Appendix J
Noise Technical Report

Noise Technical Report

Mojave Industrial Project

NOVEMBER 2023

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CBC	California Building Code
CEQA	California Environmental Quality Act
CNEL	community noise equivalent level
dB	decibel
dBA	A-weighted decibels
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FTA	Federal Transit Administration
HVAC	heating, ventilation and air conditioning
ips	inches per second
Hz	hertz
kHz	kilohertz
L_{eq}	equivalent sound level
L_{dn}	day-night level
L_{max}	maximum sound level during measurement interval
L_{xx}	Percentile-exceeded sound level
LT	Long-term noise measurement location
mPA	micro-Pascals
OPR	California Governor's Office of Planning and Research
PPV	peak particle velocity
RCNM	Roadway Construction Noise Model
SPL	sound pressure level
ST	short-term noise measurement location
TNM	Traffic Noise Model

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1 Executive Summary

The purpose of this technical report is to assess the potential noise and vibration impacts associated with implementation of the proposed Mojave Industrial Project (Project) in the City of Victorville (City). This assessment utilizes the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14-CCR 15000 et seq.), the City and other applicable thresholds of significance.

1.1 Project Summary

The Project would include construction of three industrial/warehouse buildings and associated improvements, totaling 1,351,400 square feet on approximately 81.1 acres of vacant land (see Figure 2, Site Plan). Building 1, the southeast building, would be approximately 100,300 square feet, Building 2, the southwest building, would be approximately 91,100 square feet, and Building 3, the northern building, would be approximately 1,160,000 square feet. In the immediate vicinity, the project site is bordered by vacant land to the north, east, and west, and Mojave Drive to the south.

1.2 Summary of Findings

The results of this report are summarized below based on the significance criteria in Section 6 consistent with Appendix G of the CEQA Guidelines.

Table 1. Summary of Impact Determinations

Analysis	Report Section	Significance Determinations	
		Unmitigated	Mitigated
Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards during construction	7.1.1	Less-than-Significant	Not Applicable
Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards during operation	7.1.2	Less-than-Significant	Not Applicable
Generation of excessive groundborne vibration or groundborne noise levels during construction	7.2.1	Less-than-Significant	Not Applicable
Generation of excessive groundborne vibration or groundborne noise levels during operation	7.2.2	Less-than-Significant	Not Applicable
Exposure of people residing or working in the project area to excessive noise levels from a private airstrip or an airport	7.3	No Impact	Not Applicable

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2 Project Background

2.1 Project Location

The approximately 81.1-acre Project site is located in the western part of the City, which is within the Victor Valley region of San Bernardino County (Figure 1, Project Location). The Project site is located north of Mojave Drive, east of Onyx Road, west of Topaz Road, and south of Cactus Road/Twaney Ridge Lane. The Project site consists of three parcels: Assessor's Parcel Numbers (APNs) 3128-631-02,3128-631-03, and 3128-631-04.

Regional access to the Project site is provided via Highway 395, approximately 1-mile west of the Project site. Local access to the Project is provided via Mojave Drive and Onyx Road.

2.2 Existing Conditions

The approximately 81.1-acre, rectangular-shaped Project site is currently undeveloped property bound to the east by Onyx Road, to the west by vacant land and Topaz Road, to the south by Mojave Drive, and to the north by Cactus Road/Tawney Ridge Lane. The Project site currently has a land use designation and zoning of Light Industrial (M-1) and General Commercial (C-2).

2.3 Project Characteristics

The Project would include construction of three industrial/warehouse buildings and associated improvements on approximately 81.1 acres of vacant land (see Figure 2, Site Plan). The Project would provide a total of 1,351,400 square feet of industrial/warehouse space. Building 1, the southeast building, would be approximately 100,300 square feet, Building 2, the southwest building, would be approximately 91,100 square feet, Building 3, the northern building, would be approximately 1,160,000 square feet. Project would also include associated improvements, such as loading docks, trailer parking stalls, passenger vehicle parking spaces, stormwater detention basins, and landscape area.

Site Access, Circulation, and Parking

Access to the Project site would be provided by U.S. Highway 395, off Mojave Drive, and Cactus Road/Tawney Ridge Lane. Off-site roadway, traffic signage/signal, and sidewalk improvements would be developed to provide access to these roadways.

Utility Improvements

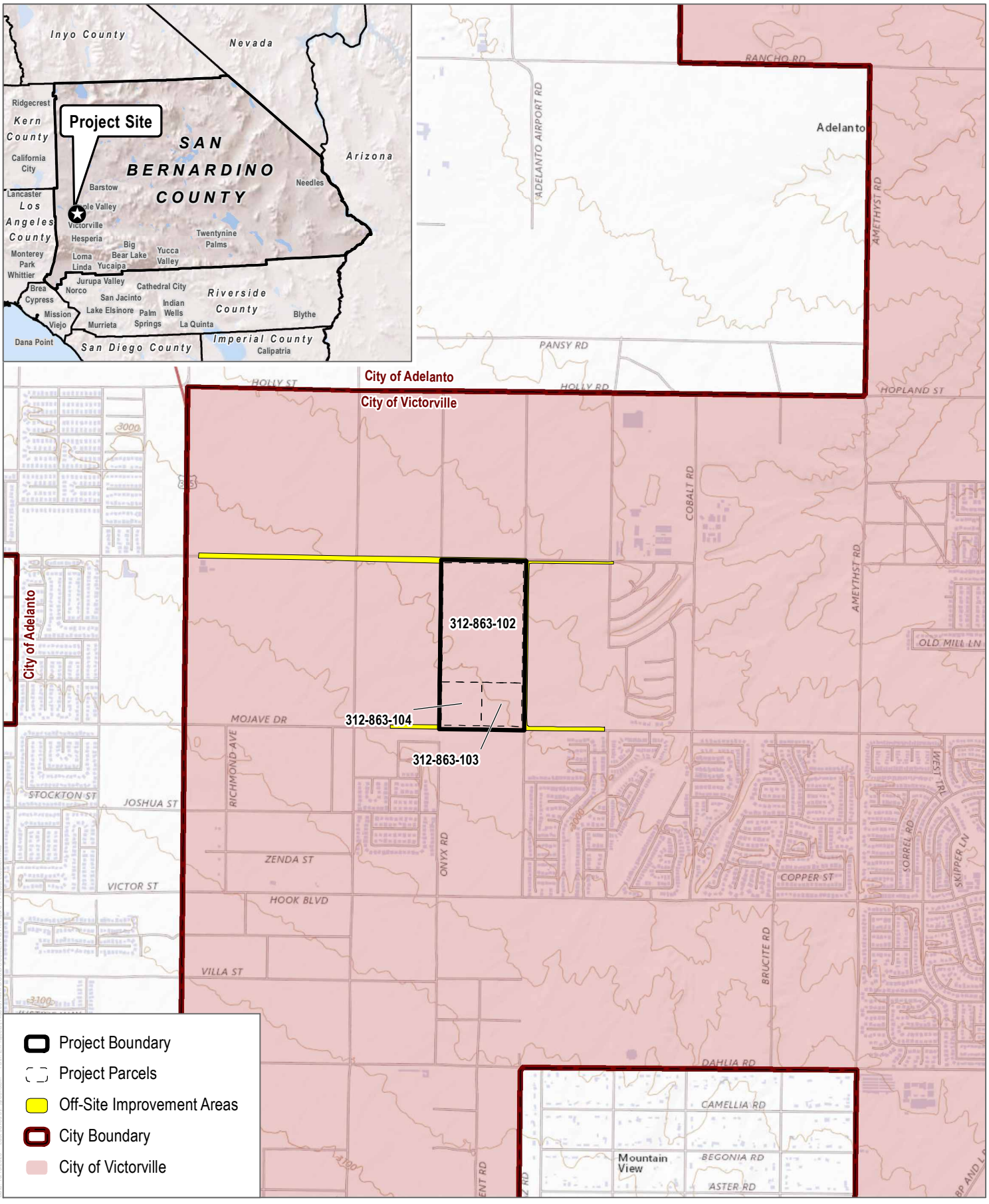
Given the vacant, undeveloped nature of the Project site, both wet and dry utilities, including domestic water, sanitary sewer, and electricity, would need to be extended onto the Project site. Domestic water, sanitary sewer, and electrical lines are located within Mojave Drive and lateral connections would be made from these existing lines. Stormwater would be managed on site by the off-site stormwater system to capture and treat on-site stormwater.

Operations

All business operations would be conducted within the enclosed buildings, with the exception of the ingressing and egressing of trucks and passenger vehicles accessing the Project site, passenger and truck parking, the loading and unloading of trailers within designated truck courts/loading areas, and the internal and external movement of materials around the Project site. It is anticipated that the facilities would be operated 24 hours a day, 7 days a week.

General Plan Land Use Designation, Specific Plan Land Use Designation, and Zone Designation

The Project site's existing General Land Use Designation and Zoning Classification is General Commercial and Light Industrial. Implementation of the Project would require a change in the General Plan designation and zone classification in order to be consistent with the General Plan.



SOURCE: Maxar 2020; County of San Bernardino 2023

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0 1,000 2,000 Feet

FIGURE 1

Project Location

Mojave Industrial Park Project

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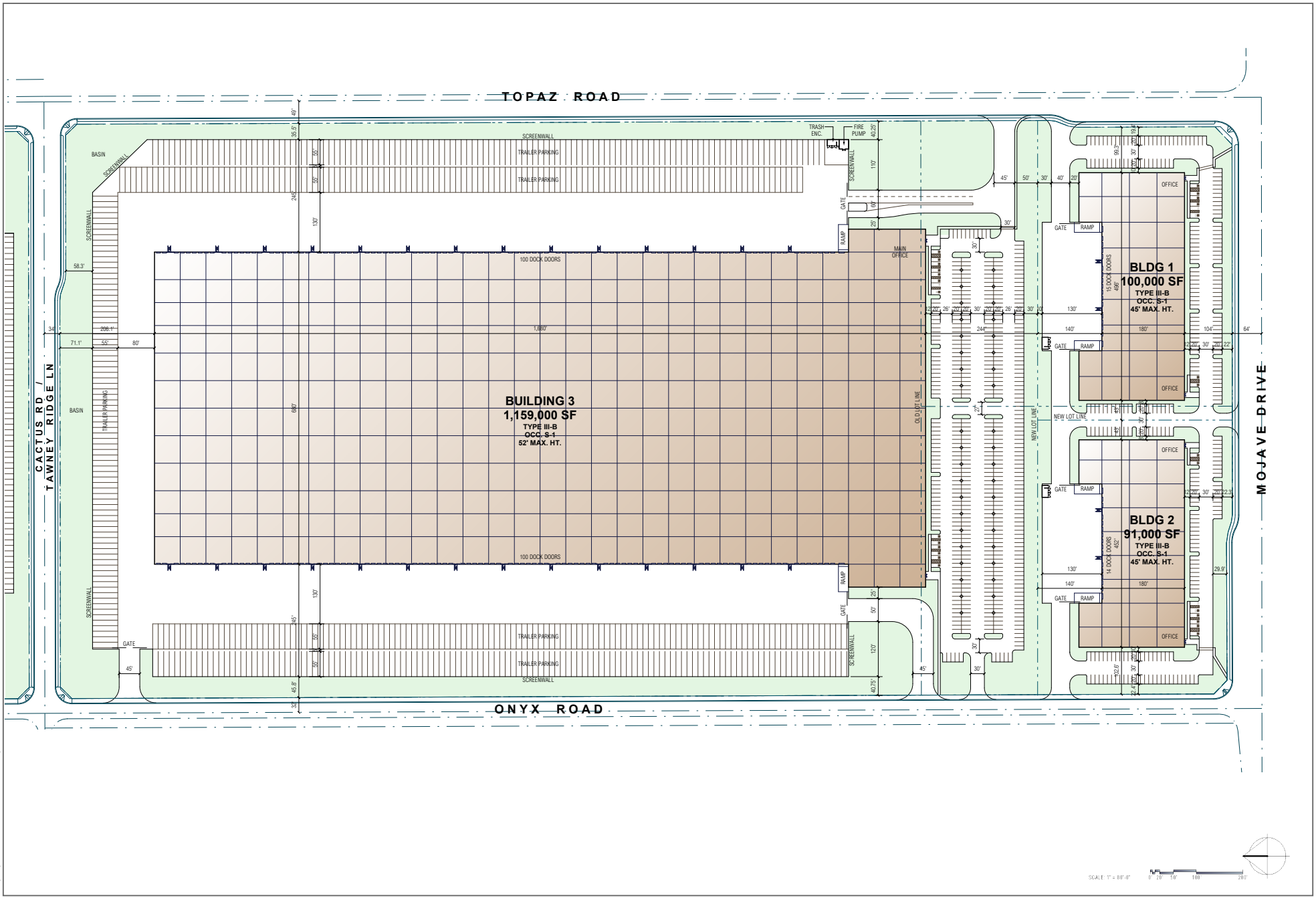

SOURCE: RGA 2023; Covington Development Partners 2023

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FIGURE 2

Site Plan

Mojave Industrial Park Project

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3 Fundamentals of Noise and Vibration

3.1 Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receptor determine the sound level and characteristics of the noise perceived by the receptor. The field of acoustics deals primarily with the propagation and control of sound.

Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB). The threshold of hearing for young people is about 0 dB, which corresponds to 20 mPa.

Addition of Decibels

Because decibels are logarithmic units, SPL cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a receptor equidistant to each sound source would be 3 dB higher than one source under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB—rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of dBA) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, D-, and G-scales), but these scales are rarely used in conjunction with highway traffic noise. Noise levels for traffic noise reports are typically reported in terms of A-weighted decibels (dBA). Table 2 provides typical outdoor and indoor noise sources against a decreasing linear scale of A-weighted sound levels.

Table 2. Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013.

Human Response to Changes in Noise Levels

As discussed above, doubling sound energy results in a 3 dB increase in sound. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different than what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1 dB changes in sound levels, when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000 Hz–8,000 Hz) range (Caltrans 2013). In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3 dB increase in sound would generally be perceived as barely detectable.

Noise Descriptors

Noise in our daily environment fluctuates over time at varying rates. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors are utilized in this analysis.

- **Equivalent Sound Level (L_{eq}):** L_{eq} represents an energy average of the sound level occurring over a specified period. The 1-hour A-weighted equivalent sound level ($L_{eq}[h]$) is the energy average of A-weighted sound levels occurring during a one-hour period and is the basis for noise abatement criteria used by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA). Note that L_{eq} is not an arithmetic average of varying dB levels over a period of time, it accounts for greater sound energy represented by higher decibel contributions.
- **Percentile-Exceeded Sound Level (L_{xx}):** L_{xx} represents the sound level exceeded for a given percentage of a specified period (e.g., L_{10} is the sound level exceeded 10% of the time, and L_{90} is the sound level exceeded 90% of the time).
- **Maximum Sound Level (L_{max}):** L_{max} is the highest instantaneous sound level measured during a specified period.
- **Day-Night Level (L_{dn}):** L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10 p.m. and 7 a.m.
- **Community Noise Equivalent Level (CNEL):** Similar to L_{dn}, CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m., and a 5 dB penalty applied to the A-weighted sound levels occurring during evening hours between 7 p.m. and 10 p.m.

Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors:

- **Geometric Spreading –** Sound from a localized source (i.e., an ideal point source) propagates uniformly outward in a spherical pattern (or hemispherical when near a surface). The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Roadways consist of several

localized noise sources on a defined path, and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.

- Ground Absorption – The propagation path of noise from a sound emission source to a receptor is usually horizontal and proximate to the ground. Under these conditions, noise attenuation from ground absorption and reflective-wave canceling can add to the attenuation associated with geometric spreading. For acoustically "hard" paths over which sound may traverse (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or "soft" sites (i.e., those sites with an absorptive ground surface between the source and the receptor, such as fresh-fallen snow, soft dirt, or dense vegetative ground cover), an additional ground-attenuation value of +1.5 dB per doubling of distance is normally assumed. When added to cylindrical spreading for line source sound propagation, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance.
- Atmospheric Absorption – In addition to aforementioned geometric spreading, the fluid medium (i.e., the air) through which sound travels yields frequency-dependent attenuation that increases in magnitude with increasing frequency. The effect is influenced by temperature and relative humidity, and typically negligible over short source-to-receptor distances (e.g., less than 500 feet); but it helps explain why lower-frequency sound such as a thunderclap appears to "travel farther" over great distances.
- Meteorological Effects – Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound pressure levels can also be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects when distances between a source and receptor are large.
- Shielding by Natural or Human-Made Features – A large object or barrier in the direct path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and ridgelines) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor specifically to reduce noise. A barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction. While a line of trees may visually occlude the direct line between a source and a receptor, its actual noise-reducing effect is usually negligible because it does not create an acoustically solid barrier. Deep expanses of dense wooded areas, on the other hand, can offer noise reduction under the right conditions.

3.2 Vibration

Vibration is oscillatory movement of mass (typically a solid) over time. It is described in terms of frequency and amplitude and, unlike sound, can be expressed as displacement, velocity, or acceleration. For environmental studies, vibration is often studied as a velocity that, akin to the discussion of sound pressure levels, can also be expressed in dB as a way to cast a large range of quantities into a more convenient scale. Vibration impacts to buildings are generally discussed in terms of inches per second (ips) peak particle velocity (PPV), which will be used herein to discuss vibration levels for ease of reading and comparison with relevant standards. Vibration can also be annoying and thereby impact occupants of structures, and vibration of sufficient amplitude can disrupt sensitive

equipment and processes (Caltrans 2020), such as those involving the use of electron microscopes and lithography equipment. Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities where sudden releases of subterranean energy or powerful impacts of tools on hard materials occur. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site also have the potential to cause high vibration amplitudes. The maximum vibration level standard used by Caltrans for the prevention of structural damage to typical residential buildings is 0.3 ips PPV (Caltrans 2020). For human annoyance, Caltrans guidance indicates that a more stringent threshold of 0.2 ips PPV due to continuous vibration (e.g., nearby roadway traffic) would be "annoying." Vibration velocity limits for transient or single events tend to be less stringent than those for continuous or "steady-state" vibration sources.

3.3 Sensitive Receptors

Noise- and vibration-sensitive land uses are typically considered locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, and hospitals are usual examples, with others depending on what the local jurisdiction may have defined or established. Based on context from the City of Victorville General Plan 2030 Noise Element (City of Lancaster 2008), sensitive receptors include residences, schools, hospitals, convalescent homes, churches and sensitive wildlife habitat. Residences and schools are the nearest noise-sensitive land uses in the vicinity of the Project site. Existing single-family residences and are located near the Project site's southern boundary, and three schools (Gus Franklin Jr. Elementary School, Melva Davis Academy of Excellence Middle School, and West Creek Elementary School) are located to the northeast. These existing sensitive receptors represent the nearest land uses with the potential to be impacted by construction and operation of the Project. In addition, residential land uses located further from the Project site may be impacted by noise associated with the addition of Project-related traffic on the local roadway network.

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4 Existing Noise Environment

Ambient noise measurements were conducted in the vicinity of Project site to characterize the existing noise environment. The measurements were conducted on August 31, 2022 using a Piccolo II Integrating Sound Level Meter equipped with a 0.5-inch, pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute (ANSI) standard for a Type 2 (General Use) sound level meter. The calibration of the sound level meter was verified before and after the measurements, and the measurements were conducted with the measurement microphone covered with a windscreen and positioned approximately five feet above the ground.

Four noise measurement locations were selected (ST1–ST4), representing existing noise-sensitive receptors in the Project vicinity. The measurement locations are shown in Figure 3, Noise Measurement and Modeling Locations, and the measured average noise levels and measurement locations are provided in Table 3. Noise measurement data is also included in Appendix A. As shown in Table 3, measured ambient noise levels ranged from approximately 40 dBA L_{eq} at ST4 to 66 dBA L_{eq} at ST3. The primary noise source at the measurement locations consisted of traffic along the adjacent roadways. Secondary noise sources included distant traffic, conversations, distant landscaping activities, and birdsong.

Table 3. Measured Noise Levels

Receptors	Location/Address	Date	Time	L_{eq} (dBA)	L_{max} (dBA)
ST1	Adjacent to Caliente Road, east side of 11991 Moss Creek Court	August 31, 2022	12:31 p.m. – 12:46 p.m.	48.0	51.7
ST2	Adjacent to Diamond Road at the south end of Gus Franklin Jr. Elementary School	August 31, 2022	10:43 a.m. – 10:58 a.m.	45.1	51.2
ST3	Southeast corner of Mojave Drive across from 12698 Alveda Street	August 31, 2022	12:01 p.m. – 12:16 p.m.	66.3	69.5
ST4	Adjacent to Diamond Road at the south end of Melba Davis Academy of Excellence	August 31, 2022	11:11 a.m. – 11:26 a.m.	39.6	47.3

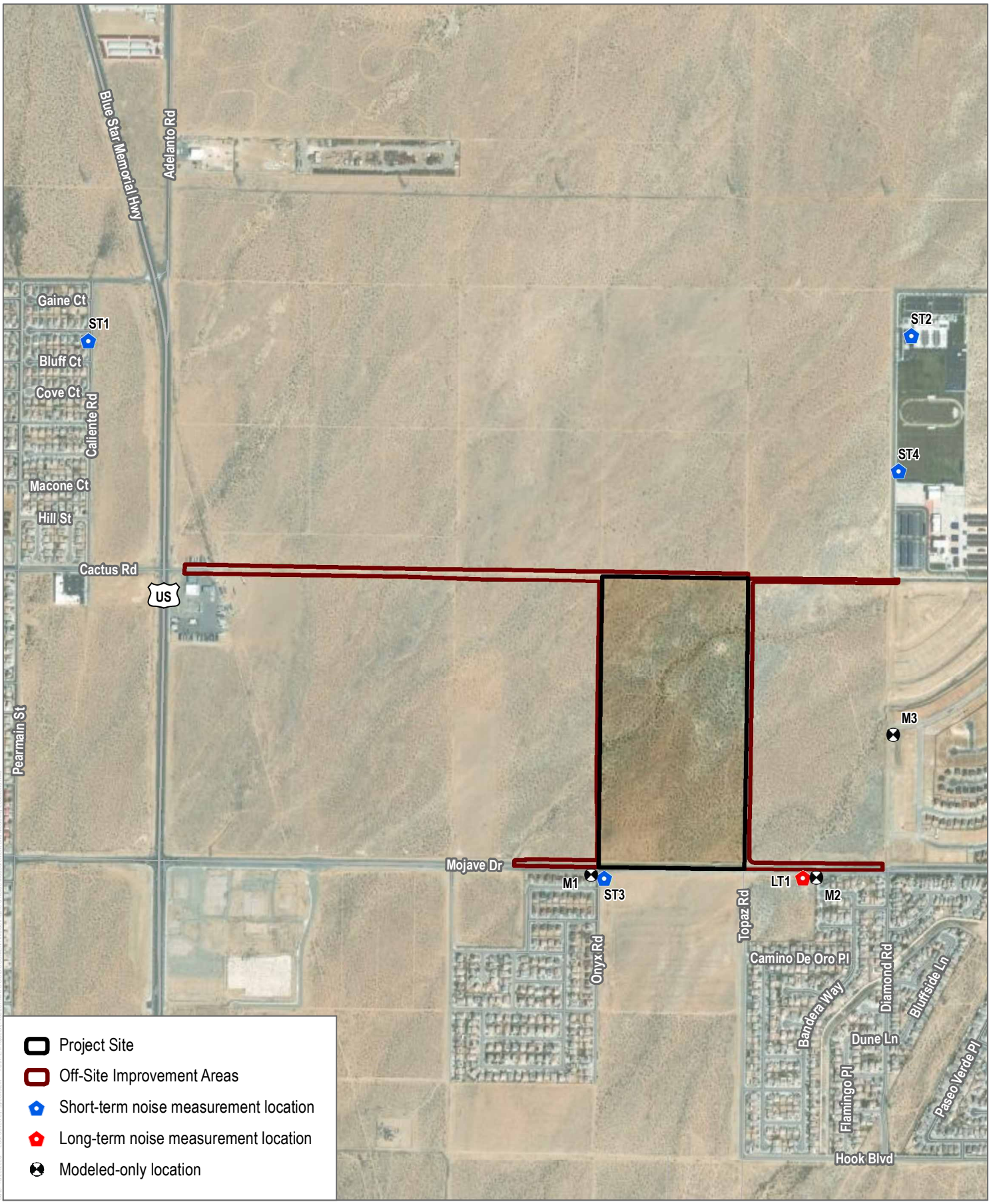
Source: Appendix A
Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval.

In addition, one long-term, unattended 24-hour noise measurement was taken from August 31 to September 1, 2022. This measurement was intended to determine the existing noise levels in the Project vicinity near noise-sensitive land uses throughout a typical daytime/evening/nighttime cycle, resulting from traffic or from other sources. As shown in Table 4, the long-term hourly average noise levels ranged from approximately 55 dBA L_{eq} (from 1 AM to 2 AM) to approximately 67 dBA L_{eq} (from 7 a.m. to 8 a.m.). The 24-hour weighted average noise level at LT1 was approximately 68 dBA CNEL. The primary noise source was traffic on the local roadways.

Table 4. Measured Long-Term (LT1) Noise Levels 8/31/2022 to 9/01/2022

Time Interval	dBA L_{eq}
11:00 AM- 12:00 PM	63.4
12:00 PM- 1:00 PM	63.3
1:00 PM- 2:00 PM	64.0
2:00 PM- 3:00 PM	65.6
3:00 PM- 4:00 PM	65.6
4:00 PM- 5:00 PM	65.3
5:00 PM- 6:00 PM	65.0
6:00 PM- 7:00 PM	64.3
7:00 PM- 8:00 PM	63.3
8:00 PM- 9:00 PM	62.5
9:00 PM- 10:00 PM	61.3
10:00 PM- 11:00 PM	60.3
11:00 PM- 12:00 AM	58.5
12:00 AM- 1:00 AM	57.1
1:00 AM- 2:00 AM	55.2
2:00 AM- 3:00 AM	55.9
3:00 AM- 4:00 AM	57.3
4:00 AM- 5:00 AM	61.8
5:00 AM- 6:00 AM	61.9
6:00 AM- 7:00 AM	63.9
7:00 AM- 8:00 AM	67.2
8:00 AM- 9:00 AM	66.6
9:00 AM- 10:00 AM	64.2
Lowest Hourly Average Noise Level: 55 dBA L_{eq} at 1 AM	
Highest Hourly Average Noise Level: 67 dBA L_{eq} at 7 AM	
24-Hour Average Noise Level: 63.4 dBA $L_{eq\ 24\text{-}Hr}$)	
24-Hour Weighted-Average Noise Level: 67.8 dBA CNEL	

Source: Appendix A



SOURCE: Maxar 2020; Open Street Map 2023

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0 400 800 Feet

FIGURE 3

Noise Measurement and Modeling Locations

Mojave Industrial Park Project

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5 Regulatory Setting

5.1 Federal Regulations

Federal Transit Administration

Although no federal regulations are applicable to this Project, guidance and methodologies from the Federal Transit Administration's (FTA's) Transit Noise and Vibration Impact Assessment Manual (FTA 2018) pertaining to construction noise and vibration are used in this analysis. For example, in its Transit Noise and Vibration Impact Assessment guidance manual (FTA 2018), the Federal Transit Administration (FTA) offers guidance on the estimation of construction noise levels from a construction Project site. It also provides suggested thresholds that include no more than 80 dBA L_{eq} (over an 8-hour daytime period) as received at a residential land use. Since the City does not provide a quantified construction noise limit, this analysis adopts the 80 dBA $L_{eq\ 8\text{-}hr}$ FTA guidance for quantitative construction noise impact assessment.

Federal Interagency Committee on Noise

In 1992 the Federal Interagency Committee on Noise (FICON) assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. Although the FICON recommendations were developed to address aircraft noise impacts, they are used in this analysis to define a substantial increase in community noise levels related to roadway traffic, as detailed in Section 6.1, Thresholds of Significance.

5.2 State Regulations

California Department of Transportation

In its Transportation and Construction Vibration Guidance Manual, Caltrans recommends a vibration velocity threshold of 0.2 ips PPV (Caltrans 2020) for assessing annoying vibration impacts to occupants of residential structures. Although this Caltrans guidance is not a regulation, it can serve as a quantified standard in the absence of such limits at the local jurisdictional level. Similarly, thresholds to assess building damage risk due to construction vibration vary with the type of structure and its fragility but tend to range between 0.2 ips and 0.3 ips PPV for typical residential structures (Caltrans 2020).

Government Code Section 65302(g)

California Government Code Section 65302(g) requires the preparation of a Noise Element in a general plan, which shall identify and appraise the noise problems in the community. The Noise Element shall recognize the guidelines adopted by the Office of Noise Control in the State Department of Health Services and shall quantify, to the extent practicable, current and projected noise levels for the following sources:

- Highways and freeways
- Primary arterials and major local streets
- Passenger and freight on-line railroad operations and ground rapid transit systems
- Aviation and airport-related operations

- Local industrial plants
- Other ground stationary noise sources contributing to the community noise environment

California General Plan Guidelines

The California General Plan Guidelines, published by the Governor's Office of Planning and Research, provides guidance for the acceptability of specific land use types within areas of specific noise exposure. Table 5, Land Use Compatibility for Community Noise Environments, presents guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. The Office of Planning and Research guidelines are advisory in nature. Local jurisdictions, including the City of Pomona, have the responsibility to set specific noise standards based on local conditions.

Table 5. Land Use Compatibility for Community Noise Environments

Land Use Type	Community Noise Exposure (CNEL)			
	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Residential-low density, single-family, duplex, mobile homes	50–60	55–70	70–75	75–85
Residential – multiple-family	50–65	60–70	70–75	70–85
Transit lodging – motel, hotels	50–65	60–70	70–80	80–85
Schools, libraries, churches, hospitals, nursing homes	50–70	60–70	70–80	80–85
Auditoriums, concert halls, amphitheaters	NA	50–70	NA	65–85
Sports arenas, outdoor spectators' sports	NA	50–75	NA	70–85
Playgrounds, neighborhood parks	50–70	NA	67.5–77.5	72.5–85
Golf courses, riding stables, water recreation, cemeteries	50–70	NA	70–80	80–85
Office buildings, business commercial and professional	50–70	67.5–77.5	75–85	NA
Industrial, manufacturing, utilities, agriculture	50–75	70–80	75–85	NA

Source: OPR 2017

CNEL = Community Noise Equivalent Level; NA = not applicable

1 Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

2 Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

3 Normally Unacceptable: New construction or development should be discouraged. If new construction of development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.

4 Clearly Unacceptable: New construction or development should generally not be undertaken.

California Code of Regulations Title 24

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. State regulations governing noise levels generated by individual motor vehicles and occupational noise control are not applicable to planning efforts, nor are these areas typically subject to CEQA analysis. State noise regulations and policies applicable to the Project include Title 24 requirements and noise exposure limits for various land use categories. The 2019 California Building Code (CBC, Part 2, Title 24, Section 1204.6, California Code of Regulations) stipulates "interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metric shall be either the day-night average sound level (L_{dn}) or the community noise equivalent level (CNEL)."

5.3 Local Regulations

City of Victorville General Plan Noise Element

The City of Victorville General Plan Noise Element (City of Victorville 2008) is intended to mitigate excessive noise levels from reaching the local community. Excessive noise can be caused by major noise sources such as highways and freeways, local streets, trains, aircrafts, industrial plants, and other ground stationary sources identified by local agencies. To ensure that noise does not affect the health of Victorville residents, this element includes policies, standards, and criteria related to public health and welfare for the community.

The following goals and policies from the Noise Element would be applicable to the Project:

Goal 1: Identify significant noise sources that could adversely affect community.

Objective 1.1: Locate noise sensitive land uses away from existing excessive noise sources and locate new excessive noise generators away from existing sensitive land uses.

Policy 1.1.1: Implement Table N-3 (reproduced in this report as Table 6) regarding placement of new land uses.

Implementation Measure 1.1.1.1: Continue to assess projects through the subdivision, site plan, conditional use permit, and other development review processes and incorporate conditions of approval which ensure noise compatibility where appropriate.

Goal 2: Manage the effects of noise emissions to help ensure reduction of adverse effects on the community.

Objective 2.1: Ensure existing and future noise sources are properly attenuated.

Policy 2.1.1: Continue to implement acceptable standards for noise for various land uses throughout the city.

Implementation Measure 2.1.1.2: Monitor noise complaints and enforce provisions of the City noise ordinance.

Implementation Measure 2.1.1.5: Continue to restrict noise and require mitigation measures for any noise-emitting construction equipment or activity.

Table 6. City of Victorville Noise/Land Use Compatibility Guidelines

Land Use categories	Community Noise Exposure L_{dn} or CNEL, dB						
	50	60	65	70	75	80*	
Residential – Low Density, Single Family, Duplex, Multi-family, Mobile Home	1	1	2	2	3	4	4
Transient Loding – Motels, Hotels	1	1	2	2	3	4	4
Schools, Libraries, Churches, Hospitals, Nursing Homes	1	1	2	3	3	4	4
Auditoriums, Concert Halls, Amphitheaters	2	2	3	3	4	4	4
Sports Arena, Outdoor Spectator Sports	2	2	2	2	3	3	3
Playgrounds, Neighborhood Parks	1	1	1	2	3	3	3
Golf Courses, Riding Stables, Water Recreation, Cemeteries	1	1	1	2	2	4	4
Office Buildings, Business Commercial, Retail Commercial and Professional	1	1	1	2	2	3	3
Industrial, Manufacturing, Utilities	1	1	1	1	2	2	2
Agriculture	1	1	1	1	1	1	1

Legend

1 Normally Acceptable: Specified land use is satisfactory, based on the assumption that any building involved are of normal conventional construction, without any special noise insulation requirements.

2 Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and Schools, Libraries, Churches, Hospitals, Nursing Homes 1 needed noise insulation features included in the design. Conventional Construction, with closed windows and fresh air supply systems or air conditioning will normally suffice.

3 Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does not proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

4 Clearly Unacceptable: New Construction or development should generally not be undertaken.

Source: City of Victorville, 2008

City of Victorville Municipal Code

The City of Victorville Municipal Code Noise Ordinance establishes noise regulations within the city through Sections 13.01.04 and 13.01.05:

Section 13.01.04 - Noise Measurement Criteria.

All ambient noise measurements shall commence in decibels within the respective zones and times as follows:

Table 7. City of Victorville Noise Measurement Criteria

Region	Time	Sound Level dB
Residential Zone	Day (7 a.m. – 10 p.m)	65
Residential Zone	Night (10 p.m. – 7 a.m.)	55
All Commercial Zones	Anytime	70
All Industrial Zones	Anytime	75

Section 13.01.050 - Noise levels prohibited

Noise levels shall not exceed the ambient noise levels in Section 13.01.040 by the following dB(A) levels for the cumulative period of time specified:

- Less than 5 dB(A) for a cumulative period of more than thirty minutes in any hour;
- Less than 10 dB(A) for a cumulative period of more than fifteen minutes in any hour;
- Less than 15 dB(A) for a cumulative period of more than five minutes in any hour;
- Less than 20 dB(A) for a cumulative period of more than one minute in any hour;
- 20 dB(A) or more for any period of time.

For construction noise, The Victorville Municipal Code prohibits the use of construction equipment between the hours of 7:00 p.m. and 7:00 a.m., Monday through Saturday, or at any time on Sunday or federal holidays.

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6 Significance Criteria

6.1 Significance Thresholds

The following significance criteria, included in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), will determine the significance of a noise impact. Impacts related to noise would be significant if the proposed Project would result in:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
B. Generation of excessive groundborne vibration or groundborne noise levels.
C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the exposure of people residing or working in the project area to excessive noise levels.

Quantitative thresholds of significance have been established for the purposes of this analysis based on the local polices and regulations described in Section 5.3 as well as those of federal and State agencies and are listed below.

- **Construction Noise:** During construction activities, an exceedance of the FTA's 80 dBA $L_{eq\ 8\text{-}hr}$ threshold is considered a significant noise impact.
- **Traffic Noise:** Guidance regarding the determination of a substantial permanent increase in transportation noise levels in the project vicinity above existing levels is provided by the 1992 findings of FICON, which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The FICON recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Annoyance is a qualitative measure of the adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment.

The rationale for the FICON recommendations is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of L_{dn} (and, by extension, CNEL[1]). The changes in noise exposure that are shown in Table 8 are expected to result in equal changes in annoyance at sensitive land uses. Although the FICON recommendations were developed to address aircraft noise impacts, they are used in this analysis to define a substantial increase in community noise levels related to all transportation noise sources.[2]

1 As discussed in Section 3.1, the L_{dn} and CNEL noise metrics are very similar and often used interchangeably.
2 Traffic noise and other transportation noise sources are similar to aircraft/airport noise in that all of these noise sources can and do operate throughout the daytime and nighttime hours. The FICON recommendations use a weighted 24-hour noise metric, in which noise occurring during nighttime hours has a penalty applied to account for the increased sensitivity of persons to noise at night. Additionally, the graduated levels of the FICON guidance for substantial increase account for the diminishing tolerance of the typical person to noise increases as ambient noise levels are increased. Such is the case whether the dominant noise source is aircraft, or some other transportation source.

Table 8. Measures of Substantial Increase for Transportation Noise Sources

Ambient Noise Level Without Project (L_{dn}/CNEL)	Significant Impact Assumed to Occur if the Project Increases Ambient Noise Levels by:
<60 dB	+ 5 dB or more
60–65 dB	+ 3 dB or more
>65 dB	+ 2 dB or more

Source: FICON 1992.

- **Project-Related Stationary Noise:** A noise impact would be considered significant if predicted noise from typical operation of heating, ventilation and air conditioning (HVAC) and other electro-mechanical systems exceeds the applicable City Municipal Code standards as detailed in Section 5.3.
- **Construction Vibration:** Groundborne vibration from construction and operation of the Project would be considered significant if the Project resulted in vibration levels exceeding the Caltrans recommendations (for construction).

7 Impact Analysis

7.1 Significance Threshold A

Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

7.1.1 Construction

It is anticipated that the Project would be constructed in one major phase (with sub-phases for site preparation, mass grading, building construction, paving and architectural coating) and would begin in October 2024, lasting approximately 12 months. The site is assumed to have a balanced cut and fill. No import or export is anticipated.

The types of construction equipment that would be used to construct the proposed Project include standard equipment that would be employed for any routine construction Project of this scale, such as graders, tractors, loaders, cranes, rubber-tired bulldozers, generators, and paving equipment. No blasting, on-site rock crushing or pile driving would be necessary.

Construction noise is difficult to quantify because of the many variables involved, including the specific equipment types, size of equipment used, percentage of time each piece is in operation, condition of each piece of equipment, and number of pieces that would operate on the site. The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is shown in Table 9. The noise values represent maximum noise generation, or full- power operation of the equipment. As an example, a loader and two dozers, all operating at full power and relatively close together, would generate a maximum sound level of approximately 90 dBA at 50 feet from their operations. As one increases the distance between equipment or separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of separate noise sources added together. In addition, typical operating cycles may involve 2 minutes of full-power operation, followed by 3 or 4 minutes at lower levels. The average noise level during construction activities is generally lower (typical levels of approximately 88 dBA L_{eq} at a distance of 50 feet) since maximum noise generation may only occur up to 50% of the time. Noise levels from construction operations decrease at a rate of approximately 6 dBA per doubling of distance from the source.

Table 9. Typical Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Air compressor	81
Backhoe	80
Compactor	82
Concrete mixer	85
Concrete pump	82
Concrete vibrator	76
Crane, mobile	83
Dozer	85

Table 9. Typical Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dBA) 50 Feet from Source
Generator	81
Grader	85
Impact wrench	85
Jackhammer	88
Loader	85
Paver	89
Pneumatic tool	85
Pump	76
Roller	74
Saw	76
Truck	88

Source: FTA 2018.

Using specific construction equipment assumptions similar to those as used for the air quality analysis for this Project, a noise analysis was performed using a model emulating the Roadway Construction Noise Model (RCNM) that was developed by the Federal Highway Administration (FHWA 2008). Input variables for the RCNM consist of the receiver/land use types, the equipment type (i.e., backhoe, crane, truck, etc.), the number of equipment pieces, the duty cycle for each piece of equipment (i.e., percentage of each time period the equipment typically is in operation and operating at full load or power level), and the distance between the construction noise source and the sensitive receiver. The Roadway Construction Noise Model has default duty-cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were adopted for this noise analysis.

Table 10 provides a summary of the predicted construction noise exposure levels by each phase at the nearest noise-sensitive receptor locations. The input and output data are provided in Appendix B. Noise-sensitive land uses in the vicinity of the Project site include existing residences to the southwest and southeast of the Project site. Consequently, Project construction noise exposure levels at other receivers further away from the site would be less, due primarily to natural distance-dependent attenuation factors such as geometric divergence, air absorption, ground surface absorption, and potential path-occluding structures and topography.

Table 10. On-Site Construction Noise Model Results Summary

Land Use	Off-site Receptor Location	Distance from Construction Activity to Noise Receptor (feet)	Estimated Construction Noise Levels (dBA $L_{eq\ 8\text{-}hr}$)				
			Site Preparation	Grading	Building Construction	Paving	Architectural Coating
Residential	Southwest of the Project	Typical Construction Activity/ Receiver Distance (1,400')	48	56	52	55	45
		Nearest Construction Activity/ Receiver Distance (170')	64	68	59	64	56
Residential	Southeast of the Project	Typical Construction Activity/ Receiver Distance (1,800')	46	54	50	53	43
		Nearest Construction Activity/ Receiver Distance (750')	53	58	52	56	48

Source: Appendix B
Notes: L_{eq} = equivalent continuous sound level; dBA = A-weighted decibel.
* Typical construction noise levels are calculated based on the acoustic center distances between the nearest sensitive receptors and the construction phase.

As shown in Table 10, typical construction noise levels at the nearest noise-sensitive land uses (residences to the southwest) are estimated to range from approximately 45 dBA $L_{eq\ 8\text{-}hr}$ during the architectural coating phase to approximately 56 dBA $L_{eq\ 8\text{-}hr}$ during the grading phase. As detailed on the worksheets in Appendix B, this 11 dB range of predicted construction noise levels is due to the intensity of construction activity, expected quantities and types of involved construction equipment, and distance. Consistent with the FTA "general assessment" technique (FTA 2018), the presented distance (1,400 feet) in Table 10 describes the horizontal proximity between the common noise-sensitive receptor fixed location and the "acoustical centroid" for each of the six studied activity phases the time-averaged position of a full set of multiple operating pieces of construction equipment and vehicles. Table 10 and Appendix B worksheets also show construction noise level predictions at distances between the noise-sensitive receptor position and the anticipated nearest boundary associated with a construction phase, which are thus shorter than those with respect to the acoustic centroid for the same phase; however, these scenarios assume that equipment would be operating at a range of distances (because not all equipment for a phase would be operating at the same distance simultaneously) and result in levels that would range from approximately 56 dBA

$L_{eq\ 8\text{-}hr}$ during the architectural coating phase to approximately 68 dBA $L_{eq\ 8\text{-}hr}$ during the grading phase. These noise levels would be lower than the 80 dBA $L_{eq\ 8\text{-}hr}$ suggested FTA threshold for construction noise.

The next-nearest noise-sensitive receivers (residences located to the southeast) are located further from the Project site. Thus, estimated construction noise levels would be somewhat lower, ranging from approximately 43 dBA $L_{eq\ 8\text{-}hr}$ during the architectural coating phase to approximately 54 dBA $L_{eq\ 8\text{-}hr}$ during the demolition and site preparation phases under typical conditions. During the relatively brief periods of time when construction would be focused near the southern Project boundary, noise from construction activities is estimated to range from approximately 48 to 58 dBA $L_{eq\ 8\text{-}hr}$. These noise levels would not exceed the 80 dBA $L_{eq\ 8\text{-}hr}$ suggested FTA threshold for construction noise.

As discussed previously, the Victorville Municipal Code prohibits the use of construction equipment between the hours of 7:00 p.m. and 7:00 a.m., Monday through Saturday, or at any time on Sunday or federal holidays. The proposed Project would not conduct noisy construction activities between the specified hours or days, and the estimated noise levels would not exceed the FTA's advisory noise standard of 80 dBA $L_{eq\ 8\text{-}hr}$. Therefore, noise from Project construction would be **less than significant**.

Construction Noise – Off-Site Street and Utilities Assessment

As shown in Figure 1 (Project Location), the Project would include off-site street and utilities construction activities. Similar to the noise assessment for on-site construction work as summarized above, the resulting noise from off-site construction activities was assessed using the RCNM. The nearest noise-sensitive receivers to the off-site construction activities (and thus the receivers the most affected) would be the residences to the southwest and southeast of the project site, during street and improvements and utilities installation within the Mojave Drive alignment. Noise levels at other locations would be lower because they would be further from the construction work. Because of the linear nature of the work, the amount of time that construction work would occur adjacent to any one noise-sensitive receiver would generally be relatively short (typically, one to two days for open-trench pipeline installation). The resulting noise levels are summarized in Table 11. As shown, the worst-case noise level from street and utilities construction is estimated to be approximately 72 dBA $L_{eq\ 8\text{-}hr}$ at the nearest noise-sensitive receivers (single-family residences approximately 100 feet from the nearest construction work).

Typically, road removal and utilities installation would take place further away (an average distance of approximately 800 feet from the residences to the southwest and southeast) and thus construction noise levels would be substantially lower at approximately 61 dBA $L_{eq\ 8\text{-}hr}$. These noise levels would be lower than the 80 dBA $L_{eq\ 8\text{-}hr}$ FTA construction noise standard. Also, the estimated noise levels during the other off-site Project construction phases (such as paving, architectural coating and testing) would be considerably would be lower than road removal and utilities installation phase.

Therefore, noise impacts from off-site construction activities would be less than significant. No noise mitigation is necessary.

Table 11. Off-Site Construction Noise Model Results Summary

Land Use	Off-site Receptor Location	Distance from Construction Activity to Noise Receptor (feet)	Estimated Construction Noise Levels (dBA $L_{eq\ 8\text{-}hr}$)			
			Road Removal / Utility Install	Paving (Continual and Final)	Architectural Coating (Striping)	Testing
Residential	Southwest of the Project	Typical Construction Activity/ Receiver Distance (800')	61	55	50	45
		Nearest Construction Activity/ Receiver Distance (100')	72	65	64	59
Residential	Southeast of the Project	Typical Construction Activity/ Receiver Distance (800')	61	55	50	45
		Nearest Construction Activity/ Receiver Distance (100')	72	65	64	59

Source: Appendix B
Notes: L_{eq} = equivalent continuous sound level; dBA = A-weighted decibel.
* Typical construction noise levels are calculated based on the acoustic center distances between the nearest sensitive receptors and the construction phase.

Off-Site Construction Activities

The Project would result in local, short-term increases in roadway noise as a result of construction traffic. Based on information developed as part of the Project's air quality analysis, Project-related traffic would include workers commuting to and from the Project site as well as vendor and haul trucks bringing or removing materials. The highest number of average daily worker trips would be 406 trips, occurring during the building construction phase. The highest number of average daily vendor truck trips would be 478 trips, also occurring during the building construction phase. The highest number of average daily haul truck trips during Project construction would be 182, occurring during the grading phase.

Based upon available data provided as part of the Project's transportation analysis, Mojave Drive between U.S. 395 and Onyx Road carries approximately 22,107 daily trips in the Project vicinity; between Onyx Road and Cobalt Road, Mojave Drive carries approximately 22,452 daily trips. Comparing the maximum number of daily construction-related trips (406 worker trips and 478 vendor trips) to the average daily traffic volume of the lowest-volume street (22,107 daily trips on Mojave Drive between U.S. 395 and Onyx Road), the additional vehicle trips would amount to an increase of approximately 4%. Based upon the fundamentals of acoustics, a doubling (i.e., a 100% increase) would be needed to result in a 3-dB increase in noise levels, which is the level corresponding to an audible change to the typical human listener. An increase in traffic volumes of 4% (all other things being equal) would amount to an increase of well under 1 dB. Therefore, traffic related to construction activities would not result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts from Project-related construction traffic noise would be **less than significant.** No mitigation measures are required.

7.1.2 Operation

On-Site Operational Noise

Outdoor Mechanical Equipment

Less-than-Significant Impact. The implementation of the Project would result in changes to existing noise levels on the Project site by developing new stationary sources of noise, including introduction of outdoor HVAC equipment, and vehicle parking lot and truck loading dock activities. These sources may affect noise-sensitive vicinity land uses off the Project site. The following analysis evaluates noise from exterior mechanical equipment and activities associated with vehicle parking lots and truck loading docks. The propagation of sound from a combination of Project on-site noise sources was modeled with commercially available Datakustik CadnaA software, which incorporates relevant International Organization of Standardization (ISO) 9613-2 algorithms and reference data that are generally considered to be industry standard for outdoor noise modeling. Key modeling assumptions and parameters are as follows:

- The model calculation area encompasses the Project and surrounding land uses that adjoin its boundary.
- Acoustical ground absorption of the Project site and the surrounding topography (conservatively modeled as flat, which generally approximates the site terrain characteristics) is set at 0.90, which on a zero (reflective) to one (absorptive) scale approximates a combination of the grass-covered soils that generally surround the Project area and any anticipated loosely graveled Project site cover.
- Meteorological conditions presume “calm” wind conditions (i.e., less than 0.5 meters per second in any direction) and average air temperature and relative humidity of 68 degrees Fahrenheit and 70%, respectively.
- The model “configuration” settings include reflection order set to “1”, which can be interpreted to mean that a sound emission path from a source will continue to be analyzed after impingement upon and reflection from the first intervening structure or barrier.
- The proposed warehouse space overall would not be served by heating or air conditioning equipment. However, the floor plan includes office space at the northeastern corner of the building totaling approximately 5,000 square feet. Based on information provided by the Project Applicant, it is anticipated that the office space would be equipped with single-packaged rooftop HVAC units with air-handling capacity of 3 to 6 nominal tons. For the analysis of noise from HVAC equipment operation, a York Model ZF-048 package HVAC unit was used as a reference. Based upon the square footage of the office space, it was assumed that two such units would be required. The York Model ZF-048 package HVAC unit has a sound power rating of 80 dBA (Johnson Controls 2015).
- During a daytime scenario, peak-hour truck volumes were assumed.
- Sound power for a single truck at the loading dock was calculated from sound levels (dBA) of truck air brakes, truck backup alarms, truck idling, truck engine ignition and airbrakes, and truck acceleration from stop (Charles M. Salter 2014).
- Sound power for a single truck pass-by along a linear sound source route along the length of the building was calculated from truck passby (Charles M. Salter 2014). Peak-hour truck volumes were assumed.
- During a nighttime model scenario, the sound power of rooftop HVAC sources from the three Project buildings remained unchanged; and, up to 25% of peak-hour on-site truck traffic would occur during a typical nighttime hour of facility operation.

As shown in Table 12, which summarizes the results of the modeling for mechanical equipment and truck loading dock/truck yard activity noise, the resulting noise levels would not exceed the applicable noise standards for daytime or nighttime noise. Additionally, the estimated noise levels from the Project would be below the existing measured daytime ambient noise levels in the Project vicinity, which ranged from approximately 40 to 66 dBA L_{eq}.

Table 12. Mechanical Equipment and Truck Loading Dock / Truck Yard Activity Noise

Modeled Receptor	Daytime (7 a.m. to 10 p.m.) Noise Level (dBA L_{eq})	Nighttime (10 p.m. to 7 a.m.) Noise Level (dBA L_{eq})	Applicable Daytime/ Nighttime Noise Standard[1] (dBA L_{eq})	Applicable Standard Exceeded?
M1 – Residential uses to the southwest	37	32	65/55	No
M2 – Residential uses to the southeast	31	26	65/55	No
M3 – Residential uses to the east	31	26	65/55	No

Source: Appendix C.
Notes: dBA = A-weighted decibel; L_{eq} = equivalent continuous sound level (time-averaged sound level).
1 Applicable exterior noise standard per City of Victorville Municipal Code Section 13.01.04, detailed in Section 4.9.2.

Parking Lot Activity

A comprehensive study of noise levels associated with surface parking lots was published in the Journal of Environmental Engineering and Landscape Management (Baltrënas et al. 2004). The study found that average noise levels during the peak period of use of the parking lot (generally in the morning with arrival of commuters, and in the evening with the departure of commuters), was 47 dBA at 1 meter (3.28 feet) from the outside boundary of the parking lot. The parking area would function as an area source for noise, which means that noise would attenuate at a rate of 3 dBA with each doubling of distance. The employee parking lot adjacent to the nearest noise-sensitive receivers (residences to the southwest) is proposed to be situated on the south side of Building 2, no closer than 270 feet from the center of drive-aisle to the residential property boundary. At a distance of 270 feet, parking lot noise levels would be approximately 28 dBA L_{eq}, which would be well below the daytime (7 a.m. to 10 p.m.) exterior residential noise standard of 65 dBA L_{eq} and the nighttime (10 p.m. to 7 a.m.) noise standard of 55 dBA L_{eq}.

To summarize, impacts associated with on-site operational noise would be **less than significant**. No mitigation measures are required.

Off-Site Operational Noise

The Project would result in the creation of additional vehicle trips on local roadways (primarily Mojave Drive and US-395), which could result in increased traffic noise levels at adjacent noise-sensitive land uses. Potential noise effects from vehicular traffic were assessed using the FHWA's Traffic Noise Model (TNM) version 2.5 (FHWA 2004). Information used in the model included the site geometry, existing, existing plus project, future (Year 2026) without project, and future (Year 2026) with project traffic volumes[3] and posted traffic speeds. Noise levels were modeled

3 Traffic volumes derived from the Mojave Industrial Project Transportation Impact Analysis (Dudek 2023)

at representative noise-sensitive receiver ST1 as well as at additional modeled-only locations (M1 through M5) as shown in Figure 3. The receivers were modeled to be 5 feet above the local ground elevation. The noise model results are summarized in Table 12. Detailed traffic noise modeling input and output is provided in Appendix D.

Table 13 shows that the maximum noise level increase would be 2 dB (when rounded to whole numbers), occurring at modeled receivers M2 and M3 (representative of residences to the southeast and east of the project site, respectively). An increase of 2 dB or less would typically not be a perceptible change in the context of community noise. The proposed Project would not result in an increase in noise levels of 5 dB or more in locations with an ambient noise level of less than 60 dBA CNEL; nor would the proposed Project result in an increase of 3 dB or more in locations with an ambient noise level of 60 to 65 dBA CNEL or an increase of 2 dB or more in locations with an ambient noise level greater than 65 dBA CNEL. Based upon these results, off-site traffic noise impacts would be **less than significant**. No mitigation measures are required.

Table 13. Off-Site Traffic Noise Modeling Results

Modeled Receptor	Existing Noise Level (dBA CNEL)	Existing Plus Project Noise Level (dBA CNEL)	Noise Level Increase (dB)	Horizon Year (2040) Noise Level (dBA CNEL)	Future Horizon Year (2040) Plus Project Noise Level (dBA CNEL)	Noise Level Increase (dB)
ST1	52	53	1	56	56	0
M1	62	63	1	64	64	0
M2	62	64	2	63	64	1
M3	48	50	2	50	51	1
M4	56	57	1	58	58	0
M5	47	48	1	50	50	0

Source: Appendix D

7.2 Significance Threshold B

Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

7.2.1 Construction

Construction activities that might expose persons to excessive ground-borne vibration or ground-borne noise could cause a potentially significant impact. Groundborne vibration from construction activities is typically attenuated over short distances. The heavier pieces of construction equipment used at this site could include bulldozers, excavators, loaded trucks, water trucks, and pavers.

Based on published vibration data, the anticipated heavy construction equipment would generate a vibration level of approximately 0.089 inches per second peak particle velocity (PPV) at a distance of 25 feet from the source; lighter construction equipment, such as a small bulldozer, would generate a substantially lower vibration level of approximately 0.003 inches per second PPV at a distance of 25 feet from the source.[4] Although heavy equipment would operate throughout the Project site at various construction phases, it is anticipated that heavy equipment

[4] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, Table 7-4, page 184, 2018.

would occasionally operate as close as approximately 170 feet from existing residences. At the distance from the nearest vibration-sensitive receivers (residences located to the south) to where construction activity would be occurring on the Project site, the peak particle velocity vibration level would be approximately 0.005 inches per second. As such, vibration levels would be less than the Caltrans threshold of 0.20 inches per second for human annoyance or the standard used by Caltrans for the prevention of structural damage to typical residential buildings of 0.3 ips PPV (Caltrans 2020). Because groundborne vibration from Project construction would not exceed recognized standards, and due to the temporary and intermittent occurrence of vibration levels, vibration impacts would be **less than significant**. No mitigation measures are required.

7.2.2 Operation

During operation, no major sources of groundborne vibration are anticipated. Therefore, **less than significant** impacts related to groundborne vibration would occur from operation of the Project. No mitigation measures are required.

7.3 Significance Threshold C

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No private airstrips exist in the Project vicinity. The nearest airport is Southern California Logistics Airport (former George Air Force Base), located approximately 3 miles to the north of the Project site. The Project site is not located within 2 miles of any public airport, nor is it located within the boundaries of any airport land use plans. Therefore, the proposed Project would not expose or result in excessive noise for people residing or working in the Project area, and **no impact** would occur. No mitigation measures are required.

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8 Mitigation Measures

Threshold A: Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Short-Term Construction Impacts

The Project would result in less-than-significant impacts with regard to short-term construction noise. No mitigation is required.

Long-Term Operational Impacts

The Project would result in less-than-significant on-site operational impacts as well as less-than-significant off-site operational traffic noise impacts. As such, no mitigation is required.

Threshold B: Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

The Project would result in less-than-significant impacts with regard to groundborne vibration and groundborne noise levels. No mitigation is required.

Threshold C: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels.

The Project would result in no impact with regard to excessive airport noise levels. No mitigation is required.

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10 Preparers

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Appendix A

Field Noise Measurement Data

ST1

Rec 49 to 64	Slow Response		dBA weighting		2.0 dB resc
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin
8/31/2022 12:31	1.0 min	47	64.8	55.2	39.8
8/31/2022 12:32	1.0 min	44.5	62.3	48.1	39.7
8/31/2022 12:33	1.0 min	45.2	63	51.4	40.9
8/31/2022 12:34	1.0 min	50.9	68.7	60.4	42.1
8/31/2022 12:35	1.0 min	45.2	63	50.5	42
8/31/2022 12:36	1.0 min	50.4	68.2	62.5	39.9
8/31/2022 12:37	1.0 min	51.7	69.5	61.4	43.2
8/31/2022 12:38	1.0 min	45.6	63.4	50.6	41.2
8/31/2022 12:39	1.0 min	47.4	65.2	51.6	43.1
8/31/2022 12:40	1.0 min	46.4	64.2	50.6	42.3
8/31/2022 12:41	1.0 min	43.8	61.6	46.4	40.1
8/31/2022 12:42	1.0 min	48.1	65.9	56.6	40.2
8/31/2022 12:43	1.0 min	46.9	64.7	56.6	41.7
8/31/2022 12:44	1.0 min	50.2	68	55.8	43.2
8/31/2022 12:45	1.0 min	47.3	65.1	55.1	39.2
8/31/2022 12:46	15 sec	50.5	62.3	55.8	47

Leq	48.0
Lmax	51.7
Lmin	43.8

ST2

Rec 1 to 16	Slow Response		dBA weighting		2.0 dB resc
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin
8/31/2022 10:43	1.0 min	46.5	64.3	55	37.9
8/31/2022 10:44	1.0 min	48.5	66.3	58.5	35.9
8/31/2022 10:45	1.0 min	45.3	63.1	60.4	36.1
8/31/2022 10:46	1.0 min	42.4	60.2	51.9	35.1
8/31/2022 10:47	1.0 min	42.5	60.3	46.9	37.7
8/31/2022 10:48	1.0 min	41.1	58.9	55	35.3
8/31/2022 10:49	1.0 min	51.2	69	67.5	34.9
8/31/2022 10:50	1.0 min	38.1	55.9	43.6	35.7
8/31/2022 10:51	1.0 min	38.5	56.3	44.7	35.4
8/31/2022 10:52	1.0 min	40.9	58.7	47.3	35.8
8/31/2022 10:53	1.0 min	39.1	56.9	47	34.9
8/31/2022 10:54	1.0 min	38.7	56.5	54.2	33.7
8/31/2022 10:55	1.0 min	36.4	54.2	44.8	33.7
8/31/2022 10:56	1.0 min	47.6	65.4	56.7	34.9
8/31/2022 10:57	1.0 min	46.8	64.6	57.2	34.3
8/31/2022 10:58	9 sec	34.7	44.2	36.6	33.8

Leq	45.1
Lmax	51.2
Lmin	36.4

ST3

Rec 33 to 48	Slow Response		dBA weighting		2.0 dB resc
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin
8/31/2022 12:01	1.0 min	65.9	83.7	71.5	42.1
8/31/2022 12:02	1.0 min	66.8	84.6	75.3	49
8/31/2022 12:03	1.0 min	67.8	85.6	73.5	48
8/31/2022 12:04	1.0 min	68.4	86.2	75.3	42.6
8/31/2022 12:05	1.0 min	62.8	80.6	69.4	46.3
8/31/2022 12:06	1.0 min	67.4	85.2	73.3	47.4
8/31/2022 12:07	1.0 min	62.5	80.3	68.6	46.3
8/31/2022 12:08	1.0 min	69.5	87.3	76.6	57.2
8/31/2022 12:09	1.0 min	62.9	80.7	71	40.7
8/31/2022 12:10	1.0 min	67.5	85.3	73.3	40.3
8/31/2022 12:11	1.0 min	59.4	77.2	71.6	35.8
8/31/2022 12:12	1.0 min	68.4	86.2	76.3	40.3
8/31/2022 12:13	1.0 min	63.5	81.3	71.6	38.5
8/31/2022 12:14	1.0 min	67.6	85.4	71.8	51.5
8/31/2022 12:15	1.0 min	59	76.8	68.9	42.4
8/31/2022 12:16	9 sec	64.4	73.9	68.6	58.6

Leq	66.3
Lmax	69.5
Lmin	59.0

ST4

Rec 17 to 32	Slow Response		dBA weighting		2.0 dB resc
Date hh:mm:ss	LeqPeriod	Leq	SEL	Lmax	Lmin
8/31/2022 11:11	1.0 min	40.2	58	46	36.7
8/31/2022 11:12	1.0 min	38.5	56.3	46.5	36.8
8/31/2022 11:13	1.0 min	36.5	54.3	40.4	35.9
8/31/2022 11:14	1.0 min	36.8	54.6	41.3	35.9
8/31/2022 11:15	1.0 min	36.5	54.3	40	35.8
8/31/2022 11:16	1.0 min	38.8	56.6	51.3	35.8
8/31/2022 11:17	1.0 min	36.8	54.6	45.7	35.8
8/31/2022 11:18	1.0 min	36.7	54.5	40.2	35.8
8/31/2022 11:19	1.0 min	38.6	56.4	48.5	35.8
8/31/2022 11:20	1.0 min	47.3	65.1	60	35.8
8/31/2022 11:21	1.0 min	36.6	54.4	38.5	35.7
8/31/2022 11:22	1.0 min	35.8	53.6	38.5	35.6
8/31/2022 11:23	1.0 min	36.6	54.4	40.8	35.6
8/31/2022 11:24	1.0 min	37.2	55	41.6	35.5
8/31/2022 11:25	1.0 min	39.9	57.7	48.6	35.8
8/31/2022 11:26	8 sec	36.1	45.1	36.7	35.9

Leq	39.6
Lmax	47.3
Lmin	35.8

Number	Start Date	Start Time	End Time	LAeq	LAmax	LAmin	
54	8/31/2022	10:58:00 AM	10:59:00 AM	57.6	69.4	28.8	
55	8/31/2022	10:59:00 AM	11:00:00 AM	64	70.5	45.2	
56	8/31/2022	11:00:00 AM	11:01:00 AM	60.8	70.2	40.6	1
57	8/31/2022	11:01:00 AM	11:02:00 AM	65	72.8	45.3	
58	8/31/2022	11:02:00 AM	11:03:00 AM	59.4	70.1	38.8	
59	8/31/2022	11:03:00 AM	11:04:00 AM	65.2	71.6	38.5	
60	8/31/2022	11:04:00 AM	11:05:00 AM	57.3	64.5	45.3	
61	8/31/2022	11:05:00 AM	11:06:00 AM	66.1	71.4	50.8	
62	8/31/2022	11:06:00 AM	11:07:00 AM	55.5	66.5	33.4	
63	8/31/2022	11:07:00 AM	11:08:00 AM	65	72.1	34.6	
64	8/31/2022	11:08:00 AM	11:09:00 AM	62	72.5	44.5	
65	8/31/2022	11:09:00 AM	11:10:00 AM	63.8	71	40.3	
66	8/31/2022	11:10:00 AM	11:11:00 AM	62.2	72.6	30.3	
67	8/31/2022	11:11:00 AM	11:12:00 AM	67.1	73.6	56.7	
68	8/31/2022	11:12:00 AM	11:13:00 AM	63.5	73.5	45.7	
69	8/31/2022	11:13:00 AM	11:14:00 AM	64.9	70.9	51.3	
70	8/31/2022	11:14:00 AM	11:15:00 AM	59.6	71	33.1	
71	8/31/2022	11:15:00 AM	11:16:00 AM	65.1	72.9	41.4	
72	8/31/2022	11:16:00 AM	11:17:00 AM	63.5	72	33.6	
73	8/31/2022	11:17:00 AM	11:18:00 AM	63.3	70.6	42.7	
74	8/31/2022	11:18:00 AM	11:19:00 AM	59.4	69.2	43.4	
75	8/31/2022	11:19:00 AM	11:20:00 AM	62.9	72.1	42.4	
76	8/31/2022	11:20:00 AM	11:21:00 AM	63.7	73.6	43.5	
77	8/31/2022	11:21:00 AM	11:22:00 AM	61.2	70.6	48.4	
78	8/31/2022	11:22:00 AM	11:23:00 AM	65.2	71.5	46.3	
79	8/31/2022	11:23:00 AM	11:24:00 AM	64.4	72	37.3	
80	8/31/2022	11:24:00 AM	11:25:00 AM	54.5	65.8	26.8	
81	8/31/2022	11:25:00 AM	11:26:00 AM	64.2	72.1	36.3	
82	8/31/2022	11:26:00 AM	11:27:00 AM	59.5	68.8	33.9	
83	8/31/2022	11:27:00 AM	11:28:00 AM	65.4	72.4	47.5	
84	8/31/2022	11:28:00 AM	11:29:00 AM	59.3	69.1	35.3	
85	8/31/2022	11:29:00 AM	11:30:00 AM	66.9	73	53.9	
86	8/31/2022	11:30:00 AM	11:31:00 AM	56.6	65.6	37.9	
87	8/31/2022	11:31:00 AM	11:32:00 AM	64.3	70.4	46.6	
88	8/31/2022	11:32:00 AM	11:33:00 AM	60.8	72.2	35.8	
89	8/31/2022	11:33:00 AM	11:34:00 AM	64.4	71.8	45.2	
90	8/31/2022	11:34:00 AM	11:35:00 AM	58.3	68.5	30.7	
91	8/31/2022	11:35:00 AM	11:36:00 AM	63.5	71.6	45.9	
92	8/31/2022	11:36:00 AM	11:37:00 AM	56.1	65.1	38.2	
93	8/31/2022	11:37:00 AM	11:38:00 AM	65	72.3	47.1	
94	8/31/2022	11:38:00 AM	11:39:00 AM	61	68.2	44.5	
95	8/31/2022	11:39:00 AM	11:40:00 AM	64.3	71.9	48.1	
96	8/31/2022	11:40:00 AM	11:41:00 AM	60.8	70.8	29.5	
97	8/31/2022	11:41:00 AM	11:42:00 AM	64.5	71.8	41.9	
98	8/31/2022	11:42:00 AM	11:43:00 AM	55.4	63.3	30.6	

99	8/31/2022	11:43:00 AM	11:44:00 AM	67.7	73.9	42.4		
100	8/31/2022	11:44:00 AM	11:45:00 AM	61.8	72.2	32.1		
101	8/31/2022	11:45:00 AM	11:46:00 AM	64.3	70.2	50.8		
102	8/31/2022	11:46:00 AM	11:47:00 AM	58.8	71	41.5		
103	8/31/2022	11:47:00 AM	11:48:00 AM	63.5	70.6	40.6		
104	8/31/2022	11:48:00 AM	11:49:00 AM	61.4	68.8	34.8		
105	8/31/2022	11:49:00 AM	11:50:00 AM	63.3	73.5	48.4		
106	8/31/2022	11:50:00 AM	11:51:00 AM	63.8	72.1	46.2		
107	8/31/2022	11:51:00 AM	11:52:00 AM	64.6	71.9	40		
108	8/31/2022	11:52:00 AM	11:53:00 AM	63.2	72.4	45.6		
109	8/31/2022	11:53:00 AM	11:54:00 AM	64	72.8	38.7		
110	8/31/2022	11:54:00 AM	11:55:00 AM	62.7	73.1	35		
111	8/31/2022	11:55:00 AM	11:56:00 AM	63.5	69.8	49.8		
112	8/31/2022	11:56:00 AM	11:57:00 AM	62.7	71.7	35.2		
113	8/31/2022	11:57:00 AM	11:58:00 AM	61.3	71.1	43.9		
114	8/31/2022	11:58:00 AM	11:59:00 AM	65.6	71.4	43		
115	8/31/2022	11:59:00 AM	12:00:00 PM	64.4	70.7	51 `		
116	8/31/2022	12:00:00 PM	12:01:00 PM	64.5	72.4	42.6		2
117	8/31/2022	12:01:00 PM	12:02:00 PM	62	70.5	46.6		
118	8/31/2022	12:02:00 PM	12:03:00 PM	62.9	69.9	30.2		
119	8/31/2022	12:03:00 PM	12:04:00 PM	63.7	72.4	43.1		
120	8/31/2022	12:04:00 PM	12:05:00 PM	64.4	72.3	34.1		
121	8/31/2022	12:05:00 PM	12:06:00 PM	64	72.8	32.9		
122	8/31/2022	12:06:00 PM	12:07:00 PM	62.8	71.2	42.6		
123	8/31/2022	12:07:00 PM	12:08:00 PM	64.2	70.7	46.5		
124	8/31/2022	12:08:00 PM	12:09:00 PM	59.5	67.1	41.6		
125	8/31/2022	12:09:00 PM	12:10:00 PM	66.1	71.8	42.8		
126	8/31/2022	12:10:00 PM	12:11:00 PM	58.8	68.5	32.5		
127	8/31/2022	12:11:00 PM	12:12:00 PM	66	73.5	51.7		
128	8/31/2022	12:12:00 PM	12:13:00 PM	60.9	73.3	37.4		
129	8/31/2022	12:13:00 PM	12:14:00 PM	64.2	73.2	49		
130	8/31/2022	12:14:00 PM	12:15:00 PM	59.7	68.6	33.9		
131	8/31/2022	12:15:00 PM	12:16:00 PM	64.4	71.8	35.1		
132	8/31/2022	12:16:00 PM	12:17:00 PM	60.4	68.6	36.1		
133	8/31/2022	12:17:00 PM	12:18:00 PM	63.9	71.3	43.9		
134	8/31/2022	12:18:00 PM	12:19:00 PM	61	71.3	39.1		
135	8/31/2022	12:19:00 PM	12:20:00 PM	64.3	72.4	38.1		
136	8/31/2022	12:20:00 PM	12:21:00 PM	60.8	71.6	34.7		
137	8/31/2022	12:21:00 PM	12:22:00 PM	63.5	72.3	36.2		
138	8/31/2022	12:22:00 PM	12:23:00 PM	64.4	75	40.5		
139	8/31/2022	12:23:00 PM	12:24:00 PM	63.5	73.2	35.5		
140	8/31/2022	12:24:00 PM	12:25:00 PM	64.7	73.6	35.5		
141	8/31/2022	12:25:00 PM	12:26:00 PM	57.1	65.4	30.5		
142	8/31/2022	12:26:00 PM	12:27:00 PM	64.7	74	47.2		
143	8/31/2022	12:27:00 PM	12:28:00 PM	62	72.6	43.8		
144	8/31/2022	12:28:00 PM	12:29:00 PM	64.6	72.7	31.5		
145	8/31/2022	12:29:00 PM	12:30:00 PM	64	73.1	46		

146	8/31/2022	12:30:00 PM	12:31:00 PM	61.3	69.6	33.5	
147	8/31/2022	12:31:00 PM	12:32:00 PM	64.8	72.9	37.9	
148	8/31/2022	12:32:00 PM	12:33:00 PM	64.6	71.5	43.9	
149	8/31/2022	12:33:00 PM	12:34:00 PM	61.7	70.1	43.8	
150	8/31/2022	12:34:00 PM	12:35:00 PM	66	74.1	46.7	
151	8/31/2022	12:35:00 PM	12:36:00 PM	62.9	71	37	
152	8/31/2022	12:36:00 PM	12:37:00 PM	63.9	71.8	48.4	
153	8/31/2022	12:37:00 PM	12:38:00 PM	58.1	66.7	37	
154	8/31/2022	12:38:00 PM	12:39:00 PM	64.3	71.8	32.8	
155	8/31/2022	12:39:00 PM	12:40:00 PM	58.4	68.6	40.7	
156	8/31/2022	12:40:00 PM	12:41:00 PM	64.2	70.5	47.4	
157	8/31/2022	12:41:00 PM	12:42:00 PM	60.9	70.4	35.6	
158	8/31/2022	12:42:00 PM	12:43:00 PM	67.2	73.2	52.1	
159	8/31/2022	12:43:00 PM	12:44:00 PM	61.1	69.7	45.9	
160	8/31/2022	12:44:00 PM	12:45:00 PM	64.5	71.3	40.1	
161	8/31/2022	12:45:00 PM	12:46:00 PM	60.8	73.1	37.1	
162	8/31/2022	12:46:00 PM	12:47:00 PM	64.1	72	44.3	
163	8/31/2022	12:47:00 PM	12:48:00 PM	57.3	68.4	29.1	
164	8/31/2022	12:48:00 PM	12:49:00 PM	60.8	68.1	37.9	
165	8/31/2022	12:49:00 PM	12:50:00 PM	58.1	65.5	39.9	
166	8/31/2022	12:50:00 PM	12:51:00 PM	63.2	72.7	45.8	
167	8/31/2022	12:51:00 PM	12:52:00 PM	61.3	71.5	47.9	
168	8/31/2022	12:52:00 PM	12:53:00 PM	64.1	71.1	48.8	
169	8/31/2022	12:53:00 PM	12:54:00 PM	57	64.4	27.5	
170	8/31/2022	12:54:00 PM	12:55:00 PM	64.8	72.3	37.5	
171	8/31/2022	12:55:00 PM	12:56:00 PM	60	68.8	40.6	
172	8/31/2022	12:56:00 PM	12:57:00 PM	66	73.2	49.4	
173	8/31/2022	12:57:00 PM	12:58:00 PM	61.3	72.2	39	
174	8/31/2022	12:58:00 PM	12:59:00 PM	63.1	70.1	47.6	
175	8/31/2022	12:59:00 PM	1:00:00 PM	62.9	72.3	48.2 `	
176	8/31/2022	1:00:00 PM	1:01:00 PM	62.1	72.6	31.4	3
177	8/31/2022	1:01:00 PM	1:02:00 PM	62.3	69.8	36.7	
178	8/31/2022	1:02:00 PM	1:03:00 PM	61.3	71.1	40.2	
179	8/31/2022	1:03:00 PM	1:04:00 PM	61.5	69	41.6	
180	8/31/2022	1:04:00 PM	1:05:00 PM	64.3	69.5	39.6	
181	8/31/2022	1:05:00 PM	1:06:00 PM	64.2	71.7	45.6	
182	8/31/2022	1:06:00 PM	1:07:00 PM	61.8	68.8	48.4	
183	8/31/2022	1:07:00 PM	1:08:00 PM	64.9	71.9	36.5	
184	8/31/2022	1:08:00 PM	1:09:00 PM	60.6	71.8	39.3	
185	8/31/2022	1:09:00 PM	1:10:00 PM	65.5	72.8	39.4	
186	8/31/2022	1:10:00 PM	1:11:00 PM	56	68.2	25.6	
187	8/31/2022	1:11:00 PM	1:12:00 PM	62.8	72.8	26	
188	8/31/2022	1:12:00 PM	1:13:00 PM	60	69.1	35.9	
189	8/31/2022	1:13:00 PM	1:14:00 PM	66	73.2	50	
190	8/31/2022	1:14:00 PM	1:15:00 PM	64.3	74.7	45.4	
191	8/31/2022	1:15:00 PM	1:16:00 PM	65.2	72.2	53.7	
192	8/31/2022	1:16:00 PM	1:17:00 PM	62.6	70.3	41.9	

193	8/31/2022	1:17:00 PM	1:18:00 PM	62.8	71.5	39	
194	8/31/2022	1:18:00 PM	1:19:00 PM	49.2	61.3	26.2	
195	8/31/2022	1:19:00 PM	1:20:00 PM	65.6	72.5	34.4	
196	8/31/2022	1:20:00 PM	1:21:00 PM	61	71.6	30.5	
197	8/31/2022	1:21:00 PM	1:22:00 PM	64.5	71.4	43.5	
198	8/31/2022	1:22:00 PM	1:23:00 PM	56.6	65.7	32	
199	8/31/2022	1:23:00 PM	1:24:00 PM	66.3	72.4	55.8	
200	8/31/2022	1:24:00 PM	1:25:00 PM	60.1	68.2	36.1	
201	8/31/2022	1:25:00 PM	1:26:00 PM	66	74.5	46.7	
202	8/31/2022	1:26:00 PM	1:27:00 PM	64.4	72.2	51.6	
203	8/31/2022	1:27:00 PM	1:28:00 PM	62.4	72.5	41.2	
204	8/31/2022	1:28:00 PM	1:29:00 PM	64.8	73.4	42.1	
205	8/31/2022	1:29:00 PM	1:30:00 PM	63.2	71.9	36.5	
206	8/31/2022	1:30:00 PM	1:31:00 PM	65.3	71.8	52.2	
207	8/31/2022	1:31:00 PM	1:32:00 PM	62.9	71.3	43.6	
208	8/31/2022	1:32:00 PM	1:33:00 PM	60	68.5	34.8	
209	8/31/2022	1:33:00 PM	1:34:00 PM	65.5	73.8	39.9	
210	8/31/2022	1:34:00 PM	1:35:00 PM	63.2	71.4	34.2	
211	8/31/2022	1:35:00 PM	1:36:00 PM	66.2	72.1	34.7	
212	8/31/2022	1:36:00 PM	1:37:00 PM	58.6	67	43	
213	8/31/2022	1:37:00 PM	1:38:00 PM	63	69.6	34.3	
214	8/31/2022	1:38:00 PM	1:39:00 PM	63.3	70.6	41.9	
215	8/31/2022	1:39:00 PM	1:40:00 PM	61.6	70.8	34.9	
216	8/31/2022	1:40:00 PM	1:41:00 PM	67.2	74	50.6	
217	8/31/2022	1:41:00 PM	1:42:00 PM	63.1	70.8	46.9	
218	8/31/2022	1:42:00 PM	1:43:00 PM	66.9	73.5	46.9	
219	8/31/2022	1:43:00 PM	1:44:00 PM	62.9	68.9	46.6	
220	8/31/2022	1:44:00 PM	1:45:00 PM	63.9	70.9	47.8	
221	8/31/2022	1:45:00 PM	1:46:00 PM	64.5	71.6	41.2	
222	8/31/2022	1:46:00 PM	1:47:00 PM	63.2	72.7	44.2	
223	8/31/2022	1:47:00 PM	1:48:00 PM	68.9	79.5	45	
224	8/31/2022	1:48:00 PM	1:49:00 PM	60.3	69.7	43	
225	8/31/2022	1:49:00 PM	1:50:00 PM	66.8	72.5	47.4	
226	8/31/2022	1:50:00 PM	1:51:00 PM	60.7	67.9	42.4	
227	8/31/2022	1:51:00 PM	1:52:00 PM	66.6	72.7	46	
228	8/31/2022	1:52:00 PM	1:53:00 PM	61.6	69.3	48.6	
229	8/31/2022	1:53:00 PM	1:54:00 PM	65	73.4	39.4	
230	8/31/2022	1:54:00 PM	1:55:00 PM	64.5	71.1	49.7	
231	8/31/2022	1:55:00 PM	1:56:00 PM	64.8	72.9	31.3	
232	8/31/2022	1:56:00 PM	1:57:00 PM	65.2	73.4	36.4	
233	8/31/2022	1:57:00 PM	1:58:00 PM	61.9	70.9	40.2	
234	8/31/2022	1:58:00 PM	1:59:00 PM	66.8	73.3	56.5	
235	8/31/2022	1:59:00 PM	2:00:00 PM	63	72.2	40.8 `	
236	8/31/2022	2:00:00 PM	2:01:00 PM	68.3	74.7	55.2	4
237	8/31/2022	2:01:00 PM	2:02:00 PM	63	71.5	38.1	
238	8/31/2022	2:02:00 PM	2:03:00 PM	67	73.2	43.1	
239	8/31/2022	2:03:00 PM	2:04:00 PM	65.3	73.4	41.3	

240	8/31/2022	2:04:00 PM	2:05:00 PM	64.6	70.7	38.7
241	8/31/2022	2:05:00 PM	2:06:00 PM	64.1	70.8	35.4
242	8/31/2022	2:06:00 PM	2:07:00 PM	62.2	70	34.5
243	8/31/2022	2:07:00 PM	2:08:00 PM	65.8	71.4	51.4
244	8/31/2022	2:08:00 PM	2:09:00 PM	62.9	70.8	40.1
245	8/31/2022	2:09:00 PM	2:10:00 PM	67.1	71.8	52.9
246	8/31/2022	2:10:00 PM	2:11:00 PM	63.5	69.4	50.4
247	8/31/2022	2:11:00 PM	2:12:00 PM	66	72.3	52.1
248	8/31/2022	2:12:00 PM	2:13:00 PM	62.1	68.6	33.9
249	8/31/2022	2:13:00 PM	2:14:00 PM	65.3	72.6	40
250	8/31/2022	2:14:00 PM	2:15:00 PM	65.1	71.8	46.6
251	8/31/2022	2:15:00 PM	2:16:00 PM	62.7	71.6	39.7
252	8/31/2022	2:16:00 PM	2:17:00 PM	67	72.4	52.8
253	8/31/2022	2:17:00 PM	2:18:00 PM	63.5	73.8	38.8
254	8/31/2022	2:18:00 PM	2:19:00 PM	65.4	72.2	50.6
255	8/31/2022	2:19:00 PM	2:20:00 PM	63.1	72.8	45.7
256	8/31/2022	2:20:00 PM	2:21:00 PM	67.2	73.3	49.8
257	8/31/2022	2:21:00 PM	2:22:00 PM	59.6	67.4	40.1
258	8/31/2022	2:22:00 PM	2:23:00 PM	64.9	70.8	42.4
259	8/31/2022	2:23:00 PM	2:24:00 PM	63.6	71.1	46.8
260	8/31/2022	2:24:00 PM	2:25:00 PM	67	72.5	48.7
261	8/31/2022	2:25:00 PM	2:26:00 PM	64.4	71.6	39
262	8/31/2022	2:26:00 PM	2:27:00 PM	65.3	71.8	38.3
263	8/31/2022	2:27:00 PM	2:28:00 PM	64.8	70.3	54.9
264	8/31/2022	2:28:00 PM	2:29:00 PM	63.5	70.3	48.6
265	8/31/2022	2:29:00 PM	2:30:00 PM	67.3	71	55.7
266	8/31/2022	2:30:00 PM	2:31:00 PM	63.3	70.6	45.3
267	8/31/2022	2:31:00 PM	2:32:00 PM	64.8	72.5	32.7
268	8/31/2022	2:32:00 PM	2:33:00 PM	70.7	85	43.6
269	8/31/2022	2:33:00 PM	2:34:00 PM	65.8	74.6	45.9
270	8/31/2022	2:34:00 PM	2:35:00 PM	67.6	73.6	43.6
271	8/31/2022	2:35:00 PM	2:36:00 PM	57.7	69.7	28.3
272	8/31/2022	2:36:00 PM	2:37:00 PM	67.6	71.7	56.1
273	8/31/2022	2:37:00 PM	2:38:00 PM	63.4	69.6	50
274	8/31/2022	2:38:00 PM	2:39:00 PM	68	72.2	59.9
275	8/31/2022	2:39:00 PM	2:40:00 PM	66.9	73	57.6
276	8/31/2022	2:40:00 PM	2:41:00 PM	64	74.6	48.1
277	8/31/2022	2:41:00 PM	2:42:00 PM	67.2	72.5	51.9
278	8/31/2022	2:42:00 PM	2:43:00 PM	59.2	68.4	29.5
279	8/31/2022	2:43:00 PM	2:44:00 PM	66.5	72.7	44.2
280	8/31/2022	2:44:00 PM	2:45:00 PM	65.5	72.7	50.8
281	8/31/2022	2:45:00 PM	2:46:00 PM	66.7	73.4	44.8
282	8/31/2022	2:46:00 PM	2:47:00 PM	65.7	71.5	56.2
283	8/31/2022	2:47:00 PM	2:48:00 PM	64.6	72	52
284	8/31/2022	2:48:00 PM	2:49:00 PM	69.7	77.8	59
285	8/31/2022	2:49:00 PM	2:50:00 PM	62.5	71.7	51.7
286	8/31/2022	2:50:00 PM	2:51:00 PM	65.4	72.5	45.4

287	8/31/2022	2:51:00 PM	2:52:00 PM	66.2	71.7	56.4	
288	8/31/2022	2:52:00 PM	2:53:00 PM	64.3	72	44.2	
289	8/31/2022	2:53:00 PM	2:54:00 PM	67.3	73.3	57.1	
290	8/31/2022	2:54:00 PM	2:55:00 PM	61.6	68	42.5	
291	8/31/2022	2:55:00 PM	2:56:00 PM	66.7	72.9	56.7	
292	8/31/2022	2:56:00 PM	2:57:00 PM	59.1	68.7	48.7	
293	8/31/2022	2:57:00 PM	2:58:00 PM	66.3	72.9	54.5	
294	8/31/2022	2:58:00 PM	2:59:00 PM	66.8	72.2	54.6	
295	8/31/2022	2:59:00 PM	3:00:00 PM	60.6	68.7	41.5 `	
296	8/31/2022	3:00:00 PM	3:01:00 PM	67.5	72.7	56.6	5
297	8/31/2022	3:01:00 PM	3:02:00 PM	63.2	71.6	43.5	
298	8/31/2022	3:02:00 PM	3:03:00 PM	68	73.5	43.1	
299	8/31/2022	3:03:00 PM	3:04:00 PM	64.8	72.2	31.6	
300	8/31/2022	3:04:00 PM	3:05:00 PM	65.4	71.8	32.4	
301	8/31/2022	3:05:00 PM	3:06:00 PM	65.2	73.1	37.7	
302	8/31/2022	3:06:00 PM	3:07:00 PM	65.2	75.7	42.6	
303	8/31/2022	3:07:00 PM	3:08:00 PM	68.2	72.7	56.7	
304	8/31/2022	3:08:00 PM	3:09:00 PM	60.4	67.6	50.4	
305	8/31/2022	3:09:00 PM	3:10:00 PM	66.5	73.5	51.2	
306	8/31/2022	3:10:00 PM	3:11:00 PM	64.8	70.4	44.9	
307	8/31/2022	3:11:00 PM	3:12:00 PM	64	70.3	43.9	
308	8/31/2022	3:12:00 PM	3:13:00 PM	64.8	72.2	45	
309	8/31/2022	3:13:00 PM	3:14:00 PM	64.6	71.9	51.7	
310	8/31/2022	3:14:00 PM	3:15:00 PM	67.8	72.9	54.1	
311	8/31/2022	3:15:00 PM	3:16:00 PM	61.5	70.9	36.1	
312	8/31/2022	3:16:00 PM	3:17:00 PM	65.5	71	46.3	
313	8/31/2022	3:17:00 PM	3:18:00 PM	62.1	70.3	43.5	
314	8/31/2022	3:18:00 PM	3:19:00 PM	64.9	71.6	40.3	
315	8/31/2022	3:19:00 PM	3:20:00 PM	66.4	71.9	47	
316	8/31/2022	3:20:00 PM	3:21:00 PM	65.5	74	44.4	
317	8/31/2022	3:21:00 PM	3:22:00 PM	64.6	72.7	53.2	
318	8/31/2022	3:22:00 PM	3:23:00 PM	62.5	71.7	46.7	
319	8/31/2022	3:23:00 PM	3:24:00 PM	68.3	73.8	59.9	
320	8/31/2022	3:24:00 PM	3:25:00 PM	62.1	69.6	47	
321	8/31/2022	3:25:00 PM	3:26:00 PM	65.6	70.3	48.7	
322	8/31/2022	3:26:00 PM	3:27:00 PM	64.4	70.2	56.5	
323	8/31/2022	3:27:00 PM	3:28:00 PM	65.4	71.3	48.7	
324	8/31/2022	3:28:00 PM	3:29:00 PM	65.8	74.3	53.2	
325	8/31/2022	3:29:00 PM	3:30:00 PM	64.3	72	45.1	
326	8/31/2022	3:30:00 PM	3:31:00 PM	66.9	74.6	45.7	
327	8/31/2022	3:31:00 PM	3:32:00 PM	61.4	67.2	48.4	
328	8/31/2022	3:32:00 PM	3:33:00 PM	67.3	75.1	50.3	
329	8/31/2022	3:33:00 PM	3:34:00 PM	64.8	70.7	48.8	
330	8/31/2022	3:34:00 PM	3:35:00 PM	67.3	73.9	57.2	
331	8/31/2022	3:35:00 PM	3:36:00 PM	61.9	68.6	42.3	
332	8/31/2022	3:36:00 PM	3:37:00 PM	66.6	72.9	53.1	
333	8/31/2022	3:37:00 PM	3:38:00 PM	63.4	72.9	41.3	

334	8/31/2022	3:38:00 PM	3:39:00 PM	67.2	74.5	53.1	
335	8/31/2022	3:39:00 PM	3:40:00 PM	61.9	70.4	42.3	
336	8/31/2022	3:40:00 PM	3:41:00 PM	64	70.3	32.6	
337	8/31/2022	3:41:00 PM	3:42:00 PM	65.3	71.9	48.2	
338	8/31/2022	3:42:00 PM	3:43:00 PM	65.8	72.6	44.7	
339	8/31/2022	3:43:00 PM	3:44:00 PM	65.5	73.2	40.9	
340	8/31/2022	3:44:00 PM	3:45:00 PM	64.5	71.2	35.5	
341	8/31/2022	3:45:00 PM	3:46:00 PM	67.3	73.2	44.3	
342	8/31/2022	3:46:00 PM	3:47:00 PM	60.9	70.4	41.4	
343	8/31/2022	3:47:00 PM	3:48:00 PM	67.2	73.6	50.9	
344	8/31/2022	3:48:00 PM	3:49:00 PM	59	67.5	43.6	
345	8/31/2022	3:49:00 PM	3:50:00 PM	70.6	83.1	53.1	
346	8/31/2022	3:50:00 PM	3:51:00 PM	67.1	72.8	48.4	
347	8/31/2022	3:51:00 PM	3:52:00 PM	64.5	70.4	42.3	
348	8/31/2022	3:52:00 PM	3:53:00 PM	66.3	70.7	55.4	
349	8/31/2022	3:53:00 PM	3:54:00 PM	62.4	70.7	43.9	
350	8/31/2022	3:54:00 PM	3:55:00 PM	67.1	71.9	37.8	
351	8/31/2022	3:55:00 PM	3:56:00 PM	65.6	70.5	54.5	
352	8/31/2022	3:56:00 PM	3:57:00 PM	64.5	71.7	42.6	
353	8/31/2022	3:57:00 PM	3:58:00 PM	65.2	71.2	53.1	
354	8/31/2022	3:58:00 PM	3:59:00 PM	61	69.2	35.5	
355	8/31/2022	3:59:00 PM	4:00:00 PM	67.4	72.3	50 `	
356	8/31/2022	4:00:00 PM	4:01:00 PM	62.3	71.2	42	6
357	8/31/2022	4:01:00 PM	4:02:00 PM	65.2	70.9	51.8	
358	8/31/2022	4:02:00 PM	4:03:00 PM	64.1	72.8	48.5	
359	8/31/2022	4:03:00 PM	4:04:00 PM	66.9	73.3	45.6	
360	8/31/2022	4:04:00 PM	4:05:00 PM	64.9	72	37.8	
361	8/31/2022	4:05:00 PM	4:06:00 PM	65.5	72.6	48.5	
362	8/31/2022	4:06:00 PM	4:07:00 PM	62.4	72.5	45	
363	8/31/2022	4:07:00 PM	4:08:00 PM	65.7	71.6	46.3	
364	8/31/2022	4:08:00 PM	4:09:00 PM	66.1	72.4	50.5	
365	8/31/2022	4:09:00 PM	4:10:00 PM	64.9	72.6	31.6	
366	8/31/2022	4:10:00 PM	4:11:00 PM	67.1	73.4	55.2	
367	8/31/2022	4:11:00 PM	4:12:00 PM	63.9	72.3	36.7	
368	8/31/2022	4:12:00 PM	4:13:00 PM	66	72.4	54.7	
369	8/31/2022	4:13:00 PM	4:14:00 PM	61.6	71.1	45.3	
370	8/31/2022	4:14:00 PM	4:15:00 PM	67.9	72.6	55.3	
371	8/31/2022	4:15:00 PM	4:16:00 PM	59.8	70.6	36.6	
372	8/31/2022	4:16:00 PM	4:17:00 PM	66.5	74.4	44.3	
373	8/31/2022	4:17:00 PM	4:18:00 PM	61.9	70.7	37.9	
374	8/31/2022	4:18:00 PM	4:19:00 PM	66.9	72.5	52.8	
375	8/31/2022	4:19:00 PM	4:20:00 PM	63.5	71.9	46.4	
376	8/31/2022	4:20:00 PM	4:21:00 PM	68.4	75	58.8	
377	8/31/2022	4:21:00 PM	4:22:00 PM	62.4	70.6	47.3	
378	8/31/2022	4:22:00 PM	4:23:00 PM	65.5	71.1	49.6	
379	8/31/2022	4:23:00 PM	4:24:00 PM	65.6	71.2	54	
380	8/31/2022	4:24:00 PM	4:25:00 PM	65.3	72.8	41.7	

381	8/31/2022	4:25:00 PM	4:26:00 PM	62	71.1	37.9	
382	8/31/2022	4:26:00 PM	4:27:00 PM	72.3	85.5	32.2	
383	8/31/2022	4:27:00 PM	4:28:00 PM	63.5	74.6	32.7	
384	8/31/2022	4:28:00 PM	4:29:00 PM	66.7	73.2	47.7	
385	8/31/2022	4:29:00 PM	4:30:00 PM	61	69.7	36.2	
386	8/31/2022	4:30:00 PM	4:31:00 PM	64.7	71.3	45.3	
387	8/31/2022	4:31:00 PM	4:32:00 PM	59.6	66.7	44.9	
388	8/31/2022	4:32:00 PM	4:33:00 PM	65.9	72.4	46.8	
389	8/31/2022	4:33:00 PM	4:34:00 PM	66.2	72.8	56.6	
390	8/31/2022	4:34:00 PM	4:35:00 PM	63.8	71.1	34.9	
391	8/31/2022	4:35:00 PM	4:36:00 PM	64.9	72.5	48.3	
392	8/31/2022	4:36:00 PM	4:37:00 PM	58.9	67.9	38.9	
393	8/31/2022	4:37:00 PM	4:38:00 PM	67.2	72.9	54.7	
394	8/31/2022	4:38:00 PM	4:39:00 PM	57.7	66.4	44	
395	8/31/2022	4:39:00 PM	4:40:00 PM	68.2	74.7	46.6	
396	8/31/2022	4:40:00 PM	4:41:00 PM	65.4	73.3	43	
397	8/31/2022	4:41:00 PM	4:42:00 PM	65.3	73.4	46.3	
398	8/31/2022	4:42:00 PM	4:43:00 PM	65.8	71.4	45	
399	8/31/2022	4:43:00 PM	4:44:00 PM	60.9	69.8	43	
400	8/31/2022	4:44:00 PM	4:45:00 PM	66.6	73.5	52.7	
401	8/31/2022	4:45:00 PM	4:46:00 PM	63.1	72.8	40.8	
402	8/31/2022	4:46:00 PM	4:47:00 PM	66.6	73.5	51.8	
403	8/31/2022	4:47:00 PM	4:48:00 PM	62.1	69.4	46.9	
404	8/31/2022	4:48:00 PM	4:49:00 PM	66.2	72.4	53.7	
405	8/31/2022	4:49:00 PM	4:50:00 PM	60.8	68.7	41.4	
406	8/31/2022	4:50:00 PM	4:51:00 PM	66.3	73	44.1	
407	8/31/2022	4:51:00 PM	4:52:00 PM	63.9	70.2	46.4	
408	8/31/2022	4:52:00 PM	4:53:00 PM	65.7	72.4	49.6	
409	8/31/2022	4:53:00 PM	4:54:00 PM	62.1	69.1	33.5	
410	8/31/2022	4:54:00 PM	4:55:00 PM	63.5	70.8	40.2	
411	8/31/2022	4:55:00 PM	4:56:00 PM	63.9	71.5	33.2	
412	8/31/2022	4:56:00 PM	4:57:00 PM	64.1	72.6	33	
413	8/31/2022	4:57:00 PM	4:58:00 PM	66.3	71.8	55.1	
414	8/31/2022	4:58:00 PM	4:59:00 PM	61.3	70.7	29.6	
415	8/31/2022	4:59:00 PM	5:00:00 PM	65.4	71.2	49.3 `	
416	8/31/2022	5:00:00 PM	5:01:00 PM	63.7	71.6	39.6	7
417	8/31/2022	5:01:00 PM	5:02:00 PM	65.1	70.3	46.5	
418	8/31/2022	5:02:00 PM	5:03:00 PM	63.5	71.5	41.8	
419	8/31/2022	5:03:00 PM	5:04:00 PM	68.3	75.9	55.7	
420	8/31/2022	5:04:00 PM	5:05:00 PM	65.5	73.7	38.5	
421	8/31/2022	5:05:00 PM	5:06:00 PM	66.1	75.3	50.2	
422	8/31/2022	5:06:00 PM	5:07:00 PM	64.3	71.6	50.6	
423	8/31/2022	5:07:00 PM	5:08:00 PM	64.5	71.8	47.9	
424	8/31/2022	5:08:00 PM	5:09:00 PM	64.6	73.9	31.4	
425	8/31/2022	5:09:00 PM	5:10:00 PM	65.7	70.5	48.3	
426	8/31/2022	5:10:00 PM	5:11:00 PM	65	72.1	32	
427	8/31/2022	5:11:00 PM	5:12:00 PM	63.6	69.6	37.8	

428	8/31/2022	5:12:00 PM	5:13:00 PM	64.9	72.7	38.4
429	8/31/2022	5:13:00 PM	5:14:00 PM	66.6	73.1	54.1
430	8/31/2022	5:14:00 PM	5:15:00 PM	63.9	74.9	48.1
431	8/31/2022	5:15:00 PM	5:16:00 PM	65.8	71	46.4
432	8/31/2022	5:16:00 PM	5:17:00 PM	64	73.4	38.5
433	8/31/2022	5:17:00 PM	5:18:00 PM	65.5	72.6	50.9
434	8/31/2022	5:18:00 PM	5:19:00 PM	63.4	71.3	48.4
435	8/31/2022	5:19:00 PM	5:20:00 PM	68	80.4	45.7
436	8/31/2022	5:20:00 PM	5:21:00 PM	66	74.4	51
437	8/31/2022	5:21:00 PM	5:22:00 PM	61.4	71.7	39.3
438	8/31/2022	5:22:00 PM	5:23:00 PM	66.4	74	46.8
439	8/31/2022	5:23:00 PM	5:24:00 PM	64.5	70.4	51
440	8/31/2022	5:24:00 PM	5:25:00 PM	64.4	72.4	40.8
441	8/31/2022	5:25:00 PM	5:26:00 PM	64	73.3	38.1
442	8/31/2022	5:26:00 PM	5:27:00 PM	63.5	69.3	51.6
443	8/31/2022	5:27:00 PM	5:28:00 PM	63.5	71.9	41.8
444	8/31/2022	5:28:00 PM	5:29:00 PM	67	73.7	56.7
445	8/31/2022	5:29:00 PM	5:30:00 PM	58.3	67.8	32.3
446	8/31/2022	5:30:00 PM	5:31:00 PM	66.3	71.3	55.9
447	8/31/2022	5:31:00 PM	5:32:00 PM	60.2	70.6	25.1
448	8/31/2022	5:32:00 PM	5:33:00 PM	66	71.7	53.3
449	8/31/2022	5:33:00 PM	5:34:00 PM	62.4	72.1	44.4
450	8/31/2022	5:34:00 PM	5:35:00 PM	63.5	70.6	41.5
451	8/31/2022	5:35:00 PM	5:36:00 PM	64.4	72.3	30.5
452	8/31/2022	5:36:00 PM	5:37:00 PM	64	70.6	29.2
453	8/31/2022	5:37:00 PM	5:38:00 PM	68.3	78.1	50
454	8/31/2022	5:38:00 PM	5:39:00 PM	63.9	70.1	41.6
455	8/31/2022	5:39:00 PM	5:40:00 PM	66.7	73	51.1
456	8/31/2022	5:40:00 PM	5:41:00 PM	60	69	35.4
457	8/31/2022	5:41:00 PM	5:42:00 PM	67.2	73.9	41.8
458	8/31/2022	5:42:00 PM	5:43:00 PM	63.8	68.8	52.4
459	8/31/2022	5:43:00 PM	5:44:00 PM	64.1	71.4	37.4
460	8/31/2022	5:44:00 PM	5:45:00 PM	62.8	70	48.2
461	8/31/2022	5:45:00 PM	5:46:00 PM	64.4	72.2	41.8
462	8/31/2022	5:46:00 PM	5:47:00 PM	63.8	71.6	44.8
463	8/31/2022	5:47:00 PM	5:48:00 PM	65.3	73	54.1
464	8/31/2022	5:48:00 PM	5:49:00 PM	62.6	72.3	49.4
465	8/31/2022	5:49:00 PM	5:50:00 PM	63.5	71.1	27.6
466	8/31/2022	5:50:00 PM	5:51:00 PM	63.8	73	52.1
467	8/31/2022	5:51:00 PM	5:52:00 PM	65	71.3	48.1
468	8/31/2022	5:52:00 PM	5:53:00 PM	58	64.2	39.8
469	8/31/2022	5:53:00 PM	5:54:00 PM	67.9	73.7	50.8
470	8/31/2022	5:54:00 PM	5:55:00 PM	63.1	71.5	49.9
471	8/31/2022	5:55:00 PM	5:56:00 PM	68.5	73.5	49.4
472	8/31/2022	5:56:00 PM	5:57:00 PM	62.6	73.9	47.9
473	8/31/2022	5:57:00 PM	5:58:00 PM	63.3	70.6	44.8
474	8/31/2022	5:58:00 PM	5:59:00 PM	65.8	73.3	50.8

475	8/31/2022	5:59:00 PM	6:00:00 PM	64.6	73.6	29.8 `	
476	8/31/2022	6:00:00 PM	6:01:00 PM	64.4	71.9	45.1	8
477	8/31/2022	6:01:00 PM	6:02:00 PM	65	73.9	45	
478	8/31/2022	6:02:00 PM	6:03:00 PM	65.1	72.4	46.5	
479	8/31/2022	6:03:00 PM	6:04:00 PM	62.5	71.1	42.9	
480	8/31/2022	6:04:00 PM	6:05:00 PM	62.5	72.1	40.3	
481	8/31/2022	6:05:00 PM	6:06:00 PM	63.7	72.7	51.3	
482	8/31/2022	6:06:00 PM	6:07:00 PM	64.2	71.4	51.4	
483	8/31/2022	6:07:00 PM	6:08:00 PM	61.5	71.6	36.1	
484	8/31/2022	6:08:00 PM	6:09:00 PM	64.4	71	46.6	
485	8/31/2022	6:09:00 PM	6:10:00 PM	63.6	72.8	48.7	
486	8/31/2022	6:10:00 PM	6:11:00 PM	65	71.9	52.3	
487	8/31/2022	6:11:00 PM	6:12:00 PM	59.1	65.5	51.1	
488	8/31/2022	6:12:00 PM	6:13:00 PM	66.3	73.1	46	
489	8/31/2022	6:13:00 PM	6:14:00 PM	62.8	72.3	43.7	
490	8/31/2022	6:14:00 PM	6:15:00 PM	65.4	71.5	54.3	
491	8/31/2022	6:15:00 PM	6:16:00 PM	63.8	71	51.8	
492	8/31/2022	6:16:00 PM	6:17:00 PM	64.9	71.5	50.4	
493	8/31/2022	6:17:00 PM	6:18:00 PM	62.4	71.8	39.1	
494	8/31/2022	6:18:00 PM	6:19:00 PM	66.8	73.7	58.9	
495	8/31/2022	6:19:00 PM	6:20:00 PM	57.8	68	39.5	
496	8/31/2022	6:20:00 PM	6:21:00 PM	65.1	72	45.4	
497	8/31/2022	6:21:00 PM	6:22:00 PM	60.8	68.9	45.8	
498	8/31/2022	6:22:00 PM	6:23:00 PM	66.2	71.9	53.2	
499	8/31/2022	6:23:00 PM	6:24:00 PM	64.2	69.9	50.4	
500	8/31/2022	6:24:00 PM	6:25:00 PM	65.4	72	45.3	
501	8/31/2022	6:25:00 PM	6:26:00 PM	61.4	70.5	40	
502	8/31/2022	6:26:00 PM	6:27:00 PM	62.8	70.1	47.8	
503	8/31/2022	6:27:00 PM	6:28:00 PM	64.4	72	41.8	
504	8/31/2022	6:28:00 PM	6:29:00 PM	61	72.9	44.7	
505	8/31/2022	6:29:00 PM	6:30:00 PM	66.8	72.9	54.6	
506	8/31/2022	6:30:00 PM	6:31:00 PM	59.8	69.8	39.3	
507	8/31/2022	6:31:00 PM	6:32:00 PM	65.3	72.7	48.6	
508	8/31/2022	6:32:00 PM	6:33:00 PM	60.9	69.2	31.4	
509	8/31/2022	6:33:00 PM	6:34:00 PM	66	71.3	30.6	
510	8/31/2022	6:34:00 PM	6:35:00 PM	64.3	72.4	57.2	
511	8/31/2022	6:35:00 PM	6:36:00 PM	65.5	71.8	46.6	
512	8/31/2022	6:36:00 PM	6:37:00 PM	62.4	69.8	39.6	
513	8/31/2022	6:37:00 PM	6:38:00 PM	68.6	79.3	46.3	
514	8/31/2022	6:38:00 PM	6:39:00 PM	66.4	73.8	51.9	
515	8/31/2022	6:39:00 PM	6:40:00 PM	60.6	68.4	43.4	
516	8/31/2022	6:40:00 PM	6:41:00 PM	67.4	73	55.5	
517	8/31/2022	6:41:00 PM	6:42:00 PM	62	69.8	41.3	
518	8/31/2022	6:42:00 PM	6:43:00 PM	66.6	73.9	41.3	
519	8/31/2022	6:43:00 PM	6:44:00 PM	59.8	68.7	40.2	
520	8/31/2022	6:44:00 PM	6:45:00 PM	65	70.4	44.2	
521	8/31/2022	6:45:00 PM	6:46:00 PM	65.4	70.5	48.5	

522	8/31/2022	6:46:00 PM	6:47:00 PM	63.9	74.2	40.7	
523	8/31/2022	6:47:00 PM	6:48:00 PM	64.1	72	50.6	
524	8/31/2022	6:48:00 PM	6:49:00 PM	61.4	70.5	44.1	
525	8/31/2022	6:49:00 PM	6:50:00 PM	65.7	72.4	51.3	
526	8/31/2022	6:50:00 PM	6:51:00 PM	60.2	70.8	43.2	
527	8/31/2022	6:51:00 PM	6:52:00 PM	64	71.1	43.3	
528	8/31/2022	6:52:00 PM	6:53:00 PM	62.2	70.1	41.6	
529	8/31/2022	6:53:00 PM	6:54:00 PM	61.8	70.3	44.4	
530	8/31/2022	6:54:00 PM	6:55:00 PM	66.1	72.3	56.3	
531	8/31/2022	6:55:00 PM	6:56:00 PM	59.6	69.5	42.3	
532	8/31/2022	6:56:00 PM	6:57:00 PM	66.4	73.9	54.9	
533	8/31/2022	6:57:00 PM	6:58:00 PM	61.2	69.4	45.5	
534	8/31/2022	6:58:00 PM	6:59:00 PM	64.3	72.7	54.8	
535	8/31/2022	6:59:00 PM	7:00:00 PM	65.4	72.2	53.6 `	
536	8/31/2022	7:00:00 PM	7:01:00 PM	63.6	70	42.3	9
537	8/31/2022	7:01:00 PM	7:02:00 PM	62	68.8	45.3	
538	8/31/2022	7:02:00 PM	7:03:00 PM	58.9	67.1	49.5	
539	8/31/2022	7:03:00 PM	7:04:00 PM	65.5	71.6	52.5	
540	8/31/2022	7:04:00 PM	7:05:00 PM	59	68.7	41.8	
541	8/31/2022	7:05:00 PM	7:06:00 PM	65.7	72.1	49.1	
542	8/31/2022	7:06:00 PM	7:07:00 PM	59.5	67.7	46.5	
543	8/31/2022	7:07:00 PM	7:08:00 PM	65.4	72.6	42.8	
544	8/31/2022	7:08:00 PM	7:09:00 PM	62	69.8	39.4	
545	8/31/2022	7:09:00 PM	7:10:00 PM	63.4	72.9	43.8	
546	8/31/2022	7:10:00 PM	7:11:00 PM	61.8	70	47.9	
547	8/31/2022	7:11:00 PM	7:12:00 PM	61.5	73.9	41.1	
548	8/31/2022	7:12:00 PM	7:13:00 PM	65.9	71.9	50.8	
549	8/31/2022	7:13:00 PM	7:14:00 PM	61	70	35.7	
550	8/31/2022	7:14:00 PM	7:15:00 PM	64.7	71.7	49.6	
551	8/31/2022	7:15:00 PM	7:16:00 PM	59.7	68.8	48.6	
552	8/31/2022	7:16:00 PM	7:17:00 PM	64.6	71.2	48.5	
553	8/31/2022	7:17:00 PM	7:18:00 PM	62.3	71.1	49.3	
554	8/31/2022	7:18:00 PM	7:19:00 PM	64.5	71.4	49.5	
555	8/31/2022	7:19:00 PM	7:20:00 PM	60.6	66.6	45.8	
556	8/31/2022	7:20:00 PM	7:21:00 PM	61.8	69.4	43.5	
557	8/31/2022	7:21:00 PM	7:22:00 PM	65.7	73.2	56.5	
558	8/31/2022	7:22:00 PM	7:23:00 PM	64.4	70.9	47.9	
559	8/31/2022	7:23:00 PM	7:24:00 PM	61.9	70.3	49	
560	8/31/2022	7:24:00 PM	7:25:00 PM	64.4	71	46.7	
561	8/31/2022	7:25:00 PM	7:26:00 PM	59.4	69.4	40.5	
562	8/31/2022	7:26:00 PM	7:27:00 PM	65.3	74.9	55.1	
563	8/31/2022	7:27:00 PM	7:28:00 PM	62.8	70.7	44.3	
564	8/31/2022	7:28:00 PM	7:29:00 PM	63	72	49.7	
565	8/31/2022	7:29:00 PM	7:30:00 PM	63.7	73.8	44.2	
566	8/31/2022	7:30:00 PM	7:31:00 PM	61.6	71.5	39	
567	8/31/2022	7:31:00 PM	7:32:00 PM	63.3	72	50.4	
568	8/31/2022	7:32:00 PM	7:33:00 PM	61	71.4	41.2	

569	8/31/2022	7:33:00 PM	7:34:00 PM	64.2	72.7	49.1	
570	8/31/2022	7:34:00 PM	7:35:00 PM	63	72	45.1	
571	8/31/2022	7:35:00 PM	7:36:00 PM	62.1	70.7	49.9	
572	8/31/2022	7:36:00 PM	7:37:00 PM	62.1	69.5	46.4	
573	8/31/2022	7:37:00 PM	7:38:00 PM	65.2	70.7	53	
574	8/31/2022	7:38:00 PM	7:39:00 PM	61	71.1	51.7	
575	8/31/2022	7:39:00 PM	7:40:00 PM	65.7	70.4	51.2	
576	8/31/2022	7:40:00 PM	7:41:00 PM	60.5	71.2	38.7	
577	8/31/2022	7:41:00 PM	7:42:00 PM	65.5	73.3	45.8	
578	8/31/2022	7:42:00 PM	7:43:00 PM	57.5	68.1	44.6	
579	8/31/2022	7:43:00 PM	7:44:00 PM	66.4	72.5	55.5	
580	8/31/2022	7:44:00 PM	7:45:00 PM	62.6	70.7	50.1	
581	8/31/2022	7:45:00 PM	7:46:00 PM	61.5	67.4	40.9	
582	8/31/2022	7:46:00 PM	7:47:00 PM	59	68.6	41.9	
583	8/31/2022	7:47:00 PM	7:48:00 PM	63.9	70.6	48.2	
584	8/31/2022	7:48:00 PM	7:49:00 PM	60	68.3	45.6	
585	8/31/2022	7:49:00 PM	7:50:00 PM	64.4	72.6	48.7	
586	8/31/2022	7:50:00 PM	7:51:00 PM	61.1	73.4	42.7	
587	8/31/2022	7:51:00 PM	7:52:00 PM	64.9	70.4	54.3	
588	8/31/2022	7:52:00 PM	7:53:00 PM	63.1	72.3	45	
589	8/31/2022	7:53:00 PM	7:54:00 PM	63.2	73.9	44	
590	8/31/2022	7:54:00 PM	7:55:00 PM	65	71.2	51.2	
591	8/31/2022	7:55:00 PM	7:56:00 PM	58.2	67.8	42.2	
592	8/31/2022	7:56:00 PM	7:57:00 PM	63.7	72.6	46.5	
593	8/31/2022	7:57:00 PM	7:58:00 PM	62.4	71.9	46.3	
594	8/31/2022	7:58:00 PM	7:59:00 PM	57.9	66.1	45.9	
595	8/31/2022	7:59:00 PM	8:00:00 PM	61.9	68.4	45.1 `	
596	8/31/2022	8:00:00 PM	8:01:00 PM	58.4	68.5	42.8	10
597	8/31/2022	8:01:00 PM	8:02:00 PM	62.9	71.7	48.4	
598	8/31/2022	8:02:00 PM	8:03:00 PM	61.6	70.2	34.6	
599	8/31/2022	8:03:00 PM	8:04:00 PM	64.5	72.8	46.4	
600	8/31/2022	8:04:00 PM	8:05:00 PM	59.6	69.4	41.2	
601	8/31/2022	8:05:00 PM	8:06:00 PM	63.6	72.4	44.8	
602	8/31/2022	8:06:00 PM	8:07:00 PM	62.9	74.1	42.9	
603	8/31/2022	8:07:00 PM	8:08:00 PM	64.9	72.5	48.2	
604	8/31/2022	8:08:00 PM	8:09:00 PM	59.6	70.2	42.8	
605	8/31/2022	8:09:00 PM	8:10:00 PM	63.7	70.9	42.1	
606	8/31/2022	8:10:00 PM	8:11:00 PM	63.9	72	48.9	
607	8/31/2022	8:11:00 PM	8:12:00 PM	64.1	71.1	53	
608	8/31/2022	8:12:00 PM	8:13:00 PM	63.5	71.2	45.1	
609	8/31/2022	8:13:00 PM	8:14:00 PM	61.3	69.1	43.7	
610	8/31/2022	8:14:00 PM	8:15:00 PM	61.6	70.2	52	
611	8/31/2022	8:15:00 PM	8:16:00 PM	60.9	68.4	48.1	
612	8/31/2022	8:16:00 PM	8:17:00 PM	64.4	74.1	39.1	
613	8/31/2022	8:17:00 PM	8:18:00 PM	59.4	68.1	37.6	
614	8/31/2022	8:18:00 PM	8:19:00 PM	64.8	72.5	46.5	
615	8/31/2022	8:19:00 PM	8:20:00 PM	62.8	69.8	51	

616	8/31/2022	8:20:00 PM	8:21:00 PM	63.3	70.7	47.6	
617	8/31/2022	8:21:00 PM	8:22:00 PM	61	72.4	44.5	
618	8/31/2022	8:22:00 PM	8:23:00 PM	62.4	71.1	36.2	
619	8/31/2022	8:23:00 PM	8:24:00 PM	55.3	64	35	
620	8/31/2022	8:24:00 PM	8:25:00 PM	64.1	72	50.3	
621	8/31/2022	8:25:00 PM	8:26:00 PM	62.2	70.3	44.8	
622	8/31/2022	8:26:00 PM	8:27:00 PM	59.6	66.9	44.6	
623	8/31/2022	8:27:00 PM	8:28:00 PM	67.9	77.9	44.9	
624	8/31/2022	8:28:00 PM	8:29:00 PM	60.2	68.7	46.5	
625	8/31/2022	8:29:00 PM	8:30:00 PM	63.4	70.5	42.9	
626	8/31/2022	8:30:00 PM	8:31:00 PM	55.1	61.4	37.6	
627	8/31/2022	8:31:00 PM	8:32:00 PM	64.5	71.7	51.4	
628	8/31/2022	8:32:00 PM	8:33:00 PM	53	61.3	38.1	
629	8/31/2022	8:33:00 PM	8:34:00 PM	64.3	72.7	41.7	
630	8/31/2022	8:34:00 PM	8:35:00 PM	62.8	72.4	41.3	
631	8/31/2022	8:35:00 PM	8:36:00 PM	66.7	73.3	48.5	
632	8/31/2022	8:36:00 PM	8:37:00 PM	62.5	71.6	46.3	
633	8/31/2022	8:37:00 PM	8:38:00 PM	60.9	70	47.8	
634	8/31/2022	8:38:00 PM	8:39:00 PM	59.4	68.7	48.2	
635	8/31/2022	8:39:00 PM	8:40:00 PM	62.3	71.4	48.1	
636	8/31/2022	8:40:00 PM	8:41:00 PM	63.9	70.3	41.9	
637	8/31/2022	8:41:00 PM	8:42:00 PM	61.3	70.3	45.6	
638	8/31/2022	8:42:00 PM	8:43:00 PM	59.5	70.7	45.3	
639	8/31/2022	8:43:00 PM	8:44:00 PM	62.9	71.6	52.3	
640	8/31/2022	8:44:00 PM	8:45:00 PM	63	71.4	43.5	
641	8/31/2022	8:45:00 PM	8:46:00 PM	59.4	67.1	42.3	
642	8/31/2022	8:46:00 PM	8:47:00 PM	57.5	70.4	42.9	
643	8/31/2022	8:47:00 PM	8:48:00 PM	56.8	65.9	38.8	
644	8/31/2022	8:48:00 PM	8:49:00 PM	60.9	71.8	47.6	
645	8/31/2022	8:49:00 PM	8:50:00 PM	60.8	69.2	45.4	
646	8/31/2022	8:50:00 PM	8:51:00 PM	62	70.3	45.4	
647	8/31/2022	8:51:00 PM	8:52:00 PM	60.2	68	48.7	
648	8/31/2022	8:52:00 PM	8:53:00 PM	61	71.8	49.3	
649	8/31/2022	8:53:00 PM	8:54:00 PM	59.1	70	41.1	
650	8/31/2022	8:54:00 PM	8:55:00 PM	62.3	71.1	44.7	
651	8/31/2022	8:55:00 PM	8:56:00 PM	53.4	60.8	46	
652	8/31/2022	8:56:00 PM	8:57:00 PM	63.8	73.7	48.4	
653	8/31/2022	8:57:00 PM	8:58:00 PM	64.2	73.8	48.4	
654	8/31/2022	8:58:00 PM	8:59:00 PM	65.1	73.4	51.5	
655	8/31/2022	8:59:00 PM	9:00:00 PM	49.1	58.6	39.5 `	
656	8/31/2022	9:00:00 PM	9:01:00 PM	61.6	70.5	48.4	11
657	8/31/2022	9:01:00 PM	9:02:00 PM	60.3	68.7	46	
658	8/31/2022	9:02:00 PM	9:03:00 PM	61.6	72.4	41.9	
659	8/31/2022	9:03:00 PM	9:04:00 PM	64.3	71.2	48.8	
660	8/31/2022	9:04:00 PM	9:05:00 PM	59.1	70.6	36.1	
661	8/31/2022	9:05:00 PM	9:06:00 PM	60	68.9	36.9	
662	8/31/2022	9:06:00 PM	9:07:00 PM	62.9	70.5	43.8	

663	8/31/2022	9:07:00 PM	9:08:00 PM	62.6	73.3	44.7
664	8/31/2022	9:08:00 PM	9:09:00 PM	60.9	69.2	41.9
665	8/31/2022	9:09:00 PM	9:10:00 PM	61.8	71.2	41.9
666	8/31/2022	9:10:00 PM	9:11:00 PM	57.3	65.2	42.7
667	8/31/2022	9:11:00 PM	9:12:00 PM	64.3	72.4	51.2
668	8/31/2022	9:12:00 PM	9:13:00 PM	60.4	69.5	46.1
669	8/31/2022	9:13:00 PM	9:14:00 PM	64.3	71.8	49.7
670	8/31/2022	9:14:00 PM	9:15:00 PM	58.8	71.7	42.9
671	8/31/2022	9:15:00 PM	9:16:00 PM	62	70	46.4
672	8/31/2022	9:16:00 PM	9:17:00 PM	57.6	68	41.6
673	8/31/2022	9:17:00 PM	9:18:00 PM	62.3	70.8	43.7
674	8/31/2022	9:18:00 PM	9:19:00 PM	57.7	64.7	42.2
675	8/31/2022	9:19:00 PM	9:20:00 PM	64.8	72.5	48.1
676	8/31/2022	9:20:00 PM	9:21:00 PM	57.4	64.3	43.3
677	8/31/2022	9:21:00 PM	9:22:00 PM	61.7	71.8	40
678	8/31/2022	9:22:00 PM	9:23:00 PM	54.4	67.1	41.8
679	8/31/2022	9:23:00 PM	9:24:00 PM	63.2	75	42.2
680	8/31/2022	9:24:00 PM	9:25:00 PM	59.5	67	42.8
681	8/31/2022	9:25:00 PM	9:26:00 PM	58.3	69.2	40.8
682	8/31/2022	9:26:00 PM	9:27:00 PM	64	75.1	43
683	8/31/2022	9:27:00 PM	9:28:00 PM	52.2	59.2	43.6
684	8/31/2022	9:28:00 PM	9:29:00 PM	61.5	69.7	42.1
685	8/31/2022	9:29:00 PM	9:30:00 PM	59	71.4	42.8
686	8/31/2022	9:30:00 PM	9:31:00 PM	62.3	72.1	43
687	8/31/2022	9:31:00 PM	9:32:00 PM	61.6	73.6	42.2
688	8/31/2022	9:32:00 PM	9:33:00 PM	59.1	66	45.6
689	8/31/2022	9:33:00 PM	9:34:00 PM	62.5	72.7	45.5
690	8/31/2022	9:34:00 PM	9:35:00 PM	59.7	69.3	43.9
691	8/31/2022	9:35:00 PM	9:36:00 PM	54.5	66.6	42.9
692	8/31/2022	9:36:00 PM	9:37:00 PM	60.1	69.4	44.7
693	8/31/2022	9:37:00 PM	9:38:00 PM	61.8	71.7	45.9
694	8/31/2022	9:38:00 PM	9:39:00 PM	61.6	71.3	45.4
695	8/31/2022	9:39:00 PM	9:40:00 PM	58	66	40.7
696	8/31/2022	9:40:00 PM	9:41:00 PM	60.5	70.3	42.8
697	8/31/2022	9:41:00 PM	9:42:00 PM	61.4	72.9	40.4
698	8/31/2022	9:42:00 PM	9:43:00 PM	57	68.2	39.1
699	8/31/2022	9:43:00 PM	9:44:00 PM	62.9	71.2	45
700	8/31/2022	9:44:00 PM	9:45:00 PM	65.1	79.3	45.2
701	8/31/2022	9:45:00 PM	9:46:00 PM	61.5	71.8	46.6
702	8/31/2022	9:46:00 PM	9:47:00 PM	62.9	72.4	42.3
703	8/31/2022	9:47:00 PM	9:48:00 PM	57.5	69	43.4
704	8/31/2022	9:48:00 PM	9:49:00 PM	60.3	70.1	49.5
705	8/31/2022	9:49:00 PM	9:50:00 PM	56.5	66.8	42.6
706	8/31/2022	9:50:00 PM	9:51:00 PM	64.9	75.9	44.6
707	8/31/2022	9:51:00 PM	9:52:00 PM	62.9	71.6	45.2
708	8/31/2022	9:52:00 PM	9:53:00 PM	62.4	70	42.4
709	8/31/2022	9:53:00 PM	9:54:00 PM	58	66.5	47.2

710	8/31/2022	9:54:00 PM	9:55:00 PM	64	72.7	46.4	
711	8/31/2022	9:55:00 PM	9:56:00 PM	57.2	65.2	40.2	
712	8/31/2022	9:56:00 PM	9:57:00 PM	56.2	67.1	37.7	
713	8/31/2022	9:57:00 PM	9:58:00 PM	49.4	59.4	39.7	
714	8/31/2022	9:58:00 PM	9:59:00 PM	62.3	71.7	45	
715	8/31/2022	9:59:00 PM	10:00:00 PM	62.8	72.7	47.7 `	
716	8/31/2022	10:00:00 PM	10:01:00 PM	59.8	72.9	39.9	12
717	8/31/2022	10:01:00 PM	10:02:00 PM	60.8	70.8	41.6	
718	8/31/2022	10:02:00 PM	10:03:00 PM	58	70.9	39.1	
719	8/31/2022	10:03:00 PM	10:04:00 PM	59.2	71.4	43.1	
720	8/31/2022	10:04:00 PM	10:05:00 PM	61.4	71.3	39.8	
721	8/31/2022	10:05:00 PM	10:06:00 PM	59.5	69.5	42.9	
722	8/31/2022	10:06:00 PM	10:07:00 PM	63.1	75.4	35.7	
723	8/31/2022	10:07:00 PM	10:08:00 PM	57.9	70.3	37.9	
724	8/31/2022	10:08:00 PM	10:09:00 PM	63.1	74.4	41.6	
725	8/31/2022	10:09:00 PM	10:10:00 PM	60.6	68.3	43.3	
726	8/31/2022	10:10:00 PM	10:11:00 PM	56.8	68.2	38	
727	8/31/2022	10:11:00 PM	10:12:00 PM	61	69.8	43.8	
728	8/31/2022	10:12:00 PM	10:13:00 PM	62.4	72.1	43.5	
729	8/31/2022	10:13:00 PM	10:14:00 PM	64.3	72.6	45.2	
730	8/31/2022	10:14:00 PM	10:15:00 PM	59.5	69.1	47.3	
731	8/31/2022	10:15:00 PM	10:16:00 PM	63.7	74.1	50.8	
732	8/31/2022	10:16:00 PM	10:17:00 PM	59.6	70.5	41.3	
733	8/31/2022	10:17:00 PM	10:18:00 PM	61.1	71.9	46.4	
734	8/31/2022	10:18:00 PM	10:19:00 PM	63.9	73.8	49.3	
735	8/31/2022	10:19:00 PM	10:20:00 PM	58.2	67.3	41.9	
736	8/31/2022	10:20:00 PM	10:21:00 PM	57.6	67	42	
737	8/31/2022	10:21:00 PM	10:22:00 PM	59.3	69.6	44.2	
738	8/31/2022	10:22:00 PM	10:23:00 PM	57.6	67.6	45.7	
739	8/31/2022	10:23:00 PM	10:24:00 PM	59.8	73	37.4	
740	8/31/2022	10:24:00 PM	10:25:00 PM	59.3	69.6	42.9	
741	8/31/2022	10:25:00 PM	10:26:00 PM	58.6	69.9	43.1	
742	8/31/2022	10:26:00 PM	10:27:00 PM	59.1	68.8	41.8	
743	8/31/2022	10:27:00 PM	10:28:00 PM	56.4	67.3	40.9	
744	8/31/2022	10:28:00 PM	10:29:00 PM	59.8	71.4	30.5	
745	8/31/2022	10:29:00 PM	10:30:00 PM	56.2	65.3	41.7	
746	8/31/2022	10:30:00 PM	10:31:00 PM	60.4	68.5	39.5	
747	8/31/2022	10:31:00 PM	10:32:00 PM	64	72.1	43.9	
748	8/31/2022	10:32:00 PM	10:33:00 PM	58.2	68.5	37.2	
749	8/31/2022	10:33:00 PM	10:34:00 PM	60.6	72	39.4	
750	8/31/2022	10:34:00 PM	10:35:00 PM	60.2	69.3	39.8	
751	8/31/2022	10:35:00 PM	10:36:00 PM	61.5	72.8	42.3	
752	8/31/2022	10:36:00 PM	10:37:00 PM	53.2	60	43.3	
753	8/31/2022	10:37:00 PM	10:38:00 PM	61	71.4	37.9	
754	8/31/2022	10:38:00 PM	10:39:00 PM	59.1	67.9	44.9	
755	8/31/2022	10:39:00 PM	10:40:00 PM	60.4	72.4	38.5	
756	8/31/2022	10:40:00 PM	10:41:00 PM	40.9	59.4	31.9	

757	8/31/2022	10:41:00 PM	10:42:00 PM	65	75.1	38.2		
758	8/31/2022	10:42:00 PM	10:43:00 PM	56.3	68.8	36.9		
759	8/31/2022	10:43:00 PM	10:44:00 PM	60.2	69.6	36.3		
760	8/31/2022	10:44:00 PM	10:45:00 PM	60.5	70	38.4		
761	8/31/2022	10:45:00 PM	10:46:00 PM	63.3	70.9	39		
762	8/31/2022	10:46:00 PM	10:47:00 PM	62.5	73.5	36.1		
763	8/31/2022	10:47:00 PM	10:48:00 PM	54.7	66.5	32.8		
764	8/31/2022	10:48:00 PM	10:49:00 PM	57.1	69.3	33.7		
765	8/31/2022	10:49:00 PM	10:50:00 PM	59.5	68.5	35.5		
766	8/31/2022	10:50:00 PM	10:51:00 PM	56.1	67.7	29.4		
767	8/31/2022	10:51:00 PM	10:52:00 PM	55.6	63.5	31		
768	8/31/2022	10:52:00 PM	10:53:00 PM	59.5	70.9	38		
769	8/31/2022	10:53:00 PM	10:54:00 PM	55.4	68.8	32.5		
770	8/31/2022	10:54:00 PM	10:55:00 PM	61.4	69.5	31.6		
771	8/31/2022	10:55:00 PM	10:56:00 PM	53.5	67.3	28.4		
772	8/31/2022	10:56:00 PM	10:57:00 PM	60.3	69.5	37.2		
773	8/31/2022	10:57:00 PM	10:58:00 PM	59.7	70.8	41.9		
774	8/31/2022	10:58:00 PM	10:59:00 PM	55	64.4	36.2		
775	8/31/2022	10:59:00 PM	11:00:00 PM	58.2	65.8	38.5	`	
776	8/31/2022	11:00:00 PM	11:01:00 PM	54.3	68.6	32.2		13
777	8/31/2022	11:01:00 PM	11:02:00 PM	62.7	71.5	32.1		
778	8/31/2022	11:02:00 PM	11:03:00 PM	56.4	63.9	42.2		
779	8/31/2022	11:03:00 PM	11:04:00 PM	56.6	68.6	34.8		
780	8/31/2022	11:04:00 PM	11:05:00 PM	61.7	72.5	44.3		
781	8/31/2022	11:05:00 PM	11:06:00 PM	58.1	67.2	42.6		
782	8/31/2022	11:06:00 PM	11:07:00 PM	58	68.6	41.9		
783	8/31/2022	11:07:00 PM	11:08:00 PM	55.5	67.1	30.8		
784	8/31/2022	11:08:00 PM	11:09:00 PM	58	68.4	31.7		
785	8/31/2022	11:09:00 PM	11:10:00 PM	59.6	71.5	34.2		
786	8/31/2022	11:10:00 PM	11:11:00 PM	63.6	74.5	36.1		
787	8/31/2022	11:11:00 PM	11:12:00 PM	57.1	67.9	44.2		
788	8/31/2022	11:12:00 PM	11:13:00 PM	56.6	66.6	42		
789	8/31/2022	11:13:00 PM	11:14:00 PM	57.8	66.9	36.7		
790	8/31/2022	11:14:00 PM	11:15:00 PM	57.7	67.7	33.3		
791	8/31/2022	11:15:00 PM	11:16:00 PM	56.6	67.6	42.5		
792	8/31/2022	11:16:00 PM	11:17:00 PM	57.8	66.7	39		
793	8/31/2022	11:17:00 PM	11:18:00 PM	52.1	65.2	28.1		
794	8/31/2022	11:18:00 PM	11:19:00 PM	57.6	68.2	34.5		
795	8/31/2022	11:19:00 PM	11:20:00 PM	63.6	73.2	39.7		
796	8/31/2022	11:20:00 PM	11:21:00 PM	58.3	68.3	41.2		
797	8/31/2022	11:21:00 PM	11:22:00 PM	57	69.3	40		
798	8/31/2022	11:22:00 PM	11:23:00 PM	52.7	63.5	32.3		
799	8/31/2022	11:23:00 PM	11:24:00 PM	59.9	68.7	30.2		
800	8/31/2022	11:24:00 PM	11:25:00 PM	53.5	62.4	38.5		
801	8/31/2022	11:25:00 PM	11:26:00 PM	60.3	71.5	39.9		
802	8/31/2022	11:26:00 PM	11:27:00 PM	58.6	69.7	40.8		
803	8/31/2022	11:27:00 PM	11:28:00 PM	52.7	63.5	29.5		

804	8/31/2022	11:28:00 PM	11:29:00 PM	55.7	68.1	29.5	
805	8/31/2022	11:29:00 PM	11:30:00 PM	57.3	68.5	33.6	
806	8/31/2022	11:30:00 PM	11:31:00 PM	61.5	70	34.9	
807	8/31/2022	11:31:00 PM	11:32:00 PM	53.9	60.2	38.7	
808	8/31/2022	11:32:00 PM	11:33:00 PM	56.8	67	35.5	
809	8/31/2022	11:33:00 PM	11:34:00 PM	52.6	61.1	34.7	
810	8/31/2022	11:34:00 PM	11:35:00 PM	56.9	64.2	31.2	
811	8/31/2022	11:35:00 PM	11:36:00 PM	59.7	70	44.6	
812	8/31/2022	11:36:00 PM	11:37:00 PM	60.1	72.7	35.9	
813	8/31/2022	11:37:00 PM	11:38:00 PM	60.1	72.4	37.1	
814	8/31/2022	11:38:00 PM	11:39:00 PM	57.8	69.2	34.8	
815	8/31/2022	11:39:00 PM	11:40:00 PM	58.1	69.8	34.1	
816	8/31/2022	11:40:00 PM	11:41:00 PM	62.1	72.9	35.3	
817	8/31/2022	11:41:00 PM	11:42:00 PM	50.6	63.4	31.1	
818	8/31/2022	11:42:00 PM	11:43:00 PM	59	69.4	34.2	
819	8/31/2022	11:43:00 PM	11:44:00 PM	60.1	71	30.7	
820	8/31/2022	11:44:00 PM	11:45:00 PM	55.7	67.4	29.3	
821	8/31/2022	11:45:00 PM	11:46:00 PM	54.1	62.9	35.9	
822	8/31/2022	11:46:00 PM	11:47:00 PM	58.2	71.6	34.6	
823	8/31/2022	11:47:00 PM	11:48:00 PM	59.4	69.6	34	
824	8/31/2022	11:48:00 PM	11:49:00 PM	59.5	70.4	36.8	
825	8/31/2022	11:49:00 PM	11:50:00 PM	48.2	60.3	27.5	
826	8/31/2022	11:50:00 PM	11:51:00 PM	62.5	72.7	34.7	
827	8/31/2022	11:51:00 PM	11:52:00 PM	58.8	67.7	39.5	
828	8/31/2022	11:52:00 PM	11:53:00 PM	53	63	36.2	
829	8/31/2022	11:53:00 PM	11:54:00 PM	57.8	68.4	35	
830	8/31/2022	11:54:00 PM	11:55:00 PM	54.6	67	24.6	
831	8/31/2022	11:55:00 PM	11:56:00 PM	43.4	56.8	22.3	
832	8/31/2022	11:56:00 PM	11:57:00 PM	60.4	69.4	37.9	
833	8/31/2022	11:57:00 PM	11:58:00 PM	57.7	69.4	34.3	
834	8/31/2022	11:58:00 PM	11:59:00 PM	57.7	69.3	31.7	
835	8/31/2022	11:59:00 PM	12:00:00 AM	56.4	68.3	29.6 `	
836	9/1/2022	12:00:00 AM	12:01:00 AM	53.7	64.8	35.4	14
837	9/1/2022	12:01:00 AM	12:02:00 AM	55.6	67.3	29.4	
838	9/1/2022	12:02:00 AM	12:03:00 AM	62.6	73	49.1	
839	9/1/2022	12:03:00 AM	12:04:00 AM	56.6	68.8	34.8	
840	9/1/2022	12:04:00 AM	12:05:00 AM	47.4	58.4	31.2	
841	9/1/2022	12:05:00 AM	12:06:00 AM	58.1	69.4	32.2	
842	9/1/2022	12:06:00 AM	12:07:00 AM	59.8	70	26.7	
843	9/1/2022	12:07:00 AM	12:08:00 AM	59.7	72.6	25.1	
844	9/1/2022	12:08:00 AM	12:09:00 AM	62.1	73.3	32.3	
845	9/1/2022	12:09:00 AM	12:10:00 AM	57.8	66.6	33.2	
846	9/1/2022	12:10:00 AM	12:11:00 AM	55.5	68.8	25.2	
847	9/1/2022	12:11:00 AM	12:12:00 AM	30.8	40.6	22.2	
848	9/1/2022	12:12:00 AM	12:13:00 AM	56.5	67	37.4	
849	9/1/2022	12:13:00 AM	12:14:00 AM	57.8	67.8	36.7	
850	9/1/2022	12:14:00 AM	12:15:00 AM	56.3	69.5	31.7	

851	9/1/2022	12:15:00 AM	12:16:00 AM	57.1	69.3	30.3	
852	9/1/2022	12:16:00 AM	12:17:00 AM	50.5	62.5	29.9	
853	9/1/2022	12:17:00 AM	12:18:00 AM	56	65.3	35.1	
854	9/1/2022	12:18:00 AM	12:19:00 AM	59.6	69.9	35.2	
855	9/1/2022	12:19:00 AM	12:20:00 AM	57.5	69	40.3	
856	9/1/2022	12:20:00 AM	12:21:00 AM	57.7	67.1	40.8	
857	9/1/2022	12:21:00 AM	12:22:00 AM	55.8	67.6	39.7	
858	9/1/2022	12:22:00 AM	12:23:00 AM	61.3	73.7	41.7	
859	9/1/2022	12:23:00 AM	12:24:00 AM	60.8	70.4	39.4	
860	9/1/2022	12:24:00 AM	12:25:00 AM	60.4	70.9	37.5	
861	9/1/2022	12:25:00 AM	12:26:00 AM	55.1	67.8	34.1	
862	9/1/2022	12:26:00 AM	12:27:00 AM	51.9	65	30.8	
863	9/1/2022	12:27:00 AM	12:28:00 AM	54.3	65.8	36.3	
864	9/1/2022	12:28:00 AM	12:29:00 AM	59.1	73.3	32.4	
865	9/1/2022	12:29:00 AM	12:30:00 AM	51	64.1	26.1	
866	9/1/2022	12:30:00 AM	12:31:00 AM	46.3	57.4	23.2	
867	9/1/2022	12:31:00 AM	12:32:00 AM	51.6	64.8	28	
868	9/1/2022	12:32:00 AM	12:33:00 AM	47.3	57.8	27.2	
869	9/1/2022	12:33:00 AM	12:34:00 AM	56.9	70.4	32.2	
870	9/1/2022	12:34:00 AM	12:35:00 AM	54.6	68.3	34.6	
871	9/1/2022	12:35:00 AM	12:36:00 AM	59	70	41	
872	9/1/2022	12:36:00 AM	12:37:00 AM	55.7	68.1	32.7	
873	9/1/2022	12:37:00 AM	12:38:00 AM	56.6	71.1	27.1	
874	9/1/2022	12:38:00 AM	12:39:00 AM	56	65.4	37.2	
875	9/1/2022	12:39:00 AM	12:40:00 AM	57.1	70.5	33.4	
876	9/1/2022	12:40:00 AM	12:41:00 AM	49.7	58.6	31.2	
877	9/1/2022	12:41:00 AM	12:42:00 AM	55.9	68.7	33.6	
878	9/1/2022	12:42:00 AM	12:43:00 AM	54.6	64.4	37	
879	9/1/2022	12:43:00 AM	12:44:00 AM	61.6	71.9	37.8	
880	9/1/2022	12:44:00 AM	12:45:00 AM	55.5	68.5	34.3	
881	9/1/2022	12:45:00 AM	12:46:00 AM	58.5	68.6	38.2	
882	9/1/2022	12:46:00 AM	12:47:00 AM	57.5	71.3	38.3	
883	9/1/2022	12:47:00 AM	12:48:00 AM	52.7	61.4	35.2	
884	9/1/2022	12:48:00 AM	12:49:00 AM	55.3	68.2	33.1	
885	9/1/2022	12:49:00 AM	12:50:00 AM	51.6	60.6	36.6	
886	9/1/2022	12:50:00 AM	12:51:00 AM	60.1	71.6	40.5	
887	9/1/2022	12:51:00 AM	12:52:00 AM	58.8	70.2	37.5	
888	9/1/2022	12:52:00 AM	12:53:00 AM	57.3	69.7	26.4	
889	9/1/2022	12:53:00 AM	12:54:00 AM	50	69.6	29.3	
890	9/1/2022	12:54:00 AM	12:55:00 AM	59.4	72.3	32.1	
891	9/1/2022	12:55:00 AM	12:56:00 AM	54.9	66.7	25.4	
892	9/1/2022	12:56:00 AM	12:57:00 AM	56.1	69.2	25.3	
893	9/1/2022	12:57:00 AM	12:58:00 AM	47.5	69.2	21.2	
894	9/1/2022	12:58:00 AM	12:59:00 AM	34.2	43.4	21.5	
895	9/1/2022	12:59:00 AM	1:00:00 AM	47.1	58.9	26.3 `	
896	9/1/2022	1:00:00 AM	1:01:00 AM	48.2	59.5	27	15
897	9/1/2022	1:01:00 AM	1:02:00 AM	28.6	35.9	23.8	

898	9/1/2022	1:02:00 AM	1:03:00 AM	46.4	58	24.7
899	9/1/2022	1:03:00 AM	1:04:00 AM	52.3	66.3	24.4
900	9/1/2022	1:04:00 AM	1:05:00 AM	52.7	61.4	36.7
901	9/1/2022	1:05:00 AM	1:06:00 AM	54.5	63.8	38
902	9/1/2022	1:06:00 AM	1:07:00 AM	51.4	62	37.7
903	9/1/2022	1:07:00 AM	1:08:00 AM	34.1	49.9	23.7
904	9/1/2022	1:08:00 AM	1:09:00 AM	57.2	68.6	27.7
905	9/1/2022	1:09:00 AM	1:10:00 AM	55.5	67.1	36.1
906	9/1/2022	1:10:00 AM	1:11:00 AM	62	72.6	35.9
907	9/1/2022	1:11:00 AM	1:12:00 AM	52.4	64.9	32.6
908	9/1/2022	1:12:00 AM	1:13:00 AM	60.2	72.5	31.1
909	9/1/2022	1:13:00 AM	1:14:00 AM	54	67.6	30.7
910	9/1/2022	1:14:00 AM	1:15:00 AM	56	68.7	36.6
911	9/1/2022	1:15:00 AM	1:16:00 AM	53.7	67.4	35.9
912	9/1/2022	1:16:00 AM	1:17:00 AM	56.2	68.2	41.4
913	9/1/2022	1:17:00 AM	1:18:00 AM	61.6	71	33.6
914	9/1/2022	1:18:00 AM	1:19:00 AM	45.7	66.7	27.5
915	9/1/2022	1:19:00 AM	1:20:00 AM	56.8	67.3	35.3
916	9/1/2022	1:20:00 AM	1:21:00 AM	55.3	67.8	35.6
917	9/1/2022	1:21:00 AM	1:22:00 AM	42.3	60.3	31.1
918	9/1/2022	1:22:00 AM	1:23:00 AM	55.5	67.3	34.1
919	9/1/2022	1:23:00 AM	1:24:00 AM	57.5	68	39.7
920	9/1/2022	1:24:00 AM	1:25:00 AM	52.7	64	38.1
921	9/1/2022	1:25:00 AM	1:26:00 AM	50.1	61.5	27
922	9/1/2022	1:26:00 AM	1:27:00 AM	55.6	68.2	29.6
923	9/1/2022	1:27:00 AM	1:28:00 AM	49.9	61.7	26.7
924	9/1/2022	1:28:00 AM	1:29:00 AM	53.4	66.8	32.6
925	9/1/2022	1:29:00 AM	1:30:00 AM	62.3	72.2	44.4
926	9/1/2022	1:30:00 AM	1:31:00 AM	56.8	66.5	38.4
927	9/1/2022	1:31:00 AM	1:32:00 AM	52.3	63.6	35.3
928	9/1/2022	1:32:00 AM	1:33:00 AM	32.7	38.7	27.1
929	9/1/2022	1:33:00 AM	1:34:00 AM	53.8	65.9	29.8
930	9/1/2022	1:34:00 AM	1:35:00 AM	33.8	44.9	23.6
931	9/1/2022	1:35:00 AM	1:36:00 AM	54.6	67.9	26.5
932	9/1/2022	1:36:00 AM	1:37:00 AM	55.5	66.8	38
933	9/1/2022	1:37:00 AM	1:38:00 AM	55.2	68.3	31.5
934	9/1/2022	1:38:00 AM	1:39:00 AM	60.1	74.7	32.1
935	9/1/2022	1:39:00 AM	1:40:00 AM	55.5	69.2	25.1
936	9/1/2022	1:40:00 AM	1:41:00 AM	41.4	51.6	24
937	9/1/2022	1:41:00 AM	1:42:00 AM	47.1	59.6	23.8
938	9/1/2022	1:42:00 AM	1:43:00 AM	47.3	59.5	27
939	9/1/2022	1:43:00 AM	1:44:00 AM	55.3	66.6	26.2
940	9/1/2022	1:44:00 AM	1:45:00 AM	23.1	27	21
941	9/1/2022	1:45:00 AM	1:46:00 AM	23.2	26.6	20.5
942	9/1/2022	1:46:00 AM	1:47:00 AM	53.8	65.7	26.6
943	9/1/2022	1:47:00 AM	1:48:00 AM	54.7	65.9	31.8
944	9/1/2022	1:48:00 AM	1:49:00 AM	30.1	44.6	22.1

945	9/1/2022	1:49:00 AM	1:50:00 AM	28.5	39.3	23.3	
946	9/1/2022	1:50:00 AM	1:51:00 AM	52.3	64.3	31.7	
947	9/1/2022	1:51:00 AM	1:52:00 AM	57.3	69.1	31.1	
948	9/1/2022	1:52:00 AM	1:53:00 AM	45.1	56.6	27.7	
949	9/1/2022	1:53:00 AM	1:54:00 AM	56.3	70	37.5	
950	9/1/2022	1:54:00 AM	1:55:00 AM	50.9	60.5	33.4	
951	9/1/2022	1:55:00 AM	1:56:00 AM	58.1	72.5	32.6	
952	9/1/2022	1:56:00 AM	1:57:00 AM	44.3	55.9	31.3	
953	9/1/2022	1:57:00 AM	1:58:00 AM	55	68.2	33.6	
954	9/1/2022	1:58:00 AM	1:59:00 AM	59.6	71.2	35	
955	9/1/2022	1:59:00 AM	2:00:00 AM	57	71.8	33.5 `	
956	9/1/2022	2:00:00 AM	2:01:00 AM	53	71.9	30.1	16
957	9/1/2022	2:01:00 AM	2:02:00 AM	56.3	67.7	32.2	
958	9/1/2022	2:02:00 AM	2:03:00 AM	56.3	69.4	27.8	
959	9/1/2022	2:03:00 AM	2:04:00 AM	59	68.5	37	
960	9/1/2022	2:04:00 AM	2:05:00 AM	48.7	60.4	33.7	
961	9/1/2022	2:05:00 AM	2:06:00 AM	59.9	70	41	
962	9/1/2022	2:06:00 AM	2:07:00 AM	53.1	63.7	33.9	
963	9/1/2022	2:07:00 AM	2:08:00 AM	50.9	60.9	40.1	
964	9/1/2022	2:08:00 AM	2:09:00 AM	55.5	68.3	33.2	
965	9/1/2022	2:09:00 AM	2:10:00 AM	56.5	65.9	40.8	
966	9/1/2022	2:10:00 AM	2:11:00 AM	59.3	71.9	38.7	
967	9/1/2022	2:11:00 AM	2:12:00 AM	50.2	61.1	32.5	
968	9/1/2022	2:12:00 AM	2:13:00 AM	50.3	61.4	37.2	
969	9/1/2022	2:13:00 AM	2:14:00 AM	58.6	73	37.5	
970	9/1/2022	2:14:00 AM	2:15:00 AM	62.1	73.4	34.9	
971	9/1/2022	2:15:00 AM	2:16:00 AM	43.2	60.7	25.6	
972	9/1/2022	2:16:00 AM	2:17:00 AM	54.3	67.9	30.5	
973	9/1/2022	2:17:00 AM	2:18:00 AM	53.5	67.9	28.8	
974	9/1/2022	2:18:00 AM	2:19:00 AM	58.1	70.2	34.3	
975	9/1/2022	2:19:00 AM	2:20:00 AM	48.4	57.8	29.3	
976	9/1/2022	2:20:00 AM	2:21:00 AM	51.8	64.8	29.5	
977	9/1/2022	2:21:00 AM	2:22:00 AM	55.4	67.9	38.5	
978	9/1/2022	2:22:00 AM	2:23:00 AM	45.4	56.9	28.9	
979	9/1/2022	2:23:00 AM	2:24:00 AM	56.7	70.3	30.6	
980	9/1/2022	2:24:00 AM	2:25:00 AM	51	59.3	34.9	
981	9/1/2022	2:25:00 AM	2:26:00 AM	54.1	67.1	33.9	
982	9/1/2022	2:26:00 AM	2:27:00 AM	51	60.3	36.8	
983	9/1/2022	2:27:00 AM	2:28:00 AM	57.8	71.5	34.4	
984	9/1/2022	2:28:00 AM	2:29:00 AM	53.9	64.6	36.1	
985	9/1/2022	2:29:00 AM	2:30:00 AM	55.9	69	38.9	
986	9/1/2022	2:30:00 AM	2:31:00 AM	58.5	72.8	28.2	
987	9/1/2022	2:31:00 AM	2:32:00 AM	52.9	63.4	35.3	
988	9/1/2022	2:32:00 AM	2:33:00 AM	48	60.3	23.8	
989	9/1/2022	2:33:00 AM	2:34:00 AM	26.1	32.1	21.9	
990	9/1/2022	2:34:00 AM	2:35:00 AM	57.1	71.2	30.6	
991	9/1/2022	2:35:00 AM	2:36:00 AM	56.2	68.2	39.3	

992	9/1/2022	2:36:00 AM	2:37:00 AM	53.9	66	30.2	
993	9/1/2022	2:37:00 AM	2:38:00 AM	60.2	73.5	29.8	
994	9/1/2022	2:38:00 AM	2:39:00 AM	50.7	65	26.5	
995	9/1/2022	2:39:00 AM	2:40:00 AM	47.7	59.6	27.7	
996	9/1/2022	2:40:00 AM	2:41:00 AM	47.6	59.2	29	
997	9/1/2022	2:41:00 AM	2:42:00 AM	53.3	67.3	27.2	
998	9/1/2022	2:42:00 AM	2:43:00 AM	51.7	66.6	33.7	
999	9/1/2022	2:43:00 AM	2:44:00 AM	45.2	56	26.4	
1000	9/1/2022	2:44:00 AM	2:45:00 AM	60.5	69.4	43.3	
1001	9/1/2022	2:45:00 AM	2:46:00 AM	57.9	69.8	28.3	
1002	9/1/2022	2:46:00 AM	2:47:00 AM	40.4	55.7	26.3	
1003	9/1/2022	2:47:00 AM	2:48:00 AM	57.4	68.8	36.7	
1004	9/1/2022	2:48:00 AM	2:49:00 AM	47.7	58.1	25.9	
1005	9/1/2022	2:49:00 AM	2:50:00 AM	57.9	69	25	
1006	9/1/2022	2:50:00 AM	2:51:00 AM	46.2	62.9	29.2	
1007	9/1/2022	2:51:00 AM	2:52:00 AM	58.9	71.6	33.7	
1008	9/1/2022	2:52:00 AM	2:53:00 AM	59.8	70	33.9	
1009	9/1/2022	2:53:00 AM	2:54:00 AM	56.2	68.5	33.5	
1010	9/1/2022	2:54:00 AM	2:55:00 AM	59.2	70.7	37.7	
1011	9/1/2022	2:55:00 AM	2:56:00 AM	32.8	38.2	27.2	
1012	9/1/2022	2:56:00 AM	2:57:00 AM	51.6	62.3	30.5	
1013	9/1/2022	2:57:00 AM	2:58:00 AM	59.1	72.4	32.6	
1014	9/1/2022	2:58:00 AM	2:59:00 AM	54.2	67.5	31.6	
1015	9/1/2022	2:59:00 AM	3:00:00 AM	51.5	64.5	28.4 `	
1016	9/1/2022	3:00:00 AM	3:01:00 AM	53.5	67.6	26.9	17
1017	9/1/2022	3:01:00 AM	3:02:00 AM	54.4	68.1	30.1	
1018	9/1/2022	3:02:00 AM	3:03:00 AM	50.9	62.6	28.5	
1019	9/1/2022	3:03:00 AM	3:04:00 AM	23.8	28.6	22.1	
1020	9/1/2022	3:04:00 AM	3:05:00 AM	25.3	29.4	23	
1021	9/1/2022	3:05:00 AM	3:06:00 AM	59.4	70	29.2	
1022	9/1/2022	3:06:00 AM	3:07:00 AM	54.3	68.3	32	
1023	9/1/2022	3:07:00 AM	3:08:00 AM	54.5	67	26.3	
1024	9/1/2022	3:08:00 AM	3:09:00 AM	43.2	54.7	22.2	
1025	9/1/2022	3:09:00 AM	3:10:00 AM	47	58.2	30.4	
1026	9/1/2022	3:10:00 AM	3:11:00 AM	54.9	68.9	24.8	
1027	9/1/2022	3:11:00 AM	3:12:00 AM	25.4	29.3	22.4	
1028	9/1/2022	3:12:00 AM	3:13:00 AM	53.2	65.8	25.2	
1029	9/1/2022	3:13:00 AM	3:14:00 AM	51	64.3	29.7	
1030	9/1/2022	3:14:00 AM	3:15:00 AM	53.8	64.5	39.2	
1031	9/1/2022	3:15:00 AM	3:16:00 AM	59.2	71.2	36.5	
1032	9/1/2022	3:16:00 AM	3:17:00 AM	58.3	68.8	33.9	
1033	9/1/2022	3:17:00 AM	3:18:00 AM	33.7	40.6	28.1	
1034	9/1/2022	3:18:00 AM	3:19:00 AM	51.3	60.6	35.5	
1035	9/1/2022	3:19:00 AM	3:20:00 AM	54	67.2	31.7	
1036	9/1/2022	3:20:00 AM	3:21:00 AM	59.6	71.7	43	
1037	9/1/2022	3:21:00 AM	3:22:00 AM	56.3	67.1	33.2	
1038	9/1/2022	3:22:00 AM	3:23:00 AM	59.2	71.4	40.4	

1039	9/1/2022	3:23:00 AM	3:24:00 AM	55.6	69.5	35	
1040	9/1/2022	3:24:00 AM	3:25:00 AM	56.5	66.2	39.9	
1041	9/1/2022	3:25:00 AM	3:26:00 AM	56.7	68.4	37.5	
1042	9/1/2022	3:26:00 AM	3:27:00 AM	57.7	69.7	40.4	
1043	9/1/2022	3:27:00 AM	3:28:00 AM	41.8	53	33.8	
1044	9/1/2022	3:28:00 AM	3:29:00 AM	43.3	55.5	28.2	
1045	9/1/2022	3:29:00 AM	3:30:00 AM	59.5	72.5	38.8	
1046	9/1/2022	3:30:00 AM	3:31:00 AM	58.8	69.7	31.9	
1047	9/1/2022	3:31:00 AM	3:32:00 AM	59.9	73.7	32	
1048	9/1/2022	3:32:00 AM	3:33:00 AM	60.2	71	43.6	
1049	9/1/2022	3:33:00 AM	3:34:00 AM	54	66.9	35.6	
1050	9/1/2022	3:34:00 AM	3:35:00 AM	53.8	64.5	32.7	
1051	9/1/2022	3:35:00 AM	3:36:00 AM	41.1	58.1	27.1	
1052	9/1/2022	3:36:00 AM	3:37:00 AM	57.2	69.5	31.6	
1053	9/1/2022	3:37:00 AM	3:38:00 AM	59.2	71.1	42.5	
1054	9/1/2022	3:38:00 AM	3:39:00 AM	57.1	65.9	41.1	
1055	9/1/2022	3:39:00 AM	3:40:00 AM	59.1	69.9	35	
1056	9/1/2022	3:40:00 AM	3:41:00 AM	57.6	68.7	39	
1057	9/1/2022	3:41:00 AM	3:42:00 AM	59.9	68.6	39.9	
1058	9/1/2022	3:42:00 AM	3:43:00 AM	58.3	66.9	37.9	
1059	9/1/2022	3:43:00 AM	3:44:00 AM	57.6	69.2	35.9	
1060	9/1/2022	3:44:00 AM	3:45:00 AM	55.4	66.6	36.1	
1061	9/1/2022	3:45:00 AM	3:46:00 AM	50.9	59.3	34.2	
1062	9/1/2022	3:46:00 AM	3:47:00 AM	58.4	68.7	42.9	
1063	9/1/2022	3:47:00 AM	3:48:00 AM	59.4	69.2	45.9	
1064	9/1/2022	3:48:00 AM	3:49:00 AM	62.9	74.1	42.7	
1065	9/1/2022	3:49:00 AM	3:50:00 AM	63.5	70.3	52.9	
1066	9/1/2022	3:50:00 AM	3:51:00 AM	61.7	71	39.8	
1067	9/1/2022	3:51:00 AM	3:52:00 AM	58.4	70.9	34.4	
1068	9/1/2022	3:52:00 AM	3:53:00 AM	54.2	61.4	40.7	
1069	9/1/2022	3:53:00 AM	3:54:00 AM	59.6	72.2	37.5	
1070	9/1/2022	3:54:00 AM	3:55:00 AM	60.4	70.3	41.4	
1071	9/1/2022	3:55:00 AM	3:56:00 AM	51.6	62.3	37.6	
1072	9/1/2022	3:56:00 AM	3:57:00 AM	57.9	69.7	43.5	
1073	9/1/2022	3:57:00 AM	3:58:00 AM	58.3	70.9	38.1	
1074	9/1/2022	3:58:00 AM	3:59:00 AM	58.5	69.6	42.2	
1075	9/1/2022	3:59:00 AM	4:00:00 AM	56.9	68.7	35 `	
1076	9/1/2022	4:00:00 AM	4:01:00 AM	58.7	68.7	36.5	18
1077	9/1/2022	4:01:00 AM	4:02:00 AM	61.5	72	38.4	
1078	9/1/2022	4:02:00 AM	4:03:00 AM	52.6	62.4	34.3	
1079	9/1/2022	4:03:00 AM	4:04:00 AM	60	71.3	38.1	
1080	9/1/2022	4:04:00 AM	4:05:00 AM	60.2	69.7	42.1	
1081	9/1/2022	4:05:00 AM	4:06:00 AM	58.2	68.6	40	
1082	9/1/2022	4:06:00 AM	4:07:00 AM	56.9	68.8	36.1	
1083	9/1/2022	4:07:00 AM	4:08:00 AM	57.1	70.1	36.1	
1084	9/1/2022	4:08:00 AM	4:09:00 AM	59.8	70.7	37.7	
1085	9/1/2022	4:09:00 AM	4:10:00 AM	56.7	68.5	43.5	

1086	9/1/2022	4:10:00 AM	4:11:00 AM	59.6	69.6	42.3
1087	9/1/2022	4:11:00 AM	4:12:00 AM	56.5	68.4	39.6
1088	9/1/2022	4:12:00 AM	4:13:00 AM	56.1	68.7	34.4
1089	9/1/2022	4:13:00 AM	4:14:00 AM	61.3	71.5	43.4
1090	9/1/2022	4:14:00 AM	4:15:00 AM	58.1	73	32.2
1091	9/1/2022	4:15:00 AM	4:16:00 AM	53	70	27.3
1092	9/1/2022	4:16:00 AM	4:17:00 AM	38.9	49.7	25.4
1093	9/1/2022	4:17:00 AM	4:18:00 AM	60.8	69.2	49.2
1094	9/1/2022	4:18:00 AM	4:19:00 AM	53	61.6	38.7
1095	9/1/2022	4:19:00 AM	4:20:00 AM	57	68.9	38.7
1096	9/1/2022	4:20:00 AM	4:21:00 AM	63.9	71.6	43.2
1097	9/1/2022	4:21:00 AM	4:22:00 AM	54.6	64.9	35.4
1098	9/1/2022	4:22:00 AM	4:23:00 AM	54.7	67.3	36.1
1099	9/1/2022	4:23:00 AM	4:24:00 AM	58.8	71.5	38.2
1100	9/1/2022	4:24:00 AM	4:25:00 AM	59.5	71.2	42.8
1101	9/1/2022	4:25:00 AM	4:26:00 AM	61.7	72.5	41.5
1102	9/1/2022	4:26:00 AM	4:27:00 AM	62.6	71.6	43.3
1103	9/1/2022	4:27:00 AM	4:28:00 AM	59.3	70.5	46.5
1104	9/1/2022	4:28:00 AM	4:29:00 AM	54.1	63.9	35
1105	9/1/2022	4:29:00 AM	4:30:00 AM	55.2	65.5	35.2
1106	9/1/2022	4:30:00 AM	4:31:00 AM	73.9	88.7	45.1
1107	9/1/2022	4:31:00 AM	4:32:00 AM	59	68.4	45.2
1108	9/1/2022	4:32:00 AM	4:33:00 AM	62.1	71.9	40.7
1109	9/1/2022	4:33:00 AM	4:34:00 AM	59.4	70.5	41.8
1110	9/1/2022	4:34:00 AM	4:35:00 AM	53.5	66.8	39.3
1111	9/1/2022	4:35:00 AM	4:36:00 AM	61.5	72.4	46.9
1112	9/1/2022	4:36:00 AM	4:37:00 AM	60.1	70.4	44.1
1113	9/1/2022	4:37:00 AM	4:38:00 AM	54.4	67.1	37.4
1114	9/1/2022	4:38:00 AM	4:39:00 AM	59.3	70.1	43.7
1115	9/1/2022	4:39:00 AM	4:40:00 AM	57.7	67.1	44
1116	9/1/2022	4:40:00 AM	4:41:00 AM	60.7	71.1	43.6
1117	9/1/2022	4:41:00 AM	4:42:00 AM	61.2	70.9	48.8
1118	9/1/2022	4:42:00 AM	4:43:00 AM	63	70.9	47.1
1119	9/1/2022	4:43:00 AM	4:44:00 AM	64.5	73	45.4
1120	9/1/2022	4:44:00 AM	4:45:00 AM	61.2	74.6	43.5
1121	9/1/2022	4:45:00 AM	4:46:00 AM	63.1	72.7	44.8
1122	9/1/2022	4:46:00 AM	4:47:00 AM	60.1	67.5	41.8
1123	9/1/2022	4:47:00 AM	4:48:00 AM	52.8	63.7	37.5
1124	9/1/2022	4:48:00 AM	4:49:00 AM	64.5	73.1	48.7
1125	9/1/2022	4:49:00 AM	4:50:00 AM	61	71.5	42.6
1126	9/1/2022	4:50:00 AM	4:51:00 AM	57.4	66.1	41.1
1127	9/1/2022	4:51:00 AM	4:52:00 AM	62	71.2	39.3
1128	9/1/2022	4:52:00 AM	4:53:00 AM	68.5	81.6	35.4
1129	9/1/2022	4:53:00 AM	4:54:00 AM	63.7	73.8	41
1130	9/1/2022	4:54:00 AM	4:55:00 AM	63.8	73.1	43.7
1131	9/1/2022	4:55:00 AM	4:56:00 AM	60.1	70	38.8
1132	9/1/2022	4:56:00 AM	4:57:00 AM	60	68.7	43.1

1133	9/1/2022	4:57:00 AM	4:58:00 AM	53.8	62.9	35.6	
1134	9/1/2022	4:58:00 AM	4:59:00 AM	62.5	74.9	47.4	
1135	9/1/2022	4:59:00 AM	5:00:00 AM	60.6	69.7	45.9 `	
1136	9/1/2022	5:00:00 AM	5:01:00 AM	58.7	68.6	47.5	19
1137	9/1/2022	5:01:00 AM	5:02:00 AM	63.4	70.6	45.1	
1138	9/1/2022	5:02:00 AM	5:03:00 AM	53	61.1	36.5	
1139	9/1/2022	5:03:00 AM	5:04:00 AM	66	74.4	43.5	
1140	9/1/2022	5:04:00 AM	5:05:00 AM	62.7	72.2	45.5	
1141	9/1/2022	5:05:00 AM	5:06:00 AM	63.8	75.3	44.7	
1142	9/1/2022	5:06:00 AM	5:07:00 AM	59.5	70.1	40.8	
1143	9/1/2022	5:07:00 AM	5:08:00 AM	54	66	35.1	
1144	9/1/2022	5:08:00 AM	5:09:00 AM	59.1	69.4	40	
1145	9/1/2022	5:09:00 AM	5:10:00 AM	65.5	75	45.7	
1146	9/1/2022	5:10:00 AM	5:11:00 AM	57	67.9	39.8	
1147	9/1/2022	5:11:00 AM	5:12:00 AM	62.6	73.5	43.2	
1148	9/1/2022	5:12:00 AM	5:13:00 AM	55.2	66.7	38.4	
1149	9/1/2022	5:13:00 AM	5:14:00 AM	61.7	72.5	42.7	
1150	9/1/2022	5:14:00 AM	5:15:00 AM	57.1	69.7	39.5	
1151	9/1/2022	5:15:00 AM	5:16:00 AM	54	63.4	40.5	
1152	9/1/2022	5:16:00 AM	5:17:00 AM	63.9	76.7	44.5	
1153	9/1/2022	5:17:00 AM	5:18:00 AM	55.4	66.6	38.5	
1154	9/1/2022	5:18:00 AM	5:19:00 AM	60.8	68.8	44.3	
1155	9/1/2022	5:19:00 AM	5:20:00 AM	60.7	68.5	45.3	
1156	9/1/2022	5:20:00 AM	5:21:00 AM	60.5	71.6	45.6	
1157	9/1/2022	5:21:00 AM	5:22:00 AM	61.6	69.9	49.6	
1158	9/1/2022	5:22:00 AM	5:23:00 AM	61.7	71.5	42.7	
1159	9/1/2022	5:23:00 AM	5:24:00 AM	58.6	67.4	40.6	
1160	9/1/2022	5:24:00 AM	5:25:00 AM	61.1	70.9	43.9	
1161	9/1/2022	5:25:00 AM	5:26:00 AM	59.9	69.7	42.7	
1162	9/1/2022	5:26:00 AM	5:27:00 AM	59.9	70	35.3	
1163	9/1/2022	5:27:00 AM	5:28:00 AM	63.4	73.2	43.6	
1164	9/1/2022	5:28:00 AM	5:29:00 AM	57.9	69	35.4	
1165	9/1/2022	5:29:00 AM	5:30:00 AM	62.4	72.2	41.1	
1166	9/1/2022	5:30:00 AM	5:31:00 AM	59.4	67.4	41.6	
1167	9/1/2022	5:31:00 AM	5:32:00 AM	62.9	72.7	42.3	
1168	9/1/2022	5:32:00 AM	5:33:00 AM	58.9	69.6	48.9	
1169	9/1/2022	5:33:00 AM	5:34:00 AM	59.8	67.2	43.4	
1170	9/1/2022	5:34:00 AM	5:35:00 AM	60.7	70.8	41.9	
1171	9/1/2022	5:35:00 AM	5:36:00 AM	62.6	72.6	38.1	
1172	9/1/2022	5:36:00 AM	5:37:00 AM	61.3	71.4	35.3	
1173	9/1/2022	5:37:00 AM	5:38:00 AM	59.6	71.6	37.8	
1174	9/1/2022	5:38:00 AM	5:39:00 AM	62.2	71	45	
1175	9/1/2022	5:39:00 AM	5:40:00 AM	59.5	70.4	45.3	
1176	9/1/2022	5:40:00 AM	5:41:00 AM	66.6	73.7	51.5	
1177	9/1/2022	5:41:00 AM	5:42:00 AM	61.8	72	46.3	
1178	9/1/2022	5:42:00 AM	5:43:00 AM	65.4	72.6	51.4	
1179	9/1/2022	5:43:00 AM	5:44:00 AM	63.5	75.1	52.1	

1180	9/1/2022	5:44:00 AM	5:45:00 AM	63.2	73.7	50.1	
1181	9/1/2022	5:45:00 AM	5:46:00 AM	63.2	73.1	55.7	
1182	9/1/2022	5:46:00 AM	5:47:00 AM	63.5	73.1	54	
1183	9/1/2022	5:47:00 AM	5:48:00 AM	61.4	71.3	52.4	
1184	9/1/2022	5:48:00 AM	5:49:00 AM	59.5	70.1	45.6	
1185	9/1/2022	5:49:00 AM	5:50:00 AM	65.4	73.9	51.9	
1186	9/1/2022	5:50:00 AM	5:51:00 AM	63.1	73.2	40.6	
1187	9/1/2022	5:51:00 AM	5:52:00 AM	64	73	45.1	
1188	9/1/2022	5:52:00 AM	5:53:00 AM	57	67.9	40.4	
1189	9/1/2022	5:53:00 AM	5:54:00 AM	62.9	70.8	50.4	
1190	9/1/2022	5:54:00 AM	5:55:00 AM	58.5	67.9	41.5	
1191	9/1/2022	5:55:00 AM	5:56:00 AM	60.3	68.2	40.4	
1192	9/1/2022	5:56:00 AM	5:57:00 AM	57.7	67.8	42.3	
1193	9/1/2022	5:57:00 AM	5:58:00 AM	63.9	73.1	42.2	
1194	9/1/2022	5:58:00 AM	5:59:00 AM	64.1	73.2	47.8	
1195	9/1/2022	5:59:00 AM	6:00:00 AM	59.5	70.8	33.1 `	
1196	9/1/2022	6:00:00 AM	6:01:00 AM	59.1	69.2	36.1	20
1197	9/1/2022	6:01:00 AM	6:02:00 AM	60.8	71.3	40.3	
1198	9/1/2022	6:02:00 AM	6:03:00 AM	63.9	74.2	43.6	
1199	9/1/2022	6:03:00 AM	6:04:00 AM	61	74.1	41.9	
1200	9/1/2022	6:04:00 AM	6:05:00 AM	66.5	74.5	51	
1201	9/1/2022	6:05:00 AM	6:06:00 AM	59	67.4	41.9	
1202	9/1/2022	6:06:00 AM	6:07:00 AM	65.3	73.6	50.4	
1203	9/1/2022	6:07:00 AM	6:08:00 AM	63.5	72.2	39.6	
1204	9/1/2022	6:08:00 AM	6:09:00 AM	60.4	71.3	39.2	
1205	9/1/2022	6:09:00 AM	6:10:00 AM	64.5	73.9	48.1	
1206	9/1/2022	6:10:00 AM	6:11:00 AM	57.1	68.2	39.8	
1207	9/1/2022	6:11:00 AM	6:12:00 AM	66	74.8	39.9	
1208	9/1/2022	6:12:00 AM	6:13:00 AM	58.8	70.2	43.8	
1209	9/1/2022	6:13:00 AM	6:14:00 AM	62.5	71.5	47.2	
1210	9/1/2022	6:14:00 AM	6:15:00 AM	56.2	68.6	43.1	
1211	9/1/2022	6:15:00 AM	6:16:00 AM	63.4	74.5	46.8	
1212	9/1/2022	6:16:00 AM	6:17:00 AM	62.1	72.7	46.6	
1213	9/1/2022	6:17:00 AM	6:18:00 AM	64	72	48.6	
1214	9/1/2022	6:18:00 AM	6:19:00 AM	63	72.6	43.3	
1215	9/1/2022	6:19:00 AM	6:20:00 AM	59.4	69.6	37.9	
1216	9/1/2022	6:20:00 AM	6:21:00 AM	64.8	74	43.2	
1217	9/1/2022	6:21:00 AM	6:22:00 AM	64.1	75.8	47.5	
1218	9/1/2022	6:22:00 AM	6:23:00 AM	64.1	72.6	48.5	
1219	9/1/2022	6:23:00 AM	6:24:00 AM	66.3	73.3	51.8	
1220	9/1/2022	6:24:00 AM	6:25:00 AM	59.6	67.8	49.1	
1221	9/1/2022	6:25:00 AM	6:26:00 AM	65.8	74.4	51.7	
1222	9/1/2022	6:26:00 AM	6:27:00 AM	59.8	71.5	44.3	
1223	9/1/2022	6:27:00 AM	6:28:00 AM	62.4	72.1	45.9	
1224	9/1/2022	6:28:00 AM	6:29:00 AM	65	73.8	46.2	
1225	9/1/2022	6:29:00 AM	6:30:00 AM	58.8	68.7	45.8	
1226	9/1/2022	6:30:00 AM	6:31:00 AM	63.6	71.9	49.5	

1227	9/1/2022	6:31:00 AM	6:32:00 AM	61.5	72.3	47.2	
1228	9/1/2022	6:32:00 AM	6:33:00 AM	64.9	73.8	46.1	
1229	9/1/2022	6:33:00 AM	6:34:00 AM	59.4	68.1	43.1	
1230	9/1/2022	6:34:00 AM	6:35:00 AM	64.6	72.6	51.7	
1231	9/1/2022	6:35:00 AM	6:36:00 AM	66.7	71.8	53.6	
1232	9/1/2022	6:36:00 AM	6:37:00 AM	62	72.1	51.8	
1233	9/1/2022	6:37:00 AM	6:38:00 AM	66.8	73.1	51.5	
1234	9/1/2022	6:38:00 AM	6:39:00 AM	58.6	66.8	43.8	
1235	9/1/2022	6:39:00 AM	6:40:00 AM	67.6	74.1	50.7	
1236	9/1/2022	6:40:00 AM	6:41:00 AM	56.5	64.7	43.8	
1237	9/1/2022	6:41:00 AM	6:42:00 AM	65.4	72.8	46.9	
1238	9/1/2022	6:42:00 AM	6:43:00 AM	60.6	68.5	48.5	
1239	9/1/2022	6:43:00 AM	6:44:00 AM	66.1	71.4	53.2	
1240	9/1/2022	6:44:00 AM	6:45:00 AM	64.1	72.2	51.7	
1241	9/1/2022	6:45:00 AM	6:46:00 AM	66.7	74	48.4	
1242	9/1/2022	6:46:00 AM	6:47:00 AM	64.4	74.1	41.6	
1243	9/1/2022	6:47:00 AM	6:48:00 AM	65	73.8	40	
1244	9/1/2022	6:48:00 AM	6:49:00 AM	63.9	72.3	47.6	
1245	9/1/2022	6:49:00 AM	6:50:00 AM	65.3	75.4	46.7	
1246	9/1/2022	6:50:00 AM	6:51:00 AM	63.8	73.3	45.1	
1247	9/1/2022	6:51:00 AM	6:52:00 AM	66.3	72.2	52.7	
1248	9/1/2022	6:52:00 AM	6:53:00 AM	63.3	69.6	52	
1249	9/1/2022	6:53:00 AM	6:54:00 AM	66.4	74.7	46.4	
1250	9/1/2022	6:54:00 AM	6:55:00 AM	64	72.2	48.8	
1251	9/1/2022	6:55:00 AM	6:56:00 AM	63.2	70.9	49.6	
1252	9/1/2022	6:56:00 AM	6:57:00 AM	63	71.4	44.7	
1253	9/1/2022	6:57:00 AM	6:58:00 AM	65.6	73.8	44	
1254	9/1/2022	6:58:00 AM	6:59:00 AM	60.2	68.9	53.3	
1255	9/1/2022	6:59:00 AM	7:00:00 AM	66.7	76	54 `	
1256	9/1/2022	7:00:00 AM	7:01:00 AM	61.9	72.1	45	21
1257	9/1/2022	7:01:00 AM	7:02:00 AM	63.9	72.4	45.9	
1258	9/1/2022	7:02:00 AM	7:03:00 AM	65.7	74.4	49.5	
1259	9/1/2022	7:03:00 AM	7:04:00 AM	65.8	71.7	50.4	
1260	9/1/2022	7:04:00 AM	7:05:00 AM	60.9	71.4	45.2	
1261	9/1/2022	7:05:00 AM	7:06:00 AM	65.6	73.9	50.9	
1262	9/1/2022	7:06:00 AM	7:07:00 AM	64.8	75	48.4	
1263	9/1/2022	7:07:00 AM	7:08:00 AM	66.5	73.3	46.5	
1264	9/1/2022	7:08:00 AM	7:09:00 AM	59.9	69.3	46.5	
1265	9/1/2022	7:09:00 AM	7:10:00 AM	67.9	73	49.1	
1266	9/1/2022	7:10:00 AM	7:11:00 AM	63.2	72.7	47.5	
1267	9/1/2022	7:11:00 AM	7:12:00 AM	65.9	72.3	38.6	
1268	9/1/2022	7:12:00 AM	7:13:00 AM	64.4	70.8	49.6	
1269	9/1/2022	7:13:00 AM	7:14:00 AM	66.6	76.7	50.8	
1270	9/1/2022	7:14:00 AM	7:15:00 AM	68.6	75.9	53.6	
1271	9/1/2022	7:15:00 AM	7:16:00 AM	63.4	74.3	49.9	
1272	9/1/2022	7:16:00 AM	7:17:00 AM	74.8	87.7	54	
1273	9/1/2022	7:17:00 AM	7:18:00 AM	63.3	72.1	46	

1274	9/1/2022	7:18:00 AM	7:19:00 AM	66.8	73	51.1	
1275	9/1/2022	7:19:00 AM	7:20:00 AM	65.6	72.1	49.2	
1276	9/1/2022	7:20:00 AM	7:21:00 AM	67.5	74.9	43.5	
1277	9/1/2022	7:21:00 AM	7:22:00 AM	66.6	73.2	53.2	
1278	9/1/2022	7:22:00 AM	7:23:00 AM	62.5	69.5	45.2	
1279	9/1/2022	7:23:00 AM	7:24:00 AM	69.3	73.7	58.1	
1280	9/1/2022	7:24:00 AM	7:25:00 AM	62.4	70.5	48.5	
1281	9/1/2022	7:25:00 AM	7:26:00 AM	68.4	76.2	59.6	
1282	9/1/2022	7:26:00 AM	7:27:00 AM	67.4	72.9	42.1	
1283	9/1/2022	7:27:00 AM	7:28:00 AM	65.9	74.4	47	
1284	9/1/2022	7:28:00 AM	7:29:00 AM	67.8	75.6	59	
1285	9/1/2022	7:29:00 AM	7:30:00 AM	60.7	70.3	45.4	
1286	9/1/2022	7:30:00 AM	7:31:00 AM	68.3	73.2	59	
1287	9/1/2022	7:31:00 AM	7:32:00 AM	60.8	70.6	42.7	
1288	9/1/2022	7:32:00 AM	7:33:00 AM	68.8	75.5	46.6	
1289	9/1/2022	7:33:00 AM	7:34:00 AM	66.3	76.8	51.4	
1290	9/1/2022	7:34:00 AM	7:35:00 AM	65.2	71.3	51.1	
1291	9/1/2022	7:35:00 AM	7:36:00 AM	67.9	74	54.2	
1292	9/1/2022	7:36:00 AM	7:37:00 AM	64.5	74.4	52.5	
1293	9/1/2022	7:37:00 AM	7:38:00 AM	68.8	74.1	57.5	
1294	9/1/2022	7:38:00 AM	7:39:00 AM	65.4	71.5	47.7	
1295	9/1/2022	7:39:00 AM	7:40:00 AM	69.4	74.3	50.5	
1296	9/1/2022	7:40:00 AM	7:41:00 AM	66.3	72.4	56.3	
1297	9/1/2022	7:41:00 AM	7:42:00 AM	68.1	75.4	58	
1298	9/1/2022	7:42:00 AM	7:43:00 AM	66.8	73.4	51.6	
1299	9/1/2022	7:43:00 AM	7:44:00 AM	67.1	75.1	46.6	
1300	9/1/2022	7:44:00 AM	7:45:00 AM	68.1	73.9	57.9	
1301	9/1/2022	7:45:00 AM	7:46:00 AM	64.6	72.6	53.4	
1302	9/1/2022	7:46:00 AM	7:47:00 AM	69.8	74.9	59.5	
1303	9/1/2022	7:47:00 AM	7:48:00 AM	68.1	73.4	55.4	
1304	9/1/2022	7:48:00 AM	7:49:00 AM	70.6	80.2	53.3	
1305	9/1/2022	7:49:00 AM	7:50:00 AM	67.1	72.6	56.1	
1306	9/1/2022	7:50:00 AM	7:51:00 AM	66.4	73.4	51.2	
1307	9/1/2022	7:51:00 AM	7:52:00 AM	69.5	74.1	60.7	
1308	9/1/2022	7:52:00 AM	7:53:00 AM	62.2	71.4	50.8	
1309	9/1/2022	7:53:00 AM	7:54:00 AM	68.7	72.6	53.4	
1310	9/1/2022	7:54:00 AM	7:55:00 AM	66.6	73.1	49.1	
1311	9/1/2022	7:55:00 AM	7:56:00 AM	66.3	74	43.9	
1312	9/1/2022	7:56:00 AM	7:57:00 AM	67.8	73	55.9	
1313	9/1/2022	7:57:00 AM	7:58:00 AM	65.7	72.1	54.8	
1314	9/1/2022	7:58:00 AM	7:59:00 AM	69.6	74.1	59.1	
1315	9/1/2022	7:59:00 AM	8:00:00 AM	64.3	71.4	51.3 `	
1316	9/1/2022	8:00:00 AM	8:01:00 AM	67.6	74.8	51.1	22
1317	9/1/2022	8:01:00 AM	8:02:00 AM	68.4	73.4	56.5	
1318	9/1/2022	8:02:00 AM	8:03:00 AM	65.6	74.5	52.5	
1319	9/1/2022	8:03:00 AM	8:04:00 AM	67.5	73.4	56.9	
1320	9/1/2022	8:04:00 AM	8:05:00 AM	65.1	73.1	51.2	

1321	9/1/2022	8:05:00 AM	8:06:00 AM	68.5	74.2	55.8
1322	9/1/2022	8:06:00 AM	8:07:00 AM	68.8	73	62.5
1323	9/1/2022	8:07:00 AM	8:08:00 AM	66.7	75	54.2
1324	9/1/2022	8:08:00 AM	8:09:00 AM	70.5	74.9	58.2
1325	9/1/2022	8:09:00 AM	8:10:00 AM	61.2	70.5	53.9
1326	9/1/2022	8:10:00 AM	8:11:00 AM	68.5	73.6	51.9
1327	9/1/2022	8:11:00 AM	8:12:00 AM	63.3	74.8	50.1
1328	9/1/2022	8:12:00 AM	8:13:00 AM	69.2	75	51.5
1329	9/1/2022	8:13:00 AM	8:14:00 AM	67.2	73.9	53.7
1330	9/1/2022	8:14:00 AM	8:15:00 AM	62.5	72.9	46.2
1331	9/1/2022	8:15:00 AM	8:16:00 AM	69.6	75.1	60.9
1332	9/1/2022	8:16:00 AM	8:17:00 AM	61.6	70.2	48.3
1333	9/1/2022	8:17:00 AM	8:18:00 AM	67.6	74.1	53.7
1334	9/1/2022	8:18:00 AM	8:19:00 AM	65.5	73.3	53.1
1335	9/1/2022	8:19:00 AM	8:20:00 AM	67.7	72.8	51.8
1336	9/1/2022	8:20:00 AM	8:21:00 AM	64.4	71.3	51.8
1337	9/1/2022	8:21:00 AM	8:22:00 AM	68.1	74.6	47
1338	9/1/2022	8:22:00 AM	8:23:00 AM	67.6	74.1	53.3
1339	9/1/2022	8:23:00 AM	8:24:00 AM	63.6	71.8	48.2
1340	9/1/2022	8:24:00 AM	8:25:00 AM	68.6	73.7	56.2
1341	9/1/2022	8:25:00 AM	8:26:00 AM	60	67.9	45.5
1342	9/1/2022	8:26:00 AM	8:27:00 AM	68.4	73.4	52.7
1343	9/1/2022	8:27:00 AM	8:28:00 AM	63.5	72.1	45.9
1344	9/1/2022	8:28:00 AM	8:29:00 AM	67.9	72.9	46
1345	9/1/2022	8:29:00 AM	8:30:00 AM	64.2	70.4	55.2
1346	9/1/2022	8:30:00 AM	8:31:00 AM	65.5	74	46.5
1347	9/1/2022	8:31:00 AM	8:32:00 AM	67	71.2	57.5
1348	9/1/2022	8:32:00 AM	8:33:00 AM	65.6	72.9	54.4
1349	9/1/2022	8:33:00 AM	8:34:00 AM	67.6	73.2	42.4
1350	9/1/2022	8:34:00 AM	8:35:00 AM	64.2	73.9	56.1
1351	9/1/2022	8:35:00 AM	8:36:00 AM	64.2	73.6	43.5
1352	9/1/2022	8:36:00 AM	8:37:00 AM	67.8	73.3	52.4
1353	9/1/2022	8:37:00 AM	8:38:00 AM	65.4	73.4	45.9
1354	9/1/2022	8:38:00 AM	8:39:00 AM	67.6	74.7	43.7
1355	9/1/2022	8:39:00 AM	8:40:00 AM	61.4	72.6	43.8
1356	9/1/2022	8:40:00 AM	8:41:00 AM	69.1	74.2	56
1357	9/1/2022	8:41:00 AM	8:42:00 AM	65.8	71.9	53.4
1358	9/1/2022	8:42:00 AM	8:43:00 AM	66.4	72.3	59.5
1359	9/1/2022	8:43:00 AM	8:44:00 AM	67	71.7	52.4
1360	9/1/2022	8:44:00 AM	8:45:00 AM	61.4	71.9	43.7
1361	9/1/2022	8:45:00 AM	8:46:00 AM	68.2	73.4	58.3
1362	9/1/2022	8:46:00 AM	8:47:00 AM	65.3	72.6	44.5
1363	9/1/2022	8:47:00 AM	8:48:00 AM	63.8	70.1	51.3
1364	9/1/2022	8:48:00 AM	8:49:00 AM	66.2	71.3	46
1365	9/1/2022	8:49:00 AM	8:50:00 AM	60.4	70.2	39.3
1366	9/1/2022	8:50:00 AM	8:51:00 AM	68.1	72.6	57.1
1367	9/1/2022	8:51:00 AM	8:52:00 AM	63	70.2	44.3

1368	9/1/2022	8:52:00 AM	8:53:00 AM	67.4	72.2	58.3	
1369	9/1/2022	8:53:00 AM	8:54:00 AM	65.8	74.1	44.5	
1370	9/1/2022	8:54:00 AM	8:55:00 AM	67.6	76.4	45.8	
1371	9/1/2022	8:55:00 AM	8:56:00 AM	67.4	72.9	56.2	
1372	9/1/2022	8:56:00 AM	8:57:00 AM	61.8	70.5	46.2	
1373	9/1/2022	8:57:00 AM	8:58:00 AM	66.7	72.9	53.8	
1374	9/1/2022	8:58:00 AM	8:59:00 AM	62.4	73.6	45.6	
1375	9/1/2022	8:59:00 AM	9:00:00 AM	66	74.4	44.1 `	
1376	9/1/2022	9:00:00 AM	9:01:00 AM	59.4	67.7	43.7	23
1377	9/1/2022	9:01:00 AM	9:02:00 AM	67.4	74.7	36.5	
1378	9/1/2022	9:02:00 AM	9:03:00 AM	61.6	70	49.2	
1379	9/1/2022	9:03:00 AM	9:04:00 AM	65.6	73.9	48.1	
1380	9/1/2022	9:04:00 AM	9:05:00 AM	64.6	72.3	51.3	
1381	9/1/2022	9:05:00 AM	9:06:00 AM	56.8	63	40.8	
1382	9/1/2022	9:06:00 AM	9:07:00 AM	65.2	72.3	50.5	
1383	9/1/2022	9:07:00 AM	9:08:00 AM	62.7	70.8	44.7	
1384	9/1/2022	9:08:00 AM	9:09:00 AM	66.2	72.4	40.7	
1385	9/1/2022	9:09:00 AM	9:10:00 AM	61.4	71.9	46.3	
1386	9/1/2022	9:10:00 AM	9:11:00 AM	64.2	72.5	42.4	
1387	9/1/2022	9:11:00 AM	9:12:00 AM	64	71.2	40.1	
1388	9/1/2022	9:12:00 AM	9:13:00 AM	64.3	73.6	47.2	
1389	9/1/2022	9:13:00 AM	9:14:00 AM	63.7	73.2	41.4	
1390	9/1/2022	9:14:00 AM	9:15:00 AM	59.7	72.5	37.8	
1391	9/1/2022	9:15:00 AM	9:16:00 AM	65.3	73.4	45	
1392	9/1/2022	9:16:00 AM	9:17:00 AM	62.5	71.6	48.2	
1393	9/1/2022	9:17:00 AM	9:18:00 AM	65.1	71.7	48.5	
1394	9/1/2022	9:18:00 AM	9:19:00 AM	59.8	70.5	39.2	
1395	9/1/2022	9:19:00 AM	9:20:00 AM	63.4	71	38.8	
1396	9/1/2022	9:20:00 AM	9:21:00 AM	56	65.4	36.5	
1397	9/1/2022	9:21:00 AM	9:22:00 AM	65.1	72.4	44.5	
1398	9/1/2022	9:22:00 AM	9:23:00 AM	57.8	66.5	37.7	
1399	9/1/2022	9:23:00 AM	9:24:00 AM	66.5	73	49.4	
1400	9/1/2022	9:24:00 AM	9:25:00 AM	63.8	74.7	34.1	
1401	9/1/2022	9:25:00 AM	9:26:00 AM	64.2	74.2	32	
1402	9/1/2022	9:26:00 AM	9:27:00 AM	62	69.3	45.6	
1403	9/1/2022	9:27:00 AM	9:28:00 AM	65.9	73	43	
1404	9/1/2022	9:28:00 AM	9:29:00 AM	62.9	71.8	36.9	
1405	9/1/2022	9:29:00 AM	9:30:00 AM	63.9	71.3	48.2	
1406	9/1/2022	9:30:00 AM	9:31:00 AM	65.4	73.9	41.4	
1407	9/1/2022	9:31:00 AM	9:32:00 AM	63.2	72.2	45.2	
1408	9/1/2022	9:32:00 AM	9:33:00 AM	64.2	72.7	42.4	
1409	9/1/2022	9:33:00 AM	9:34:00 AM	66.6	73.2	54.5	
1410	9/1/2022	9:34:00 AM	9:35:00 AM	63.3	73.4	34.2	
1411	9/1/2022	9:35:00 AM	9:36:00 AM	63.7	71.2	49.9	
1412	9/1/2022	9:36:00 AM	9:37:00 AM	60.9	73.3	35.2	
1413	9/1/2022	9:37:00 AM	9:38:00 AM	66.4	73.4	50.5	
1414	9/1/2022	9:38:00 AM	9:39:00 AM	63.7	73.7	40.1	

1415	9/1/2022	9:39:00 AM	9:40:00 AM	66.9	72.7	54.3	
1416	9/1/2022	9:40:00 AM	9:41:00 AM	62.1	68.9	42.9	
1417	9/1/2022	9:41:00 AM	9:42:00 AM	66	72.2	46.9	
1418	9/1/2022	9:42:00 AM	9:43:00 AM	64.2	70.5	39.9	
1419	9/1/2022	9:43:00 AM	9:44:00 AM	63.4	71	34.1	
1420	9/1/2022	9:44:00 AM	9:45:00 AM	64.8	70.7	48.8	
1421	9/1/2022	9:45:00 AM	9:46:00 AM	65.5	74.8	47.8	
1422	9/1/2022	9:46:00 AM	9:47:00 AM	62.5	70.9	41	
1423	9/1/2022	9:47:00 AM	9:48:00 AM	64.8	71.3	49.8	
1424	9/1/2022	9:48:00 AM	9:49:00 AM	63.9	74	48.8	
1425	9/1/2022	9:49:00 AM	9:50:00 AM	64.7	75.3	41	
1426	9/1/2022	9:50:00 AM	9:51:00 AM	65.4	73.5	48.3	
1427	9/1/2022	9:51:00 AM	9:52:00 AM	62.7	73.1	42.1	
1428	9/1/2022	9:52:00 AM	9:53:00 AM	64.8	70.9	52.8	
1429	9/1/2022	9:53:00 AM	9:54:00 AM	62.8	70.5	44.8	
1430	9/1/2022	9:54:00 AM	9:55:00 AM	63.7	71	48.4	
1431	9/1/2022	9:55:00 AM	9:56:00 AM	63.4	71.9	32.2	
1432	9/1/2022	9:56:00 AM	9:57:00 AM	64	71.2	43.8	
1433	9/1/2022	9:57:00 AM	9:58:00 AM	62.8	71	47.8	
1434	9/1/2022	9:58:00 AM	9:59:00 AM	65.8	73.7	46.2	
1435	9/1/2022	9:59:00 AM	10:00:00 AM	63.5	71.2	41	
1436	9/1/2022	10:00:00 AM	10:01:00 AM	64.9	72.2	50.5	24
1437	9/1/2022	10:01:00 AM	10:02:00 AM	62.4	71.1	42.3	
1438	9/1/2022	10:02:00 AM	10:03:00 AM	67.4	75.4	55.1	
1439	9/1/2022	10:03:00 AM	10:04:00 AM	59.8	67.1	45.6	
1440	9/1/2022	10:04:00 AM	10:05:00 AM	65	72.7	45.8	
1441	9/1/2022	10:05:00 AM	10:06:00 AM	62.2	74.1	33.6	
1442	9/1/2022	10:06:00 AM	10:07:00 AM	66.1	73.5	37.2	
1443	9/1/2022	10:07:00 AM	10:08:00 AM	63.9	70.5	54	
1444	9/1/2022	10:08:00 AM	10:09:00 AM	64.8	73.2	47.2	
1445	9/1/2022	10:09:00 AM	10:10:00 AM	62.5	71.8	35.8	
1446	9/1/2022	10:10:00 AM	10:11:00 AM	65.5	71.4	52	
1447	9/1/2022	10:11:00 AM	10:12:00 AM	65.3	72.3	51.7	
1448	9/1/2022	10:12:00 AM	10:13:00 AM	59	67	46.5	
1449	9/1/2022	10:13:00 AM	10:14:00 AM	66.6	74.4	39.6	
1450	9/1/2022	10:14:00 AM	10:15:00 AM	61.7	70	43.1	
1451	9/1/2022	10:15:00 AM	10:16:00 AM	64.8	72.1	44.7	
1452	9/1/2022	10:16:00 AM	10:17:00 AM	62.3	71.5	42.9	
1453	9/1/2022	10:17:00 AM	10:18:00 AM	65.5	73.9	40.8	
1454	9/1/2022	10:18:00 AM	10:19:00 AM	61.7	70.2	50.2	
1455	9/1/2022	10:19:00 AM	10:20:00 AM	65.4	73.7	49.6	
1456	9/1/2022	10:20:00 AM	10:21:00 AM	63.8	70.4	45	
1457	9/1/2022	10:21:00 AM	10:22:00 AM	64.7	72.8	44.6	
1458	9/1/2022	10:22:00 AM	10:23:00 AM	65.1	74	50.6	
1459	9/1/2022	10:23:00 AM	10:24:00 AM	63.8	71.7	39.9	
1460	9/1/2022	10:24:00 AM	10:25:00 AM	65.1	74.1	49.5	
1461	9/1/2022	10:25:00 AM	10:26:00 AM	59.9	67.9	39.4	

1462	9/1/2022	10:26:00 AM	10:27:00 AM	66.4	73.1	55.5
1463	9/1/2022	10:27:00 AM	10:28:00 AM	56.4	65.2	38.6
1464	9/1/2022	10:28:00 AM	10:29:00 AM	65.9	74.6	53.6
1465	9/1/2022	10:29:00 AM	10:30:00 AM	52.7	64.2	30.8
1466	9/1/2022	10:30:00 AM	10:31:00 AM	66.3	73.2	48.2
1467	9/1/2022	10:31:00 AM	10:32:00 AM	63.8	71.1	55.3
1468	9/1/2022	10:32:00 AM	10:33:00 AM	66	72.9	39
1469	9/1/2022	10:33:00 AM	10:34:00 AM	62.7	71.8	48.6
1470	9/1/2022	10:34:00 AM	10:35:00 AM	61.2	70.6	47
1471	9/1/2022	10:35:00 AM	10:36:00 AM	65.8	71.9	42
1472	9/1/2022	10:36:00 AM	10:37:00 AM	62.7	70.1	40.8
1473	9/1/2022	10:37:00 AM	10:38:00 AM	64.2	71.8	43.9
1474	9/1/2022	10:38:00 AM	10:39:00 AM	65.2	73.5	46.2
1475	9/1/2022	10:39:00 AM	10:40:00 AM	62.4	70.7	43.6
1476	9/1/2022	10:40:00 AM	10:41:00 AM	64.7	70.4	51.8
1477	9/1/2022	10:41:00 AM	10:42:00 AM	64.4	73.7	48
1478	9/1/2022	10:42:00 AM	10:43:00 AM	65.8	72	51.9
1479	9/1/2022	10:43:00 AM	10:44:00 AM	64	74.2	44.1
1480	9/1/2022	10:44:00 AM	10:45:00 AM	62.8	69.3	45.9
1481	9/1/2022	10:45:00 AM	10:46:00 AM	60.9	69.2	40.8
1482	9/1/2022	10:46:00 AM	10:47:00 AM	65.3	71.7	46.6
1483	9/1/2022	10:47:00 AM	10:48:00 AM	63.5	72.7	41.6
1484	9/1/2022	10:48:00 AM	10:49:00 AM	63.9	71.8	39.3
1485	9/1/2022	10:49:00 AM	10:50:00 AM	59	69.7	42.5
1486	9/1/2022	10:50:00 AM	10:51:00 AM	63.5	70.8	38.9
1487	9/1/2022	10:51:00 AM	10:52:00 AM	64.1	72	43.4
1488	9/1/2022	10:52:00 AM	10:53:00 AM	63.2	71.4	45.4
1489	9/1/2022	10:53:00 AM	10:54:00 AM	63.7	71.4	44
1490	9/1/2022	10:54:00 AM	10:55:00 AM	64	73.3	41.2
1491	9/1/2022	10:55:00 AM	10:56:00 AM	63.5	71.6	42.8
1492	9/1/2022	10:56:00 AM	10:57:00 AM	63.1	72.2	43
1493	9/1/2022	10:57:00 AM	10:58:00 AM	61.1	69.6	45
1494	9/1/2022	10:58:00 AM	10:59:00 AM	66.7	76	41.8
1495	9/1/2022	10:59:00 AM	11:00:00 AM	63	73.9	43.6
1496	9/1/2022	11:00:00 AM	11:01:00 AM	63.1	73.9	43.4
1497	9/1/2022	11:01:00 AM	11:02:00 AM	48.3	58.2	33
1498	9/1/2022	11:02:00 AM	11:02:41 AM	57.2	69.2	30.4

Appendix B
Construction Noise Model Input/Output

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

magnitude of threshold (dBA) = 80
allowable hours over which Leq is to be averaged = 8

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
2	Site Preparation	front end loader	1	40	79	1400	4		45.6	8	480	42
		tractor	1	40	84	1400	4		50.6	8	480	47
									Total Aggregate Noise Exposure from Site Preparation Phase			**47.8**
3	Mass Grading	grader	1	40	85	1400	4		51.6	8	480	48
		scraper	1	40	84	1400	4		50.6	8	480	47
		excavator	1	40	81	1400	4		47.6	8	480	44
		scraper	1	40	84	1400	4		50.6	8	480	47
		tractor	1	40	84	1400	4		50.6	8	480	47
		scraper	1	40	84	1400	4		50.6	8	480	47
		excavator	1	40	81	1400	4		47.6	8	480	44
		backhoe	1	40	78	1400	4		44.6	8	480	41
		scraper	1	40	84	1400	4		50.6	8	480	47
		dozer	1	40	82	1400	4		48.6	8	480	45
									Total Aggregate Noise Exposure from Mass Grading Phase			**55.8**
4	Building Construction	man lift	1	20	75	1400	4		41.6	7	420	34
		front end loader	1	40	79	1400	4		45.6	7	420	41
		generator	1	50	72	1400	4		38.6	8	480	36
		man lift	1	20	75	1400	4		41.6	7	420	34
		tractor	1	40	84	1400	4		50.6	7	420	46
		backhoe	1	40	78	1400	4		44.6	7	420	40
		welder / torch	1	40	73	1400	4		39.6	8	480	36
		man lift	1	20	75	1400	4		41.6	7	420	34
		crane	1	16	81	1400	4		47.6	7	420	39
		tractor	1	40	84	1400	4		50.6	7	420	46
		backhoe	1	40	78	1400	4		44.6	7	420	40
		generator	1	50	72	1400	4		38.6	8	480	36
		man lift	1	20	75	1400	4		41.6	8	480	35
		welder / torch	1	40	73	1400	4		39.6	8	480	36
		generator	1	50	72	1400	4		38.6	8	480	36
		man lift	1	20	75	1400	4		41.6	7	420	34
		front end loader	1	40	79	1400	4		45.6	7	420	41
									Total Aggregate Noise Exposure from Building Construction Phase			**52.2**
5	Paving	paver	1	50	77	1400	4		43.6	8	480	41
		concrete mixer truck	1	40	79	1400	4		45.6	8	480	42
		roller	1	20	80	1400	4		46.6	8	480	40
		paver	1	50	77	1400	4		43.6	8	480	41
		roller	1	20	80	1400	4		46.6	8	480	40
		concrete pump truck	1	20	81	1400	4		47.6	8	480	41
		roller	1	20	80	1400	4		46.6	8	480	40
		concrete mixer truck	1	40	79	1400	4		45.6	8	480	42
		roller	1	20	80	1400	4		46.6	8	480	40
		paver	1	50	77	1400	4		43.6	8	480	41
		roller	1	20	80	1400	4		46.6	8	480	40
		concrete pump truck	1	20	81	1400	4		47.6	8	480	41
		roller	1	20	80	1400	4		46.6	8	480	40
		concrete mixer truck	1	40	79	1400	4		45.6	8	480	42

		paver	1	50	77	1400	4		43.6	8	480	41
		roller	1	20	80	1400	4		46.6	8	480	40
		concrete pump truck	1	20	81	1400	4		47.6	8	480	41
		roller	1	20	80	1400	4		46.6	8	480	40
		concrete mixer truck	1	40	79	1400	4		45.6	8	480	42
		roller	1	20	80	1400	4		46.6	8	480	40
		paver	1	50	77	1400	4		43.6	8	480	41
		roller	1	20	80	1400	4		46.6	8	480	40
		concrete pump truck	1	20	81	1400	4		47.6	8	480	41
		roller	1	20	80	1400	4		46.6	8	480	40
		concrete mixer truck	1	40	79	1400	4		45.6	8	480	42
		roller	1	20	80	1400	4		46.6	8	480	40
		paver	1	50	77	1400	4		43.6	8	480	41
		roller	1	20	80	1400	4		46.6	8	480	40
		concrete pump truck	1	20	81	1400	4		47.6	8	480	41
		roller	1	20	80	1400	4		46.6	8	480	40
										Total Aggregate Noise Exposure from Paving Phase		**55.2**
6	Architecture	compressor (air)	1	40	78	1400	4		44.6	6	360	39
		man lift	1	20	75	1400	4		41.6	6	360	33
		compressor (air)	1	40	78	1400	4		44.6	6	360	39
		man lift	1	20	75	1400	4		41.6	6	360	33
		compressor (air)	1	40	78	1400	4		44.6	6	360	39
		man lift	1	20	75	1400	4		41.6	6	360	33
										Total Aggregate Noise Exposure from Phase		**45.1**

To User: bordered cells are inputs, unbordered cells have formulae
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air abs? 0
grnd abs? 0

magnitude of threshold (dBA) = 80
allowable hours over which Leq is to be averaged = 8

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
2	Site Preparation	front end loader	1	40	79	170	5		63.2	8	480	59
		tractor	1	40	84	200	5		66.8	8	480	63
								Total Aggregate Noise Exposure from Site Preparation Phase				**64.4**
3	Mass Grading	grader	1	40	85	170	5		69.2	8	480	65
		scraper	1	40	84	200	5		66.8	8	480	63
		excavator	1	40	81	300	5		60.4	8	480	56
		scraper	1	40	84	400	5		61.0	8	480	57
		tractor	1	40	84	500	5		59.1	8	480	55
		scraper	1	40	84	600	5		57.6	8	480	54
		excavator	1	40	81	700	5		53.3	8	480	49
		backhoe	1	40	78	800	5		49.2	8	480	45
		scraper	1	40	84	900	5		54.3	8	480	50
		dozer	1	40	82	1000	5		51.4	8	480	47
								Total Aggregate Noise Exposure from Mass Grading Phase				**68.5**
4	Building Construction	man lift	1	20	75	270	5		55.3	7	420	48
		front end loader	1	40	79	300	5		58.4	7	420	54
		generator	1	50	72	400	5		49.0	8	480	46
		man lift	1	20	75	500	5		50.1	7	420	43
		tractor	1	40	84	600	5		57.6	7	420	53
		backhoe	1	40	78	700	5		50.3	7	420	46
		welder / torch	1	40	73	800	5		44.2	8	480	40
		man lift	1	20	75	900	5		45.3	7	420	38
		crane	1	16	81	1000	5		50.4	7	420	42
		tractor	1	40	84	1100	5		52.6	7	420	48
		backhoe	1	40	78	1200	5		45.9	7	420	41
		generator	1	50	72	1300	4		39.2	8	480	36
		man lift	1	20	75	1400	4		41.6	8	480	35
		welder / torch	1	40	73	1500	4		39.1	8	480	35
		generator	1	50	72	1600	4		37.5	8	480	35
		man lift	1	20	75	1700	4		40.0	7	420	32
		front end loader	1	40	79	1800	4		43.6	7	420	39
								Total Aggregate Noise Exposure from Building Construction Phase				**58.6**
5	Paving	paver	1	50	77	170	5		61.2	8	480	58
		concrete mixer truck	1	40	79	200	5		61.8	8	480	58
		roller	1	20	80	300	5		59.4	8	480	52
		paver	1	50	77	400	5		54.0	8	480	51
		roller	1	20	80	500	5		55.1	8	480	48
		concrete pump truck	1	20	81	600	5		54.6	8	480	48
		roller	1	20	80	700	5		52.3	8	480	45
		concrete mixer truck	1	40	79	800	5		50.2	8	480	46
		roller	1	20	80	900	5		50.3	8	480	43
		paver	1	50	77	1000	5		46.4	8	480	43
		roller	1	20	80	1100	5		48.6	8	480	42
		concrete pump truck	1	20	81	1200	5		48.9	8	480	42
		roller	1	20	80	1300	4		47.2	8	480	40
		concrete mixer truck	1	40	79	1400	4		45.6	8	480	42

		paver	1	50	77	1500	4		43.1	8	480	40
		roller	1	20	80	1600	4		45.5	8	480	39
		concrete pump truck	1	20	81	1700	4		46.0	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38
		concrete mixer truck	1	40	79	1900	4		43.1	8	480	39
		roller	1	20	80	2000	4		43.7	8	480	37
		paver	1	50	77	400	5		54.0	8	480	51
		roller	1	20	80	500	5		55.1	8	480	48
		concrete pump truck	1	20	81	600	5		54.6	8	480	48
		roller	1	20	80	700	5		52.3	8	480	45
		concrete mixer truck	1	40	79	800	5		50.2	8	480	46
		roller	1	20	80	900	5		50.3	8	480	43
		paver	1	50	77	1000	5		46.4	8	480	43
		roller	1	20	80	1100	5		48.6	8	480	42
		concrete pump truck	1	20	81	1200	5		48.9	8	480	42
		roller	1	20	80	1300	4		47.2	8	480	40
											Total Aggregate Noise Exposure from Paving Phase	**63.6**
6	Architecture	compressor (air)	1	40	78	270	5		58.3	6	360	53
		man lift	1	20	75	300	5		54.4	6	360	46
		compressor (air)	1	40	78	400	5		55.0	6	360	50
		man lift	1	20	75	500	5		50.1	6	360	42
		compressor (air)	1	40	78	600	5		51.6	6	360	46
		man lift	1	20	75	700	5		47.3	6	360	39
											Total Aggregate Noise Exposure from Phase	**56.1**

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air abs? 0
grnd abs? 0

magnitude of threshold (dBA) = 80
allowable hours over which Leq is to be averaged = 8

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
2	Site Preparation	front end loader	1	40	79	1800	4		43.6	8	480	40
		tractor	1	40	84	1800	4		48.6	8	480	45
								Total Aggregate Noise Exposure from Site Preparation Phase				**45.8**
3	Mass Grading	grader	1	40	85	1800	4		49.6	8	480	46
		scraper	1	40	84	1800	4		48.6	8	480	45
		excavator	1	40	81	1800	4		45.6	8	480	42
		scraper	1	40	84	1800	4		48.6	8	480	45
		tractor	1	40	84	1800	4		48.6	8	480	45
		scraper	1	40	84	1800	4		48.6	8	480	45
		excavator	1	40	81	1800	4		45.6	8	480	42
		backhoe	1	40	78	1800	4		42.6	8	480	39
		scraper	1	40	84	1800	4		48.6	8	480	45
		dozer	1	40	82	1800	4		46.6	8	480	43
								Total Aggregate Noise Exposure from Mass Grading Phase				**53.7**
4	Building Construction	man lift	1	20	75	1800	4		39.6	7	420	32
		front end loader	1	40	79	1800	4		43.6	7	420	39
		generator	1	50	72	1800	4		36.6	8	480	34
		man lift	1	20	75	1800	4		39.6	7	420	32
		tractor	1	40	84	1800	4		48.6	7	420	44
		backhoe	1	40	78	1800	4		42.6	7	420	38
		welder / torch	1	40	73	1800	4		37.6	8	480	34
		man lift	1	20	75	1800	4		39.6	7	420	32
		crane	1	16	81	1800	4		45.6	7	420	37
		tractor	1	40	84	1800	4		48.6	7	420	44
		backhoe	1	40	78	1800	4		42.6	7	420	38
		generator	1	50	72	1800	4		36.6	8	480	34
		man lift	1	20	75	1800	4		39.6	8	480	33
		welder / torch	1	40	73	1800	4		37.6	8	480	34
		generator	1	50	72	1800	4		36.6	8	480	34
		man lift	1	20	75	1800	4		39.6	7	420	32
		front end loader	1	40	79	1800	4		43.6	7	420	39
								Total Aggregate Noise Exposure from Building Construction Phase				**50.2**
5	Paving	paver	1	50	77	1800	4		41.6	8	480	39
		concrete mixer truck	1	40	79	1800	4		43.6	8	480	40
		roller	1	20	80	1800	4		44.6	8	480	38
		paver	1	50	77	1800	4		41.6	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38
		concrete pump truck	1	20	81	1800	4		45.6	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38
		concrete mixer truck	1	40	79	1800	4		43.6	8	480	40
		roller	1	20	80	1800	4		44.6	8	480	38
		paver	1	50	77	1800	4		41.6	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38
		concrete pump truck	1	20	81	1800	4		45.6	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38
		concrete mixer truck	1	40	79	1800	4		43.6	8	480	40
		paver	1	50	77	1800	4		41.6	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38

		concrete pump truck	1	20	81	1800	4		45.6	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38
		concrete mixer truck	1	40	79	1800	4		43.6	8	480	40
		roller	1	20	80	1800	4		44.6	8	480	38
		paver	1	50	77	1800	4		41.6	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38
		concrete pump truck	1	20	81	1800	4		45.6	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38
		concrete mixer truck	1	40	79	1800	4		43.6	8	480	40
		roller	1	20	80	1800	4		44.6	8	480	38
		paver	1	50	77	1800	4		41.6	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38
		concrete pump truck	1	20	81	1800	4		45.6	8	480	39
		roller	1	20	80	1800	4		44.6	8	480	38
										Total Aggregate Noise Exposure from Paving Phase		**53.1**
6	Architecture	compressor (air)	1	40	78	1800	4		42.6	6	360	37
		man lift	1	20	75	1800	4		39.6	6	360	31
		compressor (air)	1	40	78	1800	4		42.6	6	360	37
		man lift	1	20	75	1800	4		39.6	6	360	31
		compressor (air)	1	40	78	1800	4		42.6	6	360	37
		man lift	1	20	75	1800	4		39.6	6	360	31
										Total Aggregate Noise Exposure from Phase		**43.1**

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air abs? 0
grnd abs? 0

magnitude of threshold (dBA) = 80
allowable hours over which Leq is to be averaged = 8

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
2	Site Preparation	front end loader	1	40	79	750	5		50.8	8	480	47
		tractor	1	40	84	800	5		55.2	8	480	51
								Total Aggregate Noise Exposure from Site Preparation Phase				**52.6**
3	Mass Grading	grader	1	40	85	750	5		56.8	8	480	53
		scraper	1	40	84	800	5		55.2	8	480	51
		excavator	1	40	81	900	5		51.3	8	480	47
		scraper	1	40	84	1000	5		53.4	8	480	49
		tractor	1	40	84	1100	5		52.6	8	480	49
		scraper	1	40	84	1200	5		51.9	8	480	48
		excavator	1	40	81	1300	4		48.2	8	480	44
		backhoe	1	40	78	1400	4		44.6	8	480	41
		scraper	1	40	84	1500	4		50.1	8	480	46
		dozer	1	40	82	1600	4		47.5	8	480	44
								Total Aggregate Noise Exposure from Mass Grading Phase				**58.5**
4	Building Construction	man lift	1	20	75	850	5		45.7	7	420	38
		front end loader	1	40	79	900	5		49.3	7	420	45
		generator	1	50	72	1000	5		41.4	8	480	38
		man lift	1	20	75	1100	5		43.6	7	420	36
		tractor	1	40	84	1200	5		51.9	7	420	47
		backhoe	1	40	78	1300	4		45.2	7	420	41
		welder / torch	1	40	73	1400	4		39.6	8	480	36
		man lift	1	20	75	1500	4		41.1	7	420	33
		crane	1	16	81	1600	4		46.5	7	420	38
		tractor	1	40	84	1700	4		49.0	7	420	44
		backhoe	1	40	78	1800	4		42.6	7	420	38
		generator	1	50	72	1900	4		36.1	8	480	33
		man lift	1	20	75	2000	4		38.7	8	480	32
		welder / torch	1	40	73	2100	4		36.3	8	480	32
		generator	1	50	72	2200	4		34.9	8	480	32
		man lift	1	20	75	2300	4		37.6	7	420	30
		front end loader	1	40	79	2400	4		41.2	7	420	37
								Total Aggregate Noise Exposure from Building Construction Phase				**52.4**
5	Paving	paver	1	50	77	750	5		48.8	8	480	46
		concrete mixer truck	1	40	79	800	5		50.2	8	480	46
		roller	1	20	80	900	5		50.3	8	480	43
		paver	1	50	77	1000	5		46.4	8	480	43
		roller	1	20	80	1100	5		48.6	8	480	42
		concrete pump truck	1	20	81	1200	5		48.9	8	480	42
		roller	1	20	80	1300	4		47.2	8	480	40
		concrete mixer truck	1	40	79	1400	4		45.6	8	480	42
		roller	1	20	80	1500	4		46.1	8	480	39
		paver	1	50	77	1600	4		42.5	8	480	40
		roller	1	20	80	1700	4		45.0	8	480	38
		concrete pump truck	1	20	81	1800	4		45.6	8	480	39
		roller	1	20	80	1900	4		44.1	8	480	37
		concrete mixer truck	1	40	79	2000	4		42.7	8	480	39
		paver	1	50	77	2100	4		40.3	8	480	37
		roller	1	20	80	2200	4		42.9	8	480	36

		concrete pump truck	1	20	81	2300	4		43.6	8	480	37
		roller	1	20	80	2400	4		42.2	8	480	35
		concrete mixer truck	1	40	79	2500	4		40.9	8	480	37
		roller	1	20	80	2600	4		41.6	8	480	35
		paver	1	50	77	1000	5		46.4	8	480	43
		roller	1	20	80	1100	5		48.6	8	480	42
		concrete pump truck	1	20	81	1200	5		48.9	8	480	42
		roller	1	20	80	1300	4		47.2	8	480	40
		concrete mixer truck	1	40	79	1400	4		45.6	8	480	42
		roller	1	20	80	1500	4		46.1	8	480	39
		paver	1	50	77	1600	4		42.5	8	480	40
		roller	1	20	80	1700	4		45.0	8	480	38
		concrete pump truck	1	20	81	1800	4		45.6	8	480	39
		roller	1	20	80	1900	4		44.1	8	480	37
										Total Aggregate Noise Exposure from Paving Phase		**55.6**
6	Architecture	compressor (air)	1	40	78	850	5		48.7	6	360	43
		man lift	1	20	75	900	5		45.3	6	360	37
		compressor (air)	1	40	78	1000	5		47.4	6	360	42
		man lift	1	20	75	1100	5		43.6	6	360	35
		compressor (air)	1	40	78	1200	5		45.9	6	360	41
		man lift	1	20	75	1300	4		42.2	6	360	34
										Total Aggregate Noise Exposure from Phase		**47.9**

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air abs? 0
grnd abs? 0

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allowable hours over which Leq is to be averaged = 8

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Road Removal/ Utility Install	Concrete Saw	1	20	90	800	5		61.2	8	480	54
		Front End Loader	1	40	79	800	5		50.2	8	480	46
		Excavator	1	40	81	800	5		52.2	8	480	48
		Pumps	1	50	77	800	5		48.2	8	480	45
		Excavator	1	40	81	800	5		52.2	8	480	48
		Concrete Saw	1	20	90	800	5		61.2	8	480	54
		Pumps	1	50	77	800	5		48.2	8	480	45
		Excavator	1	40	81	800	5		52.2	8	480	48
		Pumps	1	50	77	800	5		48.2	8	480	45
		Tractor	1	40	84	800	5		55.2	8	480	51
		Concrete Saw	1	20	90	800	5		61.2	8	480	54
		Backhoe	1	40	78	800	5		49.2	8	480	45
									Total Aggregate Noise Exposure from Road Removal/ Utility Install Phase			**61.2**
2	Paving (Continual and Final)	paver	1	50	77	800	5		48.2	8	480	45
		concrete mixer truck	1	40	79	800	5		50.2	8	480	46
		roller	1	20	80	800	5		51.2	8	480	44
		paver	1	50	77	800	5		48.2	8	480	45
		roller	1	20	80	800	5		51.2	8	480	44
		concrete pump truck	1	20	81	800	5		52.2	8	480	45
		roller	1	20	80	800	5		51.2	8	480	44
		concrete mixer truck	1	40	79	800	5		50.2	8	480	46
		roller	1	20	80	800	5		51.2	8	480	44
									Total Aggregate Noise Exposure from Paving (Continual and Final) Phase			**54.6**
3	Architectural Coating (Striping)	compressor (air)	1	40	78	800	5		49.2	7	420	45
		compressor (air)	1	40	78	800	5		49.2	7	420	45
		compressor (air)	1	40	78	800	5		49.2	8	480	45
									Total Aggregate Noise Exposure from Architectural Coating (Striping) Phase			**49.6**
4	Testing	generator	1	50	72	800	5		43.2	8	480	40
		generator	1	50	72	800	5		43.2	8	480	40
		generator	1	50	72	800	5		43.2	8	480	40
									Total Aggregate Noise Exposure from Testing Phase			**45.0**

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

magnitude of threshold (dBA) = 80
allowable hours over which Leq is to be averaged = 8

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Road Removal/ Utility Install	Concrete Saw	1	20	90	100	5		78.9	8	480	72
		Front End Loader	1	40	79	200	5		61.8	8	480	58
		Excavator	1	40	81	300	5		60.4	8	480	56
		Pumps	1	50	77	400	5		54.0	8	480	51
		Excavator	1	40	81	500	5		56.1	8	480	52
		Concrete Saw	1	20	90	600	5		63.6	8	480	57
		Pumps	1	50	77	700	5		49.3	8	480	46
		Excavator	1	40	81	800	5		52.2	8	480	48
		Pumps	1	50	77	900	5		47.3	8	480	44
		Tractor	1	40	84	1000	5		53.4	8	480	49
		Concrete Saw	1	20	90	1100	5		58.6	8	480	52
		Backhoe	1	40	78	1200	5		45.9	8	480	42
									Total Aggregate Noise Exposure from Road Removal/ Utility Install Phase			**72.4**
2	Paving (Continual and Final)	paver	1	50	77	100	5		65.9	8	480	63
		concrete mixer truck	1	40	79	200	5		61.8	8	480	58
		roller	1	20	80	300	5		59.4	8	480	52
		paver	1	50	77	400	5		54.0	8	480	51
		roller	1	20	80	500	5		55.1	8	480	48
		concrete pump truck	1	20	81	600	5		54.6	8	480	48
		roller	1	20	80	700	5		52.3	8	480	45
		concrete mixer truck	1	40	79	800	5		50.2	8	480	46
		roller	1	20	80	900	5		50.3	8	480	43
									Total Aggregate Noise Exposure from Paving (Continual and Final) Phase			**64.8**
3	Architectural Coating (Striping)	compressor (air)	1	40	78	100	5		66.9	7	420	62
		compressor (air)	1	40	78	200	5		60.8	7	420	56
		compressor (air)	1	40	78	300	5		57.4	8	480	53
									Total Aggregate Noise Exposure from Architectural Coating (Striping) Phase			**63.7**
4	Testing	generator	1	50	72	100	5		60.9	8	480	58
		generator	1	50	72	200	5		54.8	8	480	52
		generator	1	50	72	300	5		51.4	8	480	48
									Total Aggregate Noise Exposure from Testing Phase			**59.2**

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

magnitude of threshold (dBA) = 80
allowable hours over which Leq is to be averaged = 8

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Road Removal / Utility Install	Concrete Saw	1	20	90	800	5		61.2	8	480	54
		Front End Loader	1	40	79	800	5		50.2	8	480	46
		Excavator	1	40	81	800	5		52.2	8	480	48
		Pumps	1	50	77	800	5		48.2	8	480	45
		Excavator	1	40	81	800	5		52.2	8	480	48
		Concrete Saw	1	20	90	800	5		61.2	8	480	54
		Pumps	1	50	77	800	5		48.2	8	480	45
		Excavator	1	40	81	800	5		52.2	8	480	48
		Pumps	1	50	77	800	5		48.2	8	480	45
		Tractor	1	40	84	800	5		55.2	8	480	51
		Concrete Saw	1	20	90	800	5		61.2	8	480	54
		Backhoe	1	40	78	800	5		49.2	8	480	45
									Total Aggregate Noise Exposure from Road Removal / Utility Install Phase			**61.2**
2	Paving (Continual and Final)	paver	1	50	77	800	5		48.2	8	480	45
		concrete mixer truck	1	40	79	800	5		50.2	8	480	46
		roller	1	20	80	800	5		51.2	8	480	44
		paver	1	50	77	800	5		48.2	8	480	45
		roller	1	20	80	800	5		51.2	8	480	44
		concrete pump truck	1	20	81	800	5		52.2	8	480	45
		roller	1	20	80	800	5		51.2	8	480	44
		concrete mixer truck	1	40	79	800	5		50.2	8	480	46
		roller	1	20	80	800	5		51.2	8	480	44
									Total Aggregate Noise Exposure from Paving (Continual and Final) Phase			**54.6**
3	Architectural Coating (Striping)	compressor (air)	1	40	78	800	5		49.2	7	420	45
		compressor (air)	1	40	78	800	5		49.2	7	420	45
		compressor (air)	1	40	78	800	5		49.2	8	480	45
									Total Aggregate Noise Exposure from Architectural Coating (Striping) Phase			**49.6**
4	Testing	generator	1	50	72	800	5		43.2	8	480	40
		generator	1	50	72	800	5		43.2	8	480	40
		generator	1	50	72	800	5		43.2	8	480	40
									Total Aggregate Noise Exposure from Testing Phase			**45.0**

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

magnitude of threshold (dBA) = 80
allowable hours over which Leq is to be averaged = 8

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Road Removal/ Utility Install	Concrete Saw	1	20	90	100	5		78.9	8	480	72
		Front End Loader	1	40	79	200	5		61.8	8	480	58
		Excavator	1	40	81	300	5		60.4	8	480	56
		Pumps	1	50	77	400	5		54.0	8	480	51
		Excavator	1	40	81	500	5		56.1	8	480	52
		Concrete Saw	1	20	90	600	5		63.6	8	480	57
		Pumps	1	50	77	700	5		49.3	8	480	46
		Excavator	1	40	81	800	5		52.2	8	480	48
		Pumps	1	50	77	900	5		47.3	8	480	44
		Tractor	1	40	84	1000	5		53.4	8	480	49
		Concrete Saw	1	20	90	1100	5		58.6	8	480	52
		Backhoe	1	40	78	1200	5		45.9	8	480	42
									Total Aggregate Noise Exposure from Road Removal/ Utility Install Phase			**72.4**
2	Paving (Continual and Final)	paver	1	50	77	100	5		65.9	8	480	63
		concrete mixer truck	1	40	79	200	5		61.8	8	480	58
		roller	1	20	80	300	5		59.4	8	480	52
		paver	1	50	77	400	5		54.0	8	480	51
		roller	1	20	80	500	5		55.1	8	480	48
		concrete pump truck	1	20	81	600	5		54.6	8	480	48
		roller	1	20	80	700	5		52.3	8	480	45
		concrete mixer truck	1	40	79	800	5		50.2	8	480	46
		roller	1	20	80	900	5		50.3	8	480	43
									Total Aggregate Noise Exposure from Paving (Continual and Final) Phase			**64.8**
3	Architectural Coating (Striping)	compressor (air)	1	40	78	100	5		66.9	7	420	62
		compressor (air)	1	40	78	200	5		60.8	7	420	56
		compressor (air)	1	40	78	300	5		57.4	8	480	53
									Total Aggregate Noise Exposure from Architectural Coating (Striping) Phase			**63.7**
4	Testing	generator	1	50	72	100	5		60.9	8	480	58
		generator	1	50	72	200	5		54.8	8	480	52
		generator	1	50	72	300	5		51.4	8	480	48
									Total Aggregate Noise Exposure from Testing Phase			**59.2**

Appendix C
Mechanical Noise Calculations

TECHNICAL GUIDE

R-410A
ZE/ZF/ZR/XN/XP SERIES
3 - 6 TON
60 Hertz

Description

YORK® ZE/ZF/ZR/XN/XP Series units are convertible single package high efficiency rooftops with a common roof curb for the 3, 4, 5 and 6 Ton sizes (ZE, ZR, XN, XP not available in 6 Ton). Although the units are primarily designed for curb mounting on a roof, they can also be slab-mounted at ground level or set on steel beams above a finished roof.

All ZE/ZF/ZR/XN/XP Series units are self-contained and assembled on rigid full perimeter base rails allowing for overhead rigging. Every unit is completely charged, wired, piped and tested at the factory to provide a quick and easy field installation.

All models (including those with an economizer) are convertible between bottom and horizontal duct connections.

ZE/ZF/ZR Series units are available in the following configurations: cooling only, cooling with electric heat, and cooling with one or two stage gas heat. Electric heaters are available as factory-installed option or field installed accessory.

XN/XP Series units are available in the following configurations: cooling and heating only and cooling and heating with electric heat.

Tested in accordance with:

DESIGN CERTIFIED

C SA US

CERTIFIED

AHRI CERTIFIED www.ahridirectory.org Unitary Small AC AHRI Standard 210/240

AHRI CERTIFIED www.ahridirectory.org Unitary Small HP AHRI Standard 210/240

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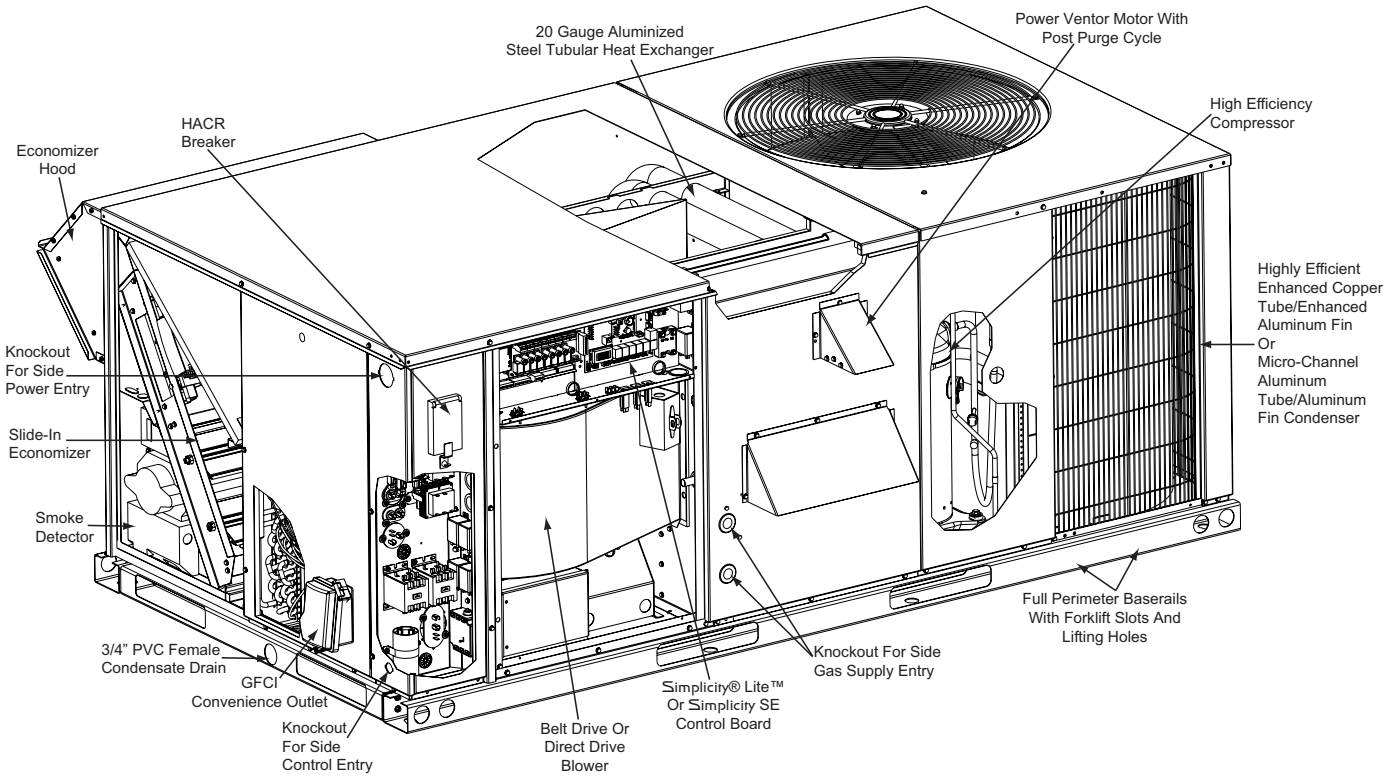
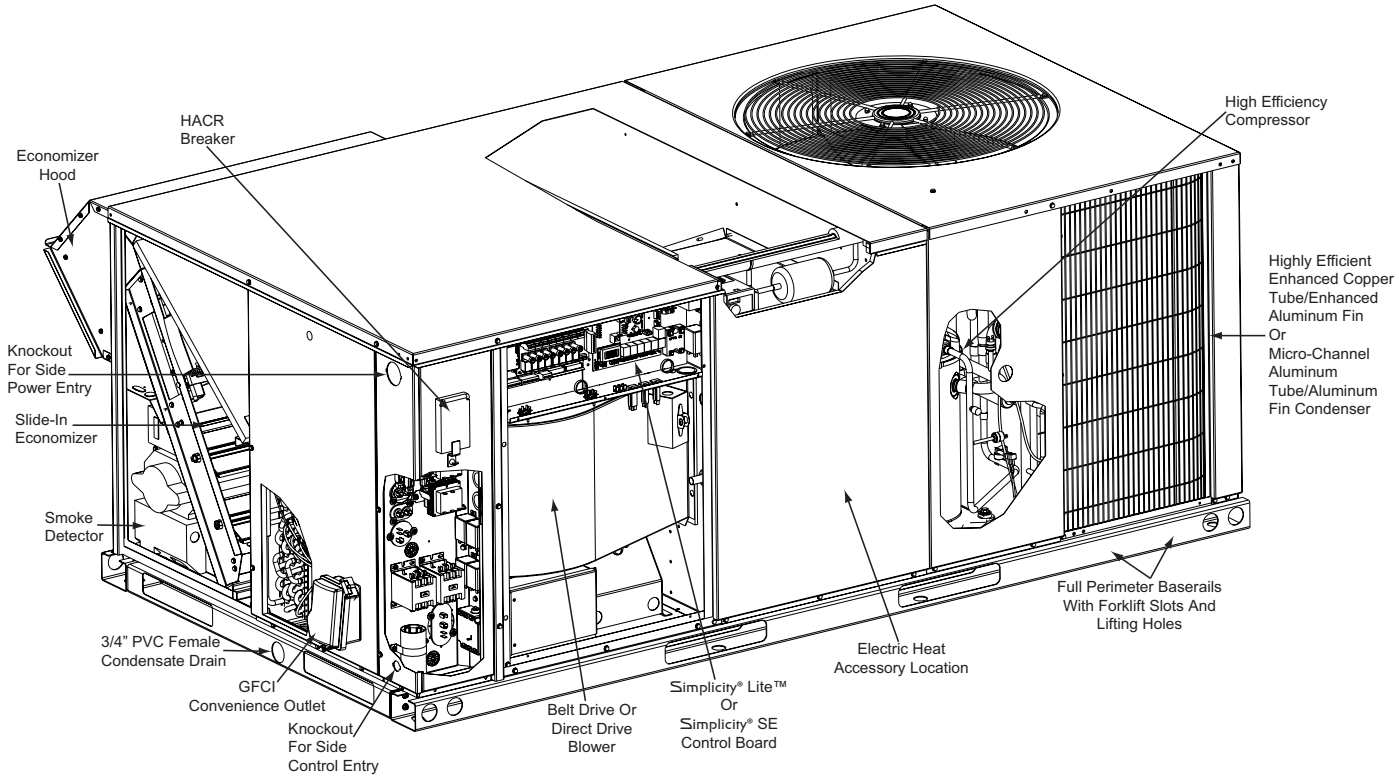
Component Location

Gas/Electric



Electric/Electric and Heat Pump



Sound Performance

ZF/ZR/XP Indoor Sound Power Levels

Size (Tons)	CFM	ESP (IWG)	Blower		Sound Power, dB (10^{-12}) Watts							
					Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)						
			RPM	BHP		63	125	250	500	1000	2000	4000	8000
036 (3.0)	1200	0.2	630	0.41	63	82	77	59	50	43	42	40	45
048 (4.0)	1600	0.2	791	0.54	72	95	84	58	54	46	44	45	44
060 (5.0)	2000	0.2	840	0.67	62	84	71	58	53	50	49	49	49
072 (6.0)	2200	0.3	920	1.45	76	61	71	68	67	72	66	61	54

1. These values have been accessed using a model of sound propagation from a point source into the hemispheric/free field. The dBA values provided are to be used for reference only. Calculation of dBA values cover matters of system design and the fan manufacture has no way of knowing the details of each system. This constitutes an exception to any specification or guarantee requiring a dBA value of sound data in any other form than sound power level ratings.

ZE/ZF/ZR Outdoor Sound Power Levels

Size (Tons)	Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
036 (3.0)	81	87.5	86.0	81.0	77.0	75.0	69.5	65.5	70.5
048 (4.0)	80	84.5	81.0	80.0	78.0	75.0	70.0	67.0	70.5
060 (5.0)	82	86.5	87.5	81.5	77.5	75.0	71.5	68.0	70.5
072 (6.0)	83	-	84.0	85.0	79.0	80.0	72.0	67.5	62.5

1. Rated in accordance with AHRI 270 standard.

XN/XP Outdoor Sound Power Levels

Size (Tons)	Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
036 (3.0)	76	83.5	84.5	76.5	72.0	68.0	66.0	60.0	56.0
048 (4.0)	80	85.0	83.0	81.0	77.5	75.5	71.5	67.5	61.5
060 (5.0)	80	86.0	84.0	81.0	77.0	75.5	71.0	66.5	60.5

1. Rated in accordance with AHRI 270 standard.

from CMS "Midpoint at 237" March 27, 2014 noise study				Dudek time estimate			
	dBA	dist (feet)	at 50'	minutes per hour	hourly Leq	source	PWL
truck passby	68	30	63.6	2	48.8	**traveling on lot**	**83.5**
truck airbrakes	72	25	66.0	0.05	35.2	at dock	69.8
truck backup alarm	79	30	74.6	0.1	46.8	at dock	81.4
idle before shutoff	70	25	64.0	5	53.2	at dock	87.8
truck engine ignition + airbrakes	71	25	65.0	0.05	34.2	at dock	68.8
truck accelerating from stop	74	25	68.0	0.05	37.2	at dock	71.8
						total at dock	**88.9**

dock door quantities from 5/2/23 siteplan		peak hour trips*	split**	log add***
Building 1	docks	5		
north	15		5.0	7.0
Building 2	docks	5		
north	14		5.0	7.0
Building 3	docks	40		
east	100		20.0	13.0
west	100		20.0	13.0

*(3 and 4-axle trucks)
**(based on dock ratio for the building)
***(to single truck noise levels)

Bericht (Future w Proj.cna)

Gruppentabelle Tag und Nacht

Name	Expression	Partial Sum Level					
		M1		M2		M3	
		Day	Night	Day	Night	Day	Night

Source			Partial Level					
Name	M.	ID	M1		M2		M3	
			Day	Night	Day	Night	Day	Night
HVAC Bldg 1			11.2	11.2	16.6	16.6	10.4	10.4
HVAC Bldg 1			11.7	11.7	11.2	11.2	8.6	8.6
HVAC Bldg 2			18.9	18.9	8.5	8.5	7.9	7.9
HVAC Bldg 2			27.0	27.0	9.2	9.2	6.7	6.7
HVAC Bldg 3			11.1	11.1	19.8	19.8	17.1	17.1
Truck Yard Noise			8.8	8.8	7.9	7.9	16.8	16.8
Truck Yard Noise			29.9	29.9	6.9	6.9	6.7	6.7
Truck Yard Noise			9.0	9.0	28.3	28.3	29.3	29.3
Truck Yard Noise			14.2	14.2	4.4	4.4	15.7	15.7
Onsite Truck Movement Noise			30.1	30.1	7.8	7.8	8.2	8.2
Onsite Truck Movement Noise			10.3	10.3	19.6	19.6	13.7	13.7
Onsite Truck Movement Noise			33.0	33.0	13.2	13.2	9.9	9.9
Onsite Truck Movement Noise			14.5	14.5	24.4	24.4	20.4	20.4

Schallquellen

Punktquellen

Name	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time		
			Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night
			(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)		(min)	(min)	(min)
HVAC Bldg 1			83.0	83.0	83.0	Lw	83		0.0	0.0	0.0						
HVAC Bldg 1			83.0	83.0	83.0	Lw	83		0.0	0.0	0.0						
HVAC Bldg 2			83.0	83.0	83.0	Lw	83		0.0	0.0	0.0						
HVAC Bldg 2			83.0	83.0	83.0	Lw	83		0.0	0.0	0.0						
HVAC Bldg 3			89.0	89.0	89.0	Lw	89		0.0	0.0	0.0						

Linienquellen

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Correction			Sound Reducti	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)
Truck Yard Noise			95.9	95.9	95.9	77.0	77.0	77.0	Lw	95.9		0.0	0.0	0.0		
Truck Yard Noise			101.9	101.9	101.9	75.5	75.5	75.5	Lw	101.9		0.0	0.0	0.0		
Truck Yard Noise			101.9	101.9	101.9	75.5	75.5	75.5	Lw	101.9		0.0	0.0	0.0		
Truck Yard Noise			95.9	95.9	95.9	77.2	77.2	77.2	Lw	95.9		0.0	0.0	0.0		
Onsite Truck Movement Noise			90.5	90.5	90.5	66.6	66.6	66.6	Lw	90.5		0.0	0.0	0.0		
Onsite Truck Movement Noise			90.5	90.5	90.5	66.5	66.5	66.5	Lw	90.5		0.0	0.0	0.0		
Onsite Truck Movement Noise			96.5	96.5	96.5	68.9	68.9	68.9	Lw	96.5		0.0	0.0	0.0		
Onsite Truck Movement Noise			96.5	96.5	96.5	68.8	68.8	68.8	Lw	96.5		0.0	0.0	0.0		

Flächenquellen

Name	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Correction			Sound Reduction		Attenuation	Ope
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)		(min)

Flächenquellen vertikal

Name	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Correction			Sound Reduction		Attenuation	Ope
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)		(min)

Schienen

Name	M.	ID	Lm,E		Train Class	Add.Level				Vmax
			Day	Night		Dfb	Dbr	Dbü	Dra	
			(dBA)	(dBA)		(dB)	(dB)	(dB)	(dB)	(km/h)

Zugklassen

Name	M.	ID	Lm,E		Train Class										Add.Level				Vmax
			Day	Night	Type	p	Number of Trains			v	l	Dfz	Dae	Lm,E,i (dB)		Dfb	Dbr	Dbü	Dra	
			(dBA)	(dBA)		(%)	Day	Evening	Night	(km/h)	(m)	(dB)	(dB)	Day	Night	(dB)	(dB)	(dB)	(dB)	(km/h)

Name	Lm,E		Train Class									
	Day	Night	Type	p	Number of Trains			v	l	Dfz	Dae	Lm,E,i (dB)	
	(dBA)	(dBA)		(%)	Day	Evening	Night	(km/h)	(m)	(dB)	(dB)	Day	Night

Parkplätze

Name	M.	ID	Type	Lwa			Event Data						Penalty Type		Penalty Surface		A
				Day	Special	Night	Ref. Quantity	Number B	No. Spaces/RefQ	Events/h/RefQ			Kpa	Type	Kstro	Surface	
				(dBA)	(dBA)	(dBA)				Day	Special	Night	(dB)		(dB)		

Strassen

Name	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		C
			Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type	
			(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(km/h)	(km/h)		(dB)		
			0.0	0.0	0.0	0	Federal Road							100		0.0	0.0	1	
			0.0	0.0	0.0	0	Federal Road							100		0.0	0.0	1	
			0.0	0.0	0.0	0	Federal Road							100		0.0	0.0	1	

Ampeln

Name	M.	ID	Active			Height	Coordinates		
			Day	Evening	Night	Begin	X	Y	Z
						(m)	(m)	(m)	(m)

Immissionspunkte

Name	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
			Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)				(m)		(m)	(m)	(m)
M1			36.7	36.7	0.0	0.0		x	Total	1.52	r	548.06	482.28	1.52
M2			31.0	31.0	0.0	0.0		x	Total	1.52	r	1185.27	469.86	1.52
M3			30.7	30.7	0.0	0.0		x	Total	1.52	r	1408.76	914.03	1.52

Gebietsausweisungen

Name	M.	ID	Type	Persons
				(1/km²)

Hindernisse

Schirme

Name	M.	ID	Absorption		Z-Ext.	Cantilever		Height			
			left	right		horz.	vert.	Begin		End	
					(m)	(m)	(m)	(m)		(m)	
								15.85	r	15.85	r
								13.72	r	13.72	r
								13.72	r	13.72	r
								1.83	r	1.83	r
								1.83	r	1.83	r

Häuser

Name	M.	ID	RB	Residents	Absorption	Height
						Begin
						(m)

Bewuchs

Name	M.	ID	Height
			(m)

Bebauung

Name	M.	ID	Type	Attenuation	B	m	Height
				dB/100m	%	1/m	(m)

Geometriedaten

Geometrie Linienquellen

Name	Height				Coordinates			
	Begin		End		x	y	z	Ground
	(m)		(m)		(m)	(m)	(m)	(m)
Truck Yard Noise	1.52	r	1.52	r	811.00	620.48	1.52	0.00
					889.38	619.80	1.52	0.00
Truck Yard Noise	2.44	r	2.44	r	656.46	801.96	2.44	0.00
					657.53	1242.55	2.44	0.00
Truck Yard Noise	2.44	r	2.44	r	878.91	797.26	2.44	0.00
					877.29	1237.17	2.44	0.00
Truck Yard Noise	1.52	r	1.52	r	637.76	617.62	1.52	0.00
					711.44	617.28	1.52	0.00
Onsite Truck Movement Noise	1.52	r	1.52	r	564.30	525.57	1.52	0.00
					565.37	636.99	1.52	0.00
					681.99	636.49	1.52	0.00
					681.46	621.56	1.52	0.00
Onsite Truck Movement Noise	1.52	r	1.52	r	970.39	521.30	1.52	0.00
					969.72	636.22	1.52	0.00
					845.39	636.89	1.52	0.00
					845.56	625.37	1.52	0.00
Onsite Truck Movement Noise	1.52	r	1.52	r	562.99	525.19	1.52	0.00
					565.53	730.52	1.52	0.00
					634.12	730.94	1.52	0.00
					635.81	1018.83	1.52	0.00
					651.05	1018.83	1.52	0.00
Onsite Truck Movement Noise	1.52	r	1.52	r	971.53	522.10	1.52	0.00
					971.11	681.28	1.52	0.00
					900.38	680.69	1.52	0.00
					898.29	1023.79	1.52	0.00
					880.15	1023.79	1.52	0.00

Geometrie Flächenquellen

Name	Height				Coordinates			
	Begin		End		x	y	z	Ground
	(m)		(m)		(m)	(m)	(m)	(m)

Geometrie Parkplätze

Name	Height				Coordinates			
	Begin		End		x	y	z	Ground
	(m)		(m)		(m)	(m)	(m)	(m)

Geometrie Straßen

Name	Height				Coordinates				Dist	LSlope
	Begin		End		x	y	z	Ground	(m)	(%)
	(m)		(m)		(m)	(m)	(m)	(m)		
	0.00	r			208.33	507.03	0.00	0.00		
					566.19	505.35	0.00	0.00		
					977.80	503.67	0.00	0.00		
					1391.04	501.99	0.00	0.00		
	0.00	r			1391.36	511.68	0.00	0.00		
					1391.36	1700.08	0.00	0.00		
					1388.16	1946.51	0.00	0.00		
	0.00	r			1393.45	501.68	0.00	0.00		
					1925.19	501.68	0.00	0.00		

Geometrie Schienen

Name	Height				Coordinates			
	Begin		End		x	y	z	Ground
	(m)		(m)		(m)	(m)	(m)	(m)

Geometrie Schirme

Name	M.	ID	Absorption		Z-Ext.	Cantilever		Height				Coordinates			
			left	right		horz.	vert.	Begin		End		x	y	z	Ground
					(m)	(m)	(m)	(m)		(m)		(m)	(m)	(m)	(m)
								15.85	r	15.85	r	661.94	1248.50	15.85	0.00
												868.58	1250.18	15.85	0.00
												871.94	784.81	15.85	0.00
												890.42	784.81	15.85	0.00
												889.76	729.47	15.85	0.00
												648.40	730.14	15.85	0.00
												648.40	784.15	15.85	0.00
												661.74	784.15	15.85	0.00
												662.26	1248.24	15.85	0.00
								13.72	r	13.72	r	604.01	556.38	13.72	0.00
												749.82	555.12	13.72	0.00
												749.29	628.15	13.72	0.00
												713.31	628.15	13.72	0.00
												713.17	614.92	13.72	0.00
												636.65	614.92	13.72	0.00
												636.74	629.45	13.72	0.00
												603.17	629.29	13.72	0.00
												602.11	557.75	13.72	0.00
								13.72	r	13.72	r	773.27	556.70	13.72	0.00
												928.33	556.70	13.72	0.00
												927.80	629.73	13.72	0.00
												891.81	629.73	13.72	0.00
												891.67	616.50	13.72	0.00
												806.08	617.03	13.72	0.00
												806.08	630.79	13.72	0.00
												772.43	630.45	13.72	0.00
												772.22	557.23	13.72	0.00
								1.83	r	1.83	r	423.48	485.90	1.83	0.00
												553.04	487.32	1.83	0.00

Name	M.	ID	Absorption		Z-Ext.	Cantilever		Height				Coordinates			
			left	right		horz.	vert.	Begin		End		x	y	z	Ground
					(m)	(m)	(m)	(m)		(m)		(m)	(m)	(m)	(m)
												553.04	444.60	1.83	0.00
								1.83	r	1.83	r	1175.46	367.57	1.83	0.00
												1176.81	482.49	1.83	0.00
												1329.70	481.81	1.83	0.00
												1330.04	404.53	1.83	0.00

Geometrie Häuser

Name	M.	ID	RB	Residents	Absorption	Height	Coordinates			
						Begin	x	y	z	Ground
						(m)	(m)	(m)	(m)	(m)

Geometrie Höhenlinien

Name	M.	ID	OnlyPts	Height		Coordinates		
				Begin	End	x	y	z
				(m)	(m)	(m)	(m)	(m)

Geometrie Bruchkanten

Name	M.	ID	Coordinates	
			x	y
			(m)	(m)

Appendix D

Traffic Noise Modeling Input/Output

Dudek					**23 October 2023**							
MG					**TNM 2.5**							
INPUT: ROADWAYS								**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**15436**							**a State highway agency substantiates the use**				
RUN:	**Mojave Industrial Project - Existing**							**of a different type with the approval of FHWA**				
Roadway		**Points**										
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**				**Flow Control**			**Segment**	
				X	**Y**	**Z**		**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft			mph	%		
US 395 N of Mojave Dr	60.0	point1	1	3,317.5	21,295.5	0.00					Average	
		point3	3	3,288.0	15,859.9	0.00						
Mojave Dr W of US 395	60.0	point34	34	3,207.3	15,870.1	0.00					Average	
		point28	28	440.9	15,859.1	0.00						
Topaz Rd N of Mojave	40.0	point36	36	8,519.8	15,925.2	0.00					Average	
		point26	26	8,508.8	17,060.5	0.00						
Topaz Rd S of Mojave	40.0	point38	38	8,580.8	13,320.9	0.00					Average	
		point22	22	8,552.1	15,831.8	0.00						
Onyx Rd N of Mojave	40.0	point40	40	7,241.3	15,914.2	0.00					Average	
		point24	24	7,263.3	17,016.4	0.00						
US 395 N of Holly Rd	60.0	point43	43	2,428.0	24,258.0	0.00					Average	
		point17	17	3,351.4	21,355.0	0.00						
Onyx Rd S of Mojave	40.0	point45	45	7,247.2	13,883.0	0.00					Average	
		point20	20	7,247.2	15,844.9	0.00						
Holly Road	60.0	point46	46	3,213.4	21,251.3	0.00					Average	
		point2	2	264.5	21,259.7	0.00						
SR18 W of SR395	60.0	point47	47	3,193.9	7,809.5	0.00					Average	
		point14	14	19.6	7,809.5	0.00						
Mojave Dr E of US 395	60.0	point49	49	3,297.9	15,867.6	0.00					Average	
		point7	7	7,251.9	15,862.2	0.00						
Adelanto Rd N. of Holly Rd	60.0	point50	50	3,351.4	21,355.0	0.00					Average	
		point18	18	3,309.8	24,312.8	0.00						
US 395 S of Mojave Dr	60.0	point51	51	3,288.0	15,859.9	0.00					Average	
		point4	4	3,260.4	7,786.6	0.00					Average	
		point5	5	3,249.4	5,450.1	0.00						

Mojave Dr E of Onyx Rd	60.0	point52	52	7,251.9	15,862.2	0.00				Average	
		point8	8	8,546.6	15,853.5	0.00					
Mojave Dr E of Topaz Rd	60.0	point53	53	8,546.6	15,853.5	0.00				Average	
		point9	9	11,135.9	15,879.7	0.00				Average	
		point10	10	13,725.3	15,888.5	0.00				Average	
		point11	11	19,008.9	15,888.5	0.00				Average	
		point12	12	23,872.7	15,923.4	0.00					
Diamond Rd	40.0	point56	56	9,802.2	15,881.9	0.00				Average	
		point57	57	9,802.2	17,462.5	0.00					

Dudek **23 October 2023**
MG **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Existing

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
US 395 N of Mojave Dr	point1	1	1762	55	57	55	76	50	0	0	0	0
	point3	3										
Mojave Dr W of US 395	point34	34	1195	45	39	45	51	40	0	0	0	0
	point28	28										
Topaz Rd N of Mojave	point36	36	0	0	0	0	0	0	0	0	0	0
	point26	26										
Topaz Rd S of Mojave	point38	38	2	25	0	0	0	0	0	0	0	0
	point22	22										
Onyx Rd N of Mojave	point40	40	0	0	0	0	0	0	0	0	0	0
	point24	24										
US 395 N of Holly Rd	point43	43	1470	55	47	55	63	50	0	0	0	0
	point17	17										
Onyx Rd S of Mojave	point45	45	67	25	1	25	1	20	0	0	0	0
	point20	20										
Holly Road	point46	46	17	45	0	0	0	0	0	0	0	0
	point2	2										
SR18 W of SR395	point47	47	1893	55	39	55	20	50	0	0	0	0
	point14	14										
Mojave Dr E of US 395	point49	49	1990	60	64	60	86	55	0	0	0	0
	point7	7										
Adelanto Rd N. of Holly Rd	point50	50	0	0	0	0	0	0	0	0	0	0
	point18	18										
US 395 S of Mojave Dr	point51	51	1780	55	57	55	77	50	0	0	0	0

	point4	4	1780	55	57	55	77	50	0	0	0	0
	point5	5										
Mojave Dr E of Onyx Rd	point52	52	2036	60	66	60	88	55	0	0	0	0
	point8	8										
Mojave Dr E of Topaz Rd	point53	53	2030	60	65	60	87	55	0	0	0	0
	point9	9	2030	60	65	60	87	55	0	0	0	0
	point10	10	2030	60	65	60	87	55	0	0	0	0
	point11	11	2030	60	65	60	87	55	0	0	0	0
	point12	12										
Diamond Rd	point56	56	0	0	0	0	0	0	0	0	0	0
	point57	57										

Dudek
MG

23 October 2023
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Existing

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	2,600.3	21,001.8	0.00	5.00	0.00	66	10.0	8.0	Y
M1	2	1	7,085.0	15,708.6	0.00	5.00	0.00	66	10.0	8.0	Y
M2	3	1	9,179.2	15,693.3	0.00	5.00	0.00	66	10.0	8.0	Y
M3	4	1	9,937.6	17,121.1	0.00	5.00	0.00	66	10.0	8.0	Y
M4	5	1	1,973.7	16,026.8	0.00	5.00	0.00	66	10.0	8.0	Y
M5	6	1	1,942.0	9,190.7	0.00	5.00	0.00	66	10.0	8.0	Y

Dudek					**23 October 2023**														
MG					**TNM 2.5**														
INPUT: BARRIERS																			
PROJECT/CONTRACT:	**15436**																		
RUN:	**Mojave Industrial Project - Existing**																		
Barrier									**Points**										
Name	**Type**	**Height**		**If Wall**	**If Berm**			**Add'tnl**	**Name**	**No.**	**Coordinates (bottom)**			**Height**	**Segment**				
		Min	**Max**	**$ per**	**$ per**	**Top**	**Run:Rise**	**$ per**			**X**	**Y**	**Z**	**at**	**Seg Ht Perturbs**			**On**	**Important**
				Unit	**Unit**	**Width**		**Unit**						**Point**	**Incre-**	**#Up**	**#Dn**	**Struct?**	**Reflec-**
				Area	**Vol.**			**Length**							**ment**				**tions?**
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,340.9	15,829.7	0.00	7.00	0.00	0	0		
									point2	2	7,208.9	15,826.3	0.00	7.00	0.00	0	0		
									point3	3	7,204.6	15,142.2	0.00	7.00					
Barrier2	W	0.00	99.99	0.00				0.00	point4	4	9,094.2	15,094.6	0.00	7.00	0.00	0	0		
									point5	5	9,090.7	15,822.7	0.00	7.00	0.00	0	0		
									point6	6	10,302.1	15,826.1	0.00	7.00					
Barrier3	W	0.00	99.99	0.00				0.00	point7	7	1,339.9	15,998.3	0.00	7.00	0.00	0	0		
									point8	8	2,291.5	15,998.3	0.00	7.00	0.00	0	0		
									point9	9	2,291.5	17,252.9	0.00	7.00					

Dudek
MG
23 October 2023
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	0.0	52.0	66	52.0	10	----	52.0	0.0	8	-8.0
M1	2	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
M2	3	1	0.0	61.5	66	61.5	10	----	61.5	0.0	8	-8.0
M3	4	1	0.0	48.0	66	48.0	10	----	48.0	0.0	8	-8.0
M4	5	1	0.0	56.3	66	56.3	10	----	56.3	0.0	8	-8.0
M5	6	1	0.0	47.4	66	47.4	10	----	47.4	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**23 October 2023**							
MG					**TNM 2.5**							
INPUT: ROADWAYS							**Average pavement type shall be used unless**					
PROJECT/CONTRACT:	**15436**						**a State highway agency substantiates the use**					
RUN:	**Mojave Industrial Project - Existing w Proj**						**of a different type with the approval of FHWA**					
Roadway		**Points**										
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**		
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**	
	ft			ft	ft	ft		mph	%			
US 395 N of Mojave Dr	60.0	point1	1	3,317.5	21,295.5	0.00				Average		
		point3	3	3,288.0	15,859.9	0.00						
Mojave Dr W of US 395	60.0	point34	34	3,207.3	15,870.1	0.00				Average		
		point28	28	440.9	15,859.1	0.00						
Topaz Rd N of Mojave	40.0	point36	36	8,519.8	15,925.2	0.00				Average		
		point26	26	8,508.8	17,060.5	0.00						
Topaz Rd S of Mojave	40.0	point38	38	8,580.8	13,320.9	0.00				Average		
		point22	22	8,552.1	15,831.8	0.00						
Onyx Rd N of Mojave	40.0	point40	40	7,241.3	15,914.2	0.00				Average		
		point24	24	7,263.3	17,016.4	0.00						
US 395 N of Holly Rd	60.0	point43	43	2,428.0	24,258.0	0.00				Average		
		point17	17	3,351.4	21,355.0	0.00						
Onyx Rd S of Mojave	40.0	point45	45	7,247.2	13,883.0	0.00				Average		
		point20	20	7,247.2	15,844.9	0.00						
Holly Road	60.0	point46	46	3,213.4	21,251.3	0.00				Average		
		point2	2	264.5	21,259.7	0.00						
SR18 W of SR395	60.0	point47	47	3,193.9	7,809.5	0.00				Average		
		point14	14	19.6	7,809.5	0.00						
Mojave Dr E of US 395	60.0	point49	49	3,297.9	15,867.6	0.00				Average		
		point7	7	7,251.9	15,862.2	0.00						
Adelanto Rd N. of Holly Rd	60.0	point50	50	3,351.4	21,355.0	0.00				Average		
		point18	18	3,309.8	24,312.8	0.00						
US 395 S of Mojave Dr	60.0	point51	51	3,288.0	15,859.9	0.00				Average		
		point4	4	3,260.4	7,786.6	0.00				Average		
		point5	5	3,249.4	5,450.1	0.00						

Mojave Dr E of Onyx Rd	60.0	point52	52	7,251.9	15,862.2	0.00				Average	
		point8	8	8,546.6	15,853.5	0.00					
Mojave Dr E of Topaz Rd	60.0	point53	53	8,546.6	15,853.5	0.00				Average	
		point9	9	11,135.9	15,879.7	0.00				Average	
		point10	10	13,725.3	15,888.5	0.00				Average	
		point11	11	19,008.9	15,888.5	0.00				Average	
		point12	12	23,872.7	15,923.4	0.00					
Diamond Rd	40.0	point56	56	9,802.2	15,881.9	0.00				Average	
		point57	57	9,802.2	17,462.5	0.00					

Dudek **23 October 2023**
MG **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Existing w Proj

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
US 395 N of Mojave Dr	point1	1	1767	55	74	55	102	50	0	0	0	0
	point3	3										
Mojave Dr W of US 395	point34	34	1210	45	44	45	59	40	0	0	0	0
	point28	28										
Topaz Rd N of Mojave	point36	36	155	25	50	25	74	20	0	0	0	0
	point26	26										
Topaz Rd S of Mojave	point38	38	2	25	0	0	0	0	0	0	0	0
	point22	22										
Onyx Rd N of Mojave	point40	40	116	25	36	25	55	20	0	0	0	0
	point24	24										
US 395 N of Holly Rd	point43	43	1503	55	59	55	81	50	0	0	0	0
	point17	17										
Onyx Rd S of Mojave	point45	45	67	25	1	25	1	20	0	0	0	0
	point20	20										
Holly Road	point46	46	17	45	0	0	0	0	0	0	0	0
	point2	2										
SR18 W of SR395	point47	47	1909	55	45	55	29	50	0	0	0	0
	point14	14										
Mojave Dr E of US 395	point49	49	2050	60	77	60	105	55	0	0	0	0
	point7	7										
Adelanto Rd N. of Holly Rd	point50	50	0	0	0	0	0	0	0	0	0	0
	point18	18										
US 395 S of Mojave Dr	point51	51	1829	55	75	55	102	50	0	0	0	0

	point4	4	1829	55	75	55	102	50	0	0	0	0
	point5	5										
Mojave Dr E of Onyx Rd	point52	52	2168	60	115	60	162	55	0	0	0	0
	point8	8										
Mojave Dr E of Topaz Rd	point53	53	2255	60	152	60	217	55	0	0	0	0
	point9	9	2255	60	152	60	217	55	0	0	0	0
	point10	10	2255	60	152	60	217	55	0	0	0	0
	point11	11	2255	60	152	60	217	55	0	0	0	0
	point12	12										
Diamond Rd	point56	56	0	0	0	0	0	0	0	0	0	0
	point57	57										

Dudek 23 October 2023
MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Existing w Proj

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	2,600.3	21,001.8	0.00	5.00	0.00	66	10.0	8.0	Y
M1	2	1	7,085.0	15,708.6	0.00	5.00	0.00	66	10.0	8.0	Y
M2	3	1	9,179.2	15,693.3	0.00	5.00	0.00	66	10.0	8.0	Y
M3	4	1	9,937.6	17,121.1	0.00	5.00	0.00	66	10.0	8.0	Y
M4	5	1	1,973.7	16,026.8	0.00	5.00	0.00	66	10.0	8.0	Y
M5	6	1	1,942.0	9,190.7	0.00	5.00	0.00	66	10.0	8.0	Y

Dudek 23 October 2023
MG TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Existing w Proj

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,340.9	15,829.7	0.00	7.00	0.00	0	0		
									point2	2	7,208.9	15,826.3	0.00	7.00	0.00	0	0		
									point3	3	7,204.6	15,142.2	0.00	7.00					
Barrier2	W	0.00	99.99	0.00				0.00	point4	4	9,094.2	15,094.6	0.00	7.00	0.00	0	0		
									point5	5	9,090.7	15,822.7	0.00	7.00	0.00	0	0		
									point6	6	10,302.1	15,826.1	0.00	7.00					
Barrier3	W	0.00	99.99	0.00				0.00	point7	7	1,339.9	15,998.3	0.00	7.00	0.00	0	0		
									point8	8	2,291.5	15,998.3	0.00	7.00	0.00	0	0		
									point9	9	2,291.5	17,252.9	0.00	7.00					

Dudek
MG
23 October 2023
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Existing w Proj
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	0.0	52.6	66	52.6	10	----	52.6	0.0	8	-8.0
M1	2	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
M2	3	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
M3	4	1	0.0	50.1	66	50.1	10	----	50.1	0.0	8	-8.0
M4	5	1	0.0	56.6	66	56.6	10	----	56.6	0.0	8	-8.0
M5	6	1	0.0	48.0	66	48.0	10	----	48.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**23 October 2023**							
MG					**TNM 2.5**							
INPUT: ROADWAYS								**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**15436**							**a State highway agency substantiates the use**				
RUN:	**Mojave Industrial Project - Year 2040**							**of a different type with the approval of FHWA**				
Roadway		**Points**										
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**				**Flow Control**			**Segment**	
				X	**Y**	**Z**		**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft			mph	%		
US 395 N of Mojave Dr	60.0	point1	1	3,317.5	21,295.5	0.00					Average	
		point3	3	3,288.0	15,859.9	0.00						
Mojave Dr W of US 395	60.0	point34	34	3,207.3	15,870.1	0.00					Average	
		point28	28	440.9	15,859.1	0.00						
Topaz Rd N of Mojave	40.0	point36	36	8,519.8	15,925.2	0.00					Average	
		point26	26	8,508.8	17,060.5	0.00						
Topaz Rd S of Mojave	40.0	point38	38	8,580.8	13,320.9	0.00					Average	
		point22	22	8,552.1	15,831.8	0.00						
Onyx Rd N of Mojave	40.0	point40	40	7,241.3	15,914.2	0.00					Average	
		point24	24	7,263.3	17,016.4	0.00						
US 395 N of Holly Rd	60.0	point43	43	2,428.0	24,258.0	0.00					Average	
		point17	17	3,351.4	21,355.0	0.00						
Onyx Rd S of Mojave	40.0	point45	45	7,247.2	13,883.0	0.00					Average	
		point20	20	7,247.2	15,844.9	0.00						
Holly Road	60.0	point46	46	3,213.4	21,251.3	0.00					Average	
		point2	2	264.5	21,259.7	0.00						
SR18 W of SR395	60.0	point47	47	3,193.9	7,809.5	0.00					Average	
		point14	14	19.6	7,809.5	0.00						
Mojave Dr E of US 395	60.0	point49	49	3,297.9	15,867.6	0.00					Average	
		point7	7	7,251.9	15,862.2	0.00						
Adelanto Rd N. of Holly Rd	60.0	point50	50	3,351.4	21,355.0	0.00					Average	
		point18	18	3,309.8	24,312.8	0.00						
US 395 S of Mojave Dr	60.0	point51	51	3,288.0	15,859.9	0.00					Average	
		point4	4	3,260.4	7,786.6	0.00					Average	
		point5	5	3,249.4	5,450.1	0.00						

Mojave Dr E of Onyx Rd	60.0	point52	52	7,251.9	15,862.2	0.00				Average	
		point8	8	8,546.6	15,853.5	0.00					
Mojave Dr E of Topaz Rd	60.0	point53	53	8,546.6	15,853.5	0.00				Average	
		point9	9	11,135.9	15,879.7	0.00				Average	
		point10	10	13,725.3	15,888.5	0.00				Average	
		point11	11	19,008.9	15,888.5	0.00				Average	
		point12	12	23,872.7	15,923.4	0.00					
Diamond Rd	40.0	point56	56	9,802.2	15,881.9	0.00				Average	
		point57	57	9,802.2	17,462.5	0.00					

Dudek **23 October 2023**
MG **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **15436**
RUN: **Mojave Industrial Project - Year 2040**

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
US 395 N of Mojave Dr	point1	1	3418	55	110	55	147	50	0	0	0	0
	point3	3										
Mojave Dr W of US 395	point34	34	1545	45	50	45	66	40	0	0	0	0
	point28	28										
Topaz Rd N of Mojave	point36	36	75	25	2	25	1	20	0	0	0	0
	point26	26										
Topaz Rd S of Mojave	point38	38	125	25	3	25	1	20	0	0	0	0
	point22	22										
Onyx Rd N of Mojave	point40	40	0	0	0	0	0	0	0	0	0	0
	point24	24										
US 395 N of Holly Rd	point43	43	2977	55	96	55	128	50	0	0	0	0
	point17	17										
Onyx Rd S of Mojave	point45	45	234	25	5	25	2	20	0	0	0	0
	point20	20										
Holly Road	point46	46	87	45	2	45	1	40	0	0	0	0
	point2	2										
SR18 W of SR395	point47	47	2501	55	52	55	26	50	0	0	0	0
	point14	14										
Mojave Dr E of US 395	point49	49	2886	60	93	60	124	55	0	0	0	0
	point7	7										
Adelanto Rd N. of Holly Rd	point50	50	0	0	0	0	0	0	0	0	0	0
	point18	18										
US 395 S of Mojave Dr	point51	51	3547	55	114	55	153	50	0	0	0	0

	point4	4	3547	55	114	55	153	50	0	0	0	0
	point5	5										
Mojave Dr E of Onyx Rd	point52	52	2818	60	91	60	121	55	0	0	0	0
	point8	8										
Mojave Dr E of Topaz Rd	point53	53	2807	60	91	60	121	55	0	0	0	0
	point9	9	2807	60	91	60	121	55	0	0	0	0
	point10	10	2807	60	91	60	121	55	0	0	0	0
	point11	11	2807	60	91	60	121	55	0	0	0	0
	point12	12										
Diamond Rd	point56	56	0	0	0	0	0	0	0	0	0	0
	point57	57										

Dudek 23 October 2023
MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Year 2040

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	2,600.3	21,001.8	0.00	5.00	0.00	66	10.0	8.0	Y
M1	2	1	7,085.0	15,708.6	0.00	5.00	0.00	66	10.0	8.0	Y
M2	3	1	9,179.2	15,693.3	0.00	5.00	0.00	66	10.0	8.0	Y
M3	4	1	9,937.6	17,121.1	0.00	5.00	0.00	66	10.0	8.0	Y
M4	5	1	1,973.7	16,026.8	0.00	5.00	0.00	66	10.0	8.0	Y
M5	6	1	1,942.0	9,190.7	0.00	5.00	0.00	66	10.0	8.0	Y

Dudek 23 October 2023
MG TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Year 2040

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,340.9	15,829.7	0.00	7.00	0.00	0	0		
									point2	2	7,208.9	15,826.3	0.00	7.00	0.00	0	0		
									point3	3	7,204.6	15,142.2	0.00	7.00					
Barrier2	W	0.00	99.99	0.00				0.00	point4	4	9,094.2	15,094.6	0.00	7.00	0.00	0	0		
									point5	5	9,090.7	15,822.7	0.00	7.00	0.00	0	0		
									point6	6	10,302.1	15,826.1	0.00	7.00					
Barrier3	W	0.00	99.99	0.00				0.00	point7	7	1,339.9	15,998.3	0.00	7.00	0.00	0	0		
									point8	8	2,291.5	15,998.3	0.00	7.00	0.00	0	0		
									point9	9	2,291.5	17,252.9	0.00	7.00					

Dudek
MG
23 October 2023
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Year 2040
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	0.0	55.5	66	55.5	10	----	55.5	0.0	8	-8.0
M1	2	1	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0
M2	3	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
M3	4	1	0.0	49.5	66	49.5	10	----	49.5	0.0	8	-8.0
M4	5	1	0.0	57.6	66	57.6	10	----	57.6	0.0	8	-8.0
M5	6	1	0.0	49.9	66	49.9	10	----	49.9	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**23 October 2023**							
MG					**TNM 2.5**							
INPUT: ROADWAYS							**Average pavement type shall be used unless**					
PROJECT/CONTRACT:	**15436**						**a State highway agency substantiates the use**					
RUN:	**Mojave Industrial Project - Yr 2040 w Proj**						**of a different type with the approval of FHWA**					
Roadway		**Points**										
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**		
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**	
	ft			ft	ft	ft		mph	%			
US 395 N of Mojave Dr	60.0	point1	1	3,317.5	21,295.5	0.00				Average		
		point3	3	3,288.0	15,859.9	0.00						
Mojave Dr W of US 395	60.0	point34	34	3,207.3	15,870.1	0.00				Average		
		point28	28	440.9	15,859.1	0.00						
Topaz Rd N of Mojave	40.0	point36	36	8,519.8	15,925.2	0.00				Average		
		point26	26	8,508.8	17,060.5	0.00						
Topaz Rd S of Mojave	40.0	point38	38	8,580.8	13,320.9	0.00				Average		
		point22	22	8,552.1	15,831.8	0.00						
Onyx Rd N of Mojave	40.0	point40	40	7,241.3	15,914.2	0.00				Average		
		point24	24	7,263.3	17,016.4	0.00						
US 395 N of Holly Rd	60.0	point43	43	2,428.0	24,258.0	0.00				Average		
		point17	17	3,351.4	21,355.0	0.00						
Onyx Rd S of Mojave	40.0	point45	45	7,247.2	13,883.0	0.00				Average		
		point20	20	7,247.2	15,844.9	0.00						
Holly Road	60.0	point46	46	3,213.4	21,251.3	0.00				Average		
		point2	2	264.5	21,259.7	0.00						
SR18 W of SR395	60.0	point47	47	3,193.9	7,809.5	0.00				Average		
		point14	14	19.6	7,809.5	0.00						
Mojave Dr E of US 395	60.0	point49	49	3,297.9	15,867.6	0.00				Average		
		point7	7	7,251.9	15,862.2	0.00						
Adelanto Rd N. of Holly Rd	60.0	point50	50	3,351.4	21,355.0	0.00				Average		
		point18	18	3,309.8	24,312.8	0.00						
US 395 S of Mojave Dr	60.0	point51	51	3,288.0	15,859.9	0.00				Average		
		point4	4	3,260.4	7,786.6	0.00				Average		
		point5	5	3,249.4	5,450.1	0.00						

Mojave Dr E of Onyx Rd	60.0	point52	52	7,251.9	15,862.2	0.00				Average	
		point8	8	8,546.6	15,853.5	0.00					
Mojave Dr E of Topaz Rd	60.0	point53	53	8,546.6	15,853.5	0.00				Average	
		point9	9	11,135.9	15,879.7	0.00				Average	
		point10	10	13,725.3	15,888.5	0.00				Average	
		point11	11	19,008.9	15,888.5	0.00				Average	
		point12	12	23,872.7	15,923.4	0.00					
Diamond Rd	40.0	point56	56	9,802.2	15,881.9	0.00				Average	
		point57	57	9,802.2	17,462.5	0.00					

Dudek **23 October 2023**
MG **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Yr 2040 w Proj

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
US 395 N of Mojave Dr	point1	1	3423	55	128	55	173	50	0	0	0	0
	point3	3										
Mojave Dr W of US 395	point34	34	1560	45	55	45	74	40	0	0	0	0
	point28	28										
Topaz Rd N of Mojave	point36	36	230	25	51	25	75	20	0	0	0	0
	point26	26										
Topaz Rd S of Mojave	point38	38	125	25	3	25	1	20	0	0	0	0
	point22	22										
Onyx Rd N of Mojave	point40	40	116	25	36	25	55	20	0	0	0	0
	point24	24										
US 395 N of Holly Rd	point43	43	3010	55	108	55	146	50	0	0	0	0
	point17	17										
Onyx Rd S of Mojave	point45	45	234	25	5	25	2	20	0	0	0	0
	point20	20										
Holly Road	point46	46	87	45	2	45	1	40	0	0	0	0
	point2	2										
SR18 W of SR395	point47	47	2517	55	58	55	35	50	0	0	0	0
	point14	14										
Mojave Dr E of US 395	point49	49	2946	60	106	60	143	55	0	0	0	0
	point7	7										
Adelanto Rd N. of Holly Rd	point50	50	0	0	0	0	0	0	0	0	0	0
	point18	18										
US 395 S of Mojave Dr	point51	51	3596	55	132	55	178	50	0	0	0	0

	point4	4	3596	55	132	55	178	50	0	0	0	0
	point5	5										
Mojave Dr E of Onyx Rd	point52	52	2942	60	140	60	195	55	0	0	0	0
	point8	8										
Mojave Dr E of Topaz Rd	point53	53	3032	60	177	60	220	55	0	0	0	0
	point9	9	3032	60	177	60	220	55	0	0	0	0
	point10	10	3032	60	177	60	220	55	0	0	0	0
	point11	11	3032	60	177	60	220	55	0	0	0	0
	point12	12										
Diamond Rd	point56	56	0	0	0	0	0	0	0	0	0	0
	point57	57										

Dudek 23 October 2023
MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 15436
RUN: Mojave Industrial Project - Yr 2040 w Proj

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	2,600.3	21,001.8	0.00	5.00	0.00	66	10.0	8.0	Y
M1	2	1	7,085.0	15,708.6	0.00	5.00	0.00	66	10.0	8.0	Y
M2	3	1	9,179.2	15,693.3	0.00	5.00	0.00	66	10.0	8.0	Y
M3	4	1	9,937.6	17,121.1	0.00	5.00	0.00	66	10.0	8.0	Y
M4	5	1	1,973.7	16,026.8	0.00	5.00	0.00	66	10.0	8.0	Y
M5	6	1	1,942.0	9,190.7	0.00	5.00	0.00	66	10.0	8.0	Y

Dudek 23 October 2023
MG TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: 15436
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Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,340.9	15,829.7	0.00	7.00	0.00	0	0		
									point2	2	7,208.9	15,826.3	0.00	7.00	0.00	0	0		
									point3	3	7,204.6	15,142.2	0.00	7.00					
Barrier2	W	0.00	99.99	0.00				0.00	point4	4	9,094.2	15,094.6	0.00	7.00	0.00	0	0		
									point5	5	9,090.7	15,822.7	0.00	7.00	0.00	0	0		
									point6	6	10,302.1	15,826.1	0.00	7.00					
Barrier3	W	0.00	99.99	0.00				0.00	point7	7	1,339.9	15,998.3	0.00	7.00	0.00	0	0		
									point8	8	2,291.5	15,998.3	0.00	7.00	0.00	0	0		
									point9	9	2,291.5	17,252.9	0.00	7.00					

Dudek
MG
23 October 2023
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 15436
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BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	0.0	55.7	66	55.7	10	----	55.7	0.0	8	-8.0
M1	2	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M2	3	1	0.0	64.6	66	64.6	10	----	64.6	0.0	8	-8.0
M3	4	1	0.0	50.9	66	50.9	10	----	50.9	0.0	8	-8.0
M4	5	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
M5	6	1	0.0	50.2	66	50.2	10	----	50.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0