CUNDALL

# OP-Form 8 –Designer Health & Safety Risk Register - Enabling Works

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| **Project name:** QTS Project Wind | | **Prepared by:** Design Team |
| | | **Date prepared:** 26/03/2025 |
| **Job No:** 1043152 | | **Checked by: KW** |
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| Item Ref | Activity | Specific description of abnormal hazard | Persons at risk | | | | | Risk Matrix | | | | Design measures implemented for hazard elimination or risk reduction | Critical design assumptions | Information provided for management of hazard | Residual hazard | | Commentary on residual hazards. |
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| | | | C | M | P | U | D | Potential to cause harm | Severity | Risk Level without controls | Risk Level after controls | | | | Y | N | |
| **Civil** | | | | | | | | | | | | | | | | | |
| EW1 | Installation of below ground infrastructure, drainage | Existing services may be present on site, refer to drawings. There may be other utilities on site that have not been identified – such as services to the BV cabins. | ☒ | ☐ | ☐ | ☐ | ☐ | L | S | H | L | Sub-scan survey has been undertaken. | Contractor will be familiar with the relevant protocol for safe working around utilities, will liaise with the relevant stakeholders and will be familiar with HSG47.<br>Contractor to scan for unmarked services before commencing any excavation works. | Refer to GPR survey and information from stats providers for detailed information. | ✓ | | |
| EW2 | Ground instability during earthworks | Deep excavations required during earthworks may not be stable. | ☒ | ☐ | ☐ | ☐ | ☐ | L | S | H | I | Contractors will provide suitable mitigation measures where deep excavations are required. | Contractor to be aware of ground conditions and install temporary supports to excavations as necessary.<br>Where infrastructure is close to deep excavations, these shall be considered in temporary works design. | Ground investigation reports to be provided along with general constraints drawings to the contractor. | ✓ | | Mitigation measures to be managed on site and if unforeseen ground conditions are encountered, the measures may need to be revised. |
| EW3 | Water ingress during earthworks | Shallow groundwater could lead to ingress into excavations and instability. | ☒ | ☐ | ☐ | ☐ | ☐ | L | S | H | I | Groundwater monitoring results to be reviewed. Contractor to implement water management strategy / dewatering strategy (if required) | Contractor to be aware of ground conditions and install temporary supports to excavations as necessary. Dewatering of excavations to be carried out if required. | Ground investigation report and Preliminary Earthworks Strategy. | ✓ | | |

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**Likelihood** is the conclusion reached after considering the potential of the harm occurring

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| VU | Very Unlikely = | The control measures are unlikely to breakdown, be removed or easily defeated. Maintenance is in place. Training is provided and repeated. Supervision is provided. |
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**Severity** is the condition reached after positively considering the extent of harm that would be sustained if the hazard were to be realised:

| | | |
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| N | Negligible = | Less than 3 days absence if ill or injured; superficial damage to the environment or to property. |
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**Risk Matrix** to calculate the Risk Level and the Revised Risk Level:

| Likelihood | | Severity | | | |
|---|---|---|---|---|---|
| | | N Negligible | M Minor | S Severe | E Extreme |
| VU | Very Unlikely | I | I | L | L |
| U | Unlikely | I | I | M | M |
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**Risk Level**

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| H | **High Risk:** The Hazard must be removed/avoided or level of risk significantly reduced by reliable controls. |
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| EW4 | Presence of ground contamination or hazardous ground gases during ground break works | Potentially contaminated soils (asbestos fibres and hydrocarbon impacted soils) soils have been identified during previous phases of ground investigation that may present a risk to human health. | ☒ | ☒ | ☒ | ☒ | ☐ | L | M | M | L | Contractor to implement site specific health and safety measures to mitigate risk during works and to follow the requirements of the Remediation Strategy as a minimum. | Contractor to be aware of ground conditions and undertake all necessary safe working procedures.<br>Safe working practises are adopted by the Contractor. | Ground Investigation Reports and Remediation Strategy. | ✓ | | Contractor to comply with own Risk Assessment and Method Statements when working near / with contaminated ground. |
| EW5 | Conflict between pedestrians and construction traffic and works | There are two public rights of way (PROW) that pass through the site, one on the south east and one at the south west. | ☒ | ☐ | ☒ | ☒ | ☐ | L | M | M | M | Site development has been planned with consideration of the eastern PROW. The western PROW has been permanently diverted to the perimeter of the site. | Contractor will manage safe PROW access for public during construction. | Drawings showing PROW. | ✓ | | Confirm status of western PROW. |
| EW6 | Working near overhead power lines | Construction works will be required under and near to overhead power lines and associated pylons crossing the site. | ☒ | ☒ | ☐ | ☒ | ☐ | L | E | H | L | Utility excavations maintained 30m off pylons. Site controls on site for working around the associated infrastructure. | Plant to be earthed and working zones clearly regulated. | Constraints drawings, utility drawings, information from Northern Power Grid. | ✓ | | O/H Power lines will remain live during construction. |
| EW7 | Unexploded Ordnance | Presence of Unexploded Ordnance in the ground | ☒ | ☐ | ☒ | ☐ | ☐ | L | E | M | M | Risk classification for site is moderate.<br>Contractor to review UXO Threat and Risk Assessment documents prior to breaking ground and comply with mitigation measures. | Contractor will comply with the requirements of the UXO specialist that should be appointed prior to breaking ground. | UXO detailed Threat and Risk Assessment for Main Site and Rail Head should be supplied to Contractor. This may need to be revised depending on the findings of the on-going ground investigation. | ✓ | | Mitigation measures to be followed. |
| EW8 | General site clearance | Standing water in channel and ditches and risk of disease such as leptospirosis. | ☐ | ☐ | ☐ | ☒ | ☒ | L | E | H | L | Contractor to implement site specific health and safety measures to mitigate risk during works | Contractor to be aware of ground conditions and undertake all necessary safe working procedures. | | | ✓ | |
| EW9 | Works Adjacent to Network Rail Infrastructure | Working near to live level crossing rail infrastructure adjacent to site | ☒ | ☒ | ☒ | ☐ | ☐ | L | E | H | L | Submit methods statements to Network Rail for approval. | Plant and machinery to be selected to reduce risk of damage to Network Rail assets | | ✓ | | Contractors Method Statement to address risk |

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| EW10 | Working in the zone of the 66kV existing cables | Excavations within zone and strikes from equipment | ☒ | ☒ | ☒ | ☐ | ☐ | L | E | H | L | Sub-scan survey has been undertaken. | Contractor will be familiar with the relevant protocol for safe working around utilities, will liaise with the relevant stakeholders and will be familiar with HSG47.<br>Contractor to scan for unmarked services before commencing any excavation works. | Refer to GPR survey and information from stats providers for detailed information. | ✓ | | Contractors Method Statement to address risk |
| EW11 | Unfenced area adjacent to Network Rail Land | Access between site and Network Rail Land | ☒ | ☒ | ☒ | ☐ | ☐ | L | E | H | L | Impacted area is located outside of the enabling works boundary | No works are to be undertaken in this zone during the enabling works | Site location plans provided to contractor | | ✓ | |
| EW12 | General Excavation Works | Presence of below ground obstructions / potential tunnels that may collapse when working in proximity | ☒ | ☐ | ☒ | ☐ | ☒ | L | S | H | M | Known below ground obstructions and presence of potential tunnels are detailed within Cundall's Ground Conditions Summary Report for Contractor review. | Contractor to assess design reports and consider the presence of obstructions / voids / features when producing risk assessments and method statements. | RIBA 3 Enabling Works design package and Arcadis Ground Investigation Report. | ✓ | | |
| EW13 | General Excavation Works | Previously unidentified contaminations | ☒ | ☐ | ☒ | ☒ | ☒ | U | M | I | I | Remediation Strategy captures Contractor requirements where previously unidentified contamination is identified. | A discovery strategy is included in Remediation Strategy. Contractor shall comply with the requirements during Earthworks. | RIBA 3 Enabling Works design package. | ✓ | | |

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| EW14 | General Excavation Works | Relocation / excavation of invasive species contaminated soils | ☒ | ☐ | ☒ | ☒ | ☒ | L | M | M | I | Detail on location minimum working requirements detailed within Cundall Remediation and Earthworks Strategy.<br>Proposed enabling works at RIBA 3 proposed to avoid majority of the area where invasive species contaminated soils are known to be present. | Ecologist to be consulted to complete appropriate risk mitigation measures on behalf of Contractor.<br>Contractor to acknowledge presence of contaminated soils and consider within risk assessment and method statements. | RIBA 3 Enabling Works design package. | ✓ | | |

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