



Norwich Western Link

Environmental Statement Chapter 3: Description of Scheme

Appendix 3.1: Outline Construction Environmental Management Plan (OCEMP)

Sub Appendix 3.1C: Outline Materials Management Plan

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Glossary of Abbreviations and Defined Terms

Term	Definition
CL:AIRE	Contaminated Land: Applications in Real Environments
MMP	Materials Management Plan
DoWCoP	Definition of Waste Code of Practice
EA	Environment Agency
MMP	Materials Management Plan
OMMP	Outline Materials Management Plan
QP	Qualified Person



1 Introduction

1.1 Overview of the purpose of this Appendix

1.1.1 The Principal Contractor has been commissioned by Norfolk County Council (The Applicant) to prepare an Outline Materials Management Plan (OMMP) for the Norwich Western Link (the Proposed Scheme).

1.2 Overview of the Scheme

1.2.1 The Proposed Scheme consists of the construction, operation and maintenance of an approximately 6 kilometre (km) long dual-carriageway road connecting the A1067 Fakenham Road and the A47, with a dualled section of the A1067 to the existing A1270 roundabout.

1.2.2 As part of the Proposed Scheme, the following structures are proposed:

- Viaduct crossing the River Wensum Special Area of Conservation and floodplain (approximately 490m long). The ten-span bridge design includes piled piers within the floodplain;
- A culvert crossing of a minor watercourse in the floodplain where it is intersected by a maintenance access track;
- Wildlife crossings structures, including underpasses and green bridges;
- Overbridges where required to maintain routes across the scheme for local landowner vehicles, non-motorised users (pedestrians, cyclists and horse riders) and/or wildlife; and
- Culvert structure for a tributary of the River Tud.

1.2.3 The Proposed Scheme design includes sloped earth embankments and cuttings to manage the topography, earth bunds, landscape planting, environmental mitigation measures, drainage basins, and maintenance access tracks.



1.2.4 As part of a separate planned scheme, National Highways proposes to realign and dual the A47 between North Tuddenham and Easton. This scheme's Development Consent Order (DCO) was granted by the Secretary of State for Transport in August 2022. As part of this scheme, National Highways will construct the Honingham grade-separated junction, and the Norwich Western Link will connect to the north-eastern side of that junction.

1.3 Scope of the Outline Materials Management Plan

1.3.1 This OMMP provides guidance for the development of the MMP which will be completed by the appointed Principal Contractor prior to the commencement of the construction phase.

1.3.2 The construction phase MMP will detail how materials will be managed during construction. Excavated materials should be managed in such a manner that, wherever possible, they do not become waste and ensuring compliance the CL:AIRE Definition of Waste Code of Practice (DoWCoP) (Ref 1).

1.3.3 It is the intent of the Applicant to, where reasonably practicable, retain site won materials within the Proposed Scheme's extents. Where surplus material arises, or materials are deemed following further analysis to not be suitable for retention on site then they will be disposed off-site in accordance with construction industry best practice, Duty of Care (Waste) Regulations and the CL:AIRE DoWCoP.

1.3.4 The design incorporates reuse of excavated arisings as fill for the Proposed Scheme, as embankments and in environmental bunds. The cut and fill balance on the scheme produces a surplus of excavated earthworks of approximately 184,822 m³ (425,091 t). Further assessments are being undertaken to identify if this material can be retained within the Scheme extents.

1.3.5 Further surveys will be undertaken to determine the suitability of excavated / site won materials for retention on site or whether it will need to be disposed



off-site to an alternative site, a suitable recycling or appropriate waste treatment / disposal facility or landfill.

- 1.3.6 All quantities associated with retention on site and / or off-site disposal will be recorded in the construction phase MMP.

1.4 Materials re-use

- 1.4.1 The DoWCoP requires the Principal Contractor to prepare a MMP for the construction phase so that excavated materials can be classified as waste or not. The MMP will record the movement of excavated materials and ensure that materials are handled in a way that prevents harm to human health and pollution of the environment.

- 1.4.2 The DoWCoP allows for materials arising from construction activities to be managed within three main scenarios:

- Reuse on Site of Origin;
- Direct Transfer of clean naturally occurring soil / mineral materials; and
- Cluster Projects.

The DoWCoP also permits the use of a combination of the above scenarios.

Reuse on Site of Origin

- 1.4.3 Reuse of excavated materials within the Proposed Scheme boundary can occur, subject to them being suitable for use, or following treatment on site under an appropriate Environmental Permit.
- 1.4.4 Any surplus material should be taken to an appropriate waste management facility. Alternatively, it may be donated to a Hub site within a Cluster Project for processing and onward dispatch to an appropriate Receiver site. If it is a clean naturally occurring soil / mineral material, it may be transferred directly to another site.



Direct Transfer

- 1.4.5 Clean naturally occurring soils and mineral materials may be transferred directly from one development site to another for use, without the need for waste legislation being applied (i.e., the receiving development site does not require an Environmental Permit or Waste Exemption).
- 1.4.6 The DoWCoP defines materials that can be classed as “clean naturally occurring soil and mineral” and defines their anticipated origins. Materials suitable for Direct Transfer must be capable of direct use without the need for treatment.

Cluster Projects

- 1.4.7 The Cluster Project approach is designed to facilitate the remediation and/or development of a number of sites that are located in relatively close proximity and share a decontamination/treatment facility located on a single site, referred to as a Hub site. A key principle of a Cluster Project is that the activity is temporary.

2 MMP for Construction Phase

2.1 Principles for the use of Materials as Non-Waste

- 2.1.1 Materials are only considered to be waste if they are discarded, intended to be discarded or required to be discarded, by the holder. Once discarded, they remain a waste until fully recovered.
- 2.1.2 The aim of this OMMP is to provide a framework that ensures that site won materials can be reused as ‘non-waste’. To ensure excavated materials are not considered as waste they must:
- Not be a risk to human health.
 - Be suitable for its intended use without further treatment. Such materials must be demonstrated to be suitable in terms of both their chemical and geotechnical properties. Other material may be suitable



for use following treatment that has been carried out under an appropriate authorisation.

- Have a demonstrated certainty of use; and
- Be only of the quantity necessary for that use.

2.1.3 The creation of the construction phase MMP will demonstrate that the above factors have been considered and that a correct determination will be made as to the nature of site won materials.

2.2 Demonstrating that material is not waste or has ceased to be waste

2.2.1 The production of a MMP demonstrates that the factors detailed in Section 2.1.2 have been satisfied. The MMP will be informed by an appropriate risk assessment identifying that the objectives of preventing harm to human health and pollution of the environment will be met if materials are used in the proposed manner.

2.2.2 The CL:AIRE protocol and the DoWCoP require the MMP to be verified and signed off by a Qualified Person (QP). The QP will sign and submit the Declaration to the Environment Agency.

2.2.3 The provision of a verification report at the close of the construction phase will demonstrate materials have been located in the correct place, were treated appropriately and used as set out in the MMP.

2.2.4 The construction phase MMP formally marshals all the relevant information to demonstrate that all four factors in Section 2.1.2 will be met and includes a tracking system and contingency arrangements.

CL:AIRE MMP Template

2.2.5 The construction phase MMP will follow the layout and outline the factors detailed within the template document provided by CL:AIRE at their website: [Materials Management Plan \(MMP\) \(claire.co.uk\)](https://www.claire.co.uk/materials-management-plan-mmp).



2.3 Construction Phase Materials Management Plan

2.3.1 The construction phase MMP (MMP) will document how all the excavated materials will be handled, stored and treated. The construction phase MMP should be adhered to throughout the construction phase and be produced prior to the commencement of excavation works.

MMP Tracking System

2.3.2 All materials subject to excavation, disposal, treatment and/or reuse should be tracked throughout the construction phase and evidence generated to provide an auditable trail.

2.3.3 The tracking system will include but not be limited to:

- Annotated plans of the Proposed Scheme identifying different excavation areas, stockpile locations, treatment areas (if applicable) and placement locations.
- Material testing results
- Treatment results
- Movement through any authorised treatment facility
- Tracking forms / control sheets

2.3.4 The movement of materials within site for retention and re-use, treatment or disposal to an appropriate facility will be tracked and records retained. These records will be included within the Verification Report.

2.3.5 Any materials arising from site operations that are not suitable for use will be removed from site in accordance with the Duty of Care (Waste) Regulations and appropriate records be retained.

Verification Plan and Verification Report

2.3.6 The DoWCoP identifies that the creation of a verification plan is an integral part of the construction phase MMP. The verification plan will identify how the placement of materials is recorded and the quantity of material to be used.



- 2.3.7 Once the Proposed Scheme has been completed a verification report will be provided to demonstrate that materials have been treated and used in an acceptable manner within the Proposed Scheme or dealt with appropriately.
- 2.3.8 This will provide an audit trail to show that materials and wastes have gone to the correct destination.
- 2.3.9 The Verification Report will document any changes that have been made to the construction phase MMP or any contingency arrangements that had been implemented.

Amendments to the MMP

- 2.3.10 The DoWCoP recognises that it may not be possible to complete the works in accordance with the construction phase MMP. Any such deviations from the original construction phase MMP must be recorded as the construction phase MMP develops and must be detailed in the Verification Report.

2.4 Qualified Person

- 2.4.1 The Principal Contractor will appoint a Qualified Person (QP) who must be registered with CL:AIRE.
- 2.4.2 The Proposed Scheme construction phase MMP will be subject to review and Declaration by the QP. The Declaration will then be submitted to the Environment Agency. The Declaration serves as a notification to the Environment Agency that the QP is satisfied that the proposed use of materials within the Proposed Scheme will occur in accordance with the DoWCoP.
- 2.4.3 The QP will review the Proposed Scheme's documentation relating to the excavation and movement of materials. The QP will be suitably qualified and experienced to be able to carry out the review of the specified documents and be confident in signing the Declaration.



- 2.4.4 The Principal Contractor will follow the construction phase MMP and produce a Verification Report upon completion of the Proposed Scheme. This will form part of the audit trail on the completion of the project.
- 2.4.5 The QP does not need to inspect the site, carry out any additional assessment, enter dialogue with regulators / planning authorities or produce/review the Verification Report.
- 2.4.6 The QP can, however, be separately appointed by the Principal Contractor to produce or review the Verification Report. This is viewed as beneficial but would be outside the remit of the DoWCoP.
- 2.4.7 The construction phase MMP would be subject to a CL:AIRE Declaration by the QP. The materials would be assessed to fall within one of the following categories:
- Material is capable of being used in another place on the same site without treatment.
 - Material is capable of being used in another place on the same site following on site ex-situ treatment.
 - Material is capable of being used on another development site without treatment.
 - Material is capable of being used on another development following ex-situ treatment on another site (designated as a Hub site);
 - Material is not capable of being used on site or elsewhere and as such would require recovery or disposal offsite as waste.
 - Material is surplus to requirements and as such would require recovery or disposal offsite as waste.
- 2.4.8 The QP will complete, sign and submit the Declaration to the Environment Agency before the use of materials within the Proposed Scheme.



2.5 Materials and Waste Arising from the Proposed Scheme

2.5.1 Where practicable excavated materials will be retained within the Proposed Scheme’s extents. Surplus material will be disposed off-site in accordance with construction industry best practice, Duty of Care (Waste) Regulations and the DoWCoP.

2.5.2 The Principal Contractor will work to refine the Proposed Scheme design to reduce the volume of material that cannot be incorporated within the Scheme extents, thus aiming to minimise the volume of material subject to off site disposal. The volumes of material stated below are based on the current iteration of the design and are therefore subject to change.

2.5.3 Table 2.6-1 below identifies the estimated quantities of materials subject to excavation and reposition (fill). Should these figures vary during the construction phase any variance will be recorded in the construction phase MMP and the Verification Report.

Table 2.6-1 Estimated quantities of materials subject to excavation and reposition (fill) within the Scheme extents

Total excavation m3	Total Fill m3	Surplus material m3
1,391,369	1,206,547	184,822

2.5.4 An estimated surplus of 184,822m3 of site won materials will be generated during construction. This material may require removal from site. The Principal Contractor will explore options for retention on site, off site, reuse and / or recycling in order to minimise disposal via landfill.

2.5.5 Where it is not possible to process soils to a level that makes them suitable for reuse on site, such soils will be characterised for off-site disposal and removed to a suitably licensed waste disposal or treatment facility. The identified materials will be subject to further analysis to:



- Determine if treatment on site can render the materials suitable for incorporation in earthworks within the site extents; and
- Determine if material requires disposal at a suitable recycling / waste treatment facility.

2.5.6 Adoption of robust material and waste management and pollution prevention procedures will occur during the construction phase. The Proposed Scheme will comply with the Waste Management Regulations by appropriately characterising and then classifying any waste. Arisings will be assessed for potential reuse onsite, or other beneficial use, and only disposed to landfill where the material be deemed inappropriate or unsuitable for reuse. All site wastes will be managed in line with the Chapter 3, Appendix 3.1, Sub Appendix 3.1.b Design Site Waste Management Plan reference 3.03.01b (Ref 2).

2.5.7 This approach aligns with the preparation of this OMMP and the processing and treatment of excavated soils for reuse on site within the proposed works.

2.5.8 The Principal Contractor will apply the required discovery strategy and watching brief to the proposed excavations and where evidence of contamination is uncovered, such materials will be processed and treated until suitable for reuse onsite or disposal at an appropriate waste treatment facility.

3 References

Ref 1 CL:AIRE Definition of Waste: Development Industry Code of Practice, Version 2 March 2011

Ref 2 Environmental Statement Chapter 3: Description of Scheme, Appendix 3.1: Outline Construction Environmental Management Plan (OCEMP), Sub Appendix 3.1.b Design Site Waste Management Plan reference 3.03.01b.