# DOVE MOUNTAIN BOULEVARD TRAFFIC SOUND ASSESSMENT (SECRET SPRINGS DRIVE TO PROSPECT WASH AREA OF PRIMARY INTEREST) Questionnaire/Survey/Comment Input Form

#### **CONTACT INFORMATION**

Dove Mountain Neighborhood Area (see map):		
Name (optional):		
Address (optional) or Nearest Minor Cross-Streets:		
E-mail (optional):	Phone (optional):	

**INSTRUCTIONS:** Contact information will only be used as a part of this assessment. If you do not wish to be contacted, please provide your approximate address/nearest minor cross-streets so your comments can be associated with a location (location in a sound assessment is very important). We recommend filling out this form after attending the workshop presentation on April 17, 2024. However, interested parties who did not attend the workshop are encouraged to complete this questionnaire and offer additional input. Please email completed questionnaires to <u>seth.chalmers@dibblecorp.com</u>. If you have technical questions, please contact the consultant Project Manager, Seth Chalmers, at 602.363.1854 or <u>seth.chalmers@dibblecorp.com</u>.

ASSESSMENT OBJECTIVE: The objective of this assessment is to continue sound evaluation efforts and arrive at an actionable or non-actionable conclusion. This includes an effort to help educate interested parties on the principles and processes involved in street traffic sound assessment and to gain input from those individuals regarding their issues. This assessment will consider whether additional data collection and evaluation are required to determine if the sound qualifies as noise. If additional data are needed, reasonable alternatives for potential mitigations may be developed and evaluated, and suitable locations for their implementation may be identified. If mitigations are deemed effective and cost-efficient, the next step will involve determining how these mitigations will be funded. Given that this situation pertains to a planned community, it may fall upon the Dove Mountain Community Association and individual residents to explore mitigations and fund them. While the Town of Marana can offer technical assistance, it is currently not positioned to directly participate in funding additional mitigations, particularly if they involve private property.

### **IMPORTANT DEFINITIONS**

- 1. **Sound:** Sound is an objective term; it refers to a physical property. When an object vibrates, the energy from those vibrations causes pressure fluctuations as it travels through air (or another medium). If the pressure fluctuations reach a person's ears, the person will perceive them as sound.
- 2. Components of Sound:
  - **Source:** The origin of the sound.
  - Path: The medium through which the sound travels.
  - **Receptor:** The person or device that detects the sound.
- 3. **Noise:** Noise is a sound that can be loud and unpleasant, causing disturbance. The judgment of the unpleasantness of sounds at lower levels is often subjective to the individuals hearing the sound and where they hear it.
- 4. Reduction in Sound or Noise Reduction Design Goal:
  - A meaningful reduction in sound is typically from 5 to 7 decibels, achievable through physical structures (such as noise barriers) located at the source or receptor (or both).
  - A reduction of 5 decibels or more is readily perceptible.







## 5. Interruption of Sound:

 Interruption of sound occurs when other sounds are used to mask the sound that might be perceived as noise. This is sometimes referred to as white noise. Water features that have fountains are typically used to interrupt unwanted sounds or noise outdoors at a specific location.

## SOUND AND NOISE ASSESSMENT QUESTIONNAIRE (please answer whatever questions apply to you)

- 1. On a scale of 1 to 10 (with 1 being the best and 10 being the worst), do you think sound from Dove Mountain Boulevard is, at times, at a level that you consider noise?
- 2. At what time(s) do you consider sound from Dove Mountain Boulevard to be noise? Circle all times that you think apply.

Early Morning - Morning - Late Morning - Noon - Early Afternoon - Afternoon - Late Afternoon - All the time

- 3. Does this perceived noise occur on specific day(s) of the week, month, or year? Or is it all the time?
- 4. Do weather conditions have any impact on your perception of the sound as noise?
- 5. Do you feel that the noise is high and frequent enough that it needs to be mitigated in some fashion?
- 6. If you consider the sound to be noise, is it when you are inside your home, outside your home, or both?
- 7. From that location (either indoors or outdoors), can you directly see Dove Mountain Boulevard? Circle which applies.

Inside: Yes or No Outside: Yes or No

**Note:** Line of sight is the path between the receiver (home/residence) and the source (vehicle on the street) and is very important in sound transmission. The rule of thumb is that if you can see the traffic, you may perceive its sound to be louder.

8. Are there any obstructions between you and Dove Mountain Boulevard that can interrupt that line of sight? If so, is that there all the time or only some of the time?

**Note:** Traffic sound or noise is a moving line source, meaning it is generating that sound as it travels along the street or road. Sound or noise can be interrupted at times by something physical like a berm, wall, or vegetation that is on or off your property. These features can reflect and/or absorb sound.

9. If you can see Dove Mountain Boulevard, have you noticed what type(s) of vehicle(s) are generating enough sound for you to consider it to be noise?



- 10. Estimate or Guess how far is your home from Dove Mountain Boulevard in feet or football fields?
- 11. Is your home above, below, or at the same level as Dove Mountain Boulevard? Or does it vary?
- 12. What is the terrain like between you and Dove Mountain Boulevard? Is it flat, hilly, uphill, or downhill? Does the terrain have no vegetation, little vegetation, some vegetation, or much vegetation? Is the soil on the terrain soft, semi-soft, semi-hard, or hard?
- 13. Describe and/or sketch the location where you are when you consider the sound from Dove Mountain Boulevard to be noisy. Is there a wall between you and Dove Mountain Boulevard? Is so, what type of wall and how high is it? Is it a solid wall or does it have openings? If it has openings or gaps, what are those openings made of?

- 14. If you consider Dove Mountain Boulevard to have enough sound to be considered noise, have you done anything on your property to mitigate it? This could include heightening a solid wall or closing gaps in a solid wall with a solid material such as masonry, steel, aluminum, wood, or safety glass. See the companion handout for the transmission loss potential of different materials.
- 15. Have you tried any other mitigation measures, such as a water feature, to help mask the sound?
- 16. Are you willing to allow the Town of Marana and its engineering consultant, Dibble, to take sound measurements at the location where you believe that sound is noise? The total time to take these measurements is estimated to be just under an hour.
- 17. Please write any other questions and/or comments here.





