

Supplement to PEIR Appendix D

McClellan-Palomar Airport
Master Plan Update PEIR

Supplemental Noise Analysis

(C&S Engineers, Inc.
dated August 6, 2021)



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Memo

To: Jeff Kashak, Department of Public Works, County of San Diego

From: Kara Young, Senior Consultant, C&S Engineers, Inc.

Cc: Nicholas Alex, Principal Consultant, C&S Engineers, Inc.
Sandi Hazlewood, Department of Public Works, County of San Diego

Date: August 6, 2021

Re: County of San Diego, Department of Public Works
McClellan-Palomar Airport Master Plan Update PEIR
Supplemental Noise Analysis

C&S File: 592.009.008

Background

Purpose and Need

The Program Environmental Impact Report (PEIR) for the McClellan-Palomar Airport Master Plan Update was originally certified by the County of San Diego Board of Supervisors on October 10, 2018 (which included Appendix D, Noise Technical Reports). Subsequently, on May 5, 2021 the Board of Supervisors de-certified the PEIR as explained in more detail below.

Upon certification of the PEIR on October 10, 2018, Citizens for a Friendly Airport filed a petition for Writ of Mandate and complaint on November 6, 2018 challenging the Board's decision (Case No. 37-2018-00057624), alleging there were deficiencies in the PEIR. On January 26, 2021, the San Diego Superior Court issued a ruling indicating that the PEIR used an appropriate threshold of significance for noise and adequately analyzed potential noise from commercial and non-commercial aircraft operations. While the Superior Court determined the noise analysis completed for the PEIR was generally adequate, the Court found the PEIR should have included supplemental noise analysis for areas further away from McClellan-Palomar Airport, specifically for areas where residents had reported noise concerns outside of the 65 decibel (dB) contour during the public comment periods¹. Subsequently, on March 4, 2021, the Superior Court filed a Writ of Mandate ordering the County to set aside all approvals associated with the October 10, 2018 approval of

¹ Superior Court Minute Order, 1/16/21: "CNEL levels in the City of Vista were not identified as part of the analysis despite the fact that Vista residents and other out of [65dB] contour communities reported significant noise impacts."

the Master Plan Update and PEIR within 60 days. As a result, the Board of Supervisors de-certified the PEIR on May 5, 2021.

To address the Court's findings on the PEIR's noise analysis, the County retained C&S Engineers, Inc. (C&S) to determine the noise levels at each location provided by public comments (such as addresses or landmarks) associated with the existing and future conditions analyzed in the PEIR. The following discussion summarizes the methodology used to identify locations provided in public comments related to noise concerns and to assess noise levels for both existing/baseline conditions (2016) and future conditions (2036) at the identified locations.

Setting and Location

As detailed within the PEIR Noise Technical Report (Appendix D), McClellan-Palomar Airport (Airport) was built on top of a mesa with steep vertical drops on almost all sides and is underlain by an inactive landfill beneath portions of the ground surface. The area surrounding the Airport is a mixture of undeveloped canyons and hillsides with commercial and residential developments that make up the City of Carlsbad, with the Cities of Vista and San Marcos located further to the east. The Airport is located at an elevation of 330.5 feet above mean-sea-level.

On-Airport Land Uses

The County-owned property on which the Airport resides is zoned Industrial (M) pursuant to the Carlsbad Municipal Code Title 21 "Zoning Ordinance" (Section 21.34²) and consists of government (airport) facility land use.

Offsite Surrounding Land Uses

Land uses surrounding the Airport are dictated by the City of Carlsbad through its General Plan Land Use Map. Directly north of the Airport is land identified by the City for Planned Industrial Office buildings line the northern boundary of the Airport across from the north apron. El Camino Real, located approximately 1,400 feet from the arrival end of Runway 24 (i.e., runway's east end), creates the eastern boundary of the Airport. Portions of the County-owned property located on the eastern side of El Camino Real are identified as Open Space. To the south, the Airport is bordered by Palomar Airport Road. The area south of the Airport is predominantly identified as Planned Industrial with some small pockets of land identified as Open Space or General Commercial. The western boundary of the Airport is identified as Planned Industrial and Open Space, which is utilized as a golf course (The Crossings at Carlsbad).

Some land uses are considered more sensitive to ambient noise levels than others because of the amount of noise exposure (both exposure duration and insulation from noise) and the types of activities typically involved. According to Federal Aviation Administration (FAA), residences, schools, rest homes, churches and hospitals are more sensitive to noise than commercial and industrial land uses³. These land uses are also consistent with how noise-sensitive locations are

² Carlsbad Municipal Code, <http://www.qcode.us/codes/carlsbad/>

³ Federal Aviation Administration (FAA) *Environmental Desk Reference for Airport Actions*, October 2007.

defined by the Caltrans Airport Land Use Planning Handbook and the San Diego County Regional Airport Authority's (SDCRAA) Airport Land Use Compatibility Plan (ALUCP) for McClellan-Palomar Airport. The closest residential land uses to the Airport are located a half-mile to the southeast, across from the intersection of Palomar Airport Road and El Camino Real. Additional residential land uses are located south of the Airport and Palomar Airport Road.

Inventory of Comments

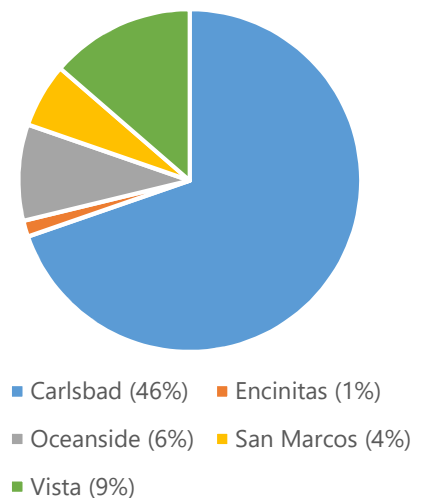
Sources of Comments

Public comments were submitted to the County during three separate review periods: (1) Notice of Preparation/Initial Study published on February 29, 2016 for 30 days; (2) Draft PEIR published on January 18, 2018 for 61 days; and (3) recirculated portions of the Draft PEIR published on June 21, 2018 for 46 days. Comments from all three review periods were reviewed to identify any concerns related to significant aircraft noise levels. Comments that included an address or nearby landmark (such as a park or an intersection) were included within this supplemental noise analysis. Comments that did not provide location data or sufficient information to discern a specific location (e.g. "live in Carlsbad") were not included.

Inventory Summary

Upon reviewing all public comments, a total of 66 locations are included in this supplemental noise analysis, including residents located in the Cities of Carlsbad, Encinitas, Oceanside, San Marcos, and Vista. As shown in **Exhibit 1**, the majority of locations provided are within the City of Carlsbad where the Airport is located. **Attachment 1** provides a table of the individual commenters with their identified Comment ID number, location information, coordinates, and elevation. Some commenters provided multiple comments during the various review periods (NOP, Draft PEIR, and Recirculated Draft PEIR). These duplicate locations were assessed once but are labeled with the Comment ID numbers associated with each review period.

Exhibit 1 Comments by Municipality



Noise Analysis Methodology

Noise Measuring Methodology and Procedures

As detailed in the PEIR Noise Technical Report (Appendix D), the noise exposure patterns for the Airport are presented in terms of the average annual "Community Noise Equivalent Level", or "CNEL", for existing (2016) and future (2036) conditions. The CNEL measurement is the average annual total of noise energy that occurs at a given location during the day, evening, and night periods. With CNEL, evening (between 7:00 pm and 9:59 pm) noise events are weighed (or penalized) by 5 dB and nighttime (between 10:00 pm and 6:59 am) noise events are weighed by

10 dB to reflect the greater perceived impact of noise during those periods. CNEL⁴ is an FAA-accepted noise metric used in California to demonstrate compliance with the California Environmental Quality Act (CEQA). With the exception of the evening period, the noise metric is identical to the day-night average sound level (DNL)⁵ used in other noise studies conducted or reviewed by the FAA.

Data Sources

To calculate noise from aircraft operations, the FAA Office of Environment and Energy (AEE-100) developed and maintains the Aviation Environmental Design Tool (AEDT). The AEDT Model utilizes information from flight tracks, fleet mix, and the number of aircraft to create noise contours surrounding an airport at different decibels. There are many other variables that the AEDT model takes into consideration, such as:

Natural Setting

- airport altitude
- terrain (including line of sight blockage)
- average meteorological conditions (i.e., weather)
- ground surface

Airport Information

- runway coordinates, dimensions
- flight track and runway utilization by aircraft type
- flight profiles (i.e. vertical path of an aircraft upon ascent and descent)
- typical operational procedures (i.e. path an aircraft takes during arrival and departure)

Project Information

- number aircraft operations (existing & proposed)
- time of day of aircraft operations (i.e. day, evening, and night)
- Type (i.e., fleet mix) of aircraft

In order to conform to the Superior Court's ruling, noise levels at each of the locations identified in **Attachment 1** were assessed using the same characteristics (fleet mix, operations, flight tracks, runway end locations, runway utilization, time of day, etc.) from the PEIR Noise Technical Report (Appendix D). Because FAA makes frequent upgrades and modifications to the AEDT model, the latest version of the model (AEDT Version 3d) was used.

Each location identified within the comment inventory was entered to calculate the CNEL levels associated with the four scenarios previously analyzed in the PEIR:

⁴ While DNL is the primary metric FAA uses to determine noise impacts, FAA accepts the CNEL when a state requires that metric to assess noise effects.

⁵ For aviation noise analyses, the FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of Yearly Day Night Average Sound Level (DNL), the FAA's primary noise metric.

- Baseline (existing conditions; 2016)
- Future Conditions (2036) without Project
- Future Conditions (2036) with Project PAL1⁶
- Future Conditions (2036) with Project PAL2⁷

Threshold

As explained in the PEIR, the threshold of significance for aircraft-related noise impacts is 65 dB. This is established by FAA Order 1050.1F and was upheld by the Court ruling in favor of the County confirming the PEIR's threshold was appropriate.

Specifically, an impact would occur if a project causes noise-sensitive areas located at or above 65 dB to experience a noise increase of at least 1.5 dB when compared to the No Project Alternative for the same timeframe. As explained in the Master Plan Update and PEIR, it is important to note that an incremental increase in aircraft operations is expected to occur throughout the 20-year planning period whether or not the Master Plan Update is implemented.

Therefore, consistent with the PEIR, FAA policy and methodology, and the Court's ruling, aircraft-related noise impact analysis is predicated on whether sensitive receptors are located within the 65 dB CNEL contour when comparing the future 2036 conditions with and without the Proposed Project (for both PAL1 and PAL2 planned activity levels).

Results

Figure 1 through **Figure 4** illustrate the locations of noise comments in comparison to the anticipated noise levels of each scenario outlined above. As shown on these figures, none of the locations are located within the 65 dB CNEL contour for any of the four scenarios. In fact, all locations are located outside of the 60 dB CNEL contour in each scenario.

Attachment 1 provides a summary of all reportable data for each location, including the distance of each address or landmark to the 65 dB CNEL contour. The closest location to the 65 dB CNEL contour for both future project scenarios (PAL1 and PAL2) is located approximately 1,755 feet and 1,590 feet from the PAL1 and PAL2 65 dB CNEL contours, respectively. **Attachment 1** also provides a comparison between the noise levels of each location between the Future No Project scenario and the Future with Project PAL1 and PAL2 scenarios.

⁶ As explained in the Master Plan Update, PAL1 is based on the number of passengers that the current terminal facility could handle with minor modifications, which would equate to a total of 195,050 annual aircraft operations.

⁷ PAL2 reflects the number of passengers predicted in the Regional Aviation Strategic Plan (RASP) prepared by SDCRAA in 2011. PAL 2 would equate to a total of 208,004 annual aircraft operations.

For comparison, when looking at the 2036 conditions with and without the Proposed Project at the locations received for noise-related comments, the greatest dB increase amounts to 2.78 dB in the PAL1 scenario, and 2.84 dB in the PAL2 scenario⁸.

Conclusion

As discussed in the Results section above, this supplemental noise analysis (which is prepared pursuant to the Court's ruling) verifies that no significant noise impacts would occur as a result of the Proposed Project (i.e., Master Plan Update) in light of the received public comments. Accordingly, this noise analysis supplements the PEIR, which confirms aircraft-related noise impacts would be less than significant, and no mitigation would be required.

End of Memo

⁸ It is important to remember that in order for a significant noise impact to occur, a location must experience both a 1.5 dB increase and be located at or above the 65 dB contour. Although 2.84 dB is higher than the 1.5 dB criteria, the location would experience 43.03 dB under the future PAL2 scenario; therefore, because it's less than 65 dB, a significant noise impact would not occur.

Attachment 1 - Summary of Noise Levels by Commenter

| Comment Number | Commenter First Name | Commenter Last Name | Street Address (or other provided location) | City | State | Zip | Lat (DD) | Long (DD) | MSL | Distance to Baseline 65 CNEL (Ft.) | Distance to FNP 65 CNEL (Ft.) | Distance to PAL1 65 CNEL (Ft.) | Distance to PAL2 65 CNEL (Ft.) | Baseline dB | Future No Project dB | Future Project PAL1 dB | Future Project PAL2 dB | Future Project PAL1 - Future No Project | Future Project PAL2 - Future No Project |
|-------------------|------------------------|---------------------|---|------------|-------|-------|----------|-----------|-----|------------------------------------|-------------------------------|--------------------------------|--------------------------------|-------------|----------------------|------------------------|------------------------|---|---|
| I4-1 | Tanja | Freeman | Intersection of Melrose and Sunset | Vista | CA | 92081 | 33.17775 | -117.2536 | 428 | 17,456.82 | 16,915.36 | 16,609.23 | 16,366.74 | 42.61 | 42.26 | 43.06 | 43.08 | 0.80 | 0.82 |
| I8-1/I60-1 | Delinda | Forsberg | 6571 Paseo Del Norte #E | Carlsbad | CA | 92011 | 33.11613 | -117.3135 | 115 | 5,742.30 | 5,347.15 | 6,031.44 | 5,674.67 | 50.42 | 51.56 | 51.78 | 52.66 | 0.22 | 1.10 |
| I15-1 | Marie | Marcinko | 914 Caminito Madrigal Unit G | Carlsbad | CA | 92011 | 33.11563 | -117.3127 | 125 | 5,645.09 | 5,256.01 | 5,932.84 | 5,584.17 | 49.84 | 50.99 | 51.26 | 52.15 | 0.27 | 1.16 |
| I19-1 | Gary | Polster | 4358 Tulolumne Pl | Carlsbad | CA | 92010 | 33.16324 | -117.3064 | 354 | 13,559.64 | 13,445.34 | 13,304.49 | 13,147.38 | 38.11 | 38.00 | 38.68 | 38.94 | 0.68 | 0.94 |
| I25-1 | Bob & Gail | Carroll | 1254 Mariposa Road | Carlsbad | CA | 92011 | 33.11816 | -117.3033 | 217 | 2,985.69 | 2,714.62 | 3,284.03 | 2,986.72 | 52.49 | 53.63 | 53.70 | 54.61 | 0.07 | 0.98 |
| I26-2 | David | Ohlson | 6372 Huntington Drive | Carlsbad | CA | 92009 | 33.12027 | -117.2541 | 289 | 5,160.03 | 4,432.91 | 4,405.24 | 4,306.19 | 45.06 | 45.83 | 46.38 | 46.71 | 0.55 | 0.88 |
| I28-1/I29-1/I47-2 | Barry | Hacker | 6047 Paseo Alameda | Carlsbad | CA | 92009 | 33.12748 | -117.235 | 414 | 9,526.72 | 7,836.35 | 7,136.52 | 6,375.71 | 45.25 | 46.91 | 47.43 | 47.87 | 0.52 | 0.96 |
| I39-2/I46-1/R-I11 | P. | Gray | 1680 Via Del Vorvo | San Marcos | CA | 92078 | 33.11521 | -117.2236 | 747 | 14,078.35 | 12,669.41 | 12,089.99 | 11,466.10 | 41.56 | 43.39 | 43.54 | 43.61 | 0.15 | 0.22 |
| I43-1 | Debra | Treinen | 4949 Demeter Way | Oceanside | CA | 92056 | 33.15411 | -117.265 | 426 | 8,227.38 | 8,185.75 | 7,730.12 | 7,666.93 | 45.04 | 44.62 | 45.31 | 45.44 | 0.69 | 0.82 |
| I44-1 | Laura | Dolloff | 2562 Dogwood Road | Carlsbad | CA | 92009 | 33.1235 | -117.2604 | 317 | 3,008.45 | 2,678.29 | 2,641.13 | 2,571.74 | 48.22 | 49.09 | 50.17 | 50.67 | 1.08 | 1.58 |
| I51-1 | Lonnie & Anne | Smith | 2636 Sausalito Avenue | Carlsbad | CA | 92010 | 33.16325 | -117.3117 | 212 | 14,053.16 | 13,964.74 | 13,887.34 | 13,717.50 | 37.92 | 37.70 | 38.46 | 38.73 | 0.76 | 1.03 |
| I56-1 | Shirley | Anderson | 6305 Keeneland Drive | Carlsbad | CA | 92009 | 33.12247 | -117.2585 | 332 | 3,665.81 | 3,209.00 | 3,254.02 | 3,193.70 | 46.87 | 47.69 | 48.57 | 49.02 | 0.88 | 1.33 |
| I61-14 | Giovanni and Anne | Bertussi | 2265 Masters Road | Carlsbad | CA | 92008 | 33.14072 | -117.2913 | 215 | 4,424.94 | 4,270.58 | 4,075.20 | 3,970.22 | 50.48 | 50.72 | 51.44 | 51.77 | 0.72 | 1.05 |
| I62-1/I80-3 | Mary and Joe | Hull | 913 Poppy Lane | Carlsbad | CA | 92011 | 33.09996 | -117.3026 | 120 | 9,164.62 | 9,079.46 | 9,421.66 | 9,218.94 | 39.33 | 39.78 | 40.42 | 41.08 | 0.64 | 1.30 |
| I66-1 | Christopher | Carroll | 841 Plumeria St | San Marcos | CA | 92069 | 33.14997 | -117.1672 | 690 | 31,061.60 | 29,227.25 | 28,460.14 | 27,621.24 | 46.38 | 48.82 | 49.92 | 51.01 | 1.10 | 2.19 |
| I69-3 | Michael | Goldbeck | Intersection of Alga Road and Corintia Street | Carlsbad | CA | 92009 | 33.10796 | -117.2451 | 439 | 10,342.44 | 9,676.02 | 9,558.62 | 9,399.62 | 40.01 | 39.55 | 39.61 | 39.84 | 0.06 | 0.29 |
| I70-1 | Stacy | King | 7043 Heron Circle | Carlsbad | CA | 92011 | 33.10873 | -117.2981 | 272 | 5,820.50 | 5,746.52 | 6,026.57 | 5,855.41 | 44.42 | 45.02 | 45.27 | 46.04 | 0.25 | 1.02 |
| I72-1 | Sigrid | Tehrani | 3194 Corte Tamarindo | Carlsbad | CA | 92009 | 33.10778 | -117.237 | 640 | 12,089.77 | 11,162.56 | 10,864.36 | 10,531.41 | 39.59 | 38.98 | 39.01 | 39.18 | 0.03 | 0.20 |
| I76-18 | Richard | Breyer | 5213 Milton Road | Carlsbad | CA | 92008 | 33.14189 | -117.2954 | 230 | 5,164.35 | 5,017.13 | 4,854.55 | 4,718.21 | 49.47 | 49.59 | 50.06 | 50.43 | 0.47 | 0.84 |
| I77-1 | Val | Brown | Intersection of Jobe Hill Drive and Casa Bonita Way | Vista | CA | 92081 | 33.19082 | -117.2635 | 377 | 21,482.96 | 21,444.34 | 21,054.41 | 20,990.66 | 40.82 | 40.19 | 40.61 | 40.63 | 0.42 | 0.44 |
| I78-6 | Pamela | Chana | 7331 Lantana Terrace | Carlsbad | CA | 92011 | 33.0972 | -117.3044 | 143 | 10,262.01 | 10,164.03 | 10,523.90 | 10,312.56 | 38.58 | 38.85 | 39.57 | 40.17 | 0.72 | 1.32 |
| I79-1/O1-1 | Theresa | Gibson | 3535 Linda Vista Dr #255 | San Marcos | CA | 92078 | 33.14033 | -117.211 | 678 | 17,211.07 | 15,377.85 | 14,610.71 | 13,772.40 | 53.46 | 56.33 | 57.74 | 58.96 | 1.41 | 2.63 |
| I85-4 | Pia | Romano | 2090 Balboa Circle | Vista | CA | 92081 | 33.16439 | -117.2343 | 496 | 15,714.27 | 14,320.56 | 13,765.49 | 13,776.16 | 40.42 | 41.40 | 43.09 | 43.13 | 1.69 | 1.73 |
| NOP-1 | Ray & Ellen | Bender | 1015 Camino del Arroyo Drive | San Marcos | CA | 92078 | 33.11486 | -117.2143 | 745 | 16,787.38 | 15,300.08 | 14,680.23 | 14,004.51 | 40.40 | 42.21 | 42.35 | 42.42 | 0.14 | 0.21 |
| NOP-2 | Joan | Bockman | 1017 Alberta Ave. | Oceanside | CA | 92054 | 33.19005 | -117.3689 | 128 | 31,824.38 | 31,634.73 | 31,862.85 | 31,589.41 | 37.43 | 37.02 | 37.88 | 37.93 | 0.86 | 0.91 |
| NOP-3 | Lisa | McKethan | 1343 Forest Ave. | Carlsbad | CA | 92008 | 33.17175 | -117.3426 | 143 | 21,504.83 | 21,344.17 | 21,528.08 | 21,266.06 | 39.25 | 38.52 | 39.28 | 39.39 | 0.76 | 0.87 |
| NOP-4 | Hope & Vince | Nelson | 1416 Sapphire Dr. | Carlsbad | CA | 92011 | 33.12015 | -117.2945 | 262 | 1,634.00 | 1,543.91 | 1,754.86 | 1,590.15 | 55.28 | 56.37 | 56.55 | 57.43 | 0.18 | 1.06 |
| NOP-5 | Chris | Cereghino | 1538 Turquoise Drive | Carlsbad | CA | 92011 | 33.11694 | -117.2919 | 340 | 2,849.39 | 2,739.82 | 2,871.42 | 2,720.44 | 51.74 | 52.57 | 53.06 | 53.78 | 0.49 | 1.21 |
| NOP-6 | Robert & Donna | Billmeyer | 1566 Maritime Dr. | Carlsbad | CA | 92011 | 33.11444 | -117.2898 | 356 | 3,823.22 | 3,694.92 | 3,787.73 | 3,648.09 | 49.76 | 50.36 | 50.80 | 51.38 | 0.44 | 1.02 |
| NOP-7 | Maud E. | Schaefer | 1660 Dawson Dr. | Vista | CA | 92081 | 33.14995 | -117.2461 | 364 | 9,366.20 | 7,951.03 | 7,407.45 | 6,856.05 | 44.73 | 44.97 | 45.73 | 45.86 | 0.76 | 0.89 |
| NOP-8 | Cathy | Overley | 1841 Timber Trail | Vista | CA | 92018 | 33.15955 | -117.2567 | 514 | 10,924.33 | 10,229.98 | 9,936.60 | 9,744.58 | 42.35 | 41.95 | 42.68 | 42.79 | 0.73 | 0.84 |
| NOP-9 | Graham R. | Torley | 2539 El Gavilan Court | Carlsbad | CA | 92009 | 33.11027 | -117.2518 | 359 | 8,310.08 | 8,060.30 | 7,973.82 | 7,909.26 | 41.70 | 41.45 | 41.58 | 41.85 | 0.13 | 0.40 |
| NOP-10 | Susan | Hertz | 3221 Corte Tamarindo | Carlsbad | CA | 92009 | 33.1075 | -117.2346 | 633 | 12,695.92 | 11,717.49 | 11,381.33 | 11,011.25 | 39.34 | 38.69 | 38.73 | 38.89 | 0.04 | 0.20 |
| NOP-11 | Edward | McKissick | 3610 Pontiac Dr. | Carlsbad | CA | 92010 | 33.16723 | -117.3105 | 303 | 15,314.42 | 15,213.05 | 15,100.59 | 14,936.15 | 37.88 | 37.67 | 38.40 | 38.59 | 0.73 | 0.92 |
| NOP-12 | Paul | Young | 4021 Arcadia Way | Oceanside | CA | 92056 | 33.16129 | -117.2697 | 397 | 10,611.45 | 10,572.63 | 10,239.97 | 10,176.31 | 43.57 | 42.84 | 42.72 | 42.83 | -0.12 | -0.01 |
| NOP-13 | Patrick | Quillin | 4280 Clearview Dr. | Carlsbad | CA | 92008 | 33.15041 | -117.32 | 231 | 11,125.42 | 10,987.22 | 11,144.08 | 10,884.41 | 40.13 | 40.05 | 40.83 | 41.39 | 0.78 | 1.34 |
| NOP-14 | Dr. & Mrs. Paul | Blake | 4783 Flying Cloud Way | Carlsbad | CA | 92008 | 33.14472 | -117.3192 | 54 | 9,385.90 | 9,196.28 | 9,431.17 | 9,150.51 | 41.04 | 41.45 | 42.46 | 43.25 | 1.01 | 1.80 |
| NOP-15 | Gage | Vincent | 4987 Delos Way | Oceanside | CA | 92056 | 33.15656 | -117.2668 | 402 | 8,996.13 | 8,957.22 | 8,548.83 | 8,485.10 | 44.64 | 43.99 | 44.41 | 44.54 | 0.42 | 0.55 |
| NOP-16 | Melanie | Murnane | 5233 Milton Road | Carlsbad | CA | 92008 | 33.14116 | -117.2947 | 224 | 4,851.81 | 4,703.47 | 4,539.36 | 4,405.50 | 50.02 | 50.16 | 50.74 | 51.10 | 0.58 | 0.94 |
| NOP-17 | Jeff | Tontini | 6408 Merlin Dr. | Carlsbad | CA | 92011 | 33.11994 | -117.3073 | 186 | 3,391.28 | 2,996.20 | 3,680.54 | 3,323.99 | 55.10 | 56.28 | 56.05 | 56.91 | -0.23 | 0.63 |
| NOP-18 | Beth | Rosselle | 6430 Torreyanna Circle | Carlsbad | CA | 92011 | 33.11831 | -117.3015 | 243 | 2,660.80 | 2,472.97 | 2,955.84 | 2,693.25 | 52.84 | 53.91 | 53.85 | 54.76 | -0.06 | 0.85 |
| NOP-19 | Helle and David | Pearson | 6443 Amethyst Way | Carlsbad | CA | 92011 | 33.11689 | -117.2917 | 343 | 2,875.34 | 2,763.83 | 2,887.04 | 2,738.02 | 51.68 | 52.51 | 53.01 | 53.73 | 0.50 | 1.22 |
| NOP-20 | Don | Sonck | 6482 Torreyanna Circle | Carlsbad | CA | 92011 | 33.11704 | -117.3 | 255 | 2,925.74 | 2,818.67 | 3,205.36 | 2,974.20 | 51.74 | 52.61 | 52.50 | 53.40 | -0.11 | 0.79 |
| NOP-21 | Vernie A. | Seach | 6531 Camino del Parque | Carlsbad | CA | 92011 | 33.11487 | -117.3139 | 95 | 6,122.10 | 5,732.36 | 6,409.98 | 6,060.79 | 49.14 | 50.26 | 50.61 | 51.49 | 0.35 | 1.23 |
| NOP-22 | Nina Luisi & Joann | West | 6531 Easy Street | Carlsbad | CA | 92011 | 33.11856 | -117.3247 | 55 | 8,456.24 | 8,023.04 | 8,736.90 | 8,320.29 | 53.29 | 54.47 | 54.42 | 55.26 | -0.05 | 0.79 |
| NOP-23 | DeAnn | Weimer | 6606 Fiona Pl. | Carlsbad | CA | 92011 | 33.11118 | -117.2823 | 263 | 5,211.93 | 5,107.63 | 5,105.49 | 5,067.06 | 47.01 | 47.46 | 47.91 | 48.26 | 0.45 | 0.80 |
| NOP-24 | David | Smith | 6986 Corte Langosta | Carlsbad | CA | 92009 | 33.10423 | -117.2387 | 619 | 12,639.88 | 11,864.46 | 11,658.29 | 11,404.88 | 38.48 | 37.75 | 37.68 | 37.88 | -0.07 | 0.13 |
| NOP-25 | Pamela L. & Richard A. | Fefferman | 7016 Corintia Street | Carlsbad | CA | 92009 | 33.1055 | -117.2372 | 647 | 12,611.84 | 11,758.63 | 11,503.88 | 11,207.09 | 38.88 | 38.16 | 38.11 | 38.29 | -0.05 | 0.13 |
| NOP-26 | Greg & Denise | Dorin | 7024 Corintia Street | Carlsbad | CA | 92009 | 33.10595 | -117.237 | 656 | 12,534.73 | 11,663.66 | 11,398.14 | 11,092.09 | 39.04 | 38.33 | 38.29 | 38.46 | -0.04 | 0.13 |
| NOP-27 | Stephanie & Larry | Yackley | 7036 Heron Circle | Carlsbad | CA | 92011 | 33.10734 | -117.2976 | 271 | 6,314.03 | 6,239.22 | 6,500.18 | 6,332.93 | 43.41 | 43.99 | 44.30 | 45.04 | 0.31 | 1.05 |
| NOP-28 | June | Lombardi | 7037 Heron Circle | Carlsbad | CA | 92011 | 33.10784 | -117.2981 | 270 | 6,141.86 | 6,067.89 | 6,345.19 | 6,175.03 | 43.72 | 44.33 | 44.63 | 45.39 | 0.30 | 1.06 |
| NOP-29 | Stuart P. & Kathy S. | Hepburn | 7040 Corintia Street | Carlsbad | CA | 92009 | 33.10676 | -117.2366 | 651 | 12,423.06 | 11,516.60 | 11,229.25 | 10,904.22 | 39.28 | 38.60 | 38.58 | 38.75 | -0.02 | 0.15 |
| NOP-30 | Siavash & Susan | Meshkat | 7044 Corintia Street | Carlsbad | CA | 92009 | 33.10697 | -117.2364 | 645 | 12,412.36 | 11,494.99 | 11,200.68 | 10,869.48 | 39.33 | 38.65 | 38.64 | 38.81 | -0.01 | 0.16 |
| NOP-31 | Christine & John | Daggett | 7052 Corintia Street | Carlsbad | CA | 92009 | 33.10741 | -117.2366 | 644 | 12,260.81 | 11,335.06 | 11,036.48 | 10,702.25 | 39.47 | 38.83 | 38.84 | 39.01 | 0.01 | 0.18 |
| NOP-32 | Stephanie | Jackel | Ahmu Terrace | Vista | CA | 92084 | 33.23024 | -117.2438 | 375 | 36,678.00 | 36,242.75 | 35,921.84 | 35,632.42 | 38.75 | 37.34 | 37.01 | 37.01 | -0.33 | -0.33 |
| NOP-33 | Amanda | Mascia | Amigos Court and Serena Ave | Oceanside | CA | 92056 | 33.17617 | -117.2759 | 259 | 16,047.50 | 16,009.03 | 15,767.81 | 15,704.96 | 40.03 | 40.00 | 40.49 | 40.55 | 0.49 | 0.55 |
| NOP-34 | Luke | Miracco | Crystalline Drive and Rose Drive | Carlsbad | CA | 92011 | 33.10566 | -117.2986 | 240 | 6,946.00 | 6,872.51 | 7,152.86 | 6,982.66 | 42.16 | 42.76 | 43.20 | 43.93 | 0.44 | 1.17 |
| NOP-35 | James P. & Marilyn | Day | Ocean Hills Country Club | Oceanside | CA | 92056 | 33.16003 | -117.2645 | 418 | 10,367.08 | 10,325.16 | 9,884.59 | 9,820.68 | 43.82 | | | | | |

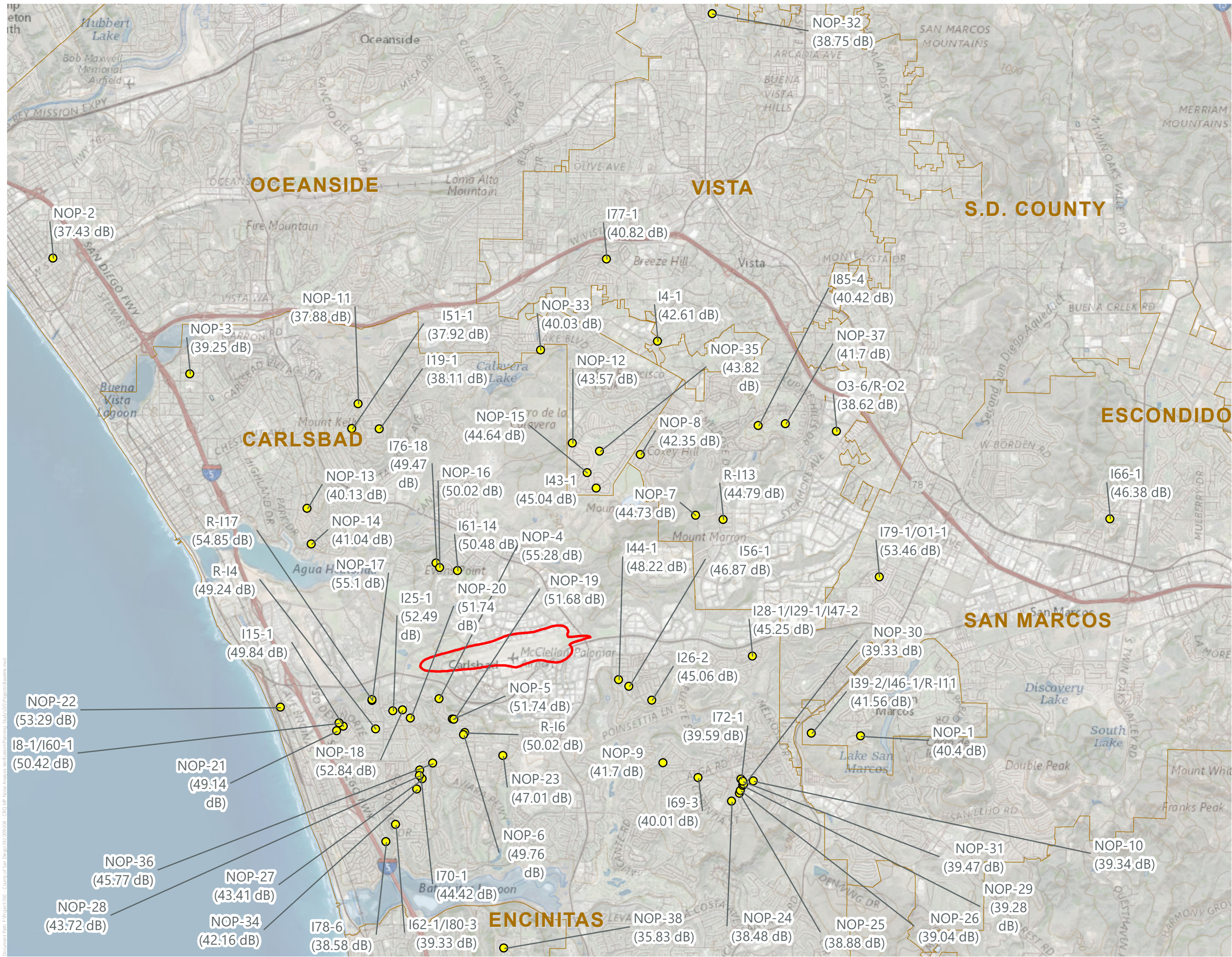
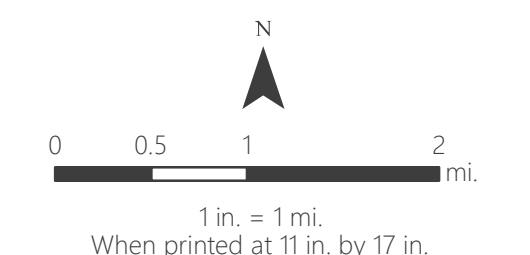


Figure 1
Existing/Baseline Conditions (2016)

- Yellow dot: Comment Address
- Red outline: 65 dB CNEL
- Yellow outline: Municipal Boundary



**McClellan-Palomar Airport
Master Plan Update PEIR:
Supplemental Noise Analysis**

Sources: AEDT Noise Contours from C&S Engineers, Inc.; ESRI World Imagery & USGS Topo Basemaps Basemap. Created by C&S Engineers, Inc. 2021

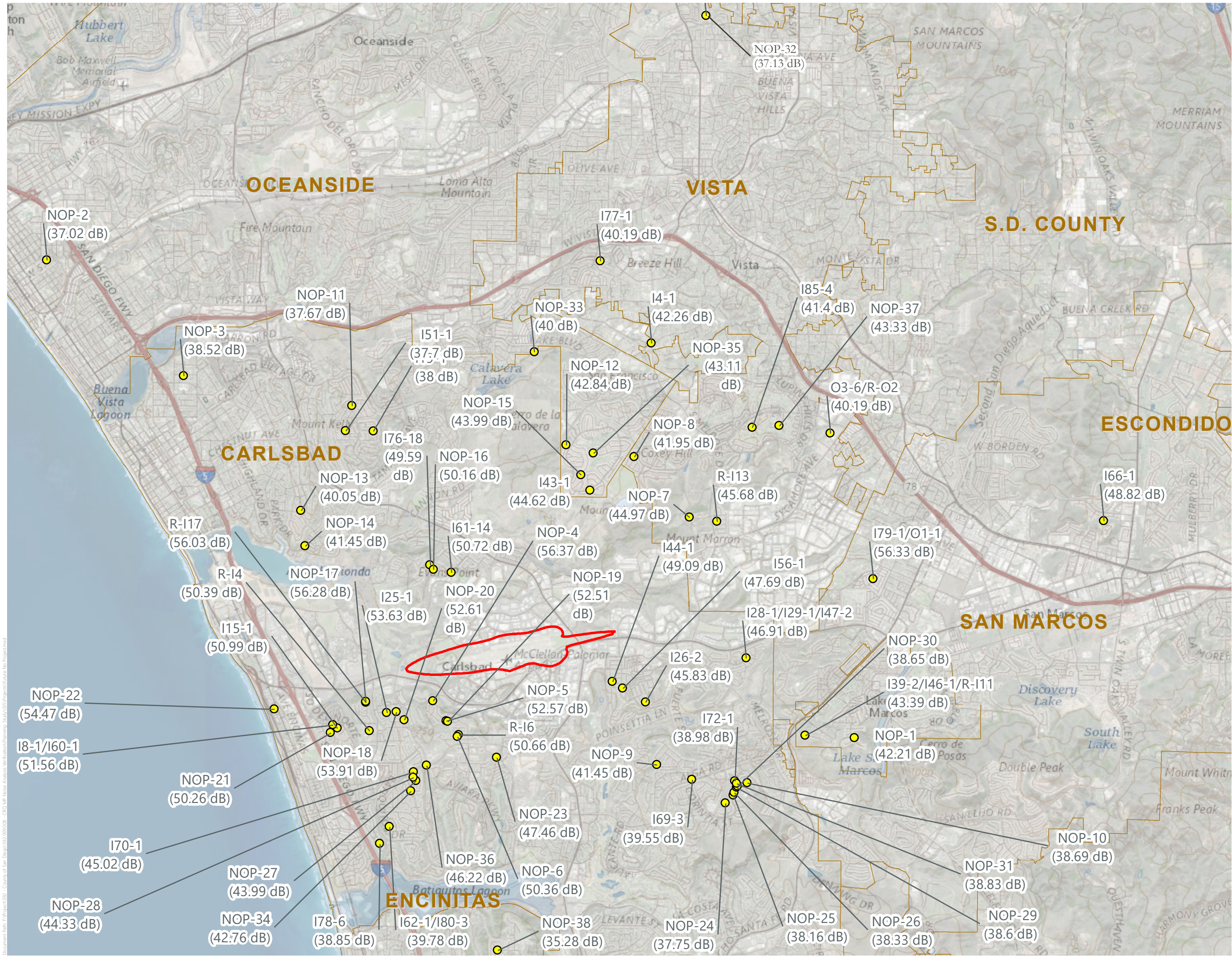
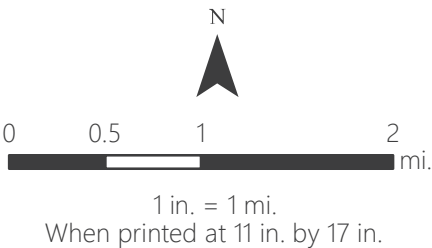


Figure 2

Future Conditions (2036)
No Project

- Comment Address
- 65 dB CNEL
- Municipal Boundary






McClellan-Palomar Airport Master Plan Update PEIR: Supplemental Noise Analysis

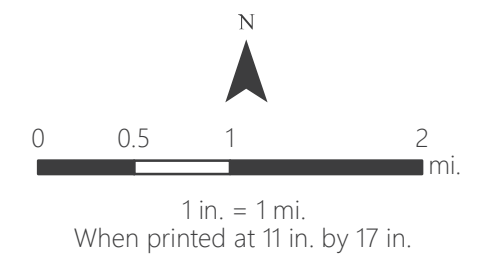
Sources: AEDT Noise Contours from C&S Engineers, Inc.; ESRI World Imagery
& USGS Topo Basemaps Basemap. Created by C&S Engineers, Inc. 2021



Figure 4

Future Conditions (2036)
With Project (PAL2)

-  Comment Address
 65 dB CNEL
 Municipal Boundary



McClellan-Palomar Airport Master Plan Update PEIR: Supplemental Noise Analysis

Sources: AEDT Noise Contours from C&S Engineers, Inc.; ESRI World Imagery & USGS Topo Basemaps Basemap. Created by C&S Engineers, Inc. 2021