

*This Project Pro-forma is used to capture **project descriptions, innovations and efficiencies**. It is not expected that all the information requested will be appropriate to all projects. Please provide as much information as possible. This form should be updated and resubmitted as projects develop.*

*Text in **shaded box** is guidance – click on text box and over type.*

<b>MHA Authority</b>	Derbyshire County Council
<b>Project Number</b>	60638041
<b>Project Title</b>	A61 Dronfield Bypass Resurfacing Noise Impact Assessment
<b>Client Contact</b>	John Bourne, Project Engineer - Maintenance Programmes
<b>Client Details</b>	<p>John Bourne</p> <p>Economy, Transport and Environment Department, Derbyshire County Council County Hall, Matlock, Derbyshire, DE4 3AG</p> <p>01629 536432 (internal 36432)</p> <p>John.Bourne@derbyshire.gov.uk</p>
<b>Brief Project Description</b> (300 Characters)	<p>Local residents have expressed concern regarding road traffic sound from the A61 Dronfield Bypass following the application of a surface dressing, and Derbyshire County Council (DCC) intend to address this concern by introducing thin road surfacing on a section of the A61. DCC appointed AECOM to undertake an assessment of sound emissions from the A61 Dronfield Bypass to assist in identifying an appropriate extent of the road over which the new surface would be applied.</p>
<b>Full Project Description</b>	<p>Derbyshire County Council (DCC) intends to resurface a section of the A61 Dronfield Bypass in order to reduce sound emissions from vehicles on the A61. AECOM was commissioned by DCC to undertake an assessment of the sound emissions from vehicles on the A61 and quantify the potential reductions in sound levels from traffic on the A61 due to the proposed resurfacing.</p> <p>The focus of this assessment was to identify the potential reductions in sound levels at local residential properties that would be expected from the resurfacing of the A61.</p> <p>The scope of this assessment comprised:</p> <ul style="list-style-type: none"> <li>- Establishment of noise emission levels from the A61 and of baseline sound levels at selected representative noise sensitive receptors in the locality, under current traffic conditions;</li> <li>- Development of a 3-dimensional computational noise model of the A61 and surroundings, including validation of this model based on current traffic conditions;</li> <li>- Predictions of road traffic noise levels from the A61 under typical traffic conditions; and</li> <li>- Assessment of the effectiveness of the proposed resurfacing options and identification of an appropriate resurfacing extent to be applied.</li> </ul> <p>To avoid any temporary effects of the on-going coronavirus outbreak, the modelling in the assessment calculated typical (i.e. pre-coronavirus) baseline sound levels which were obtained from noise predictions based on February 2020 traffic flow data.</p> <p>Thin surfaced and hot rolled asphalt (HRA) road surface types and a number of resurfacing extent options were studied. These options were discussed with DCC and a thin surfacing extent that was estimated to provide at least a moderate beneficial effect at most of the properties on either side of the A61 was chosen as the preferred option. This chosen thin surfacing extent covers a 3175 m section of the A61, from the Bowshaw roundabout extending 585 m south of the Gosforth Lane bridge.</p>

	<p>The short-term change in predicted road traffic sound levels due to the introduction of the chosen thin surfacing extent indicated that moderate to major beneficial effects at a majority of the properties within the study area.</p> <p>The proposed thin surfacing is expected to achieve levels lower than those present before the application of surface dressing applied in August 2019.</p>	
<b>Innovation</b>	<p>The assessment used sound data captured during the COVID-19 lockdown and we needed to interpret this in a way to estimate noise impacts under typical conditions. I.e. pre-lockdown (before March 2020). To do this, we needed to use traffic counts representative of the pre-lockdown and lockdown periods. This can be considered as innovation because it is not a usual procedure. We needed to approach the question in a different way to be able to provide reliable results representing typical pre-lockdown conditions.</p> <p><b>This project has contributed to the development of an AECOM tool that will simplify some usual tasks within noise assessment.</b> The noise modelling undertaken within the scope of the project required processing of publicly available free LIDAR data. This has contributed to the development of a GIS tool that allows for automated LIDAR data processing. This tool can be used internally in future projects where large number of LIDAR tiles need processing. This will increase efficiency and the quality of data.</p>	
<b>Lean Delivery / Efficiency Savings</b>	<p>The GIS tool will provide efficiency savings which are difficult to quantify but are still moderate in the overall scheme of things. The key benefit is and improvement to the quality of the data processed.</p>	
<b>Sustainability</b>	<p>N/A</p>	
<b>Awards / Customer Satisfaction</b>	<p><input checked="" type="checkbox"/> MHAPSP 2 360 degree Performance Feedback? AECOM scored an average of over 9/10 across the KPIs measured.</p> <p><input type="checkbox"/></p>	
<b>Address of Site</b>	<p>A61 Dronfield Bypass</p> <p>Post Code: S18 1PS (project site centre point)</p> <p>Coordinates: 434654 , 378292 (project site centre point)</p> <p>England</p>	<p>Multiple Site Project: <input type="checkbox"/></p>
<b>Project Capital Value (if applicable)</b>	<p>Estimated: <b>Not known</b></p>	<p>At Completion: <b>Not known</b></p>
<b>Fee Value</b>	<p>Estimated: <b>£9,650</b></p>	<p>At Completion: <b>£9650</b></p>
<b>MHA PSP3 Delivery Team</b>	<p>Project Manager: Tom Lucas</p> <p>Delivery Manager: Seckin Basturk</p>	
	<p>Framework Manager: Jason Clarke</p>	
<b>Project Manager Contact Details</b>	<p>Tom Lucas +44-(0)7824-303156, tom.lucas@aecom.com</p>	

<b>Other Useful Information</b>	N/a				
<b>Image References</b> (Images to be provided separately)	N/A				
<b>Completion Certificates</b> (to be provided separately)	N/A Not available. Job not closed as an extension is under discussion.				
<b>This information provided by:</b>	<table> <tr> <td><b>Who:</b></td> <td>Seckin Basturk, +44-750-010-8470 Seckin.basturk@aecom.com</td> <td><b>When:</b></td> <td>16/11/2020</td> </tr> </table>	<b>Who:</b>	Seckin Basturk, +44-750-010-8470 Seckin.basturk@aecom.com	<b>When:</b>	16/11/2020
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