

Appendix 9.3. Mitigation (Construction and Operation) Tables

Table C.1 – Mitigation (construction and operation)

Receptor	Potential Risk	Significance of effect (Pre-mitigation)	Mitigation measures	Residual effect
Wider Health Determinant: Air Pollution				
Specific mitigation measures are set out in Chapter 6 (Air quality).				
Wider Health Determinant: Land quality and Water quality or availability				
Specific mitigation measures are set out in the Ground Conditions Report				
Wider Health Determinant: Noise and Vibration				
Specific mitigation measures are set out in the Noise and Vibration Report				
Wider Health Determinant: Risk Taking Behaviour				
Road Infrastructure – roads, vehicles, diversion routes	Potential risks include: <u>Physical</u> - Introduction of construction traffic, increased traffic levels in surrounding areas, altered traffic movements (including large volumes of materials being moved), user conflict, restrictions, diversions and/or closures <u>Human</u> - Injuries or loss of life from construction traffic, increased traffic levels and an unawareness of altered traffic movements, particularly for sensitive road users (e.g. motorcyclists, elderly drivers, children, pedestrians, new drivers and cyclists)	<u>Physical receptor</u> Moderate adverse (significant) Temporary, direct, short term, reversible <u>Human receptor</u> (all groups) Moderate adverse (significant) Temporary, direct and short term	Consultation will take place with the relevant Officers in Manchester City Council, regarding any road closures, diversions etc. A Construction Traffic Management Plan will be prepared to allow ongoing access where possible and minimise potential disruption and severance for communities nearby. This will include overnight and weekend closures where possible. Any such works will be consulted upon with local residents or facilities that are likely to be affected by the works to direct users during construction and support access to local facilities. With appropriate mitigation measures in place to minimise the risk of injuries and death including, for example, use of best practice construction techniques and implementation of a Construction Traffic Management Plan no significant effects are predicted for the physical and human receptors.	<u>Physical receptor</u> Minor adverse (not significant) Temporary, direct and indirect, short term, reversible <u>Human receptor</u> (all groups) Minor adverse (not significant) Temporary, direct and indirect, short term
Site Compound	Potential risks include: <u>Physical</u> Trespass, damage, conflict, restrictions or closures	<u>Physical receptors only</u> Moderate adverse (significant) Temporary, direct, short term, reversible	Site compounds would be established in accordance with a strict Construction Methodology, adhering to all appropriate standards and which includes the establishment of traffic management systems and appropriate, safe access. Plant and equipment would be safely delivered to site, outside of peak hours, as required depending on the stage of the works and securely stored.	<u>Physical receptors only</u> Minor adverse (not significant) Temporary, direct, short-term and reversible

Receptor	Potential Risk	Significance of effect (Pre-mitigation)	Mitigation measures	Residual effect
			Compounds would be made fully secure with on-site security, appropriate security fencing and lighting installed to provide visibility for onsite security staff. Mobile welfare would also be available. With these measures in place, it is not predicted there would be any significant effects on the physical or human receptors. Following completion of the construction works the land would be reinstated to its original condition.	
Utilities and buried services	Potential risks include: <u>Physical</u> - Damage, leaks and blocks <u>Human</u> - Risk to human health from contact with overhead or buried power lines, leaks from gas or sewage networks	<u>Physical receptor</u> Moderate adverse (significant) Temporary, direct, short term, reversible <u>Human receptor</u> (wider group – contractors working on the Scheme) Moderate adverse (significant) Temporary, direct, short term	All clearance and construction work, including works potentially affecting electricity, gas, water and sewage supplies will be undertaken under the applicable Health and Safety legislation and best practice guidance pertaining at that time. Utility diversion works will be managed in accordance with the appropriate legislation and guidelines applicable at that time. The Construction Method Statement will detail the arrangements for responding to the unexpected discovery of utilities - even if utilities have not been identified in any surveys. This should include emergency contact details for all utilities operating in the location of construction and arrangements for isolating and securing the affected area. With appropriate mitigation measures in place to minimise the risk of injuries and death, no significant effects are predicted for the physical and human receptors.	<u>Physical receptor</u> Minor adverse (not significant) Temporary, direct, short-term, reversible <u>Human receptor</u> (wider group – contractors working on the Scheme) Minor adverse (not significant) Temporary, direct, short-term
General Mitigation measures to deal with non-significant impacts: Construction Method Statement to detail how all work activities will be undertaken in a controlled and safe manner, in respect of site personnel, visitors and the general public. H&S Management Plan				
Wider Health Determinant: Transport modes, access and connections				
Public Transport (Buses)	<u>Physical</u> Potential for temporary closure/disruptions to services along main access routes <u>Human</u>	<u>Physical receptor</u> Moderate adverse (significant) Temporary, direct and indirect, short term, reversible <u>Human receptor</u>	Provision of a Construction Traffic Management Plan to ensure that if required, diversions are in place and are set up in accordance with relevant guidance in relation to signage etc. Inclusion of temporary bus stops if required. Liaison with bus operators to explore temporary timetables if required. Liaison with local communities to ensure any changes to public transport are communicated well in advance.	<u>Physical receptor</u> Minor adverse (not significant) Temporary, direct and indirect, short term, reversible

Receptor	Potential Risk	Significance of effect (Pre-mitigation)	Mitigation measures	Residual effect
	- Health outcome from temporary closure, modification, diversion or disruption to local roads and routes - Disruptions to normal activities / journeys - Health outcome from temporary impacts on traffic and demand for public transport - Any temporary closure of routes increasing the number of passengers using roads and bus services, resulting in congestion and/or crowding	Moderate adverse (all groups)		<u>Human receptor</u> (all groups) Minor adverse (not significant) Temporary, direct and indirect, short term
General Mitigation measures to deal with non-significant impacts: Community engagement, including awareness of disruption / diversion to routes				
Wider Health Determinant: Employment and Income				
Businesses / commercial premises immediately adjacent the site boundary	<u>Potential effects include:</u> <u>Physical</u> - Temporary disruptions to access and trading conditions - Amenity effects <u>Human</u> - Health outcomes from disruptions to journey times, access and loss of amenity	<u>Physical receptor</u> Moderate adverse (significant) Temporary, direct and indirect, short term, reversible <u>Human receptor</u> Moderate adverse (all groups)	Liaison with local business owners to ensure any changes to access are communicated well in advance and arrangements made to maintain access.	Minor adverse (not significant) Temporary, direct and indirect, short-term
Wider Health Determinant: Education and training				
Educational premises immediately adjacent the site boundary such as The Manchester	<u>Potential effects include:</u> <u>Physical</u> - Temporary disruptions to access and teaching conditions (including impacting on College operations) - Amenity effects	<u>Physical receptor</u> Moderate adverse (significant) Temporary, direct and indirect, short term, reversible <u>Human receptor</u> Moderate adverse (all groups)	Provision of a Construction Traffic Management Plan to ensure appropriate diversions and accesses are in place for users of Manchester College and Manchester Film School. Early engagement with College to ensure construction activities do not cause disruption during key periods such as exams.	Minor adverse (not significant) Temporary, direct and indirect, short-term

Receptor	Potential Risk	Significance of effect (Pre-mitigation)	Mitigation measures	Residual effect
College and the Manchester Film School (UCEN Manchester)	<u>Human</u> - Health outcomes from disruptions to journey times, access and loss of amenity - Health outcomes from disruption to teaching	Temporary, direct and indirect, short term, reversible		

Source: Atkins analysis