

**FINDINGS AND DECISION
OF THE HEARING EXAMINER FOR THE CITY OF SEATTLE**

In the Matter of the Appeal of

FOUR SEASONS SEATTLE,
et al.,

from a Decision by the Director,
Department of Construction and Inspections

Hearing Examiner file:
HC 18-001- HC 18-006

Department Reference:
#3029782

Introduction

Seven appeals were filed of a Major Public Project Construction Noise Variance granted by the Director of the Seattle Department of Construction and Inspections (“Director” or “City”) to the Washington State Department of Transportation (“WSDOT”) from the maximum permissible sound level requirements of the Noise Control Code, Chapter 25.08 of the Seattle Municipal Code, during the Alaskan Way Viaduct Replacement Program and the demolition of the Alaskan Way Viaduct. The matters were heard before the Deputy Hearing Examiner (“Examiner”) on July 16, 2018. Represented at the hearing were the Appellants: 98 Union Homeowners Association by Mr. John Gleason; Ms. Jackie Swarts; Ms. Kay Smith-Blum; Mr. Andrew Konstantaras; and Mr. Michael Roberts; all *pro se* (collectively herein “Appellants”). The City was represented by Mr. Patrick Downs, Assistant City Attorney; and WSDOT was represented by Ms. Deborah Cade and Mr. Michael Huot, Washington State Assistant Attorneys General (“State” or “WSDOT”) (collectively herein “Respondents”).

While the Four Seasons Seattle and WSDOT also filed appeals, both parties settled with the City prior to the hearing. An issue challenging compliance with the State Environmental Policy Act brought by Appellant Konstantaras was dismissed prior to the hearing.

For purposes of this decision, all section numbers refer to the Seattle Municipal Code (“SMC” or “Code”) unless otherwise indicated. Having considered the evidence in the record and visited the site, the Examiner enters the following findings of fact, conclusions and decision on the appeal.

Findings of Fact

1. The site covers a large area of the downtown Seattle waterfront area, currently occupied by a double decker highway structure named the Alaskan Way Viaduct (“Viaduct”), also known as State Route (“SR”) 99. The area includes the entire SR 99 roadway corridor from the south tunnel entrance (near the intersection of S Dearborn Street and 1st Avenue South) to the north tunnel entrance (in the vicinity of 1st Avenue and Battery Street), including two ramps, at Columbia Street and Seneca Street. Exhibit 11. The

general area where the Director's noise variance applies is represented on a map in Exhibit 3 at 4.

2. The existing Viaduct was built in the 1950's and was damaged in the 2001 Nisqually earthquake. It is seismically vulnerable and at the end of its useful life. The Federal Highway Administration ("FHWA"), WSDOT, and the City developed a project plan to replace the existing facility with a new tunnel structure capable of meeting current standards for earthquake resistance. The FHWA approved the "Tolled Bored Tunnel Alternative" for the Alaskan Way Replacement Project in a Record of Decision dated August 22, 2011. That decision was preceded by and based upon a Final Environmental Impact Statement ("FEIS"). Exhibit 5.
3. The land use classifications near the project site are residential, commercial, and industrial. Exhibit 2. The noise levels allowed by code in each area correspond to the zoning classification enacted by the City Council. The allowed noise level in residential zones is 55 decibels ("dBA")¹ in day and 45 dBA at night, while the allowed noise level in commercial zones is 57 dBA in the day and 47 dBA at night. The permitted noise levels in industrial zones is 60 dBA in the day and 50 dBA at night. Nighttime hours are 10 p.m. to 7 a.m. on weekdays, and 10 p.m. to 9 a.m. on weekends. Exhibit 3 at 18; and Exhibit 8.
4. On October 9, 2017, WSDOT applied for a Noise Variance to the Seattle Department of Construction and Inspections ("SDCI"). Exhibit 3. The Noise Variance was requested under SMC 25.08.590 and 25.08.655 to allow on-site construction noise to exceed the maximum permissible sound level during nighttime hours specified in SMC 25.08.410 through SMC 25.08.425.
5. WSDOT requested the noise variance for the proposed Viaduct demolition to allow necessary construction work activities to occur during nighttime hours (between 10 p.m. and 7 a.m. on weekdays and between 10 p.m. and 9 a.m. on weekends and legal holidays). WSDOT also requested a Major Public Project Construction Noise Variance ("MPPCNV") to allow impact work to occur between 7 a.m. and 10 p.m. on weekdays, weekends and legal holidays in addition to the regular daytime hours of 8 a.m. and 5 p.m. on weekdays and 9 a.m. and 5 p.m. on weekends and legal holidays. Although the noise variance is requested for one year, WSDOT hopes to start in November 2018, and complete all work by Mother's Day 2019. Not only would this schedule avoid disruption of the busy summer tourist season, it would also avoid doing work during the part of the year inhabitants are most likely to have their windows open and therefore would experience more noise. WSDOT also plans to honor the City of Seattle's request that no demolition work occur from Thanksgiving Day to New Years' Day.

¹ A decibel is a unit measure of the physical sound energy in the air, expressed in a range of magnitude that the human ear can hear, from the faintest to the loudest sound on a logarithmic scale. The smallest "just noticeable" increase in sound is about 3dBA. A 6 dBA increase is clearly noticeable, and a 10 dBA increase causes a doubling of judged loudness. For example, 80 dBA is judged to be twice as loud as 70 dBA and four times as loud as 60 dBA. Exhibit 3 at 8.

6. The demolition is planned in three stages: 1) early work; 2) demolition; and 3) finish work. Early work involves the Alaskan Way traffic switch, which includes installation of a span wire signal system and signage. Finish work, the third stage, will include project closeout, including cleanup, dismantling of staging areas, and restoration where required. Early and finish work is expected to be quieter than demolition. Exhibit 3 at 5.

Demolition will be the loudest activity and will take approximately six months. Exhibit 3 at 5-6. The work is planned as follows:

- For most of the Viaduct mainline, the deck will be hammered out with the use of excavators and hammers, and the inside beams will be cut up with a concrete cracker. The footings will be hammered and the debris will be loaded out. This activity uses impact equipment and is expected to take up to six months.
- Demolition will occur two blocks at a time and close three intersections at a time. Work would take place within and from public rights-of-way, or where WSDOT obtains temporary construction easements. The entire work zone would be closed to the public with no crossings for vehicles or pedestrians. Three to five work crews will be working at a time on different parts of the structure.
- Burlington Northern Santa Fe Railroad ("BNSF") has imposed some significant limitations on the timing of demolition around the railroad bridge and right of way near the existing Viaduct. Over the railroad tracks, the deck will be saw cut into sections, the sections will be rigged and loaded onto trucks. BNSF will only allow this activity to occur between the hours of 1 a.m. and 4 p.m. on Saturdays, Sundays and Mondays and will be prohibited altogether between October 1st and December 31st. WSDOT expects a total of 39 nights will be needed to complete this work over a period of 13 weeks.
- The first 100 feet north of the railroad tracks is similarly restricted. The same process as used for the rest of the mainline will be used to demolish this part of the highway structure. Impact equipment will be used, and demolition may only occur between 1 a.m. and 4 a.m. on Saturdays, Sundays, and Mondays and will be prohibited altogether between October 1st and December 31st. WSDOT expects a total of 12 nights will be needed to complete this work over a period of a month.
- From the end of the railroad restricted work areas to Battery Street Tunnel, excavators with concrete crackers will demolish the structure and it will be loaded out. This activity uses impact equipment will and is expected to take three months.
- The Seneca and Columbia off-ramps present some special challenges. Demolition of each of those off-ramps will necessitate blocking ingress and egress to a residential parking garage. The bridge decks will be saw cut and lifted out by crane and loaded onto flatbed trucks. The bridge diaphragms will be removed with impact

hammers. As with the mainline, the footings will be hammered and the debris will be loaded out. WSDOT has committed to not block garage access for more than 30 days and expects the demolition of each ramp will take 40 days. WSDOT anticipates that a seven-day period with impact work during nighttime hours on each ramp will be necessary to clear access for residents.

7. WSDOT's application includes an initial Noise Management and Mitigation Plan ("NMMP") as required by SMC 25.08.590.D. The contractor awarded the bid for demolition is expected to provide more specifics to the NMMP, is responsible for meeting the noise levels established by the Noise Variance and must use the mitigation measures listed in the plan. The NMMP includes the following:
 - a. A description of the type of construction activities and equipment that will generate noise during nighttime hours;
 - b. A description of the expected exterior sound levels at each of the receiving sites, comparing those levels to the nighttime hourly L_{eq}^2 that was requested through the Noise Variance process;
 - c. Specifications for noise control at the construction sites that require WSDOT's contractor to implement measures for compliance with the nighttime noise limits requested in the Noise Variance application.
 - d. Mitigation measures include prohibiting the use of compression brakes and tonal backup alarms, not allowing equipment to idle unused for longer than five minutes, securely fastening truck tailgates, and using better (reduced noise) mufflers during certain activities. Potential additional mitigation measures include using electric welders, critical or double mufflers on equipment such as cranes, noise blankets for mobile equipment, and using temporary noise barriers including blankets, skirts, walls, and other items.
 - e. Individual property mitigation includes providing ear-plugs and white noise machines, installing sound dampening drapes, and providing hotel rooms for residents during high-impact or extremely noisy operations. Exhibit 3 at 34-35.
 - f. Mitigation measures also include procedures and programs for effectively monitoring, evaluating, and resolving public complaints by taking corrective measures. Two methods for resolution of complaints contemporaneous with the event include: 1) a 24-hour construction hotline that will be maintained by WSDOT; and 2) a Nighttime Noise Monitor, who shall act as an independent third party to provide oversight on nighttime work to represent the public's interest and to determine that the contractor strictly adheres to the Noise Control Code and permit conditions. Id.

² L_{eq} refers to hourly average noise levels.

8. The Seattle Department of Construction and Inspections (“SDCI”) issued a Director’s Decision approving a Noise Variance on March 19, 2018, with hours more limited than those proposed in the application. Exhibit 5 contains a table (Exhibit 1) at 13-14 providing noise limits allowed by the Director’s Decision. It was granted for 12 months starting at the beginning of nighttime construction, for the noise related to the nighttime construction activities described in WSDOT’s October 9, 2017 and in the Findings of Fact in the Director’s Decision. The Director imposed the following conditions (original numbering retained):

- (1) WSDOT, the primary contractor, and all subcontractors shall follow and execute all noise control measures identified in the Noise Variance application, appendices, attachments, and this Analysis and Decision. If there is a conflict between the WSDOT’s noise mitigation and control requirements or specifications and this Analysis and Decision, this Analysis and Decision shall control.
- (2) Nighttime project sound levels shall not exceed the required values at the identified receiving sites for Leq and L1 listed in Table 2 located in the Findings, subsection III.2 of this decision. These limits shall apply to non-impact equipment during the following schedule: weekdays 10:00 p.m. to 7:00 a.m.; and weekends including legal holidays 10:00 p.m. to 9:00 a.m. See also Exhibit 1 at the end of this [Director’s] decision for the Table of Leq Noise Limits which apply to this [Director’s] decision.
- (3) During demolition of the entire length of the [Viaduct], impact work at the sound levels permitted by SMC 25.08.425.C is further limited to the hours of 7:00 a.m. to 8:00 p.m. on weekdays, and between 9:00 a.m. to 8:00 p.m. on Saturday, and 9:00 a.m. to 5:00 p.m. on Sundays and legal holidays.
- (4) Demolition work at the BNSF railroad location will be allowed within the constraints mandated by BNSF. These constraints were presented in the application as: (1) no work between October 1 and December 31; and (2) demolition is only allowed between 1:00 a.m. and 4:00 a.m. on Saturdays, Sundays, and Mondays.
- (5) At the Seneca and Columbia Street ramps, impact equipment and saw cutting demolition will be allowed to occur for one 7-day period at each location between the hours of 7:00 a.m. and 8:00 p.m. During the 7-day period only, the noise limits of SMC 25.08.425.C for impact equipment shall apply.
- (6) As noted in the October 9, 2017 application, WSDOT shall require the contractor and all subcontractors to use their equipment and trucks in a manner that minimizes the sound that is generated. Specific measures are

identified as “Minimum Mitigation Measures” and “Additional Noise-Control Measures.” Measures listed under these headings are incorporated into this Analysis and Decision.

All seven monitoring locations used as baseline measurement locations shall be equipped with permanent monitoring devices. The monitors shall provide real-time accessible data to SDCI. Additional moveable monitoring stations shall be located 50 feet from each active demolition site and shall record data when any demolition or work subject to this Noise Variance is occurring.

- (7) The independence of the INM [Independent Noise Monitor] shall be established by WSDOT and approved by SDCI prior to starting nighttime construction. WSDOT shall provide an organizational chart to show a separate reporting structure for the INM outside of Construction Management.
- (8) WSDOT shall provide a staffed complaint hotline phone number and shall respond to all noise complaints within 1-hour. Response shall be directly to the complaint caller and SDCI at 206-615-1190.
- (9) The design-builder shall be required to submit a revised NMMP for SDCI’s approval before starting nighttime work.
- (10) SDCI shall provide oversight of the nighttime work to determine that the public interest is protected, and the contractor and subcontractors adhere to the Noise Control Code and the conditions imposed by this Analysis and Decision. SDCI shall assign a Noise Control Program Specialist who shall serve as the City’s primary contact for noise-related issues at this site. WSDOT representatives with authority to stop work shall be present on the project site during all work hours to ensure that mitigation measures are being followed. Periodic noise monitoring shall occur consistent with Director’s Rule 3-2009. Specifically, monitoring for this project shall occur as described in the October 9, 2017 Noise Variance application. WSDOT shall be required to keep the community informed of upcoming work at least 72 hours before starting nighttime work. Notice may be in the form of email lists, mailers, or door-to-door, and all notices given shall include SDCI Noise Abatement staff.
- (11) Fourteen days before starting construction that is subject to this Noise Variance, WSDOT shall provide notice of the start date to the Administrator and to all community members who were notified of the Noise Variance application. The notification form and content shall be approved by the Administrator.

- (12) WSDOT, its contractor, and subcontractors shall be responsible for implementing and adhering to all NMMPs. WSDOT's contractor shall submit their NMMP to SDCI for review and approval.
- (13) WSDOT, its contractor, and subcontractors shall be responsible for all equipment used on site whether being used by the contractor or subcontractor. If noise barriers are used to mitigate sound, the contractor or subcontractor shall be responsible for providing the barriers. Where necessary, due to repeated non-compliance with sound levels established in this variance, substantial sound walls shall be erected to provide effective barriers between the project and the adjacent residents.
- (14) Violating any condition of the Noise Variance or Analysis and Decision shall result in a review of the conditions imposed by the Noise Variance and the Analysis and Decision and may result in modifying the conditions or revoking this Noise Variance as allowed by SMC 25.08.615.

Exhibit 5 at 11-13.

9. SDCI held two public meetings on the Noise Variance Application to take public comment on the application, one on November 14, 2017 and the other on March 8, 2018. SDCI collected and considered public comments in processing the application. Exhibit 5.
10. SDCI retained BRC Acoustics and Audiovisual Design ("BRC") to assist in reviewing and analyzing the Noise Variance application. BRC reviewed the Noise Variance application, the written public comments, and provided comments and recommendations to SDCI.
11. The Appellants at hearing are all residents occupying various buildings near the project site. *See* Exhibit 6a and 6b for location of Appellants' residences. All are concerned that nighttime noise levels will interrupt sleep and adversely affect the health of nearby residents. Mr. John Gleason, President of the 98 Union Home Owners Association, submitted the following testimony that sums up many of the concerns of the Appellants:

There are approximately 110 people who live in my building.

In discussions with the homeowners of 98 Union, it was clear that if the cost of having a period at night with NO work what-so-ever meant having the demolition duration extended two or three months, it was well worth it.

Within earshot of the viaduct, there are thousands of residents and visitors to the city who will lose much sleep as a result of this noise ordinance variance.

Please remember that in the middle of the night, even minor work such as staging and assembly creates noise that during daytime hours would be lost in the ambient din of downtown. But, in the wee hours, the staccato bursts of noise will jolt people awake:

- as traffic signs are unloaded and clatter on the pavement,
- barricades are dropped on the sidewalk,
- tailgates are slammed shut,
- and heavy equipment is moved off flatbed trucks.

We therefore respectfully request that the Hearing Examiner reconsider the variance and incorporate the following modifications:

- a. Between the hours of 2200 and 0700, no “impact work” to occur and allow no work than is louder than inspections, worker assembly, safety briefings, utility locating, etc.
- b. Demolish the two elevated ramps simultaneously to minimize the duration of noise in the community.
- c. Establish a City of Seattle “hotline” to which people can report noise ordinance violations.
- d. Dedicate a City of Seattle ombudsperson to be available each night between the hours of 2200 and 0700 to investigate complaints in real time.
- e. For violations of the noise ordinance, provide for fines that are increasingly punitive for the contractor.
- f. Provide regular construction updates to residents and business in the impact area.

Exhibit 1.

12. At the hearing, the State presented Brian Nielsen, the Program Administrator for the Viaduct Project for WSDOT. Mr. Nielsen, an engineer employed for 25 years with WSDOT, provided an overview of the project:
 - a. The project is a Design/Build project, meaning bid specifications were published through a procurement process, a number of contractors bid on the project, and one was ultimately selected based on price and quality. That contractor will be responsible for finishing the work on schedule and if they do not, they must pay liquidated damages.

- b. Meeting the Noise Code and the Noise Code Variance will be the responsibility of the contractor. For example, while mitigation measures are specified in the NMMP, it is up to the contractor to ensure that a particular mitigation measure is appropriate and will adequately mitigate noise generation.
 - c. There will be up to five crews working at once. Five would start in January, with peak work occurring during February. There will be three to five crews working at any given time.
 - d. Timing of the entire project is already subject to a few significant constraints. The City has asked for no work during the holiday season (Thanksgiving through New Years' Day), which WSDOT will respect. The City also wants to avoid the summer tourist season, because of the impacts on businesses and visitors. Current demolition schedule is January 2, 2019 to May 9, 2019.
 - e. The decision to work during nighttime hours is a matter of balancing interests that must be considered as a part of this large, complex project. While their request for bid allowed the contractor to take up to nine months to complete the project, the winning bid scheduled to complete the project in six months. The impacts to both residences, businesses, and surface transportation must be considered. For example, the demolition of the ramps at Seneca and Columbia is complicated by the fact that WSDOT must block access at the east end of the ramp to an apartment residence for at least 30 days. Because of that, it is critical that the project continue during the nighttime hours.
13. WSDOT also submitted a declaration from Brian Nielsen with an attached economic report. The Appellants did not submit any information on economic considerations.
- a. The report quantifies the economic cost of the traffic impacts caused by the demolition work. The methodology used in this report is the same as that used by WSDOT to compute the amount set as liquidated damages in contracts when contractors exceed the time allowed for traffic lane closures. It reflects the value of time, since people and goods are delayed in traffic.
 - b. The declaration states that the ability to work at night outside the time periods permitted under Seattle's Noise Code provides about 40 percent additional time for the contractor to complete the work. The lack of ability to work at night would likely add a month or more to the demolition work, taking it into the busy summer tourist season. The report estimates that the additional cost to the local economy would be at least \$10 million dollars.
 - c. The declaration also states that the loss of nighttime hours would reduce efficiency, since special equipment for demolition will be mobilized to the site. Keeping that equipment on site for a longer period of time will increase overhead for both WSDOT and the contractor.

14. Both the City and the WSDOT had noise experts testify about the impacts of noise that would occur under the Director's Decision. No noise expert testified on behalf of the Appellants.
15. To study noise, WSDOT monitored noise at seven locations in downtown Seattle, based on their proximity to construction activities and availability. Exhibit 3 at 11-12. It found that measured existing nighttime sound levels exceed City of Seattle nighttime noise control ordinance limits of 45 dBA (Leq) at residential locations and 60 dBA (Leq) at commercial locations. The existing sound levels, which are produced primarily by automobile traffic, are not subject to the limits of the ordinance. SMC 25.08.410-.425. Those baselines are useful for comparisons to the proposed noise increases due to demolition activities. See Exhibit 3 at Exhibit 5, p. 13.
16. The City sent out the noise variance application for third-party review to a noise expert, in this case BRC Acoustics & Audiovisual Design ("BRC"). Exhibit 4. Ioana Park, P.E., from BRC testified as the noise expert for the City. Her experience included prior Sound Transit projects. She indicated that the Noise Variance nighttime noise level approved by the Director in this case was more restrictive than Sound Transit's project at Mercer East, which was 85 dBA, and the Denny Substation, which was 80 dBA. She testified that based on her review, the sound level limits in the Noise Variance did not present a significant adverse noise impact or present a health hazard to residents.
17. The two ramp demolitions need to occur as quickly as possible because the demolition work will block certain residents from using their parking garage. For that reason, the Director allowed impact equipment and saw cutting demolition for one-seven day period at each location between the hours of 7:00 a.m. and 8 p.m. During that time, sound may not exceed 90 dBA continuously, or even higher levels ranging up to 99 dBA for increasingly shorter periods of time.
18. The part of the project site containing the BNSF bridge and railroad tracks presents difficulties, since the WSDOT work schedule is severely constrained by the need to continue running freight and passenger trains through the construction area. In accordance with BNSF's prescribed schedule, demolition is only allowed between 1:00 a.m. and 4:00 a.m. on Saturdays, Sundays, and Mondays. In addition, WSDOT may not work in that area at all between October 1 and December 31. The Noise Variance allows a limit of up to 75 dBA for nighttime activity.
19. The City called Samuel Steele as a witness. He is a Construction Inspection Manager with the City. He testified that he took a walking tour of the buildings where the Appellants live. He testified regarding the Sound Transmission Class ("STC") of buildings, which is a number that indicates how much noise can be transmitted through different types of buildings. The basic requirement under building codes is that it shall have an STC of 50 (45 if field tested). In reviewing the building occupied by the Appellants, Mr. Steele concluded that they all met that standard. The typical

controlling factor is double-paned windows, which help to bring outside noise down by about 25 dBA, as long as the windows are closed.

20. WSDOT's noise expert, Ginette Lalonde, testified that an increase of 6 dBA is noticeable, but 3 dBA is "just noticeable." She also testified that other MPPCNVs for Sound Transit and the Highway 520 bridge have allowed a 6 dBA noise increase over ambient noise levels.
21. Appeal of a noise variance or its conditions is permitted under SMC 25.08.610. The appeal is considered de novo, and the Examiner gives no deference to the Director's Decision. The Examiner may affirm, reverse, or modify the Director's Decision or remand it for additional review and analysis.

Applicable Law

22. SMC 25.08.590 provides the general requirements for granting a noise variance.
 - A. No variance shall be granted until the Administrator has considered the relative interests of the applicant, other owners or possessors of property likely to be affected by the noise, and the general public.
 - B. A technical, economic, or major public project construction variance may be granted only after notice and an opportunity for public comment. For technical or economic variances proposed for more than two weeks and for major public project construction variances, a public meeting is also required, in accordance with rules adopted by the Administrator.
 - C. The Administrator may grant a variance if the Administrator finds that:
 1. The noise occurring or proposed to occur does not endanger public health or safety; and
 2. The applicant demonstrates that the criteria required for the variance are met;
 - D. Noise Management and Mitigation Plan. As part of the application for a variance, an applicant shall submit a Noise Management and Mitigation Plan to be approved by the Administrator. A Noise Management and Mitigation Plan shall contain the following components. . . :
 1. A description of the exterior sound level limits of Chapter 25.08 expected to be exceeded, estimates of the amount(s) by which these levels are expected to be exceeded and by what equipment, the exterior sound level limits that will be in effect during the

variance, the time periods during which the pre-variance exterior sound level limits may be exceeded, and the expected sources of the sound during each of the time periods (e.g., types of equipment or activity causing the exterior sound level limits to be exceeded);

2. Measures and provisions to be taken to avoid exceeding the exterior sound level limits of this Chapter 25.08;
 3. Provisions to mitigate sounds that exceed the exterior sound level limits and that cannot otherwise be avoided; and
 4. A process for informing the public in the affected areas about the provisions of the variance.
- E. The Administrator may impose conditions, including but not limited to conditions relating to types of equipment, hours of use, and duration, to mitigate the adverse impacts of granting the variance. The Administrator may also include conditions proposed by the applicant as part of the variance application. Compliance with the Noise Management and Mitigation Plan approved by the Administrator is a condition of every variance.

23. SMC 25.08.655 provides the specific criteria for MPPCV:

- A. A major public project construction variance shall provide relief from the exterior sound level limits during the construction or reconstruction of a major public project only to the extent the applicant demonstrates that compliance with the levels would:
1. Be unreasonable in light of public or worker safety or cause the applicant to violate other applicable regulations, including but not limited to regulations that reduce impacts on transportation infrastructure or natural resources; or
 2. Render the project economically or functionally unreasonable due to factors such as the financial cost of compliance or the impact of complying for the duration of the construction or reconstruction of the major public project.
- B. A major public project construction variance shall set forth the period or periods during which the variance is effective, which period or periods shall be the minimum reasonably necessary in light of the standard set forth in subsection 25.08.655.A, and the exterior sound level limits that will be in effect during the period of the variance.
- C. The Administrator shall condition a major public project construction variance as necessary to provide reasonable control or mitigation of

the construction noise that may be expected to occur pursuant to the variance.

Conclusions

1. The Examiner has jurisdiction over these appeals pursuant to SMC 25.08 610. Appeals are considered de novo, or anew, meaning that the evidence is not limited to the record made before the Director. The Code also provides that in considering the appeal, the Examiner gives no deference to the Director's decision on the variance application. SMC 15.08.610.D.
2. Construction noise is allowed to exceed the SMC limits under SMC 25.08.425. On public projects, construction noise is allowed to exceed the noise limits by between 15 and 25 dBA, depending on the type of equipment being used, between 7:00 a.m. and 10:00 p.m., and 9:00 a.m. to 10:00 p.m. on weekends and holidays. Impact work that exceeds the noise limits is more restricted and is allowed only between 8:00 a.m. and 5:00 p.m. on weekdays and between 9:00 a.m. and 5 p.m. on weekends and holidays. WSDOT requests to work outside those hours.
3. The City's Noise Code also allows impact equipment to produce even higher sound levels (average 90 dBA) from 8:00 a.m. to 5 p.m. on weekdays and 9:00 a.m. to 5:00 p.m. on weekends and holidays. WSDOT also requests that the Noise Variance extend the higher sound limits for impact work to the hours between 7 a.m. to 10 p.m. on weekdays, weekends, and holidays.
4. WSDOT requested a variance to allow non-impact work to occur between 10 p.m. and 7:00 a.m. *See Exhibit 3.* WSDOT also requested a variance to allow impact work until 10:00 p.m. The Director granted a more limited variance, allowing impact work between 7:00 a.m. and 8:00 p.m. on weeknights and even more limited times on weekends and holidays. Although work may occur between 8:00 p.m. and 7:00 a.m., the work must comply with the noise limits imposed in the variance, and cannot include impact work, except as specifically allowed for the Seneca Street and Columbia Street ramp demolition and the work near the railroad bridge. In addition, the nighttime non-impact work can only produce up to 6 dBA above the nighttime noise limits, except as specifically allowed for the Seneca Street and Columbia Street ramp demolition and the work near the railroad bridge.
5. SMC 25.08.590 provides the general requirements for granting a noise variance. Below each requirement appears in *italics*, followed by an analysis of how the project meets that criteria.
 - A. *No variance shall be granted until the Administrator has considered the relative interests of the applicant, other owners or possessors of property likely to be affected by the noise, and the general public.*

The Viaduct is a vital artery of the downtown Seattle transportation infrastructure. The demolition of this structure in the heart of the waterfront is a necessary but very complex task. There are many viewpoints to consider, including those of: the Applicant; the residents who live near the demolition site; the merchants that must have business disrupted due to the demolition; tourist businesses that depend on the Seattle Waterfront as a tourist attraction; other regional users; those who must navigate downtown Seattle as a part of business, including car, truck, rail, and vessel traffic; those responsible for transportation infrastructure and funding, including city, state and federal government; the workers; and the general public, among others. The demolition of the Viaduct is vital to the public health and safety of the people of Seattle because it is at the end of its useful life and significant injuries and even deaths would likely result from its collapse. That is the overriding public interest.

Getting this project finished quickly is also in the public interest- the region's economy, transportation users, and residents, among others, depend on the ability to navigate the downtown waterfront area. The variance as conditioned by the Director walks the fine line of getting the job done quickly while assuring that mitigation is available in real time for those instances if and when the noise does become excessive. It also limits nighttime noise to reasonable levels.

- B. A technical, economic, or major public project construction variance may be granted only after notice and an opportunity for public comment. For technical or economic variances proposed for more than two weeks and for major public project construction variances, a public meeting is also required, in accordance with rules adopted by the Administrator.*

SDCI held two public meetings, one on November 14, 2017 and a second on March 8, 2018, to take public comment on the proposed Noise Variance.

- C. The Administrator may grant a variance if the Administrator finds that:*

- 1. The noise occurring or proposed to occur does not endanger public health or safety; and*

The City presented unrefuted expert opinion evidence that the noise to be generated from the project will not endanger public health and safety. The third party noise expert, Ioana Park, P.E., testified that while the noise levels approved in the variance might be a nuisance, they will not endanger public health and safety. Furthermore, the noise levels contained in the Director's Decision are consistent with noise levels approved for other Major Public

Project Construction Noise Variances for Sound Transit and the Highway 520 work. The Appellants did not provide any specific expert evidence to contradict this opinion.

2. *The applicant demonstrates that the criteria required for the variance are met;*

Through the testimony presented and exhibits in the record, WSDOT has demonstrated that the variance criteria are met. The Appellants provided no evidence that indicates WSDOT has not met the criteria. Furthermore, the noise levels and conditions contained in the Director's Decision are consistent with or more restrictive than those approved for other Major Public Project Construction Noise Variances for Sound Transit and the Highway 520 work. The Appellants did not provide any specific expert evidence to contradict the City's and State's evidence.

- D. *Noise Management and Mitigation Plan. As part of the application for a variance, an applicant shall submit a Noise Management and Mitigation Plan to be approved by the Administrator. A Noise Management and Mitigation Plan shall contain the following components. . .:*

1. *A description of the exterior sound level limits of Chapter 25.08 expected to be exceeded, estimates of the amount(s) by which these levels are expected to be exceeded and by what equipment, the exterior sound level limits that will be in effect during the variance, the time periods during which the pre-variance exterior sound level limits may be exceeded, and the expected sources of the sound during each of the time periods (e.g., types of equipment or activity causing the exterior sound level limits to be exceeded);*

In its application, WSDOT provided a very detailed description of the exterior sound limits of SMC Chapter 25.08 that are expected to be exceeded during the different demolition activities outlined in the application. Exhibit 3 at 20-34.

2. *Measures and provisions to be taken to avoid exceeding the exterior sound level limits of this Chapter 25.08;*

WSDOT has provided a list of specific noise mitigation measures that the contractor will use in performing the work. The contractor who performs the work will be obligated to employ these mitigation measures as a part of its work plan. The contract will update the NMMP to provide more precise information regarding how and when these mitigation measures will be used.

3. *Provisions to mitigate sounds that exceed the exterior sound level limits and that cannot otherwise be avoided; and*

WSDOT has provided a list of specific noise mitigation measures that the contractor will use in performing the work. The list contains standard industry practices that the contractor will be required to provide in the manner set out in the NMMP. There is no evidence in the record to suggest these measures are anything other than adequate.

4. *A process for informing the public in the affected areas about the provisions of the variance.*

A. The Director, through Rule 3-2009, requires WSDOT to provide an Independent Noise Monitor (“INM”) whose responsibility it is to oversee the monitoring of sound levels from construction covered by the MPPCNV and to report directly to the SDCI Coordinator for Noise Abatement. If the continuous monitoring equipment detects an exceedance of the Noise Variance nighttime noise level limits, or if a caller to a 24-hour hotline has a noise-related complaint, the INM will be notified, and will perform a site inspection within 60 minutes of receiving the complaint. The INM will also

- coordinate with WSDOT and the night crews on planned work operations;
- coordinate with WSDOT Communications Team on any updates or concerns from residents and other people in the neighborhood;
- coordinate with SDCI on any questions or concerns from the City;
- conduct nightly verification of fixed noise monitoring station with a hand held noise monitor to validate noise monitor readings from fixed locations;
- conduct regular spot-check noise monitoring at various locations of the project site with a handheld monitor; and
- address noise exceedances and monitoring alarms in the field.

B. WSDOT and the Contractor will also generate weekly reports that will be provided to SDCI and will include any monitored Leq exceedances, noise complaints logged in the

program database, and work modifications completed to resolve complaints. The weekly reports will be publicly available online.

C. WSDOT also uses electronic and online communications for public outreach regarding construction activities:

- WSDOT maintains an electronic mailing list, and regular email updates are sent to provide status updates and information on current activities.
- A project website is created and updated regularly.
- WSDOT provides information to other agencies to use on their websites.
- There is a 24-hour live telephone construction hotline that will be maintained for the Viaduct demolition.
- Detailed responses will be provided to emails sent to the project email address.

These measures are designed to keep the public informed and to provide effective mechanisms to independently monitor and respond to noise complaints in a very timely manner. There has been no suggestion by the Appellants that these measures are flawed in any way. The Appellants asked for real-time access to noise meter levels. WSDOT's noise expert explained that while they considered making that information available, they were concerned that there would be many people losing sleep simply trying to monitor nighttime noise, without being physically affected by it. WSDOT proposes, and the Director imposed, reasonable and adequate measures to keep the public informed.

E. The Administrator may impose conditions, including but not limited to conditions relating to types of equipment, hours of use, and duration, to mitigate the adverse impacts of granting the variance. The Administrator may also include conditions proposed by the applicant as part of the variance application. Compliance with the Noise Management and Mitigation Plan approved by the Administrator is a condition of every variance.

The Director imposed 14 conditions, all of which are reasonable, protective of the public interest, and achievable. The Appellants have provided no evidence to indicate otherwise.

6. SMC 25.08.655 provides the specific criteria for a MPPCV. Below each requirement appears in italics, followed by an analysis of how the project meets that criteria.

- A. *A major public project construction variance shall provide relief from the exterior sound level limits during the construction or reconstruction of a major public project only to the extent the applicant demonstrates that compliance with the levels would:*
1. *Be unreasonable in light of public or worker safety or cause the applicant to violate other applicable regulations, including but not limited to regulations that reduce impacts on transportation infrastructure or natural resources; or*
 2. *Render the project economically or functionally unreasonable due to factors such as the financial cost of compliance or the impact of complying for the duration of the construction or reconstruction of the major public project.*

This provision allows the Applicant to focus on either A.1 or A.2 as a justification for the variance. WSDOT focused on A.2, arguing that compliance with the noise code would render the project economically unreasonable. The evidence presented in the testimony and Declaration of Brian Nielsen, with a supporting economic study, justified the request for the variance. The Appellants presented no evidence to refute Mr. Nielsen's submissions. Given the importance of this area in the transportation network and the cost of extending the project, compliance with the noise code would render the project economically unreasonable. The Appellants have provided no evidence to suggest otherwise.

- B. *A major public project construction variance shall set forth the period or periods during which the variance is effective, which period or periods shall be the minimum reasonably necessary in light of the standard set forth in subsection 25.08.655.A, and the exterior sound level limits that will be in effect during the period of the variance.*

WSDOT asked for and the Director granted a variance that lasts one year starting at the beginning of nighttime construction. While WSDOT plans to only take six months to complete demolition activities, the period of one year provides an additional cushion to finish this complex project in the event there are unanticipated problems. WSDOT could even discontinue demolition activities for the summer months and finish in the fall. This is a large and complex project, and a one-year noise variance is the minimum reasonably necessary under the circumstances.

It is not reasonable to require WSDOT to take a longer time to complete the project, as requested by Appellants. Appellants would have WSDOT work only through daytime hours to complete the demolition of the viaduct. In that case, the demolition work would continue through the tourist season, and force some businesses that depend on that summer revenue to close, or

severely cut back. In addition, during warm weather, many will have their windows open, and as Mr. Steele testified, the sound levels will increase by 25 dBA by that fact alone.

- C. *The Administrator shall condition a major public project construction variance as necessary to provide reasonable control or mitigation of the construction noise that may be expected to occur pursuant to the variance.*

The Director imposed 14 conditions, all of which are reasonable and achievable to control and mitigate the construction noise. The Appellants have provided no evidence to indicate otherwise.

7. Appellants have all voiced concerns regarding disruption of sleep. While this is certainly a legitimate concern, there are adequate limits and mitigation measures in place to ensure a minimum of disruption. In addition, none of the Appellants reside near the railroad bridge or the two ramps, so additional nighttime noise from those portions of the project will not affect them. Moreover, the City has imposed almost all the conditions requested by Appellant 98 Union Home Owners Association in Exhibit 1, quoted earlier in the findings.
8. The Applicant has met its burden to show that the Director's Decision approving the Major Public Construction Noise Variance for demolition is in compliance with the requirements of SMC Chapter 25.08. The experts' opinions are unrefuted by the Appellants and support the Director's Decision. *See Sloan v. Thompson*, 128 Wn. App. 776, 789-90, 115 P.3d 1009 (2005).

The Examiner concludes that the conditions, as set forth in the Director's Decision are reasonable and achievable within the context of this major public construction project and are supported by the evidence in the record.

Decision

The Director's decision is **AFFIRMED**.

Entered this 14th day of August, 2018.


Barbara Dykes Ehrlichman
Deputy Hearing Examiner

Concerning Further Review

NOTE: It is the responsibility of the person seeking to appeal a Hearing Examiner decision to consult Code sections and other appropriate sources, to determine applicable rights and responsibilities.

The decision of the Hearing Examiner in this case is the final decision for the City of Seattle. In accordance with RCW 36.70C.040, a request for judicial review of the decision must be commenced within twenty-one (21) days of the date the decision is issued unless a motion for reconsideration is filed, in which case a request for judicial review of the decision must be commenced within twenty-one (21) days of the date the order on the motion for reconsideration is issued.

The person seeking review must arrange for and initially bear the cost of preparing a verbatim transcript of the hearing. Instructions for preparation of the transcript are available from the Office of Hearing Examiner. Please direct all mail to: PO Box 94729, Seattle, Washington 98124-4729. Office address: 700 Fifth Avenue, Suite 4000. Telephone: (206) 684-0521.

**BEFORE THE HEARING EXAMINER
CITY OF SEATTLE**

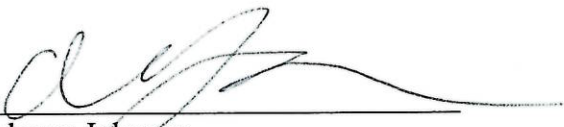
CERTIFICATE OF SERVICE

I certify under penalty of perjury under the laws of the State of Washington that on this date I sent true and correct copies of the attached **Findings and Decision** to each person listed below, or on the attached mailing list, in the matter of **Four Seasons Hotel Seattle et al.**, Hearing Examiner Files: **HC-18-001 through HC-18-006** in the manner indicated.

Party	Method of Service
Appellants 98 Union Homeowners Association John Gleason johng@secprop.com Kay Smith-Blum kay@butchblum.com Jackie Swarts jackie1.home@yahoo.com Andrew Konstantaras akonsta@me.com Michael Roberts mjsroberts@icloud.com	<input type="checkbox"/> U.S. First Class Mail, postage prepaid <input type="checkbox"/> Inter-office Mail <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> Fax <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Legal Messenger
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Dated: August 14, 2018



Alayna Johnson
Legal Assistant