



Form Ref: HSI-10	Independent Health & Safety Inspection – Blue Star Item	Version: 2.0 Jun 2015
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	Awarded for Exceptional Performance or New Initiative not widely used on other sites
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Project	Principal Contractor (PC)	Date of Inspection
M3 J2-4a Smart Motorway	Balfour Beatty	21/06/16
Site Contact	Email Address	Telephone Number
James McCrossan	James.Mccrossan@balfourbeatty.com	07967578435

Description of Blue Star Item	<p>The original design was undertaken by AECOM in 2013. The design was based on limited site specific detail which had been undertaken by other third parties</p> <p>LiDAR survey information Generalised ground model</p> <p>Value engineering workshops on the project reviewed whether an alternative earthworks re-grade solution would be able to replace</p> <p>Bored pile walls at Gantry Bases Bored pile walls at ERA's Sheet pile walls at Gantry Bases Sheet pile walls at ERA's</p> <p>Safe access to the hard shoulder was obtained and the site clearance was completed Delivery Partner (DP) was able to provide additional information to the Designer to enable the designs to be verified. New information was assessed and the VE opportunities identified by collaborative working between the DP and Designer.</p>
Benefits of Blue Star Item	<p>So what have we achieved so far?</p> <p>23 walls out of 58 in total have now been deleted on the M3 Project, 7 bored piles, 16 sheet pile walls. These have been replaced with earthworks re-grade solutions.</p> <p>Eliminated significant Fatal Risks & Occupational and Exposure Hazards on the Project</p> <p>Eliminated Working at height Eliminated People Plant interface (piling and sprayed concrete) Eliminated lifting operations Eliminated Noise and vibration Eliminated Public Risk -road users/ Public perception Exposure to chemicals Elimination of Dust (silica dust)</p> <p>Programme</p> <p>84,500 man hours eliminated from programme Total 152 days of contract programme activities</p> <p>Public Impact/ Improved Air Quality</p> <p>900 lorry movements</p>



	<p>48,345 Km less disruption to the public 2,602 Tonnes CO2 emissions Noise /Vibration / Air pollution / Congestion</p> <p>Material savings Non renewable recourses : 640 tonnes Water 6,365 Tonnes aggregates 1105 Tonnes of steel 3,562 m3 less concrete 12,540 Litres fuel</p>
<p>Details and Cost of any Specific Product</p>	<p>Total Savings from plant, material and labour: £2,400,000!!!!</p>
<p>Photograph</p>	<div data-bbox="609 875 1241 1715" data-label="Image">  </div> <p style="text-align: center;">Elimination of Piling rigs</p>

Photographs



Replacement for the bored Piles