

APPENDIX D

Noise Modeling Results and Technical Study



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23 February 2006

Al Shaghaghi
AMS Associates, Inc.
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Walnut Creek CA. 94597

Subject: **Noise Study**
Lowe's Store, Manteca California

Dear Mr Shaghaghi:

The enclosed final report presents the results of our Noise Study and design recommendations for the Lowe's hardware store in Manteca California proposed by Lowe's HIW Inc. The purpose of our noise study was to assess the project's exterior noise environment, which will be dominated by vehicle traffic, and to provide recommendations for control of project-generated exterior noise to the surrounding community.

Very truly yours,

WILSON, IHRIG & ASSOCIATES, INC.

Tim Schmidt
Senior Consultant
encl.

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NOISE IMPACT STUDY
LOWE'S HARDWARE STORE
MANTECA, CALIFORNIA

23 February 2006

Submitted To:

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AMS Associates, Inc.
1350 Treat Boulevard, Suite 250
Walnut Creek CA. 94597

By:

Tim Schmidt
Senior Consultant

1. Introduction

This report summarizes the results of our study of the potential noise impact on the surrounding residences associated with the new Lowe's hardware store in Manteca California proposed by Lowe's HIW Inc. This noise study was conducted to assess the existing exterior noise environment and site conditions, and to predict noise levels based on the proposed design, equipment layout and facility operations. Existing community noise data were collected over a six day period at perimeter locations around the project site. Potential noise sources in this project were evaluated and appropriate recommendations were developed to address the applicable community noise exposure limits.

This report also provides a description of the environmental noise survey methodology, a summary of applicable noise standards, the noise survey results, future noise level projections, as well as recommendations that address project-generated noise impact on the surrounding community. Our analysis is based on information contained in the MTCca-A-11.dwg file prepared by AMS Associates, Inc. (received January 25, 2006), Lowe's HIW, Inc General Design Standards, the City of Manteca Noise Ordinance, as well as our own observations and measurement data collected during our visits to the project site in January 2006.

Construction noise related to the Lowe's Store project was not assessed as part of our noise study and is not included in this report.

2. Executive Summary

The Lowe's project site is located near the intersections of S. Airport Way and Daniels Street directly adjacent to the exit ramp to S. Airport Way from State Route 120 in Manteca, California. The site is bordered by adjacent residential properties on the East and North. The residences to the East are shielded by existing sound barriers from State Route 120 traffic. The existing barrier at the East side of the project will also provide some shielding of noise from the new Lowe's project. The adjacent lots across S. Airport Way to the West of the project site are commercial developments currently under construction and are not part of this study.

The Lowe's hardware store project must meet the requirements of the City of Manteca Noise Ordinance, Title 17, section 17.13.040. Table 3 of this section states that maximum sound pressure levels radiated from any facility shall not exceed 60 dBA (at the property line) during daytime hours or 50 dBA during nighttime hours. An exposure time duration is not included, indicating that these are the maximum instantaneous maximum levels permitted. Adjustments to these limits may be applied to account for non-continuous noise sources (such as delivery trucks). With these corrections, the maximum allowable noise level from the truck traffic is 70 dBA during the daytime if these occur less than 5% of any one hour period. Continuous noise such as produced by roof-mounted mechanical units may not exceed a noise exposure limit of 50 dBA at the property line during night time hours of 10:00 pm to 7:00 am. Our analysis indicates that noise from delivery trucks as well roof-mounted mechanical units would exceed the maximum noise limits set by City of Manteca Noise Ordinance, Title 17, section 17.13.040, without adequate noise control provisions.

The surrounding residential areas are already exposed to ambient noise levels above 60 L_{dn} which is the maximum allowable exterior noise level limit for new residential developments in Manteca. These high ambient noise levels, which are dominated by vehicular traffic on State Route 120, do not factor into the Manteca noise exposure limits; however, the project-generated noise will be significantly masked by the existing background noise. Thus, the future noise levels generated from the new Lowe's Store are not expected to increase the overall existing noise levels

The following summarizes our recommendations:

1. Raise the height of the existing sound barrier located at the East boundary of the site to 11'-0" above finished grade. If it is not possible to raise the height of the existing barrier wall, other mitigation options may be considered.
2. Prohibit delivery trucks from using the Eastern delivery lane before the hours of 7:00 am and after the hours of 10:00 pm. Alternative routes to access the loading dock area during nighttime hours, such as from the South side of the Lowe's store, could be used during these restricted hours.
3. Limit maximum sound levels of individual roof-top mechanical units on the Lowe's Store to a maximum 55 dBA sound pressure level at 30 feet distance or maximum 85 dBA sound power level at the unit.
4. Locate roof-top mounted equipment a minimum of 40 feet from the North and East edges of the Lowe's store.
5. Provide a minimum 5-foot high parapet wall along the North edge of the rooftop of the Lowe's store that wraps around, extending at least an additional 60 feet along the West edge of the building. Provide a minimum 5-foot high parapet wall along the East edge of the Lowe's store.
6. Screen the proposed trash compactor located near the truck well on the East side of the Lowe's store with a minimum 10 foot high sound barrier wall on the North side of the compactor and restrict the use of this unit to regular daytime hours during the week.
7. Enclose the emergency generator and restrict the testing of this unit to regular daytime hours during the week.

Refer to Section "8. Noise Mitigation Recommendations" for more detail.

3. Proposed Lowe's Store Description

Proposed Layout

The proposed Lowe's store location is at the Southeast corner of the intersection of Daniels Street and S. Airport Way, directly North of State Route 120, in Manteca, California. The site borders the off ramp to S. Airport Way. The project parking entrance will be from the North side of the site, off of Daniels Street. The 140,015 sf proposed Lowe's store will be located on the East side of the site. A recessed truck well will be located at the South East corner of the building and a separate delivery drive lane runs along the East side of the building. Four (4) smaller retail commercial buildings, ranging in size from 4000 sf to 15,000 sf will be located to the West of the Lowe's store.

Adjacent residential areas border the East and North sides of the project site. One-story single family homes to the East of the project site are shielded from the project site by an existing 9-foot high sound barrier. Two-story single family homes to the North of the project site face the project site. The adjacent lots on the West of the project site across S. Airport Way are commercial developments currently under construction.

Lowe's Store Operations

Based on the Lowe's Store General Standards, we understand that the new Lowe's store proposed operating hours will be 6:00 am to 10:00 pm Monday through Saturday, and 7:00 am to 8:00 pm on Sunday.

Lowe's truck delivery volumes depend on how well the store does in sales volume. Based on typical Lowe's store volumes, Typical deliveries to the Manteca Lowe's store may consist of the following:

- 15 to 20 tractor trailers per day at recessed delivery dock
- 6 to 10 flatbeds per week at lumber delivery door
- 4 to 8 smaller flatbeds and panel vans per week at garden center

Proposed delivery hours are 6:30 am to 8 pm, Mon through Sat. Most deliveries are expected to occur between 6:30 am and 6 pm, Monday through Friday.

Traffic Conditions

Project-generated traffic volume projections based on data for typical existing Lowe's stores were provide by AMS. The following represent potential traffic volumes at the new Lowe's project:

- 2,500 to 2,800 cars per day
- 5,000 to 5,600 trips per day
- Peak hours 1 pm to 4 pm on Saturdays in spring
- Customer count 1,200 to 2,000 / day, 7,000 to 10,000 / week

The primary noise source impacting the project site and the surrounding areas is traffic on State Route 120. Based on traffic counts conducted on January 24, we estimate that a minimum of 60,000 vehicles use SR 120 during a typical day (24 hour period).

Traffic data provided by David Vickers, Transportation analyst for the City of Manteca, indicates that traffic volumes along S. Airport way are over 10,000 vehicles per day. Project generated traffic (estimated at 5600 cars per day) is not expected to increase the overall noise exposure levels from current traffic volumes along the SR 120 or S. Airport Way.

Lowe's Operational and Equipment Noise Sources

The following noise-generating sources were assessed for potential noise impact to the surrounding community:

- Truck deliveries (trucks driving along the delivery lane)
- Loading dock operations
- Trash compactor
- Project generated on-site vehicular traffic and parking activity
- Project generated traffic along S. Airport Way and Daniels Street
- Roof top mechanical units
- Power generators (during testing)

We understand that the following sources will not be part of the proposed project and, therefore, these were not assessed:

- Exterior fork lift operations at the truck well
- Exterior Public Address systems

4. Applicable Noise Standards – Noise Study Criteria

The applicable noise related requirements of the Lowe's project are found in the City of Manteca Municipal Code, Title 17, Section 17.13.040, "Control of dangerous and objectionable conditions". Specific noise level limits and allowable periods of exposure for project-generated noise are listed in Table 3 of this section.

City of Manteca Noise Ordinance

Relevant excerpts from the City of Manteca Noise Ordinance Title 17:

A. Noise. The maximum sound pressure level radiated by any use or facility at the points of measurement specified in Section 17.13.030, shall not exceed the computed noise level values specified in Table 3, after applying corrections. The maximum permissible sound pressure levels at the points of measurement specified in Section 17.13.030 of this chapter, are shown below in Table 3.

Noise limits for residential areas:*

10 pm to 7 am – 50 dBA

7 am to 10 pm – 60 dBA

+5 dBA if daytime operation only

+5 dBA if 20% of any one hour period only

+10 dBA if 5% of any one hour period only

+15 dBA if 1% of any one hour period only

-5 dBA if noise of impulsive character

-5 dBA if noise rising or falling in pitch

** Apply only one of these corrections)*

City of Manteca Noise Element of the General Plan

The City of Manteca Noise Element includes the following Policies (Section 9.4.1) which were also addressed in this Noise Study:

N-P-4: The City shall require stationary noise sources proposed adjacent to noise sensitive uses to be mitigated so as not to exceed the noise level performance standards in Table 9-2

Table 9-2

Performance Standards for Stationary Noise Sources or Projects Affected by Stationary Noise Sources^{1,2}

<u>Noise Level Descriptor</u>	<u>Daytime</u>	<u>Nighttime</u>
	<u>7:00 am–10:00 pm</u>	<u>10:00 pm–7:00 am</u>
<i>Hourly Leq, dB</i>	50	45
<i>Maximum Level, dB</i>	70	65

¹ *Each of the noise levels specified above should be lowered by five (5) dB for simple noise tones, noises consisting primarily of speech or music, or recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints.*

² *No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.*

Note, for this study it is assumed that the noise levels in Table 9-2 are dBA (A weighted) levels. The maximum Leq levels in Table 9-2 are in agreement with, or are higher (less stringent) than the limits set in the City of Manteca Noise Municipal Code, Title 17.

Discussion of the Manteca Noise Ordinance, Noise Element of the General Plan and Additional Applied Noise Criteria

Based on our telephone conversation on Jan 26, 2006 with Mary Gore, Planning Technician for the City of Manteca Community Development Department, the +10 dBA correction for "5% of any hour period" applies to truck delivery noise where trucks are generating noise levels exceeding the 60 dBA daytime noise limit for less than 5% of any hour period, or exceeding the 50 dBA nighttime noise limit for less than 5% of any hour period.

In this study, we estimated an absolute maximum number of 2 trucks (4 truck passes) per hour. Based on 24 trucks per day over a delivery period of 12 hours, we predict truck deliveries will impact the adjacent residences less than 5% of any hour. This number of truck passes is based on the current volumes of typical Lowe's stores, and an average driving speed of 10 mph. The Lowe's of Manteca may have fewer delivery trucks; however, our analysis is based on a more conservative (higher) estimate of truck volume to account for the possibility of high sales periods and potential non-typical delivery schedules.

Noise-generating sources with maximum property line noise limits for each source are summarized:

	<u>7:00 am–10:00 pm</u>	<u>10:00 pm–7:00 am</u>
▪ Vehicular traffic in the parking areas	55 dBA	45 dBA
▪ Delivery Trucks (2 per hour)	70 dBA	60 dBA
▪ Mechanical Equipment	60 dBA	50 dBA
▪ Outdoor PA Systems	55 dBA	45 dBA
▪ Loading Dock Operations	70 dBA	60 dBA
▪ Trash Compactors	55 dBA	45 dBA
▪ Emergency Generators	65 dBA	55 dBA

Noise-generating sources with hourly (L_{eq}) noise limits for each source are summarized:

	<u>7:00 am–10:00 pm</u>	<u>10:00 pm–7:00 am</u>
▪ Vehicular traffic in the parking areas	50 L_{eq}	45 L_{eq}
▪ Delivery Trucks	50 L_{eq}	45 L_{eq}
▪ Mechanical Equipment	45 L_{eq}	40 L_{eq}
▪ Outdoor PA Systems	45 L_{eq}	40 L_{eq}
▪ Loading Dock Operations	50 L_{eq}	45 L_{eq}
▪ Trash Compactors	50 L_{eq}	45 L_{eq}
▪ Emergency Generators	45 L_{eq}	40 L_{eq}

Additional Noise Criteria.

The following noise metrics were also evaluated as part of our noise study. These metrics are not referenced in the City of Manteca Municipal Code, Title 17, and the project is not required to meet criteria based on the following parameters.

Day-Night Level (L_{dn})

The Day-Night Level (L_{dn}) represents the A-weighted equivalent continuous noise level for a 24-hour period and includes a 10 decibel (dB) adjustment added to sound levels during nighttime hours (10:00 pm to 7:00 am). The term "Equivalent Continuous Sound Exposure Level" (L_{eq}) refers to a decibel level that equals the level of a steady noise containing the same total sound energy as the fluctuating community noise level for a given period of time.

The A-weighted scale, used for community noise measurements, represents the auditory response of the average person. A-weighting is implicit in noise levels reported in terms of L_{dn} .

The L_{dn} was used to compare the existing traffic environment with the future traffic noise impact from increased traffic resulting from the new Lowe's store.

Spectral Data

Single number A-weighted sound pressure levels and L_{dn} levels are time-averaged descriptors; therefore, these do not adequately characterize short-duration, tonal, or level fluctuating noise events. These metrics are also limited in the ability to characterize noise sources that contain tonal or mostly low-frequency energy.

This study includes an assessment of short-term maximum levels (L_{max}) and spectral data for different types of sources to better evaluate and mitigate the impact from traffic and other sources common around the project site. Spectral data were used to assess sound barrier requirements for sources that potentially contain tonal characteristics such as mechanical units or significant low frequency energy such as delivery trucks.

5. Environmental Noise Survey

Our Environmental Noise Survey consisted of both short-term noise recordings and long-term noise measurements at several locations in the project vicinity. Table I summarizes the noise measurement locations, with distances to adjacent traffic sources as well as the types of measurements performed at each location. Refer to figure 1, which indicates the relative (approximate) position of measurement locations for this noise study on a site plan.

Long-Term Measurements

Long-term, statistical noise levels were measured at the site with two precision, calibrated, Type I¹ logging sound level meters (set to "Slow Response") left unattended at the site to monitor six complete days between Wednesday, Jan 18 and Tuesday Jan 24, 2006. These long-term meters were placed at the locations indicated in Table I and Figure 1, where they were secured to light poles at approximately 12 ft above grade. The sound level meters recorded noise levels continuously during the survey period, providing hourly-averaged and statistical noise levels. The measured hourly equivalent noise data (L_{eq}) were then used to calculate the daily and typical Day-Night Levels (L_{dn}). The RMS detector time constant was set to "slow".

We extrapolated a five-day L_{dn} from the average of four (4) actual week days of measured noise data. The weekday L_{dn} and the measured weekend days L_{dn} levels were combined and an average L_{dn} for a "typical" seven-day period was calculated that accounts for the lower levels that typically exist on weekends.

Short-term Measurements

At Short-Term locations ST-1 and ST-2, calibrated, digital audio tape (DAT) recordings were made of the noise created by traffic sources near the project site on 23 January 2006, between 11:00 am and 2:00 pm (refer to Figure 1 for locations).

¹ Type 1 refers to the precision of sound level meters as defined in ANSI S1.4 Type 1 Indicator High Precision

TABLE I ENVIRONMENTAL NOISE SURVEY MEASUREMENT LOCATIONS

Location Label	Microphone Height (Above Grade)	Distance From SR 120 Off Ramp (Edge of Nearest Lane)*	Measurement	Noise Source
LT-1	8 ft	270'	Hourly (Interval) noise levels Jan 18 through Jan 23	Traffic on SR 120
LT-2	12 ft	830'	Hourly (Interval) noise levels Jan 18 through Jan 23	Traffic on SR 120
LT-3	12 ft	1050'	Hourly (Interval) noise levels Jan 18 through Jan 23	Traffic on SR 120
ST-1	12 ft	270'	Average noise levels over 15 minute duration	Traffic on SR 120
ST-2	12 ft	830'	Average noise levels over 15 minute duration	Traffic on SR 120

Notes: * Approximate distances

Notes: * Refer to Figure 1 for Site plan with measurement locations

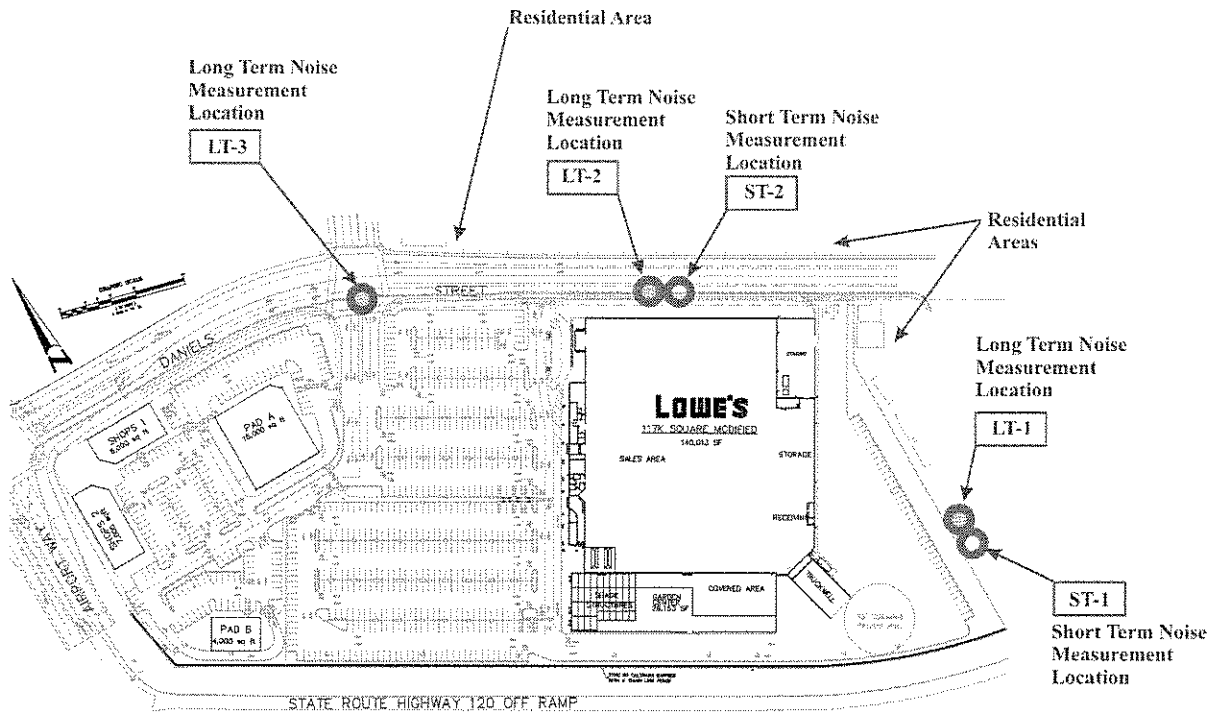


FIGURE 1 ENVIRONMENTAL NOISE SURVEY MEASUREMENT LOCATIONS

6. Environmental Noise Survey Results

Refer to the following summary Tables II and III as well as Figures 3 through 20 for measured noise level plots..

TABLE II SUMMARY OF MEASURED EXISTING L_{dn} BY MEASUREMENT LOCATION

	Location LT-1*	Location LT-2	Location LT-3
L_{dn} – Wed, 18 Jan	70	70	70
L_{dn} – Thu, 19 Jan	67	71	69
L_{dn} – Fri, 20 Jan	68	70	71
L_{dn} – Sat, 21 Jan	65	67	68
L_{dn} – Sun, 22 Jan	62	65	67
L_{dn} – Mon, 23 Jan	--	69	68
Existing Typical L_{dn}	68	69	70

Note: * Monday, 23 January 2006 included a non-typical, local noise event in the 12:00 am – 1:00 pm period

TABLE III SUMMARY OF MEASURED EXISTING 24 HOUR L_{eq} BY MEASUREMENT LOCATION (REFER TO FIGURES 3-20)

	Location LT-1*	Location LT-2	Location LT-3	Location ST-1	Location ST-2
L_{eq} – Wed, 18 Jan	64	67	66	--	--
L_{eq} – Thu, 19 Jan	61	64	64	--	--
L_{eq} – Fri, 20 Jan	61	64	65	--	--
L_{eq} – Sat, 21 Jan	59	61	62	--	--
L_{eq} – Sun, 22 Jan	58	62	64	--	--
L_{eq} – Mon, 23 Jan	--	63	64	--	--
L_{eq} – Tue, 24 Jan 11:35 am -11:40 am	--	--	--	--	59
L_{eq} – Tue, 24 Jan 11:35 am -11:40 am	--	--	--	59	--
Existing Typical L_{eq}	61	64	64	59	59
Typical L_{max}	--	--	--	67	77

Note * Monday, 23 January 2006 included a non-typical, local noise event in the 12:00 am – 1:00 pm

Measured Existing Noise Levels

The existing (measured) noise environment, primarily affected by vehicular traffic on State Route 120, ranged from 62 L_{dn} to 71 L_{dn} , at representative locations along the property line of the closest adjacent residences. The surrounding community is exposed to noise levels at least 2 to 11 dBA higher than the 60 L_{dn} maximum allowable from mobile sources for residential outdoor activity areas land (required by the City of Manteca Noise Element of the General Plan for new residential projects).

Long-term noise levels at measurement locations, LT-1,2 & 3 are summarized in Table II which includes the calculated L_{dn} sound levels from the long-term survey for several days at each monitoring location as well as projected "annual" levels based on these measurements.

Projected Future Noise Increases:

General ambient noise levels are likely to increase with expected increases in local traffic, highway traffic and well as expanded airport operations at the nearby Stockton Metropolitan Airport, even with the expected shielding of the highway noise provided at some areas when the new Lowe's store is constructed.

Stockton Metropolitan Airport, located 7 miles to the North of the project site, is planning to increase its current airport operations. According to Barry Rondinella from the airport administration, a large volume of corporate jets and late night air cargo operations are currently using this airport. Cargo and passenger airline activity, along with corporate jet activity is expected to increase dramatically over the next few years. New noise impact studies are being conducted and noise contours are being developed related to this expansion.

The project-generated traffic, by comparison, is expected to be less than 50% of the current traffic volumes on S. Airport way and on the order of 20% of the traffic volumes on SR 120. Also, traffic occurring along Daniels Street will be limited to 40 mph speeds. This local project-generated traffic, due to the close proximity, will result in more non-continuous, fluctuating noise levels compared to the continuous "drone" of the more distant SR 120, however, the future noise from project-generated traffic is not expected to significantly increase the overall (L_{dn}) noise levels relative to current levels.

7. Predicted Project-Generated Noise Impact

The most significant sources of noise generated from the proposed Lowe's project would be the delivery and vendor trucks as well as roof-mounted mechanical equipment on the new Lowe's building. The following describes specific project related noise sources as well as the parameters used to evaluate the community noise impact:

Delivery Truck Operations

Delivery trucks were assumed to produce the maximum noise level permitted by the State of California per the California vehicle code sections 27200-27207. We used the requirements for Trucks manufactured after 1987 under the assumption that trucks 30 years or older are unlikely to be in operation. Section 27204 from the vehicle code summarizes the noise limits for all trucks operating in California:

...the following noise limits shall apply to any motor vehicle within the specified manufacturer's gross vehicle weight rating and date of manufacture:

<u>GVWR--Pounds</u>	<u>Date of Manufacture</u>	<u>Noise Limit--dba</u>
Over 6,000	after 1967 and before 1973	88
Over 6,000	after 1972 and before 1975	86
Over 6,000	after 1974 and before 1978	83
Over 8,500	after 1977 and before 1982	83
Over 6,000 but not over 8,500	after 1977	80
Over 8,500 but not over 10,000	after 1981	80
Over 10,000	after 1981 and before 1988	83
Over 10,000	after 1987	80

These maximum limits for new trucks are also part of The Noise Control Act of 1972 which gives the Federal Environmental Protection Agency (EPA) the authority to establish noise regulations to control major sources of noise, including transportation vehicles and construction equipment. In particular, this legislation requires EPA to issue noise emission standards for motor vehicles used in Interstate commerce (vehicles used to transport commodities across State boundaries) and requires the Federal Motor Carrier Safety Administration (FMCSA) to enforce these noise emission standards. Maximum Noise Emission Levels as Required by EPA for Newly Manufactured Trucks with GVWR over 4,525 Kilograms is 80 dBA at 50 ft from the trucks centerline of travel with the truck operating in any condition.

The maximum number of trucks using the delivery lane is predicted to be 24 (48 total passes) per day over an average 12-hour period, which is an approximate rate of 4 truck passes per hour along the delivery lane. The total route length is 350 ft. The travel speed of the trucks was assumed to be 10 mph to calculate the average exposure time (as a percentage of any hour period) at the adjacent residential properties and to determine the equivalent background noise impact (L_{eq}) from trucks.

We understand that the Lowe's of Manteca may in fact have less than the estimated number of delivery trucks. However, we have used a more conservative estimate of truck volume to account for the possibility of high sales periods and non-typical delivery schedules. Four (4) trucks in one hour would pass by the closest residential properties, operating approximately an average of 1.89% (depending on truck speed) of the time along the total 350 ft distance to the recessed truck well of the loading dock. If fewer truck traffic deliveries will occur, less than 1 truck every 1.5 hours, then the percentage of exposure on the "impact" area would be less than 1% and the maximum noise limit would be 5 dB higher during daytime hours.

There is no clear relationship between the maximum noise level and travel speed, as the noise is primarily determined by gear, engine rpm, and load. However, using 80 dBA at 50 feet avoids the complexity of predicting these additional parameters. The trucks using the proposed drive lane will actually be 30 feet from the nearest residential properties and, based on the maximum allowable limits for truck noise, would potentially generate 85 dBA at the property line (without a sound barrier). This level also accounts for the additional sound reflecting off the Lowe's Store exterior wall next to the delivery lane. Wilson, Ihrig & Associates has observed that delivery trucks typically produce noise levels that are a few decibels less than the permitted noise emission level.

According to the Manteca Noise Code, the absolute maximum level at the property line is the only factor that must be addressed. The mitigation at the residential property lines to the East of the project site must provide a minimum 13 dB attenuation from trucks using the delivery lane during daytime (7:00 am – 10:00 pm) and minimum 23 dB for trucks using the delivery lane during nighttime hours (10:00 pm – 7:00 am). The existing 9' sound wall sound barrier is predicted to provide an attenuation of 12 dB at a receiver location 5 ft from the wall and 6 ft above ground level, which does not achieve the applicable noise standards for community noise exposure. Nighttime restrictions are much higher and will be even more difficult to achieve with a sound barrier.

The L_{eq} and L_{dn} , which depend on exposure time and thus travel speed, were evaluated to compare with predicted truck noise levels. These levels could actually increase with reduced travel speed if all other factors remained unchanged. The L_{eq} and L_{dn} , as a general rule, would increase or decrease by 3 decibels per doubling or halving of the number of trucks. Also, the noise produced by one truck during the night between 10 pm and 7 am would be equivalent to noise produced by ten trucks during the day between 7 am and 10 pm, for the purpose of computing the L_{dn} .

A 56 L_{dn} was calculated for trucks using the delivery lane during the proposed "typical" delivery times (6:30 am – 8:00 pm) based on the parameters described above. This L_{dn} is well below the existing 68 to 70 L_{dn} measured at the project site at residential property lines, but the calculated

Leq levels for the truck traffic, are higher than the allowable Leq levels during night time hours (before 7:00 am).

Typical modern trucks produce noise levels that are several dB below the assumed maximum of 80 dBA when operating at low speed. From a practical perspective, it is likely that the existing 9 foot high barrier is adequate to meet the noise limits, however, the possibility of older trucks or noisy vehicles using the drive lane is difficult to predict and cannot be ruled out.

Forklifts and Truck Loading/Unloading Operations

The truck receiving area at the South East corner of the building will be screened on both sides; therefore we assume that loading/unloading operations will occur in a shielded environment and, consequently, noise from these activities is not expected to impact the adjacent residential properties. Also, due to a distance of approximately 200 ft from the closest residence, noise from trucks backing up, idling or using backup alarms are not expected to exceed the noise limits at the residences closest to this area

Trash Compactor

The proposed trash compactor located near the truck loading area appears to be shielded by a solid perimeter barrier wall on the north side. With a sound barrier, noise levels will not exceed the noise limits at the residences closest to this area. Recommendations for barrier height and configuration are provided below.

Project-generated Traffic along Daniels Street and Project Parking Lot

Project-generated traffic volume projections based on data for typical existing Lowe's stores were compared with existing local traffic and traffic along SR 120.

The project-generated traffic noise levels will be highest along the section of Daniels Street between S. Airport Way and the main parking entrance, however; overall (hourly) levels from this traffic are not expected to significantly increase the existing traffic noise already impacting the homes along Daniels Street.

Roof-mounted HVAC units

Roof mounted mechanical units, proposed for this project, are specified as 95 dBA (at the unit). Proposed unit locations were used to calculate the highest acceptable unit noise levels after accounting for shielding and distance. Assuming that the Lowe's store will be 25 feet high, most of the rooftop units will be above the level of the surrounding buildings, and a roof edge/parapet will provide physical shielding of the units from nearby homes.

The rooftop units on the North side, and on the East side of the Lowe's Store rooftop, however, are closest to the residences and could impact the adjacent properties without adequate mitigation. Due to the potential for tonal noise and other annoying characteristics of HVAC units, we recommend a maximum allowable sound level criterion of 45 dBA (5 dB below the

Adjacent homes to the East are single level homes, however, houses across Daniels Street are two stories and would be exposed to direct, unshielded noise from roof-mounted mechanical units. Drawings provided to Wilson Ihrig. & Assoc., Inc., as well as site information gathered during our site survey, were used to establish sound barrier sizes, locations control noise from roof mounted mechanical equipment

Emergency Generator

A 350 KW emergency generator is to be located at the NE corner of the project site, at a location 100 feet from the closest residence. Because noise data for this proposed unit were not available, noise level data from an existing emergency generator at another Lowe's store were used. The generator noise levels would be 84 dBA at 40 feet distance based on measured levels contained in the Noise Analysis for Proposed Lowe's of Scottsdale, AZ, pages 9 and 10.

We understand that this generator will not be operating except for emergency purposes and for testing at a maximum rate of one time per week, for no more than 60 minutes. Assuming that the reference generator was measured in similar environmental conditions, the proposed emergency generator noise impact at the closest residences would be less than 78 dBA at 100 feet distance and the existing sound barrier will reduce the noise levels further to levels below the 70 dBA maximum allowable daytime noise exposure limit.

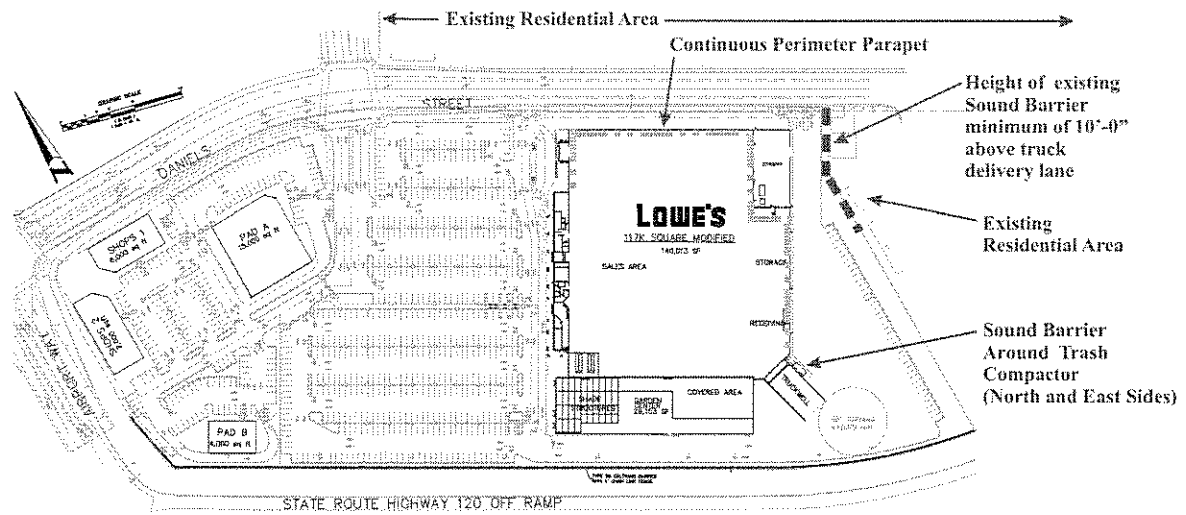
8. Noise Mitigation Recommendations

The following recommendations for mitigation of noise impact expected from the Lowe's store are for compliance with the noise limits set by City of Manteca Noise Ordinance, Title 17, Section 17.13.040, Table 3:

1. If designed for the highest maximum legal truck noise, the height of the existing sound barrier at the East boundary of the site would need to be raised to a minimum height of 11' - 0" above the pavement height of the delivery lane in order to mitigate potential "worst case" noise from delivery trucks. This height would be required along the entire section of the barrier bordering the residential property lines that are closer than 50 feet from the truck lane (refer to figure 2 for location). Actual measurement data indicates that typical, modern trucks are 5 to 7 dB less than this maximum allowable limit; therefore, we expect that the existing barrier will provide adequate attenuation from truck noise. Raising the existing barrier would provide a safety margin for potential "worst case" levels; however, we understand that this may not be practical or structurally possible without additional reinforcement. We understand that the drive lane pavement will already be 10' - 0" below the top level of this wall and that dense landscaping will be planted in the area between the drive lane and the existing barrier. In order to keep noise from trucks as low as possible, we recommend that trucks are prohibited from stopping, idling or using "compression release" engine brake (Jake Brakes) along the drive lane. We also recommend that older trucks be routed around the South side of the Lowe's Store to the loading well.

2. Prohibit any delivery trucks from using the East side drive lane before the hours of 7:00 am or after the hours of 10:00 pm. Provide alternative routes for trucks going to the loading dock area during nighttime hours, such as through the parking lot and around the South side of the Lowe's store, and exiting the same way.
3. Limit maximum sound levels of individual roof-top mechanical units on the Lowe's Store to a maximum 60 dBA sound pressure level at 30 feet distance or maximum 90 dBA sound power level at the unit (recommended for all rooftop HVAC units less than 140 feet from the nearest residential property line).
4. Locate roof-top mounted equipment on the Lowe's store a minimum of 40 feet away from the edge of the rooftop.
5. Provide a minimum 5-foot high parapet wall along the North edge of the Lowe's store rooftop that extends South an additional 60 feet along the West edge of the rooftop. The top of this parapet must be at least as high as the top of the roof-top units. Provide a minimum 5-foot high parapet wall along the East edge of the Lowe's store rooftop.
6. Limit the maximum noise levels of the emergency generator to 85 dBA at 30 feet distance or 115 dBA sound power level (at the generator unit). Provide a solid wood or masonry sound barrier/enclosure with a minimum 4 lbs/sf surface density and a minimum 6 foot height on the East, South and North sides of the emergency generator. Restrict the testing of the generator to daytime hours during the week when there is the least likelihood of residents being at home. The generator exhaust muffler should be selected for *Residential Grade* or better.
7. Enclose the proposed trash compactor on the East side of the Lowe's store with a continuous 10 foot high sound barrier. Restrict the operation of the trash compactor and collection of trash to daytime hours during the week when there is the least likelihood of residents being at home.

With the above recommended treatment, truck delivery traffic and roof-mounted mechanical units will comply with the limits of the City of Manteca

**LEGEND**

	Existing Masonry Sound Barrier
	Minimum 5'-0" High Parapet Wall

FIGURE 2 SITE PLAN INDICATING MITIGATION MEASURES

DESCRIPTION OF ACOUSTICAL TERMS RELEVANT TO THE PROJECT

A-Weighted Sound Level (dBA):

The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made. A-weighting de-emphasizes the low and very high frequency components of the sound in a manner similar to the response of the average human ear. A-weighted sound levels correlate well with subjective reactions of people to noise and are universally used for community noise evaluations.

Airborne Sound:

Sound that travels through the air, as opposed to structure-borne sound.

Ambient Noise:

The prevailing general noise existing at a location or in a space, which usually consists of a composite of sounds from many sources near and far.

Community Noise Equivalent Level (CNEL):

The L_{eq} of the A-weighted noise level over a 24-hour period with a 5 dB penalty applied to noise levels between 7 p.m. and 10 p.m. and a 10 dB penalty applied to noise levels between 10 p.m. and 7 a.m.

Day-Night Sound Level (L_{dn}):

The L_{eq} of the A-weighted noise level over a 24-hour period with a 10 dB penalty applied to noise levels between 10 p.m. and 7 a.m.

Decibel (dB):

The decibel is a measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, and sound intensity) with respect to a reference example, during nearby passbys of trains, trucks, buses and automobiles, when there is relatively steady traffic. Thus, while L_{10} does not necessarily describe the typical maximum noise levels observed at a point, it is strongly quantity.

Energy Equivalent Level (L_{eq}):

The level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time period of interest. L_{eq} is widely used as a single-number descriptor of environmental noise. L_{eq} is based on the logarithmic or energy summation and it places more emphasis on high noise level periods than does L_{50} or a straight arithmetic average of noise level over time. This energy average is not the same as the average sound pressure levels over the period of interest, but must be computed by a procedure involving summation or mathematical integration.

Frequency (Hz):

The number of oscillations per second of a periodic noise (or vibration) expressed in Hertz (abbreviated Hz). Frequency in Hertz is the same as cycles per second.

Octave Band - 1/3 Octave Band:

One octave is an interval between two sound frequencies that have a ratio of two. For example, the frequency range of 200 Hz to 400 Hz is one octave, as is the frequency range of 2000 Hz to 4000 Hz. An octave band is a frequency range that is one octave wide. A standard series of octaves is used in acoustics, and they are specified by their center frequencies. In acoustics, to increase resolution, the frequency content of a sound or vibration is often analyzed in terms of 1/3 octave bands, where each octave is divided into three 1/3 octave bands.

Sound Absorption Coefficient (α):

The absorption coefficient of a material is the ratio of the sound absorbed by the material to that absorbed by an equivalent area of open window. The absorption coefficient of a perfectly absorbing surface would be 1.0 while that for concrete or marble slate is approximately 0.01 (a perfect reflector would have an absorption of 0.00).

Sound Pressure Level (SPL):

The sound pressure level of sound in decibels is 20 times the logarithm to the base of 10 of the ratio of the RMS value of the sound pressure to the RMS value of a reference sound pressure. The standard reference sound pressure is 20 micro-pascals as indicated in ANSI S1.8-1969, "Preferred Reference Quantities for Acoustical Levels".

Sound Transmission Class (STC):

STC is a single number rating, specified by the American Society for Testing and Materials, which can be used to measure the sound insulation properties for comparing the sound transmission capability, in decibels, of interior building partitions for noise sources such as speech, radio, and television. It is used extensively for rating sound insulation characteristics of building materials and products.

Structure-Borne Sound:

Sound propagating through building structure. Rapidly fluctuating elastic waves in gypsum board, joists, studs, etc.

Statistical Distribution Terms:

L_{99} and L_{90} are descriptors of the typical minimum or "residual" background noise (or vibration) levels observed during a measurement period, normally made up of the summation of a large number of sound sources distant from the measurement position and not usually recognizable as individual noise sources. Generally, the prevalent source of this residual noise is distant street traffic. L_{90} and L_{99} are not strongly influenced by occasional local motor vehicle passbys. However, they can be influenced by stationary sources such as air conditioning equipment.

L_{50} represents a long-term statistical median noise level over the measurement period and does reveal the long-term influence of local traffic.

L_{10} describes typical or average levels for the maximum noise levels occurring, for influenced by the momentary maximum noise level occurring during vehicle passbys at most locations.

L_1 , the noise level exceeded for 1% of the time is representative of the occasional, isolated maximum or peak level which occurs in an area. L_1 is usually strongly influenced by the maximum short-duration noise level events which occur during the measurement time period and are often determined by aircraft or large vehicle passbys.

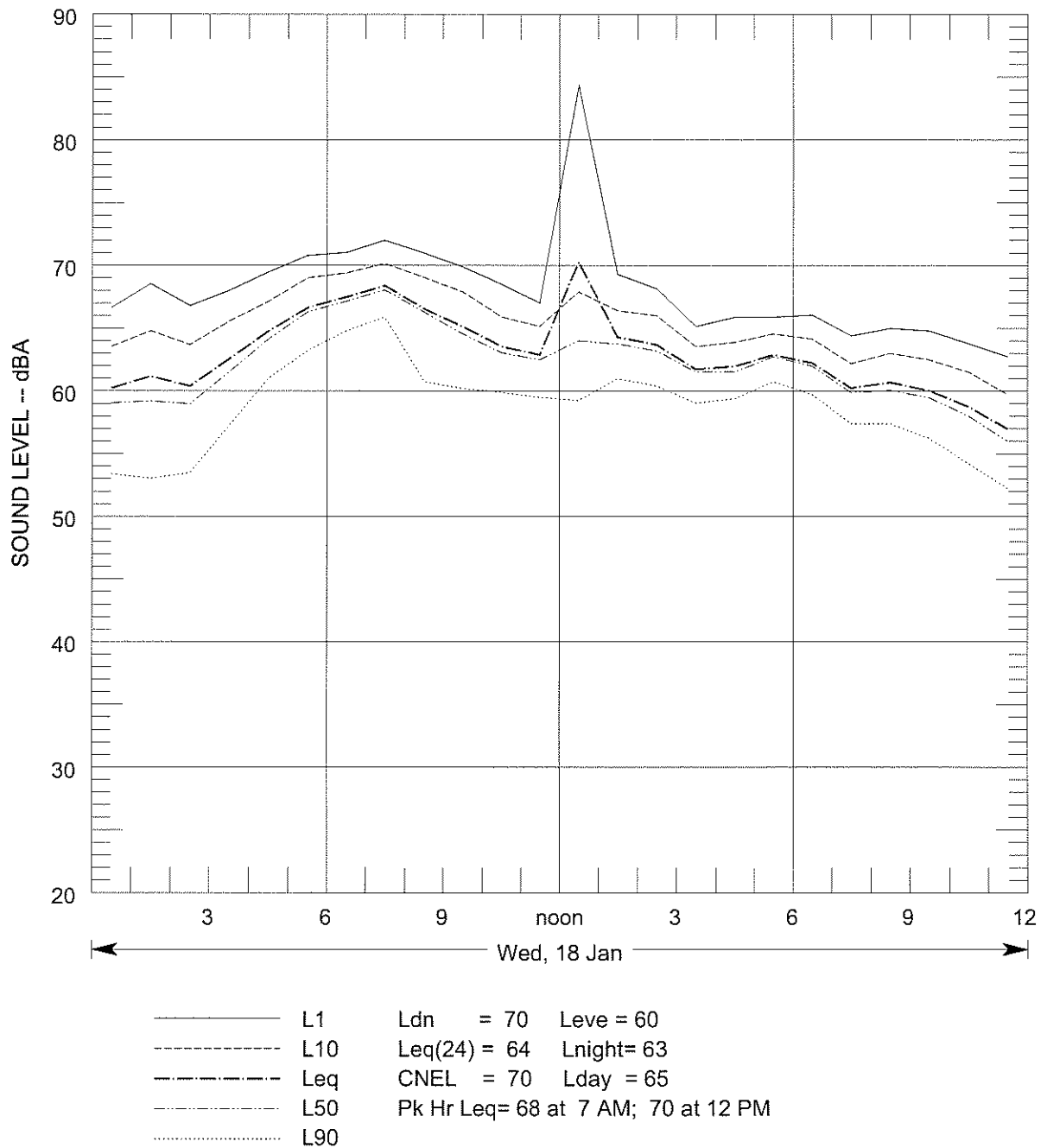


FIGURE 3 24 HOUR HOURLY AMBIENT NOISE LEVELS
WEDNESDAY 18 JANUARY, 2006
MEASUREMENT LOCATION LT-1

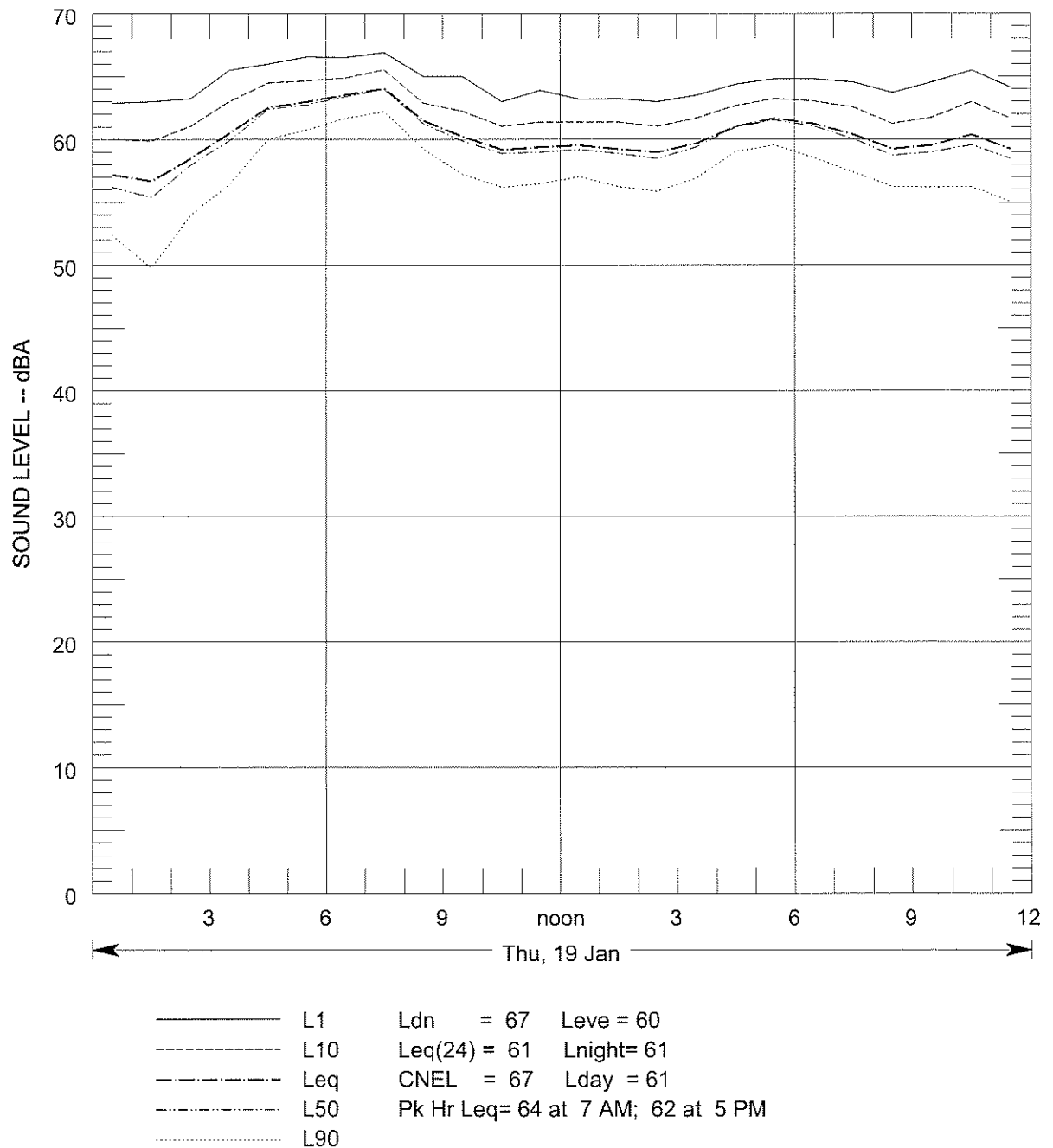


FIGURE 4 24 HOUR HOURLY AMBIENT NOISE LEVELS
THURSDAY 19 JANUARY, 2006
MEASUREMENT LOCATION LT-1

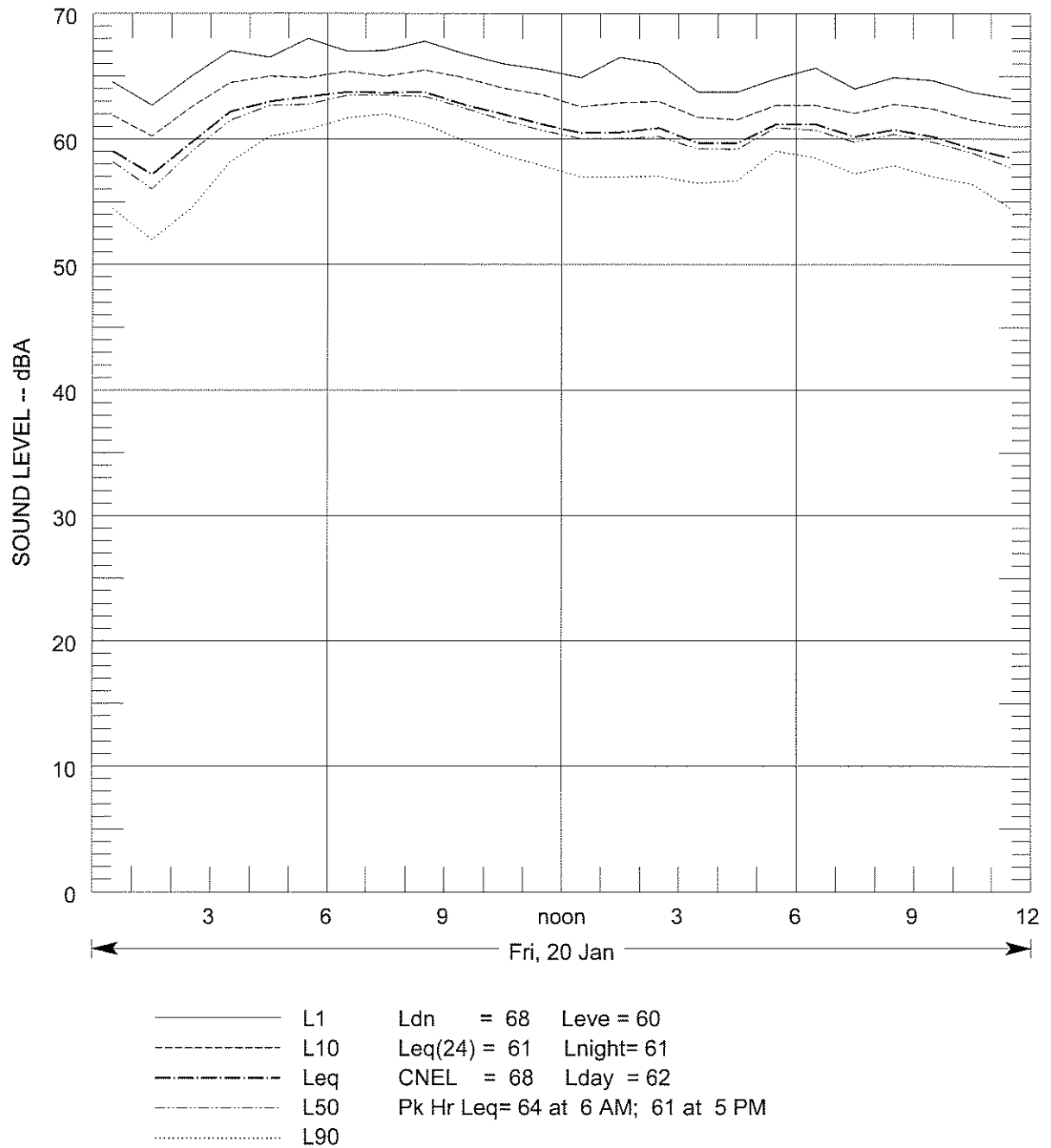


FIGURE 5 24 HOUR HOURLY AMBIENT NOISE LEVELS
FRIDAY 20 JANUARY, 2006
MEASUREMENT LOCATION LT-1

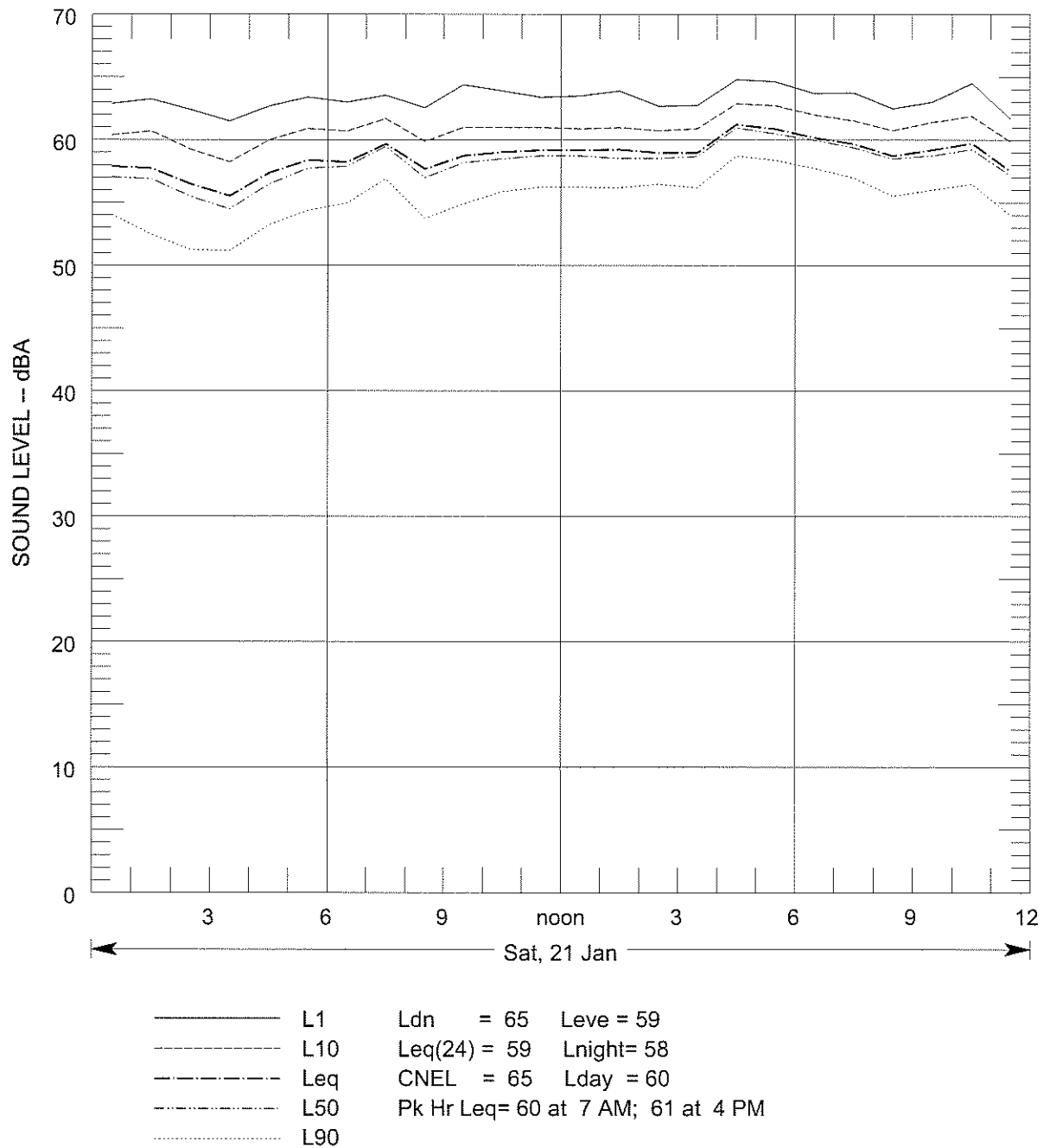


FIGURE 6 24 HOUR HOURLY AMBIENT NOISE LEVELS
SATURDAY 21 JANUARY, 2006
MEASUREMENT LOCATION LT-1

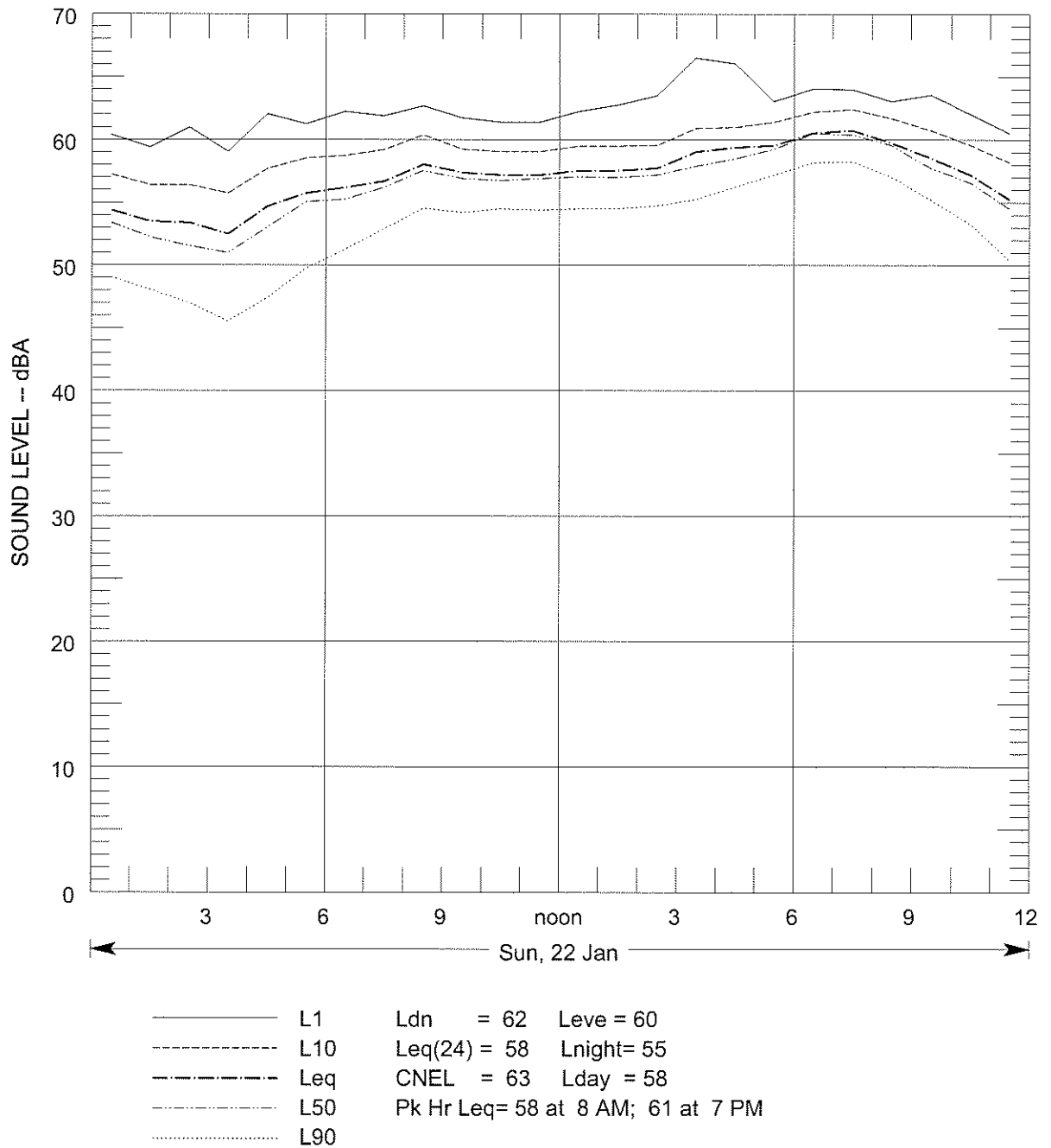


FIGURE 7 24 HOUR HOURLY AMBIENT NOISE LEVELS
SUNDAY 22 JANUARY, 2006
MEASUREMENT LOCATION LT-1

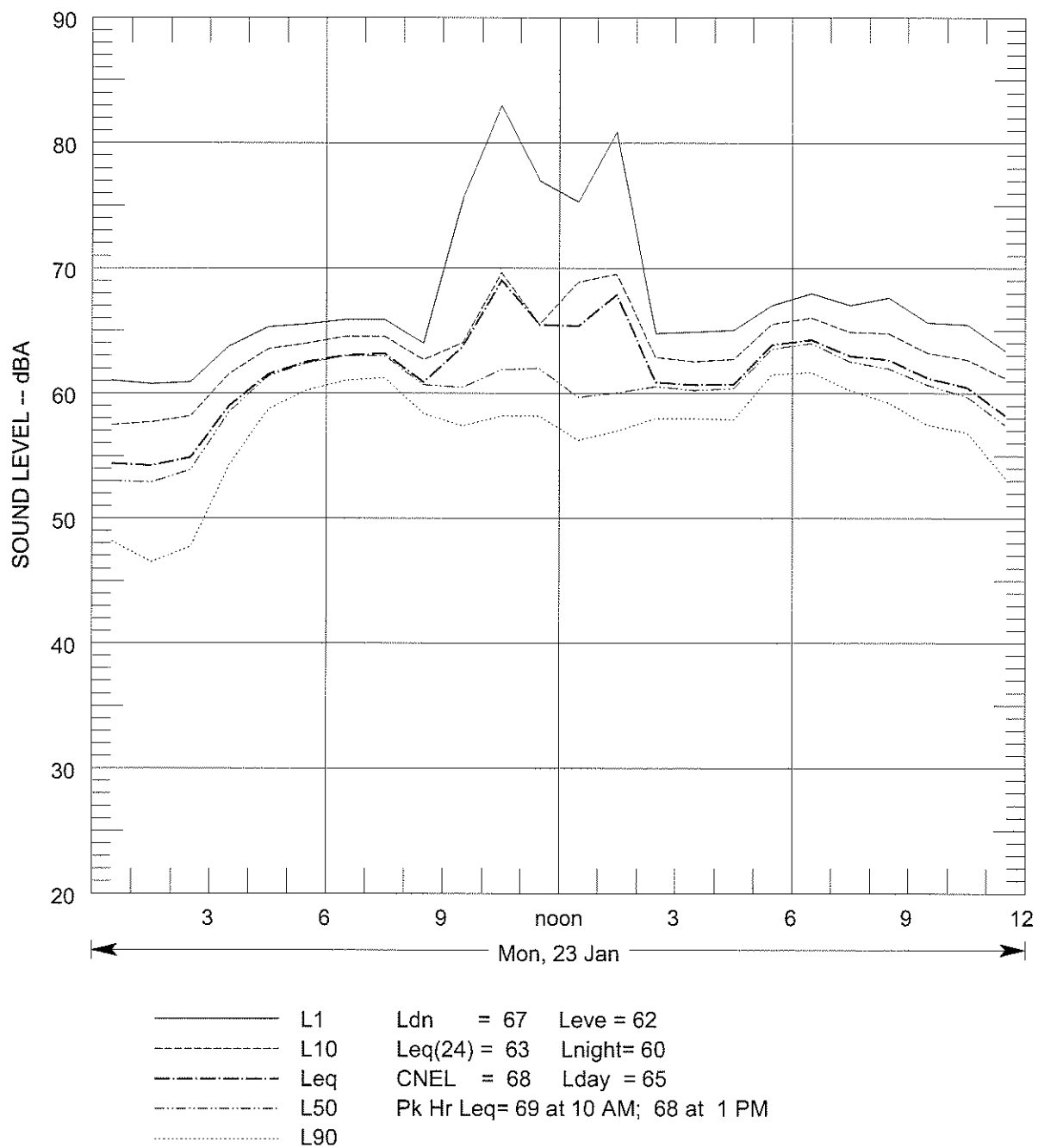


FIGURE 8 24 HOUR HOURLY AMBIENT NOISE LEVELS
 MONDAY 23 JANUARY, 2006
 MEASUREMENT LOCATION LT-1

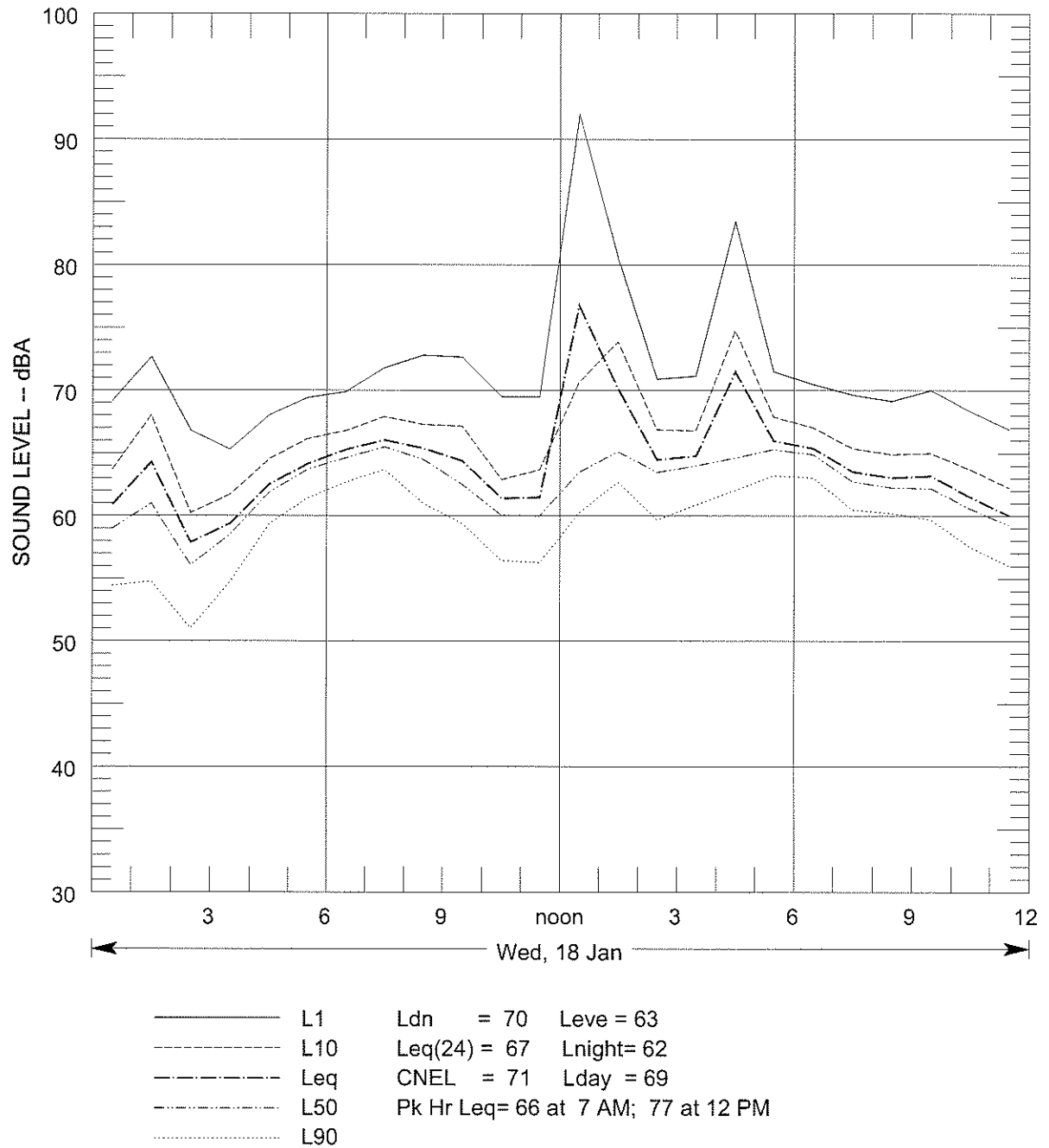


FIGURE 9 24 HOUR HOURLY AMBIENT NOISE LEVELS
WEDNESDAY 18 JANUARY, 2006
MEASUREMENT LOCATION LT-2

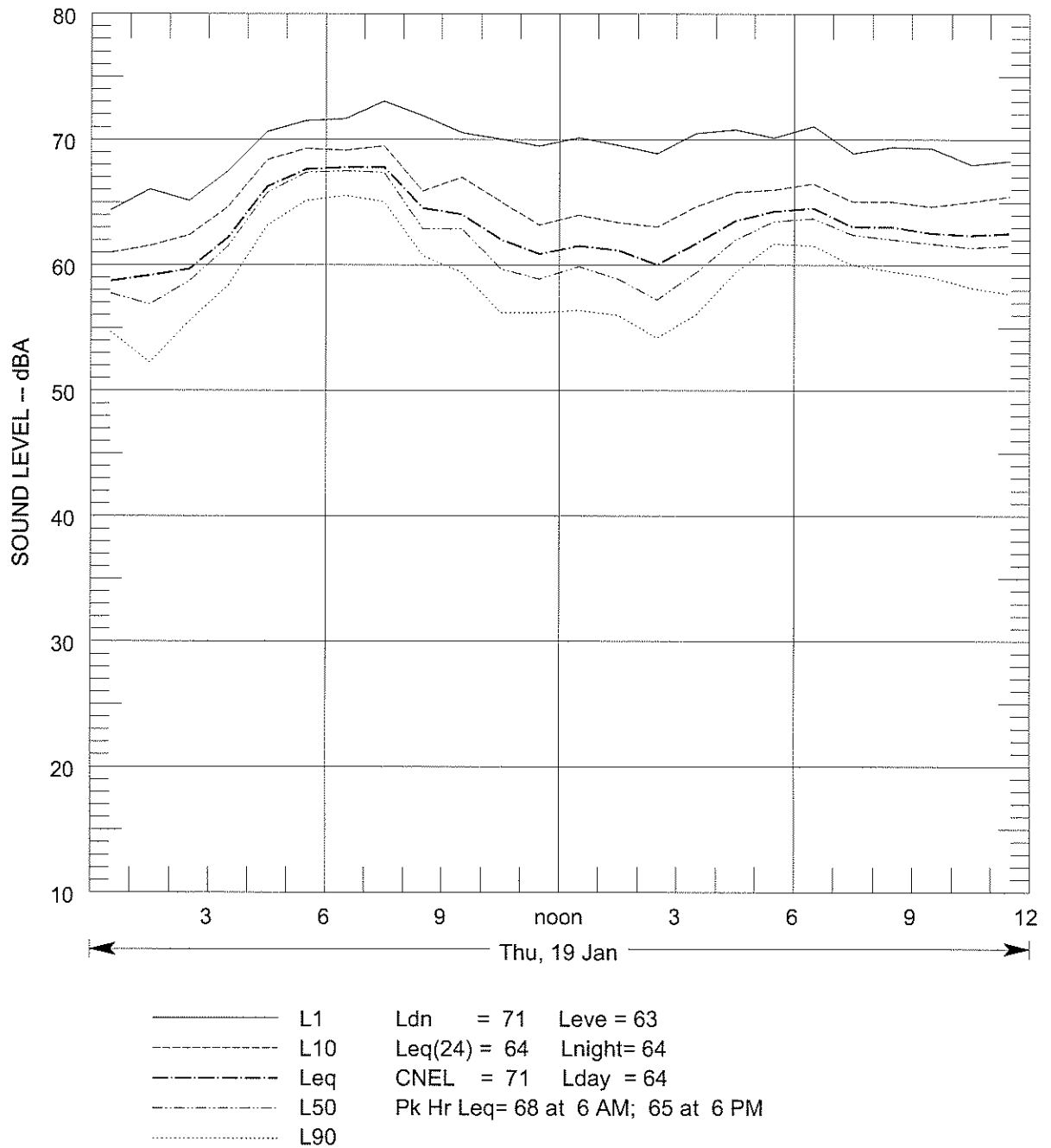


FIGURE 10 24 HOUR HOURLY AMBIENT NOISE LEVELS
THURSDAY JANUARY 19, 2006
MEASUREMENT LOCATION LT-2

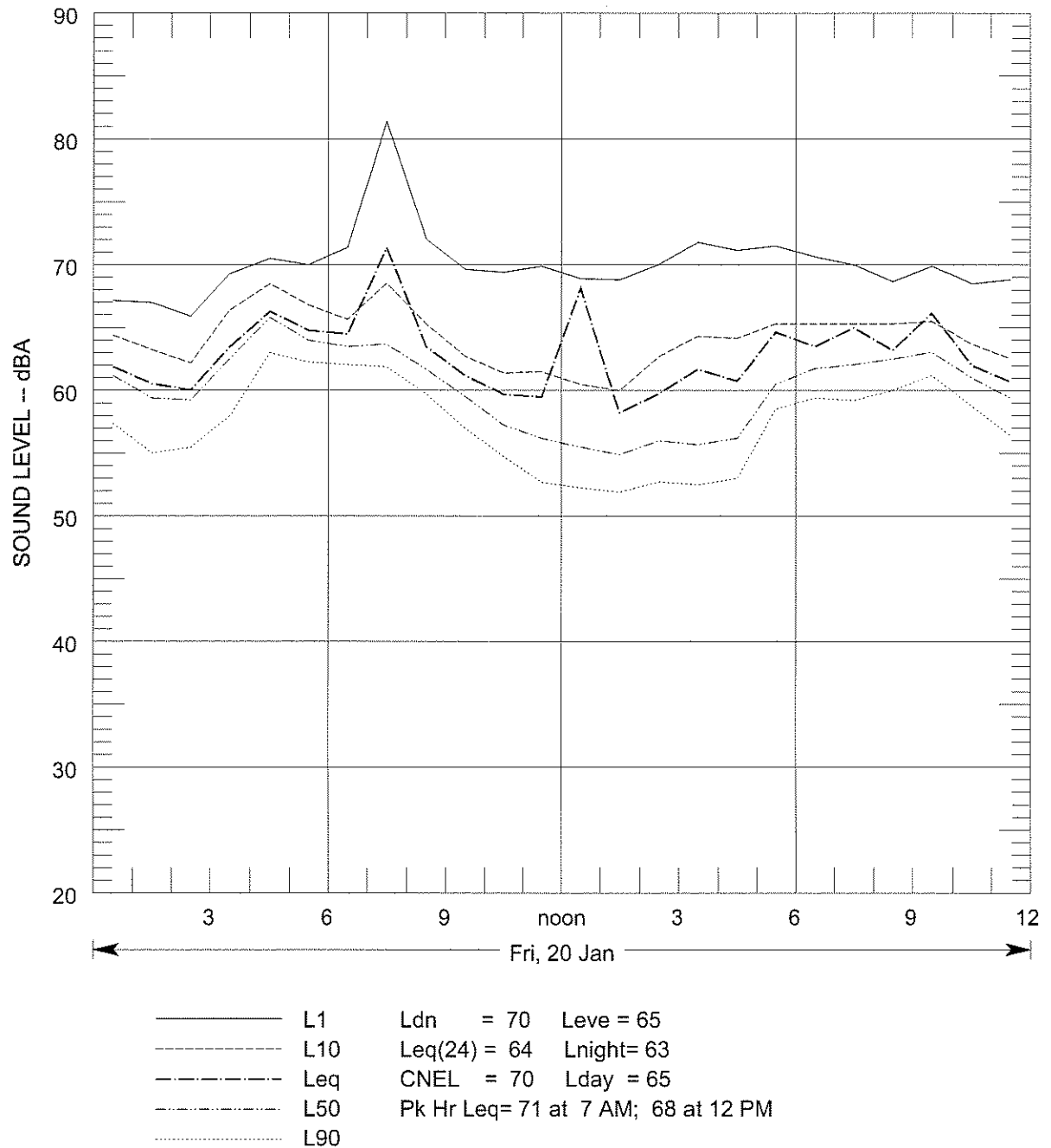


FIGURE 11 24 HOUR HOURLY AMBIENT NOISE LEVELS
FRIDAY 20 JANUARY, 2006
MEASUREMENT LOCATION LT-2

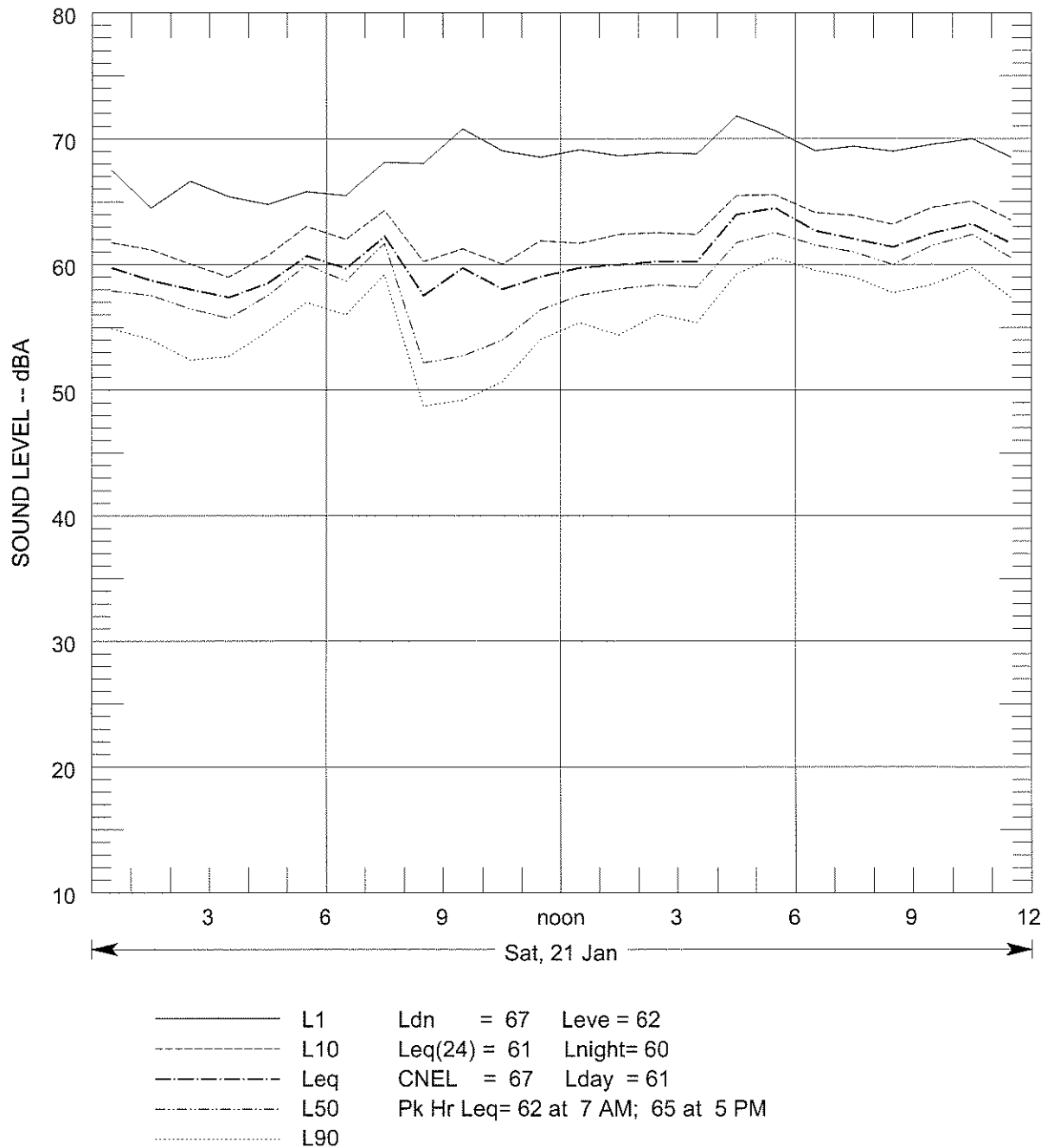


FIGURE 12 24 HOUR HOURLY AMBIENT NOISE LEVELS
SATURDAY 21 JANUARY, 2006
MEASUREMENT LOCATION LT-2

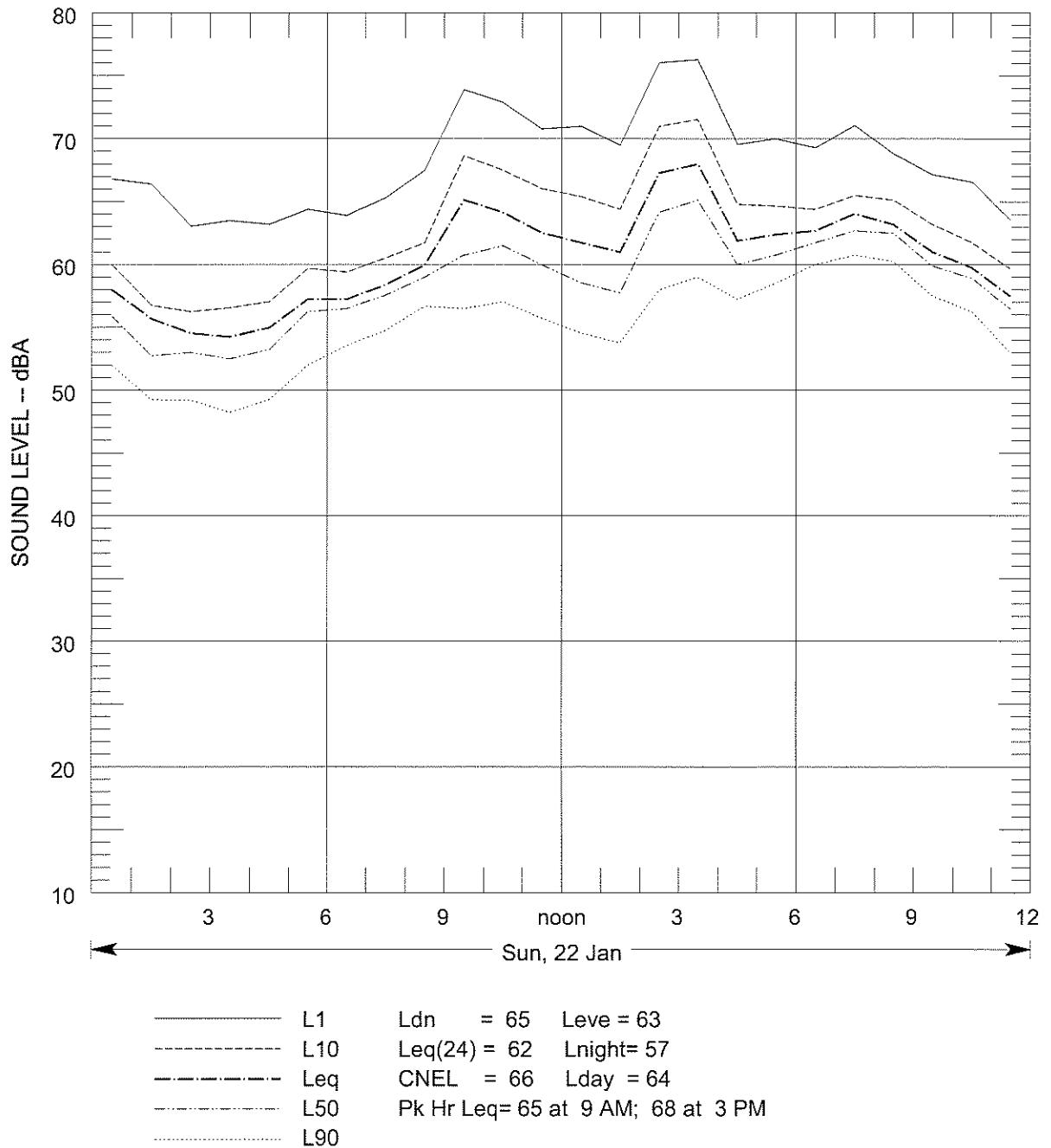


FIGURE 13 24 HOUR HOURLY AMBIENT NOISE LEVELS
SUNDAY 22 JANUARY, 2006
MEASUREMENT LOCATION LT-2

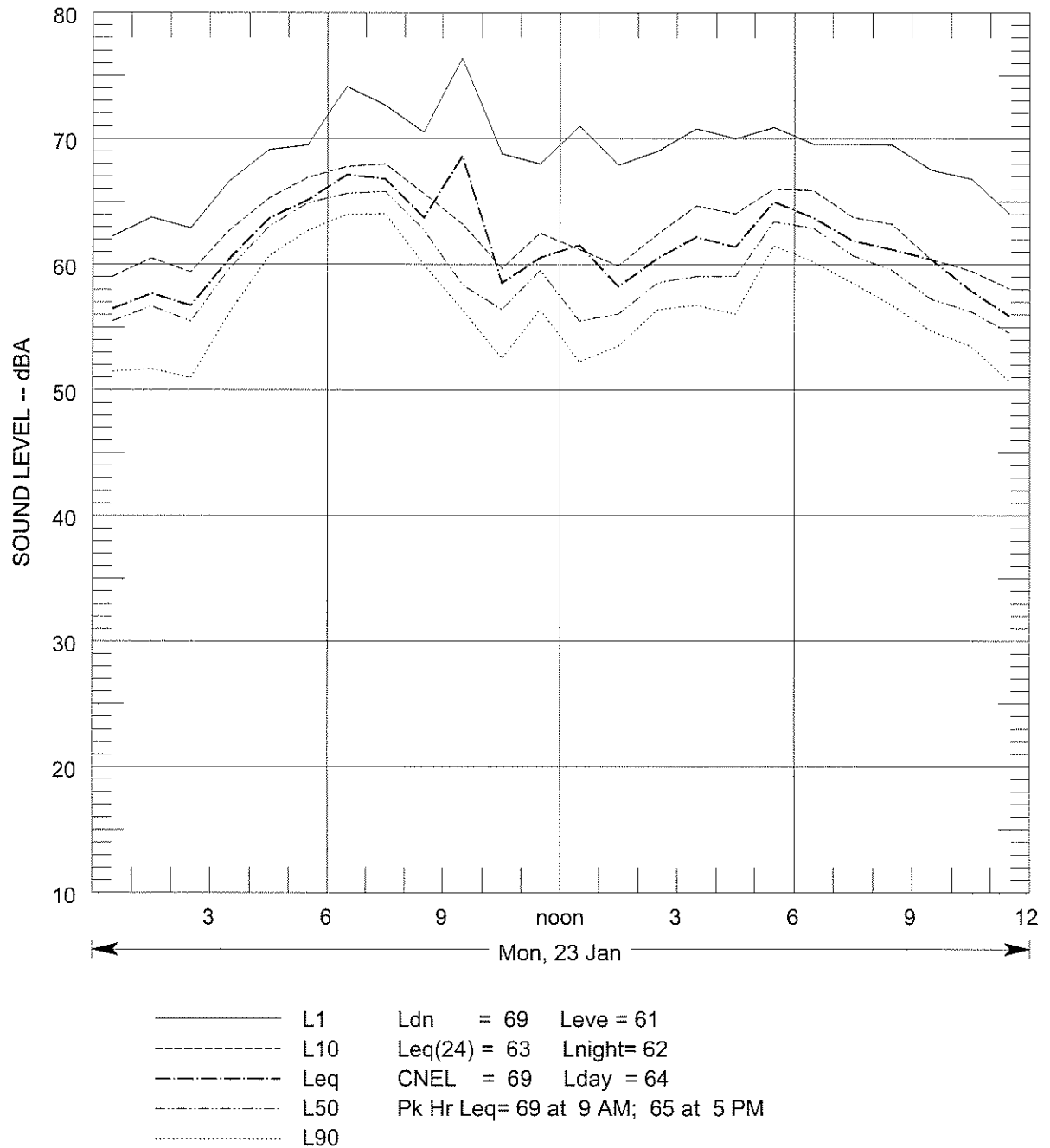


FIGURE 14 24 HOUR HOURLY AMBIENT NOISE LEVELS
 MONDAY 23 JANUARY, 2006
 MEASUREMENT LOCATION LT-2

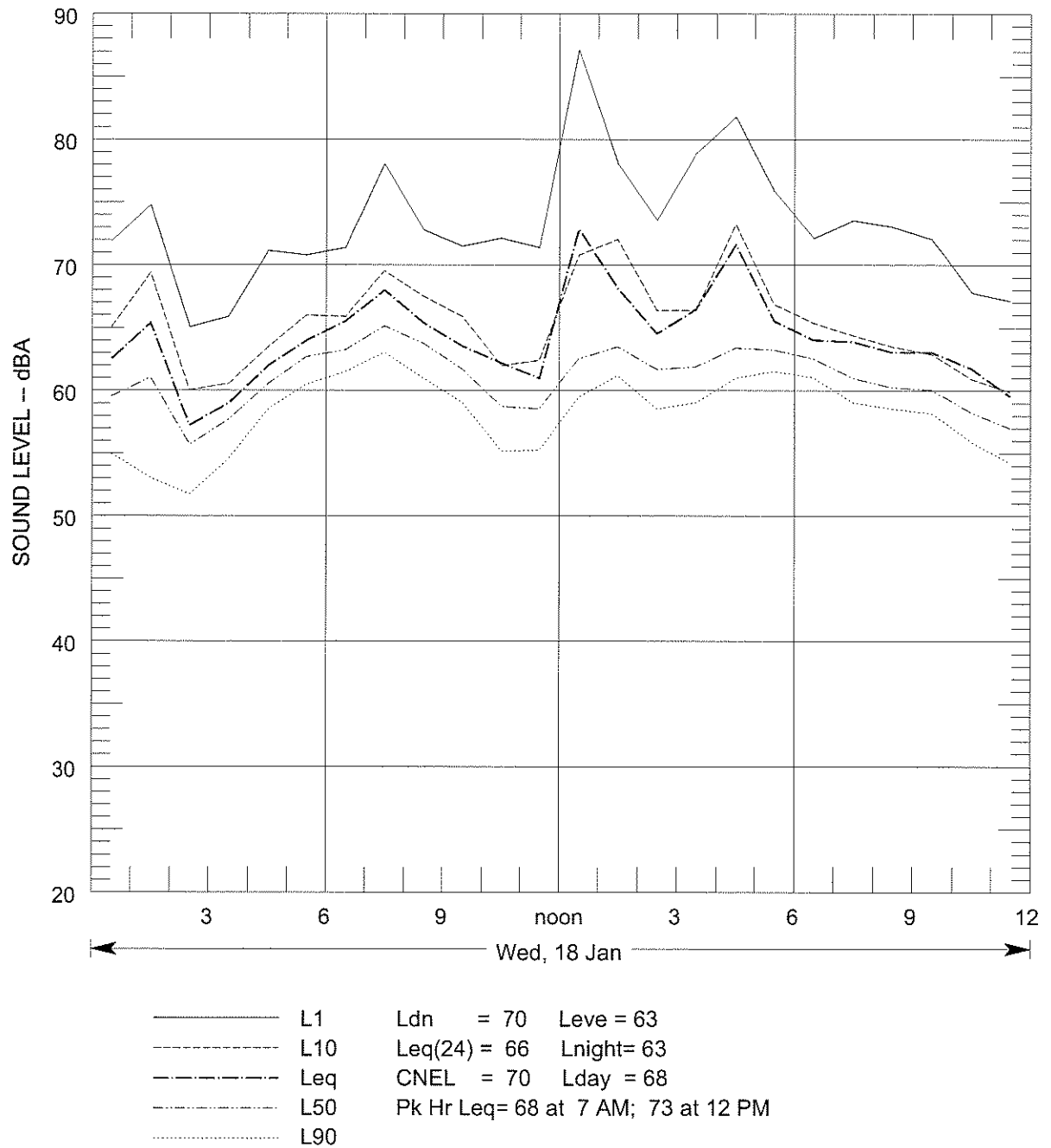


FIGURE 15 24 HOUR HOURLY AMBIENT NOISE LEVELS
WEDNESDAY 18 JANUARY, 2006
MEASUREMENT LOCATION LT-3

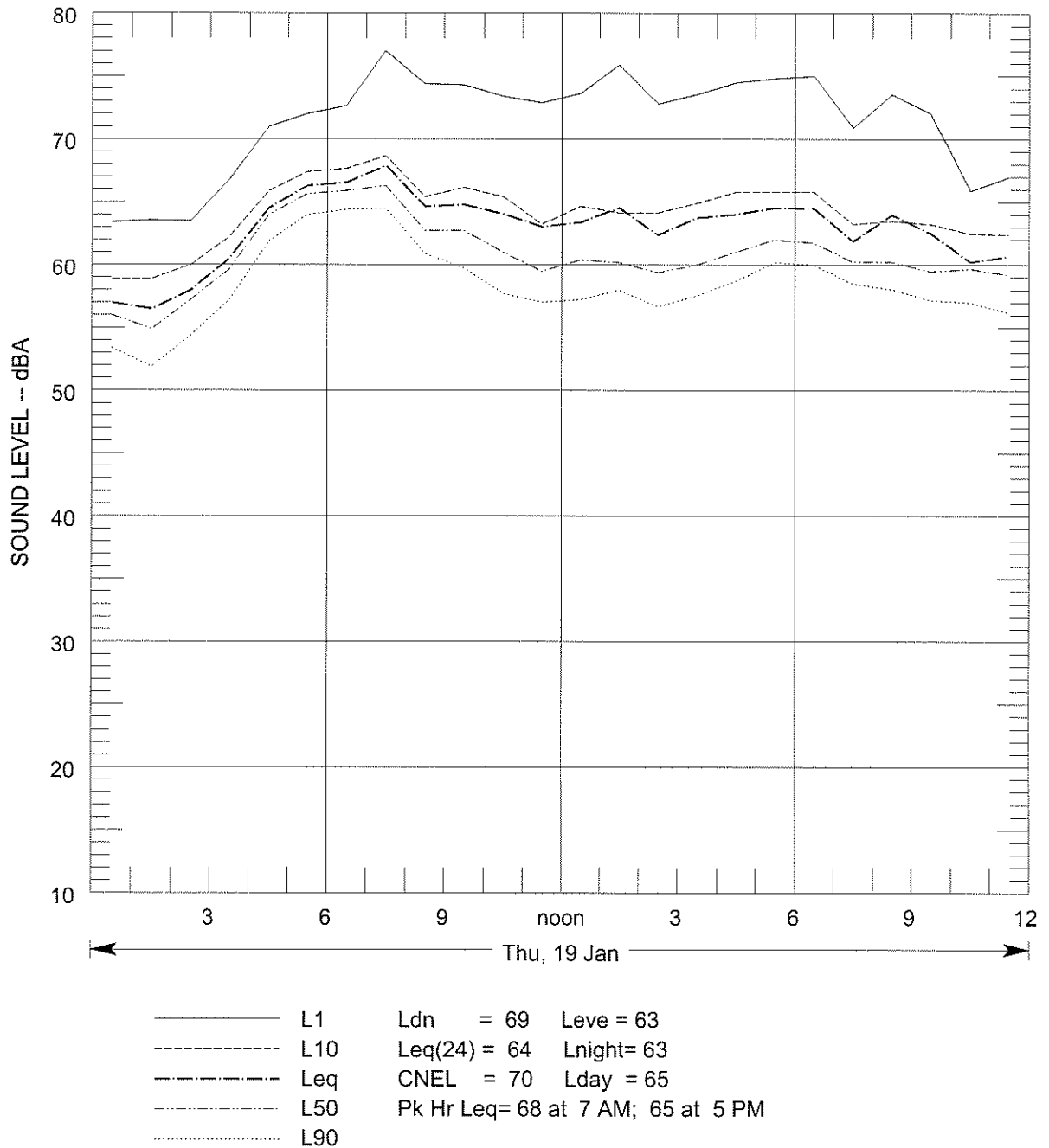


FIGURE 16 24 HOUR HOURLY AMBIENT NOISE LEVELS
THURSDAY 19 JANUARY, 2006
MEASUREMENT LOCATION LT-3

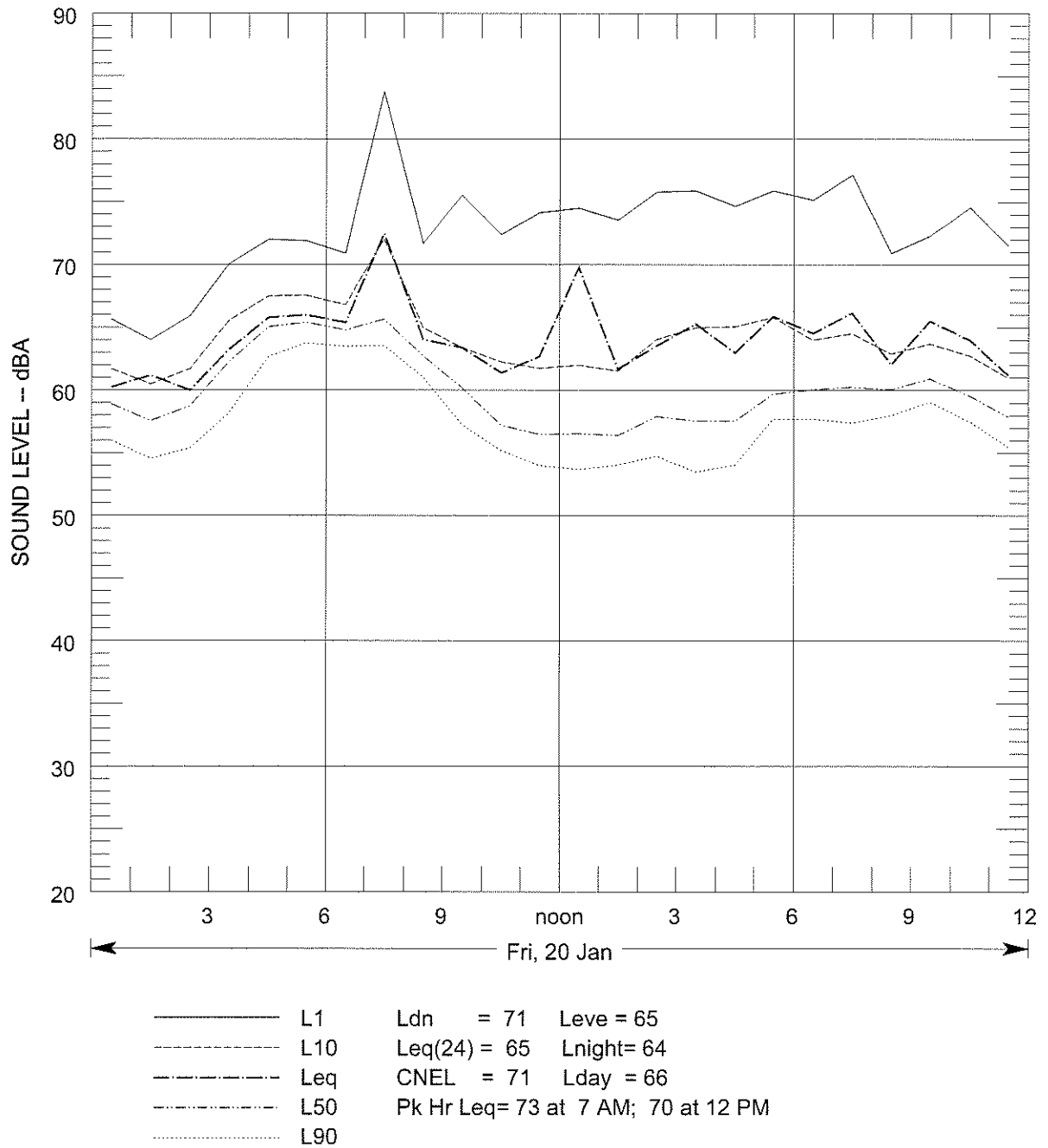


FIGURE 17 24 HOUR HOURLY AMBIENT NOISE LEVELS
FRIDAY 20 JANUARY, 2006
MEASUREMENT LOCATION LT-3

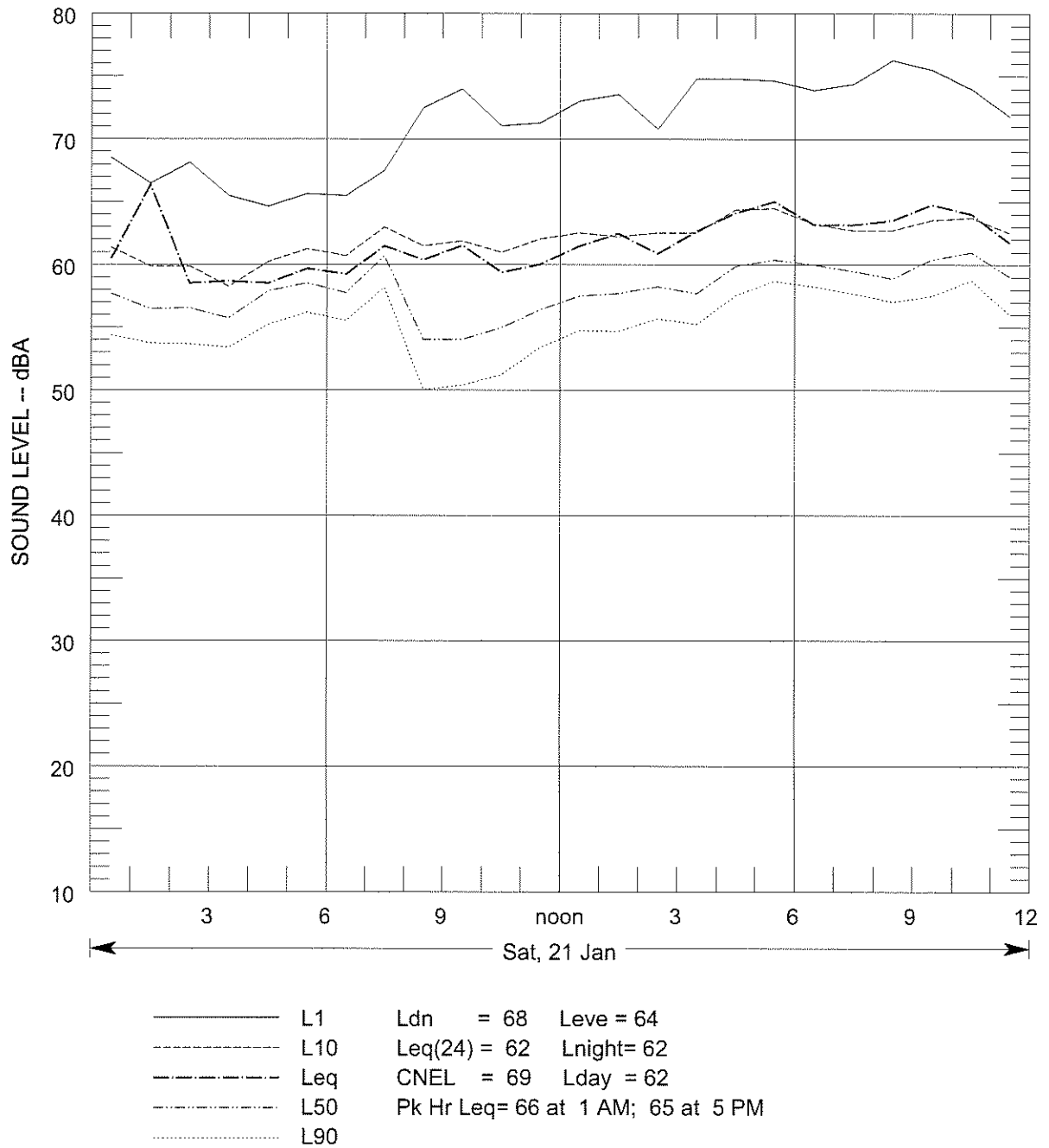


FIGURE 18 24 HOUR HOURLY AMBIENT NOISE LEVELS
SATURDAY 21 JANUARY, 2006
MEASUREMENT LOCATION LT-3

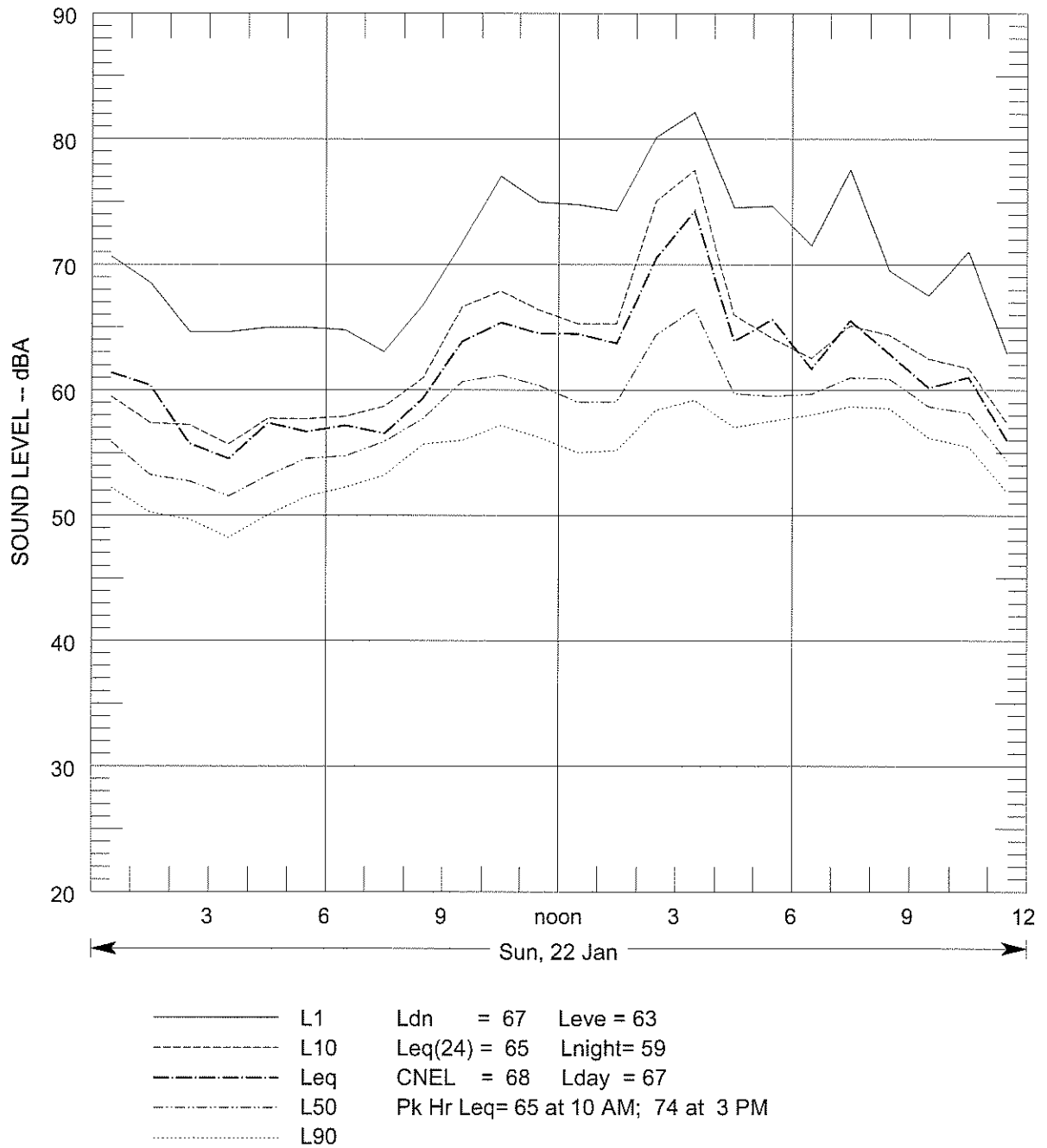


FIGURE 19 24 HOUR HOURLY AMBIENT NOISE LEVELS
SUNDAY 22 JANUARY, 2006
MEASUREMENT LOCATION LT-3

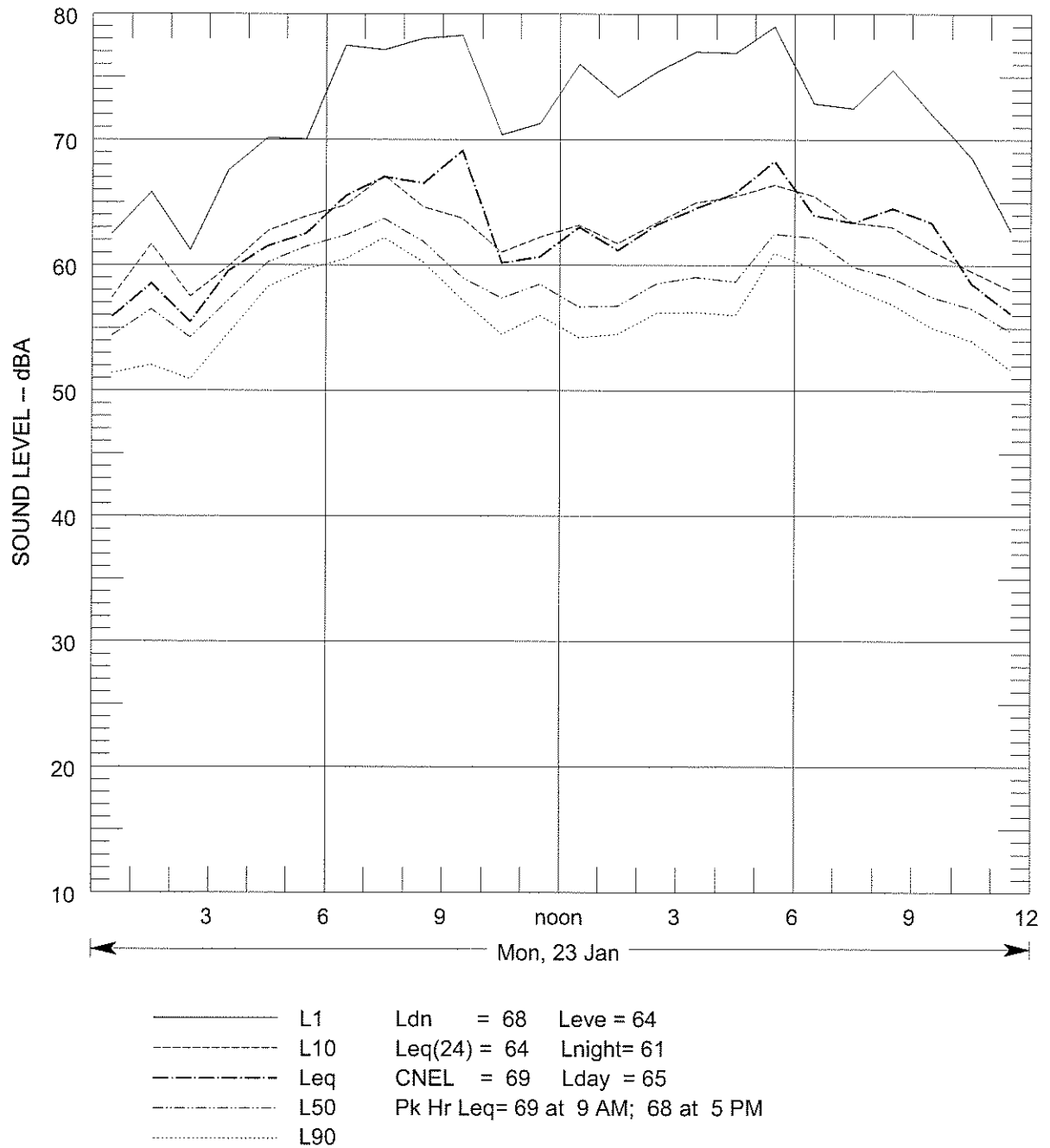


FIGURE 20 24 HOUR HOURLY AMBIENT NOISE LEVELS
 MONDAY 23 JANUARY, 2006
 MEASUREMENT LOCATION LT-3

Noise Modeling Results

AIRPORT WAY EXISTING NO PROJECT

RUN NAME: AIRPORT WAY - YOSEMITE AVE TO WAWONA ST RUN DATE:
MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
---	-----	-----
AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 9230 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.52
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL

-----	-----	-----	-----
0.0	95.8	206.0	443.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: AIRPORT WAY - WAWONA ST TO DANIELS ST

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

--- - -

AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 10300 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.00

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 103.0 221.6 477.3

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: AIRPORT WAY - DANIELS ST TO SR 120

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

--- - -

AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 12250 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.75

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

53.9 115.6 248.7 535.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: AIRPORT WAY - SR 120 WB TO SR 120 EB

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

--- - -

AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 9300 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.56

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 96.3 207.1 445.9

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: AIRPORT WAY - SR 120 TO ATHERTON DR

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
---	-----	-----
AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 7680 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.73
** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **
70 CNEL 65 CNEL 60 CNEL 55 CNEL

-----	-----	-----	-----
0.0	84.8	182.3	392.5

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: AIRPORT WAY - ATHERTON DR TO WOODWARD AVE
MAY 24 2007

RUN DATE:

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
---	-----	-----
AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 4500 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.40
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL

-----	-----	-----	-----
0.0	59.5	127.7	274.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: AIRPORT WAY - SOUTH OF WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
---	-----	-----
AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 3230 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 63.96
** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **
70 CNEL 65 CNEL 60 CNEL 55 CNEL

-----	-----	-----	-----
0.0	0.0	102.5	220.4

DO YOU WANT A HARD COPY? (Y/N)

AIRPORT WAY EXISTING PLUS PROJECT

RUN NAME: YOSEMITE AVE TO WAWONA ST

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

--- ----- -----

AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 9640 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.71

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 98.6 212.1 456.7

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WAWONA ST TO DANIELS ST RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

--- ----- -----

AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 10820 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.21

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

----- ----- ----- -----

0.0 106.5 229.0 493.2

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: DANIELS ST TO SR 120 RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
---	-----	-----
AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 16210 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.97
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL

-----	-----	-----	-----
64.9	139.3	299.8	645.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 WB TO SR 120 EB RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

--- ----- -----

AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 11440 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.46

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

----- ----- ----- -----

51.6 110.5 237.6 511.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 TO ATHERTON DR RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

--- ----- -----

AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 8070 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.94

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

----- ----- ----- -----

0.0 87.6 188.4 405.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: ATHERTON DR TO WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
-----	---------	-------

---	-----	-----
-----	-------	-------

AUTOS

68.15	11.12	8.43
-------	-------	------

M-TRUCKS

7.77	1.27	0.96
------	------	------

H-TRUCKS

1.79	0.29	0.22
------	------	------

ADT: 4610 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.51

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

-----	-----	-----	-----
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0.0	60.5	129.8	279.3
-----	------	-------	-------

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SOUTH OF WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

--- ----- -----

AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 3340 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 64.11

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 0.0 104.8 225.4

DO YOU WANT A HARD COPY? (Y/N)

UNION ROAD

RUN NAME: YOSEMITE AVE TO WAWONA ST

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 12680 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.90

* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL 65 CNEL 60 CNEL 55 CNEL

55.2 118.3 254.5 548.1

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: YOSEMITE AVE TO WAWONA ST

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 13290 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.11

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

56.9 122.0 262.6 565.5

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WAWONA ST TO DANIELS ST RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 13500 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.18

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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57.5 123.3 265.4 571.5

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WAWONA ST TO DANIELS ST RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 14310 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.43

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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59.7 128.2 275.9 594.1

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: DANIELS ST TO SR 120 RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 14130 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.37

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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59.2 127.1 273.6 589.1

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: DANIELS ST TO SR 120 RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 14290 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.42

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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59.7 128.1 275.6 593.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 WB TO SR 120 EB RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 9080 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.45

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 94.8 203.8 438.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 WB TO SR 120 EB RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
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AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 9330 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.57
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0	96.5	207.5	446.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 TO ATHERTON DR (FUTURE INTERSECTION)
MAY 24 2007

RUN DATE:

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
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AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 4300 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.21
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0	57.8	123.9	266.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 TO ATHERTON DR (FUTURE INTERSECTION)
MAY 24 2007

RUN DATE:

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
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AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 4650 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.55
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0	60.8	130.5	280.9

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: ATHERTON DR TO WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 4300 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.21

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 57.8 123.9 266.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: ATHERTON DR TO WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 4650 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 65.55

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 60.8 130.5 280.9

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SOUTH OF WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 3300 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 64.06

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 0.0 103.9 223.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SOUTH OF WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 3410 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 64.20

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 0.0 106.2 228.5

DO YOU WANT A HARD COPY? (Y/N)

DANIELS STREET

RUN NAME: AIRPORT WAY TO FISHBACK AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 2180 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 62.26

* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 0.0 78.9 169.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: AIRPORT WAY TO FISHBACK AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 6990 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.32

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 79.7 171.2 368.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: FISHBACK RD TO JUNCTION DR RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 1400 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 60.33

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 0.0 58.9 126.3

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: FISHBACK RD TO JUNCTION DR

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 3130 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 63.83

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 0.0 100.3 215.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: JUNCTION DR TO WINTERS DR RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 1180 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 59.59

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 0.0 52.6 112.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: JUNCTION DR TO WINTERS DR RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
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AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 2470 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 62.80
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0	0.0	85.7	184.3

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WINTERS DR TO UNION RD RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 1350 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 60.18

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 0.0 57.5 123.3

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WINTERS DR TO UNION RD RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 2510 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 62.87

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 0.0 86.7 186.3

DO YOU WANT A HARD COPY? (Y/N)

CUMULATIVE

AIRPORT WAY

RUN NAME: YOSEMITE AVE TO WAWONA ST RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 20230 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.93

* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL 65 CNEL 60 CNEL 55 CNEL

75.1 161.4 347.5 748.3

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: YOSEMITE AVE TO WAWONA ST

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 20890 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.07

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

76.7 164.9 355.0 764.5

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WAWONA ST TO DANIELS ST RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 21950 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.29

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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79.3 170.4 366.9 790.2

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WAWONA ST TO DANIELS ST RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 22720 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.44

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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81.1 174.4 375.4 808.5

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: DANIELS ST TO SR 120 RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 31880 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 73.91

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

101.6 218.5 470.5 1013.4

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: DANIELS ST TO SR 120 RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 35560 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 74.38

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

109.2 235.0 506.0 1089.9

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 WB TO SR 120 EB RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
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AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 31130 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 73.80
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL

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100.0	215.1	463.1	997.4

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 WB TO SR 120 EB RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 33290 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 74.09

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

104.5 224.9 484.3 1043.0

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 TO ATHERTON DR RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 31100 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 73.80

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

----- ----- ----- -----

99.9 214.9 462.8 996.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 TO ATHERTON DR RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 31690 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 73.88

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

101.2 217.6 468.6 1009.3

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: ATHERTON DR TO WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 16230 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 70.97

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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64.9 139.4 300.0 646.1

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: ATHERTON DR TO WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
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AUTOS

68.15	11.12	8.43
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M-TRUCKS

7.77	1.27	0.96
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H-TRUCKS

1.79	0.29	0.22
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ADT: 16430 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.03

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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65.5	140.5	302.5	651.4

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SOUTH OF WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 11150 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.34

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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50.7 108.6 233.6 503.1

DO YOU WANT A HARD COPY? (Y/N)

UNION ROAD

RUN NAME: YOSEMITE AVE TO WAWONA ST

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 26100 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 73.04

* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *

70 CNEL 65 CNEL 60 CNEL 55 CNEL

88.9 191.2 411.8 886.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: YOSEMITE AVE TO WAWONA ST

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 26620 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 73.12

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

90.1 193.8 417.2 898.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SOUTH OF WOODWARD AVE

RUN DATE: MAY 24 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 11210 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.37

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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50.9 109.0 234.5 504.9

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: YOSEMITE AVE TO WAWONA ST

RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
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AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 26100 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 73.04

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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88.9	191.2	411.8	886.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: YOSEMITE AVE TO WAWONA ST

RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 26620 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 73.12

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

90.1 193.8 417.2 898.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WAWONA ST TO DANIELS ST RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 25150 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.88

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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86.8 186.6 401.7 865.2

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WAWONA ST TO DANIELS ST RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 25860 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 73.00

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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88.4 190.1 409.2 881.4

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: DANIELS ST TO SR 120 RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 25000 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.85

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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86.4 185.8 400.1 861.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: DANIELS ST TO SR 120 RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 25160 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.88

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

86.8 186.6 401.8 865.4

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 WB TO SR 120 EB RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 24050 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.68

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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84.2 181.1 389.9 839.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 WB TO SR 120 EB RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 24430 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.75

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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85.1 183.0 394.0 848.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 TO ATHERTON DR (FUTURE INTERSECTION)
MAY 25 2007

RUN DATE:

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 23350 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.55

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

82.6 177.6 382.3 823.4

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SR 120 TO ATHERTON DR (FUTURE INTERSECTION)
MAY 25 2007

RUN DATE:

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
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AUTOS		
68.15	11.12	8.43
M-TRUCKS		
7.77	1.27	0.96
H-TRUCKS		
1.79	0.29	0.22

ADT: 23940 SPEED: 40 ACTIVE HALF WIDTH (FT): 6
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 72.66
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL

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84.0	180.5	388.7	837.2

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: ATHERTON DR TO WOODWARD AVE

RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 9200 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.51

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 95.6 205.6 442.7

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: ATHERTON DR TO WOODWARD AVE

RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 9450 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.63

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 97.3 209.3 450.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SOUTH OF WOODWARD AVE

RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 9830 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.80

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 99.9 214.8 462.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: SOUTH OF WOODWARD AVE

RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
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AUTOS

68.15	11.12	8.43
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M-TRUCKS

7.77	1.27	0.96
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H-TRUCKS

1.79	0.29	0.22
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ADT: 9980 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.86

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0	100.9	217.0	467.3
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DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: AIRPORT WAY TO FISHBACK RD

RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 12050 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.68

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

53.3 114.3 246.0 529.8

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: AIRPORT WAY TO FISHBACK RD

RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 16980 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 71.17

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

66.9 143.6 309.2 665.9

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: FISHBACK RD TO JUNCTION DR RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 8130 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.97

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 88.1 189.3 407.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: FISHBACK RD TO JUNCTION DR

RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 9820 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.79

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 99.8 214.7 462.3

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: JUNCTION DR TO WINTERS DR RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 7700 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.74

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 84.9 182.6 393.1

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: JUNCTION DR TO WINTERS DR RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 8720 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.28

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 92.2 198.4 427.1

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WINTERS DR TO UNION RD RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 7480 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.61

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 83.3 179.1 385.6

DO YOU WANT A HARD COPY? (Y/N)

RUN NAME: WINTERS DR TO UNION RD RUN DATE: MAY 25 2007

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

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AUTOS

68.15 11.12 8.43

M-TRUCKS

7.77 1.27 0.96

H-TRUCKS

1.79 0.29 0.22

ADT: 8430 SPEED: 40 ACTIVE HALF WIDTH (FT): 6

SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.13

** DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL **

70 CNEL 65 CNEL 60 CNEL 55 CNEL

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0.0 90.2 194.0 417.6

DO YOU WANT A HARD COPY? (Y/N)