

CONSTRUCTION NOISE MONITORING SUMMARY REPORT

SEPTEMBER 1 – 30, 2018

**VIRGINIA AVENUE TUNNEL RECONSTRUCTION PROJECT
WASHINGTON, DC**

**Prepared for:
CSX Transportation**

**Prepared by:
Gannett Fleming Inc.**

September 2018

VIRGINIA AVENUE TUNNEL RECONSTRUCTION

Construction Noise Monitoring Summary

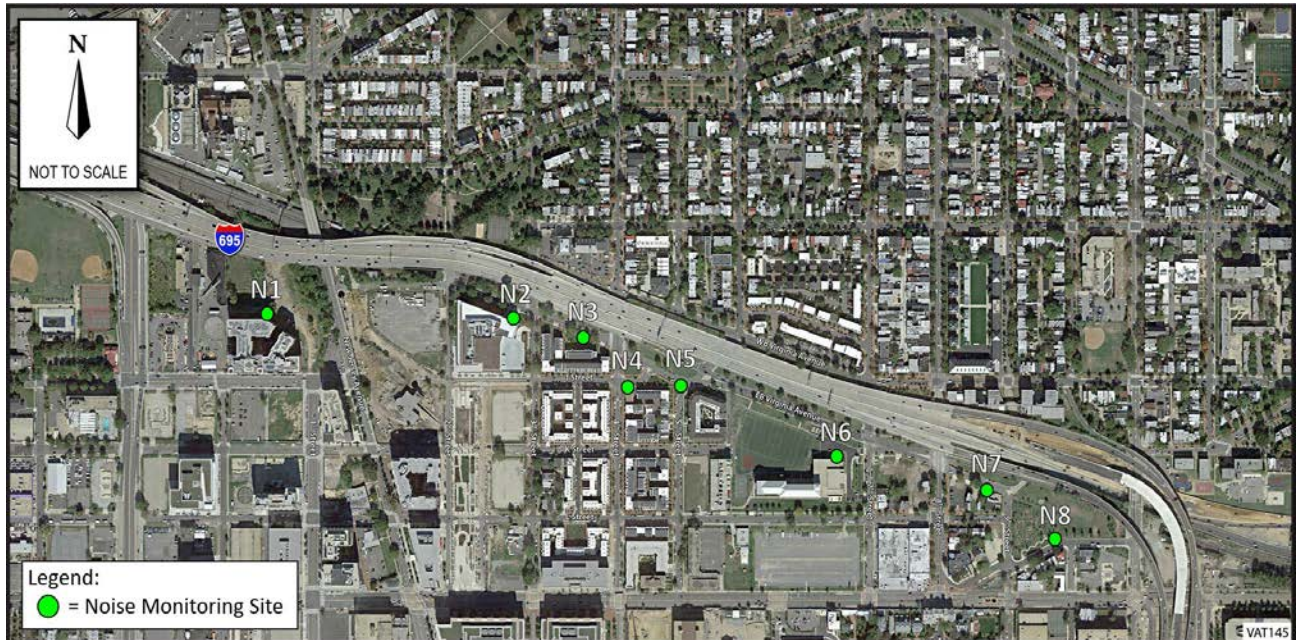
The Project Team has prepared this noise monitoring report as part of the ongoing efforts to comply with the commitments presented in the Virginia Avenue Tunnel Reconstruction Final Environmental Impact Statement (FEIS) and Section 4(f) Evaluation (May 2014) and further detailed in the Record of Decision (ROD), November 2014. The project sponsor has agreed to a number of environmental commitments as mitigation for environmental impacts that will result from the Virginia Avenue Tunnel Reconstruction Project. The commitments are divided between those related to construction of the Project and those related to the restoration of affected areas upon project completion of the Selected Alternative. These environmental commitment measures are mitigations which avoid the impact altogether by not taking a certain action or parts of an action; minimize impacts by limiting the degree or magnitude of the action and its implementation; rectify the impact by repairing, rehabilitating, or restoring the affected environment; reduce or eliminating the impact over time by preservation and maintenance operations during the life of the action; or compensate for the impact by replacing or providing substitute resources or environments. This construction noise monitoring summary report is intended to fulfill aspects of the noise monitoring commitments contained in the ROD for the Virginia Avenue Tunnel reconstruction.

The Project Team has installed perimeter noise monitoring stations adjacent to various buildings within the Project limits. These monitoring stations are intended to monitor construction noise associated with the Project. Construction noise will be monitored throughout the Project's construction. Sophisticated monitoring devices have been installed at eight locations to ensure the construction activities are performed in compliance with the permitted noise levels. The monitoring devices will record the level of the sound and automatically report the data back to the Project Engineers.

Methodology of Construction Noise Monitoring

Construction sound level data was collected for the reporting period September 1 – September 30, 2018. Eight fixed noise monitoring locations have been measured continuously to monitor sound levels since the beginning of major construction activities in May 2015. Sound level data was collected every minute for the duration of the noise monitoring period. The locations of the monitoring stations are depicted in **Figure 1** and the addresses described in **Table 1**.

Figure 1. Noise Monitoring Locations



Note that Monitoring Units N3 and N5 have been shifted slightly to avoid conflicts with current roadway reconstruction activities.

Table 1. Noise Monitoring Locations Description

| Site ID | Noise Monitoring Location |
|---------|---|
| N1 | West of New Jersey Avenue SE |
| N2 | Corner of 3 rd Street and Virginia Avenue SE |
| N3 | Between 3 rd Street and 4 th Street SE, in front of townhomes |
| N4 | Corner of 4 th Street SE and I Street SE |
| N5 | Corner of 5 th Street and Virginia Avenue SE, in front of Capper Senior Apartments |
| N6 | Adjacent to fence of Marine Corps Recreation Facility on 6 th Street SE |
| N7 | Between 8 th and 9 th Streets SE, in front of commercial buildings |
| N8 | Within Virginia Avenue Park |

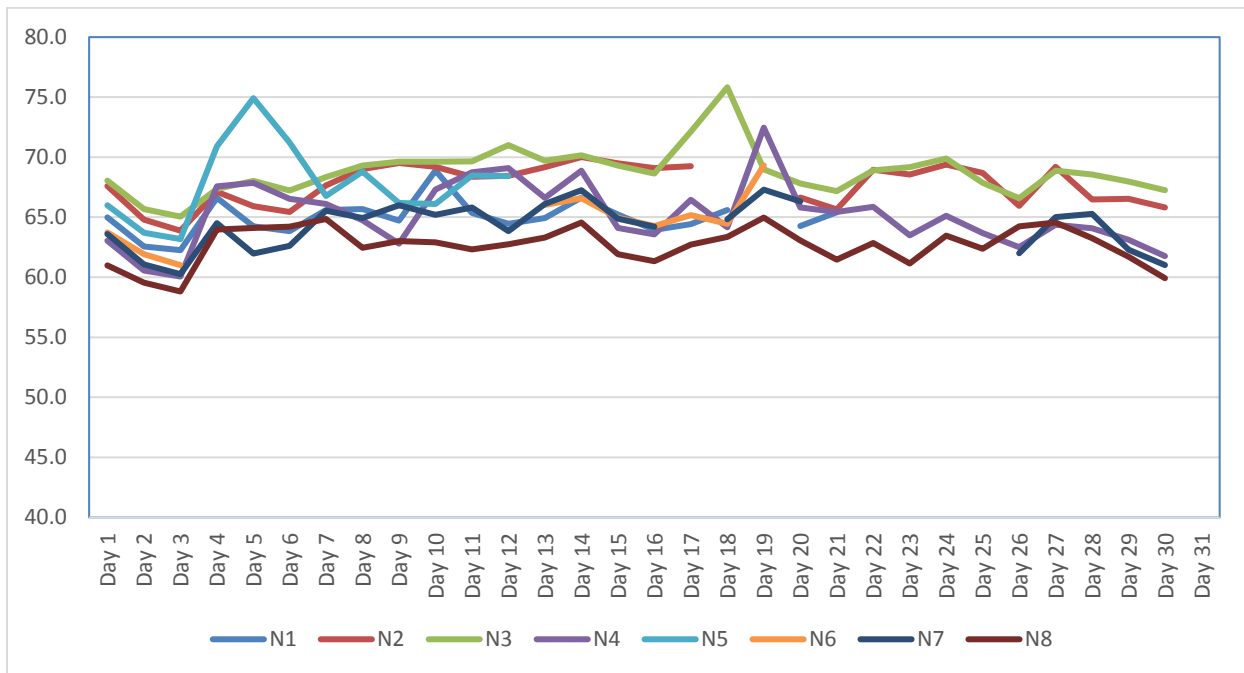
Noise Data Summary Charts

Table 2 presents the results of the sound levels measured during the month of September 2018. The daily sound levels results are plotted in **Figure 2** (on the following page) and show how the measured levels compare to the established noise criteria. There were no exceedances of the daily sound level criteria.

Table 2. Construction Noise Monitoring Results (30-Day Exceedances) – September 2018

| Site ID | Noise Monitoring Location | Construction Monitoring | | |
|---------|---|-------------------------|-----------------------|---------------------|
| | | 30-Day Leq dB(A) | 30-Day Criteria dB(A) | Exceedance (Yes/No) |
| N1 | West of New Jersey Avenue SE | 65 | 80 | No |
| N2 | Corner of 3 rd Street and Virginia Avenue SE | 68 | 80 | No |
| N3 | Between 3 rd Street and 4 th Street SE (in front of townhomes) | 69 | 80 | No |
| N4 | Corner of 4 th Street and I Street SE | 66 | 80 | No |
| N5 | Corner of 5 th Street and Virginia Avenue SE (in front of Capper Senior Apartments) | 69 | 80 | No |
| N6 | Adjacent to fence of Maine Corps Recreation Facility on 6 th Street SE | 65 | 80 | No |
| N7 | Between 8 th and 9 th Streets SE (in front of commercial buildings) | 66 | 80 | No |
| N8 | Within Virginia Avenue Park | 63 | 80 | No |

Figure 2. Summary of Daily Construction Noise Monitoring Data dB(A) – September 2018



Location N1 unit was down on 9/19 and from 9/22 to 9/30 due to power losses at the NJ Yard trailer. Location N2 unit was down on 9/18 and 9/19 due to equipment maintenance (Modem failure). Location N5 unit was down with no access to the unit since the Capper Senior Center fire from 9/19 and due to a modem failure from 9/13 to 9/18 (ordering and testing new modem). Location N6 unit was down for the majority of the month as the Marine Corps is not allowing access to the unit for servicing. Location N7 unit was down on 9/17, 9/21 due to power losses and 9/23 – 9/25 due to power losses and blocked access to the unit.

Table 3 (on the following page) represents the number of 1-hour exceedances that occurred during the month, and when applicable, the reason for the exceedance and the corrective action taken by the team. As reported in the table there were 7 exceedances recorded during the month at Locations N3, N4, N5 and N7. The exceedances at Location N3 were related to roadway reconstruction activities that were very close to the monitor. In each instance the contractor was notified immediately, and corrective actions were taken to minimize any additional exceedances. At Locations N5 and N7, the exceedances were related to equipment maintenance. The exceedance at Location N4 was caused by the fire at the Capper Senior Center.

Table 3. Construction Noise Monitoring Results (1-hour Exceedances) – September 2018

| Site ID | Noise Monitoring Location | Number of 1-hour Exceedances | Date | Time | Source | Corrective Action Taken |
|---------|--|------------------------------|-----------|---------------------------|---|---|
| N1 | West of New Jersey Avenue SE | 0 | N/A | N/A | N/A | N/A |
| N2 | Corner of 3 rd Street and Virginia Avenue SE | 0 | N/A | N/A | N/A | N/A |
| N3 | Between 3 rd Street and 4 th Street SE (in front of townhomes) | 4 | 9/17/2018 | 11am – 12pm 12pm – 1pm | Concrete and saw cutting | Contractor was notified during the first hour to limit activities |
| | | | 9/18/2018 | 7am – 8am 8am – 9am | | |
| N4 | Corner of 4 th Street and I Street SE | 1 | 9/19/2018 | 3pm – 4pm | Fire at Capper Senior Center | |
| N5 | Corner of 5 th Street and Virginia Avenue SE (in front of Capper Senior Apartments) | 1 | 9/5/2018 | 8am – 9am | Moving unit to allow for roadway paving | |
| N6 | Adjacent to fence of Marine Corps Recreation Facility on 6 th Street SE | 0 | N/A | N/A | N/A | N/A |
| N7 | Between 8 th and 9 th Streets SE (in front of commercial buildings) | 1 | 9/19/2018 | 1pm – 2pm | Calibrating unit | |
| N8 | Within Virginia Avenue Park | 0 | N/A | N/A | N/A | N/A |