May 9, 2022

Melinda Allhands
Acom Consulting
5200 SW Meadows Road, Suite 150
Lake Oswego, OR 97035

Re: Acoustical Report – Verizon SPO Crosby
Site: 40 S Wall Street, Spokane, WA 99201

Dear Melinda,

This report presents a noise survey performed in the immediate vicinity of the proposed Verizon telecommunications facility at 40 S Wall Street in Spokane, Washington. This noise survey extends from the proposed equipment to the nearest properties. The purpose of this report is to document the existing conditions and the impacts of the acoustical changes due to the proposed equipment. This report contains data on the existing and predicted noise environments, impact criteria and an evaluation of the predicted sound levels as they relate to the criteria.

Code Requirements

The site is located within the City of Spokane zoning jurisdiction on property with a DTC zoning designation. All of the receiving properties are zoned DTC. Spokane Municipal Code 10.08 defines DTC properties as Class B EDNA.

The proposed new equipment includes equipment support cabinets, which are expected to run 24 hours a day.

Under Spokane Municipal Code Chapter 10.08D.070, noise from equipment on a Class B EDNA property is limited as follows:

Class B EDNA Receiver: Noise is limited to 60 dBA 24 hours a day.

Ambient Conditions

Existing ambient noise levels were measured on site with a Svantek 971 sound level meter on May 3, 2022. Measurements were conducted as close to the proposed location as possible and the property lines in accordance with the State of Washington code for Maximum Environmental Noise Levels WAC 173-60-020. The average ambient noise level was 61 dBA, due primarily to local vehicle traffic.

Predicted Equipment Sound Levels

24-Hour Operation Equipment
The following table presents a summary of the equipment and their associated noise levels:

Table 1: Equipment Noise Levels

Equipment	LwA (each)	Quantity	Combined dBA @ 5 ft
Ericsson Streetmacro 6701	60 LwA	3	64
Total LwA (All cabinets combined)			**64**

Methods established by ARI Standard 275-2010 and ASHRAE were used in predicting equipment noise levels to the receiving properties. Application factors such as location, height, and reflective surfaces are accounted for in the calculations.

The equipment will be located on a light pole at approximately 24'-0" above grade. The nearest receiving property is approximately 8 feet west of the equipment. The following table presents the predicted sound level at the nearest receiving property:

Table 2: Predicted Noise Levels: Proposed Equipment Cabinets

Line	Application Factor	W
1	Sound Power Level (dBA), Lw1	64
2	Distance Factor (DF) Inverse-Square Law (Free Field): DF = 20*log (r) + 0.5	-19 (8 ft)
3	New Equipment Sound Pressure Level at Receiver, Lpr (Add lines 1 and 2)	**45**

As shown in Table 2, the sound pressure level from the proposed equipment is predicted to be 45 dBA at the nearest receiving property to the west which meets the 60 dBA code limit. Noise levels at other receiving properties, which are further away, will be lower and within code limits.

Please let us know if you have questions or need further information.

Sincerely,
SSA Acoustics, LLP

Steven Hedback
Acoustical Consultant