## **APPLEGREEN PLC**

## **DEADLINE 2 SUBMISSIONS**

relating to

M42 Junction 6
Development Consent Order Application

## APPENDIX 2 - RESPONSE TO HIGHWAYS ENGLAND'S COMMENTS ON APPLEGREEN'S RELEVANT REPRESENTATION [REP1-002]

24th June 2019

Reference Number	Applegreen RR comment	Highways England response	Applegreen further response
RR011			
RR011f	However, a fundamental issue facing the DCO Scheme is that the location of the new, proposed Junction 5a, is in the same place as a proposed new dedicated junction to serve a proposed Motorway Service Area (MSA), promoted by Extra MSA Group, hereafter referred to the 'Extra MSA'.	Noted, this matter is addressed in Section 2.4 and Sections 3-6 of Appendix 4 in the Planning Statement [APP-173/Volume 7.1].	All Section 2.4 states is that that the preferred route corridor announced by Highways England limits the scope to change the scheme. This does not avoid the point that the preferred route has been influenced by an MSA proposal that does not have planning permission.  As regards the reasons given in Section 3 as to why the junction could not be moved are the following:  Moving the roundabout further north would mean the western roundabout of Junction 5a would have to be raised on an embankment to maintain sufficient headroom clearance over the motorway for the Junction overbridge. The distance between the roundabout and the 132kV overhead power line is too short for the link road to get down and under it.
			Applegreen response: Without the MSA proposal there would be no need

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			for the roundabout and no need to raise the link road in such close proximity to the 132kV overhead power line.
			The MSA north facing slip roads would not be able to get under the Shadowbrook Lane overbridge.
			Applegreen response: Without the MSA there would be no north facing slip roads.
			Moving the junction further north would make the sub-standard weaving length associated with the north facing slip roads even more sub-standard.
			Applegreen response: Without the MSA there would be no north facing slip roads.
RR011i	As described above, the fundamental point of the DCO scheme is to add new capacity to Junction 6, for the extraordinarily important reasons previously identified. Any MSA on the new Junction 5a will simply absorb new	Highways England acknowledges that there are two schemes (the Extra MSA and the current DCO application) proposing a new Junction 5A on the M42 and that elements of these schemes	In their response Highways England refer to Section 6 of Appendix 4 to the Planning Statement (APP-173) as evidence that there is a junction layout for Junction 5a that could

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	capacity that is being created	Highways England has consistently taken the view that as planning permission for the MSA is not certain, the DCO Scheme should stand alone and that the MSA should not be treated as a committed development as set out in paragraph 2.4.5 of the Planning Statement [APP-173/Volume 7.1].  Highways England has sought, where practicable, in the event that both schemes were to be granted approval, the DCO scheme would not preclude the MSA proposal at Junction 5A from being implemented.  To further understand whether the presence of the MSA would materially impact the DCO Scheme, Highways England has undertaken further traffic modelling to establish whether the MSA will absorb the capacity provided by the Scheme.  As set out in Section 6 of Appendix 4 to the Planning Statement [APP-173/Volume 7.1] this additional demand could be accommodated through the following modifications:  • Junction 5A dumb-bell	accommodate the Extra MSA proposal. They acknowledge that the western roundabout of the DCO scheme for Junction 5a and the approach and departure arms would require modification to accommodate the Extra proposal. This is presumably not just to fit in the extra arms of the MSA access and the north facing slip, but also to try and provide further capacity. This is confirmed by the type of modifications proposed.  A highway designer, when faced with a junction that is over capacity would look to make the following modifications:  1. Remove some of the traffic from the junction. (Highways England are proposing a free flow left turn slip into the MSA).  2. Widen the entry onto the roundabout to provide greater capacity for vehicles to get out onto the roundabout. (Highways England are proposing to widen the northbound diverge slip road from two to three lanes on the approach to the roundabout)

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		arrangement modified to a "Dog Bone" arrangement.  Three lanes approach at the stop line on the M42 northbound offslip.  Three lanes on the western side of the gyratory.  The new mainline Link Road should exit the roundabout with three lanes, then merge into two lanes downstream of the junction.  A segregated left turn lane for M42 into MSA traffic.  These modifications are capable of being delivered within the DCO, or through modifications to the Extra MSA planning application, subject to complying with detailed design requirements.  If the MSA scheme is approved, therefore, it will not absorb the capacity of the Junction.	These proposed alterations are presumably to accommodate the additional MSA traffic on the slip road and the MSA traffic from the north on the roundabout that will conflict with the traffic trying to get off the motorway.  The proposed alterations would lead to an unsatisfactory position. Widening the northbound diverge slip road at the roundabout means that three lanes of traffic will all join the roundabout at the same time and will all exit the roundabout onto the Link Road. This has meant that Highways England has had to propose to widen the circulating carriageway on the roundabout to three lanes and widen the Link Road exit from the roundabout to three lanes.  It is difficult to assess if this would be a safe arrangement because Section 6 of Appendix 4 only provides a sketch of the arrangement as Figure 4. No Road Safety Audit has been undertaken and it would not be possible to undertake one without better design drawings.

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			It is difficult to comment accurately on the suitability of the proposed junction layout shown in Figure 4 as it is an "Indicative Layout" rather than an engineering drawing. Even so there must be serious concerns about the impact on the proposed Solihull Road Bridge. The slip road under the bridge would be significantly wider. The Solihull Road Bridge would have to be longer, not only to accommodate the wider carriageway, but any forward visibility along the free flow left turn slip. While traffic on the slip road proposed in the DCO scheme only has to see as far as the entry onto the roundabout, traffic on the introduced free flow left turn slip needs to be able to see the required stopping sight distance along the road ahead. This lengthening of the Solihull Road Bridge would extend the section of Solihull Road that needs to be at high level further to the west adjacent to the ancient woodland.
			At paragraph 6.3 of Appendix 4, Highways England indicate that the proposed modifications have been assessed and validated through traffic modelling but no results of that

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			modelling are provided. We request that any modelling and assessment results be provided.
RR011j	By way of context, it is noted that the Extra MSA application Transport Assessment has never been updated to consider the DCO Scheme and provides no assessment whatsoever of the adverse impact the MSA would cause.	This representation is in reference to the MSA planning application and so Highways England has no comments.	We are surprised that Highways England has no comments given that a) it does not object to the Extra MSA planning application and b) the scheme is currently incompatible with the DCO scheme.
RR011k	Equally concerning to the success of the DCO Scheme is the fact that the DCO application, which was made subsequent to the Extra MSA application, also presents no assessment of the impact of the MSA on the capacity of the new Junction 5a. The DCO application Transport Assessment states (paragraph 3.9.1): "Various sensitivity tests were undertaken to assess the impact on the design of the scheme improvements. These included: d. junction 5A motorway service area (MSA) - traffic demand tests for the potential increase in traffic at Junction 5A, should the proposed MSA at this location be approved".	See response for RR011i.	It is noted that Highways England refers to their response to RR011i. The point being made in Applegreen's representation was that no capacity modelling had been reported that indicated that the DCO scheme, or a modification of the DCO scheme, had enough capacity to accommodate the Extra MSA. Highways England's response to RR011i does not address this.
	included in the DCO application documentation and nowhere in the extensive DCO application documentation documentation does it state that the impacts on the capacity of the new junction would be acceptable and / or the residual cumulative impacts on the road network		

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	would not be severe		
RR011I	The interface between the 2 schemes is referenced in the DCO application Planning Statement with several neutral and worryingly ambiguous statements e.g. at paragraph 2.4.5 which says (extract and our emphasis): "Nevertheless, Highways England has engaged with the applicant for the MSA scheme and sought to ensure that, where practicable, the design of Junction 5A would not preclude the MSA scheme being delivered if authorised following the implementation of the Scheme"	position to be ambiguous: the Scheme	We would refer to Examining Authority's written question 1.0.4 and Applegreen's response which demonstrate that there is a contradictory approach to the Extra MSA.
RR011m	The above references are far from unequivocal that the DCO Scheme and the Extra MSA can actually co-exist and beg the question as to where the two schemes are left with those incompatibilities that were not 'practicable' to resolve. In fact, it is readily evident from the DCO Planning Statement that HE is trying to avoid stating that their scheme precludes the MSA for the sole reason of avoiding an objection from Extra to the DCO Scheme refer to PDF page 146, an Appendix setting out the design rationale for Junction 5a, which states: "The M42 J6 improvement works must not be seen to preclude this design as it would most likely result in an objection being lodged by the MSA developer at DCO application"  In Applegreen's view such an approach is misguided as it risks fundamentally undermining the efficacy of the critically important DCO Scheme.	<b>173/Volume 7.1</b> ], which sets the range of factors that were considered. One of the	Highways England's response to RR011m confirms that not precluding the Extra MSA was one of the objectives of the DCO scheme. Applegreen contends that this has compromised the design process with consequential impacts on highway operation and the environment, not least of which being the impact on the ancient woodland.  We would refer to Applegreen's response to Examining Authority's written questions 1.0.5 and 1.7.28.
RR0110	In short, the assessment work showed that the new Junction 5a worked without the MSA, but materially failed with it, with unacceptable levels of congestion	See response for RR011i.	See response to RRo11k.

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	forecast. In fact the flow on the exit from the Extra MSA would be double the recommended level of flow for the capacity provided. No subsequent analysis is provided in the DCO application that demonstrates that what was clearly an unacceptable position has in anyway changed, or been acceptably resolved.		
RR011p	In light of the foregoing, it is considered essential that DCO application includes a detailed analysis of the potential impact of the Extra MSA on the new, proposed Junction 5a, in order to establish definitively whether the presence of the MSA fundamentally undermines the overriding purpose of the DCO Scheme i.e. to add more capacity on motorway / non- motorway junctions and links in the M42 Junction 6 area.	See response for RR011i.	See response to RRo11k.
RR011q	It appears to Applegreen, based on the above information, that far from HE looking to mitigate against receiving an objection from the prospective MSA operator, they should be seeking to ensure that the publicly stated purpose of the DCO is not fundamentally compromised by the MSA.	For the reasons given above Highways England does not accept that the DCO is fundamentally compromised by the MSA.	Applegreen would refer to its response to Examining Authority written question 1.0.4.
RR011r	Applegreen acknowledges that with regard to the provision of a MSA on the M42 between junctions 3a and 7, HE is wearing two hats. This is due the widespread acceptance that a new MSA is required on this stretch of the M42 in order to support the safety and welfare of motorway users. Secretaries of State have twice determined this need (at MSA planning inquiries) in 2001 and 2009.  In 2001 he stated: "The Secretary of State notes that the	Alternative MSA applications are a matter for Solihull Metropolitan Borough Council.	Whilst Alternative MSA applications are a matter for SMBC this is no justification for Highways England's failure to consider them in the context of the DCO scheme. Highways England has chosen to take account of the Extra MSA planning application in the design of the DCO scheme and is even contemplating the possibility of making modifications to the DCO

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	stretch of motorway between Junction 4 and Junction 6 of the M42 has one of the highest motorway flows in the country and he agrees with the Inspector that there is a significant number of vehicles per day travelling between excessive gaps in MSAs on this stretch, demonstrating a substantial amount of unsatisfied need"		scheme (see its response to RR011i above). A failure to take into account an alternative MSA, particularly where no modifications to the DCO scheme would be required to accommodate that alternative, is highly questionable.
	In 2009 she stated: "For the reasons given by the Inspector she [the Secretary of State] agrees with him that there remains a significant unmet need for one additional MSA serving traffic travelling in both directions on this stretch of the M42, and that this need is somewhat greater than that which existed in 2001"		
	Thus, there might be support (in Applegreen's view not warranted) for HE accepting a DCO Scheme compromised by the Extra MSA, if there were no alternative options for MSA provision on this length of the M42. However, that is not the case. Applegreen also has undetermined planning application with SMBC (application reference: PL/2016/02754/MAJFOT) for an MSA on land adjacent to M42 Junction 4, that would equally well resolve the unmet MSA demand. In short, there is a clear alternative to the Extra MSA and one which has no interface with, or impact upon, HE's DCO Scheme.		
RR011s	In terms of timescales for the two schemes, the granting of the DCO is programmed for very early 2020, circa 12 months from now. The Extra Scheme is planned to go to SMBC's planning committee on 27th March 2019. In the event that SMBC refuses permission the interface issue goes away, unless Extra appeal. In such an event the	Highways England refers Applegreen to the previous responses and Appendix 4 of the Planning Statement [APP-173/Volume 7.1].	See response to RR011i.

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	Extra Scheme would require a circa 24 month period for the lodging of an appeal, a public inquiry and the subsequent decision making process, and thus be finally determined long after the DCO Scheme. In fact, it would not be determined until around Q2/3 2021, well over a year after the DCO Scheme is planned to start construction (i.e. in Q1/2 2020).  Alternatively, in the event SMBC resolves to approve the Extra MSA, that decision will be referred to the National Planning Case Work Unit. All historic evidence then points to the overwhelming likelihood that it would be called in for determination by the Secretary of State following a planning inquiry. In such circumstances, a similar 24 month period would ensue and the Extra Scheme would again be determined long after the DCO Scheme, and over 12 months after the DCO Scheme has commenced construction. (The likelihood of call-in is amplified by the existence of the alternative MSA proposal promoted by Applegreen at M42 Junction 4. The circa 24 timescale for determination either via appeal or call-in is evidenced by the fact that the last time competing MSA proposals were considered on this stretch of the M42, the Junction 4 MSA appeal was lodged in June 2006, subject to a co- joined public inquiry with a MSA proposal at Catherine-de-Barnes, and the Secretary of State issued his decision in January 2009; a 30 month period).		
	Thus, it is important to understand the impact on the DCO Scheme in the likely event that, where the Extra Scheme ever to be consented, this would occur after the		

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	DCO Scheme was well into its construction period.		
	The submitted DCO Planning Statement (at Appendix 4 paragraph 6.1) assists in understanding this scenario, stating:		
	"Should the planned MSA be authorised after the M42 Junction 6 Improvement Scheme is operational, the western roundabout at Junction 5A and approach and departure arms would require geometric modifications, this would include the following works:		
	The junction would be altered from a dumb-bell arrangement to a 'Dog Bone' layout. This would mean extending the central reserve island on the link road between the two roundabouts to connect with the roundabout island, subsequently severing the gyratory at each roundabout.		
	A segregated left-turn lane would be required from the M42 northbound diverge slip road into the MSA.		
	The M42 northbound diverge slip road would be widened to 3 lanes from 2 lanes 80m before the give way line.		
	The western side of the roundabout would be widened to 3 lanes from 2 lanes to accommodate the 3 lanes traffic movements from the south at the M42 diverge slip road travelling north at the main line.		
	The New Link Road would be widened at exit from the roundabout to three lanes before merging into two lanes		

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	downstream of the junction".		
RR011t	Applegreen also notes that:  There is the obvious point that two north facing slip roads would be added to Junction 5a. This would result in a weaving length between the new Junction 5a and existing Junction 6 of 1.175 km northbound and 1.16 km southbound (refer to DCO Planning Statement at Appendix 4 paragraph 3.16). This is a very significant Departure from Standard from the 2 km requirement.  No mention is made in the DCO Planning Statement of the need to introduce All Lane Running between J5 and J6 if the MSA is to be accommodated. This comes with the inherent risk of the motorway operating as Dynamic Hard Shoulder Running between J3a and J5 and J6 and J7, while J5 to J6 would operate with All Lane Running (no hard shoulder);  The vertical alignment of Solihull Road west of the overbridge would have to be raised in order to provide the headroom for the MSA access road that passes below Solihull Road; and  The DCO Scheme includes a Departure from Standard to reduce the forward visibility on the northbound off slip. The proposed DCO junction overbridge carrying Solihull Road is long enough to accommodate this reduced forward visibility. The sketch that has been prepared to indicate how access to the MSA could be accommodated (Planning Statement Appendix 4 Figure 4) includes a free flow left turn slip. This would require	Highways England refers Applegreen to the previous responses and Appendix 4 of the Planning Statement [APP-173/Volume 7.1].  Paragraph 3.16 of Appendix 4 of the Planning Statement, [APP-173/Volume 7.1] refers explicitly to the need for All Lane Running to be provided by MSA Extra should it receive planning permission. The north-facing slip roads are not part of the DCO scheme.	Applegreen refers to its response to the Examining Authority's written question 1.0.6. In particular, there will be safety issues associated with the sub-standard weaving length and these are not justified by the benefits of including north facing slip roads, particularly when there is an alternative MSA available.

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	drivers on the slip road to see further to the left along this free flow slip. From the sketch layout provided, it appears that the Solihull Road bridge proposed in the DCO Scheme will obstruct the ability to see along the free flow left turn slip and it is possible that the bridge, if built as currently proposed, would need to be demolished and rebuilt to accommodate the forward visibility required by the access to the MSA.		
RR011u	Accordingly it can be seen that seeking to 'retrofit' the MSA into the DCO Scheme will have a huge impact on the latter. It should also be noted that these design features / requirements do not form part of the Extra MSA planning application, which has been submitted in detail in respect of access. In short, this means that in the most likely scenario that the DCO is granted before the Extra MSA, the Extra scheme is not deliverable without needing to go through a new, separate planning application process, and securing a subsequent approval. As such, the DCO scheme will either be very well developed, or even complete, before the massive disruption that would be caused by the MSA materialises.  Applegreen cannot see how such disruption could ever be compatible with the DCO Scheme objectives, or acceptable to HE.	MSA scheme to be varied, this would be a matter for resolution between MSA Extra and Solihull Metropolitan Borough Council as the local Planning Authority.	The MSA scheme would need to be varied and Highways England's response is correct that this would have to go back to SMBC. However, at present, Highways England, as a key consultee on the Extra MSA application, is not objecting to that proposal despite it being incompatible with the DCO scheme.