# 1300 S. PCH Dog Salon

Acoustical Testing Summary
Project No. 25.0143

April 8, 2025

TJ Parker
**Parker Realty**
1300 South Pacific Coast Highway, Suite 106
Redondo Beach, California

Dear TJ,

At your request and authorization, Westside Acoustics & Vibration Engineering (Westside) completed Normalized Noise Isolation Class (NNIC) testing to the adjacent tenant spaces at 1300 S. PCH Dog Salon on April 6, 2025. The building is located in Redondo Beach, California. Testing results were compared to City requirements for sound isolation and estimates of dog barking/whining/etc. noise to adjacent tenants were also provided. This report documents the testing results and analysis.

## 1.0 EXECUTIVE SUMMARY

It is understood that the City of Redondo Beach has provided a requirement that demising assemblies between the proposed project and adjacent tenant spaces shall achieve between STC 55 and 65. While STC is a laboratory-measured noise metric, Westside has provided guidance on translation between laboratory- and field-measured acoustic metrics to verify compliance with the intent of the City requirements.

The following conclusions can be drawn from the testing performed:

- The tested floor-ceiling assembly between the proposed dog salon and the existing chiropractic practice above meets City requirements.
- The tested wall assembly between the proposed dog salon and the existing dry cleaners does not meet City requirements.

Modifications are required to the demising wall assembly only. Recommendations are provided in the following sections of this report.

## 2.0 TESTING METRICS

The testing was performed in accordance with the following metrics:

1. ASTM E336: *Standard Test Method for Measurement of Airborne Sound Attenuation between Rooms in Buildings*

2. ASTM E413: *Classification of Rating Sound Insulation*

Normalized Noise Isolation Class (NNIC) describes airborne sound isolation from sources like voices, televisions or dogs as tested in the field. Sound Transmission Class (STC) is an analogous laboratory-tested metric to NNIC.

## 3.0 STANDARDS

Westside understands the City of Redondo Beach has issued a requirement for the subject project that requires demising conditions to meet a minimum of STC 55 (exact requirement language states performance must meet between STC 55 and STC 65).

STC is a laboratory testing metric and cannot be measured in the field. Therefore, Westside has used existing published standards to relate the analogous NNIC field testing metric to STC.

1. The International Code Council (ICC) Guidelines for Acoustics considers a three-point reduction between laboratory and field metrics as acceptable.
2. The California Building Code, when referring to minimum demising condition sound isolation between habitable/sleeping spaces (not commercial), allows for a five-point reduction when relating laboratory testing metrics to field testing metrics.

Therefore, conservatively, Westside recommends that the minimum City required sound isolation in terms of field testing should be NNIC 52.

## 4.0 TESTING RESULTS

The acoustic test measurement results are shown in the table below. The measurement results show that the vertical demising floor-ceiling condition meets the City requirements, but the lateral demising wall condition fails the City requirements.

*Table 1: Testing Results*

| Specimen | Adjacency | Results |
|---|---|---|
| | | NNIC |
| Floor-Ceiling | Dog Salon to Goodlife Chiropractic | 52 |
| Demising Wall | Dog Salon to Blue Sky Cleaners | 45 |
| | **Minimum City Criteria** | 52 |

Exact assembly construction is unknown. However, Westside made the following observations of existing construction:

- Floor-Ceiling Assembly
  - Plywood subfloor
  - Wood structure with two sets of 2x joists
  - Insulation batts applied within joist cavities, though some have fallen

out.
    - Damped fabric material tacked to structure.
- Wall Assembly
    - 2x wood studs with insulation
    - Drywall finishes on both sides, unknown number of layers.
    - Service penetrations on dog salon side are unsealed and oversized.

As can be seen in the table above, the wall assembly does not meet City requirements as tested. Therefore, modifications are required.

## 5.0 MITIGATION RECOMMENDATIONS

To improve the demising wall assembly to achieve minimum City sound isolation requirements, Westside has provided two options for mitigation. Either option may be implemented, however the full set of recommendations within each option must be completed.

### 5.1 Option 1

- Remove the finish gypsum board layer on future tenant (Dog Salon) side of wall.
- Replace with two (2) layers of gypsum board attached via resilient clips, equal to Pac International RSIC-1 or Pliteq GenieClip.
    - These products utilize a 7/8-inch hat channel attachment to gypsum board.
- Wall improvement shall extend all the way up to structure.
- All penetrations in this wall shall be caulked with acoustic sealant equal to USG Fire Rated Acoustical Sealant in tube.
- Maintain a 1/4-inch gap around the entire wall perimeter. This gap shall be caulked with the same acoustic sealant.
- If any equipment, cabinets, photos, etc. is planned to be hung or supported off the demising wall, these shall be supported from the hat channel and not off studs.
    - Additional clips and/or tighter hat channel and clip spacing may be necessary to achieve this if wall-mounted equipment/items are suitably heavy.
    - Coordinate with resilient clip manufacturer to properly space clips and accomplish this.

### 5.2 Option 2

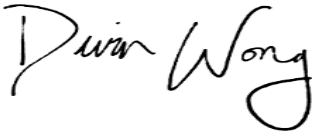
- Verify the number of layers of gypsum board on the future tenant (Dog Salon) side of the existing assembly. If required, add an additional layer of 5/8-inch gypsum board on the future tenant side so that the total number of layers attached to the existing studs is two (2).

- All penetrations in the existing tenant demising wall shall be caulked with acoustical sealant equal to USG Fire Rated Acoustical Sealant in tube.
- Install a new row of studs in front of the existing assembly (wood or metal, minimum 2-1/2-inch depth). The new row of studs shall be spaced a minimum of 1-inch front of the finish gypsum board.
- Provide batt insulation the (nominal) depth of the new stud cavity.
- Provide one (1) layer of gypsum board to the exterior of the new stud row.
- Wall improvement shall extend all the way up to structure.
- All penetrations in this wall shall be caulked with acoustical sealant equal to USG Fire Rated Acoustical Sealant in tube.
- Maintain a 1/4-inch gap around the entire wall perimeter. This gap shall be caulked with the same acoustic sealant.

Per on-site observations, the existing wall appears to be a single stud wall with cavity insulation and at least one (1) layer gypsum board on the dry cleaner's side. Depending on the exact testing agency, both mitigation options should achieve approximately STC 58-61. Test reference TL07-672 for Option 1 and TL17-272 for Option 2.

Please feel free to contact us with any questions.

Sincerely,
**Westside Acoustics**



Devin Wong
*Acoustician*