

## 2EN2 Stage 2 - Traffic Noise and Air Quality

### QC Checklist for TNR NOISE ANALYSIS WORK PLAN

SPOT ID/Project TIP #: \_\_\_\_\_

County: \_\_\_\_\_

Note: This QC checklist is for the initial submittal only. For subsequent submittals, the Comment/Response matrix will serve as QC checklist.

Item #	Review Item	Yes	No	N/A
<b>QC.1</b>	<b>Reporting</b>			
QC.1.1	Prepared by a traffic noise analyst prequalified with NCDOT to prepare TNRs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.1.2	The Noise Analysis Work Plan Template has been followed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.1.2.1	Includes project location, proposed improvements, number of alts, project length, existing base year, and design year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.1.2.2	Design speed has been confirmed and identified and aligns with most current design criteria.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.1.2.3	Explains why the project is a Type I for noise study purposes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.1.2.4	Includes a sufficient discussion of all primary types of land uses (NAC category) in the study area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.1.2.5	Includes commitment to verify certain info in field (duplicate or missing address info, NAC category for uncertain buildings, receptor locations, etc.), areas of frequent human use at special land use locations, number of units at multi-family residential buildings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.1.2.6	Discusses any areas where model validation isn't needed (for projects that include new location alternatives).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.1.2.7	Non-residential noise sensitive land uses where ER calculations are anticipated have been identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.1.3	Must be approved by NCDOT prior to initiation of any noise measurements or modeling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>QC.2</b>	<b>Figures</b>			
QC.2.1	Figures show appropriate number and location of proposed short-term and long-term noise monitoring sites, and number of SLMs per site, as applicable, indicated with white dots on the figures (can be adjusted in the field if needed). Include reason(s) for any long-term measurements, as applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.2.2	Figures include all receptor locations and the associated noise abatement criteria (NAC) activity category for each location, including black dots for NAC F and other non-noise sensitive land uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Item #	Review Item	Yes	No	N/A
QC.2.3	Proposed spatial limits of traffic noise study area generally follow guidance from Table 7.1 of the 2022 NCDOT Traffic Noise Manual (may need to be expanded following the initial noise modeling effort if the outer limit of predicted traffic noise impacts and/or benefits is not defined).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.2.4	Project mapping represents entire project (study area) on one image (Vicinity Map).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.2.5	Figures are landscape oriented and are oriented in the same way roadway plans follow the alignment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.2.6	Figures include aerial photogrammetry.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.2.7	Figures include a logical scale or denoted as being not to scale.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.2.8	NSA boundaries are shown.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QC.2.9	Proposed design (if available) is shown.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For items marked NO or N/A that require further explanation, provide comments or action items in the table below.

Item #	Comments and Action Items

*This checklist may not be comprehensive to every project. All items may not be applicable for smaller projects. It is the responsibility of the reviewer to ensure that an adequate review is performed.*

I have reviewed the deliverables for consistency with this checklist and confirmed that all items have been completed.

QC Reviewer Name: \_\_\_\_\_ Date: \_\_\_\_\_

QC Reviewer (Signature): \_\_\_\_\_