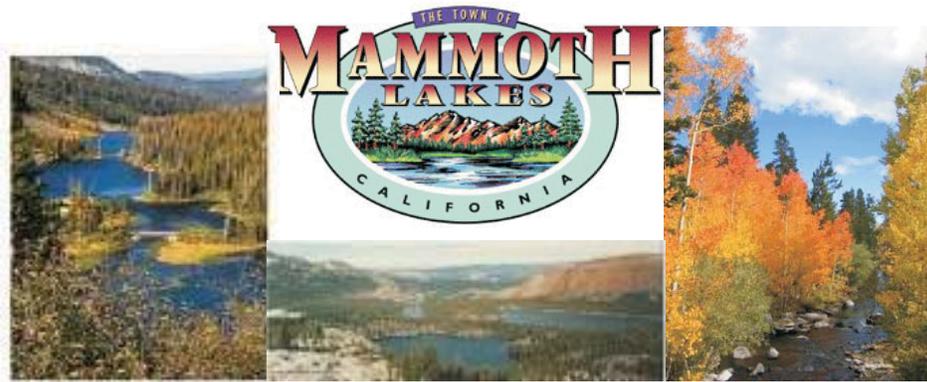


APPENDIX 9.1
Traffic Impact Analysis

MAMMOTH POLICE STATION TRAFFIC AND PARKING IMPACT STUDY



Prepared for

RBF Consulting

Prepared by

LSC Transportation Consultants, Inc.



September 21, 2007

Mammoth Police Station Traffic and Parking Impact Study

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September 21, 2007

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LSC Transportation Consultants, Inc. was retained by the Town of Mammoth Lakes to prepare a Traffic and Parking Study for the construction of a new Mammoth Lakes Police Station (MLPD), proposed to be located on the east side of Sierra Nevada Road north of Tavern Road in Mammoth Lakes, California. This study focuses on the existing (2007) and future (2025) impacts with and without the project.

PROJECT DESCRIPTION

The location of the project is shown in Figure 1. As indicated, it is located along the east side of Sierra Park Road south of Main Street and north of Tavern Road. The project proposes to build the following:

- 11,617 square foot police station building
- 21 garage parking spaces
- 30 surface parking spaces

Access would be provided by an eastward extension of Tavern Road (for all traffic) and a second access point on Sierra Park Road to the north (for police vehicles only). Tavern Road could potentially be extended eastward to connect with Commerce Drive.

The analysis of traffic impacts reflects the following conditions:

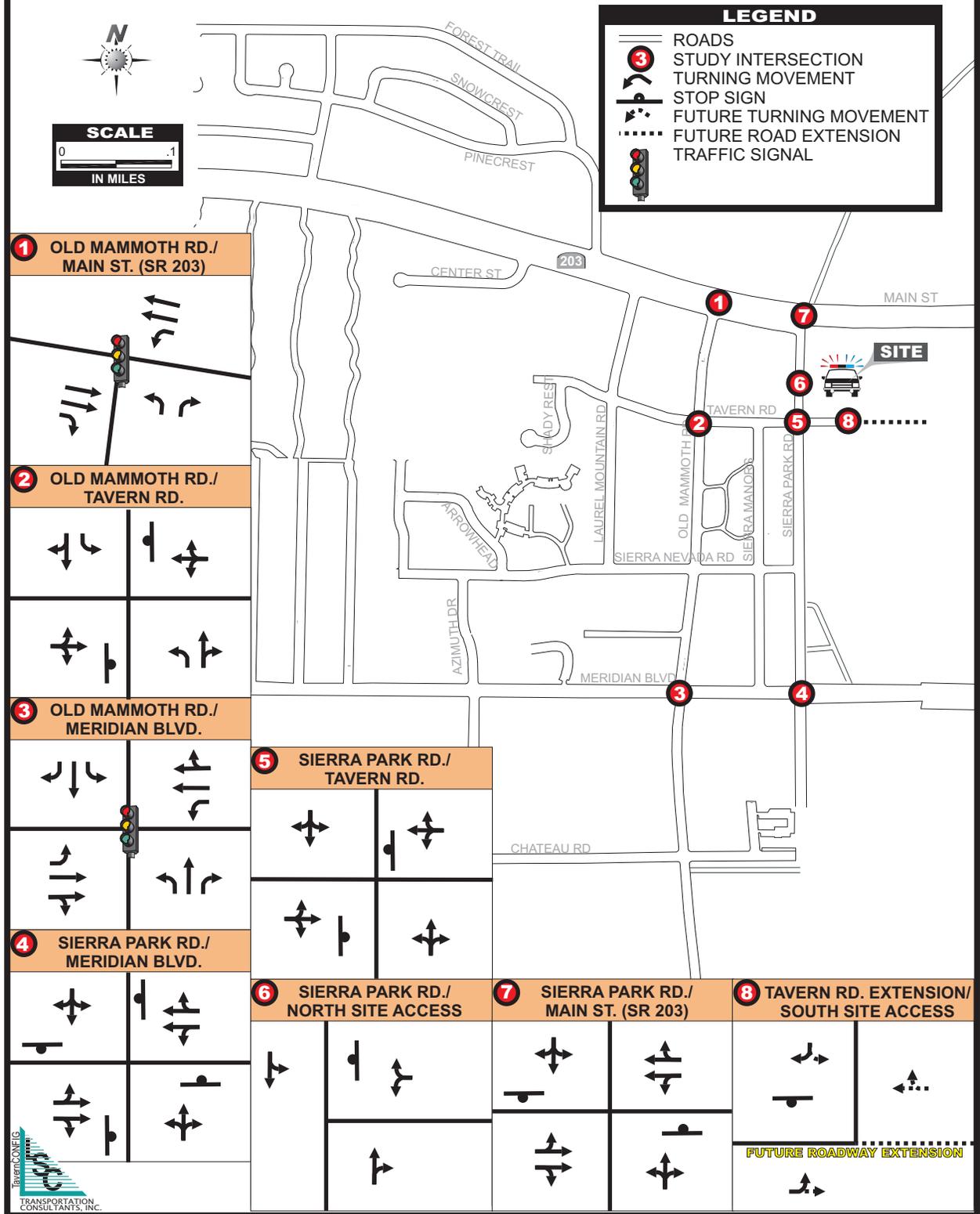
- Existing 2007 no project conditions
- Existing 2007 plus project conditions
- Existing 2007 plus project conditions with mitigation
- Future 2025 no project conditions
- Future 2025 plus project conditions
- Future 2025 plus project conditions with mitigation

In addition, the study presents results of an examination of the future planned extension of Tavern Road to connect to Commerce Drive as identified in the Town's Mobility Plan. Also, as the public schools located along Sierra Park Road result in volumes on some movements that are greater on weekdays than on Saturdays, the intersections along Sierra Park Road are evaluated for both weekday and Saturday conditions.

The study intersections are as follows:

1. Old Mammoth Road/Main Street (State Route 203)
2. Old Mammoth Road/Tavern Road
3. Old Mammoth Road/Meridian Boulevard
4. Sierra Park Road/Meridian Boulevard

**FIGURE 1
MAMMOTH POLICE STATION LANE CONFIGURATIONS
AND TRAFFIC CONTROL**



5. Sierra Park Road/Tavern Road
6. Sierra Park Road/Site Access
7. Sierra Park Road/Main Street (State Route 203)
8. Tavern Road Extension/Site Access (Future intersection)

LEVEL OF SERVICE STANDARDS

Level of Service (LOS) is commonly used as a qualitative description of intersection operation and is based on the type of traffic control and delay experienced at the intersection. The *Highway Capacity Manual* (HCM) analysis methodology for signalized intersections and unsignalized intersections is utilized to determine the operating LOS of the study intersections. All LOS were calculated using the software Traffix 7.7. All LOS printouts are presented in Appendix A. The HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding ranges of stopped delay experienced per vehicle for signalized and unsignalized intersections shown in Table 1.

The Town of Mammoth Lakes General Plan presents the following LOS thresholds:

- Signalized Intersections – Total intersection LOS D or better must be maintained. Therefore, if a signalized intersection is found to operate at a total intersection LOS E or F, mitigation is required. This same threshold applies to roundabouts.
- Unsignalized Intersections – In order to avoid the identification of a LOS failure for intersections that result in only a few vehicles experiencing a delay greater than 50 seconds (such as at a driveway serving a few homes that accesses onto a busy street), a LOS deficiency is not identified for all intersections with approach LOS E or F. Instead, a LOS deficiency is assumed to occur at an unsignalized intersection only if an individual minor street movement operates at LOS E or F and total minor approach delay exceeds four vehicle hours for a single lane approach and five vehicle hours for a multi-lane approach.

In addition, impacts are considered significant if, in the future year scenario (2025) with the project, the volume to capacity ratio along any of the study area roadways is greater than one.

Table 1: Level of Service Descriptions

LOS	Description	Delay (seconds/vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	Operation with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0	> 50.0

Source: Transportation Research Board, Highway Capacity Manual, "HCM 2000" Edition (Washington D.C., 2000).

EXISTING 2007 NO PROJECT CONDITIONS

Figure 1 presents the lane configuration and intersection control devices for all of the study intersections.

Saturday PM Peak Hour volumes were estimated as follows:

- Intersection volumes were obtained from the No Project scenario from Mammoth Lakes Tavern Road Mixed Use Project (LSC Transportation Consultants, Inc., January 2007). An annual growth rate, based on traffic trends over recent years, was then applied in order to update the volumes to 2007 levels.

Weekday School PM Peak Hour volumes were estimated as follows:

- Volumes for Sierra Park Road/Main Street and Sierra Park Road/Meridian Road were estimated from the 2004 Mammoth Traffic Demand Model, then adjusted to obtain weekday volumes along Sierra Park Road. An annual growth rate, based on traffic trends over recent years, was then applied in order to update the volumes to 2007 levels.
- As volumes for the Sierra Park Road/Tavern were not available in the Model, they were estimated based on Saturday PM peak hour volumes at this intersection factored by a ratio of weekday to weekend volumes south of Main Street along Sierra Park Road. A separate factor was obtained for northbound and southbound volumes. These volumes were then balanced conservatively with the intersection of Sierra Park Road and Main Street.

Figure 2 shows the existing 2007 volumes for both the typical winter Saturday PM peak hour and the weekday school PM peak hour without the project. The corresponding intersection LOS, presented in Table 2, shows that all intersections operate at an acceptable LOS without the project.

FUTURE 2025 NO PROJECT CONDITIONS

Saturday 2025 PM Peak Hour volumes were forecasted based on the Mammoth Lakes Transportation Demand Model as follows:

- The Mammoth Lakes Transportation Demand Model was run to estimate a set of 2025 and 2004 traffic volumes at all the intersections (excluding the site access intersections). The annual growth of volumes was then calculated. Note that for individual movements for which the model predicted negative growth, in order to remain conservative, the growth was assumed to be zero. Finally, 18 years of growth was then added to the 2007 no project volumes to obtain the 2025 no project volumes.

**FIGURE 2
MAMMOTH POLICE STATION 2007 NO PROJECT TRAFFIC VOLUMES**

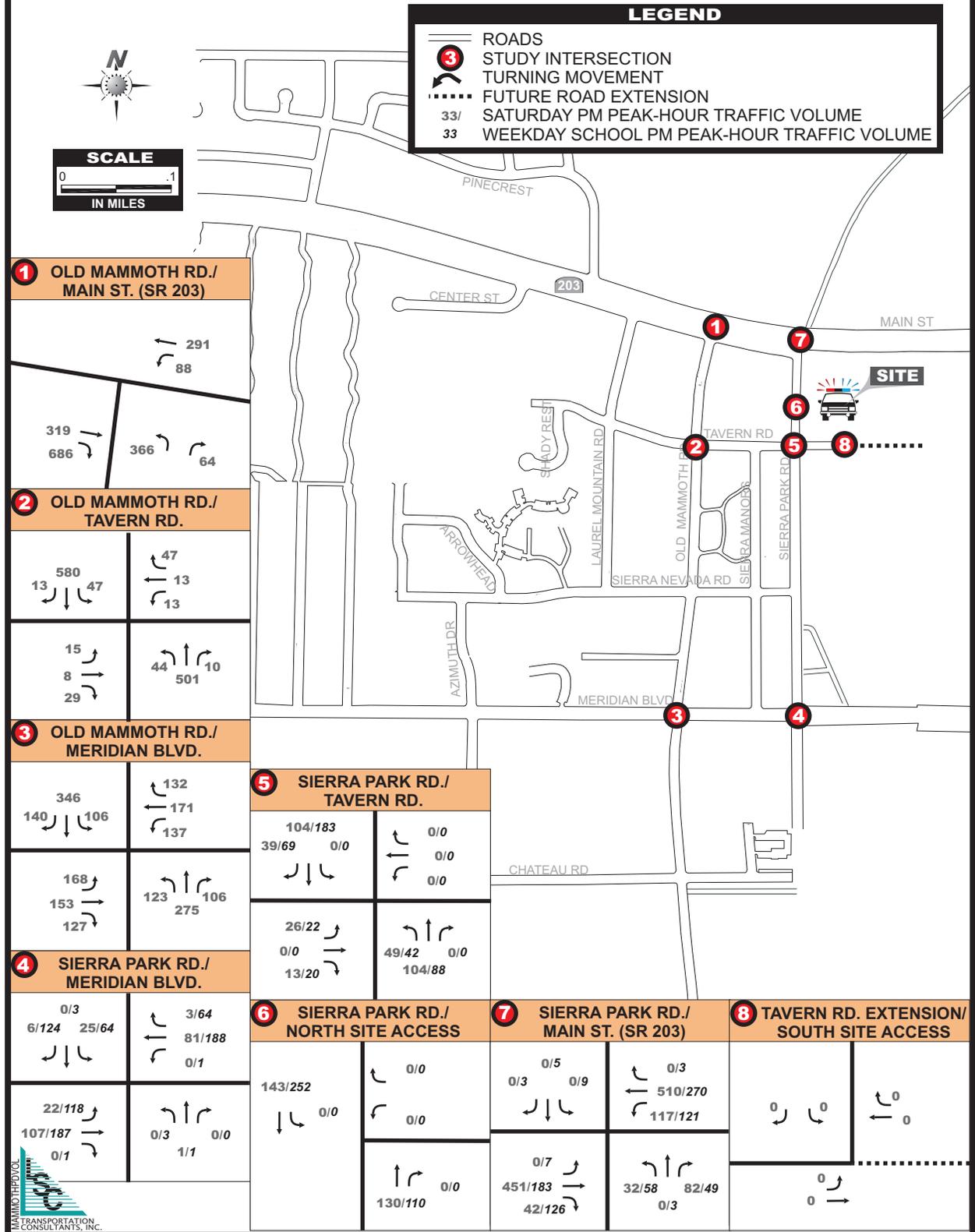


TABLE 2: 2007 Intersection Level of Service (LOS)

#	Intersection	Traffic Control	Movement	No Project		Plus Project	
				LOS	Delay (sec/vehicle)	LOS	Delay (sec/vehicle)

Saturday PM Peak Hour

1	Old Mammoth Road/Main St (SR 203)	Traffic Signal	Total Intersection	B	18.9	B	18.8
2	Old Mammoth Road/Tavern Road	Two-Way Stop	Worst Movement	D	31.1	D	31.2
			Total Intersection	A	3.3	A	3.4
3	Old Mammoth Road/Meridian Blvd	Traffic Signal	Total Intersection	C	28.9	C	28.9
4	Sierra Park Road/Meridian Blvd	Four-Way Stop	Worst Movement	A	8.0	A	8.0
			Total Intersection	A	7.8	A	7.8
5	Sierra Park Road/Tavern Road	Two-Way Stop	Worst Movement	B	10.4	B	10.8
			Total Intersection	A	2.3	A	2.5
6	Sierra Park Road/Site Access	Two-Way Stop	Worst Movement	-	-	A	9.6
			Total Intersection	-	-	A	0.2
7	Sierra Park Road/Main St (SR 203)	Two-Way Stop	Worst Movement	C	16.2	C	16.9
			Total Intersection	A	2.3	A	2.5
8	Tavern Road/Site Access	Two-Way Stop	Worst Movement	-	-	A	2.6
			Total Intersection	-	-	A	2.4

Weekday School PM Peak Hour

4	Sierra Park Road/Meridian Blvd	Two-Way Stop	Worst Movement	B	10.1	B	10.1
			Total Intersection	A	9.4	A	9.5
5	Sierra Park Road/Tavern Road	Four-Way Stop	Worst Movement	B	10.5	B	11.1
			Total Intersection	A	1.8	A	2.1
6	Sierra Park Road/Site Access	Two-Way Stop	Worst Movement	-	-	A	10.0
			Total Intersection	-	-	A	0.2
7	Sierra Park Road/Main St (SR 203)	Two-Way Stop	Worst Movement	C	16.0	C	16.7
			Total Intersection	A	3.6	A	3.7

Weekday 2025 School PM Peak Hour volumes were forecasted based on the Mammoth Lakes Transportation Demand Model as follows:

- Volumes for Sierra Park Road/Main Street and Sierra Park Road/Meridian Road were estimated from the 2025 Mammoth Traffic Demand Model, then adjusted to obtain weekday volumes along Sierra Park Road.
- Volumes for the Sierra Park Road/Tavern Road were not available in the Model, therefore, they were estimated based on Saturday PM peak hour volumes at this intersection factored by a ratio of weekday to weekend volumes south of Main Street along Sierra Park Road. A separate factor was obtained for northbound and southbound volumes. These volumes were then balanced conservatively with the intersection of Sierra Park Road and Main Street.

Figure 3 presents the future 2025 volumes for both the typical winter Saturday PM peak hour and the weekday school PM peak hour without the project. The corresponding LOS for each intersection is shown in Table 3. As shown, all intersections are forecast operate at an acceptable LOS D or better, with the exception of the Sierra Park Road/Main Street intersections during the weekday school PM peak hour. Note that while the worst movement at Old Mammoth Road/Tavern Road is LOS F, this does not exceed the Town LOS standard as the 2.8 vehicle hours of delay on this minor approach is less than the 4.0 hour standard.

**FIGURE 3
MAMMOTH POLICE STATION 2025 NO PROJECT TRAFFIC VOLUMES**

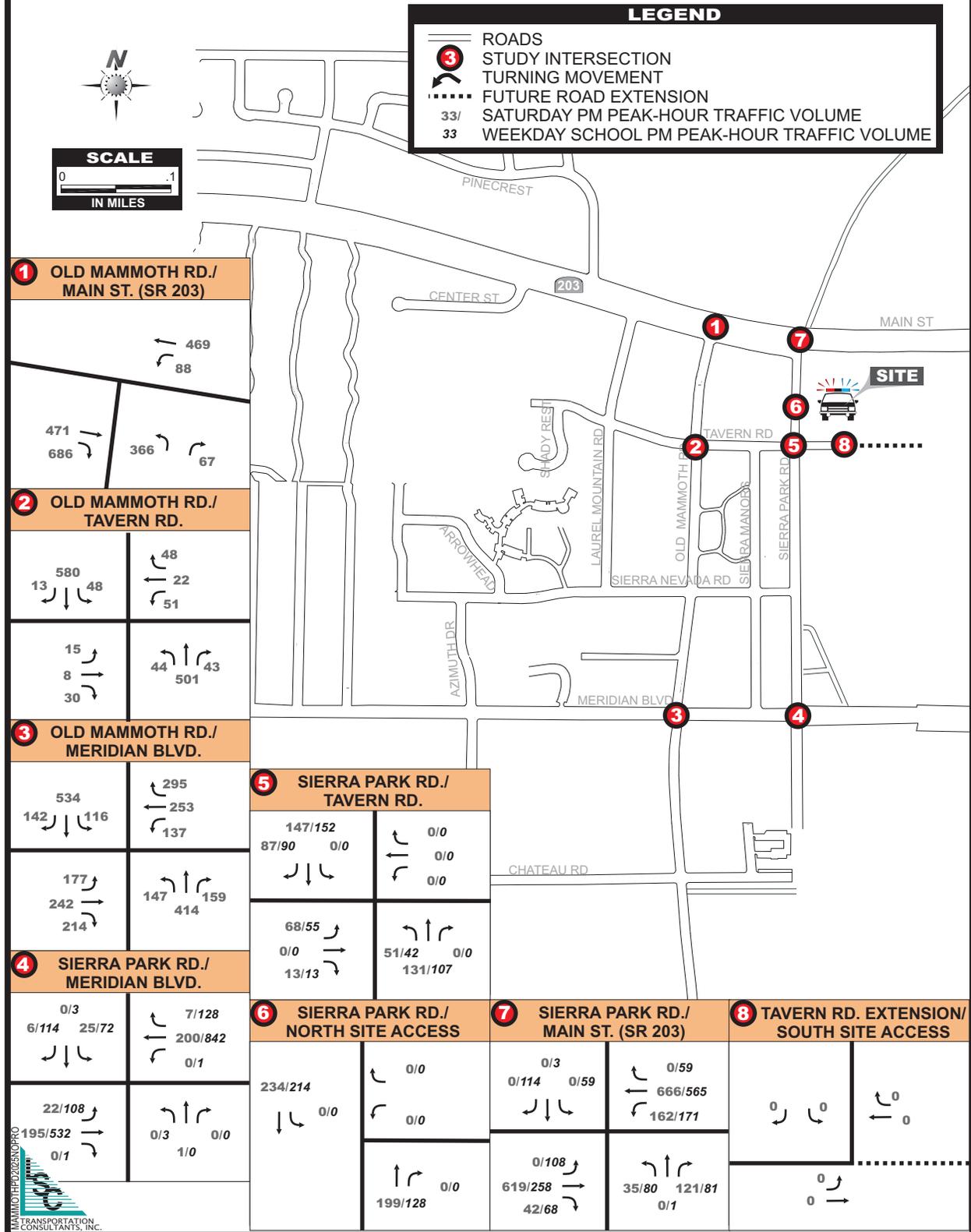


TABLE 3: 2025 Intersection Level of Service (LOS)

BOLD text indicated the LOS standard was exceeded.

#	Intersection	Traffic Control	Movement	No Project		Plus Project	
				LOS	Delay (sec/vehicle)	LOS	Delay (sec/vehicle)
Saturday PM Peak Hour							
1	Old Mammoth Road/Main St (SR 203)	Traffic Signal	Total Intersection	B	17.1	B	17.2
2	Old Mammoth Road/Tavern Road	Two-Way Stop	Worst Movement	F	82.6	F	95.2
			Total Intersection	A	9.0	B	10.5
3	Old Mammoth Road/Meridian Blvd	Traffic Signal	Total Intersection	C	30.1	C	30.2
4	Sierra Park Road/Meridian Blvd	Four-Way Stop	Worst Movement	A	8.4	A	8.5
			Total Intersection	A	8.3	A	8.3
5	Sierra Park Road/Tavern Road	Two-Way Stop	Worst Movement	B	12.2	B	13.3
			Total Intersection	A	2.8	A	3.2
6	Sierra Park Road/Site Access	Two-Way Stop	Worst Movement	-	-	B	10.8
			Total Intersection	-	-	A	0.2
7	Sierra Park Road/Main St (SR 203)	Two-Way Stop	Worst Movement	D	26.9	D	29.0
			Total Intersection	A	3.5	A	3.8
8	Tavern Road/Site Access	Two-Way Stop	Worst Movement	-	-	A	2.6
			Total Intersection	-	-	A	2.4
Weekday School PM Peak Hour							
4	Sierra Park Road/Meridian Blvd	Two-Way Stop	Worst Movement	D	28.8	D	29.4
			Total Intersection	C	22.2	C	22.6
5	Sierra Park Road/Tavern Road	Four-Way Stop	Worst Movement	B	11.3	B	12.3
			Total Intersection	A	2.4	A	2.9
6	Sierra Park Road/Site Access	Two-Way Stop	Worst Movement	-	-	B	10.2
			Total Intersection	-	-	A	0.4
7	Sierra Park Road/Main St (SR 203)	Two-Way Stop	Worst Movement	F	87.9	F	99.5
			Total Intersection	C	19.5	C	21.0

PROJECT GENERATED IMPACTS

PROJECT TRIP GENERATION AND DISTRIBUTION

Trip generation is the evaluation of the number of vehicle-trips that would either have an origin or destination at the project site. While standard trip generation rates are provided by documents such as ITE Trip Generation, these documents do not provide standard rates for police stations. Therefore, it was necessary to estimate daily and peak hour trip generation based on a “person-trip” analysis for both Saturday and weekday time periods. This person-trip analysis consists of estimating the anticipated number of one-way person trips by time of day, then factoring by travel mode and vehicle occupancy to forecast the number of vehicle-trips. The number of one-way person trips was estimated by interviewing the Mammoth Lakes Police Chief, reviewing a log of personnel entering and exiting the current site, and reviewing Police Department staff schedules.

The resulting number of existing vehicle-trips generated throughout the day is shown in Tables 4 and 5, for Saturday and weekdays. As indicated, the Saturday PM peak hour occurs between 4 PM and 5 PM with a volume of 18 vehicle-trips (8 in, 10 out), while the weekday school PM peak hour occurs between 3 PM and 4 PM with a volume of 27 vehicle-trips (14 in, 13 out). Additionally, the proposed project is forecast to generate 167 daily vehicle-trips on a Saturday and 264 daily vehicle-trips on a weekday.

Future (2025) activity at the Police Station is expected to increase proportionate to the total activity in the community, resulting in increased site traffic from both staff and visitors. The *Town of Mammoth Lakes General Plan Update* (May 2007) population estimates were used to identify a factor equal to the future total Town-wide resident plus visitor population divided by the 2007 figure. The resulting ratio of 1.60 was used factor the 2007 trip generation up to future 2025 levels. The resulting trip generation for the 2025 Saturday PM peak hour is forecast to be 29 vehicle-trips (13 in, 16 out), while the weekday school PM peak hour will increase to 43 vehicle-trips (22 in, 21 out). Additionally, the proposed project will generate 267 daily vehicle-trips on a Saturday and 422 daily vehicle-trips on a weekday.

The distribution of project generated traffic arriving and departing the project site was estimated based on the following:

- The origin and destination of trips generated in the vicinity of the project site, as identified in the Mammoth Lakes Transportation Demand Model;
- Expected trip purposes by MLPD visitors and staff; and
- The location of the site relative to employment, commercial, and recreational centers.

The resulting distribution pattern for project-generated peak-hour trips is summarized in Table 6.

TABLE 4: Mammoth Lakes Police Station Total Trips (Entering and Exiting) - Existing Weekend

STAFF
 Records &
 CSO &
 School

Hour Beginning	Administ ration	Specialist - Detectives	Specialist - Narcotics	Specialist - Resources	Animal Control	Patrol	Evening Patrol	Graveyard Patrol	Utility ¹	Visitors	Total Vehicle Trips
1:00 AM	0	0	0	0	0	0	2	2	0	0	4
2:00 AM	0	0	0	0	0	0	4	2	0	0	6
3:00 AM	0	0	0	0	0	0	0	3	0	0	3
4:00 AM	0	0	0	0	0	0	0	3	0	0	3
5:00 AM	0	0	0	0	0	0	0	2	0	0	2
6:00 AM	0	0	0	0	0	6	0	2	0	0	8
7:00 AM	0	0	0	0	0	3	0	4	0	0	7
8:00 AM	0	0	2	4	0	3	0	0	0	6	15
9:00 AM	0	0	0	0	1	3	0	0	0	2	6
10:00 AM	0	0	0	0	0	3	0	0	0	6	9
11:00 AM	0	0	0	0	0	3	0	0	0	14	17
12:00 PM	0	0	2	2	1	3	0	0	0	4	12
1:00 PM	0	0	2	2	1	4	0	0	0	2	11
2:00 PM	0	0	0	0	0	4	0	0	0	2	6
3:00 PM	0	0	0	0	0	3	0	0	0	2	5
4:00 PM	0	0	1	2	0	5	4	0	0	6	18
5:00 PM	0	0	2	0	1	0	2	0	0	0	5
6:00 PM	0	0	0	0	0	0	3	0	0	0	3
7:00 PM	0	0	0	0	0	0	3	0	0	0	3
8:00 PM	0	0	0	0	0	0	2	0	0	0	2
9:00 PM	0	0	0	0	0	0	2	4	0	0	6
10:00 PM	0	0	0	0	0	0	3	2	0	0	5
11:00 PM	0	0	0	0	0	0	3	3	0	0	6
12:00 AM	0	0	0	0	0	0	2	3	0	0	5
Total Entering Trips	0	0	9	10	4	40	30	30	0	44	167

Source: Mammoth Lakes Police Department, September 2007

Highlighting indicates PM peak hour

TABLE 5: Mammoth Lakes Police Station Total Trips (Entering and Exiting) - Existing Weekday

STAFF
Records &
CSO &
School

Hour Beginning	Administ ration	Specialist - Detectives	Specialist - Narcotics	Specialist - Resources	Animal Control	Patrol	Evening Patrol	Graveyard Patrol	Utility ¹	Visitors	Total Vehicle Trips
1:00 AM	0	0	0	0	0	0	3	2	0	0	5
2:00 AM	0	0	0	0	0	0	5	2	0	0	7
3:00 AM	0	0	0	0	0	0	0	3	0	0	3
4:00 AM	0	0	0	0	0	0	0	3	0	0	3
5:00 AM	0	0	0	0	0	0	0	2	0	0	2
6:00 AM	0	2	0	0	0	6	0	2	0	0	10
7:00 AM	0	0	0	0	0	3	0	4	0	0	7
8:00 AM	3	0	2	4	0	3	0	0	0	16	28
9:00 AM	0	1	0	0	1	3	0	0	2	14	21
10:00 AM	0	0	0	0	0	3	0	0	0	8	11
11:00 AM	0	2	0	0	0	3	0	0	2	8	15
12:00 PM	2	2	2	3	1	3	0	0	0	6	19
1:00 PM	2	0	2	3	1	4	0	0	0	16	28
2:00 PM	0	0	0	0	0	4	0	0	2	10	16
3:00 PM	0	0	0	0	0	3	0	0	0	24	27
4:00 PM	0	2	1	4	0	5	6	0	0	0	18
5:00 PM	3	0	2	0	1	0	3	0	0	0	9
6:00 PM	0	0	0	0	0	0	3	0	0	0	3
7:00 PM	0	0	0	0	0	0	3	0	0	0	3
8:00 PM	0	0	0	0	0	0	3	0	0	0	3
9:00 PM	0	0	0	0	0	0	3	4	0	0	7
10:00 PM	0	0	0	0	0	0	3	2	0	0	5
11:00 PM	0	0	0	0	0	0	4	3	0	0	7
12:00 AM	0	0	0	0	0	0	4	3	0	0	7
Total Trips	10	9	9	14	4	40	40	30	6	102	264

Source: Mammoth Lakes Police Department, September 2007

Note 1: Utility trips consist of a daily linen truck, daily UPS delivery, and a daily rug cleaning truck.

Highlighting indicates PM peak hour

Table 6: Trip Distribution

Name	2007 Distribution	2025 Distribution	2025 Distribution with Tavern Extension
Main Street West of Old Mammoth Road	39%	39%	39%
Main Street East of Sierra park Road	5%	5%	3%
Sierra Park Road Area (internal gate)	2%	2%	2%
Meridian East of Serra Park Road	5%	5%	5%
Vons Shopping Center Area	5%	5%	5%
Old Mammoth Road South of Meridain	21%	21%	21%
Meridain West of Old Mammoth Road	15%	15%	15%
Sierra Nevada Street West of Old Mammoth Road	4%	4%	4%
Tavern Road West of Old Mammoth Road	4%	4%	4%
Tavern Road Extension	0%	0%	2%
Total	100%	100%	100%

Applying this distribution to the trip generation volumes yields the net change in project generated peak-hour vehicle-trips through each study intersection, as shown in Figures 4 and 5, for 2007 and 2025.

EXISTING AND FUTURE PLUS PROJECT CONDITIONS

Intersection LOS

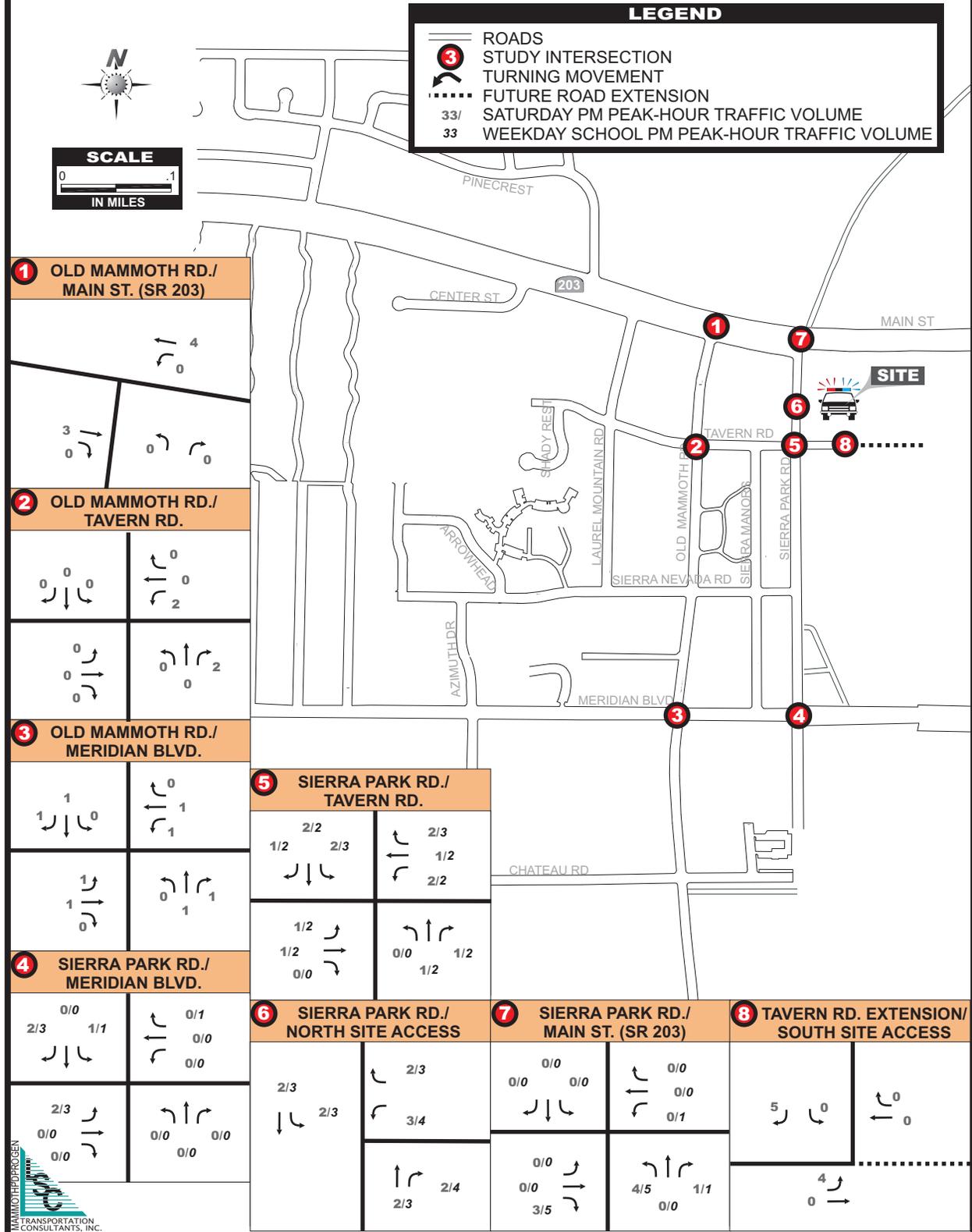
Project generated volumes were added to the existing 2007 no project volumes to yield the existing 2007 peak hour plus project volumes, as shown in Figure 6. The plus project LOS conditions were then evaluated and summarized in Table 2. As indicated, the proposed project would not lower the total intersection or worst movement LOS at any study intersection. All of the study intersections are predicted to operate within the Town's LOS standard with the project.

Project generated volumes were also added to the future 2025 no project volumes to yield the future 2025 peak hour plus project volumes, shown in Figure 7. The corresponding LOS conditions were evaluated and summarized in Table 3. As shown, the proposed project would not lower the LOS for any intersection except Old Mammoth Road/Tavern Road at which the total intersection LOS would degrade from LOS A to LOS B. The intersection Sierra Park Road/Main Street would continue to exceed the LOS standard with the worst movement of LOS F, with more than 4.0 vehicle hours of delay for the minor approach.

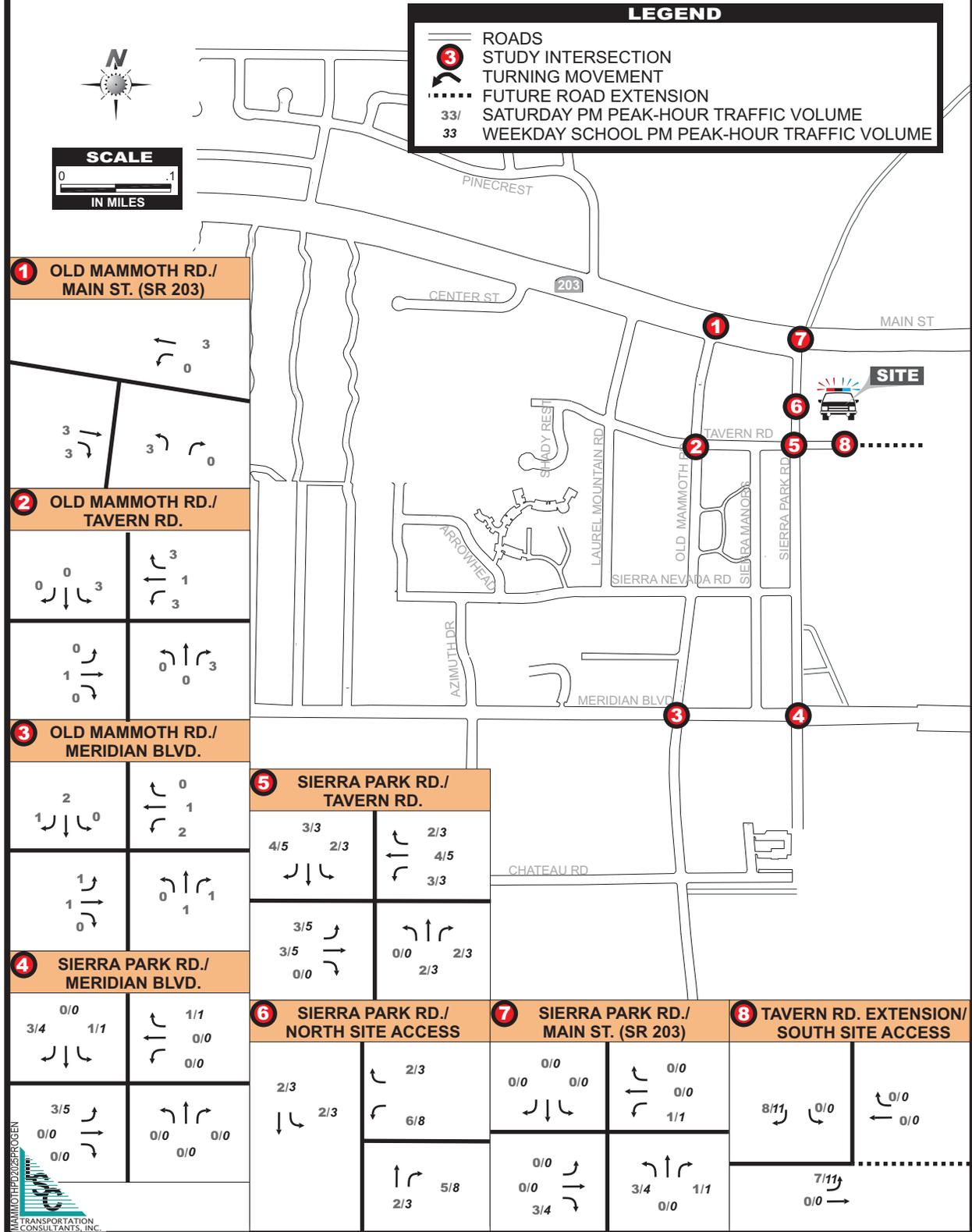
Impacts of the Tavern Road Extension

Future 2025 no project and plus project volumes were also generated assuming the proposed extension of Tavern Road. The Traffic Model was rerun with this additional roadway link included to identify no-project conditions. 2025 site traffic generation was also assigned to the

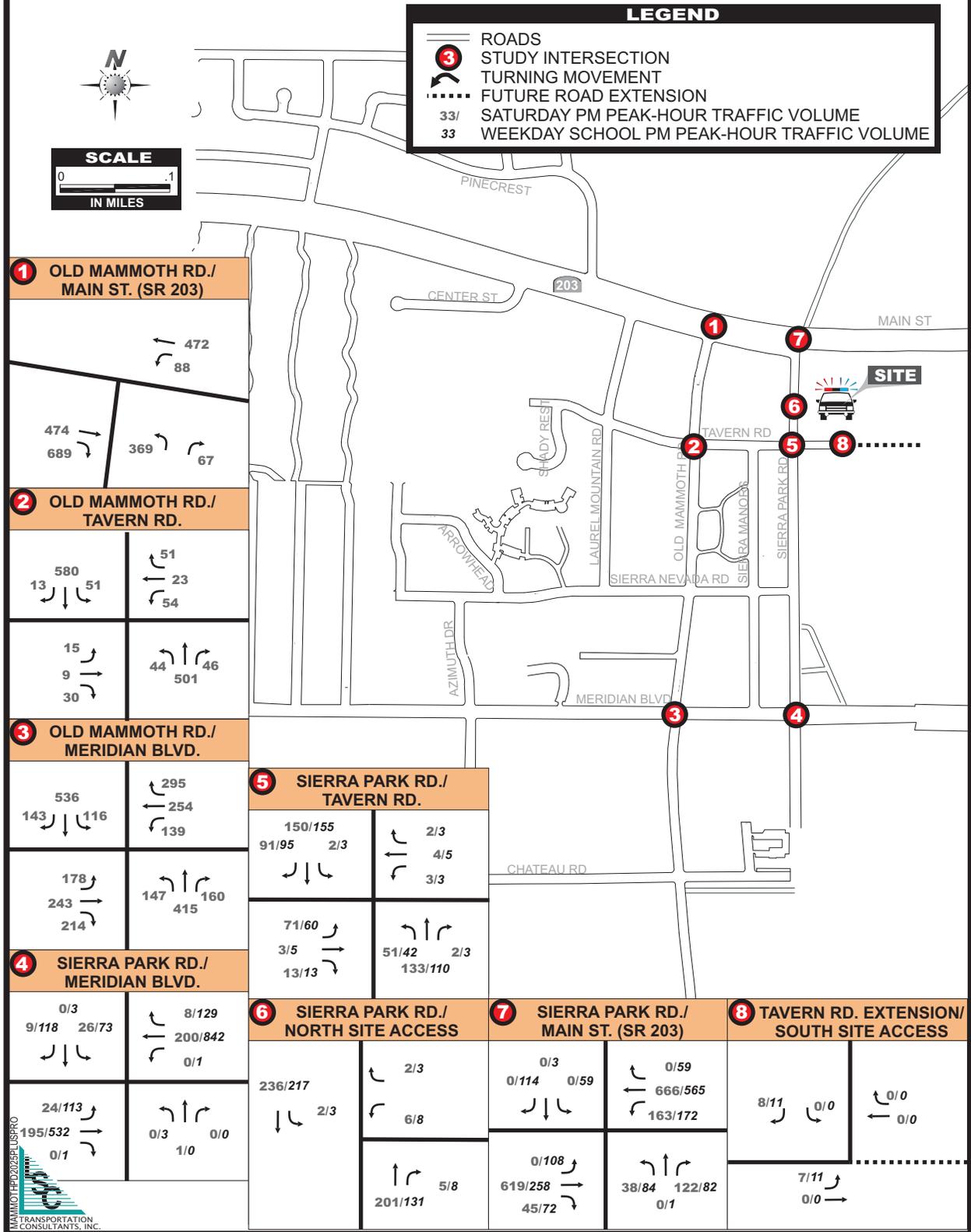
**FIGURE 4
MAMMOTH POLICE STATION 2007 PROJECT GENERATED
TRAFFIC VOLUMES**



**FIGURE 5
MAMMOTH POLICE STATION 2025 PROJECT GENERATED
TRAFFIC VOLUMES**



**FIGURE 7
MAMMOTH POLICE STATION 2025 PLUS PROJECT TRAFFIC VOLUMES**



roadway network using a trip distribution adjusted to reflect site traffic that would use the new roadway. The impact of this roadway is as follows:

- Tavern Road Extension/South Site Access would continue to operate at LOS A with or without the proposed project.
- Sierra Park Road/Tavern Road would continue to operate at LOS A for the total intersection, but the worst movement will be degraded from a B to a C under no project conditions. The addition of the project will not cause the LOS to degrade further.

Roadway Capacity

Peak hour roadway capacity was estimated from the peak hour volumes at the study intersections. Tables 7 and 8 show that neither the 2007 nor the 2025 peak hour volumes will exceed the roadway capacity standard, with or without the project. In fact, all of the volume to capacity ratios are below 0.65, indicating that all roadway segments will carry volumes that are well within their capacity.

INTERNAL CIRCULATION/PROJECT ACCESS

Site access is provided on Sierra Park Road north of Tavern Road and on Tavern Road as an additional leg (east leg) at the intersection of Sierra Park Road/Tavern Road. The site access intersection LOS is summarized in Tables 2 and 3, above. As shown, good (A or B) LOS would be provided at both of the site access driveways, for both worst-movement and overall intersection conditions. Based on these LOS results and a review of turning-movement volumes, no additional left-turn or right-turn lanes are warranted at either of the site access points.

The 24 parking spaces located on the Tavern Road extension are laid out perpendicular to the street. Under the existing conditions Tavern Road will not be extended past this parking area and this type of parking would be acceptable. If Tavern Road is extended to the east in the future to form a through public roadway, it would not be acceptable for these perpendicular spaces (which would require drivers to back out into the through travel lanes) to remain. When and if this extension occurs, this perpendicular parking would need to be modified to parallel or angled parking, consistent with Town standards.

PARKING

While standard parking requirements based on land uses are provided in the Town of Mammoth Lakes Parking Code, a police station is not included as a standard use. As each police station has its own unique elements, the person-trip analysis used for the trip generation above was used to estimate parking demand. The maximum number of persons on site at one time occurs on a weekday around 3PM with 28 persons onsite. Dividing by a vehicle occupancy of 1.12 (the national average for work trips) results in a maximum of 25 vehicles on site at one time. Note this does not include the police vehicles. Currently, the Police Department has 18 vehicles.

Roadway Segment	2007 No Project						2007 Plus Project					
	Saturday PM Peak Hour			Weekday School PM Peak Hour			Saturday PM Peak Hour			Weekday School PM Peak Hour		
	Maximum Direction per Hour	Volume/ Capacity	Capacity Exceeded ?	Maximum Direction per Hour	Volume/ Capacity	Capacity Exceeded ?	Maximum Direction per Hour	Volume/ Capacity	Capacity Exceeded?	Maximum Direction per Hour	Volume/ Capacity	Capacity Exceeded?
Main Street East of Old Mammoth Road	383	0.15	No	394	0.15	No	386	0.15	No	395	0.15	No
Main Street East of Sierra Park Road	533	0.21	No	394	0.15	No	627	0.24	No	395	0.15	No
Main Street West of Old Mammoth Road	1005	0.39	No	-	-	-	1008	0.39	No	-	-	-
Main Street West of Sierra Park Road	542	0.21	No	331	0.13	No	546	0.21	No	335	0.13	No
Meridian Boulevard East of Old Mammoth	440	0.28	No	-	-	-	442	0.28	No	-	-	-
Meridian Boulevard East of Sierra Park Road	132	0.08	No	253	0.16	No	133	0.08	No	254	0.16	No
Meridian Boulevard West of Old Mammoth	448	0.17	No	-	-	-	450	0.17	No	-	-	-
Meridian Boulevard West of Sierra Park Road	129	0.08	No	315	0.20	No	131	0.08	No	319	0.20	No
Old Mammoth Road North of Meridian	592	0.37	No	-	-	-	594	0.37	No	-	-	-
Old Mammoth Road North of Tavern	640	0.40	No	-	-	-	640	0.40	No	-	-	-
Old Mammoth Road South of Main Street	774	0.48	No	-	-	-	774	0.48	No	-	-	-
Old Mammoth Road South of Meridian	610	0.38	No	-	-	-	612	0.38	No	-	-	-
Old Mammoth Road South of Tavern	622	0.39	No	-	-	-	624	0.39	No	-	-	-
Sierra Park Road North of Meridian	31	0.02	No	191	0.12	No	34	0.02	No	196	0.12	No
Sierra Park Road North of Tavern	143	0.09	No	252	0.16	No	148	0.09	No	263	0.16	No
Sierra Park Road South of Main Street	159	0.10	No	252	0.16	No	162	0.10	No	257	0.16	No
Sierra Park Road South of Tavern	153	0.10	No	203	0.13	No	155	0.10	No	209	0.13	No
Tavern Road East of Old Mammoth	73	0.05	No	-	-	-	75	0.05	No	-	-	-
Tavern Road West of Old Mammoth	70	0.04	No	-	-	-	70	0.04	No	-	-	-
Tavern Road West of Sierra Park Road	88	0.06	No	111	0.07	No	90	0.06	No	121	0.08	No

Table 7: 2007 Roadway Capacity

Roadway Segment	2025 No Project						2025 Plus Project					
	Saturday PM Peak Hour			Weekday School PM Peak Hour			Saturday PM Peak Hour			Weekday School PM Peak Hour		
	Maximum Vehicles per Direction per Hour	Volume/ Capacity	Capacity Exceeded ?	Direction per Hour	Volume/ Capacity	Capacity Exceeded ?	Maximum Vehicles per Direction per Hour	Volume/ Capacity	Capacity Exceeded?	Direction per Hour	Volume/ Capacity	Capacity Exceeded?
Main Street East of Old Mammoth Road	2,600	0.21	No	-	-	-	560	0.22	No	-	-	-
Main Street East of Sierra Park Road	2,600	0.32	No	795	0.31	No	829	0.32	No	796	0.31	No
Main Street West of Old Mammoth Road	2,600	0.45	No	-	-	-	1163	0.45	No	-	-	-
Main Street West of Sierra Park Road	2,600	0.27	No	759	0.29	No	704	0.27	No	763	0.29	No
Meridian Boulevard East of Old Mammoth	1,600	0.43	No	-	-	-	688	0.43	No	-	-	-
Meridian Boulevard East of Sierra Park Road	1,600	0.14	No	971	0.61	No	221	0.14	No	972	0.61	No
Meridian Boulevard West of Old Mammoth	2,600	0.24	No	-	-	-	635	0.24	No	-	-	-
Meridian Boulevard West of Sierra Park Road	1,600	0.14	No	959	0.60	No	219	0.14	No	963	0.60	No
Old Mammoth Road North of Meridian	1,600	0.55	No	-	-	-	888	0.56	No	-	-	-
Old Mammoth Road North of Tavern	1,600	0.40	No	-	-	-	644	0.40	No	-	-	-
Old Mammoth Road South of Main Street	1,600	0.48	No	-	-	-	777	0.49	No	-	-	-
Old Mammoth Road South of Meridian	1,600	0.55	No	-	-	-	889	0.56	No	-	-	-
Old Mammoth Road South of Tavern	1,600	0.41	No	-	-	-	664	0.42	No	-	-	-
Sierra Park Road North of Meridian	1,600	0.02	No	236	0.15	No	35	0.02	No	242	0.15	No
Sierra Park Road North of Tavern	1,600	0.15	No	242	0.15	No	208	0.15	No	253	0.16	No
Sierra Park Road South of Main Street	1,600	0.13	No	242	0.15	No	208	0.13	No	247	0.15	No
Sierra Park Road South of Tavern	1,600	0.11	No	165	0.10	No	186	0.12	No	171	0.11	No
Tavern Road East of Old Mammoth	1,600	0.08	No	-	-	-	128	0.08	No	-	-	-
Tavern Road West of Old Mammoth	1,600	0.05	No	-	-	-	80	0.05	No	-	-	-
Tavern Road West of Sierra Park Road	1,600	0.09	No	132	0.08	No	146	0.09	No	142	0.09	No

Table 8: 2025 Roadway Capacity

A total of 51 parking spaces will be provided in combination with underground (21 spaces) and street level (30 spaces) parking. All of the underground garage spaces and six of the street level spaces will be used by employees and police vehicles, and the remaining 24 spaces will be used by the public.

In summary there are 51 proposed parking spaces, while the maximum number of vehicles non-department vehicles forecast to be on site is 25. This would leave parking spaces for up to 26 police vehicles. As there are currently 18 police vehicles, this parking can be considered to be adequate.

CONSISTENCY WITH TOWN TRAFFIC MODEL LAND USES

To identify if the proposed project has the potential to contribute to a cumulative exceedence of the Town's 2025 traffic forecasts, it is necessary to identify if the site traffic generation is consistent with that generated by the future growth in land uses assumed in the traffic model for the recently adopted General Plan. The proposed project site is part (but not all) of Traffic Analysis Zone (TAZ) 106, for which the following future growth in land use was assumed:

- 187 high density multifamily visitor units
- 8 acres of retail/commercial & town offices
- 8,000 square feet of retail commercial space

Excluding the multifamily units (which are part of the redevelopment of the RV park), the Saturday PM peak hour trip generation of the TAZ is 463 one-way vehicle-trips. As the Police Station trip generation during the same period at full buildout in 2025 is 22 vehicle-trips, it can be concluded that the Police Station land use is within the total TAZ land uses assumed in the Traffic Model.

MITIGATION MEASURES

The intersection of Sierra Park Road/Main Street is expected to operate for the worst movement at an unacceptable LOS F with more than 4 vehicle-hours of delay in the future 2025 weekday school PM peak hour with or without the project. The addition of a northbound right-turn lane would improve the LOS to acceptable levels. The worst movement would still be LOS F, but there would be less than 4 vehicle-hours of delay on either minor street approach.

SUMMARY AND CONCLUSIONS

In summary, the results of this traffic impact analysis are as follows:

- The proposed project would increase traffic volumes at the site access driveways by 167 vehicle-trips per day on Saturdays, of which 18 would occur during the PM peak-hour (8 inbound, 10 outbound) and by 264 vehicle-trips per day on weekdays, of which 27 would occur during the school PM peak-hour (14 inbound, 13 outbound).
- LOS at all study intersections would remain within the Town's LOS standards both with and without the project and in both 2007 and 2025, except for the Sierra Park Road/Main Street intersection which would operate at LOS F in 2025 on the worst movement (with more than 4 vehicle-hours of delay) with or without the project. Adequate conditions in 2025 at this intersection (either with or without the proposed project) could be provided with the provision of separate northbound right-turn lane.
- The capacity of roadway segments would not be exceeded by traffic volumes in 2007 or 2025, either with or without the proposed project.
- The LOS analysis at all intersections and roadway segments is not significantly impacted by the extension of Tavern Road eastward to Commerce Drive. If this extension is completed in the future, the perpendicular parking along Tavern Road proposed as part of the Police Station plan would need to be converted to angled or parallel parking consistent with Town standards.
- The project is consistent with the land uses assumed in the Town of Mammoth Lakes Traffic Model for the Approved General Plan.
- The proposed project would provide 51 parking spaces, while the maximum number of vehicles on site at one time would be 43 (25 employee and visitor vehicles and 18 police vehicles). Therefore the proposed parking supply is more than adequate.