Government Property Agency

AtkinsRéalis



MANCHESTER DIGITAL CAMPUS

Environmental Statement

Volume 4 - Appendix 21.1: Major accidents and disasters long list

NOVEMBER 2024

Notice

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This document has 7 pages including the cover.

Document history

Document title: Environmental Statement Volume 4 – Appendix 21: Major accidents and disasters

Document reference: MDCX-ATR-XX-XX-RP-Z-000052

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1.0	Planning Submission Issue	EE	PW	IL	TC	25/11/2024

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Appendix 21.1. Major accidents and disasters long list

Table 1.1 – Long list of major events

Major event	Relevant to Proposed Development	Source of disaster	Potential receptors	Consequence	Mitigation	Major accident and disaster with mitigation
Geological disasters						
Avalanches Earthquakes Volcanic eruptions Sinkholes and/or ground dissolution	No	Due to the topography, the surrounding area and not being within a geologically active area, these major events are not considered to be a risk or serious possibility to the Site.	N/A	N/A	N/A	N/A
Ground instability	No	Potential for natural ground subsidence due to shrinking or swelling clays, compressible deposits, running sands, collapsible deposits, ground dissolution and landslides within the study area is negligible to very low.	N/A	N/A	N/A	N/A
Hydrological disasters						
Tsunami/Storm surge Limnic eruptions	No	The Proposed Development is not situated near a coastal location, or near to any lakes therefore, these major events are not considered to be a risk or serious possibility to the Proposed Development.	N/A	N/A	N/A	N/A
Floods	Yes	Both the vulnerability of the Proposed Development to flooding, and its potential to exacerbate flooding, are covered in the Flood Risk Assessment (FRA) and are also reported in Water Resources and Flood Risk ES chapter (ES (Volume 2) Chapter 19). Both assessments have addressed the risk to the Site and increased risk due to the Site. The risk of surface water flooding indicates that there are areas at risk within the study area. There is a small pocket of 'low' risk of flooding within the Site from the River Medlock. The Site is partially located within Breach Zone A of Rochdale and Ashton Canals. There is a low risk of overtopping and bank breaches in the Rochdale and Ashton Canals, but there is a possibility of overtopping and breaching if a flood event occurs. The Site has not historically experienced flooding.	Office workers, buildings, surrounding environment	Casualties, damage to infrastructure and property, disruption to services.	ES (Volume 2) Chapter 19 Water Resources and FRA outline appropriate mitigation to avoid and reduce the flood risk during construction which is also detailed in the CEMP. Mitigation measures to limit potential adverse operational impacts have been incorporated into the design of the Proposed Development (for example, through the Drainage Strategy).	No
Major change to groundwater levels	Yes	The likelihood of groundwater flooding occurring in Manchester is generally low and is not likely to cause a significant risk due to the slow rate in which groundwater level rises. The entire area of the Site falls within an area at risk of groundwater flooding.				No
Meteorological disasters						
Blizzards Cold waves Cyclonic storms Droughts Thunderstorms Hailstorms Heat wave	No	The risks are no different from other developments in the UK, and as such is not considered further.	N/A	N/A	N/A	N/A

Major event	Relevant to Proposed Development	Source of disaster	Potential receptors	Consequence	Mitigation	Major accident and disaster with mitigation
Tornadoes Wildfires High wind events Wildfires						
Poor air quality episodes	Yes	ES (Volume 2) Chapter 7 Air Quality baseline covers human health receptors and ecologically designated sites within 200 m of roads where traffic volumes, vehicle speeds and road alignments are affected by the Proposed Development. The Site is fully within the Greater Manchester Combined Authority Air Quality Management Area. There may be new areas of public exposure introduced due to the planned retail spaces on the ground floor of the Proposed Development.	Human and ecological receptors within the surrounding environment	Poor human health, degradation of ecological sites	ES (Volume 2) Chapter 7 Air Quality states that best practice mitigation measures to reduce effects from construction dust would be undertaken by the Contractor. These mitigation measures are included in the CEMP and Construction Traffic Management Plan to mitigate risks from construction dust.	No
Space disasters						
Geomagnetic storms Solar flare Astronomical object collision	No	The Proposed Development is considered to be no more vulnerable than any other development and is not considered further.	N/A	N/A	N/A	N/A
Transport						
Aircraft disasters Maritime disasters	No	There is not considered to be any increased risk to the Proposed Development than currently exists and is not considered further.	N/A	N/A	N/A	N/A
Road accidents	No	There is not considered to be any increased risk to the Proposed Development and its users than currently exists and is not considered further.	N/A	N/A	N/A	N/A
Rail accidents	No	The closest rail line is the New Islington to Manchester Piccadilly tramline approximately 323m southwest. There is not considered to be any increased risk of rail accidents to the Proposed Development Site and users than currently exists and is not considered further.	N/A	N/A	N/A	N/A
Engineering accidents/failures						
Building failure or fire	No	There is not considered to be any increased risk to the Proposed Development Site and is therefore not considered further.	N/A	N/A	N/A	N/A
Flood defence failure/ reservoir failure	No	A FRA considers the risk from flooding. No reservoirs are located close enough to the Proposed Development for the potential reservoir flooding area to affect the Proposed Development. Similarly, there are no areas protected by flood defences which would affect the Proposed Development.	N/A	N/A	N/A	N/A
Utilities failure (gas, electricity, water, sewage, oil, communications)	Yes	Various existing utilities cross the Site, including multiple electricity cables and two large diameter sewers. The as-built utilities include multiple electricity cables, foul and surface water drainage, telecoms, water supply and fire hydrant infrastructure. The Proposed Development design has ensured that all utility works are designed appropriately and follow approaches agreed with the statutory undertakers. ES (Volume 2) Chapter 12 Ground Conditions identifies existing potential contaminated land sources, including those associated with utilities.	Office workers, property, surrounding environment	Potential for fire/explosion, pollution incident, injury	Emergency plans will be written for the Proposed Development, which would be agreed with Local Authority, statutory undertakers and blue light authorities. All machinery powered by mains electricity should have built in safety switches that help prevent accidents in the event of a power failure. All utilities companies have plans and arrangements in place to deal with supply disruptions and failures.	No

Major event	Relevant to Proposed Development	Source of disaster	Potential receptors	Consequence	Mitigation	Major accident and disaster with mitigation
Pollution incidents	Yes	ES (Volume 2) Chapter 12 Ground Conditions considers the environment within the study area as a whole. It states that there is the potential that contaminants from contaminated land and infilled land may impact on groundwater and surface water.	Local residents, property, surrounding environment	Contamination, poor human health, injury	ES (Volume 2) Chapter 12 Ground Conditions states that statutory guidance and best practice, alongside an CEMP to be developed prior to the start of construction works should reduce the risk of pollution incidents. If mitigation is embedded in design then the operational effects are reduced.	No
Industrial accidents						
Defence industry Energy industry (fossil fuel) Nuclear power Oils and gas refinery/storage Food industry Chemical industry Manufacturing industry Mining industry	No	No relevant industries/ facilities are located within 2 km of the Proposed Development.	N/A	N/A	N/A	N/A
Terrorism/crime/civil unrest						
Terrorism/ crime/ civil unrest	Attack on infrastructure	The new Manchester Digital Campus may become a target for terrorism, crime or civil unrest, due to functioning as a government building.	Workers, property, surrounding environment	Casualties, damage to property and disruption of services.	Security has been a key consideration of the design, in line with government building requirements, the Proposed Development incorporates significant measures to minimise the risk of crime. A Crime Impact Statement is submitted alongside this planning application.	N/A
War						
Conventional Chemical Nuclear	No	No more vulnerable than any other developments.	N/A	N/A	N/A	N/A
Disease						
Human disease Animal disease Plant disease Animal infestation	No	No more vulnerable than any other developments.	N/A	N/A	N/A	N/A
Other						
Unexploded Ordnance (UXO)	Yes	The Ground Condition and Contamination ES (Volume 2) Chapter 12 states that a review of the online unexploded bomb risk maps by Zetica (August 2017) indicates that the Site is in a moderate risk for encountering UXO.	Workers, property, surrounding environment	Injury, death	A full assessment and zoning of the UXO hazard level and results of the GI will inform the design. No UXO survey is required based on the undertaken Detailed Unexploded Ordnance Threat and Risk Assessment by 6 Alpha Associates in 2018.	No

AtkinsRéalis

AtkinsRéalis Manchester
3 Piccadilly Place,
M1 3BN,
Manchester,
United Kingdom

T: +44 1612 453400

www.atkinsrealis.com