportation system. All analysis resulted in acceptable levels-of-service for intersections and driveways in the study area, and queuing analysis resulted in acceptable queueing levels.

As a result of the analysis contained in this Traffic Impact Study, the following recommendations are made:

- All construction related to the project shall maintain adequate sight distances at intersections and driveways to the extent possible.
- This project should be accessed via two full access unsignalized full access driveways as shown on the site plan for this project (See Appendix Page A-3).
- A left turn deceleration lane is warranted on Desert Surf Circle North at both Driveway "A" and Driveway "B". The eastbound left turn lanes should be designed and constructed to

a length of 150 feet with 150'-150' reverse curve transitions. Since Desert Surf Circle is 36 feet wide along the frontage of this project, then the left turn lanes should be striped on the existing roadway section at Driveway "A" and at Driveway "B".

Andretti Kart Racing (Desert Surf Circle North / Alexander Blvd.) Traffic Impact Study

Introduction

The purpose of this Study is to determine the impact of the proposed Andretti Kart Racing facility and to make recommendations to mitigate any significant adverse impact resulting from implementation of the new facility. This Study is being prepared to meet the requirements of the City of Albuquerque Transportation Development Section of the Planning Department and the New Mexico Department of Transportation (District 3). The New Mexico Department of Transportation has minimal interest in this project since they will be starting construction of the new interchange at Montgomery Blvd. / I-25 in the near future.

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The Andretti Kart Racing facility is a 96,069 s.f. building in which clients can participate in various indoor gaming events such as racing karts, bowling, arcade games, laser tag, etc. Groups can schedule parties, meetings, and events at the center and participate in gaming and other entertainment events.

Description of Proposed Development

The Andretti Kart Racing facility is modelled in this Traffic Impact Study as a Multipurpose Recreational Facility (ITE Land Use 435). The ITE Trip Generation Manual (11th Edition) definition of a Multipurpose Recreational Facility reads as follows:

A multipurpose recreational facility contains two or more of the following land uses combined at one site; miniature golf, batting cages, video arcade, bumper boats, go-carts, and golf driving range. A refreshment are may also be provided.

The trip generation rate is based on ITE Trip Generation Manual (11th Edition) trip generation data and equations, and is summarized in the following table:

Andretti Racing - ABQ, NM

Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

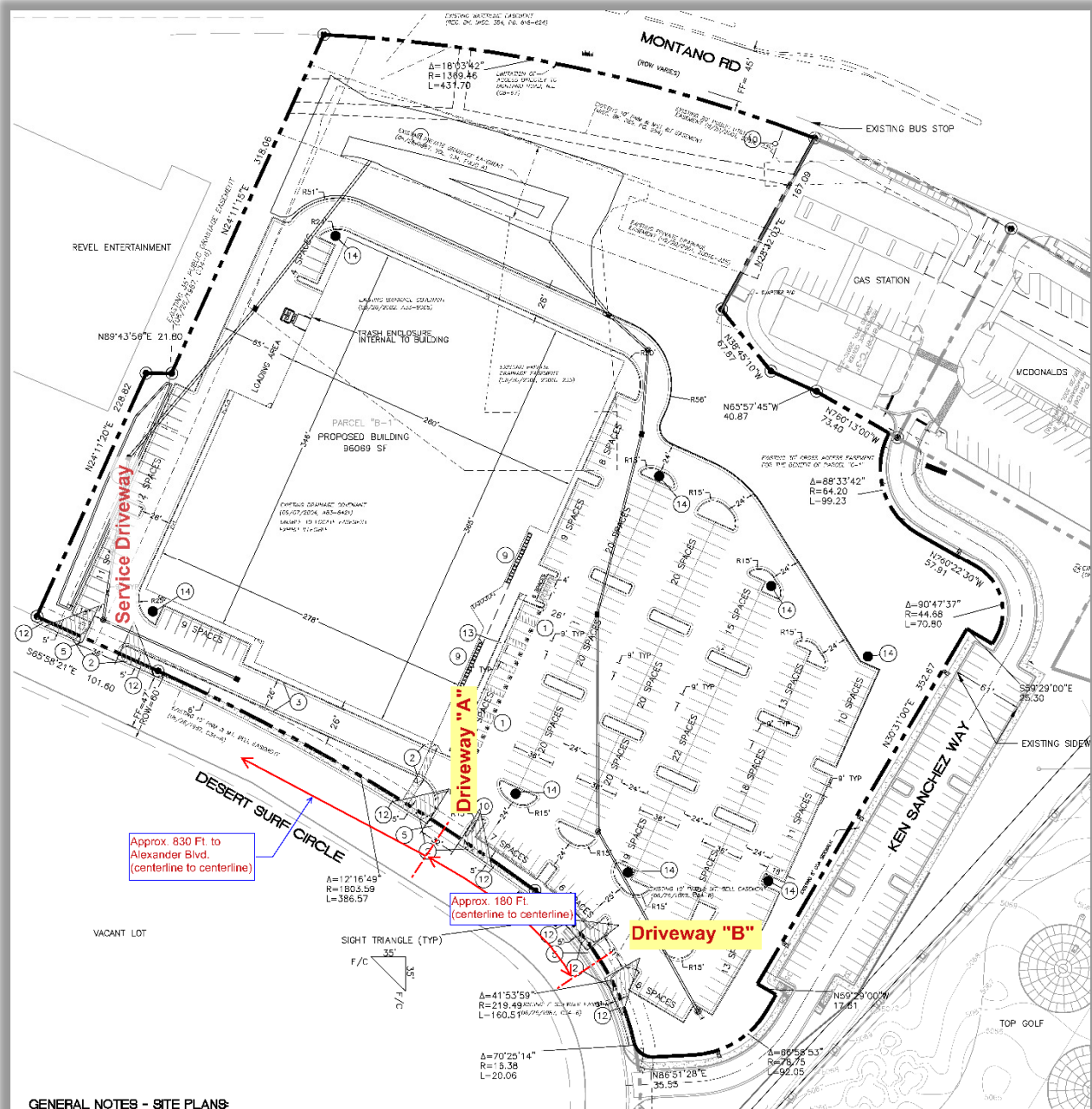
	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
	DESCRIPTION	GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet						
Multipurpose Recreational Facility (435)		Units				
		96.07	N/A	-	-	189 155

The Andretti Kart Racing facility does not open for business until 10:00 am so there are no trips generated during the AM Peak Hour period. Also, this study did not adjust the trip generation rate for pass-by trips.

This project is anticipated to be developed in a single phase.

The IDO Zoning of the parcel upon which the Andretti Kart Racing will be constructed is NR-C (Non-Residential – Commercial).

There are two customer access driveways proposed for the project and one service / employee driveway. All three driveways access Desert Surf Circle North. Driveway “A” is a full access unsignalized driveway located approximately 830 feet east of Alexander Blvd. (centerline to centerline). Driveway “B” is also a full access unsignalized driveway located approximately 180 feet east of Driveway “A” (centerline to centerline). The service / employee driveway is a full access unsignalized driveway located approximately 330 feet west of Driveway “A” (centerline to centerline). Since the service / employee driveway will have very low volumes, it will not be analyzed in this study.



Study Area Conditions

A scoping meeting to define the requirements of this Traffic Impact Study was held on Thursday, June 23, 2022. Attending the scoping meeting were Matt Grush (City of Albuquerque Transportation Development), Margaret Haynes (NM DOT), and members of the development team comprised of staff at Tierra West, LLC. Subsequent to the scoping meeting, Matt Grush issued a City of Albuquerque Scoping Letter defining the requirements of this study. Margaret Haynes (NM DOT) also attended the meeting, but was not concerned about the impact of this project since 1) it would not open until 10:00 am and 2) the Montano / I-25 Interchange will be reconstructed in the near future.

The parcel in question is currently vacant. There are no other known developments in the nearby area being proposed that would need to be included in the background traffic of this analysis.

Alexander Blvd. is classified as a major collector on the Long Range Roadway System Map (Connections 2024). Generally, it is an urban four-lane divided roadway with raised medians, curbs and gutters of both side of the street, and concrete sidewalks on both side of the street. The posted speed limit on Alexander Blvd. in the study area is 35 MPH. The 2019 AADT on Alexander Blvd. in the study area is approximately 5,500 vpd (both directions).

There are no planned C.I.P. improvements in the study area and there are no signalized intersections in the study area. Also, there are no bus routes that travel on Alexander Blvd. or on Desert Surf Circle. Alexander Blvd. is shown on the Long Range Bikeway System Map to have a proposed bike lane at some time in the future.

Analysis of Existing Conditions

PM Peak Hour turning movements volumes were collected at the intersections of Desert Surf North / Alexander Blvd. and Desert Surf South / Alexander Blvd. on Thursday, August 11, 2022. The PM traffic count data was collected from 4:00 pm to 6:00 pm. AM traffic counts were not required since this facility does not open for business until 10:00 am.

There are four unsignalized intersections / driveways to evaluate in this study. The evaluation of the intersections in this study are performed using criteria and methodology established by the Highway Capacity Manual, 6th Edition (HCM6).

Analysis to report the existing levels-of-service for intersections in the study are were not addressed in this report specifically. The implementation year is only three years into the future and the annual growth rate is normal, so the 2023 PM Peak Hour NO BUILD analysis results should approximate existing conditions.

Crash data for the study area was collected for the years 2017, 2018, and 2019. The crash data was taken from the New Mexico Department of Transportation's statewide database. The crash history data was collected for the intersection of Desert Surf Circle North / Alexander Blvd., Desert Surf Circle South (Montbel Loop) / Alexander Blvd., and for the roadway link on Alexander Blvd. between those two intersections. There have been very few crashes recorded in the study area over those years. Based on the low number of crashes reported over the recent three-year period, this report finds that there are no significant safety issues in the study area. The table below summarizes the crashes by year and by type of crash:

Crash Analysis Andretti Kart Racing Facility

Desert Surf Circle North / Alexander Blvd. - Albuquerque, NM

Intersection: 1. Desert Surf Circle / Alexander Blvd.											
Date: 9/27/2022											
		Alcohol/Drug Involved	Disregarded Traffic Signal	Driver Inattention	Excessive Speed	Failure to Yield	Following Too Closely/Overtaking	Improper Lane Change/Turn	Other	Missing Data	Total
2017		0	0	0	0	0	0	0	0	0	0
2018		0	0	0	0	0	0	0	0	0	0
2019		0	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	0	0	0
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Average Crashes per Million Vehicles = 0.0
on existing (2022) PM Peak Hour Volume x 10 hours x 365 days per year = 2,861,600 veh/year

Intersection: 2. Desert Surf Circle South / Alexander Blvd.											
Date: 9/27/2022											
		Alcohol/Drug Involved	Disregarded Traffic Signal	Driver Inattention	Excessive Speed	Failure to Yield	Following Too Closely/Overtaking	Improper Lane Change/Turn	Other	Missing Data	Total
2017		0	0	0	0	0	0	0	1	0	0
2018		0	0	0	0	0	0	0	1	0	0
2019		0	0	0	1	0	0	0	1	0	0
Total		0	0	0	1	0	0	0	3	0	4
		N/A	N/A	N/A	25%	N/A	N/A	N/A	75%	N/A	100%

Average Crashes per Million Vehicles = 0.5
on existing (2022) PM Peak Hour Volume x 10 hours x 365 days per year = 2,861,600 veh/year

Segment: 3. Alexander Blvd. from Desert Surf Circle South to Desert Surf Circle North											
Date: 9/27/2022											
		Alcohol/Drug Involved	Disregarded Traffic Signal	Driver Inattention	Excessive Speed	Failure to Yield	Following Too Closely/Overtaking	Improper Lane Change/Turn	Other	Missing Data	Total
2017		0	0	0	0	0	0	0	0	0	0
2018		0	0	0	0	1	0	0	0	0	0
2019		0	0	1	0	0	0	0	0	0	0
Total		0	0	1	0	1	0	0	0	0	2
		N/A	N/A	50%	N/A	50%	N/A	N/A	N/A	N/A	100%

Average Crashes per Million Vehicles = 0.2
on existing (2022) PM Peak Hour Volume x 10 hours x 365 days per year = 2,861,600 veh/year

Analysis of Implementation Year Conditions

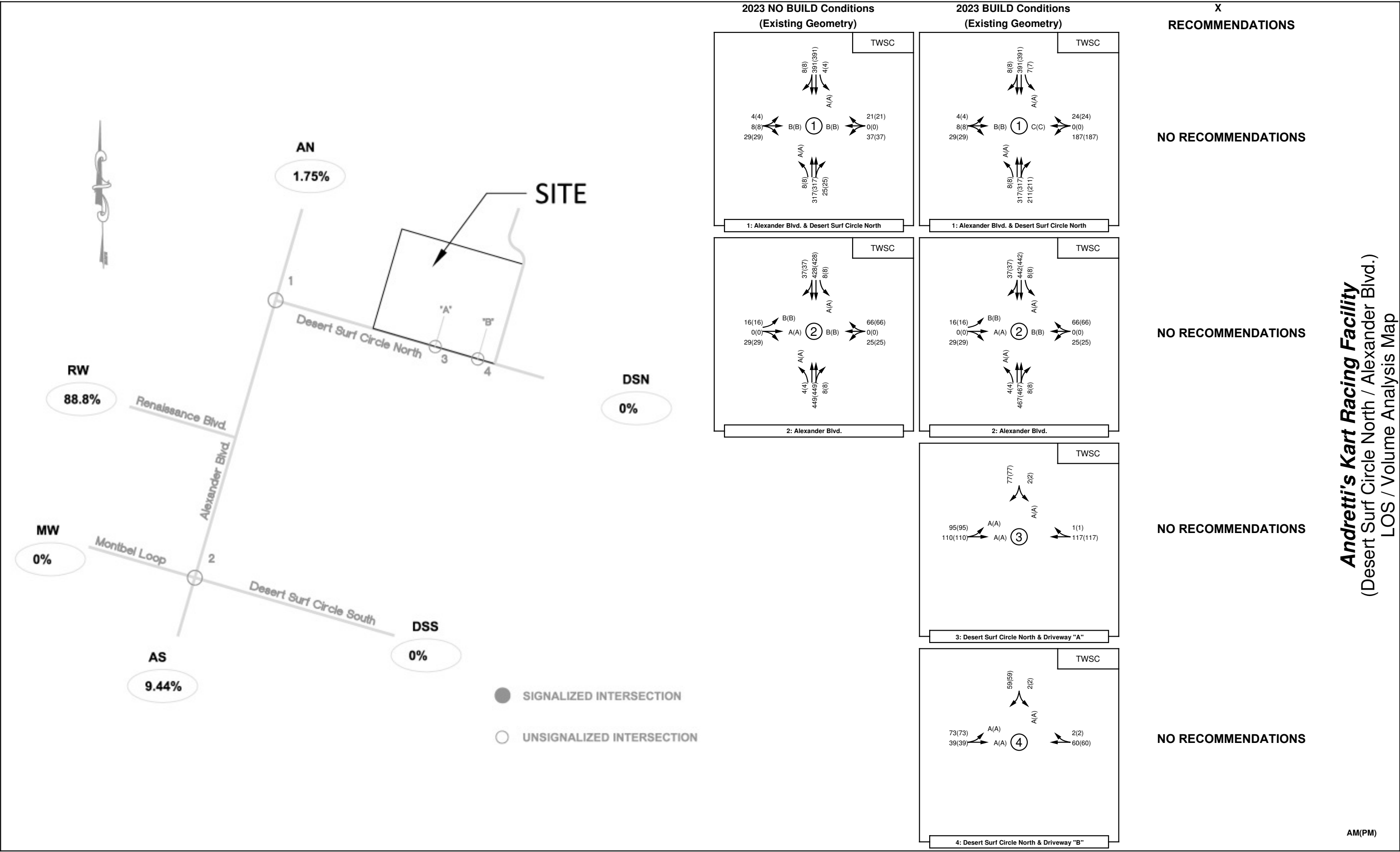
The base PM Peak Hour turning movements volumes utilized for this analysis were grown annually at a generic 3% growth rate to project the 2023 PM Peak Hour NO BUILD volumes for the intersections in the study area. The actual calculated annual growth rate based on a ten-year history of Traffic Flow Rates from the Mid-Region Council of Governments shows the historic growth trend to be negative. This report could have used the minimum growth rate of 0.5% but chose to use a 3% annual growth rate to be conservative.

Trip Distribution of the new trips generated by the proposed Andretti Kart Racing facility were

determined based on Mid-Region Council of Governments' Socioeconomic Data (2016 – 2040 Data Set). Trips were distributed within the MRCOG region based on population inversely proportional to the distance of the project from the MRCOG Subarea. See Appendix Pages A-xx thru A-xx for Trip Distribution Map and worksheet.

Trip Assignments were made based on the results of the Trip Distribution results using logical routing.

The following pages show the Lanes / Volumes Analysis Maps for the project that summarize the lane geometry for each approach, the 2023 NO BUILD and 2023 BUILD turning movements volumes and the associated levels-of-service of each applicable turning movement for each of the intersections in the study area.



Andretti's Kart Racing Facility
(Desert Surf Circle North / Alexander Blvd.)
LOS / Volume Analysis Map

Following are the results of the Implementation Year Analysis (2023) for the intersections in the Study area. Only the PM Peak Hour conditions are reported since the Andretti Kart Racing facility is not open for business until 10:00 am and, therefore, does not contribute to the AM Peak Hour traffic volumes.

Analysis of Intersection #1 – Desert Surf Circle North / Alexander Blvd.

Desert Surf Circle North / Alexander Blvd. is an unsignalized four-legged intersection controlled by a Two-Way Stop sign on Desert Surf Circle North. The results of the unsignalized intersection analysis are summarized in the following table:

Desert Surf Cir N / Alexander Blvd. 2023 Conditions	EB (Desert Surf Cir N)			WB (Desert Surf Cir N)			NB (Alexander Blvd.)			SB (Alexander Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1>	0	0	<1>	0	1	2>	0	1	2>	0
PM Peak Hour												
2023 NO BUILD Conditions Volumes	4	8	29	37	0	21	8	317	25	4	391	8
V/C Ratio		0.06			0.10		0.01			0.00		
Level-of-Service		B			B		A			A		
Control Delay (Seconds)		10.9			12.0		8.1			8.0		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		0.2			0.3		0.0			0.0		
2023 BUILD Conditions Volumes	4	8	29	187	0	24	8	317	211	7	391	8
V/C Ratio		0.07			0.46		0.01			0.01		
Level-of-Service		B			C		A			A		
Control Delay (Seconds)		11.3			19.6		8.1			8.5		
Intersection LOS	TWSC											
95th Percentile Queue (veh)		0.2			2.4		0.0			0.0		

The preceding analysis shows that all of the calculated delays at the intersection are at acceptable levels and there are no excessive queuing issues for either the 2023 NO BUILD conditions or the 2023 BUILD conditions. Therefore, no recommendation is made regarding the operation of the unsignalized intersection of Desert Surf Circle North / Alexander Blvd.

Analysis of Intersection #2 – Desert Surf Circle South (Montbel Lp.) / Alexander Blvd.

Desert Surf Circle South (Montbel Loop) / Alexander Blvd. is an unsignalized four-legged intersection controlled by a Two-Way Stop sign on Desert Surf Circle South (Montbel Loop). The results of the unsignalized intersection analysis are summarized in the following table:

Desert Surf Cir S / Alexander Blvd. 2023 Conditions	EB (Desert Surf Cir S)			WB (Desert Surf Cir S)			NB (Alexander Blvd.)			SB (Alexander Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	0	<1>	0	1	2>	0	1	2>	0
PM Peak Hour												
2023 NO BUILD Conditions Volumes	16	0	29	25	0	66	4	449	8	8	428	37
V/C Ratio	0.04	0.04			0.14		0.00			0.01		
Level-of-Service	B	A			B		A			A		
Control Delay (Seconds)	14.2	9.9			11.7		8.3			8.3		
Intersection LOS	TWSC											
95th Percentile Queue (veh)	0.1	0.1			0.5		0.0			0.0		
2023 BUILD Conditions Volumes	16	0	29	25	0	66	4	467	8	8	442	37
V/C Ratio	0.04	0.04			0.15		0.00			0.01		
Level-of-Service	B	A			B		A			A		
Control Delay (Seconds)	14.4	9.9			11.8		8.3			8.3		
Intersection LOS	TWSC											
95th Percentile Queue (veh)	0.1	0.1			0.5		0.0			0.0		

The preceding analysis shows that all of the calculated delays at the intersection are at acceptable levels and there are no excessive queuing issues for either the 2023 NO BUILD conditions or the 2023 BUILD conditions. Therefore, no recommendation is made regarding the operation of the unsignalized intersection of Desert Surf Circle South (Montbel Loop) / Alexander Blvd.

Analysis of Intersection #3 – Desert Surf Circle North / Driveway “A”

Desert Surf Circle North / Driveway “A” is an unsignalized three-legged intersection controlled by a Two-Way Stop sign on Driveway “A”. The results of the unsignalized intersection analysis are summarized in the following table:

Desert Surf Cir N / Driveway "A" 2023 Conditions	EB (Desert Surf Cir N)			WB (Desert Surf Cir N)			SB (Driveway "A")		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		<1			1>		1>		
PM Peak Hour									
2023 BUILD Conditions Volumes	95	110			117	1	2		77
V/C Ratio	0.07						0.09		
Level-of-Service	A	A					A		
Control Delay (Seconds)	7.6	0.0					9.3		
Intersection LOS	TWSC								
95th Percentile Queue (veh)	0.2						0.3		

The preceding analysis shows that all of the calculated delays at the driveway are at acceptable levels and there are no excessive queuing issues for the 2023 BUILD conditions. The driveway does not exist in the NO BUILD condition. Therefore, no recommendation is made regarding the operation of the unsignalized intersection of Desert Surf Circle North / Driveway “A”. Driveway “A” was analyzed as a standard full access unsignalized driveway with one entering lane and one exiting lane (for both left and right turn exiting vehicles).

Analysis of Intersection #4 – Desert Surf Circle North / Driveway “B”

Desert Surf Circle North / Driveway “B” is an unsignalized three-legged intersection controlled by a Two-Way Stop sign on Driveway “B”. The results of the unsignalized intersection analysis are

summarized in the following table:

Desert Surf Cir N / Driveway "B" 2023 Conditions	EB (Desert Surf Cir N)			WB (Desert Surf Cir N)			SB (Driveway "B")		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		<1			1>		1>		
PM Peak Hour									
2023 BUILD Conditions Volumes	73	39			60	2	2		59
V/C Ratio	0.05						0.06		
Level-of-Service	A	A					A		
Control Delay (Seconds)	7.5	0.0					8.9		
Intersection LOS	TWSC								
95th Percentile Queue (veh)	0.1						0.2		

The preceding analysis shows that all of the calculated delays at the driveway are at acceptable levels and there are no excessive queuing issues for the 2023 BUILD conditions. The driveway does not exist in the NO BUILD condition. Therefore, no recommendation is made regarding the operation of the unsignalized intersection of Desert Surf Circle North / Driveway "B". Driveway "B" was analyzed as a standard full access unsignalized driveway with one entering lane and one exiting lane (for both left and right turn exiting vehicles). The analysis of the driveway calculated the eastbound left turn movement to have a maximum 95th percentile queue length of 1 vehicle.

The Andretti Kart Racing facility is projected to generate approximately 189 entering trips during the PM Peak Hour, most of them approaching the facility from the west entering in the two proposed driveways on Desert Surf Circle North. The City of Albuquerque's threshold warranting a left turn lane on a roadway with a posted speed limit of 25 MPH is 50 left turns per hour. Therefore, a left turn lane is warranted on Desert Surf Circle North at Driveway "A" and at Driveway "B".

The City of Albuquerque's DPM standard for left turn lane design states that "Turn lanes shall be designed based primarily on the following: a) The length needed for drivers to decelerate to a speed that allows safe turning into the driveway or side street, and b) The amount of vehicular storage that will be required. Therefore, Driveway "A" and Driveway "B" should be constructed to include an eastbound left turn lane. The length of the eastbound left turn lane should be 150 feet with a 150'-150' reverse curve transition. Desert Surf Circle North is 36 feet wide, so the left turn lanes can be striped on Desert Surf Circle at each of the two driveways. The projected volume of traffic approaching the driveways on Desert Surf Circle from the east is minimal, so no westbound right turn deceleration lane is warranted at either Driveway "A" or Driveway "B".

Analysis of Horizon Year Conditions

A Horizon Year analysis was not required for this Study.

Summary of Deficiencies, Impacts, and Recommendations

The transportation analysis contained in this Traffic Impact Study was performed in accordance with the methods established in the Highway Capacity Manual, 6th Edition (HCM6) and this analysis is designed to comply with the requirements established by the City of Albuquerque Transportation Development section as defined in the Scoping Meeting held with the City of Albuquerque on June 23, 2022. Analysis of the intersections in the study area showed no significant adverse impact to the adjacent transportation system. All intersections evaluated were demonstrated to operate at acceptable levels-of-service with acceptable calculated delays and

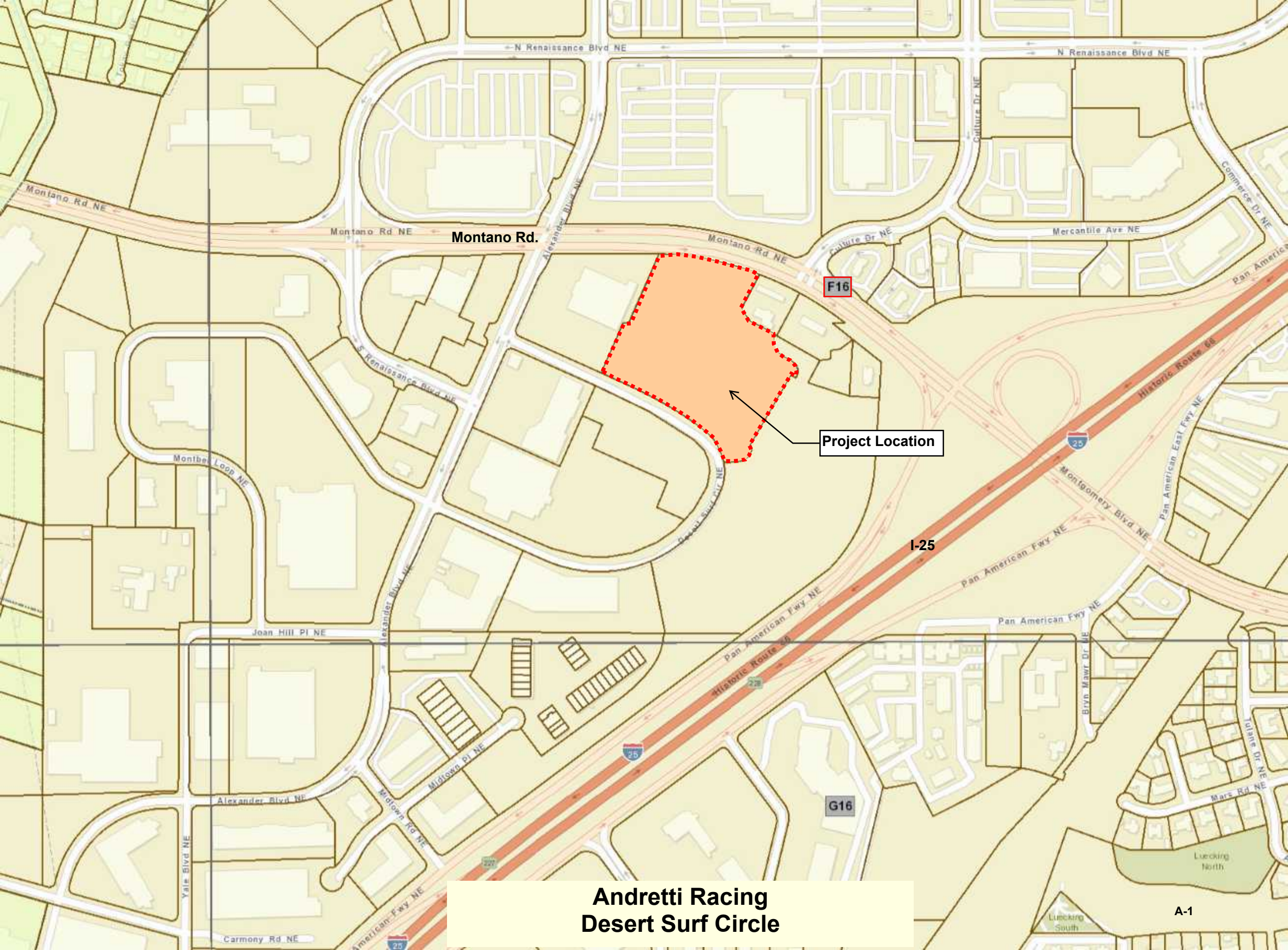
acceptable 95th percentile queues. No deficiencies were found.

Recommendations associated with this Traffic Impact Study can be found at the end of the Executive Summary of this report.

Appendix

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APPENDICES



Montano Rd.

F16

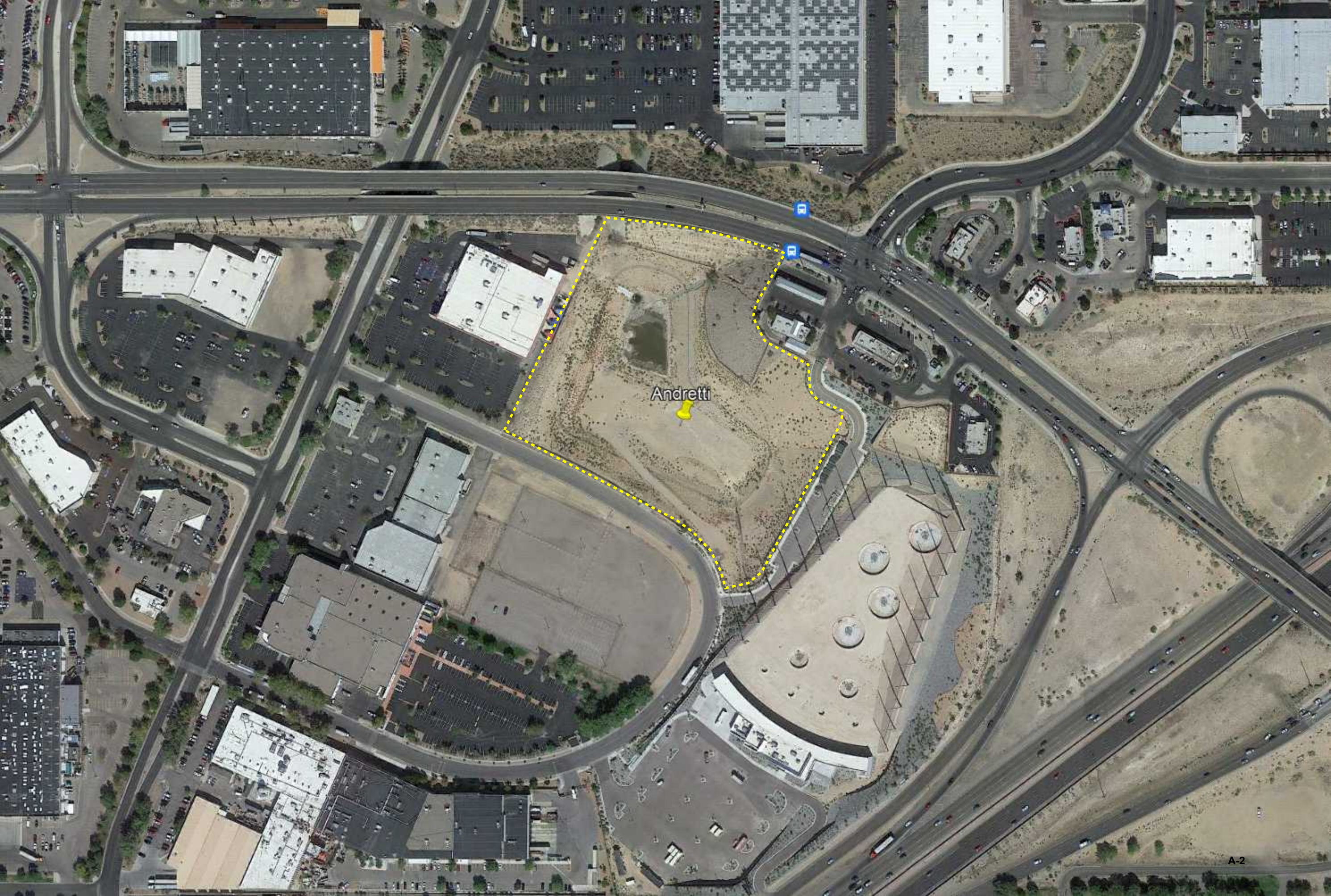
Project Location

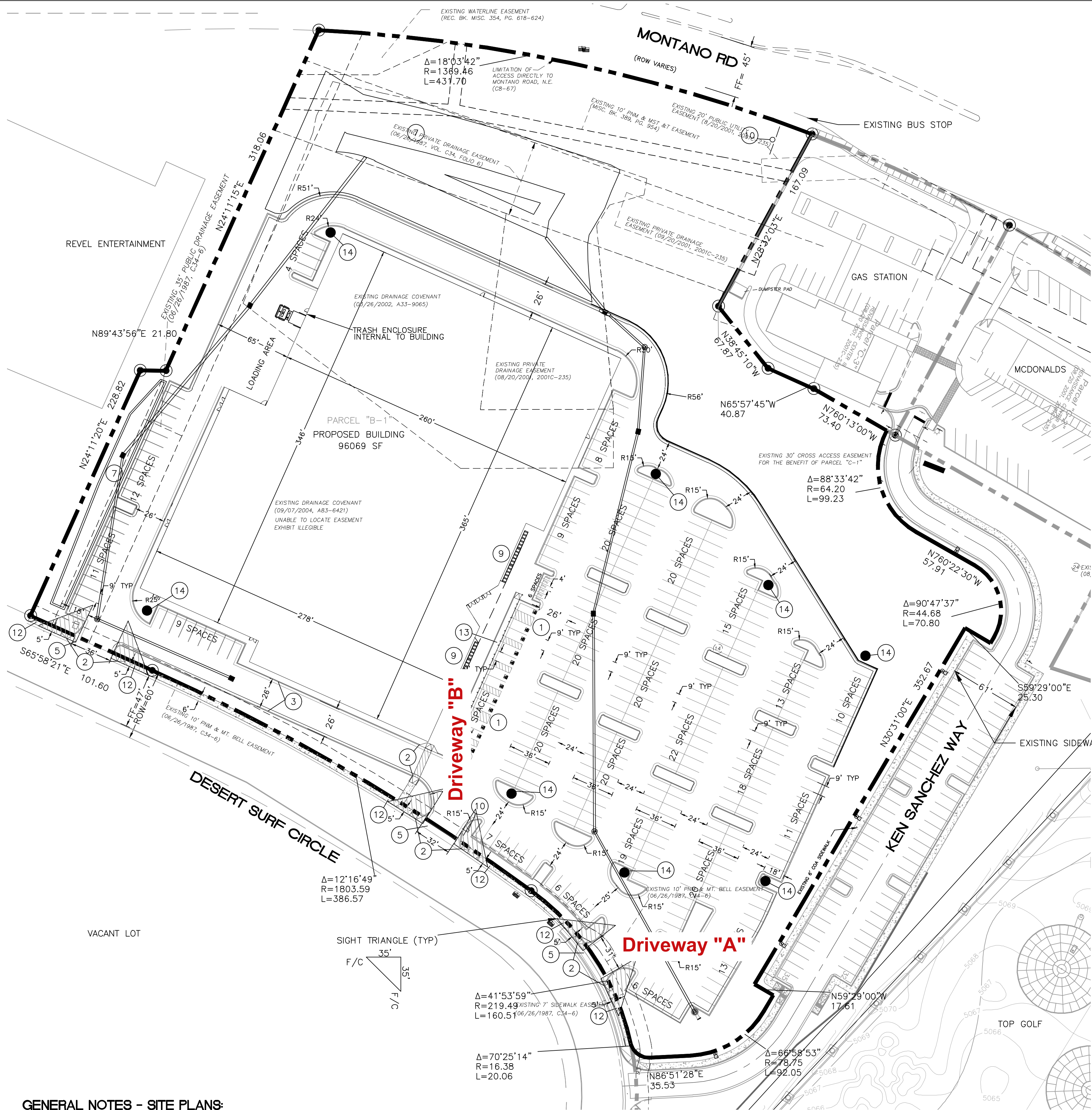
I-25

G16

Andretti Racing Desert Surf Circle

A-1





LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- BUILDING
- PROPOSED SIDEWALK
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- LIGHT

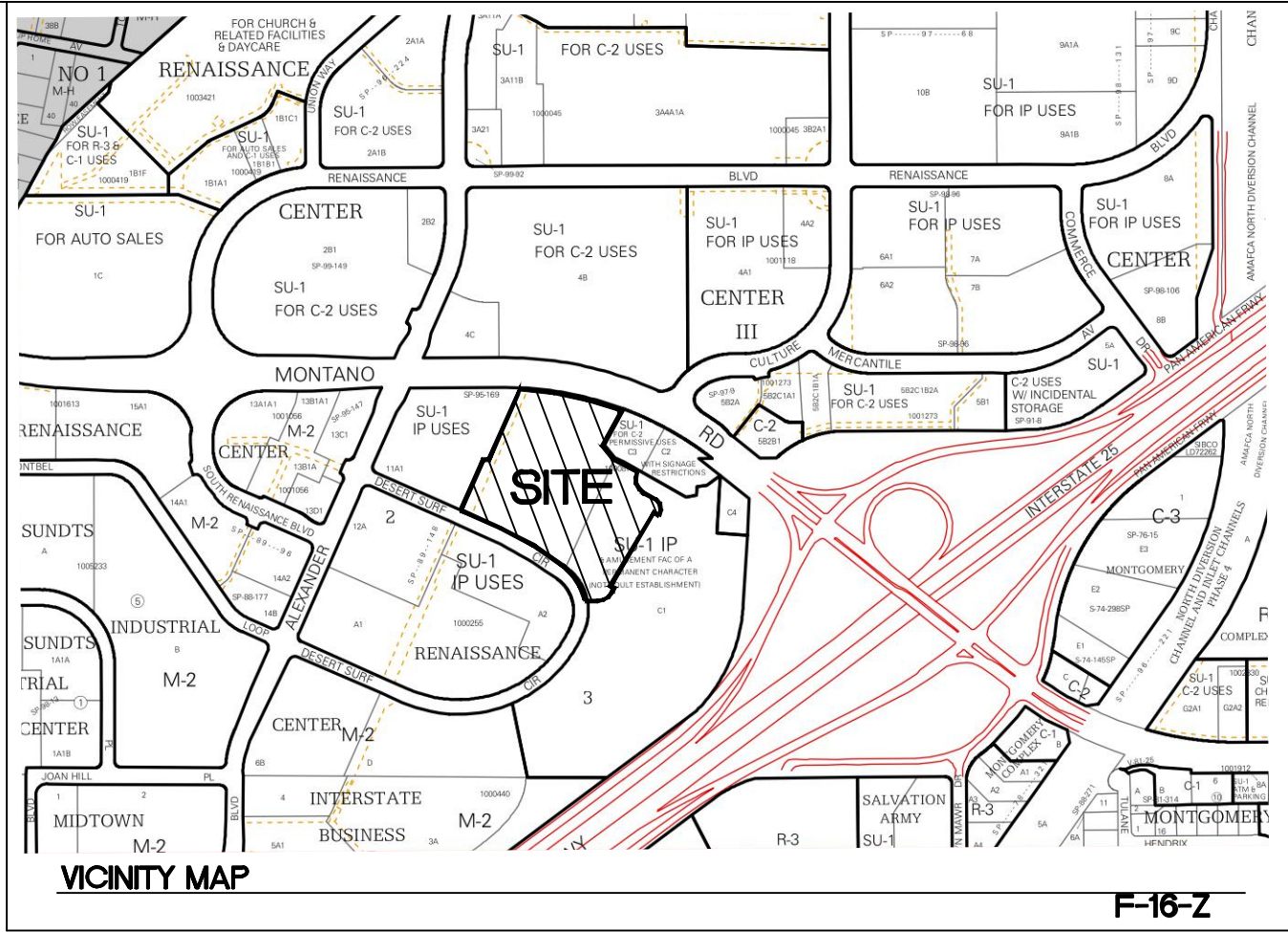
KEYED NOTES

- ACCESSIBLE PARKING W/SIGN PER ADA STANDARDS (1.0% MIN - 2.0% MAX SLOPE) SEE DETAIL SHEET DET-1
- UNIDIRECTIONAL ACCESSIBLE RAMP
- STANDARD CURB AND GUTTER (TYP) PER COA STD DWG 2415A SEE DETAIL SHEET DET-1
- PARKING LOT LIGHT STANDARD (TYP) FULL CUTOFF LED'S, 25' HIGH
- 6' VALLEY GUTTER PER COA STD DWG 2415B SEE DETAIL SHEET DET-1
- MOTORCYCLE SPACE (4'X8' MIN) W/SIGN
- RETENTION POND
- NEW ASPHALT PAVING SEE DETAIL SHEET DET-1
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- MONUMENT SIGN
- 6' PEDESTRIAN CROSSING SEE DETAIL SHEET DET-1
- NEW 5' CONCRETE SIDEWALK PER COA STD DW 2430 SEE DETAIL SHEET DET-1
- ZERO-FLUSH CURB W/ 8" BOLLARDS SEE DETAIL SHEET DET-1
- STANDARD LIGHT POLE SEE DETAIL SHEET DET-1

SITE DATA

PROPOSED USAGE	INDOOR ENTERTAINMENT
LOT AREA	402445 SF (9.23 ACRES)
ZONING	NR-C
PARKING REQUIRED	1 SPACE/300 GSF=320 SPACES PER TABLE 5-5-2
PARKING PROVIDED	330 SPACES
HC PARKING REQUIRED	12 SPACES (2 VAN SPACES)
HC PARKING PROVIDED	12 SPACES (2 VAN SPACES)
BICYCLE SPACES REQUIRED	10% OF OFF-STREET PARKING
BICYCLE SPACES PROVIDED	35 SPACES
MOTORCYCLE SPACES REQUIRED	6 SPACES
MOTORCYCLE SPACES PROVIDED	6 SPACES
PARKING TOTAL=	351

PROJECT NUMBER: _____	
APPLICATION NUMBER: _____	
This plan is consistent with the specific Site Development Plan approved by the Environmental Planning Commission (EPC), dated _____ and the Findings and Conditions in the Official Notification of Decision are satisfied.	
Is an Infrastructure List required? () Yes () No If Yes, then a set of approved DRG plans with a work order is required for any construction within Public Right-of-Way or for construction of public improvements.	
DRB SITE DEVELOPMENT PLAN SIGNOFF APPROVAL:	
Traffic Engineer, Transportation Division	Date
Water Utility Development	Date
Parks & Recreation Department	Date
City Engineer	Date
* Environmental Health Department (conditional)	Date
Solid Waste Management	Date
Code Enforcement	Date
DRB Chairperson, Planning Department	Date
* Environmental Health, if necessary	



LEGAL DESCRIPTION:

PARCEL B-1-A CORRECTION PLAT OF PARCELS C-1-A, C-1-B AND B-1-A RENAISSANCE CENTER III CONT 9.2281 AC

NOTES:

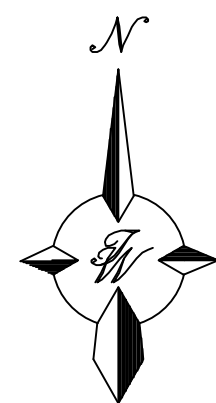
- COMMON STORM DRAINAGE, PEDESTRIAN, AND VEHICULAR ACCESS ACROSS NEW TRACTS IS GRANTED BY THIS SITE PLAN AND WILL BE GRANTED ON THE REPLAT.
- APPROVAL OF THIS PLAN DOES NOT CONSTITUTE OR IMPLY EXEMPTION FROM WATER WASTE PROVISIONS OF THE WATER CONSERVATION LANDSCAPING AND WATER WASTE ORDINANCE WATER WASTE MANAGEMENT IS THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER.
- LANDSCAPE MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE OWNER.
- LIGHT POLES SHALL BE A MAXIMUM OF 20' FEET WITH FULL CUT OFF LIGHT FIXTURES. LIGHT FIXTURES SHALL BE A MAXIMUM OF 20' WITH FULL CUT OFF SHIELDS ON FIXTURES SO THAT NO FUGITIVE LIGHT SHALL ESCAPE BEYOND THE PROPERTY LINE. THE LIGHT FIXTURES SHALL BE FULLY SHIELDED WITH HORIZONTAL LAMPS. LIGHT POLES WITHIN 100' OF RESIDENTIAL ZONING SHALL BE LIMITED TO 16' HIGH.
- THERE SHALL BE NO BACKLIT, PLASTIC, OR VINYL AWNINGS OR ILLUMINATED PLASTIC BANDING ON SIGNAGE.
- ACCESS AT DESERT SURF CIRCLE BE FULL MOVEMENT.
- ROOF EQUIPMENT SHALL BE BELOW PARAPET HEIGHT AND SCREENED FROM VIEW. ALL GROUND MOUNTED EQUIPMENT SHALL BE SCREENED BY SCREEN WALLS WITH TOP OF EQUIPMENT BELOW TOP OF SCREEN WALL.

GENERAL NOTES - SITE PLANS:

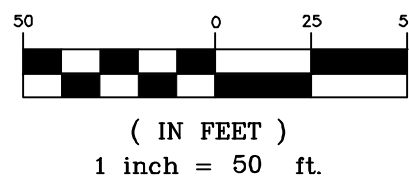
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING THIS WORK. IN CASE OF ANY DISCREPANCIES, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY AND WORK SHALL NOT COMMENCE WITHOUT APPROVAL FROM THE ARCHITECT.
- WRITTEN DIMENSIONS OF DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE GENERAL CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE BUILDING SITE, AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
- GC AND LIGHTING CONTRACTOR TO ENSURE SITE LIGHTING FIXTURE HEADS HAVE THE CORRECT ORIENTATION. REFER TO PHOTOMETRIC DRAWINGS FOR HEAD PLACEMENT.
- GC TO COORDINATE SITE SECURITY LAYOUT AND CONDUIT SIZE & LOCATION WITH THE OWNER.
- GC TO ENSURE PAVING AT ALL EXITS SHALL NOT EXCEED A 2% MAX SLOPE IN ALL DIRECTIONS.
- PAVING SHALL BE LOWER THAN THE BUILDING SLAB BY THE FOLLOWING AMOUNTS UNO:
 - 1/2" @ ALL EXIT DOORS
 - 1/2" @ ALL SHOWROOM GLAZING LOCATIONS
 - 1 1/2" @ OVERHEAD DOORS
 - 1 1/2" @PRE-FAB METAL WALL PANELS

NOTICE TO CONTRACTORS

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 260-1990 (OR DIAL 811 LOCALLY), FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.



GRAPHIC SCALE



	ANDRETTI'S RACING ALBUQUERQUE, NM	DRAWN BY JL
	SITE PLAN FOR BUILDING PERMIT	DATE 6-08-22
		DRAWING
		SHEET # SP-1
		JOB # 2022011

Andretti Racing - ABQ, NM
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		ENTER	EXIT	ENTER	EXIT
Units					
Multipurpose Recreational Facility (435)	96.07	-	-	189	155
1,000 S.F.					

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

$$T = \frac{0}{50\%} (X) + \frac{0}{50\%} \text{ Exit}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

$$T = \frac{0}{50\%} (X) + \frac{0}{50\%} \text{ Exit}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

$$T = \frac{3.58}{55\%} (X) + \frac{0}{45\%} \text{ Exit}$$

Comments:

Andretti Kart Racing not open for business until 10:00 AM.

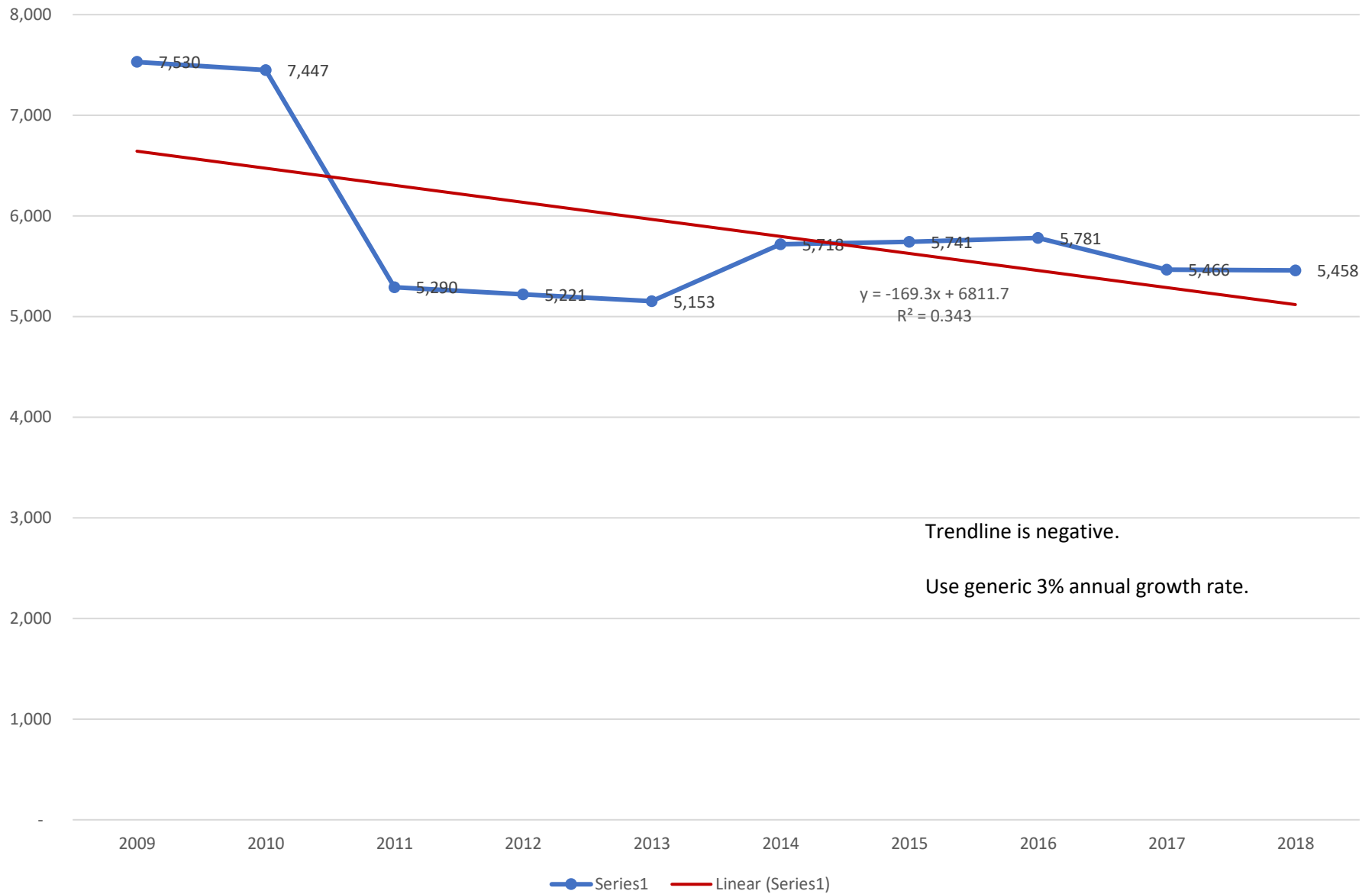
Based on ITE Trip Generation Manual - 11th Edition

Historic Growth Data Table
Andretti Kart Racing
Desert Surf Circle North / Alexander Blvd.

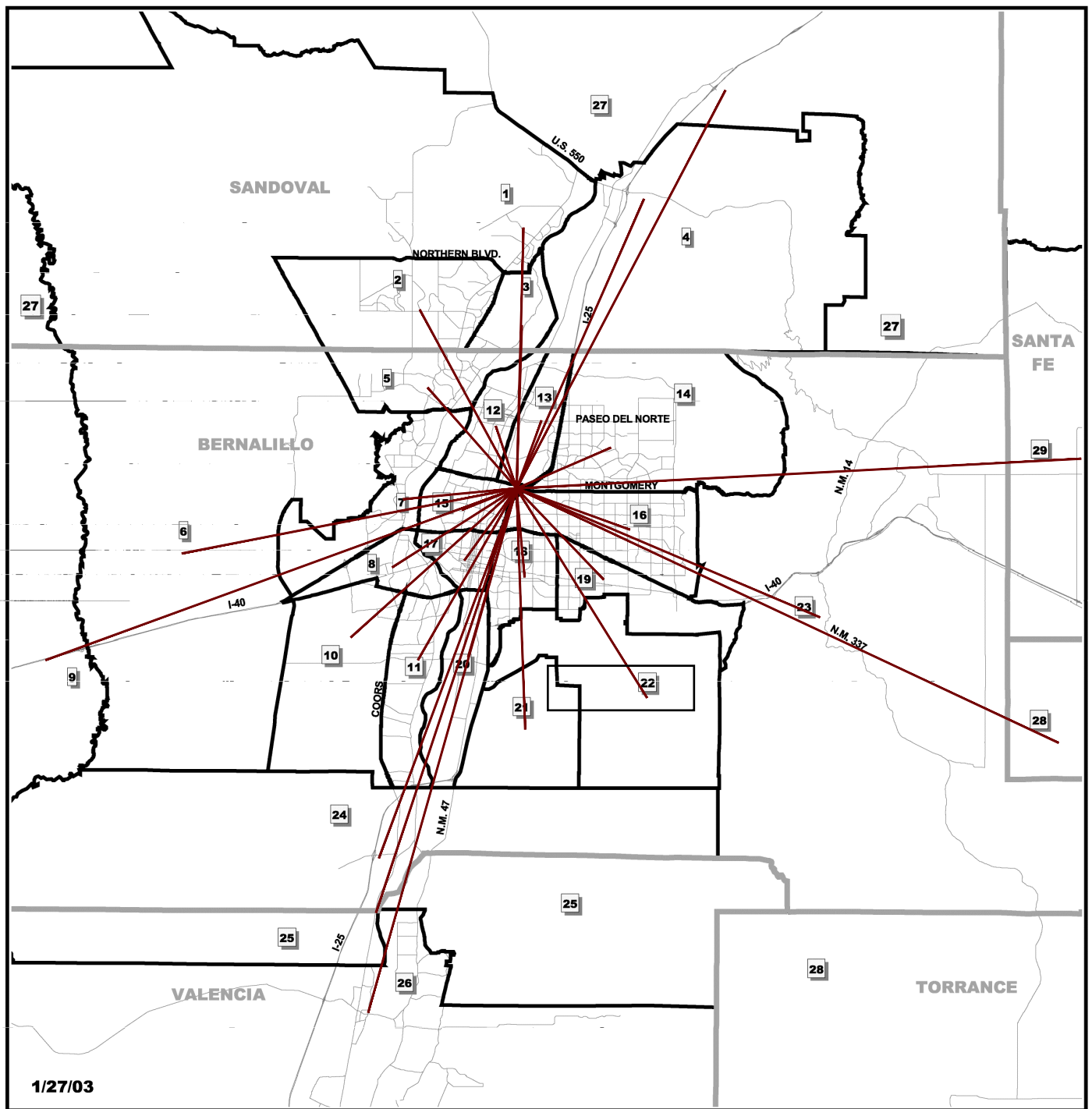
Traffic Flows (AWDT) from Mid-Region Council of Governments

COG ID	Location												
Intersection #1:	ALEXANDER BLVD. NORTH OF RENAISSANCE												
Street:	From:	To:	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
21111 ALEXANDER	NORTH OF RENAISSANCE (S	SOUTH OF RENAISSANCE (N	7,530	7,447	5,290	5,221	5,153	5,718	5,741	5,781	5,466	5,458	

HISTORIC TRAFFIC FLOW ON ALEXANDER BLVD. SOUTH OF RENAISSANCE BLVD.



Trip Distribution / Trip Assignments



X=3.8061
Y=7.2746

22 Subarea Identification Number

Figure 6

Subareas of the MRCOG Region



**Mid-Region
Council of Governments**
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Subarea boundaries extend to county boundary where full extent of subarea not shown except for Subarea 29 which only includes southern Santa Fe County.

**Andretti Kart Racing
(Desert Surf Rd. / Alexander Blvd.)
Trip Distribution Subarea Map**

Trip Distribution Table

Andretti Kart Racing (Desert Surf Cr. / Alexander Blvd.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Office / Warehouse Development Trips**

2016 and 2040 Data Taken from Mid-Region Council of Governments' 2040 Data Set

Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

Sub Area I.D.#	% Sub Area in Study							% Employment / Distance	AN Alexander Blvd. North			(DSN) Desert Surf Cr. North			(DSS) Desert Surf Cr. South		
		2016 Employment	2040 Employment	Interpolated Employment for the Year 2023	Employment in Study	Dist. (Mi.)	Employment / Distance		% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
		2016	2040														
1	100%	44,711	62,255	49,828	49,828	11.1	4,489	3.02%	5%	0.15%	224	0%	0.00%	0	0%	0.00%	0
2	100%	54,828	62,222	56,985	56,985	8.7	6,550	4.41%	5%	0.22%	327	0%	0.00%	0	0%	0.00%	0
3	100%	8,510	10,377	9,055	9,055	7	1,294	0.87%	5%	0.04%	65	0%	0.00%	0	0%	0.00%	0
4	100%	13,817	17,784	14,974	14,974	13.5	1,109	0.75%	5%	0.04%	55	0%	0.00%	0	0%	0.00%	0
5	100%	59,285	58,890	59,170	59,170	5.7	10,381	6.98%	5%	0.35%	519	0%	0.00%	0	0%	0.00%	0
6	100%	5,988	9,663	7,060	7,060	14.6	484	0.33%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7	100%	59,485	71,484	62,985	62,985	4.9	12,854	8.64%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
8	100%	31,699	34,678	32,568	32,568	6.3	5,170	3.48%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
9	100%	2,158	3,112	2,436	2,436	21.4	114	0.08%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
10	100%	64,323	61,537	63,510	63,510	9.5	6,685	4.50%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
11	100%	33,210	40,174	35,241	35,241	8.5	4,146	2.79%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
12	100%	15,936	22,087	17,730	17,730	2.8	6,332	4.26%	5%	0.21%	317	0%	0.00%	0	0%	0.00%	0
13	100%	9,888	12,530	10,659	10,659	3.1	3,438	2.31%	5%	0.12%	172	0%	0.00%	0	0%	0.00%	0
14	100%	73,684	84,299	76,780	76,780	4.4	17,450	11.74%	5%	0.59%	873	0%	0.00%	0	0%	0.00%	0
15*	100%	24,829	33,670	27,408	27,408	2.5	10,963	7.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
16	100%	82,412	94,137	85,832	85,832	5.2	16,506	11.10%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
17	100%	22,270	37,540	26,724	26,724	3.8	7,033	4.73%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
18	100%	41,643	56,762	46,053	46,053	3.8	12,119	8.15%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
19	100%	65,540	81,066	70,068	70,068	5.4	12,976	8.73%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
20	100%	9,636	10,794	9,974	9,974	7.5	1,330	0.89%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
21	100%	559	17,783	5,583	5,583	10.3	542	0.36%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
22	100%	3,511	3,820	3,601	3,601	10.5	343	0.23%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
23	100%	19,163	27,184	21,502	21,502	14.1	1,525	1.03%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
24	100%	2,531	3,352	2,770	2,770	16.9	164	0.11%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
25	100%	863	1,161	950	950	19.1	50	0.03%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
26	100%	56,155	59,697	57,188	57,188	23.3	2,454	1.65%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
27	100%	19,926	24,499	21,260	21,260	19.2	1,107	0.74%	5%	0.04%	55	0%	0.00%	0	0%	0.00%	0
28	100%	15,662	18,407	16,463	16,463	25.6	643	0.43%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
29	100%	10,397	11,564	10,737	10,737	24.2	444	0.30%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
		852,619	1,032,528	905,092	905,092		148,693	100.00%		1.75%	2,608		0.00%	0		0.00%	0
											1.75%			0.00%			0.00%

* - Subarea in which the site is located.

Trip Distribution Table

Andretti Kart Racing (Desert Surf Cr. / Alexander Blvd.)

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Office / Warehouse Development Trips**

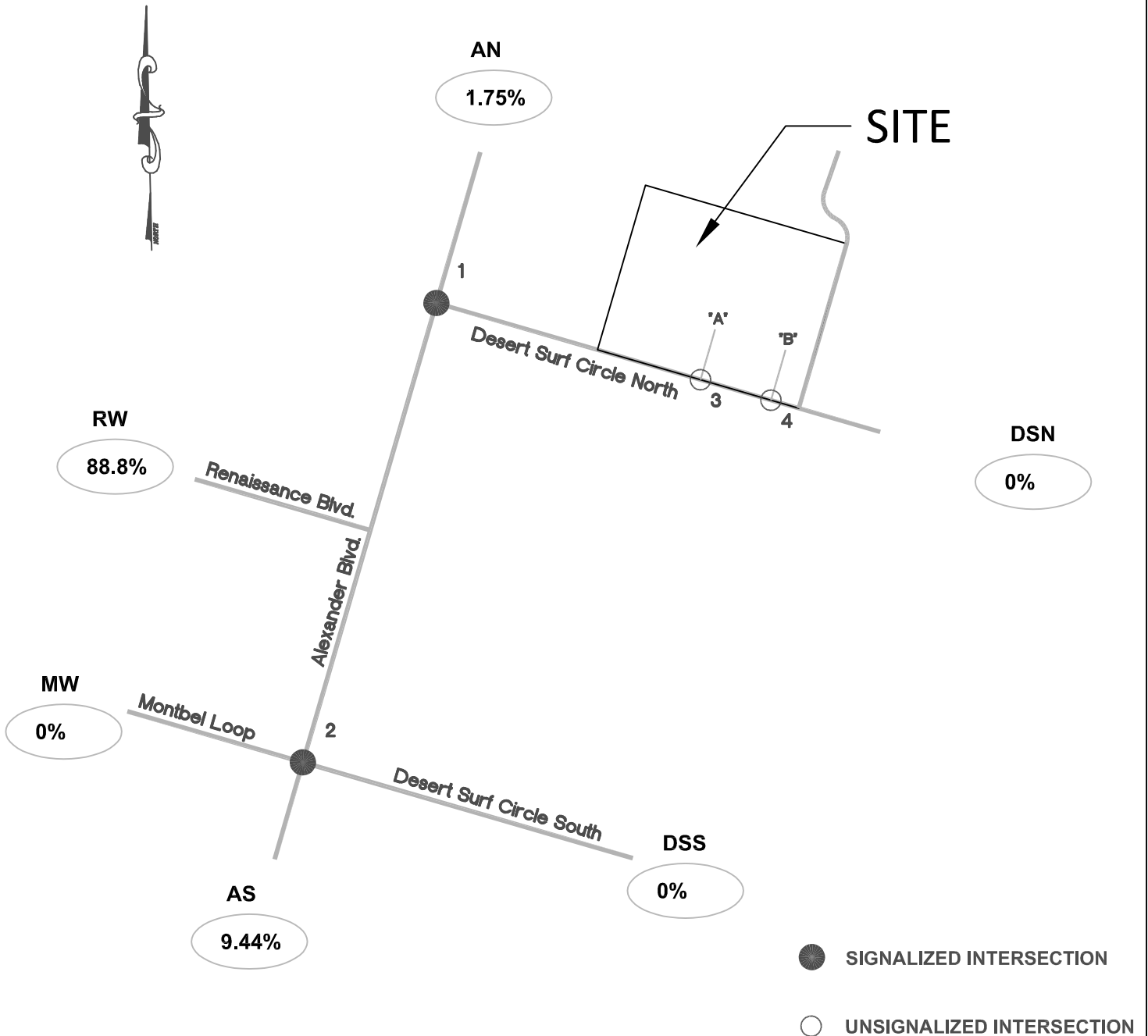
2016 and 2040 Data Taken from Mid-Region Council of Governments' 2040 Data Set

Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

Sub Area I.D.#	% Sub Area in Study			Interpolated Employment for the Year 2023	Employment in Study	Dist. (Mi.)	Employment / Distance	% Employment / Distance	(AS) Alexander Blvd. South			(MW) Montbel Loop West			(RW) Renaissance Blvd. West		
		2016 Employment	2040 Employment						% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
		2016	2040														
1	100%	44,711	62,255	49,828	49,828	11.1	4,489	3.02%	0%	0.00%	0	0%	0.00%	0	95%	2.87%	4,265
2	100%	54,828	62,222	56,985	56,985	8.7	6,550	4.41%	0%	0.00%	0	0%	0.00%	0	95%	4.18%	6,222
3	100%	8,510	10,377	9,055	9,055	7	1,294	0.87%	0%	0.00%	0	0%	0.00%	0	95%	0.83%	1,229
4	100%	13,817	17,784	14,974	14,974	13.5	1,109	0.75%	0%	0.00%	0	0%	0.00%	0	95%	0.71%	1,054
5	100%	59,285	58,890	59,170	59,170	5.7	10,381	6.98%	0%	0.00%	0	0%	0.00%	0	95%	6.63%	9,862
6	100%	5,988	9,663	7,060	7,060	14.6	484	0.33%	10%	0.03%	48	0%	0.00%	0	90%	0.29%	435
7	100%	59,485	71,484	62,985	62,985	4.9	12,854	8.64%	10%	0.86%	1,285	0%	0.00%	0	90%	7.78%	11,569
8	100%	31,699	34,678	32,568	32,568	6.3	5,170	3.48%	10%	0.35%	517	0%	0.00%	0	90%	3.13%	4,653
9	100%	2,158	3,112	2,436	2,436	21.4	114	0.08%	10%	0.01%	11	0%	0.00%	0	90%	0.07%	102
10	100%	64,323	61,537	63,510	63,510	9.5	6,685	4.50%	10%	0.45%	669	0%	0.00%	0	90%	4.05%	6,017
11	100%	33,210	40,174	35,241	35,241	8.5	4,146	2.79%	10%	0.28%	415	0%	0.00%	0	90%	2.51%	3,731
12	100%	15,936	22,087	17,730	17,730	2.8	6,332	4.26%	0%	0.00%	0	0%	0.00%	0	95%	4.05%	6,016
13	100%	9,888	12,530	10,659	10,659	3.1	3,438	2.31%	0%	0.00%	0	0%	0.00%	0	95%	2.20%	3,266
14	100%	73,684	84,299	76,780	76,780	4.4	17,450	11.74%	0%	0.00%	0	0%	0.00%	0	95%	11.15%	16,578
15*	100%	24,829	33,670	27,408	27,408	2.5	10,963	7.37%	50%	3.69%	5,482	0%	0.00%	0	50%	3.69%	5,482
16	100%	82,412	94,137	85,832	85,832	5.2	16,506	11.10%	10%	1.11%	1,651	0%	0.00%	0	90%	9.99%	14,856
17	100%	22,270	37,540	26,724	26,724	3.8	7,033	4.73%	10%	0.47%	703	0%	0.00%	0	90%	4.26%	6,329
18	100%	41,643	56,762	46,053	46,053	3.8	12,119	8.15%	10%	0.82%	1,212	0%	0.00%	0	90%	7.34%	10,907
19	100%	65,540	81,066	70,068	70,068	5.4	12,976	8.73%	10%	0.87%	1,298	0%	0.00%	0	90%	7.85%	11,678
20	100%	9,636	10,794	9,974	9,974	7.5	1,330	0.89%	10%	0.09%	133	0%	0.00%	0	90%	0.80%	1,197
21	100%	559	17,783	5,583	5,583	10.3	542	0.36%	10%	0.04%	54	0%	0.00%	0	90%	0.33%	488
22	100%	3,511	3,820	3,601	3,601	10.5	343	0.23%	10%	0.02%	34	0%	0.00%	0	90%	0.21%	309
23	100%	19,163	27,184	21,502	21,502	14.1	1,525	1.03%	10%	0.10%	152	0%	0.00%	0	90%	0.92%	1,372
24	100%	2,531	3,352	2,770	2,770	16.9	164	0.11%	10%	0.01%	16	0%	0.00%	0	90%	0.10%	148
25	100%	863	1,161	950	950	19.1	50	0.03%	10%	0.00%	5	0%	0.00%	0	90%	0.03%	45
26	100%	56,155	59,697	57,188	57,188	23.3	2,454	1.65%	10%	0.17%	245	0%	0.00%	0	90%	1.49%	2,209
27	100%	19,926	24,499	21,260	21,260	19.2	1,107	0.74%	0%	0.00%	0	0%	0.00%	0	95%	0.71%	1,052
28	100%	15,662	18,407	16,463	16,463	25.6	643	0.43%	10%	0.04%	64	0%	0.00%	0	90%	0.39%	579
29	100%	10,397	11,564	10,737	10,737	24.2	444	0.30%	10%	0.03%	44	0%	0.00%	0	90%	0.27%	399
		852,619	1,032,528	905,092	905,092		148,693	100.00%		9.44%	14,040 9.44%		0.00%	0 0.00%		88.80%	132,046 88.80%

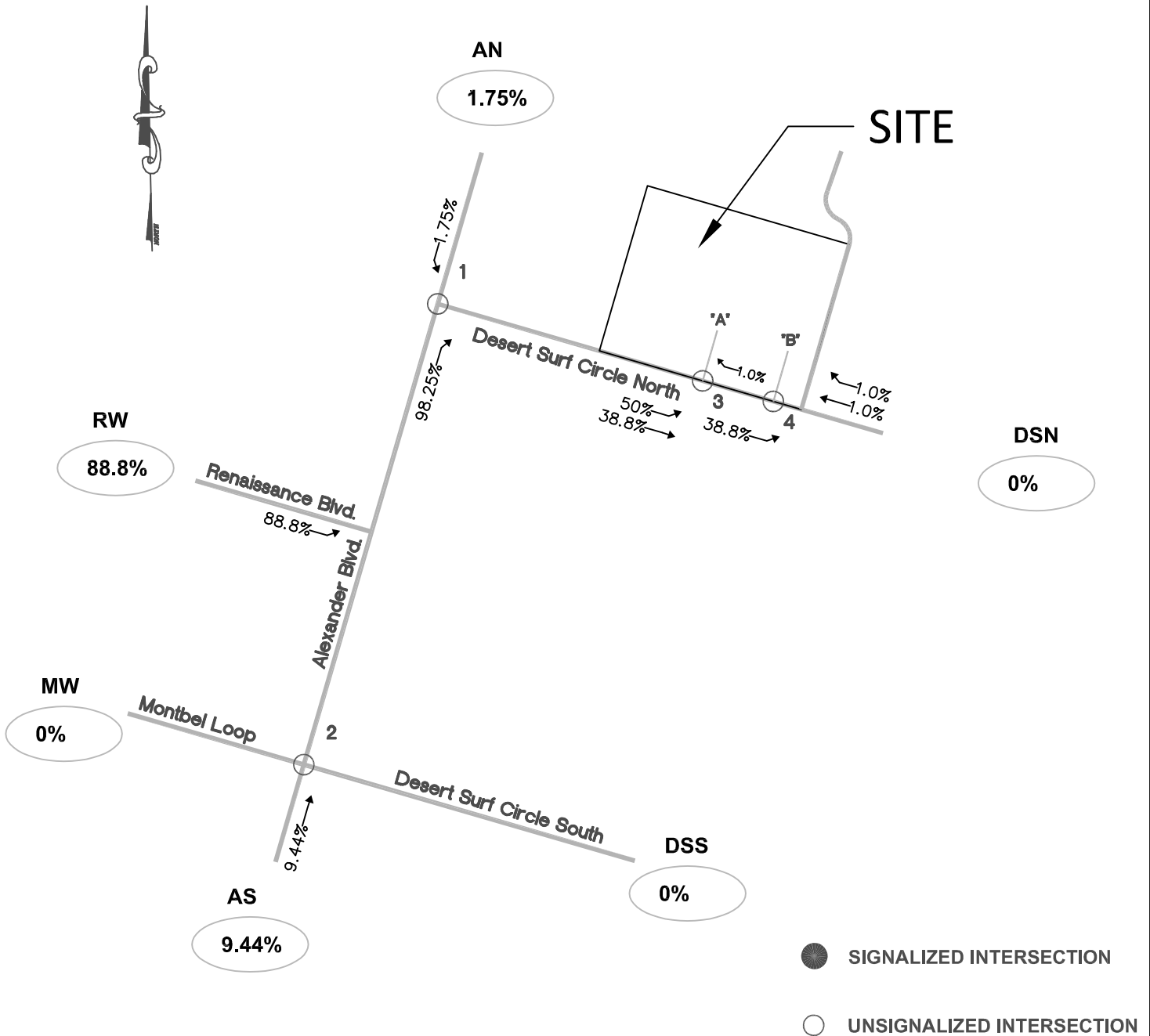
* - Subarea in which the site is located.

Andretti Kart Racing
(Desert Surf Circle / Alexander Blvd.)
Trip Distribution Map (%)



Tierra West, LLC
5571 Midway Park Pl. NE
Albuquerque, NM 87109
(505) 858-3100 (Voice)

Andretti Kart Racing
(Desert Surf Circle / Alexander Blvd.)
Trip Assignments (% Entering)

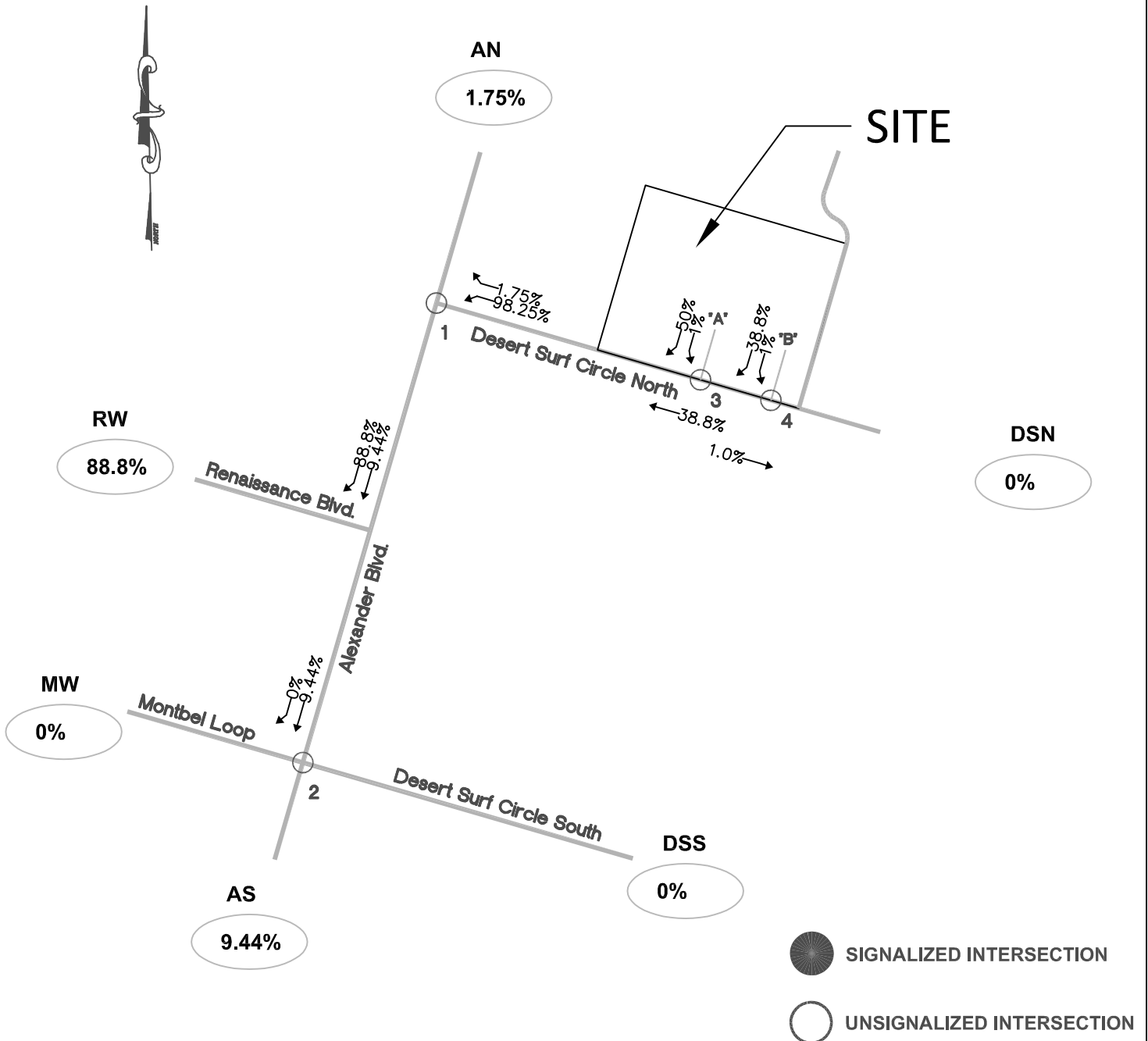


Tierra West, LLC
5571 Midway Park Pl. NE
Albuquerque, NM 87109
(505) 858-3100 (Voice)

Andretti Kart Racing

(Desert Surf Circle / Alexander Blvd.)

Trip Assignments (% Exiting)



Tierra West, LLC
 5571 Midway Park Pl. NE
 Albuquerque, NM 87109
 (505) 858-3100 (Voice)

Turning Movements Volumes

Andretti Kart Racing Facility (Desert Surf / Alexander Blvd.)

Projected Turning Movements SUMMARY PROPOSED DEVELOPMENT (2023) - 100% Development

INTERSECTION: Summary

<u>Desert Surf N. / Alexander Blvd.</u>			1.00	1.00			1.00			1.00			PHF
(1)													
PM Peak Existing (2022) 2023 (NO BUILD - P.M.) 2023 (BUILD - P.M.)													

<u>Desert Surf S. / Alexander Blvd.</u>				1.00				1.00				1.00				1.00				PHF																																
(2)					Eastbound (Desert Surf S.)				Westbound (Desert Surf S.)				Northbound (Alexander Blvd.)				Southbound (Alexander Blvd.)																																			
	PM Peak				Left				Thru				Right				Left				Thru				Right																											
	Existing (2022)				16				0				28				24				0				64				4				436				8				8				416				36			
	2023 (NO BUILD - P.M.)				16				0				29				25				0				66				4				449				8				8				428				37			
	2023 (BUILD - P.M.)				16				0				29				25				0				66				4				467				8				8				442				37			

<u>Desert Surf N. / Driveway "A"</u>			1.00	1.00	1.00	1.00	PHF					
(3)												
PM Peak Existing (2022) 2023 (NO BUILD - P.M.) 2023 (BUILD - P.M.)	Eastbound (Desert Surf N.)			Westbound (Desert Surf N.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
	0	0	0	0	0	0	0	0	0	0	0	0
	0	37	0	0	58	0	0	0	0	0	0	0
	95	110	0	0	117	0	0	0	0	2	0	77

<u>Desert Surf N. / Driveway "B"</u>		1.00			1.00			1.00			1.00			PHF
(4)		Eastbound (Desert Surf N.)			Westbound (Desert Surf N.)			Northbound (Driveway "B")			Southbound (Driveway "B")			
	PM Peak	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	Existing (2022)	0	0	0	0	0	0	0	0	0	0	0	0	0
	2023 (NO BUILD - P.M.)	0	37	0	0	58	0	0	0	0	0	0	0	0
	2023 (BUILD - P.M.)	73	39	0	0	60	2	0	0	0	2	0	59	

Andretti Kart Racing Facility (Desert Surf / Alexander Blvd.)

Projected Turning Movements Worksheet

Desert Surf N. / Alexander Blvd.**INTERSECTION :**E-W Street: **Desert Surf N.**

(1)

N-S Street: **Alexander Blvd.**

Year of Existing Counts

2022

Horizon Year

2023

Growth Rates

3.00%

3.00%

3.00%

3.00%

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Andretti Trips Generated(Entering)

Percent Andretti Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Desert Surf N.)			Westbound (Desert Surf N.)			Northbound (Alexander Blvd.)			Southbound (Alexander Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4	8	28	36	0	20	8	308	24	4	380	8
0	0	1	1	0	1	0	9	1	0	11	0
4	8	29	37	0	21	8	317	25	4	391	8
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	98.25%	1.75%	0.00%	0.00%
0.00%	0.00%	0.00%	98.25%	0.00%	1.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0	0	0	150	0	3	0	0	186	3	0	0
4	8	29	187	0	24	8	317	211	7	391	8

Number of Office Trips Generated

Entering Exiting

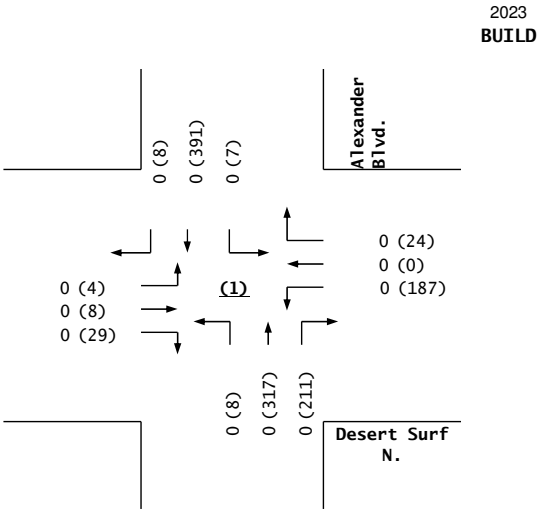
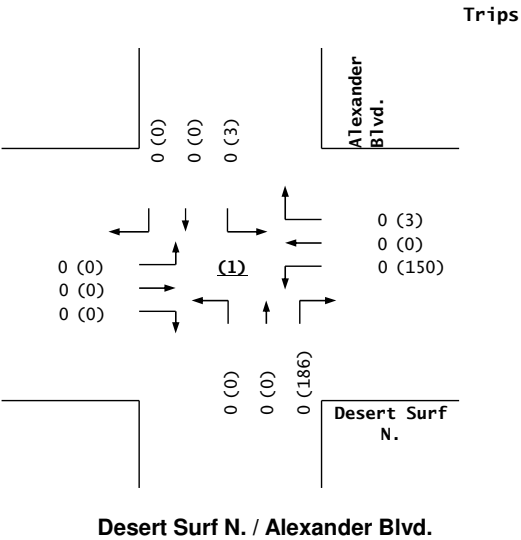
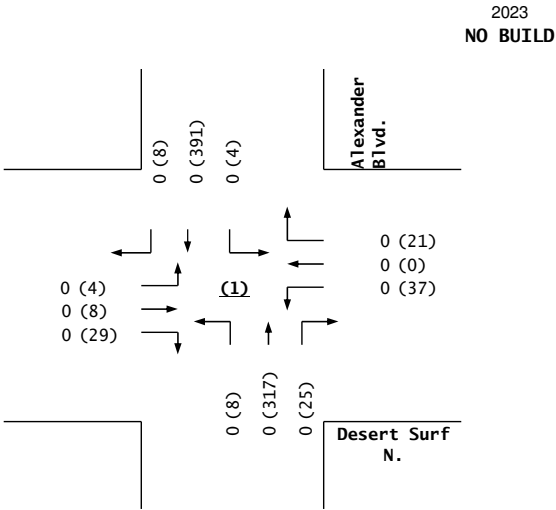
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A.M.

100% Andretti Development

189 153

P.M.



Andretti Kart Racing Facility (Desert Surf / Alexander Blvd.)

Projected Turning Movements Worksheet

Desert Surf S. / Alexander Blvd.**INTERSECTION :**E-W Street: **Desert Surf S.**

(2)

N-S Street: **Alexander Blvd.**

Year of Existing Counts

2022

Horizon Year

2023

Growth Rates

3.00%

3.00%

3.00%

3.00%

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Andretti Trips Generated(Entering)

Percent Andretti Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Desert Surf S.)			Westbound (Desert Surf S.)			Northbound (Alexander Blvd.)			Southbound (Alexander Blvd.)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
16	0	28	24	0	64	4	436	8	8	416	36
0	0	1	1	0	2	0	13	0	0	12	1
16	0	29	25	0	66	4	449	8	8	428	37
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.44%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.44%	0.00%
0	0	0	0	0	0	0	18	0	0	14	0
16	0	29	25	0	66	4	467	8	8	442	37

Number of Office Trips Generated

Entering

Exiting

0

0

A.M.

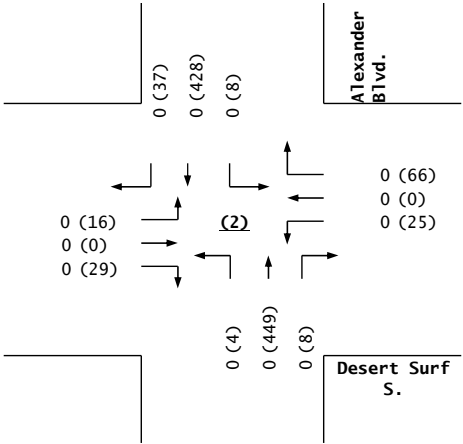
100% Andretti Development

189

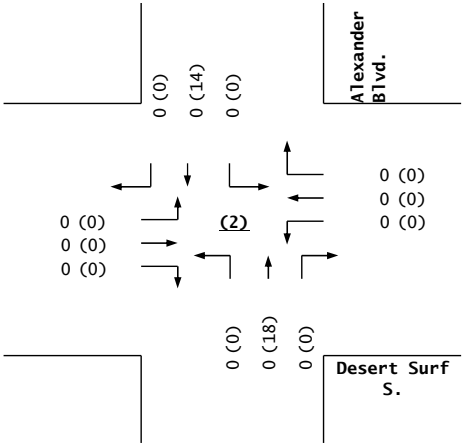
153

P.M.

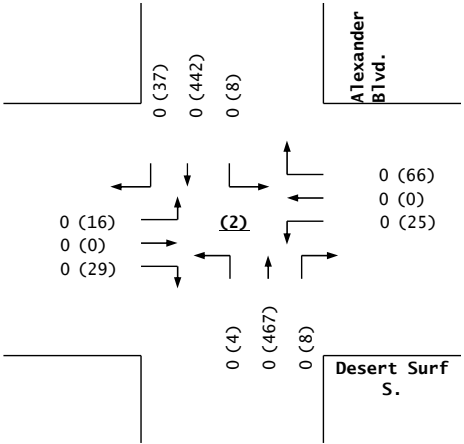
2023
NO BUILD



Trips



2023
BUILD



Andretti Kart Racing Facility (Desert Surf / Alexander Blvd.)

Projected Turning Movements Worksheet

Desert Surf N. / Driveway "A"**INTERSECTION :**E-W Street: **Desert Surf N.**

(3)

N-S Street: **Driveway "A"**

Year of Existing Counts

2022

Horizon Year

2023

Growth Rates

3.00%

3.00%

3.00%

3.00%

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Andretti Trips Generated(Entering)

Percent Andretti Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Desert Surf N.)			Westbound (Desert Surf N.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	37	0	0	58	0	0	0	0	0	0	0
50.00%	38.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	38.80%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	50.00%
95	73	0	0	59	0	0	0	0	2	0	77
95	110	0	0	117	0	0	0	0	2	0	77

Number of Office Trips Generated

Entering

Exiting

0

0

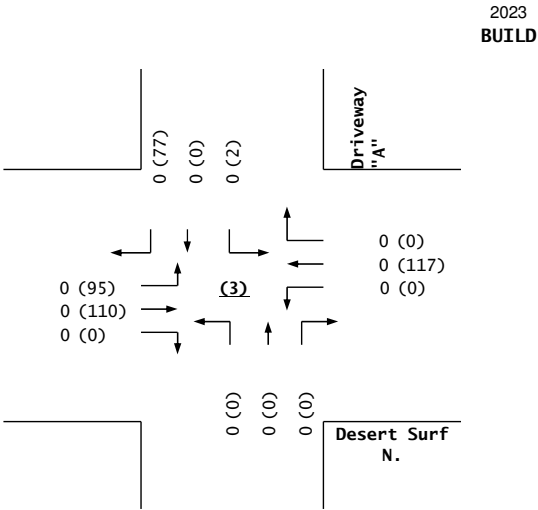
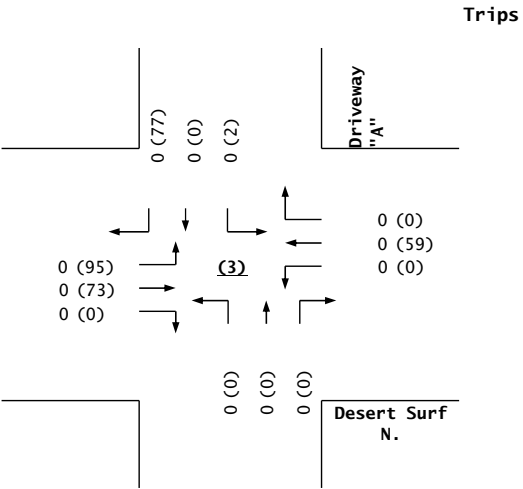
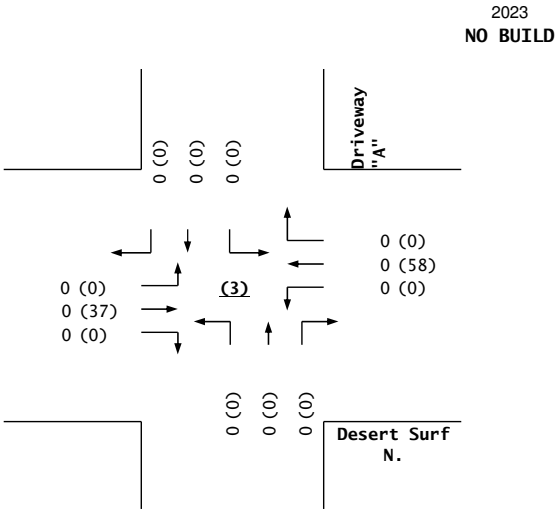
A.M.

100% Andretti Development

189

153

P.M.



Desert Surf N. / Driveway "A"

Andretti Kart Racing Facility (Desert Surf / Alexander Blvd.)

Projected Turning Movements Worksheet

Desert Surf N. / Driveway "B"**INTERSECTION :**E-W Street: **Desert Surf N.**

(4)

N-S Street: **Driveway "B"**

Year of Existing Counts

2022

Horizon Year

2023

Growth Rates

3.00%

3.00%

3.00%

3.00%

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Andretti Trips Generated(Entering)

Percent Andretti Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Desert Surf N.)			Westbound (Desert Surf N.)			Northbound (Driveway "B")			Southbound (Driveway "B")		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	37	0	0	58	0	0	0	0	0	0	0
38.80%	0.00%	0.00%	0.00%	1.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	38.80%
73	2	0	0	2	2	0	0	0	2	0	59
73	39	0	0	60	2	0	0	0	2	0	59

Number of Office Trips Generated

Entering

Exiting

0

0

A.M.

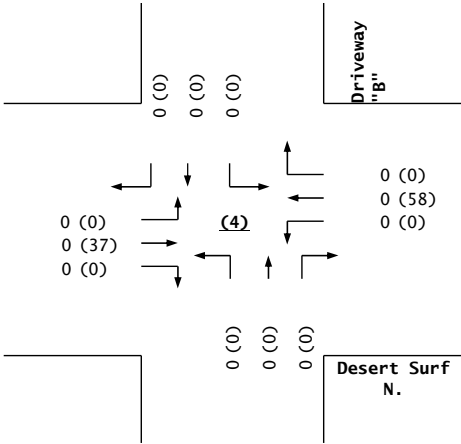
100% Andretti Development

189

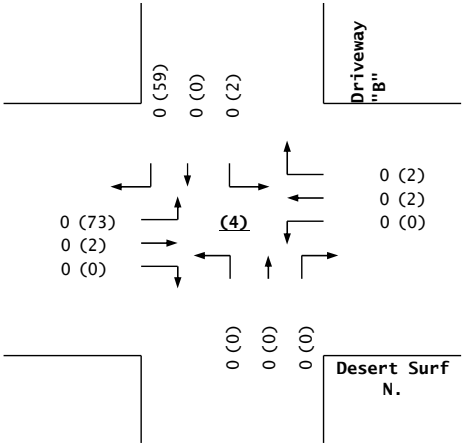
153

P.M.

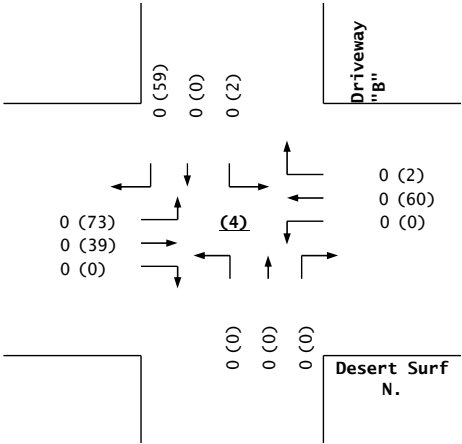
2023
NO BUILD



Trips



2023
BUILD



Desert Surf N. / Driveway "B"

HCM 6 Analysis

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	4	8	29	37	0	21	8	317	25	4	391	8
Future Vol, veh/h	4	8	29	37	0	21	8	317	25	4	391	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	8	29	37	0	21	8	317	25	4	391	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	578	761	200	554	753	171	399	0	0	342	0	0
Stage 1	403	403	-	346	346	-	-	-	-	-	-	-
Stage 2	175	358	-	208	407	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	399	334	808	415	337	843	1156	-	-	1214	-	-
Stage 1	595	598	-	643	634	-	-	-	-	-	-	-
Stage 2	810	626	-	775	596	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	386	331	808	391	334	843	1156	-	-	1214	-	-
Mov Cap-2 Maneuver	475	428	-	487	429	-	-	-	-	-	-	-
Stage 1	591	596	-	638	630	-	-	-	-	-	-	-
Stage 2	784	622	-	735	594	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.9		12		0.2		0.1	
HCM LOS	B		B					








Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1156	-	-	651	575	1214	-
HCM Lane V/C Ratio	0.007	-	-	0.063	0.101	0.003	-
HCM Control Delay (s)	8.1	-	-	10.9	12	8	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0	-

Intersection												
Int Delay, s/veh	3.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	
Traffic Vol, veh/h	4	8	29	187	0	24	8	317	211	7	391	8
Future Vol, veh/h	4	8	29	187	0	24	8	317	211	7	391	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	8	29	187	0	24	8	317	211	7	391	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	584	953	200	653	852	264	399	0	0	528	0	0
Stage 1	409	409	-	439	439	-	-	-	-	-	-	-
Stage 2	175	544	-	214	413	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	395	258	808	352	295	734	1156	-	-	1035	-	-
Stage 1	590	594	-	567	576	-	-	-	-	-	-	-
Stage 2	810	517	-	768	592	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	378	254	808	330	291	734	1156	-	-	1035	-	-
Mov Cap-2 Maneuver	469	363	-	434	396	-	-	-	-	-	-	-
Stage 1	586	590	-	563	572	-	-	-	-	-	-	-
Stage 2	778	513	-	725	588	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.3		19.6		0.1		0.1	
HCM LOS	B		C					








Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1156	-	-	617 455	1035	-	-
HCM Lane V/C Ratio	0.007	-	-	0.066 0.464	0.007	-	-
HCM Control Delay (s)	8.1	-	-	11.3 19.6	8.5	-	-
HCM Lane LOS	A	-	-	B C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2 2.4	0	-	-

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	29	25	0	66	4	449	8	8	428	37
Future Vol, veh/h	16	0	29	25	0	66	4	449	8	8	428	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	29	25	0	66	4	449	8	8	428	37

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	696	928	233	691	942	229	465	0	0	457	0	0
Stage 1	463	463	-	461	461	-	-	-	-	-	-	-
Stage 2	233	465	-	230	481	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	328	266	769	331	261	774	1093	-	-	1100	-	-
Stage 1	548	562	-	550	564	-	-	-	-	-	-	-
Stage 2	749	561	-	752	552	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	297	263	769	316	258	774	1093	-	-	1100	-	-
Mov Cap-2 Maneuver	408	373	-	422	370	-	-	-	-	-	-	-
Stage 1	546	558	-	548	562	-	-	-	-	-	-	-
Stage 2	683	559	-	718	548	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.4		11.7		0.1		0.1	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1093	-	-	408	769	630	1100	-	-
HCM Lane V/C Ratio	0.004	-	-	0.039	0.038	0.144	0.007	-	-
HCM Control Delay (s)	8.3	-	-	14.2	9.9	11.7	8.3	-	-
HCM Lane LOS	A	-	-	B	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.5	0	-	-

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	29	25	0	66	4	467	8	8	442	37
Future Vol, veh/h	16	0	29	25	0	66	4	467	8	8	442	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	29	25	0	66	4	467	8	8	442	37




Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	719	960	240	716	974	238	479	0	0	475	0	0
Stage 1	477	477	-	479	479	-	-	-	-	-	-	-
Stage 2	242	483	-	237	495	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	316	255	761	317	250	763	1080	-	-	1083	-	-
Stage 1	538	554	-	537	553	-	-	-	-	-	-	-
Stage 2	740	551	-	745	544	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	286	252	761	302	247	763	1080	-	-	1083	-	-
Mov Cap-2 Maneuver	399	364	-	411	361	-	-	-	-	-	-	-
Stage 1	536	550	-	535	551	-	-	-	-	-	-	-
Stage 2	673	549	-	711	540	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.5		11.8		0.1		0.1	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1080	-	-	399	761	618	1083	-	-
HCM Lane V/C Ratio	0.004	-	-	0.04	0.038	0.147	0.007	-	-
HCM Control Delay (s)	8.3	-	-	14.4	9.9	11.8	8.3	-	-
HCM Lane LOS	A	-	-	B	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.5	0	-	-




HCM 6th TWSC
3: Desert Surf Circle North & Driveway "A"

Tierra West, LLC
09/14/2022

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	95	110	117	1	2	77
Future Vol, veh/h	95	110	117	1	2	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	110	117	1	2	77
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	118	0	-	0	418	118
Stage 1	-	-	-	-	118	-
Stage 2	-	-	-	-	300	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1470	-	-	-	591	934
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	752	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1470	-	-	-	550	934
Mov Cap-2 Maneuver	-	-	-	-	550	-
Stage 1	-	-	-	-	844	-
Stage 2	-	-	-	-	752	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.5	0		9.3		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1470	-	-	-	918	
HCM Lane V/C Ratio	0.065	-	-	-	0.086	
HCM Control Delay (s)	7.6	0	-	-	9.3	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3	

HCM 6th TWSC
4: Desert Surf Circle North & Driveway "B"

Tierra West, LLC
09/14/2022

Intersection						
Int Delay, s/veh	4.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	73	39	60	2	2	59
Future Vol, veh/h	73	39	60	2	2	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	73	39	60	2	2	59
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	62	0	-	0	246	61
Stage 1	-	-	-	-	61	-
Stage 2	-	-	-	-	185	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1541	-	-	-	742	1004
Stage 1	-	-	-	-	962	-
Stage 2	-	-	-	-	847	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1541	-	-	-	706	1004
Mov Cap-2 Maneuver	-	-	-	-	706	-
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	847	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.9	0		8.9		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1541	-	-	-	990	
HCM Lane V/C Ratio	0.047	-	-	-	0.062	
HCM Control Delay (s)	7.5	0	-	-	8.9	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	

Safety Analysis

Andretti Kart Racing Crash Map



Montano Rd.

No crashes at Intersection 1
(Desert Surf Circle North /
Alexander Blvd.)

Andretti

Alexander Blvd.

Desert Surf Circle
North

Desert Surf Circle
South

I-25

Andretti Kart Racing
(Desert Surf / Alexander)

Note: No crashes were recorded for Intersection #1 (Desert Surf Circle North / Alexander Blvd.
for 2017, 2018, abd 2019)

CRASH REPORT NUMBER	CRASH DATE	HOUR OF CRASH	PRIMARY STREET	SECONDARY STREET	LANDMARK	CRASH DIRECTION	DIRECTION FROM INTERSECTION OR LANDMARK	DISTANCE FROM LANDMARK	DISTANCE FROM LANDMARK MEASUREMENT UNIT	NUMBER OF PEOPLE KILLED IN CRASH	NUMBER OF PEOPLE INJURED (CLASS A+B+C) IN CRASH	CRASH SEVERITY	CRASH CLASSIFICATION	CRASH ANALYSIS	HIGHEST CONTRIBUTING FACTOR TO CRASH	WEATHER	LIGHTING	ALCOHOL INVOLVEMENT	DRUG INVOLVEMENT
23436440	12/14/2017	5 a.m.	DESERT SURF	ALEXANDER NE		E				0	0	Property Damage Only Crash	Other Vehicle	Left Blank	Missing Data	Left Blank	Left Blank	Not Involved	Not Involved
710460240	2/27/2018	9 a.m.	MONTBEL NE	ALEXANDER BLVD NE		E				0	0	Property Damage Only Crash	Other Vehicle	Other Vehicle - From Same Direction/Sideswipe Collision	Drove Left Of Center	Clear	Daylight	Not Involved	Not Involved
23480495	5/20/2019	5 p.m.	MONTBEL LP NE	ALEXANDER BLVD NE						0	0	Property Damage Only Crash	Other Vehicle	Left Blank	Excessive Speed	Raining	Daylight	Not Involved	Not Involved
710551295	5/20/2019	6 p.m.	ALEXANDER BLVD NE	MONTBEL NE		S	S			0	1	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Driver Inattention	Raining	Daylight	Not Involved	Not Involved

3 PDO
1 Injury

Intersection #2
(Desert Surf South / Alexander Blvd.)

Andretti Kart Racing
(Desert Surf / Alexander)

CRASH REPORT NUMBER	CRASH DATE	PRIMARY STREET	SECONDARY STREET	LANDMARK	GIS-DERIVED ROUTE NAME	CRASH DIRECTION	NUMBER OF PEOPLE KILLED IN CRASH	NUMBER OF PEOPLE INJURED (CLASS A+B+C) IN CRASH	CRASH SEVERITY	CRASH CLASSIFICATION	CRASH ANALYSIS	HIGHEST CONTRIBUTING FACTOR TO CRASH	WEATHER	LIGHTING	ALCOHOL INVOLVEMENT	DRUG INVOLVEMENT
710537553	2/27/2018	ALEXANDER BLVD NE	SO RENAISSANCE			S	0	2	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Failed to Yield Right of Way	Clear	Daylight	Not Involved	Not Involved
710560849	3/7/2019	ALEXANDER BLVD NE	ALEXANDER BLVD NE			N	0	2	Injury Crash	Other Vehicle	Other Vehicle - One Left Turn/Entering At Angle	Driver Inattention	Clear	Daylight	Not Involved	Not Involved

0 PDF
2 Injury

Traffic Counts

Traffic Count Data Sheet

Year Counts Taken: **2022**E-W Street **Desert Surf N.**
N-S Street: **Alexander Blvd.**

Signalized

Speed Limit (Desert Surf N.)= **25**
Speed Limit (Alexander Blvd.)= **25**
8/11/22

Begin Time	End Time	Eastbound (Desert Surf N.)			Westbound (Desert Surf N.)			Northbound (Alexander Blvd.)			Southbound (Alexander Blvd.)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	8	0	3	6	0	3	0	55	4	3	85	6
4:15 PM	4:30 PM	1	0	1	7	0	3	0	61	4	4	70	3
4:30 PM	4:45 PM	1	0	0	6	1	8	0	60	2	1	86	1
4:45 PM	5:00 PM	1	1	1	4	0	2	2	56	5	3	86	6
5:00 PM	5:15 PM	1	2	7	9	0	5	2	77	6	1	95	2
5:15 PM	5:30 PM	6	0	1	5	1	4	1	51	5	0	52	9
5:30 PM	5:45 PM	5	2	1	6	0	2	1	45	1	3	54	3
5:45 PM	6:00 PM	2	0	0	4	0	2	0	44	4	1	53	0
4X Peak 15-Min. Vol. (PM)		4	8	28	36	0	20	8	308	24	4	380	8
% of Total Traffic		0.5%	1.0%	3.4%	4.3%	0.0%	2.4%	1.0%	37.2%	2.9%	0.5%	45.9%	1.0%
% Directional			4.8%			6.8%	Intersection		41.1%			47.3%	

Traffic Count Data Sheet

Year Counts Taken: **2022**E-W Street **Desert Surf S.**
N-S Street: **Alexander Blvd.**

Signalized

Speed Limit (Desert Surf S.)= **25**
Speed Limit (Alexander Blvd.)= **25**
8/11/22

Begin Time	End Time	Eastbound (Desert Surf S.)			Westbound (Desert Surf S.)			Northbound (Alexander Blvd.)			Southbound (Alexander Blvd.)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	4	0	5	5	0	1	0	73	4	1	89	2
4:15 PM	4:30 PM	7	0	4	4	0	0	2	78	3	2	73	1
4:30 PM	4:45 PM	6	0	6	4	0	1	3	84	4	1	85	6
4:45 PM	5:00 PM	4	1	1	3	0	5	2	57	4	3	84	7
5:00 PM	5:15 PM	4	0	7	6	0	16	1	109	2	2	104	9
5:15 PM	5:30 PM	7	0	6	0	0	5	0	50	6	3	53	3
5:30 PM	5:45 PM	4	0	6	1	0	2	0	35	3	4	64	2
5:45 PM	6:00 PM	2	0	2	4	0	2	0	44	5	3	51	0
4X Peak 15-Min. Vol. (PM)		16	0	28	24	0	64	4	436	8	8	416	36
% of Total Traffic		1.5%	0.0%	2.7%	2.3%	0.0%	6.2%	0.4%	41.9%	0.8%	0.8%	40.0%	3.5%
% Directional			4.2%			8.5%	Intersection		43.1%			44.2%	

SCOPE OF TRAFFIC IMPACT STUDY (TIS)

TO: Terry Brown
Tierra West, LLC
5571 Midway Park Pl. NE
Albuquerque, NM 87109

MEETING DATE: June 23, 2022 (9:30 AM)

ATTENDEES: Matthew Grush (City of Albuquerque); Margaret Haynes (NMDOT); Ronald R. Bohannon, Amanda Herrera, and Terry Brown (Tierra West LLC).

PROJECT: Andretti Racing (Desert Surf / Alexander)

REQUESTED CITY ACTION: ☐ Zone Change ☒ Site Development Plan

☐ Subdivision ☒ Building Permit ☐ Sector Plan ☐ Sector Plan Amendment

☐ Curb Cut Permit ☐ Conditional Use ☐ Annexation ☐ Site Plan Amendment

ASSOCIATED APPLICATION: Description of development, where, what, etc. Include acreage, uses, etc. Proposed 93,330 s.f. Multipurpose Recreational Facility

SCOPE OF REPORT:

The Traffic Impact Study should follow the standard report format, which is outlined in the DPM. The following supplemental information is provided for the preparation of this specific study.

1. Trip Generation - Use Trip Generation Manual, 11th Edition.
Local data may be used for certain land use types as determined by staff.
Consultant to provide.
2. Appropriate study area:
Signalized Intersections;
a. None

Unsignalized Intersections;
a. Desert Surf Circle North / Alexander Blvd.
b. Desert Surf Circle South / Alexander Blvd.

Driveway Intersections: all site drives.
3. Intersection turning movement counts
Study Time – 4-6 p.m. peak hour (facility does not open until 10:00 AM)
Consultant to provide for all intersections listed above.
4. Type of intersection progression and factors to be used.
Type III arrival type (see “Highway Capacity Manual, current edition” or equivalent as approved by staff). Unless otherwise justified, peak hour factors and % heavy commercial should be taken directly from the MRCOG turning movement data provided or as calculated from current count data by consultant.
5. Boundaries of area to be used for trip distribution.
City Wide - residential, office or industrial;

variable mile radius – commercial; (consultant to proposed preliminary trip distribution criteria for approval by City of Albuquerque.
 Interstate or to be determined by consultant - motel/hotel
 APS district boundary mapping for each school and bus routes

6. Basis for trip distribution. – Use Office / Industrial distribution model

Residential – Use inverse relationship based upon distance and employment. Use employment data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Office/Industrial - Use inverse relationship based upon distance and population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Commercial - Use relationship based upon population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Residential - $T_s = (T_t) (S_e / D) / (S_e / D)$
 T_s = Development to Individual Subarea Trips
 T_t = Total Trips
 S_e = Subarea Employment
 D = Distance from Development to Subarea

Office/Industrial - $T_s = (T_t) (S_p / D) / (S_p / D)$
 T_s = Development to Individual Subarea Trips
 T_t = Total Trips
 S_p = Subarea Population
 D = Distance from Development to Subarea

Commercial -
 $T_s = (T_t) (S_p) / (S_p)$
 T_s = Development to Individual Subarea Trips
 T_t = Total Trips
 S_p = Subarea Population

7. Traffic Assignment. Logical routing on the major street system.

8. Proposed developments which have been approved but not constructed that are to be Included in the analyses. Projects in the area include:
 a. None

9. Method of intersection capacity analysis - planning or operational (see “2016 Highway Capacity Manual” or equivalent [i.e. HCS, Synchro, Teapac, etc.] as approved by staff). Must use latest version of design software and/or current edition of design manual.
 Implementation Year: 2023
 Horizon Year: None

10. Traffic conditions for analysis:
 a. Existing analysis ___ yes X no - year (xxxx);
 b. Phase implementation year(s) without proposed development – 2023
 c. Phase implementation year(s) with proposed development – 2023
 d. Project horizon year without proposed development – N/A
 e. Project horizon year with proposed development – N/A

f. Other –

11. Background traffic growth.

Method: use 10-year historical growth based on standard data from the MRCOG Traffic Flow Maps. Minimum growth rate to be used is 1/2%.

12. Planned (programmed) traffic improvements.

List planned CIP improvements in study area and projected project implementation year:

a. Project – Location (Implementation Year)

13. Items to be included in the study:

a. Intersection analysis.

b. Signal progression - An analysis is required if the driveway analysis indicates a traffic signal is possibly warranted. Analysis Method:

c. Arterial LOS analysis;

d. Recommended street, intersection and signal improvements.

e. Site design features such as turning lanes, median cuts, queuing requirements and site circulation, including driveway signalization and visibility.

f. Transportation system impacts.

g. Other mitigating measures.

h. Accident analyses ☐ yes ☒ no; Location(s):

i. Weaving analyses ☐ yes ☒ no; Location(s):

14. Other:

SUBMITTAL REQUIREMENTS:

1. Number of copies of report required

a. 1 digital copy

2. Submittal Fee – \$1300 for up to 3 reviews

The Traffic Impact Study for this development proposal, project name, shall be performed in accordance with the above criteria. If there are any questions regarding the above items, please contact me at 505-924-3362.

 P.E.

6/28/2022

Matt Grush, P.E., PTOE
Senior Engineer
City of Albuquerque, Planning
Transportation Development Section

Date

via: email

C: TIS Task Force Attendees, file