

**ENVIRONMENTAL APPRAISAL SUMMARY – M1 Junction 12 Improvements
Diamond Arrangement Options 5 and 7 (also referred to as Alternatives b and c) ('Rejected Option 2')**

Scheme Description.	Description: DIAMOND option for Junction 12 improvement utilising existing bridge and providing a new bridge structure to north of the existing structure. NMU facilities incorporated into bridge.	
ENVIRONMENTAL ISSUES	QUALITATIVE IMPACTS	EFFECT
Noise	North-bound off-slip and North-bound on-slip moved closer to several properties to west of motorway. Negligible increases in noise levels to these properties to west of motorway where noise levels would be dominated by noise from the approach road to the junction and from the mainline.	Neutral
Local Air Quality	Air quality around Junction 12 currently meets the air quality objectives, and would be likely to with the Scheme in place. These effects have not been quantified at this time.	Neutral
Greenhouse Gases	The scheme is anticipated to result in a negligible change in greenhouse gases.	Neutral
Landscape & Townscape	At Junction 12 the existing motorway has had a significant adverse effect on the landscape character as it was never properly integrated into the landscape. Impacts on the adjacent landscape would be largely indirect but would include some vegetation loss. Scope for mitigation planting associated with the realigned slip roads and gantries.	Neutral
Heritage or Historic Resources	Direct physical impacts to archaeological remains of Neolithic to post-medieval date surrounding Junction 12. Negligible impacts on settings of two Grade II Listed buildings (Redhills Farm and Mill Farm). Negligible direct impact on historic motorway structures. No impact on historic landscape.	Negative
Biodiversity	Direct habitat loss and fragmentation impacts, together with the potential disturbance of legally protected species including badger and bat.	Negative
Water Environment	Increased road runoff would be attenuated and subject to pollution control measures if required. Landtake within area at risk of flooding due to new embankments to be mitigated by provision of flood compensation area if required. Extension to culvert and one new culvert, to be designed such that flows in unnamed watercourse not adversely affected.	Neutral
Physical Fitness	Existing nmu facilities on overbridge currently un-useable; improvements would allow for dedicated footway , thereby facilitating pedestrian route across bridge, and provide signalised pedestrian crossings at top of sliproads.	Positive
Journey Ambience	Adverse impacts on traveller's views due to the loss of mature vegetation and the provision of multiple gantries coupled with embankments and landform associated with the junction. Beneficial effect on driver stress due to improved traffic flow and extensive signage leading to reduced fear of potential accidents and improved capacity at Junction 12.	Positive
Severance	Improvements to pedestrian facilities across Toddington overbridge would reduce severance	Positive
Land-Use Policy	Scheme would contribute to improvements in accessibility to various development areas. Scheme aims to minimise environmental impacts but would require some land take from Green Belt and from best and most versatile agricultural land.	Neutral
Other Government Policies	The Scheme would improve the efficiency of the road network, thereby enabling journey times to decrease; reducing congestion and improving safety; and facilitating business efficiencies. These improvements would contribute to economic growth and housing development in the vicinity of the M1 corridor. While the Scheme would improve accessibility to employment, retail and leisure facilities, dependency on the car would not be lessened	Neutral