

CL:AIRE Materials Management Plan

Site: Castleton Sidings, Heywood Road, Rochdale

Reference: 14-768-R6-8

Date: March 26





E3P

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QUALITY ASSURANCE

Report reference	14-768-R7
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REV REF:	DESCRIPTION	AUTHOR	CHECKED	AUTHORISE D	DATE
1	First issue	JS	MD	MD	27/08/24
2	Updated to cover full site turnover (re-use at site of origin)	JS	MD	MD	13/11/24
3	Additional Topsoil and Subsoil Donors	JS	MD	MD	20/3/25
4	Updated volume	JS	MD	MD	7/5/25
5	Additional Topsoil Donor	JS	MD	MD	8/8/25
6	Additional Subsoil Donor	JS	MD	MD	25/2/26
7	Additional Subsoil Donor	JS	MD	MD	10/3/26
8	Additional Subsoil Donor	JS	MD	MD	17/3/26

This report has been prepared for the sole benefit, use, and information of the client. The liability of Environmental Engineering Partnership Limited T/A E3P with respect to the information contained in the report will not extend to any third party. This report has been prepared by the qualified persons as listed below.

WRITTEN BY	QUALIFICATIONS	POSITION
Jessica Sheridan	MeSci, FGS, MEnvSci, CSci	Principal Consultant

REVIEWED BY	QUALIFICATIONS	POSITION
Martin Dyer	BSc(Hons), FGS, AIEMA, MEnvSc, CEnv, CGeol	Director

AUTHORISED BY	QUALIFICATIONS	POSITION
Martin Dyer	BSc(Hons), FGS, AIEMA, MEnvSc, CEnv, CGeol	Director





MATERIALS MANAGEMENT PLAN (MMP) FORM

This form should be completed once the lines of evidence have been marshalled in relation to suitability for use, certainty of use and quantity required.

The answers to the questions posed within this form, together with the supporting information will constitute the MMP and must be provided to the Qualified Person.

A Qualified Person may comment on draft versions of this MMP but will not complete the Declaration until all the relevant documents, demonstrating lines of evidence have been provided for each site.

The person / organisation who will pay the Declaration fee should confirm that they have read and understand the Terms and Conditions relating to the payment of the Declaration fee to CL:AIRE. These can be found on the CL:AIRE website.

**The person / organisation agreeing to pay the Declaration Fee –
Name, organisation and contact details inc. email address**

E3P
Taylor Road, Urmston, M41 7JQ

Contact: Jessica Sheridan
Tel: 0161 707 9612
Email: jsheridan@e3p.co.uk

✓ I confirm I have read and understood the Terms & Conditions.



Each question must be answered. If the question is not applicable, please state this and provide a brief explanation.

1. Specify the scenario to which this MMP relates, as described in the Definition of Waste: Development Industry Code of Practice (DoW CoP) (1, 2, 3 or 4):

- ✓ 1. Reuse on the Site of Origin
- ✓ 2. Direct Transfer of clean naturally occurring soil / mineral materials
- 3. Cluster Project
- ✓ 4. Combination of any of the above

In the case of a combination of reuse scenarios, please describe it below:

Reuse on Site of Origin and Direct Transfer of clean naturally occurring unpolluted soils.

(NB: A Declaration is required for reuse on the Site of Origin and for any 2-site arrangement i.e. there is no facility for a combination Declaration)

2. Organisation and name of person preparing MMP

E3P
Taylor Road
Urmston
M41 7JQ

Prepared by Jessica Sheridan
Tel: 0161 707 9612
Email: jsheridan@e3p.co.uk



DOCUMENT CONTROL

Date issued	August 2024 (Rev 1), November 2024 (Rev 2), March 2025 (Rev 3), May 2025 (Rev 4), August 2025 (Rev 5), February 2026 (Rev 6), March 2026 (Rev 7)
Revision No.	7
Revision Date	March 2026
Summary of revision 2	Updated to cover full site turnover (re-use at site of origin)
Summary of revision 3	Addition of Topsoil and Subsoil donors
Summary of revision 4	Updated subsoil volume (Dinting Road)
Summary of revision 5	Addition of Topsoil Donor – Haslingden Road, Blackburn
Summary of revision 6	Addition of subsoil donor – Mosley Phase 2
Summary of revision 7	Addition of subsoil donor – Mirlees
Summary of revision 8	Addition of subsoil donor – Don Steet, Middleton

Insert additional lines to the table above for any subsequent revisions.

Note - revisions to the MMP do not trigger an additional Declaration by a Qualified Person, unless an additional site is added to the project.

Revisions to the MMP must be recorded and summarised in the Document Control box above.

SITE DETAILS

3. Site / Project name(s)	Castleton Sidings, Heywood Road, Rochdale OL11 3AU
Reuse / receiving site name:	As Above
Donor site name (if Direct Transfer)	Donor 1: Kellen Homes – Bennett Street, Manchester, M12 5NL. NGR E 386189, N 397031 Donor Site 2: Redrow – Gleaves View at Daresbury Garden Village (Topsoil) Donor Site 3: Seddon Homes – Dinting Road, Glossop (Subsoil) Donor Site 4: Keepmoat Homes – Haslingden Road, Blackburn (Topsoil) Donor Site 5: Kellen Home – Mosley Phase 2 (Subsoil) Donor Site 6: Kellen Homes – Mirrlees Fields, Hazel Grove (Subsoil) Donor Site 7: Kellen Homes – Don Street, Middleton Further donors TBC with subsequent updates to MMP.

Landowners

4a. Name of Landowner(s) (full address and contact details) – where excavated materials are to be reused	Castleton Sidings Kellen Homes 1st Floor, 103 Dalton Avenue,
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	Birchwood Park, Warrington WA3 6YF Contact: Lewis Shaw Tel: 07511 178874 Email: Lewisshaw@kellenhomes.com
4b. Name of Landowner(s) (full address and contact details) – where excavated materials are arising from	Donor Site 1: Bennett Street, Manchester Kellen Homes 1st Floor, 103 Dalton Avenue, Birchwood Park, Warrington WA3 6YF (Contact: As above) Donor Site 2: Redrow – Gleaves View at Daresbury Garden Village (Topsoil) Redrow Homes NW 6450 Cinnabar Court Daresbury Business Park Daresbury WA4 4GE Donor Site 3: Seddon Homes – Dinting Road, Glossop (Subsoil) Seddon Homes Ltd Birchwood One Business Park, Warrington, WA3 7GB Donor Site 4: Keepmoat Homes – Haslingden Road, Blackburn (Topsoil) The Waterfront Lakeside Boulevard Doncaster DN4 5PL Donor Site 5: Kellen Homes – Mosley Phase 2 (Subsoil)



Kellen Homes
105 Dalton Avenue,
Birchwood Park,
Warrington,
WA3 6YF

Contact :Stuart Ellis
Tel: 01925 363108
Email: stuartellis@kellenhomes.com

Donor Site 6: Kellen Homes – Mirrlees Fields, Hazel Grove (Subsoil)
As above

Donor Site 7: Kellen Homes – Don Street, Middleton (Subsoil)
As above

SUMMARY AND OBJECTIVES

5a. Provide a brief description of the planned project and how excavated materials are to be reused.

As part of the construction of the proposed residential development at Hawks View (formerly Castleton Sidings) to achieve a development platform, several hotspots and impacted areas will be delineated and removed, and extensive peaty organic deposits (estimated volume of 24,434 m³) will require wholesale excavation from beneath the development area and replacement with either site won Made Ground or imported fill. These excavated organic soils will be placed in the designated area of POS in the west of the site to construct a landscape mound in accordance with the agreed development proposals.

The cut and fill works to create the development platform will be undertaken in phases as follows:

	Phase 1	Phase 2	Phase 3	POS	Total
Cut	-4536 m ³	-7364 m ³	-5331 m ³	-933 m ³	-18,164 m ³
Fill	+6211 m ³	+5056 m ³	+5142 m ³	+2900 m ³	+19,309 m ³
Nett	+1674 m³	-2307 m³	-190 m³	+1967 m³	+1145 m³

In addition to the above overall cut/fill calculations, approximately 225,000 m³ of Made Ground will be excavated, turned over to remove obstructions, and re-engineered. An estimated volume of 24,434 m³ of organic soils will also be excavated and replaced/substituted with imported material.



The import of suitable cover system materials will also be required to complete the proposed gardens and public open space. The below volumes have been estimated to be required to complete the development.

Area Names	Area Size (m ²)	Subsoil Volume (m ³)	Topsoil Volume (m ³)
Rear Gardens (600mm)	8915	4012	1337
Front Gardens (450mm)	4752	1426	713
POS (450mm)	5650	1695	848
TOTAL	19317	7132	2898

Material is therefore required to be imported as engineering/bulk fill and to complete the garden cover system.

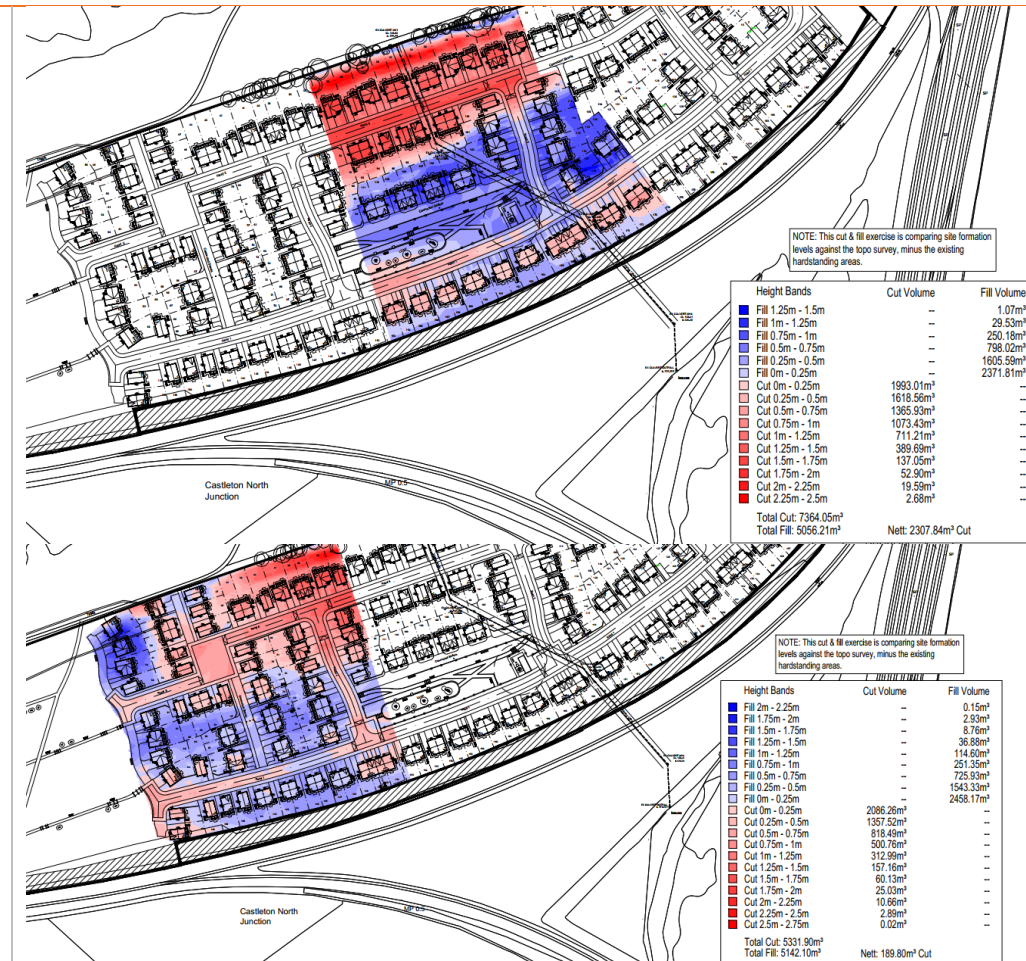
GENERAL PLANS AND SCHEMATICS

Receiver Site: Hawks View, Castleton (formerly Castleton Sidings)

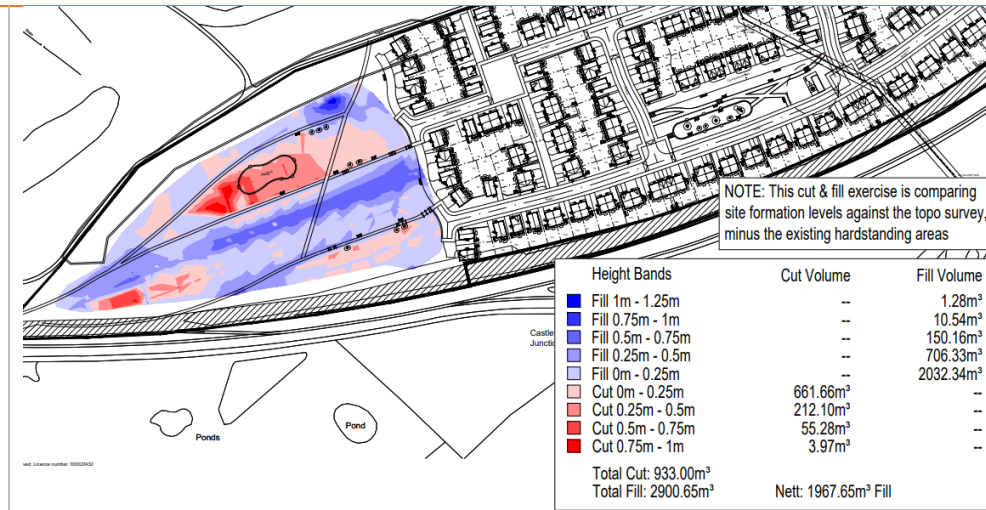
Areas of cut are shown in red in the phase drawings below, with fill in blue and in Appendix I. Site won and imported materials will be temporality stockpiled in the designated POS area in the west of the site.

6. Attach a location plan for the site(s) and a plan of the site(s) which identifies where different materials are to be excavated from, stockpile locations (if applicable), where materials are to be treated (if applicable) and where materials are to be reused.





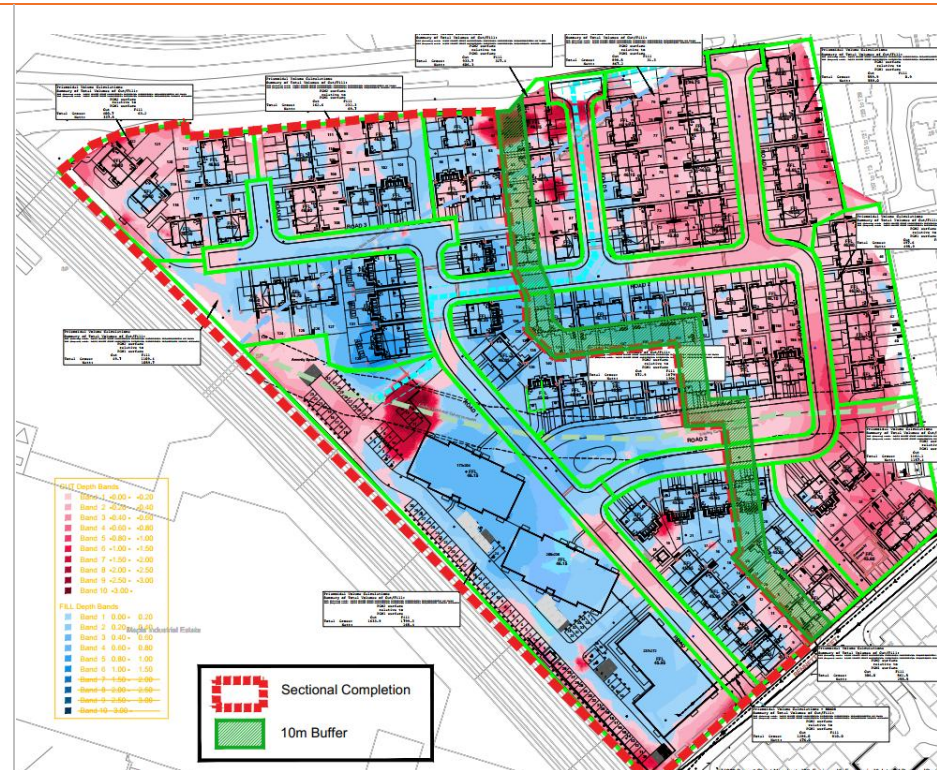
The POS (below) will be used as a temporary storage area for stockpiling site won and imported soils. Treatment plant will also be situated in this part of the site.



Donor Site 1: Bennett Street Manchester

Importation of excess clean naturally occurring subsoil from Bennett Street, Manchester.

Material to be won from cut areas (in red below) to create a development platform. Natural subsoils will be excavated from areas shown in red for use as bulk fill or subsoils in the cover system.



Donor Site 2: Redrow – Gleaves View at Daresbury Garden Village (Topsoil)

Surplus topsoil is stockpiled at the development site (greenfield source). This material will be imported to the Hawks View development for use in the garden cover system.

Donor Site 3: Seddon Homes – Dinting Road, Glossop (Subsoil)

Surplus subsoil is stockpiled at the development site (greenfield source). This material will be imported to the Hawks View development for use in the garden cover system. The subsoil has been generated from the cut/fill earthworks (cut from east and north) and foundation excavations.



Donor Site 4: Keepmoat Homes – Haslingden Road, Blackburn (Topsoil)

Surplus topsoil is stockpiled at the development site (greenfield source). This material will be imported to the Hawks View development for use in the garden cover system.

Donor Site 5: Kellen Homes - Mosley Phase 2 (Subsoil)

Natural subsoils will be excavated from areas of cut (red) within the redline boundary at Mosley Phase 2 and stockpiled for export. This material will be imported to the Hawks View development for use in the garden cover system.

Kellen Homes Cut& Fill Drawing: Phase 2 - Cut and Fill / Isopachyte





Donor Site 6: Kellen Homes – Mirrlees Fields, Hazel Grove (Subsoil)

Natural subsoils will be excavated from areas of cut (red) within the redline boundary at Mirrlees Fields and stockpiled for export. This material will be imported to the Hawks View development for use in the garden cover system.

Kellen Homes Cut & Fill Drawing:



Construction Arising Calculations (Generation of Surplus Subsoil):

Arising		
Foundation	= 3,767m ³	(WPI)
Main Drainage	= 4,654m ³	(WPI)
Mains	= 3,096m ³	(1,720m x 2.00 x 0.90)
Service Connections	= 995m ³	(158plots x (7.0 x 1.00 x .90))
Plot Drainage	= 1,106m ³	(158plots x 7m ³)
Total	= 13,618m³	
 Net Fill	 = -1,147m ³	
 Total	 = 12,471m ³ + 20% bulking = 14,965m³	



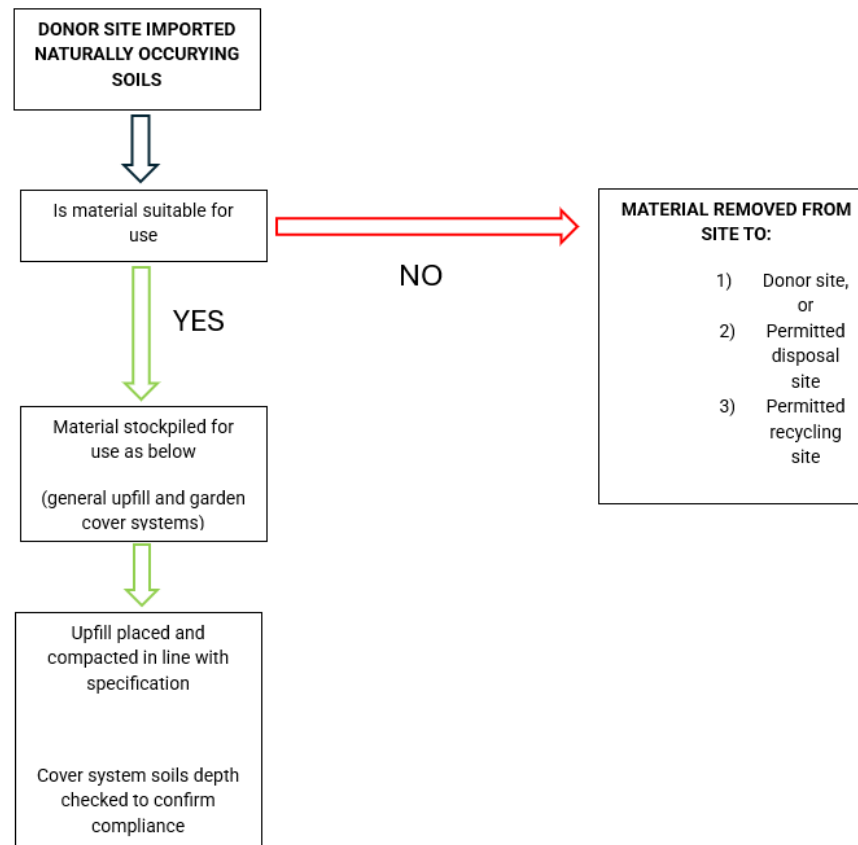
Donor Site 7: Kellen Homes – Don Street, Middleton (Subsoil)

Natural subsoils have been excavated from Don Street Parcel B (from the area shown in red on the image below) and stockpiled for export. This material will be imported to Hawks View development for use as bulk fill.

7. Attach a schematic of proposed materials movement. Where there is only one source area, and one placement area briefly describe it. For all other projects a schematic is required.



Description & Schematic Document Reference:



Parties Involved and Consultation – if more than one party please provide additional details for them and identify the location that they will be working e.g. where a site is zoned



8a. Main earthworks contractor(s) (full address and contact details) – Where excavated materials are to be reused	Receiver Site: Hawks View, Castleton (formerly Castleton Sidings) Urban Regen Ltd Langley Road Pendlebury Salford M6 6FG Contact: Ben Thomas Tel: 07376 611818 Email: ben.thomas@urbanregen.co.uk
8b. Main earthworks contractor(s) (full address and contact details) - Where excavated materials are arising from	Donor Site 1: Bennett Street, Manchester Urban Regen Ltd Langley Road Pendlebury Salford M6 6FG Contact: Ben Thomas Tel: 07376 611818 Email: ben.thomas@urbanregen.co.uk Donor Site 2: Redrow – Gleaves View at Daresbury Garden Village X&P Mcguigan Civil Engineering Ltd The old pump house Railway rd Withnell Chorley PR6 8UA Contact: Ian Seddon (Site Foreman) Tel: 07817 315624 Email:



Donor Site 3: Seddon Homes – Dinting Road, Glossop

Caldwell construction Ltd
Caldwell House,
830 Mandarin Court,
Centre Park,
Warrington,
WA1 1GG

Tel: 01782 265532
email: admin@caldwellconstruction.co.uk

Donor Site 4: Haslingden Road, Blackburn

Keepmoat Homes
The Waterfront
Lakeside Boulevard
Doncaster
DN4 5PL
Tel: 01302 896 800

Donor Site 5: Kellen Homes – Mosley Phase 2 (Subsoil)

WPI CIVIL ENGINEERING LTD
WPI House
King St.Trading Estate
Middlewich
Cheshire
CW10 9LF
Contact: Liam Igoe ligoe@wpigroup.co.uk
Tel: 01606 737380

Donor Site 6: Kellen Homes – Mirrlees Fields, Hazel Grove (Subsoil)

As above

Donor Site 7: Kellen Homes – Don Street, Middleton (Subsoil)



	As above
9. Treatment contractor(s) (full address and contact details) – for treatment on site of origin, or at a Hub site within a fixed STF / Cluster Project	Urban Regen Ltd Langley Road Pendlebury Salford M6 6FG Contact: Ben Thomas Tel: 07376 611818 Email: ben.thomas@urbanregen.co.uk
10. Where wastes and materials are to be transported between sites, provide details of the transport contractor(s) (full address, contact details and waste carriers registration details (if applicable))	Details of the haulage contractor transporting material from donor site to receiver site: Donor 1: Bennett St TBC Donor Site 2: Redrow – Gleaves View at Daresbury Garden Village Donor Site 3: Seddon Homes – Dinting Road, Glossop Cheshire Soils and Aggregates LTD Suite 1 Unit 2 Edward Court Altrincham Business Park George Richards Way Altrincham WA14 5GL Waste Carriers Licence Number CB/DU 324237 Donor Site 4: Haslingden Road, Blackburn Braidwood & Sons Ltd Worsley Trading Estate Lester Rd



	Little Hulton Manchester M38 0PT Waste Registration No: CB/DU 91464 Donor Site 5: Kellen Homes – Mosley Phase 2 (Subsoil) Cheshire Soils and Aggregates Ltd Suite 1, Unit 2, Edward Court Altrincham Business Park George Richards Way Altrincham WA14 5GL Office Tel: 0161 302 2765 David Bodily Office Manager dave@cheshiresoils.co.uk Waste Registration No: CB/DU 229080 Donor Site 6: Kellen Homes – Mirrlees Fields, Hazel Grove (Subsoil) TBC Donor Site 7: Kellen Homes – Don Street, Middleton (Subsoil) TBC
11. Provide Local Authority contact details (full address and named contacts) where excavated materials are to be reused	Rochdale Borough Council Number One Riverside Smith St Rochdale OL16 1XU Contact: Michael Moore Email: michael.moore@rochdale.gov.uk Tel: 01706 647474



12a. For the site where materials are to be reused and for Hub Site locations provide Environment Agency contact details (full address and named contacts):	The Waste Enquiries Helpdesk Team Environment Agency Richard Fairclough House Knutsford Road Warrington WA4 1HT GMMCWasteEnquiries@environment-agency.gov.uk
<i>For all Cluster Projects:</i> 12b. Attach any relevant documentation from the EA relating to the excavation and reuse of the materials to demonstrate no objection to the proposals (see 3.37 of DoW CoP) If the EA has not been consulted please explain why (see paragraph 3.39 of the DoW CoP).	N/A
For Projects in Greater Manchester - Has this MMP been submitted to the EA Waste Team gmmcwasteenquiries@environment-agency.gov.uk	MMP submitted to EA for review and approval.

LINES OF EVIDENCE

There is no one single factor that can be used to decide that a substance or object is waste, or when it is, at what point it ceases to be waste; as complete a picture as possible has to be created.

The following sections require completion to ensure the correct decision is made.

If a requested item is not relevant it is important to clearly state why this is so (e.g. no planning permission required because permitted development status exists).

Suitable for use criteria



13. Please describe or provide copies of the required specification(s) for the materials to be reused on each site.	Document Reference(s): Receiver Site: Castleton Sidings E3P Remediation Strategy. Ref: 14-768-R4, dated April 2024. Section 4 and RE-15, RE-18, RE-20 and RE-21. Table 3.5 for chemical sampling frequency for suitability for re-use on receiver site and Appendix IV for remediation and validation chemical criteria. Donor Site 1: Bennet Street, Manchester E3P Phase I and II Geoenvironmental Site Assessment. Ref: 15-974-R1-1, December 2022. Section 9.1.1 and Appendix VI for chemical analysis results (full site investigation). The report states: <i>Chemical analysis of the natural drift deposits has identified these soils to be acceptable for use as subsoil within any landscaping areas.</i> Donor Site 2: Redrow – Gleaves View at Daresbury Garden Village (Topsoil) Betts Associates Ground Investigation Report. Ref: 10RED037/GI Rev 1, January 2013. Appendix D for chemical analysis results. Section 10.2 states: <i>Slightly elevated levels of Benzo(a)pyrene above relevant guidance were encountered within the Topsoil in WS2, WS5, WS6, WS7, WS8 in the Canal Field and TP50 in the Crow's Nest Field during the contamination assessment. Analysis of the statistics of the elevated levels of Benzo(a)pyrene showed that it was not a statistical outlier and as such the 95th Percentile may be used. Double Ratio Plots undertaken on the samples, confirm the elevated determinants are of coal/coal ash origin. The Mean Test Value US95 of 1.08 mg/kg (SGV of 0.94mg/kg for 2.5% SOM); on the basis of this marginal exceedance and evidence of low risk source via the Double Ratio Plots and site history, it is deemed that no remedial action is required for Benzo(a)pyrene.</i> In addition to the narrative in the report (above), it is noted that the applied GAC value for Benzo(a)pyrene used (0.94 mg/kg) in the comparison is much lower than the current S4UL value of 2.2 mg/kg. When applying the current GAC, only one sample is marginally in exceedance, thus the risk to human health from topsoil derived from this source is considered very low.
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Donor Site 3: Seddon Homes – Dinting Road, Glossop (Subsoil)

Sutcliffe Phase II Interpretive Ground Assessment. Ref: 30241LG – R02, August 2019

Appendix G for chemical analysis results and soil screening tables. Section 6.1 states: *As no elevated levels of contamination were identified that would represent a risk to the long-term human health of site users no further analysis was required for the site.*

Donor Site 4: Keepmoat Homes – Haslingden Road, Blackburn (Topsoil)

Coopers Supplemental Site Investigation Report. Ref: 7659ssi, September 2021

Appendix 8 for chemical analysis results.

Section 2.0 (Executive Summary) states: *Previous investigation (LK Group) identified elevated concentrations lead within reworked topsoil from 2 No. samples in the northern part of the site. Concentrations above private residential gardens, but below thresholds for residential open space. Coopers' investigation identified elevated concentrations of PAHs in 1 No. sample of topsoil, attributed to natural coal fragments and considered as no significant risk to future residents.*

Section 16.6 states – *Coopers therefore propose that during the initial soil strip the contractors should segregate areas of reworked topsoil for either reuse in areas of proposed public open space or disposal off site. Verification of the segregation should be provided via either independent inspection or disposal tickets.*

Section 19.2 states – *The **natural** topsoil from the site is inert and suitable for reuse or transfer.*

Donor Site 5: Kellen Homes – Mosley Phase 2 (Subsoil)

E3P Phase 2 Geoenvironmental Site Assessment Ref 18-076-R2-3, July 2025

Appendix VI for chemical analysis results. Section 4.2 states - *Chemical analysis of the natural clay superficial deposits has identified these soils to be acceptable for use as subsoil within the proposed garden areas; however, further chemical validation samples will be required to confirm this during the construction phase.*



	Donor Site 6: Kellen Homes – Mirrlees Fields, Hazel Grove (Subsoil) E3P Phase 2 Geoenvironmental Site Assessment Ref 17-390-R2-2, November 2024 Appendix VIII for chemical analysis results. Section 4.3.2. states chemical analysis of the natural clay and sand superficial deposits has identified these soils to be acceptable for use as subsoil within the proposed garden areas; however, further chemical validation samples may be required to meet regulatory sampling frequency. Donor Site 7: Kellen Homes – Don Street, Middleton (Subsoil) E3P Phase 2 Geoenvironmental Site Assessment Ref 14-554-R1-2, December 2022 Material is natural subsoil arising from the cut/civils works in Parcel B at Don St (former playing fields area in the north of the site). Appendix VI for chemical analysis results. Section 15.1 in relation to Parcel B states chemical analysis of the natural clay and sand superficial deposits has identified these soils to be acceptable for use as subsoil within the proposed garden areas; however, further chemical validation samples may be required to meet regulatory sampling frequency. Additional sampling of the stockpiled material has been undertaken (Material 1 samples 1A, 1B and 1C, results included in Appendix III of this MMP). Sampling locations are shown on E3P Drawing 14-554-043 (Appendix III), which notes '<i>no chemical exceedance and that soils suitable for use or transfer. Should they be transferred, this will need observing to ensure only natural soils are removed</i>'.
Where contamination is suspected or known to be present 14a. Please provide copies of or relevant extracts from the risk assessment(s) that has been used to determine the specification for use on the site. This must relate to the place where materials are to be used. This must be in terms of (i) human health (ii) controlled waters and (iii) any other relevant receptors. If a risk assessment is not	Document Reference(s): 📎 E3P Phase 1 & 2 Geoenvironmental Site Assessment (Ref: 14-768-R1-4, November 2023) 📎 E3P Supplementary Site Investigation Letter (Ref: 14-768-L4-2, September 2023) 📎 E3P Controlled Waters Supplementary Site Investigation Letter (Ref: 14-768-L5-2, March 2024) Human Health



relevant for a particular receptor given the site setting please explain why below:

Elevated concentrations of inorganic heavy metals, non-volatile PAH compounds, and trace asbestos can be mitigated through the installation of a suitable cover system. Given the widespread distribution of the contamination encountered during this and the previous phases of investigation, the cover system would be required in all proposed private gardens, landscaping, and public open space to remove any potential for direct exposure to impacted soils. It is likely that a no-dig layer (stone or robust geotextile) may also be required at the base of the clean cover system by the local authority.

Naphthalene and TPH fractions (and other S/VOCs) have been detected at concentrations in exceedance of GAC values at numerous locations across the main development area, and are particularly prevalent in the northeastern and south western sectors of the site. Further trial pitting in these areas has aided delineation of the extent of visual, olfactory and laboratory determined hydrocarbon and volatile impact. A previous phase of vapour monitoring conducted indicated that the soils in the vicinity of WS110 (northeast) posed a plausible risk from vapour emissions.

Monitoring in the southwest suggested a reduced vapour risk, however, further targeted assessment in and around TP211 (extending north and east) should be carried out to fully appraise the risk.

The gross Naphthalene/TPH impact and visually and olfactorily impacted soils (refer to Drawing no. 14-768-118) will require remediation to mitigate long term potential vapour accumulation and migration, odour issues, risk to construction workers/end users and potential future risks to controlled waters. Treatment may include ex situ bioremediation, chemical oxidation and/or soil stabilisation to 'lock in' contaminants where the material remains in-situ. As a precaution, it would be prudent to also incorporate VOC resistant membranes in plots in the areas where the impacted material remains, or is re-placed, to reduce the long term risks to receptors.

In addition to the above, speciation of the Mercury previously found to be elevated during previous investigations has concluded three locations contain elemental (volatile) Mercury in exceedance of residential GAC values (TP121, WS112 and RB304).

It may be possible to treat TP121, WS112 and RB304 as localised hotspots for delineation and removal or incorporate VOC resistant to mitigate the risks from elemental Mercury and other volatiles (particularly in the east of the site).

The potential for re-use of impacted soils (even proven not to present a volatile risk) may be limited due to potential to cross contaminate other areas of the site and facilitate downward and lateral



migration of contamination to underlying soils. A suitable clean cover system (minimum 600 mm) will be required for all plots.

Controlled Waters

Several phases of investigation have been completed at the site, which have included soil and groundwater analysis. Previous groundwater monitoring identified elevated naphthalene and TPH fractions in water samples taken from WS105 in the west of the main development area. However, this contamination was absent in surrounding wells to the west or north west, indicating migration in the direction of the off-site Roeacre Brook) was not occurring.

Sampling of the on-site drainage ditch, where accessible, has also confirmed the absence of TPH/volatile compound exceedances.

Additional monitoring wells were installed to the south and east of WS105 during this phase of works in an attempt to determine the extent of contamination. TPH fractions, naphthalene and SVOCs have been found in exceedance in wells to the east of WS105. The identified hydrocarbon and volatile contamination in the groundwater (WS105, WS301 and WS303) is located within the area of previously defined visual and olfactory hydrocarbon contamination in soils (refer to drawing no. 14-768-118). It is therefore considered likely that the contamination is confined to the perched water and is directly derived from the soils as a point source. No surface water receptors have been identified within influencing distance of the site to the south or east. There is therefore considered to be no unacceptable degree of risk to controlled waters receptors from the site.

Point source removal and ex-situ treatment of the soils by a specialist contractor is considered the most viable option, with a view to then replacing/re-using the treated material within the development area. This method would remediate the soil impact and as a result remove the point source and result in improved groundwater conditions. The exact treatment method will be defined by the remediation contractor in their Remediation Implementation Plan and Method Statement.

Ground Gas

In consideration of the nature of the site, historical land uses, and prevalence of TPH/SVOC impacted soils (albeit generally low vapour risk), E3P consider that gas protection measures in accordance with a CS2 classification should be incorporated in all residential properties constructed at the site.

Organic Soils/PEAT



Investigations have found organic soils/PEAT to be present across large parts of the site. Where present, it is deepening towards the southern site boundary and thickest in the in the centre south, south east and west of the site. The removal of compressible soils will be required from beneath adopted highway, infrastructure and external hard standing.

Aggregate

In respect of existing foundations and potentially recoverable aggregate, it is recommended that allowances be made for encountering piled foundations and 'hard spots' beneath areas of former structures during the Made Ground turnover at enabling works stage. Re-use of track ballast as recycled aggregate may be limited due to potential contamination and vapour risks. Allowances should therefore be made for importing suitable materials.

Validation Sampling

During the remediation and enabling works phase at Bennett St, sampling of site won clay have been (Eurofins/Chemtest Analytical Reports 24-19163-1, 24-25212-1, 24-25843-1, 24-27364-1, 24-29407-1). Material has arisen from reduced level dig for vibro plots. Results show the material to be suitable for use as subsoil in gardens subject to segregation of SW-CLAY-001 and SW-CLAY-011. These samples were taken from the base of the stockpile and likely included a scrape of the underlying Made Ground. Subsequent testing following segregation confirmed suitability. Visual inspection of the soils by E3P indicate the material to appear visually natural without any anthropogenic inclusions. Test results and photographs are included in Appendix III.

Donor Site 2: Redrow – Gleaves View at Daresbury Garden Village (Topsoil)

Betts Associates Ground Investigation Report. Ref: 10RED037/GI Rev 1, January 2013.

Appendix D for chemical analysis results. Section 10.2 states: *Slightly elevated levels of Benzo(a)pyrene above relevant guidance were encountered within the Topsoil in WS2, WS5, WS6, WS7, WS8 in the Canal Field and TP50 in the Crow's Nest Field during the contamination assessment. Analysis of the statistics of the elevated levels of Benzo(a)pyrene showed that it was not a statistical outlier and as such the 95th Percentile may be used. Double Ratio Plots undertaken on the samples, confirm the elevated determinants are of coal/coal ash origin. The Mean Test Value US95 of 1.08 mg/kg (SGV of 0.94mg/kg for 2.5% SOM); on the basis of this marginal exceedance and evidence of low risk source via the Double Ratio Plots and site history, it is deemed that no remedial action is required for Benzo(a)pyrene.*



In addition to the narrative in the report (above), it is noted that the applied GAC value for Benzo(a)pyrene used (0.94 mg/kg) in the comparison is much lower than the current S4UL value of 2.2 mg/kg. When applying the current GAC, only one sample is marginally in exceedance, thus the risk to human health from topsoil derived from this source is considered very low.

Donor Site 3: Seddon Homes – Dinting Road, Glossop (Subsoil)

Sutcliffe Phase II Interpretive Ground Assessment. Ref: 30241LG – R02, August 2019

Appendix G for chemical analysis results and soil screening tables. Section 6.1 states: *As no elevated levels of contamination were identified that would represent a risk to the long term human health of site users no further analysis was required for the site.*

Donor Site 4: Keepmoat Homes – Haslingden Road, Blackburn (Topsoil)

Coopers Supplemental Site Investigation Report. Ref: 7659ssi, September 2021

Appendix 8 for chemical analysis results.

Section 2.0 (Executive Summary) states: Previous investigation (LK Group) identified elevated concentrations lead within reworked topsoil from 2 No. samples in the northern part of the site. Concentrations above private residential gardens, but below thresholds for residential open space. Coopers' investigation identified elevated concentrations of PAHs in 1 No. sample of topsoil, attributed to natural coal fragments and considered as no significant risk to future residents.

Coopers recommended segregation of the reworked topsoil and state that the natural topsoil from the site is suitable for reuse or transfer (thus presenting a low risk to human health).

Donor Site 5: Kellen Homes – Mosley Phase 2 (Subsoil)

E3P Phase 2 Geoenvironmental Site Assessment Ref 18-076-R2-3, July 2025

Appendix VI for chemical analysis results. Section 4.2 states - *Chemical analysis of the natural clay superficial deposits has identified these soils to be acceptable for use as subsoil within the proposed*



	<i>garden areas; however, further chemical validation samples will be required to confirm this during the construction phase.</i> Donor Site 6: Kellen Homes – Mirrlees Fields, Hazel Grove (Subsoil) E3P Phase 2 Geoenvironmental Site Assessment Ref 17-390-R2-2, November 2024 Appendix VIII for chemical analysis results. Section 4.3.2. states chemical analysis of the natural clay and sand superficial deposits has identified these soils to be acceptable for use as subsoil within the proposed garden areas; however, further chemical validation samples may be required to meet regulatory sampling frequency. Donor Site 7: Kellen Homes – Don Street, Middleton (Subsoil) E3P Phase 2 Geoenvironmental Site Assessment Ref 14-554-R1-2, December 2022 Material is natural subsoil arising from the cut/civils works in Parcel B at Don St (former playing fields area in the north of the site). Appendix VI for chemical analysis results. Section 15.1 in relation to Parcel B states chemical analysis of the natural clay and sand superficial deposits has identified these soils to be acceptable for use as subsoil within the proposed garden areas; however, further chemical validation samples may be required to meet regulatory sampling frequency. Additional sampling of the stockpiled material has been undertaken (Material 1 samples 1A, 1B and 1C, results included in Appendix III of this MMP). Sampling locations are shown on E3P Drawing 14-554-043 (Appendix III), which notes '<i>no chemical exceedance and that soils suitable for use or transfer. Should they be transferred, this will need observing to ensure only natural soils are removed</i>'.
14b. Please attach any relevant documentation from the LA relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 of the CoP)	LA Document references: Planning decision 23/00431/HYBR (Appendix II) dated 9 August 2024. E3P has made contact with Rochdale Council in relation to the re-use and direct transfer of soils, response is presented in Appendix IV.



14c. Please attach any relevant documentation from the EA relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 and Table 2 of the CoP)	EA Document references: E3P has made contact with GMMC in relation to the re-use and direct transfer of soils, response is presented in Appendix IV.
14d. Please attach any relevant documentation from any other regulators (if relevant) relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 of the CoP)	Not Applicable.
<i>Where contamination is not suspected</i> 15a. Please attach copies or relevant extracts from the Desk Top Study that demonstrates that there is no suspicion of contamination.	Not Applicable.
15b. Please attach copies of or relevant extracts from the site investigation/testing reports that adequately characterise the clean materials to be used (if appropriate).	Not Applicable.
15c. Please attach copies of any other relevant information (if available) confirming that land contamination is not an issue.	Sampling of stockpiled subsoils at Bennett Street undertaken by E3P (report 24-19163-1, Appendix III), has not recorded any elevated determinants above human health thresholds for a residential end use. Chemical analysis of stripped topsoil from Haslingden Road, Blackburn has not recorded any elevated determinants above human health thresholds for a residential end use.

NB: It is your responsibility to assess the nature of the material to be used and that it fits within the limitations of the scenario under which it is to be used

Certainty of use

Various lines of evidence are required to demonstrate that the materials are certain to be used. This includes:



- ✳ The production of this MMP
- ✳ An appropriate planning permission (or conditions that link with the reuse of the said materials)
- ✳ An agreed Remediation Strategy(ies)
- ✳ An agreed Design Statement(s)
- ✳ Details of the contractual arrangements

Please identify in the following sections what lines of evidence relate to the site(s) where the materials are to be used.

16a.	Full planning permission granted for residential development for 191 dwellings including access, landscaping, open space together with erection of sub-station and foul water pump station. Planning Decision 23/00431/Hybr (Appendix II) Dated 9 August 2024.
16b. Explain how the reuse of the excavated materials fits within the planning permission(s) for each site.	In order to complete the proposed residential development, there will be a requirement to replace geotechnically unsuitable soils with suitably engineered material. There will also be a requirement to import suitable topsoil and subsoil to ultimately complete the clean cover system in landscaped areas.
16c. If planning permission is not required for any one site please explain why below e.g. permitted development, clean up of a chemical spill, surrender of an Environmental Permit, re-contouring within the existing permission.	Not Applicable
Where contamination is suspected or is known to be present 17. Please provide a copy of any Remediation Strategy(ies) that have been agreed with relevant regulators.	Document Reference(s): E3P Remediation Strategy. Ref: 14-768-R4, dated April 2024.
Where contamination is not suspected	Not Applicable



18. Please provide a copy of any Design Statement(s) that have been agreed (e.g. with the planning authority or in the case of permitted developments the client).

QUANTITY OF USE

19. Please provide a breakdown of the excavated materials for each site and how much will be placed at each site or sub area of each site.

Where this is not specific to a single readily identifiable source refer to an annotated plan, schematic or attach a tabulated summary.

As part of the construction of the proposed residential development at Castleton Sidings to achieve a development platform, several hotspots and impacted areas will be delineated and removed, and extensive peaty organic deposits (estimated volume of 24,434 m³) will require wholesale excavation from beneath the development area and replacement with either site won Made Ground or imported fill. These excavated organic soils will be placed in the designated area of POS in the west of the site to construct a landscape mound in accordance with the agreed development proposals.

The cut and fill works to create the development platform will be undertaken in phases as follows:

	Phase 1	Phase 2	Phase 3	POS	Total
Cut	-4536 m ³	-7364 m ³	-5331 m ³	-933 m ³	-18,164 m ³
Fill	+6211 m ³	+5056 m ³	+5142 m ³	+2900 m ³	+19,309 m ³
Nett	+1674 m³	-2307 m³	-190 m³	+1967 m³	+1145 m³

In addition to the above overall cut/fill calculations, approximately 225,000 m³ of Made Ground will be excavated, turned over to remove obstructions and re-engineered, and an estimated volume of 24,434 m³ of organic soils will be excavated and replaced/substituted with imported material.

The import of suitable cover system materials will also be required to complete the proposed gardens and public open space. The below volumes have been estimated to be required to complete the development.



Area Names	Area Size (m ²)	Subsoil Volume (m ³)	Topsoil Volume (m ³)
Rear Gardens (600mm)	8915	4012	1337
Front Gardens (450mm)	4752	1426	713
POS (450mm)	5650	1695	848
TOTAL	19317	7132	2898

Donor Site 1: Bennett Street

Approximately 2000 m² clean naturally occurring material will be imported from Bennett Street (direct transfer).

Donor Site 2: Redrow – Gleaves View at Daresbury Garden Village (Topsoil)

130 m³ natural topsoil will be imported via direct transfer.

Donor Site 3: Seddon Homes – Dinting Road, Glossop (Subsoil)

1000 m³ natural subsoil will be imported via direct transfer.

Donor Site 4: Keepmoat Homes – Haslingden Road, Blackburn (Topsoil)

2000 m³ natural topsoil will be imported via direct transfer.

Donor Site 5: Kellen Homes – Mosley Phase 2 (Subsoil)

Up to 1000 m³ natural subsoil will be imported via direct transfer.

Donor Site 6: Kellen Homes – Mirrlees Fields, Hazel Grove (Subsoil)

Up to 6000 m³ natural subsoil will be imported via direct transfer.

Donor Site 7: Kellen Homes – Don Street, Middleton (Subsoil)

Up to 3000 m³ natural subsoil will be imported via direct transfer.

Other donor sites will be added to the MMP when identified.



20a. How has consolidation/compaction being considered in the above mass balance calculations?	No allowance has been made for consolidation / compaction in the mass balance calculations which show a shortfall of materials. Any reduction will therefore increase the shortfall on site either during the initial site preparatory stage or during subsequent development phase.
20b. How has loss due to treatment being considered in the above mass balance calculations (if applicable)?	The remediation contractor has provided an estimated volumetric assessment by phase (Appendix I) which accounts for recovery of ballast, concrete, tarmac, 6F and hard materials (from general turnover and soil processing).
20c. How has the addition of treatment materials being considered in the above mass balance calculations (if applicable)? Note - An exact figure is not required but one that is reasonable in the circumstances and can be justified if challenged.	See above.

Contingency arrangements

Explain what is to happen in the following situations and identify the appropriate clauses in the contract(s) (Such clauses must be provided to the Qualified Person, preferably as a summary document): or

21a. What is to happen to, and who is to pay for out of specification materials?	The remediation contractor will re-use the excavated materials from the site of origin and donor sites to provide a suitable development platform for the works, as specified.
21b. What is to happen to, and who is to pay for any excess materials?	Excess materials are to be removed from site by the remediation contractor at the cost of the client.
21c. What happens if the project programme slips in relation to excavated materials or materials under -going treatment?	Additional resources are to be employed by the remediation contractor and or client or extended working hours (subject to those allowed by the planning decision notice) will be actioned to achieve the agreed completion date.
21d. Other identified risk scenarios for the project (relating to excavated materials)?	Potential and previously unidentified chemical contamination soil.



THE TRACKING SYSTEM

Where contamination is suspected or known to be present, state the procedures put in place to:

22a. For all sites please describe the tracking system to be employed to monitor materials movements.	For imported and site won materials, a simple tracking system will be employed by the relevant contractors to record where materials have arisen from and been placed. Daily site records will be kept, and photographs taken in support of the volume calculations from the survey information. Materials will be directed to temporary stockpile or placement area(s) upon importation. Materials imported to site from the direct transfer donor site will be accompanied by haulage tickets.
<i>Where contamination is suspected or known to be present, state the procedures put in place to:</i> 22b. Prevent contaminants not suitable for the treatment process being accepted	The works will be completed under the full time supervision of the remediation contractor, with part time supervision by E3P who will be providing independent verification for Kellen Homes. If any material that would be deemed to pose an unacceptable risk to the receptors identified within the CSM, these materials will be carefully delineated and analysed to ensure the risk is appropriately assessed. Where imported materials are suitable for re-use on site they will not be deemed contaminated and as such can be re-used in accordance with the MMP objectives. Where materials are deemed to pose an unacceptable degree of risk within the context of the site CSM, they will be disposed of by a licensed waste management contractor with all Duty of Care notes to be retained by the contractor.
<i>Where contamination is suspected or known to be present, state the procedures put in place to:</i> 22c. Prevent cross contamination of materials not in need of treatment, wastes awaiting treatment and treated materials	The MMP will ensure that materials are selected in accordance with their proposed use with any potentially contaminated elements to be dealt with in accordance with 22b (above).
<i>Where contamination is suspected or known to be present, state the procedures put in place to:</i>	Testing of potentially contaminated site won and imported materials will be undertaken at the required frequency by volume in accordance with the agreed E3P Remediation Strategy.



22d. Demonstrate that materials that do not require treatment and successfully treated materials reach their specific destination

Where contamination is suspected or known to be present, state the procedures put in place to:

22e. Ensure that waste for off-site disposal or treatment is properly characterised and goes to the correct facility

23. Please attach a copy of the tracking forms / control sheets that are to be used to monitor materials movements.

To include transfer of loads on site into stockpiles prior to treatment (if applicable), stockpiled after treatment (if applicable), stockpiled awaiting use (as appropriate) and final placement.

Any waste soils generated for off-site disposal will be classified using WM3 HazWaste assessment tool and waste acceptance criteria testing will be undertaken if destined for landfill.

Document reference(s)

See attached E3P Material Tracking Form.

For Hub Sites within Cluster Projects & where materials need treatment before reuse

24. Please attach a copy of the Environmental Permit covering the treatment process.

Alternatively if the treatment is covered by a Mobile Plant Permit and associated Deployment Form, attach a copy of the EA agreement to the Deployment Form.

Permit EPR/PP3924SA is included in Appendix VI.



RECORDS

25. Where, and in what form, are records to be kept?

Note – records e.g. transfer notes, delivery tickets, Desk Top Study, Site Investigation, Risk Assessment(s), Verification Report(s) need to be kept for at least 2 years after the completion of the works and production of the Verification Report

Both paper and electronic copies of surveys will be kept to record cut / fill levels and volumes together with all other appropriate information listed in Section 3.31 of the CoP Version 2.

VERIFICATION PLAN

26. Provide or explain the Verification Plan which sets out how you will record the placement of materials and prove that excavated materials have been reused in the correct location and in the correct quantities within the development works (see 3.4 of the DoW CoP).

Document Reference

E3P Remediation Strategy. Ref: 14-768-R4, dated April 2024.

APPENDIX I

DRAWINGS



APPENDIX II

PLANNING PERMISSION



APPENDIX III

CHEMICAL ANALYSIS

RESULTS



APPENDIX IV

REGULATORY AUTHORITY

CORRESPONDENCE



APPENDIX V

SUPPORTING REPORTS

(AVAILABLE ELECTRONICALLY)



APPENDIX VI

EA PERMITS

