TIERRA WEST

Tidal Wave Auto Spa - Albuquerque

(Menaul Blvd. / 2nd St.)

Traffic Impact Study

October 17, 2023

D R A F T

Presented to:
City of Albuquerque
Transportation Development Section
Planning Department

Prepared for:
Jason Skarsgard
Skarsgard Construction
8220 San Pedro Dr. NE # 500
Albuquerque, NM 87113

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

Ronald R. Bohannan, P.E.
5571 Midway Park Pl. NE
Albuquerque, NM 87109
(505) 883-8807

Tidal Wave Auto Spa - Albuquerque
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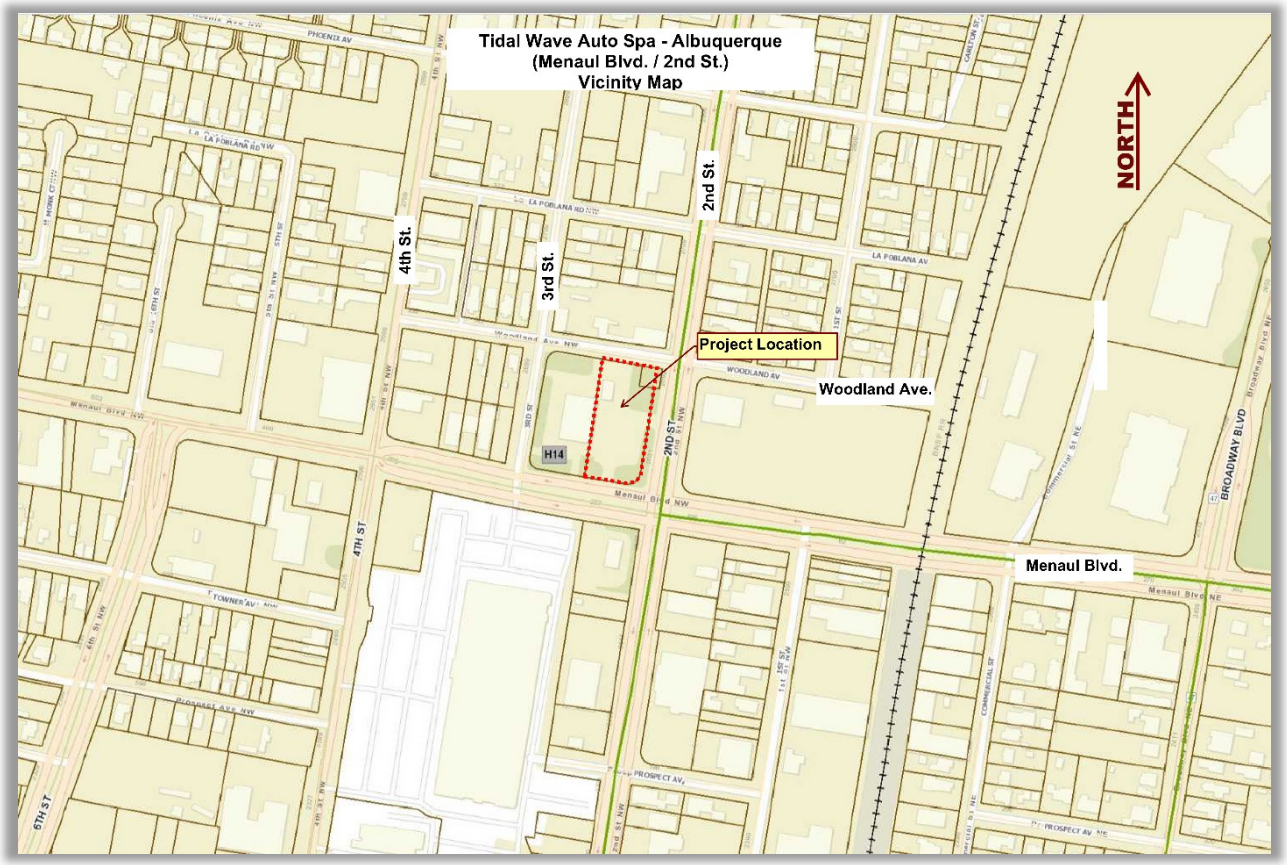
Traffic Impact Study

Executive Summary

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed Tidal Wave Auto Spa - Albuquerque, determine the impact of the development on the adjacent transportation system and recommend mitigation measures where necessary. This study is prepared to meet the requirements of the City of Albuquerque Transportation Development Section, Planning Department associated with their review of this project. The project is located in a Cumulative Impact Area of the City as defined in the Integrated Development Ordinance (IDO).

The proposed development is located at the northwest corner of Menaul Blvd. / 2nd St. in the City of Albuquerque. The study area includes the intersections of Menaul Blvd. / 2nd St. (signalized), Menaul Blvd. / 3rd St. (unsignalized), Woodward Ave. / 2nd St. (unsignalized), Woodward Ave. / 3rd St. (unsignalized) and two proposed unsignalized driveways for the project – Driveway "A" on Woodward Ave. and Driveway "B" on Menaul Blvd. Following is a vicinity map for the project:



The proposed project is to be developed as a full service automated car wash / detailing facility with one wash tunnel. Trip generation rates for the AM and PM Peak Hour for this project were calculated using the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition. Following is a summary of the AM and PM Peak Hour (Adjacent Street Traffic) trips generated by this project:

Tidal Wave Car Spa (Menaul Blvd. / 2nd St.)
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	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Automated Car Wash (948)	*1.00*	-	25*	25*	39	39
	Car Wash Tunnels					

*** - Based on Local Data**

The development will be accessed via two driveways – one full access entering only driveway on the south side of Woodward Ave. approximately 135 feet west of 2nd St. (centerline to centerline) and one right-out only access driveway on the north side of Menaul Blvd. approximately 135 feet west of 2nd St. (centerline to centerline). See the Appendix Page A-3 for more details.

The project volumes do not meet the normal warrant for a Traffic Impact Study in the City of Albuquerque. However, since the project is located in a Cumulative Impact Area of Albuquerque according to the Integrated Development Ordinance, then it was determined that a Traffic Impact Study would be required. Following is language from the Integrated Development Ordinance:

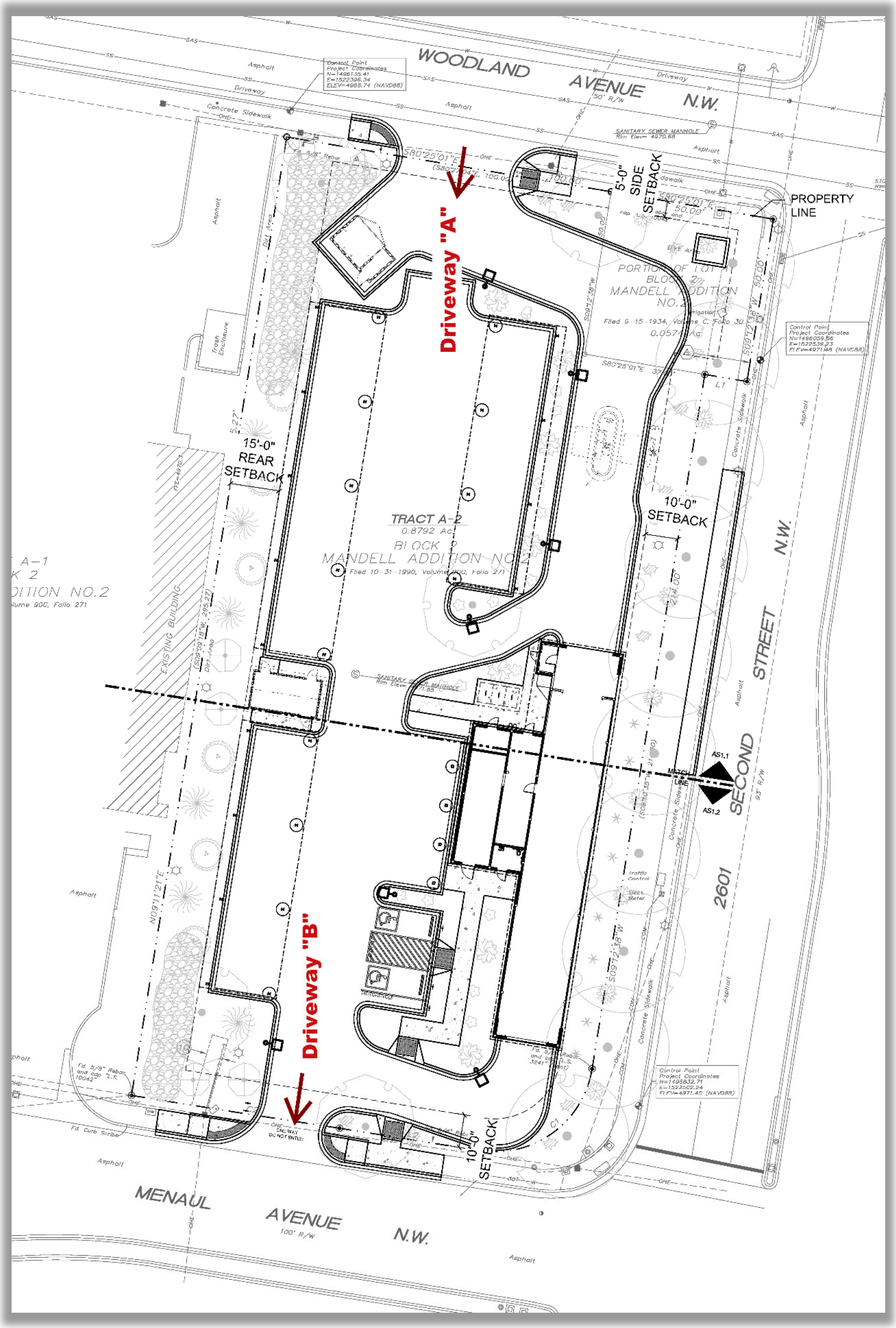
6-4(H) CUMULATIVE IMPACTS ANALYSIS REQUIREMENTS

- 6-4(H)(1) A cumulative impacts analysis is required prior to approval of a Site Plan – EPC for any development in the Railroad and Spur Small Area that meets the criteria in Subsection 14-16-5-2(F)(1). The cumulative impacts analysis shall be submitted as part of the application materials and is subject to the application completeness requirements of Subsection 14-16-6-4(G).

6-4(H)(2) The cumulative impacts analysis shall include all of the following:

- 6-4(H)(2)(a) A list of other uses listed in Subsection 14-16-5-2(F)(1)(c) that are within 660 feet of property.
- 6-4(H)(2)(b) A Traffic Impact Study, pursuant to Subsection 14-16-5-2(F)(2)(c).
- 6-4(H)(2)(c) A list, estimated amount, and storage location of hazardous materials, as defined by federal regulation, to be used for operations, including but not limited to fuels.
- 6-4(H)(2)(d) A summary of sewer and storm water discharge, including volumes.
- 6-4(H)(2)(e) A Letter of Availability from the ABCWUA, including estimate of volume of water to be used annually for operations.
- 6-4(H)(2)(f) The operating hours of the facility, including but not limited to times of delivery or movement of freight vehicles to and from the property and activities that generate noise and occur outdoors.
- 6-4(H)(2)(g) A list of and copies of all permits required for the use.

Please refer to the project's site plan below for more details.


WOODLAND AVENUE N.W.
Driveway "A"
5'-0" SIDE SETBACK
PROPERTY LINE
15'-0" REAR SETBACK
TRACT A-2
0.8792 Ac.
BLOCK 2
MANDELL ADDITION NO.2
EXISTING BUILDING
10'-0" SETBACK
SECOND STREET N.W.
2601
Driveway "B"
10'-0" SETBACK
MENAUL AVENUE N.W.

A summary of analysis results by analysis year are included in the following table:

Executive Summary Results Table

			2025 Conditions		2035 Conditions	
Intersection No. / Name	**Signalization**	**Case**	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**
1 - Menaul Blvd. / 2nd St.	Signalized	NO BUILD	C - 31.5	C - 33.8	C - 32.0	C - 33.8
		BUILD	C - 31.4	C - 34.0	C - 32.0	C - 34.0
2 - Menaul Blvd. / 3rd St.	Unsignalized	NO BUILD	C - 20.4	C - 17.3	C - 22.4	C - 17.3
		BUILD	C - 21.7	C - 19.5	C - 23.9	C - 19.5
3 - Woodward Ave. / 2nd St.	Unsignalizeed	NO BUILD	C - 18.3	C - 17.1	C - 19.1	C - 17.1
		BUILD	C - 19.6	C - 18.6	C - 20.5	C - 18.6
4 - Woodward Ave. / 3rd St.	Unsignalizeed	NO BUILD	A - 8.9	A - 9.0	A - 8.9	A - 9.0
		BUILD	A - 9.0	A - 9.3	A - 9.0	A - 9.3
5 - Woodward Ave. / Driveway "A"	Unsignalizeed	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	A - 7.3	A - 7.3	A - 7.3	A - 7.3
6. Menaul Blvd. / Driveway "B"	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	A - 9.9	B - 13.0	A - 9.9	B - 13.0

In summary, the proposed development does not have a significant adverse impact to the adjacent transportation system and the minimal impact to the transportation system can be mitigated by the recommended measures described in this report. In summary, the recommendations of this study are:

Recommendations:

All design and construction associated with this development shall maintain adequate sight distances at driveways and intersections.

Access – The proposed Tidal Wave Auto Spa development may be accessed via two full-access unsignalized driveways described as follows:

- **Driveway "A"** is a full access unsignalized (entering only) driveway on the south side of Woodward Ave. located approximately 135 feet west of 2nd St. (centerline to centerline). Driveway "A" should be designed and constructed as a commercial driveway with one entering and no exiting lane.
- **Driveway "B"** is a full access unsignalized right-out ONLY driveway along the north side of Menaul Blvd. located approximately 135 feet west of 2nd St. (centerline to centerline). Driveway "B" should be designed and constructed with one exiting lane.

Tidal Wave Auto Spa - Albuquerque
(Menaul Blvd. / 2nd St.)
Traffic Impact Study

Contents

Tidal Wave Auto Spa - Albuquerque
(Menaul Blvd. / 2nd St.)
Traffic Impact Study

Introduction

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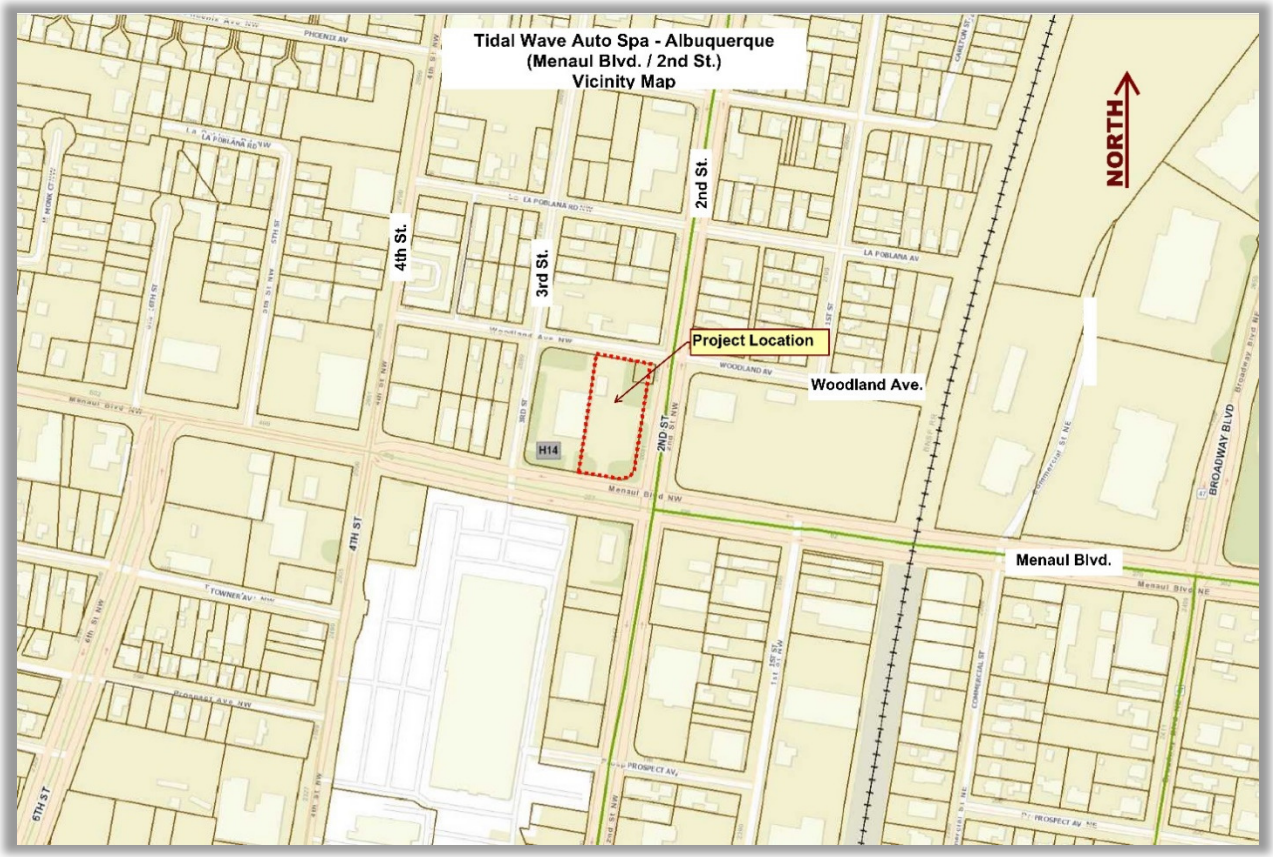

The proposed project will be developed as a full service automated car wash / detailing facility with one wash tunnel. Trip generation rates for the PM Peak Hour for this project were calculated using the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition. There is no AM data for an Automated Car Wash in the ITE Trip Generation Manual, so local data was used instead. Following is a summary of the trips generated by this project:

Tidal Wave Car Spa (Menaul Blvd. / 2nd St.)
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

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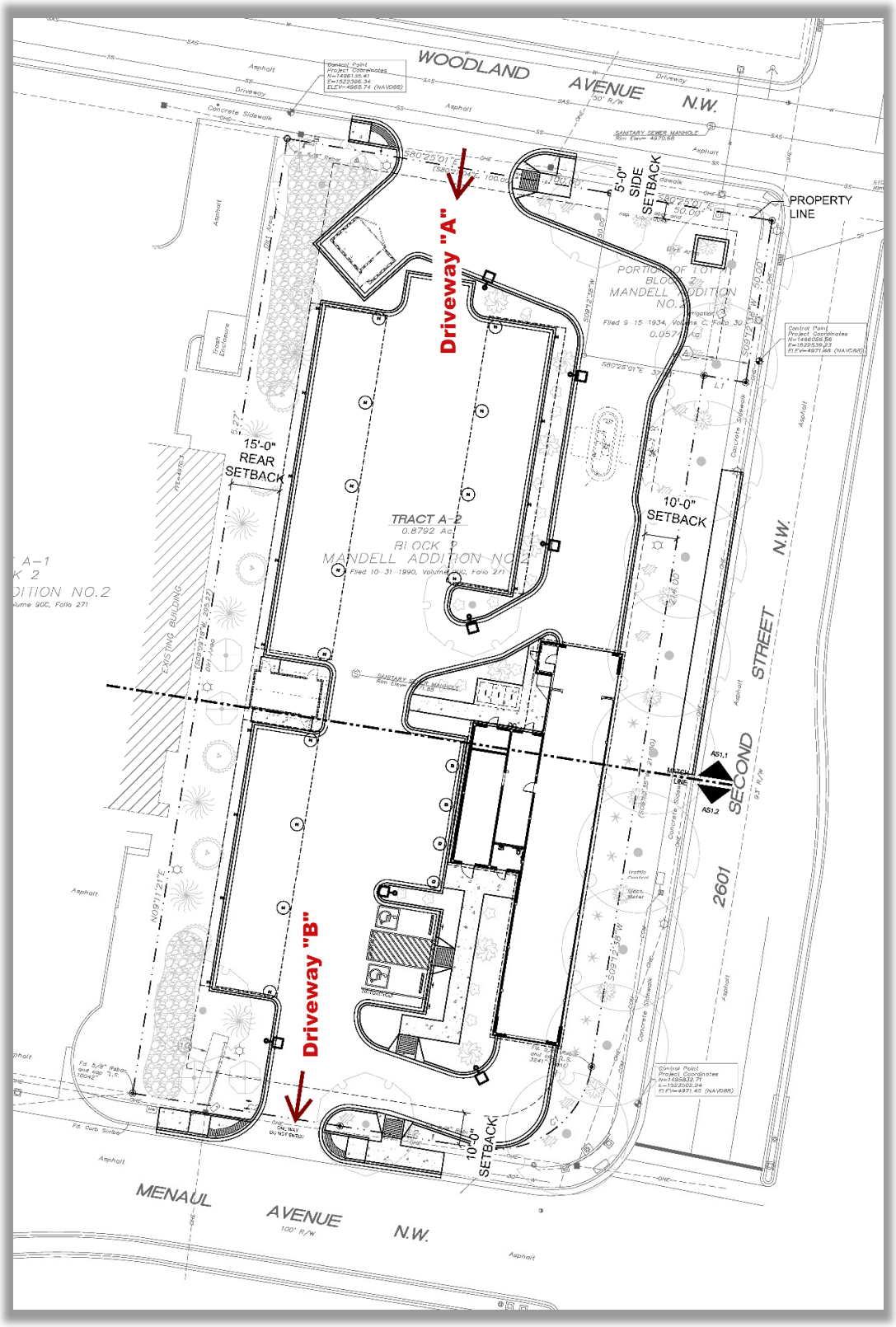
Please refer to the project's site plan below for more details.


WOODLAND AVENUE N.W.
Driveway "A"
Driveway "B"
5'-0" SIDE SETBACK
PROPERTY LINE
15'-0" REAR SETBACK
10'-0" SETBACK
TRACT A-2
0.8792 AC
BLOCK 2
MANDELL ADDITION NO.2
EXISTING BUILDING
SECOND STREET N.W.
2601
MENAUL AVENUE N.W.
100' R/W

Study Area Conditions

A Traffic Impact Study Scoping Meeting was held on August 10, 2023 with the City of Albuquerque Transportation Dev. Section, Planning Dept. staff (Matt Grush, P.E.). During the meeting, it was determined that the study area would include the following list of intersections to be analyzed in the Traffic Impact Study:

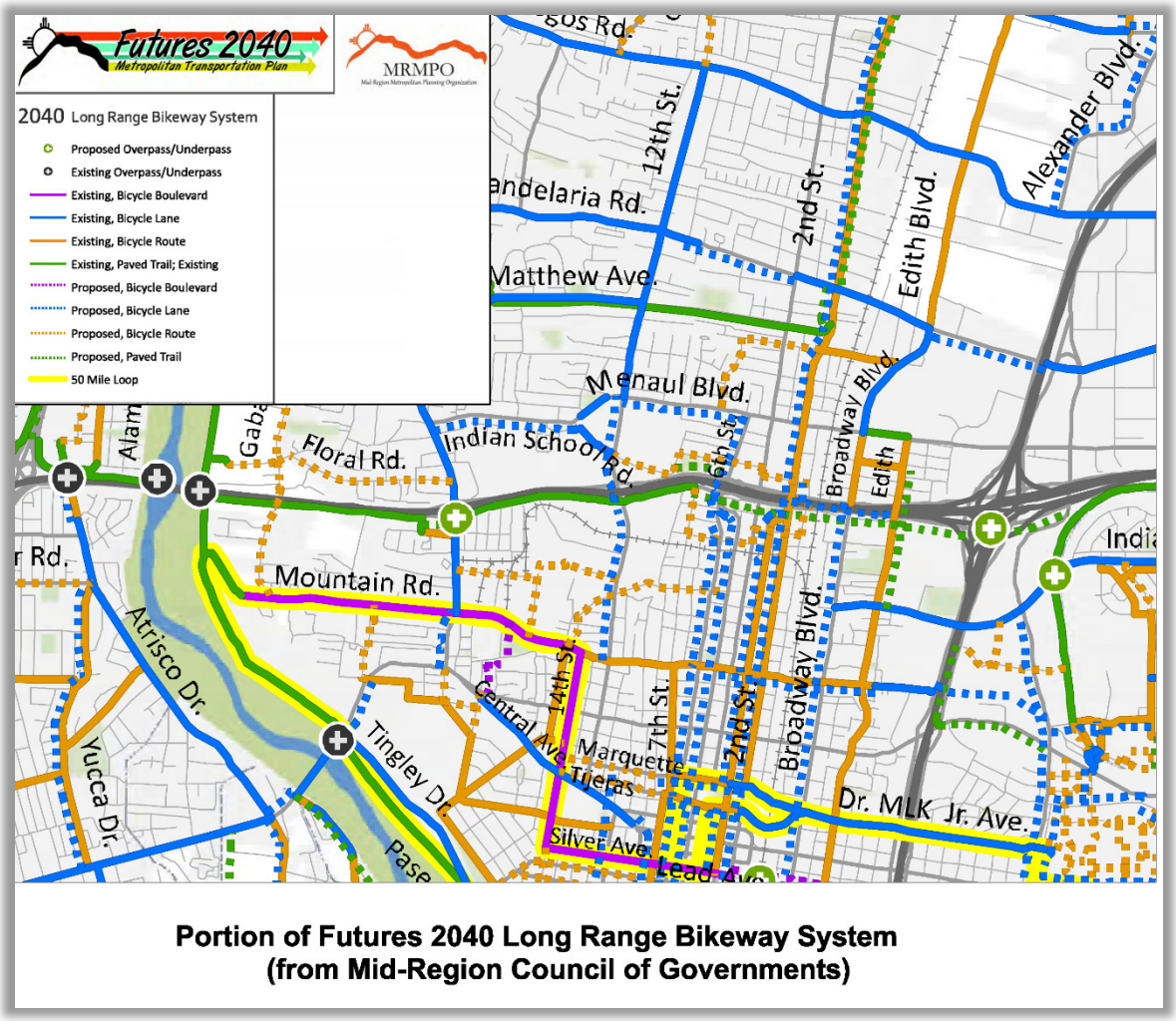
1. Menaul Blvd. / 2nd St. (signalized)
2. Menaul Blvd. / 3rd St. (unsignalized)
3. Woodward Ave. / 2nd St. (unsignalized)
4. Woodward Ave. / 3rd St. (unsignalized)
5. Woodward Ave. / Driveway "A" (ENTER ONLY)
6. Menaul Blvd. / Driveway "B" (EXIT RIGHT OUT ONLY)

This scope of study was based on the assumption that the parcel in question would be developed as a fully automated car wash / car detailing facility as shown on the proposed site plan. The City of Albuquerque Scoping Letter can be found on Pages A-107 thru A-109 in the Appendix of this report.

There is one other known land development project in the area which needs to be incorporated into the background traffic model for this study – namely the proposed Maverik Gasoline Station with Convenience Store located at the northwest corner of Menaul Blvd. / 4th St. There are no known Transportation Improvement Program projects in the area that need to be considered in the Traffic Impact Study.

This project is served by public transit services in the area; specifically, Routes #8 and #13. Route # 8 (Menaul Blvd.) serves Menaul Blvd. from Tramway Blvd. west to 12th St. at approximately 30-minute intervals from approximately 6:00 am to approximately 9:30 pm. Route # 13 (Comanche Rd.) serves 2nd St. from Comanche Rd. to Gold Ave. a couple of times a day – once at approximately 7:30 am and once at approximately 5:00 pm. See Appendix pages A-96 thru A-97 for Transit Bus Route Maps.

There are designated bike routes in the project area on the Futures 2040 Metropolitan Transportation Plan (2040 Long Range Bikeway System) as shown on the following portion of the map. Menaul Blvd. is designated as a Proposed Bicycle Lane west of 6th St.



Portion of Futures 2040 Long Range Bikeway System
(from Mid-Region Council of Governments)

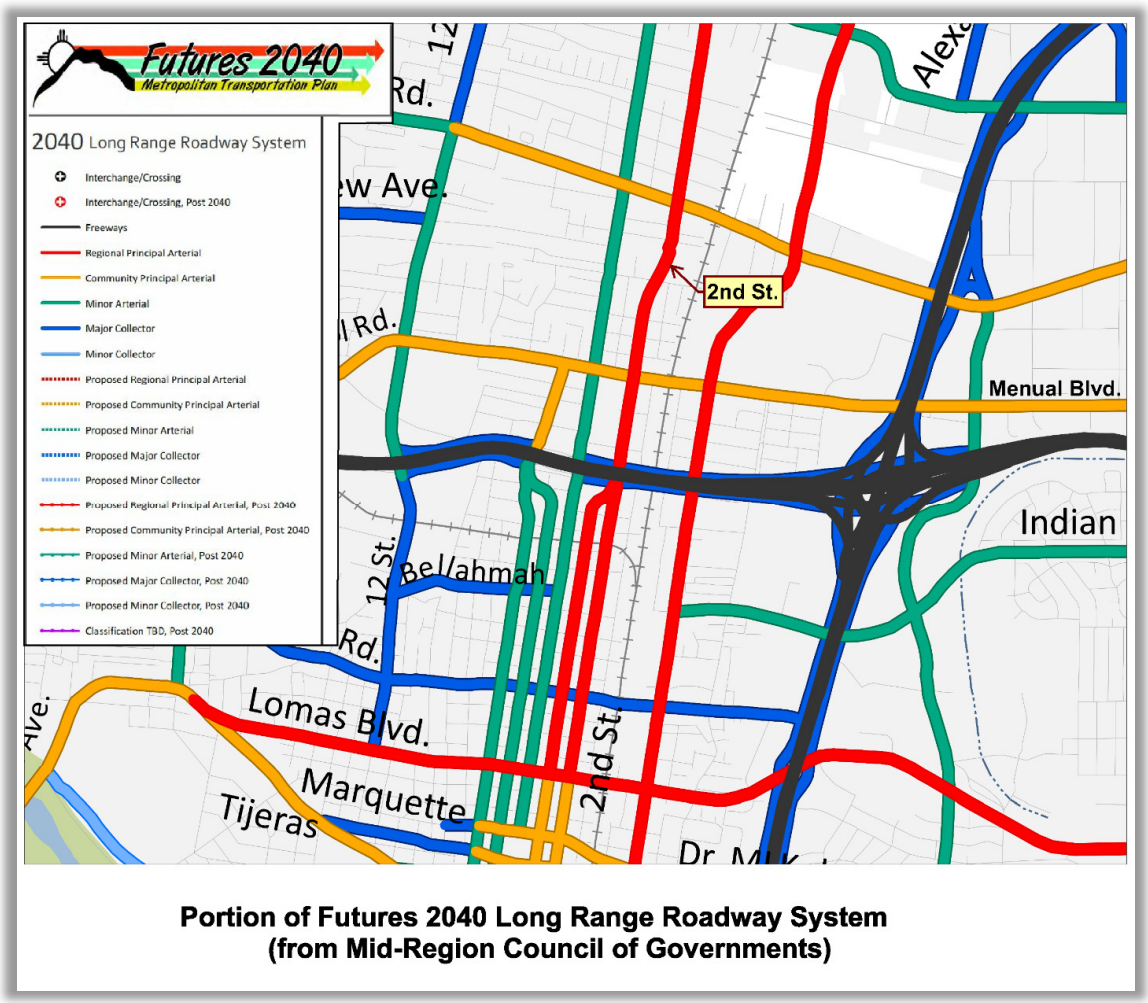
There are pedestrian facilities in the project area – curb & gutter and sidewalks along the roads, as well as raised medians for pedestrians & bicyclists crossing against traffic. Also, the signalized intersections in the area are equipped with pedestrian pushbuttons and the intersections are striped with pedestrian crossing pavement markings.

Menaul Blvd., a City of Albuquerque urban roadway facility, is classified as a Community Principal Arterial Roadway on the Mid-Region Council of Government's Futures 2040 Long Range Roadway System Map. It is generally a six-lane urban-type roadway with curb and gutter & sidewalks and some raised medians. The posted speed limit along Menaul Blvd. in the project study area is 35 MPH.

2nd St., a City of Albuquerque urban roadway facility, is classified as Regional Principal Arterial urban roadway facility on the Mid-Region Council of Government's Futures 2040 Long Range Roadway System Map. 2nd St. is generally a four-lane roadway with curb & gutter, raised medians, and sidewalks in the vicinity of the study area. The posted speed limit along this section of 2nd St. is 35 MPH.

3rd St. is not classified on the Mid-Region Council of Government's Futures 2040 Long Range Roadway System Map. It is generally a two-lane urban roadway with curbs and gutters on both sides of the street. The posted speed limit on 3rd St. is 30 MPH.

Woodward Ave. is not classified on the Mid-Region Council of Government's Futures 2040 Long Range Roadway System Map. It is generally a two-lane urban roadway with curbs and gutters and sidewalks on both sides of the street. The speed limit on Woodward Ave. is 30 MPH. Following is a portion of the Mid-Region Council of Government's Futures 2040 Long Range Roadway Map:



Portion of Futures 2040 Long Range Roadway System (from Mid-Region Council of Governments)

Analysis of Existing Conditions

Due to the fact that the Implementation Year is less than two years in the future and the annual background traffic growth rate is only 0.5%, no existing analysis was performed. The Implementation Year NO BUILD analyses should closely approximate existing conditions. Existing traffic volumes (turning movement counts) were collected at the intersections targeted for analysis in this study in September 2023 and are included on Appendix Pages A-100 through A-103.

Existing signal timing / phasing sheets are in the Appendix on Pages A-104 thru A-106. Generally speaking, the eastbound / westbound traffic on Menaul Blvd. is coordinated.

Crash data for the study area was collected for the years 2015, 2016, 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 Menaul Blvd. / 2nd St. The table below summarizes the crashes by year and by type of crash:

Crash Analysis

Tidal Wave Auto Spa

Menaul Blvd. / 2nd St. - Albuquerque, NM

Intersection: 1. Menaul Blvd. / 2nd St.
Date: 10/15/2023

		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
2015		0	7	9	0	4	3	1	3	6	33
2016		0	3	3	2	0	1	0	4	0	13
2017		0	3	4	1	4	2	1	5	4	24
2018		1	2	3	1	2	1	0	5	2	17
2019		1	4	4	0	1	1	0	4	0	15
Total		2	19	23	4	11	8	2	21	12	102
		2%	19%	23%	4%	11%	8%	2%	21%	12%	100%

Average Crashes per Million Entering Vechicles = 1.4
ased on existing (2022) PM Peak Hour Volume x 10 x 365 days per year = 14,132,800 veh/year

The overall average crash rate is slightly higher than average for the City of Albuquerque. The crash data above would suggest that there is an inordinate number of crashes resulting from disregarding traffic signal closely related to driver inattention. This report recommends that the City of Albuquerque consider installing something at the traffic signal that may draw attention of the drivers more to the signal. A suggestion would be installing yellow backplates on the mastarm signals such as was recently done at the intersection of Montgomery Blvd. / San Mateo. This measure would tend to draw the driver's eye to the traffic signal indicators.

Data Collection (Turning Movements Volumes)

Traffic counts (i.e., AM and PM Peak Hour Turning Movements Volumes) were collected using video cameras 15-minute traffic count data for the intersections of 1) Menaul Blvd. / 2nd St., 2) Menaul Blvd. / 3rd St., Woodward Ave. / 2nd St., and 3) Woodward Ave. / 3rd St. Traffic count data was collected on September 13, 2023 from 7:00 am to 9:00 am and from 4:00 pm to 6:00 pm to extract the AM and PM Peak Hour base volumes utilized in this Study.

The traffic counts worksheets are included on Appendix Pages A-100 through A-103 of this report.

Analysis of Implementation Year Conditions

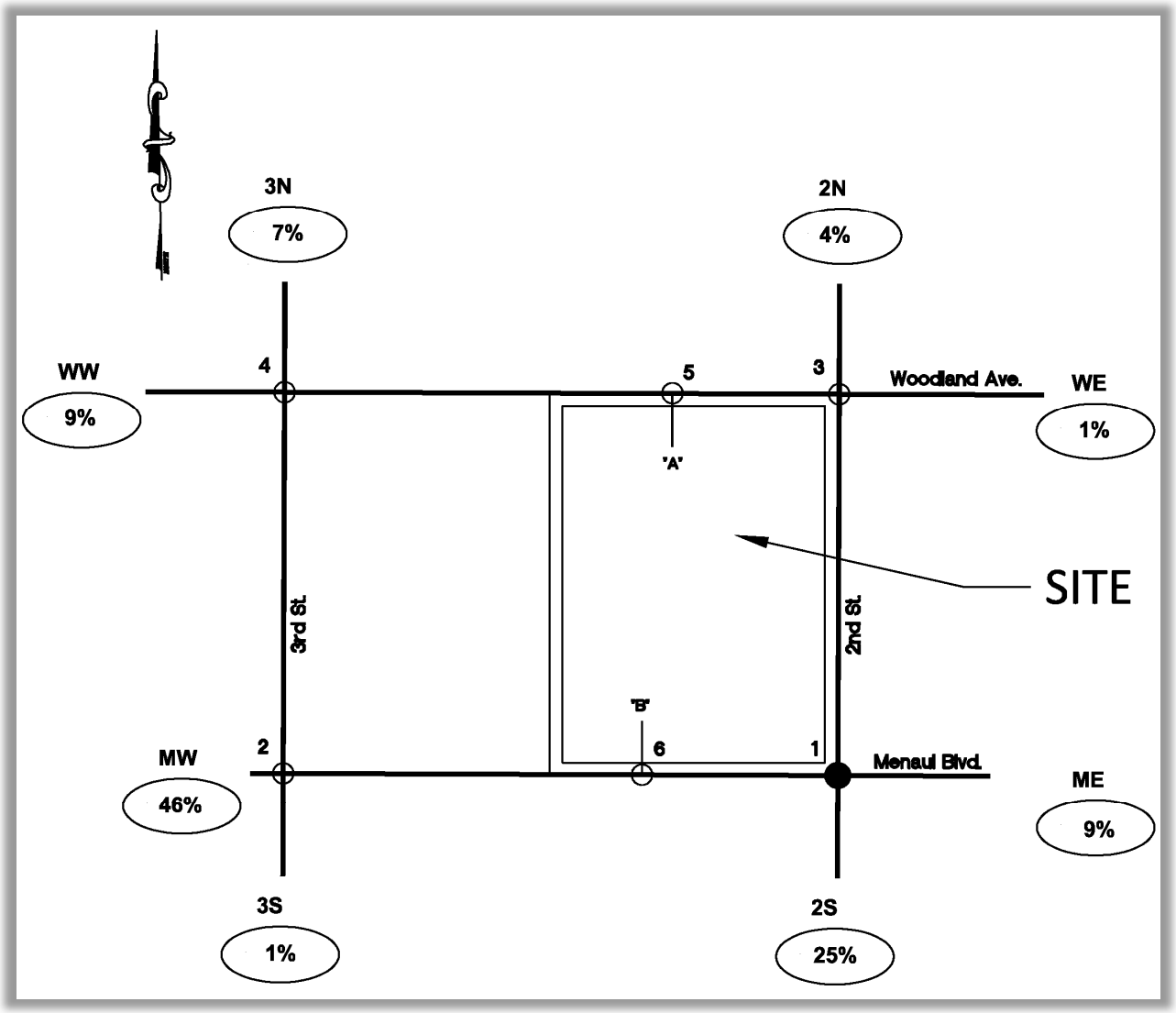
Traffic Projections

Background traffic volumes for the implementation year and horizon year were forecast by applying the calculated annual background traffic growth rate and applying it to recent turning movements volume data. Background annual growth rates were calculated based on Mid-Region Council of Governments' Traffic Flow Map data from 2009 to 2019. Background traffic growth rates were considered for each individual approach to an intersection that was targeted for analysis based on data from the 2009 thru 2019 Traffic Flow maps prepared by the Mid-Region Council of Governments (MRCOG). The data from those years for each approach was plotted on a graph and a linear "regression trend line" calculated using the equation format y=mx+b. The growth rate was determined by calculating the average volume increase per year during the time period considered and dividing that volume into the most recent AWDT used in the analysis from which future volumes will be calculated. The rate of growth of that trend line was utilized as the growth rate for each approach if that calculated rate appeared feasible. However, there may be some instances where the rate indicated a negative growth trend. In those cases, an appropriate growth rate from an adjacent segment of the same roadway was considered. Due to the potential for growth in the area, it was believed that a zero percent growth rate was inappropriate for this study. Additionally, if the R^2 value of the trend line was low, other means of establishing a probable growth rate from the data accumulated was considered. Historic Growth Rate Data and Graph with linear regression trendline are shown in the Appendix on Pages A-7 thru A-8. Generally speaking, a 0.5% annual growth rate was considered to be an appropriate growth rate to apply to background traffic for this Study.

This study assumes that the development will be implemented in one phase with an implementation year of 2025 and a horizon year of 2035.

The Gravity Model was used to determine trip distribution where primary trips for the retail land use development were distributed proportionally to the 2025 projected population of Data Analysis Subzones (DASZ) within a 2-mile radius. Population data for the years 2016 and 2040 were taken from the 2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico supplied by the Mid-Region Council of Governments (MRCOG). Population data from the

years 2016 and 2040 was interpolated linearly to obtain 2025 population data to utilize for this analysis. Population Subzones were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of data analysis subzones are shown in the Appendix on Pages A-10 thru A-16. The Trip Distribution map can be found below and in the Appendix on Page A-17.

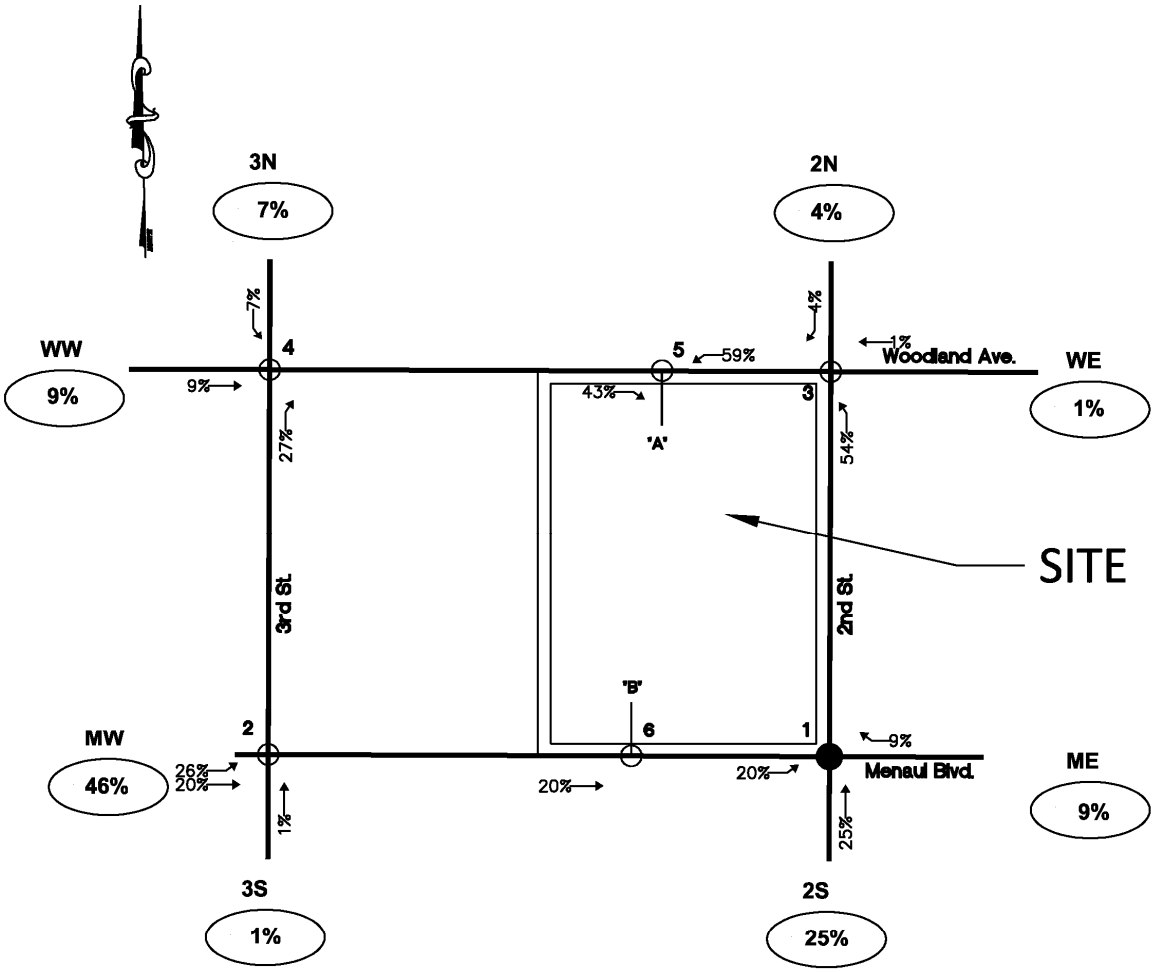


Trip assignments are first made on a percentage basis derived from data established in the trip distribution determination process and logical routing. Those percentages are then applied to the projected trips to determine individual traffic movements. Percentage trip assignments for project trips are shown below and on Appendix on Pages A-18 thru A-19. No adjustments for pass-by trips on this project were applied.

Tidal Wave Car Spa - Albuquerque, NM

(Menaul Blvd. / 2nd St.)

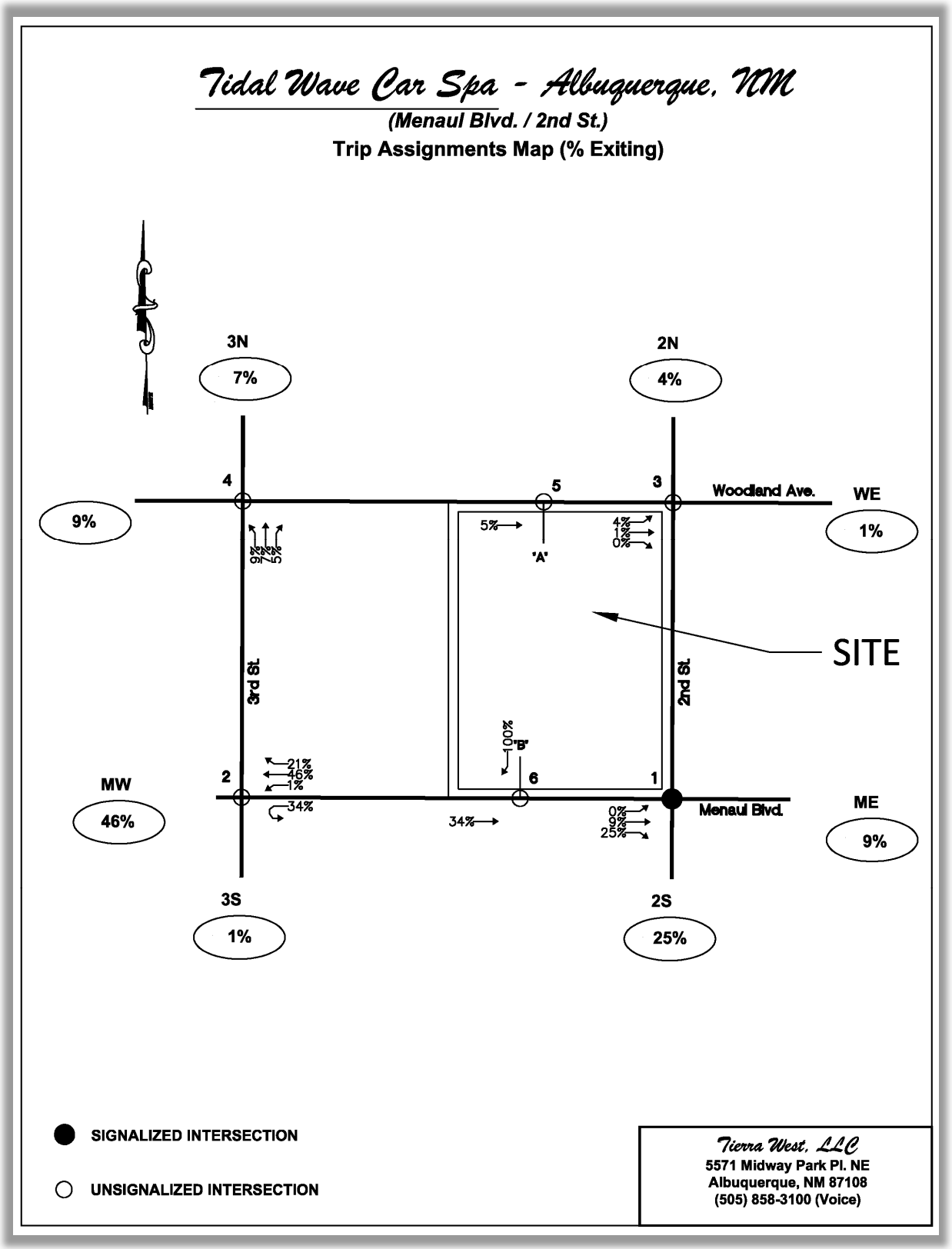
Trip Assignments Map (% Entering)



● SIGNALIZED INTERSECTION

○ UNSIGNALIZED INTERSECTION

Tierra West, LLC
5571 Midway Park Pl. NE
Albuquerque, NM 87108
(505) 858-3100 (Voice)


Tidal Wave Car Spa - Albuquerque, NM
(Menaul Blvd. / 2nd St.)
Trip Assignments Map (% Exiting)
3N
7%
2N
4%
4
5
3
Woodland Ave.
WE
1%
9%
5%
'A'
4%
1%
0%
SITE
3rd St.
2nd St.
100%
'B'
MW
46%
2
6
1
21%
46%
1%
34%
34%
Menaul Blvd.
0%
0%
25%
ME
9%
3S
1%
2S
25%
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION
Tierra West, LLC
5571 Midway Park Pl. NE
Albuquerque, NM 87108
(505) 858-3100 (Voice)

The trip generation, trip distribution and trip assignments were utilized along with the existing 2023 base traffic volumes and the historical traffic growth rates to determine the Implementation and horizon year NO BUILD and BUILD volumes, see Appendix Pages A-20 thru A-47 for Projected Turning Movements Volumes Summary and Worksheets. Lane geometry, NO BUILD and BUILD volumes, and calculated levels-of-service for associated lane groups are shown on the Lanes / Volumes Analysis Maps at the end of the front-end text of this report.

Traffic Analysis – Implementation Year (2025) / Horizon Year (2035)

A capacity analysis using existing traffic signal timing (see Appendix Pages A-48 thru A-95) was conducted for the Implementation Year (2025) NO BUILD and BUILD Conditions and the Horizon Year (2035 NO BUILD and BUILD Conditions. The results are summarized as follows:

#1 – Menaul Blvd. / 2nd St. - Pages A-48 thru A-55

The results of the 2025 analyses of the signalized intersection of Menaul Blvd. / 2nd St. are summarized in the following tables:

1: 2nd St. & Menaul Blvd. 2025 Conditions	EB (Menaul Blvd.)			WB (Menaul Blvd.)			NB (2nd St.)			SB (2nd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	3>	0	1	3>	0	1	2	1	1	2>	0
AM Peak Hour												
2025 NO BUILD Conditions Volumes	121	923	61	40	518	101	36	400	89	242	582	109
V/C Ratio	0.23	0.34	0.34	0.11	0.22	0.23	0.24	0.78	0.39	0.76	0.78	0.78
Level-of-Service	B	B	B	B	B	B	D	E	D	D	D	D
Control Delay (Seconds)	12.1	15.6	16.0	13.4	15.9	16.3	47.0	56.2	51.4	45.6	49.3	49.5
Intersection LOS	**C - 31.5**											
95th Percentile Queue (veh)	2.8	8.9	9.6	1.0	5.8	6.2	1.8	10.6	4.9	11.2	16.2	16.2
2025 BUILD Conditions Volumes	126	925	67	40	518	103	36	406	89	242	582	109
V/C Ratio	0.25	0.34	0.34	0.11	0.23	0.23	0.24	0.78	0.38	0.76	0.77	0.78
Level-of-Service	B	B	B	B	B	B	D	E	D	D	D	D
Control Delay (Seconds)	12.1	15.8	16.2	13.6	16.1	16.5	46.8	56.1	51.2	45.5	49.0	49.2
Intersection LOS	**C - 31.4**											
95th Percentile Queue (veh)	2.9	9.0	9.7	1.0	5.9	6.3	1.8	10.7	4.9	11.1	16.1	16.2
PM Peak Hour												
2025 NO BUILD Conditions Volumes	93	445	42	81	1,425	352	174	767	89	136	394	204
V/C Ratio	0.50	0.19	0.20	0.16	0.73	0.74	0.63	0.85	0.22	0.62	0.71	0.72
Level-of-Service	C	B	B	B	C	C	D	D	D	D	D	D
Control Delay (Seconds)	24.1	18.0	18.2	15.0	28.1	31.2	36.5	48.1	35.5	36.0	44.0	44.6
Intersection LOS	**C - 33.8**											
95th Percentile Queue (veh)	2.5	4.6	5.1	2.0	20.0	20.8	7.3	16.9	3.8	5.5	13.3	12.8
2025 BUILD Conditions Volumes	101	449	52	81	1,425	356	174	777	89	136	394	204
V/C Ratio	0.54	0.20	0.21	0.16	0.74	0.75	0.63	0.85	0.22	0.62	0.70	0.71
Level-of-Service	C	B	B	B	C	C	D	D	D	D	D	D
Control Delay (Seconds)	25.2	18.2	18.5	15.3	28.9	32.1	36.1	48.2	35.2	35.9	43.6	44.2
Intersection LOS	**C - 34.0**											
95th Percentile Queue (veh)	2.8	4.8	5.3	2.1	20.4	21.2	7.3	17.1	3.8	5.5	13.2	12.8

The 2025 analysis of the intersection of Menaul Blvd. / 2nd St. demonstrates that the level-of-service will be acceptable for both the AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions analyzed in this report. All lane groups are projected to operate at acceptable levels-of-service and delays for the 2025 AM / PM Peak Hour NO BUILD and BUILD Conditions. The northbound thru movement is projected to operate at LOS "E" (about 56 seconds of average control delay) during the AM Peak Period. This is the case for both the NO BUILD condition and the BUILD condition. The impact of the new traffic generated by the proposed Tidal Wave Auto Spa in negligible. Therefore, no recommendations are made for the intersection of Menaul Blvd. / 2nd St..

The results of the 2035 analyses of the signalized intersection of Menaul Blvd. / 2nd St. are summarized in the following tables (see Pages A-72 thru A-79):

1: 2nd St. & Menaul Blvd. 2035 Conditions	EB (Menaul Blvd.)			WB (Menaul Blvd.)			NB (2nd St.)			SB (2nd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	3>	0	1	3>	0	1	2	1	1	2>	0
AM Peak Hour												
2035 NO BUILD Conditions Volumes	127	966	64	42	540	106	38	420	93	254	611	114
V/C Ratio	0.26	0.36	0.36	0.13	0.24	0.25	0.25	0.79	0.39	0.78	0.79	0.79
Level-of-Service	B	B	B	B	B	B	D	E	D	D	D	D
Control Delay (Seconds)	12.8	16.7	17.2	14.3	17.0	17.4	46.4	55.7	50.8	46.1	49.3	49.5
Intersection LOS	**C - 32.0**											
95th Percentile Queue (veh)	3.0	9.6	10.3	1.1	6.4	6.8	1.9	11.0	5.1	11.6	16.9	16.9
2035 BUILD Conditions Volumes	132	968	70	42	518	108	38	426	93	254	611	114
V/C Ratio	0.26	0.36	0.36	0.13	0.23	0.24	0.25	0.79	0.39	0.78	0.78	0.78
Level-of-Service	B	B	B	B	B	B	D	E	D	D	D	D
Control Delay (Seconds)	12.8	16.8	17.3	14.5	17.1	17.5	46.1	55.6	50.5	46.0	49.0	49.1
Intersection LOS	**C - 32.0**											
95th Percentile Queue (veh)	3.2	9.7	10.4	1.1	6.2	6.6	1.9	11.1	5.0	11.6	16.8	16.9
PM Peak Hour												
2035 NO BUILD Conditions Volumes	93	445	42	81	1,425	352	174	767	89	136	394	204
V/C Ratio	0.50	0.19	0.20	0.16	0.73	0.74	0.63	0.85	0.22	0.62	0.71	0.72
Level-of-Service	C	B	B	B	C	C	D	D	D	D	D	D
Control Delay (Seconds)	24.1	18.0	18.2	15.0	28.1	31.2	36.5	48.1	35.5	36.0	44.0	44.6
Intersection LOS	**C - 33.8**											
95th Percentile Queue (veh)	2.5	4.6	5.1	2.0	20.0	20.8	7.3	16.9	3.8	5.5	13.3	12.8
2035 BUILD Conditions Volumes	101	449	52	81	1,425	356	174	777	89	136	394	204
V/C Ratio	0.54	0.20	0.21	0.16	0.74	0.75	0.63	0.85	0.22	0.62	0.70	0.71
Level-of-Service	C	B	B	B	C	C	D	D	D	D	D	D
Control Delay (Seconds)	25.2	18.2	18.5	15.3	28.9	32.1	36.1	48.2	35.2	35.9	43.6	44.2
Intersection LOS	**C - 34.0**											
95th Percentile Queue (veh)	2.8	4.8	5.3	2.1	20.4	21.2	7.3	17.1	3.8	5.5	13.2	12.8

The results of the horizon year (2035) analysis are very similar to that of the implementation year analysis. The northbound thru movement is projected to operate at LOS E during the AM Peak Period with an average control delay of approximately 56 seconds for both the NO BUILD Condition and the BUILD Condition. The new traffic from the Tidal Wave Auto Spa has not

significant adverse impact on the operation of the signalized intersection of Menaul Blvd. / 2nd St. Therefore, no recommendation is made.

#2 – Menaul Blvd. / 3rd St. - Pages A-56 thru A-59

The results of the 2025 analyses of the full access unsignalized intersection of Menaul Blvd. / 3rd St. are summarized in the following tables:

2: 3rd St. & Menaul Blvd. 2025 Conditions	EB (Menaul Blvd.)			WB (Menaul Blvd.)			NB (3rd St.)			SB (3rd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	3>	0	1	3>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2025 NO BUILD Conditions Volumes	4	1,153	12	16	647	1	9	1	4	1	1	17
V/C Ratio	0.00			0.05				0.06			0.03	
Level-of-Service	A			C				C			B	
Control Delay (Seconds)	8.8			16.7				20.4			11.5	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.2				0.2			0.1	
2025 BUILD Conditions Volumes	11	1,158	12	16	659	5	9	1	4	1	1	17
V/C Ratio	0.01			0.05				0.06			0.03	
Level-of-Service	A			C				C			B	
Control Delay (Seconds)	8.8			16.8				21.1			11.6	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.2				0.2			0.1	
PM Peak Hour												
2025 NO BUILD Conditions Volumes	1	542	4	98	1,720	4	13	4	30	1	4	13
V/C Ratio	0.00			0.15				0.11			0.06	
Level-of-Service	B			B				B			C	
Control Delay (Seconds)	10.6			11.6				14.2			17.3	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.5				0.4			0.2	
2025 BUILD Conditions Volumes	11	550	4	98	1,748	12	13	4	30	1	4	13
V/C Ratio	0.02			0.15				0.11			0.06	
Level-of-Service	B			B				B			C	
Control Delay (Seconds)	10.7			11.7				14.8			18.6	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1			0.5				0.4			0.2	

The 2025 analysis of the intersection of Menaul Blvd. / 3rd St. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Menaul Blvd. / 3rd St.

The implementation of the proposed Tidal Wave Auto Spa will likely generate a moderate volume of westbound to eastbound U-Turns on Menaul at 3rd St. These U-Turns were likely present to some degree associated with the former use of the property as a fueling center since the driveway

for that use was restricted to a right-in, right-out driveway as well. However, the U-Turn traffic from the new Tidal Wave Auto Spa use will still operate at acceptable levels-of-service.

The results of the 2035 analyses of the full access unsignalized intersection of Menaul Blvd. / 3rd St. are summarized in the following tables (see Pages A-80 thru A-83):

2: 3rd St. & Menaul Blvd. 2035 Conditions	EB (Menaul Blvd.)			WB (Menaul Blvd.)			NB (3rd St.)			SB (3rd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	3>	0	1	3>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2035 NO BUILD Conditions Volumes	4	1,207	13	17	676	1	9	1	4	1	1	18
V/C Ratio	0.01			0.06				0.11			0.05	
Level-of-Service	B			C				E			C	
Control Delay (Seconds)	11.5			17.6				36.0			15.4	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.2				0.4			0.2	
2035 BUILD Conditions Volumes	11	1,212	13	17	688	5	9	1	4	1	1	18
V/C Ratio	0.02			0.06				0.11			0.06	
Level-of-Service	B			C				E			C	
Control Delay (Seconds)	11.7			17.6				37.7			15.7	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.1			0.2				0.4			0.2	
PM Peak Hour												
2035 NO BUILD Conditions Volumes	1	542	4	98	1,720	4	13	4	30	1	4	13
V/C Ratio	0.00			0.15				0.11			0.06	
Level-of-Service	B			B				B			C	
Control Delay (Seconds)	10.6			11.6				14.2			17.3	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.0			0.5				0.4			0.2	
2035 BUILD Conditions Volumes	11	550	4	98	1,748	12	13	4	30	1	4	13
V/C Ratio	0.07			0.15				0.38			0.27	
Level-of-Service	D			B				F			F	
Control Delay (Seconds)	28.7			11.7				51.3			78.9	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)	0.2			0.5				1.6			1.0	

The results of the horizon year (2035) analysis are very similar to that of the implementation year analysis. The new traffic from the Tidal Wave Auto Spa has not significant adverse impact on the operation of the unsignalized intersection of Menaul Blvd. / 3rd St. Therefore, no recommendation is made.

#3 – Woodward Ave. / 2nd St. - Pages A-60 thru A-63

The results of the 2025 analyses of the full access unsignalized intersection of Woodward Ave. / 2nd St. are summarized in the following tables:

3: 2nd St. & Woodward Ave.	EB (Woodward Ave.)			WB (Woodward Ave.)			NB (2nd St.)			SB (2nd St.)		
2025 Conditions	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
AM Peak Hour												
2025 NO BUILD Conditions Volumes	4	1	4	4	1	4	4	630	1	4	929	4
V/C Ratio		0.03			0.03		0.01			0.00		
Level-of-Service		C			C		B			A		
Control Delay (Seconds)		18.3			15.1		10.0			7.9		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.1			0.1		0.0			0.0		
2025 BUILD Conditions Volumes	5	1	4	4	1	4	18	630	1	4	929	5
V/C Ratio		0.04			0.03		0.03			0.00		
Level-of-Service		C			C		B			A		
Control Delay (Seconds)		19.6			15.7		10.1			7.9		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.1			0.1		0.1			0.0		
PM Peak Hour												
2025 NO BUILD Conditions Volumes	4	1	4	4	1	4	4	1,208	4	4	717	4
V/C Ratio		0.02			0.03		0.01			0.01		
Level-of-Service		B			C		A			A		
Control Delay (Seconds)		14.0			17.1		9.2			9.1		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.1			0.1		0.0			0.0		
2025 BUILD Conditions Volumes	6	1	4	4	1	4	25	1,208	4	4	717	6
V/C Ratio		0.03			0.03		0.03			0.01		
Level-of-Service		B			C		A			A		
Control Delay (Seconds)		14.3			18.6		9.3			9.1		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.1			0.1		0.1			0.0		

The 2025 analysis of the intersection of Woodward Ave. / 2nd St. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Woodward Ave. / 2nd St.

The results of the 2035 analyses of the full access unsignalized intersection of Woodward Ave. / 2nd St. are summarized in the following tables (see Pages A-84 thru A-87):

3: 2nd St. & Woodward Ave. 2035 Conditions	EB (Woodward Ave.)			WB (Woodward Ave.)			NB (2nd St.)			SB (2nd St.)		
	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
AM Peak Hour												
2035 NO BUILD Conditions Volumes	4	1	4	4	1	4	4	661	1	4	975	4
V/C Ratio		0.05			0.04		0.01			0.00		
Level-of-Service		D			C		B			A		
Control Delay (Seconds)		27.9			23.5		10.2			8.9		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.2			0.1		0.0			0.0		
2035 BUILD Conditions Volumes	5	1	4	4	1	4	18	661	1	4	975	5
V/C Ratio		0.07			0.05		0.03			0.00		
Level-of-Service		D			C		B			A		
Control Delay (Seconds)		31.1			24.6		10.3			8.9		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.2			0.1		0.1			0.0		

PM Peak Hour												
2035 NO BUILD Conditions Volumes	4	1	4	4	1	4	4	1,208	4	4	717	4
V/C Ratio		0.02			0.03		0.01			0.01		
Level-of-Service		B			C		A			A		
Control Delay (Seconds)		14.0			17.1		9.2			9.1		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.1			0.1		0.0			0.0		
2035 BUILD Conditions Volumes	6	1	4	4	1	4	25	1,208	4	4	717	6
V/C Ratio		0.09			0.09		0.03			0.01		
Level-of-Service		E			E		A			B		
Control Delay (Seconds)		35.8			44.1		9.3			11.4		
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.3			0.3		0.1			0.0		

The 2035 analysis of the intersection of Woodward Ave. / 2nd St. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Woodward Ave. / 2nd St.

#4 – Woodward Ave. / 3rd St. - Pages A-64 thru A-67

The results of the 2025 analyses of the full access unsignalized intersection of Woodward Ave. / 3rd St. are summarized in the following tables:

4: 3rd St. & Woodward Ave. 2025 Conditions	EB (Woodward Ave.)			WB (Woodward Ave.)			NB (3rd St.)			SB (3rd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2025 NO BUILD Conditions Volumes	4	4	4	4	4	4	4	12	4	4	12	4
V/C Ratio		0.01			0.01		0.00			0.00		
Level-of-Service		A			A		A	A		A	A	
Control Delay (Seconds)		8.9			8.9		7.3	0.0		7.3	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.0			0.0		0.0			0.0		
2025 BUILD Conditions Volumes	4	6	4	4	4	4	4	14	12	6	12	4
V/C Ratio		0.02			0.01		0.00			0.00		
Level-of-Service		A			A		A	A		A	A	
Control Delay (Seconds)		9.0			8.9		7.3	0.0		7.3	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.0			0.0		0.0			0.0		
PM Peak Hour												
2025 NO BUILD Conditions Volumes	4	4	4	4	4	4	4	8	4	4	38	4
V/C Ratio		0.01			0.01		0.00			0.00		
Level-of-Service		A			A		A	A		A	A	
Control Delay (Seconds)		9.0			9.0		7.3	0.0		7.3	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.0			0.0		0.0			0.0		
2025 BUILD Conditions Volumes	4	8	4	4	4	4	8	11	17	7	38	4
V/C Ratio		0.02			0.01		0.01			0.00		
Level-of-Service		A			A		A	A		A	A	
Control Delay (Seconds)		9.3			9.1		7.3	0.0		7.3	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.1			0.0		0.0			0.0		

The 2025 analysis of the intersection of Woodward Ave. / 3rd St. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Woodward Ave. / 3rd St.

The results of the 2035 analyses of the full access unsignalized intersection of Woodward Ave. / 3rd St. are summarized in the following tables (see Pages A-88 thru A-91):

4: 3rd St. & Woodward Ave. 2035 Conditions	EB (Woodward Ave.)			WB (Woodward Ave.)			NB (3rd St.)			SB (3rd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
AM Peak Hour												
2035 NO BUILD Conditions Volumes	4	4	4	4	4	4	4	13	4	4	13	4
V/C Ratio		0.01			0.01		0.00			0.00		
Level-of-Service		A			A		A	A		A	A	
Control Delay (Seconds)		8.9			8.9		7.3	0.0		7.3	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.0			0.0		0.0			0.0		
2035 BUILD Conditions Volumes	4	6	4	4	4	4	4	15	12	6	13	4
V/C Ratio		0.02			0.01		0.00			0.00		
Level-of-Service		A			A		A	A		A	A	
Control Delay (Seconds)		9.0			9.0		7.3	0.0		7.3	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.0			0.0		0.0			0.0		
PM Peak Hour												
2035 NO BUILD Conditions Volumes	4	4	4	4	4	4	4	8	4	4	38	4
V/C Ratio		0.01			0.01		0.00			0.00		
Level-of-Service		A			A		A	A		A	A	
Control Delay (Seconds)		9.0			9.0		7.3	0.0		7.3	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.0			0.0		0.0			0.0		
2035 BUILD Conditions Volumes	4	8	4	4	4	4	8	11	17	7	38	4
V/C Ratio		0.02			0.01		0.01			0.00		
Level-of-Service		A			A		A	A		A	A	
Control Delay (Seconds)		9.3			9.1		7.3	0.0		7.3	0.0	
Intersection LOS	**TWSC**											
95th Percentile Queue (veh)		0.1			0.0		0.0			0.0		

The 2035 analysis of the intersection of Woodward Ave. / 3rd St. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Woodward Ave. / 3rd St.

#5 – Woodward Ave. / Driveway "A". – Pages A-68 thru A-69

The results of the 2025 analysis of the full access unsignalized intersection of Woodward Ave. / Driveway "A". are summarized in the following table:

5: A & Woodward Ave. 2025 Conditions	EB (Woodward Ave.)			WB (Woodward Ave.)			NB (Driveway "A")		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		1>	0	0	<1		1>		0
AM Peak Hour									
2025 BUILD Conditions Volumes		10	11	15	9		0		0
V/C Ratio				0.01					
Level-of-Service				A	A		A		
Control Delay (Seconds)				7.3	0.0		0.0		
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)				0.0					
PM Peak Hour									
2025 BUILD Conditions Volumes		11	17	23	9		0		0
V/C Ratio				0.02					
Level-of-Service				A	A		A		
Control Delay (Seconds)				7.3	0.0		0.0		
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)				0.0					

The 2025 analysis of the intersection of Woodward Ave. / Driveway "A" demonstrates that the delays will be acceptable for all conditions analyzed in this report. Driveway "A" does not generate traffic for the NO BUILD Condition since it is assumed that the existing fueling station is closed. Driveway "A" on Woodward Ave. is proposed as a full access entering only driveway. The analysis shows that the driveway will operate at acceptable levels-of-service for all conditions analysis in this report. Therefore, no recommendations are made for the intersection of Woodward Ave. / Driveway "A".

The results of the 2035 analysis of the full access unsignalized intersection of Woodward Ave. / Driveway "A". are identical to the 2025 analysis since the base volumes are so low and the annual growth rate is very low as well. Therefore, no recommendations are made for the intersection of Woodward Ave. / Driveway "A".

#6 – Menaul Blvd. / Driveway "B". – Pages A-70 thru A-71

The results of the 2025 analysis of the full access unsignalized intersection of Menaul Blvd. / Driveway "B". are summarized in the following table:

6: Menaul Blvd. & B 2025 Conditions	EB (Menaul Blvd.)			WB (Menaul Blvd.)			SB (Driveway "B")		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	3			3>	0	0		1
AM Peak Hour									
2025 BUILD Conditions Volumes	0	1,110			663	0	0		25
V/C Ratio									0.03
Level-of-Service									A
Control Delay (Seconds)									9.9
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)									0.1
PM Peak Hour									
2025 BUILD Conditions Volumes	0	588			1,803	0	0		39
V/C Ratio									0.08
Level-of-Service									B
Control Delay (Seconds)									13.0
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)									0.3

The 2025 analysis of the intersection of Menaul Blvd. / Driveway "B" demonstrates that the delays will be acceptable for all conditions analyzed in this report. Driveway "B" does not generate traffic for the NO BUILD Condition since it is assumed that the existing fueling station is closed. Driveway "B" on Menaul Blvd. is proposed as a full access exiting right-out only driveway. The analysis shows that the driveway will operate at acceptable levels-of-service for all conditions analysis in this report. Therefore, no recommendations are made for the intersection of Menaul Blvd. / Driveway "B".

The results of the 2035 analysis of the full access unsignalized intersection of Menaul Blvd. / Driveway "B". are summarized in the following table (see Pages A-94 thru A-95):

6: Menaul Blvd. & B 2035 Conditions	EB (Menaul Blvd.)			WB (Menaul Blvd.)			SB (Driveway "B")		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	0	3			3>	0	0		1
AM Peak Hour									
2035 BUILD Conditions Volumes	0	1,162			692	0	0		25
V/C Ratio									0.05
Level-of-Service									B
Control Delay (Seconds)									11.8
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)									0.1
PM Peak Hour									
2035 BUILD Conditions Volumes	0	588			1,803	0	0		39
V/C Ratio									0.16
Level-of-Service									C
Control Delay (Seconds)									23.0
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)									0.6

The 2035 analysis of the intersection of Menaul Blvd. / Driveway "B" demonstrates that the delays will be acceptable for all conditions analyzed in this report. Driveway "B" does not generate traffic for the NO BUILD Condition since it is assumed that the existing fueling station is closed. Driveway "B" on Menaul Blvd. is proposed as a full access exiting right-out only driveway. The analysis shows that the driveway will operate at acceptable levels-of-service for all conditions analysis in this report. Therefore, no recommendations are made for the intersection of Menaul Blvd. / Driveway "B".

LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Average Delay (secs)	Level-of-Service
≤ 10	A
> 10 and ≤ 20	B
> 20 and ≤ 35	C
> 35 and ≤ 55	D
> 55 and ≤ 80	E
> 80	F

LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Average Delay (secs)	Level-of-Service
≤ 10	A
> 10 and ≤ 15	B
> 15 and ≤ 25	C
> 25 and ≤ 35	D
> 35 and ≤ 50	E
> 50	F

Generally speaking, a Level-of-Service D or better is an acceptable parameter for design purposes.

Impact Assessment

The proposed development will have minimal adverse impact on the adjacent transportation system. All the levels-of-service were determined to be acceptable for the overall intersections.

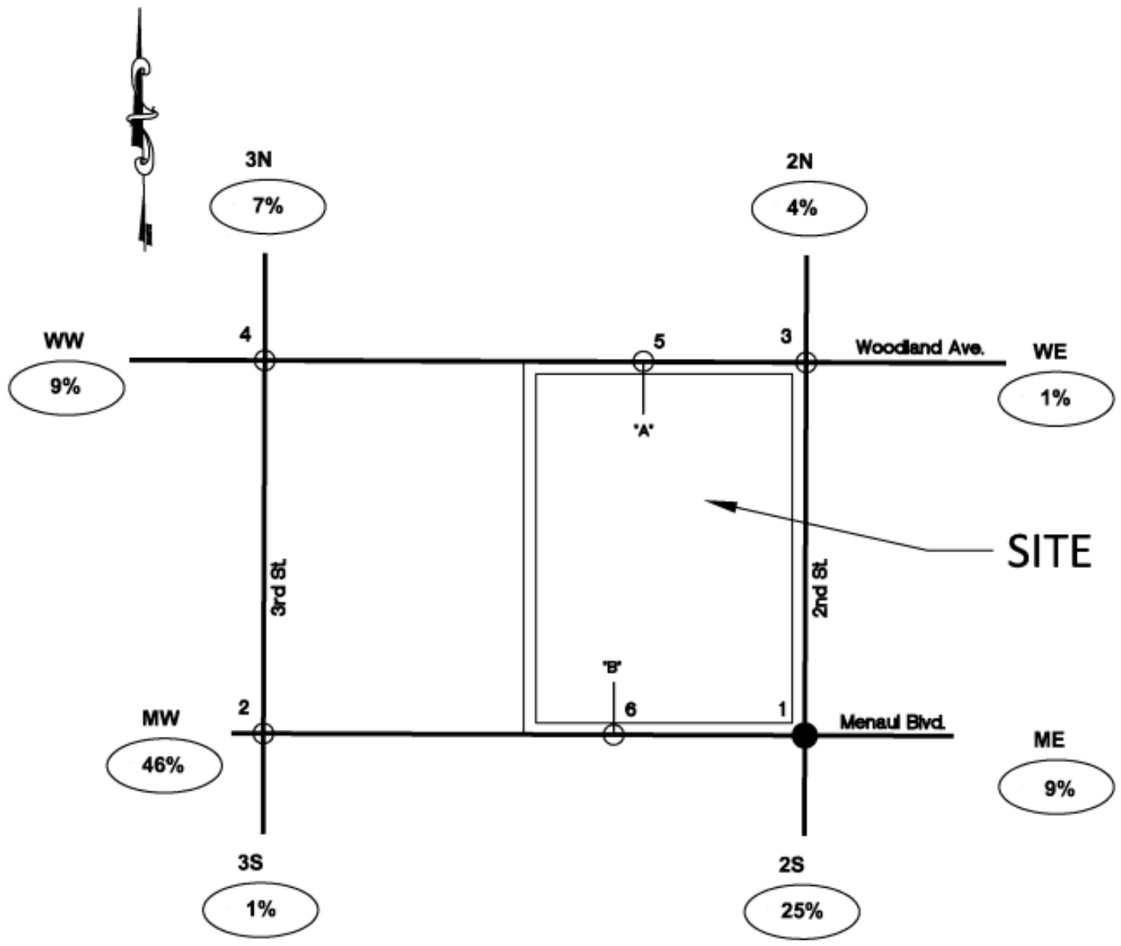
Access Design Specifications

Sight distance at Driveway "A" and Driveway "B" are both adequate. There are no vertical or horizontal curves along this portion Menaul Blvd. and Woodward Ave., and there are no structures that are blocking sight distance into and out of the driveway.

Design and construction of the proposed driveways on Menaul Blvd. and on Woodward Ave. are required to meet the standards of the City of Albuquerque Development Process Manual.

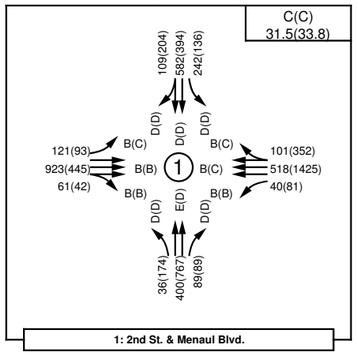
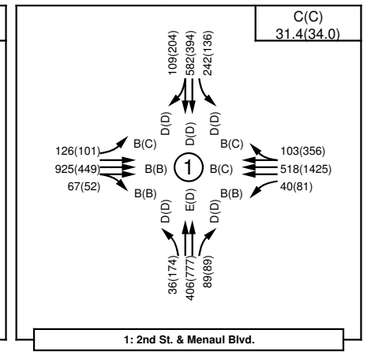
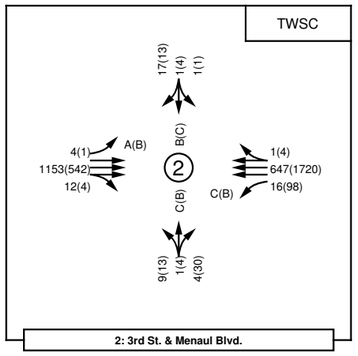
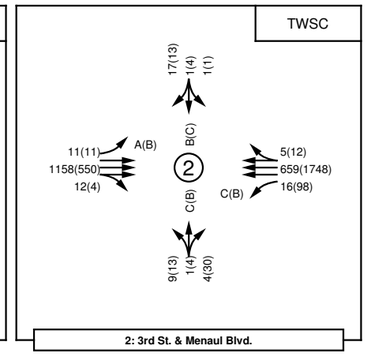
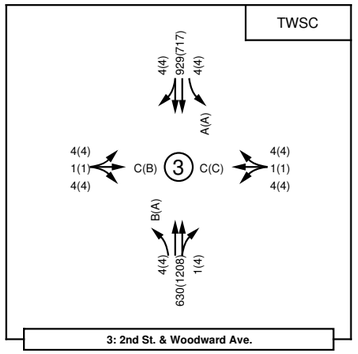
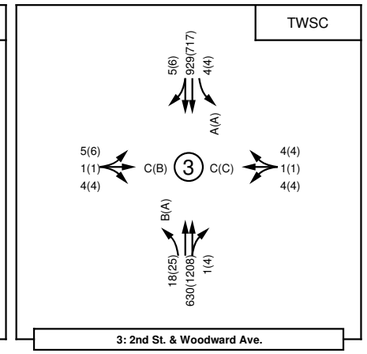
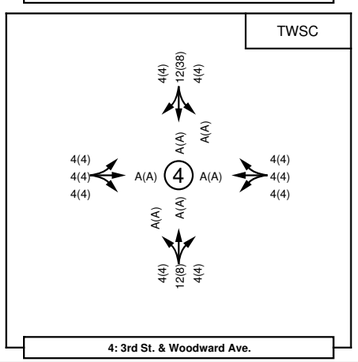
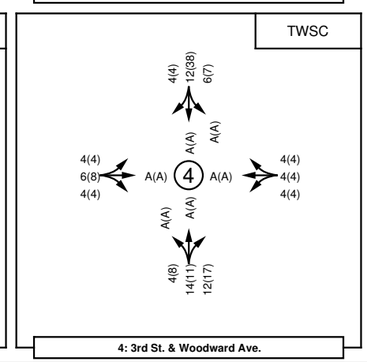
Summary of Deficiencies, Anticipated Impacts, and Recommendations

The proposed Tidal Wave Auto Spa facility will have no significant adverse impact to the adjacent transportation system provided that the recommendations listed at the end of the Executive Summary of this report are followed.



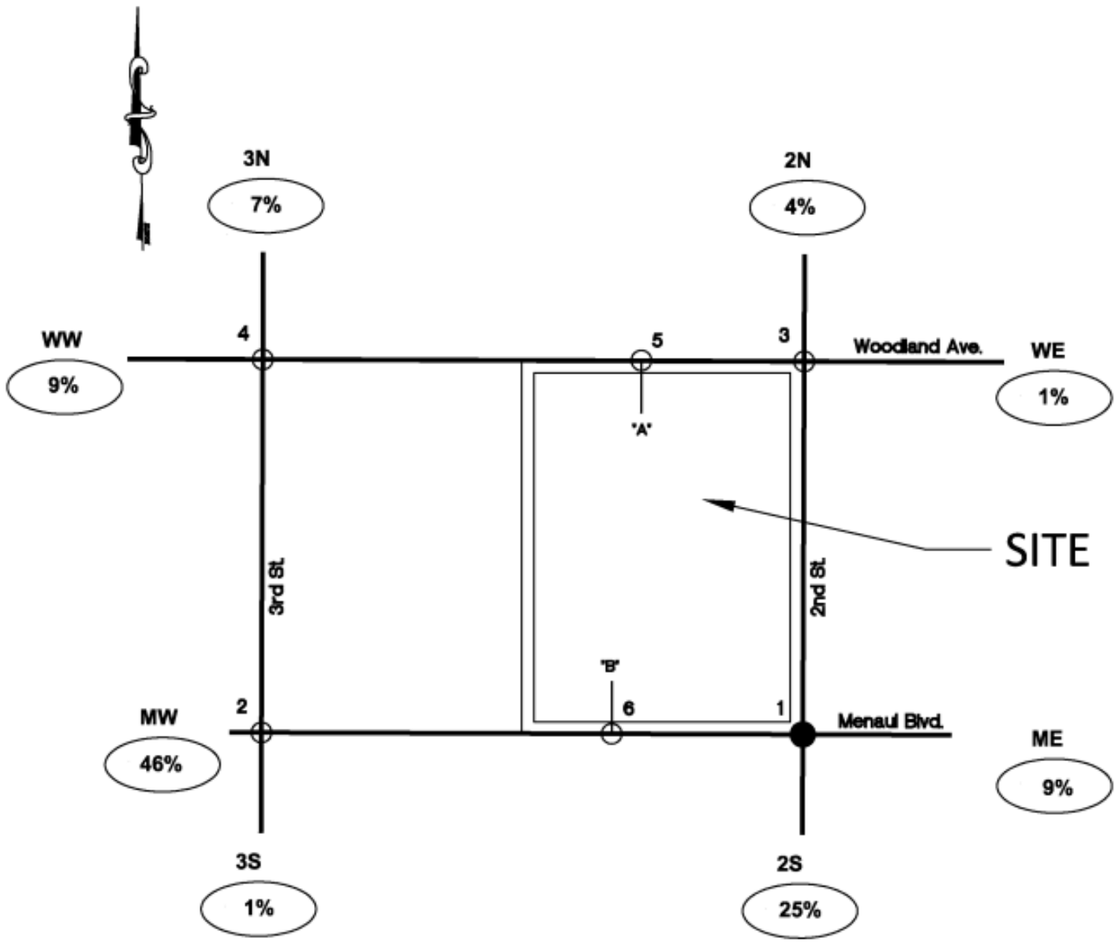
SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

2025 NO BUILD Conditions (Existing Geometry)	2025 BUILD Conditions (Existing Geometry)	
		**NO RECOMMENDATION**
		**NO RECOMMENDATION**
		**NO RECOMMENDATION**
		**NO RECOMMENDATION**

Tidal Wave Auto Spa - Albuquerque
[Menaul Blvd. / 2nd St.]
LOS / Volume Analysis Map

AM(PM)

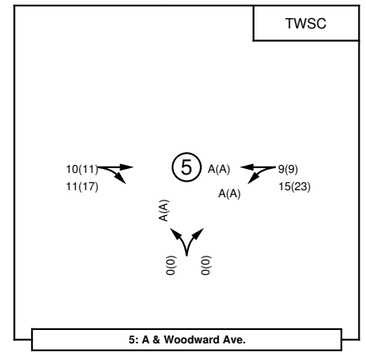


SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

2025 NO BUILD Conditions
(Existing Geometry)

2025 BUILD Conditions
(Existing Geometry)



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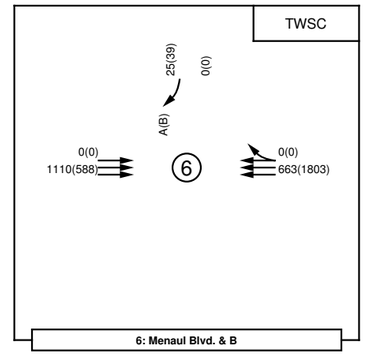
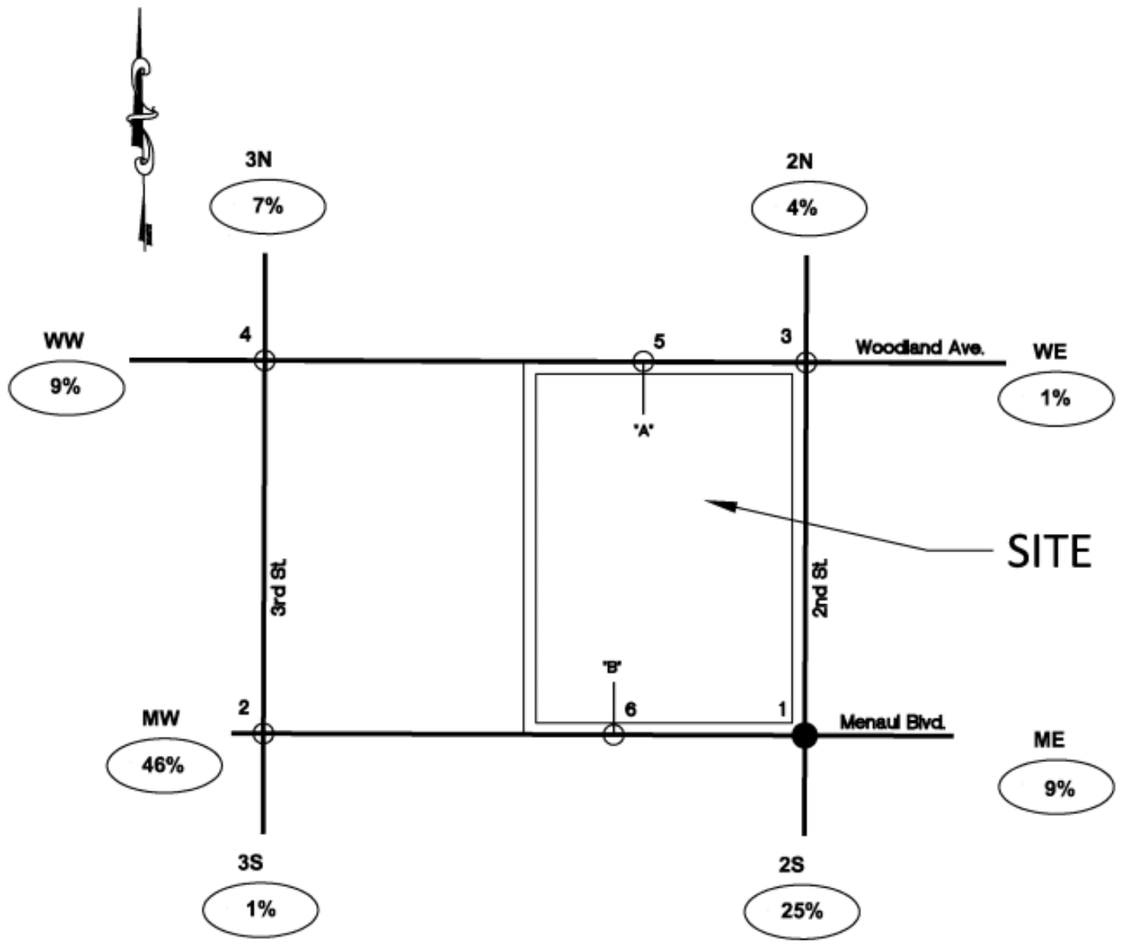


NO RECOMMENDATION

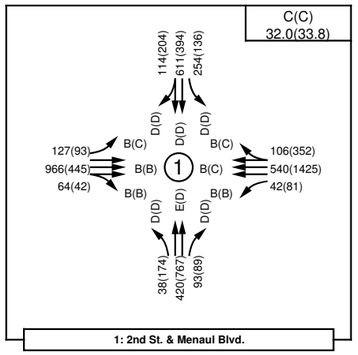
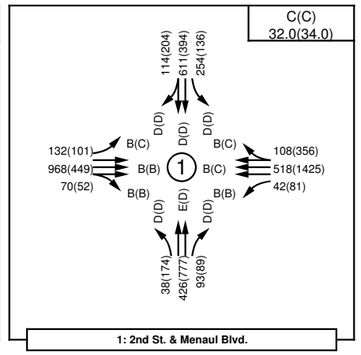
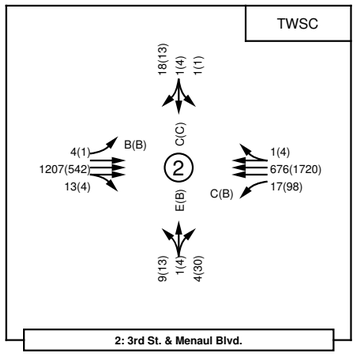
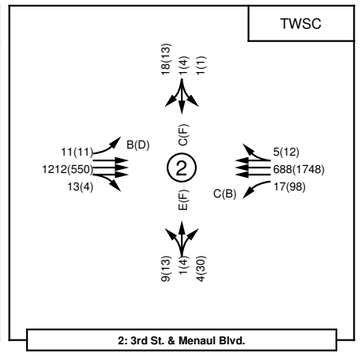
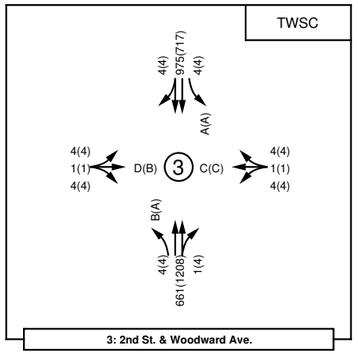
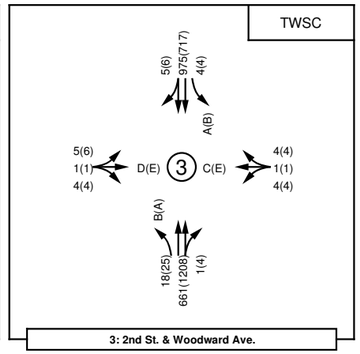
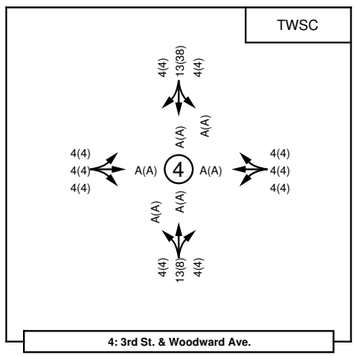
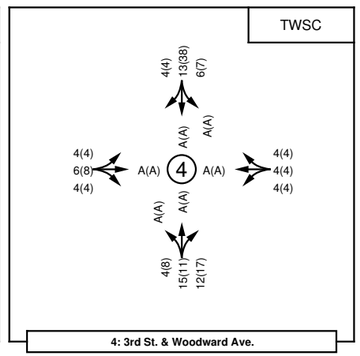
Tidal Wave Auto Spa - Albuquerque
[Menaul Blvd. / 2nd St.]
LOS / Volume Analysis Map

AM(PM)



● SIGNALIZED INTERSECTION

○ UNSIGNALIZED INTERSECTION

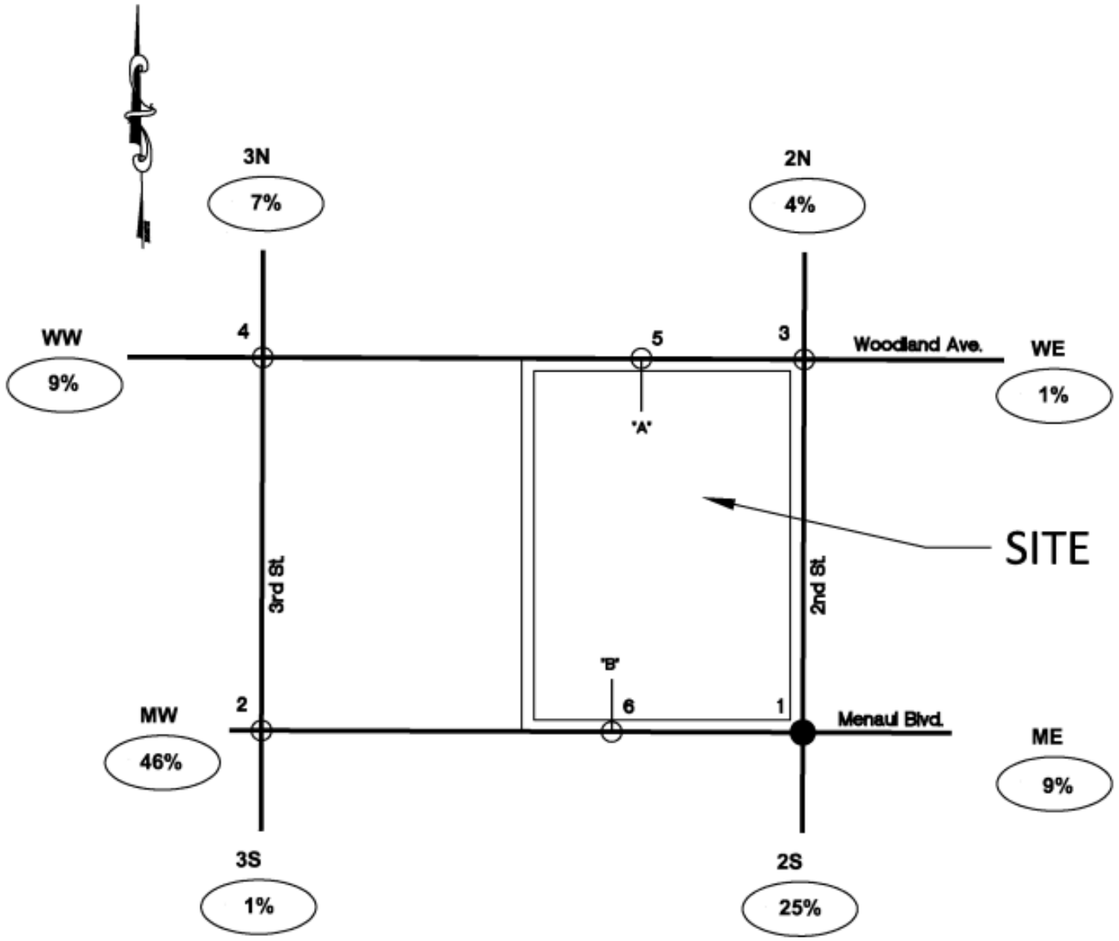
2035 NO BUILD Conditions (Existing Geometry)	2035 BUILD Conditions (Existing Geometry)	
		**NO RECOMMENDATION**
		**NO RECOMMENDATION**
		**NO RECOMMENDATION**
		**NO RECOMMENDATION**

Tidal Wave Auto Spa - Albuquerque

[Menaul Blvd. / 2nd St.]

LOS / Volume Analysis Map

AM(PM)

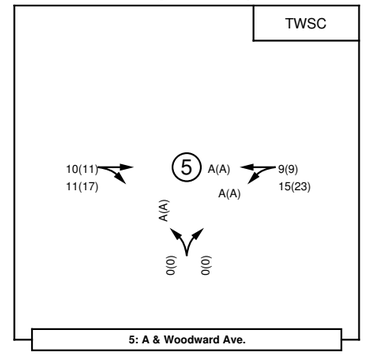


● SIGNALIZED INTERSECTION

○ UNSIGNALIZED INTERSECTION

2035 NO BUILD Conditions
(Existing Geometry)

2035 BUILD Conditions
(Existing Geometry)



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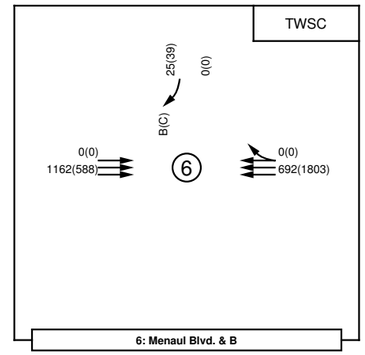


NO RECOMMENDATION

Tidal Wave Auto Spa - Albuquerque
[Menaul Blvd. / 2nd St.]
LOS / Volume Analysis Map

AM(PM)

Appendix

APPENDIX

Tidal Wave Auto Spa - Albuquerque
(Menaul Blvd. / 2nd St.)
Vicinity Map

NORTH

Project Location

Woodland Ave.

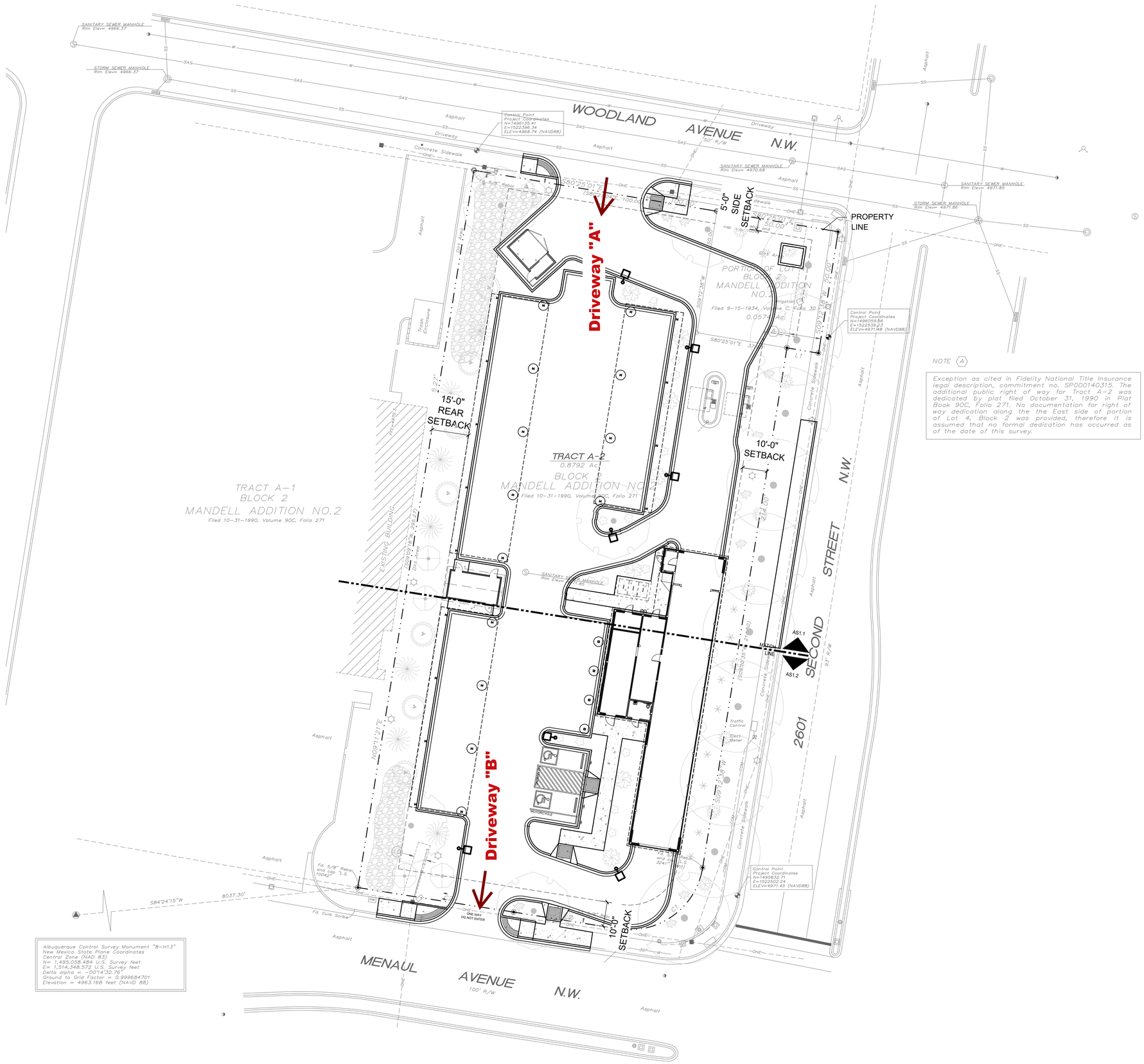
Menaul Blvd.

4th St.

3rd St.

2nd St.

A-1



NOTE (A)

Exception as cited in Fidelity National Title Insurance legal description, commitment no. SP000140315. The additional public right of way for Tract A-2 was dedicated by plat filed October 31, 1990 in Plat Book 90C, Folio 271. No documentation for right of way dedication along the the East side of portion of Lot 4, Block 2 was provided, therefore it is assumed that no formal dedication has occurred as of the date of this survey.

GENERAL NOTES: SITE PLAN

1. SEE CIVIL SHEETS FOR SITE DEMOLITION, HORIZONTAL CONTROL PLAN, GRADING IMPROVEMENTS, EASEMENTS, EROSION CONTROL, SIGNAGE, STRIPPING AND PAVEMENT PLANS. SEE LANDSCAPE SHEETS FOR LANDSCAPE IMPROVEMENTS.
2. THE CONTRACTOR SHALL PREVIEW CONDITIONS AND REVIEW THE SUBSURFACE EXPLORATION GEOTECHNICAL ENGINEERING REPORT FOR THE PROJECT AND PERFORM TO THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.
3. VERIFY LOCATIONS OF EXISTING UTILITIES BEFORE PROCEEDING WITH EXCAVATIONS.
4. ALL GRADING AND CONCRETE PAVING SHALL SLOPE AWAY FROM THE BUILDING.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ADEQUATE DRAINAGE THROUGHOUT THE SITE DURING THE PROCESS OF EXCAVATION AND GRADING. THE GRADE SHALL BE MAINTAINED IN SUCH CONDITION THAT IT IS WELL DRAINED AT ALL TIMES.
6. ADJACENT STREETS AND PARKING AREA SHALL BE KEPT FREE OF MUD AND DEBRIS.
7. THE CONTRACTOR SHALL PROTECT EXISTING ON & OFF SITE CONDITIONS TO REMAIN FROM DAMAGE.
8. THE CONTRACTOR SHALL CONFINE STAGING, STORAGE AND CONSTRUCTION PARKING TO THE SITE.
9. THE IRRIGATION SUBCONTRACTOR SHALL COORDINATE THE LOCATION OF IRRIGATION PIPE SLEEVES WITH THE GENERAL CONTRACTOR PRIOR TO PAVING ACTIVITIES. SLEEVES SHALL BE PROVIDED AND INSTALLED BY THE IRRIGATION SUBCONTRACTOR. IRRIGATION DESIGN TO BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE LANDSCAPE PLANS & IRRIGATION REQUIREMENTS.
10. CONTROL JOINTS TO BE SAW CUT TO ¼ DEPTH OF SLAB. EXPANSION JOINTS TO BE ½" WIDE AND HELD DOWN ½" FROM SURFACE TO RECEIVE SELF LEVELING SEALANT

1 OVERALL ARCHITECTURAL SITE PLAN

SCALE: 1/16" = 1'-0"

ARIA
STUDIO CONSULTANTS, INC
100 Gold Ave. SW, Suite 205,
Albuquerque, NM 87102
Daniel@ariascinc.com
(505) 506-2314
ARCHITECT

KLINGER CONSTRUCTORS, LLC
CONTRACTOR

Civil:
RESPEC
7770 Jefferson St NE
Suite #200
Albuquerque, NM 87109

Landscape:
The Hilltop
Landscape Architects
and Contractors
7909 Edith Blvd NE,
Albuquerque, NM 87113

Structural:
Walla Engineering, LTD
6501 Americas Pkwy #301,
Albuquerque, NM 87110

MEP:
BG Buildingworks
7007 Wyoming Blvd NE # F2,
Albuquerque, NM 87109

CONSULTANTS

TIDAL WAVE AUTO SPA
120 LEFT ENTRY STD

2601 2nd St NW
Albuquerque, NM 87107

OWNER

TIDAL WAVE AUTO SPA

MARK	DATE	DESCRIPTION

NEW MEXICO
NO. 017
04/21/23
Architect/Engineer Stamp

PROJECT DATE:	04/14/23
PROJECT NUMBER:	2220
DRAWN BY:	BEM

SITE PLAN

AS1.0