

**SUPPLEMENTAL REQUIREMENTS**

1. NCDOT requires sound barrier wall panels, piles, connections, and any miscellaneous items to be designed in accordance with the current edition of the *AASHTO LRFD Bridge Design Specifications* (Coastal condition). The analysis should correspond to North Carolina's highest wind velocity condition for the longest panel width and wall height that is intended to be used in the State.
2. Check the boxes below verifying the submittal includes analysis and design calculations in accordance with the AASHTO LRFD Specifications [signed and sealed by a North Carolina PE] for the:
  - Sound barrier wall panels
  - Sound barrier wall piles/columns
  - Connections
  - Miscellaneous items
3. NCDOT requires sound walls to utilize foundation connection details similar to those shown on NCDOT's Sound Barrier Wall Standard drawings, which can be found here:  
[https://connect.ncdot.gov/resources/Structures/Structure%20Specs/sbw1\\_18.pdf](https://connect.ncdot.gov/resources/Structures/Structure%20Specs/sbw1_18.pdf)  
[https://connect.ncdot.gov/resources/Structures/Structure%20Specs/sbw4\\_18.pdf](https://connect.ncdot.gov/resources/Structures/Structure%20Specs/sbw4_18.pdf)
  - Submittal includes details showing the pile/column connection to the foundation (check to verify).
4. Submit the testing from ASTM E 90 that shows an STC rating equal to or greater than 30.
5. Provide a Letter of Compliance stating at a minimum: the company name, product name, statement saying it meets the applicable specification(s) and the manufacturer's currently published physical properties and performance characteristics.
  - a. The submitted product must meet all noise wall standards in Traffic Noise Manual and Appendices [Revision Date: January 27, 2017]  
<https://connect.ncdot.gov/resources/Environmental/PDEA%20Procedures%20Manual%20Documents/--%20Appendix%20B%20-%202023%20CFR%20772.pdf>