

Deposit for Recovery
Bespoke
Environmental Permit
Non-Technical
Summary and
Additional Information

South Tees Development Corporation

**April 2025** 

MAMX-ATK-ENV-FDRXX-RP-EN-000002

# FOUNDRY CENTRAL EAST

## **Notice**

This document and its contents have been prepared and are intended solely as information for South Tees Development Corporation in relation to providing supporting information for the environmental permit application for Foundry Central East.

AtkinsRéalis UK Limited assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 26 pages including the cover.

#### **Document history**

Document title: Deposit for Recovery Bespoke Environmental Permit Non-Technical Summary and Additional Information

Document reference: MAMX-ATK-ENV-FDRXX-RP-EN-000002

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1.0	Issue to EA	NC	BD	LW	SB	April 2025

#### **Client signoff**

Client		
Job number	5223442	
Project	FOUNDRY CENTRAL EAST	
Client	South Tees Development Corporation	

signature/date



# **Contents**

1.	Intro	oduction	4
2.	Term	ns of Reference	5
3.	Non-	-Technical Summary (Part B2, 5c)	7
	3.1.	Site Description	7
	3.2.	Site History	7
	3.3.	Project Outline	8
	3.4.	Planning Application Status	9
	3.5.	Development Platform Design	9
	3.6.	Development Platform Construction	10
	3.7.	Waste Volumes and Tonnage	12
4.	Envi	ronment Agency Pre-Application Advice (Part B2, 1a)	13
5.	Site	Condition Report (Part B2,5b)	13
6.	Tech	nnical Guidance Notes (Part B4, 3a)	14
7.	Docu	ument Directory	16
8.	Asse	essments Summary	22
9.	Refe	rences	24
Tab	los		
		Document Suite Structure to Support Permit Application	4
Table	2-1 - T	Terms of Reference	5
Table	3-1 - \	/olume to Weight Conversion Table	12
Table	7-1 - 🛭	Document Directory	16
Table	8-1 - [	Document Conclusions	22
Figu	ıres		
Figure	e 3-1 - S	Schematic of Proposed Works to Create a Development Platform	11



#### 1. Introduction

AtkinsRéalis has been commissioned by South Tees Development Corporation (STDC) to apply for a bespoke environmental permit for deposit for recovery. The permit is for activities associated with material recovery which includes the treatment, storage and backfill associated with the construction of a development platform at Foundry Central East, located within the Teesworks site.

The purpose of this document is to provide information to support the application for the environmental permit, provide a non-technical summary of the project and to act as a signpost to supporting information and documents. The following application forms have been completed and are submitted along with the supporting information:

- Part A;
- Part B2;
- Part B4; and
- Part F1.

The supporting information has been written in such a way as to minimise the duplication of information within each document. To achieve this, this non-technical summary presents the contextual elements required for the understanding of the site and the project and should be read prior to reading the other supporting information documentation. Table 1-1 shows the structure of the supporting information and the suggested reading order.

Table 1-1 - Document Suite Structure to Support Permit Application

Suggested Reading Order	Document Title	Document Reference	
1	Waste Recovery Plan [1]	MAMX-ATK-ENV-FDRXX-RP-EN-000005	
2	Non-technical Summary and Additional Information [2]	MAMX-ATK-ENV-FDRXX-RP-EN- 000002	
3	Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report [3]	MAMX-ATK-ENV-FDRXX-RP-EN- 000003	Permit Forms
4	Hydrogeological Risk Assessment [4]	10047374-AUK-XX-XX-RP-ZZ- 1038-01	(Parts A, B2, B4, F1)
5	Ecological Risk Assessment [5]	INCA 2024-37	
6	Waste Acceptance Procedures [6]	MAMX-ATK-ENV-FDRXX-RP-EN- 000004	
7	Environmental Management System Summary [7]	MAMX-ATK-ENV-FDRXX-RP-EN- 000006	



## 2. Terms of Reference

The following terms of reference are used throughout the permit documents. Additional information and context are provided in Table 2-1.

Table 2-1 - Terms of Reference

CEMP	Construction Environmental Management Plan (CEMP) is a requirement to discharge a planning condition for the construction of the development platform. This document assesses the risks to the environment posed by the works and will employ systems and procedures to manage, minimise or mitigate the risks. The CEMP will incorporate the Environmental Management Systems (EMS) requirements required as part of the permit and will align with the governance requirements of the Teesworks Environmental Management System. The CEMP will incorporate any monitoring requirements detailed within the Environmental Risk Assessment and Environmental Setting and Site Design Report [3], that does not require a monitoring plan. The CEMP will be developed by the contractor once appointed.
Environmental Permit	This bespoke deposit for recovery permit will be referred to within the documents as the "environmental permit".
Site	Foundry Central East, is as shown on drawing reference TSWK-STDC-FDR-ZZ-SK-C-0009.
South Tees Development	Applicant / Operator / Producer.
Corporation	South Tees Development Corporation (known as STDC) is part of the Tees Valley Combined Authority, which was set up to regenerate the Teesworks site, driving forward its redevelopment to create jobs, secure investment and transform the region.
Tees Valley Combined Authority	Tees Valley Combined Authority is a Mayoral Development Corporation that includes the following organisations: South Tees Development Corporation, South Tees Site Company and South Tees Developments Limited.
Teesworks site	Name used to refer to the development area of the wider Mayoral Development Corporation Area, which covers 1,052 ha of land to the south of the River Tees.
Development Platform	Enabling works undertaken by STDC to construct a platform for development, for use by a future tenant. The earthworks include remediation, utility connections and placement of subbase for road construction etc.



Material Recovery	Term used to describe the permitted activity, which consists of the whole recovery operation, including preparation for backfilling (treatment, sampling and storage) and backfilling. Material Recovery has been achieved at the point of recovery.			
Treatment	Term used to describe the material processing to enable its suitability for backfilling. This will be a mixture of crushing, screening, blending and stabilisation as required.			
Waste	Term used to describe the waste during its excavation and storage, prior to waste acceptance.			
Material	Term used to describe the material following waste acceptance which is being treated, stored or backfilled during material recovery.			
Backfilling	Term used to describe the placement of material in accordance with the Earthworks Specification [8] and therefore has been accepted as suitable for recovery for its intended use as set out by the waste recovery plan.			
Recovery	The point at which the waste has been placed in the ground in accordance with the Earthworks Specification [8]. At this point the material is considered to be recovered, and material recovery is complete.			
Earthworks Envelope	The lateral and vertical extent of excavation and filling of the proposed earthworks.			
Non hazardous	Within this document, reference to non hazardous waste, as defined in WM3 [9]			



# 3. Non-Technical Summary (Part B2, 5c)

## 3.1. Site Description

Foundry Central East (known as 'the site') is a land parcel within the Teesworks site which is located across the Redcar, Lackenby, Grangetown and South Bank conurbations of the Borough of Redcar and Cleveland. It is set within the wider industrial area known as 'South Tees'. A drawing showing the site location within the wider context of the Teesworks site is presented on TSWK-STDC-FDR-ZZ-SK-C-0009. At their most proximal, the River Tees is located approximately 470 m south-west and the North Sea is approximately 925 m to the north east of the site.

There is a 2.4 m high metal palisade fence around the wider Teesworks site to prevent unauthorised access. Access to the Teesworks site is via a manned security gate at Steel House with vehicle registration plates recorded to verify entry to the site. Site security operate 24 hours a day and there is CCTV in operation across the wider site. Access to the Foundry Central East site is via the internal road network. The main roadway is 'Blue Main' which runs east-west across the southern section of the site. There are currently no additional security measures to access Foundry Central East, however, measures will be implemented prior to works starting to prevent unauthorised access. At its closest point, the site is approximately 85 m from the wider Teesworks boundary to the south-west.

The Foundry Central East site comprises a land parcel approximately 33.4 hectares (ha) in size and centred at approximately 456417, 525333 (Ordnance Survey National Grid). Previously occupied by the Redcar Steelworks, the site is rectangular in shape. The plot is located within a wider hub of interlinked green energy projects that includes a power station and carbon capture site that are proposed to be built on adjacent plots.

Recent demolition works have removed the majority of above ground and below ground structures that were associated with the former Redcar Steelworks. The site surface comprises a mix of rubble, iron and steel making by-products, concrete slabs, bare ground and grassy areas. Some relic structures remain, including the deepwater tunnel access and blast furnace foundations, earth landforms and internal roadways still present at the site. The demolition works included the isolation and removal of redundant services, and it is not anticipated that live services are present on the site. The site is relatively flat but with hollows formed where relic foundations have been demolished and the excavation made safe with general backfilling and graded sides.

#### 3.2. Site History

A review of the site history has been undertaken and included within the Arcadis UK Ltd (Arcadis) phase 1 contaminated land desk studies [10, 11] for the site. The site was originally mudflats and marshland of the River Tees estuary. Land reclamation works to raise the ground levels creating developable land began in the 19th and 20th century, with the majority of the site reclaimed in the 1970's. Reclamation materials are likely to predominantly consist of:

- By-products from the site's historical use as an iron and steel works used to reclaim the site including slag-rich material
- River dredgings (known as Sand Fill) dredged from the River Tees and placed to reclaim the site
- Refractory brick
- Feedstock materials such as iron ore



Following the reclamation, the site formed part of the wider Redcar Steelworks development, which was operational between 1980 to 2015. The site can be split by its historical industrial use into two zones; Redcar Power Station including Ironworks Technical Centre, and later a pond to the north of Red Main and management offices (understood to have been temporary structures) to the south and Materials Handling Area.

Drawing MAMX-ATK-ENV-XX-DR-EN-000003 identifies former process areas on the site with the following operations processes and infrastructure.

#### **Redcar Power Station**

- Blast furnace and coke oven gas fuelled power station
- Acid / alkali storage
- Diesel generators and fuel storage
- Heavy oil pipe work

- Substations
- Hydraulic pipework
- Blast furnace gas pipework
- Coke oven gas pipework

#### Materials Handling area

- Blended ore stocks
- Blended coal and coke stocks

## 3.3. Project Outline

Regeneration of the former Redcar Iron and Steelworks site is being undertaken in accordance with the South Tees Regeneration Masterplan [12]. This targets the attraction of green energy producers and advanced manufacturers to bring highly skilled employment and economic growth to the Tees Valley whilst designed to play a vital role in decarbonising the UK's economy and commitments to achieving "Net Zero".

Currently, the plot is earmarked for the construction of a hydrogen manufacturing facility. This itself is part of a wider hub of interlinked green energy projects, including a power station and carbon capture site that are proposed to be built on adjacent plots.

To facilitate the site's regeneration, a 33.4 ha development platform is to be created to provide an area of land that is suitable for the subsequent industrial / commercial development by a future tenant in line with the Masterplan [12]. Crucially, this will provide a site where legacy environmental and geotechnical risks have been reduced and therefore greatly improving the suitability of the site for future development. This will include the creation of a running surface layer to support future construction undertaken by a future tenant.



### 3.4. Planning Application Status

Planning applications have been made to the Local Planning Authority Redcar and Cleveland Borough Council to cover the construction of a development platform for commercial / industrial use at Foundry Central East. Two planning applications for the Foundry Central East site have been submitted to Redcar and Cleveland Borough Council which include:

- An outline planning application (reference R/2020/0821/ESM) for the development of general industry and storage or distribution facilities with office accommodation has been approved by Redcar and Cleveland Borough Council that covers the majority of the site area as well as other plots within the wider Foundry area of Teesworks (as shown in Drawing FO-SD-00.01).
- Planning application to cover the north-eastern section of the site and a thin area of land down the eastern boundary (reference R/2024/0644/FFM), as shown in Drawing TSWK-STDC-FDR-ZZ-SK-C-0009A.

Details of both applications are provided in:

The extent of these applications are shown in Drawing MAMX-ATK-ENV-XX-DR-EN-000001 which shows the planning boundaries and the site boundary.

The permit being applied for covers the construction of a development platform, including earthworks and remediation undertaken by STDC. Further development of the site by a future tenant is excluded from this permit application.

## 3.5. Development Platform Design

The development platform is designed to remove a number of constraints that prevent the sites redevelopment and the buildability of the proposed structures and utility / transport connections. Many of these relate to legacy risks associated with the Teesworks sites former land use, such as geotechnical and environmental risks, but they also include foreseeable risks such as those from flooding. Other requirements are to facilitate the buildability of future structures including the associated utility and logistical networks that are required to tie into the site.

In summary these requirements include:

- remediation of the earthworks envelope in accordance with the enabling earthworks and remediation strategies [13] [14]. Each planning area is accompanied by a remediation strategy, to enable discharge of the planning condition. These remediation strategies have the same requirements and methodologies and the boundaries in relation to the proposed Foundry Central East boundary are shown in Drawing MAM-ATK ENV-XX-DR-EN-000002.;
- earthworks envelope constructed in accordance with The Manual for Contract Documents for Highway Works (MCHW), Specification for Highway Works (SHW) series 600 (2017) [15] as amended by the Earthworks Specification Foundry Central East [8];
- laterally, the earthworks envelope is defined as the lease boundary plus a 5 m working buffer as shown on Drawing TSWK-STDC-FDR-ZZ-DR-C-0030
- vertically, the earthworks envelope is defined as the 2.5 m of material below the set site final finish level;
- the earthworks envelope must be free from remaining relic below ground structures and foundations, fused slag obstructions, voids and material non-compliant with current earthworks standards. The earthworks and



- remediation strategies have been designed and constructed in alignment with the Waste Framework Directive waste hierarchy;
- removal of structures or gross contamination which extend beyond 2.5 m below the final finished level will be required where the lateral or vertical extent of the structure would materially restrict development options. The extent of additional removal will be determined on a case-by-case basis; and
- finished level of 7.10 m above ordnance datum (AOD).

## 3.6. Development Platform Construction

To create the development platform at the site, remaining below ground structures that were not part of the previous demolition works require removal to a minimum depth of 2.5 m below the final finish design level of 7.1 m AOD. This is to create a zone (also referred to as the earthworks envelope) below the site that is free of physical obstructions such as foundations and basements that will then enable a tenant to undertake their future construction without encountering historical obstructions. Where these structures are found to extend beyond 2.5 m below the final platform level, these will be assessed on a case-by-case basis to determine whether further excavation and removal is required.

Where an unacceptable risk of gross contamination to either human health, buildings and other property or the environment is identified, this will be managed and mitigated in line with the approved Remediation Strategies [13] [14] as required by the existing planning conditions (condition 15). Where gross contamination extends beyond 2.5 m below the final platform level, remedial works may require excavation below 2.5 m in line with the remediation strategies.

Within the earthworks envelope, it is proposed to excavate Made Ground to 2.5 m, process it to make it geotechnically suitable and place as engineering fill to construct the development platform. Non-hazardous wastes are to be recovered, substituting non-waste materials that would otherwise be needed to construct the development platform. The majority of the material recovery will be derived from suitable Made Ground excavated at the site but waste and material from the wider Teesworks site will also be used in backfilling where suitable site won material is unavailable to supplement the required material volume. Unsuitable materials are not to be used within the project and will be discarded applying the waste hierarchy to these wastes as set out in the Waste Framework Directive.

To recover the waste as a suitable substitute, meeting the required specifications, the excavated material will require treatment (a mixture of crushing, blending, screening and stabilisation as required) as detailed in the Waste Recovery Plan [1]. Treated material used for backfilling will then be used to construct the development platform design. Backfilling will be in accordance with the Waste Acceptance Procedures [6].

The location of the permit activity (treatment, storage and material recovery) will encompass the entire Foundry Central East site (drawing TSWK-STDC-FDR-ZZ-DR-C-0030). The mechanism for the treatment, storage and backfilling of material is a bespoke deposit for recovery environmental permit, which this document suite supports. The volumes of material are detailed in Section 3.7.

Upon completion of the works, the site surface will be suitable for foot and light vehicular traffic, at a level of 7.1 m AOD (+ / - 50 mm), tied into the surrounding internal road network and utilities, suitable for the tenant's development. A broad schematic of the proposed works in shown in Figure 3-1 below.



Offsite Site Offsite Proposed excavation, depth typically 2.5m **Current Conditions** Gross below final formation Relic structures contamination level Subsurface Heterogeneous voids unsuitable ground conditions **Excavation Stage** Void created to remove features and unsuitable ground to 2.5m below final formation level Relic structures below 2.5m below final formation level left in place unless future development requires their removal Excavation below 2.5m below finial formation level required where obstructions below this level present a constraint to future development, to be considered on a case-by-case basis Unsuitable Material Excavated Suitable Backfill (not used within scheme) Treatment Backfill / Finished Works Levels suitable for cross boundary transport infrastructure Levels suitable for utility connections Engineered ground Additional infill volume required due to increased excavation Relic structures remaining below 2.5m final formation level depth to remove obstructions that present a constraint to future development

Figure 3-1 - Schematic of Proposed Works to Create a Development Platform

Note: Stages shown above are illustrative of the process but may not represent the overall stages of work, with excavation and backfilling in different areas of the site occurring simultaneously.



The potential impacts of climate change have been considered as part of the flood risk assessment and associated planning permission for the construction of the development platform. The agreed recovery level of 7.1 m AOD reflects the desire to ensure that rising sea and river levels does not impact on the future development.

#### 3.7. Waste Volumes and Tonnage

The Waste Recovery Plan [1] details the justification for the material volume required and includes a cut and fill assessment. The assessment shows that 835,860 m³ of material will need to be excavated and replaced with approximately 919,445 m³ fill to meet the required development platform elevation.

Where treatment timescales limit the availability of acceptable material for backfilling, material from the wider Teesworks site will be used providing that it aligns with the Earthworks Specification [8] and Remediation Strategies [13] [14] and subject to being acceptable in accordance with the Waste Acceptance Procedures [6].

Surplus materials and / or waste will be removed from the site and managed in accordance with current waste legislation.

All material quantities used within the engineering design and cut and fill are calculated in cubic metres, however for the requirements of the permit these quantities require conversion to weight in tonnes. Table 3-1 presents the conversion factors that are to be used during the project to determine the weight of materials.

**Table 3-1 - Volume to Weight Conversion Table** 

Material	Density (kg/m³)	Comment
Pre excavated Made Ground and construction / demolition materials	2,000	Standard density used for these material types at Teesworks
Stockpiled Made Ground and construction / demolition materials	1,400	Density accounts for the bulking of material (30%) within stockpile following excavation
Recovered material on placement	2,150	Increase in density due to compaction that is to be achieved on placement

Waste acceptance quantities will be reported to the Environment Agency in tonnage based on stockpile volumes, at the point of the waste being accepted for backfilling.

Applying these conversion factors to the fill volumes, approximately 1,976,808 tonnes of backfill material will be required to meet the required development platform level of 7.1 m AOD. This total tonnage should be regarded as an estimate, as the density of material on compaction may vary, and could lead to a greater tonnage being required to meet the volume of material required.



# 4. Environment Agency Pre-Application Advice (Part B2, 1a)

Enhanced pre-application advice has been sought with the Environment Agency regarding agreement that the principle for construction of development platforms at the Teesworks site can be considered recovery under reference number EPR/NP3022SA/P001.

Advice and discussions regarding this application for a bespoke deposit for recovery application are continuing under this reference and a service user agreement, which has been set up between the Environment Agency and STDC.

The Environment Agency have agreed that the financial element of the substitution test has been passed for the Teesworks site, reference detailed in Section 6.

The remaining substitution tests for Foundry Central East are addressed in the Waste Recovery Plan [1], submitted to the Environment Agency on 27<sup>th</sup> February 2025. The principles for recovery are the same as for the adjacent Foundry Central West plot, that was previously granted recovery, reference detailed in Section 6.

# 5. Site Condition Report (Part B2,5b)

The Environment Agency confirmed that a Site Condition Report is only required to cover areas of the permit where recovery is not being undertaken. As the entire permit boundary will be subject to recovery, a Site Condition Report is therefore not required for this permit application.



# 6. Technical Guidance Notes (Part B4, 3a)

The permit will be undertaken in compliance with the following documentation regarding the Teesworks site that has been provided during discussions between the Environment Agency and AtkinsRéalis:

Waste basic additional pre-application advice for Deposit for Recovery (DfR) sites	WasteDfRAdditionalPreAppAdvice – Version 1.0
	25/10/2021
Permit Variation Application – New bespoke deposit for recovery permit	GOTnewDfREnhPreAppAdvice – Version 3.0
	22/02/2022
Letter to J Colam (AtkinsRéalis) from A MacIntyre (Environment Agency) 'South Tees Development – covering High Tip, Warrenby and ex SLEMS Landfills'	EPR/KP3790ZE/V003, EPR/LB3408KJ/A001 & EPR/TP3109LG/V002
	02/08/2022
Permit Application – Deposit waste into water under a landfill or deposit for recovery operation	GOTTiptoWaterEnhPreAppAdvice – Version 1.1
	30/09/2022
Permit Surrender Application – Bespoke deposit for recovery permit	GOTDfRSurrenderEnhPreAppAdvice – Version 2.0
,	13/12/2022
Email from A Watts (Environment Agency) to S Bullock (AtkinsRéalis)	Pre-app advice foundry and steel house
	25/9/23 16:04
Nature and Heritage Conservation Screening Report: Bespoke Waste	EPR/NP3022SA/P001
•	12/03/2025
Email from S Franklin (Environment Agency) to S Bullock (AtkinsRéalis) 'Foundry central west RvD	EPR/NP3022SA/P001
Assessment'*	08/03/2024 14:23
Email from S Franklin (Environment Agency) to S Bullock (AtkinsRéalis) RvD advice Letters – Teesworks	EPR/NP3022SA/P001
,	26/07/2024 17:04
Environmental Permitting - Recovery vs Disposal assessment of a waste recovery plan for Foundry Central West*	



Environmental Permitting - Recovery vs Disposal assessment of the substitution element of a waste recovery plan	
Email from S Franklin (Environment Agency) to S Bullock (AtkinsRéalis) – Pre-application review of	EPR/NP3022SA/P001
Foundry Central West application*	16/07/2024 17:36
	17/07/2024 15:44

<sup>\*</sup>Although these email relate to Foundry Central West, it is adjacent to Foundry Central East and the sites are very similar, so this is considered to be relevant.

In addition, the permit will also be undertaken with reference to the below:

- Waste Classification: Guidance on the classification and assessment of waste Technical Guidance WM3
   Waste\_classification\_technical\_guidance\_WM3.pdf (publishing.service.gov.uk);
- Waste Acceptance Procedures, AtkinsRéalis, 2025 [6];
- Non-hazardous and inert waste: appropriate measures for permitted facilities Guidance GOV.UK (www.gov.uk) (relevant sections only);
- Develop a management system: environmental permits GOV.UK (www.gov.uk);
- Summary of Environmental Management System, AtkinsRéalis, 2025 [7];
- Construction Environment Management Plan (to be developed by the Contractor following tender award and submitted under planning);
- Risk assessments for your environmental permit GOV.UK (www.gov.uk); and,
- Waste recovery plans and deposit for recovery permits GOV.UK (www.gov.uk)



#### **7. Document Directory**

A number of separate documents support the permit application and Table 7-1 provides details of those documents along with the permit application form title and question each document is being submitted under.

**Table 7-1 - Document Directory** 

Name / Purpose	Reference	Parent Document	Author	Permit application form and question reference
Reports (in recommended reading of	rder)			
Waste Recovery Plan [1]	MAMX-ATK-ENV-FDRXX-RP- EN-000005	N/A	AtkinsRéalis	Part B4: Appendix 2
Deposit for Recovery Bespoke Environmental Permit Non-technical Summary and Additional Information [2]	MAMX-ATK-ENV-FDRXX-RP- EN-000002	N/A	AtkinsRéalis	Part B2: 1, 3b, 5c
Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report [3] including groundwater monitoring plan	MAMX-ATK-ENV-FDRXX-RP- EN-000003	N/A	AtkinsRéalis	Part B2: 6 Part B4: 2 Part B4: 4 Part B4: Appendix 2
Hydrogeological Risk Assessment [4]	10047374-AUK-XX-XX-RP-ZZ- 1038-01-Foundry Central East HRA	N/A	Arcadis	Part B4: Appendix 2
Ecological Risk Assessment [5]	INCA 2024-37	N/A	INCA	Part B4: Appendix 2 Conceptual Site Model, Risk Assessment and



Name / Purpose	Reference	Parent Document	Author	Permit application form and question reference
				Environmental Setting and Site Design Report
Waste Acceptance Procedures [6]	MAMX-ATK-ENV-FDRXX-RP-	N/A	AtkinsRéalis	Part B4: Table 1b
	EN-00004		, titilioi todilo	Part B4: Appendix 2
Danisit Astinita Flam Chart / Brassas				Part B4:3
Permit Activity Flow Chart / Process Flow Diagram / Block Diagram for	MAMX-ATK-ENV-FDRXX-RP-	N/A	AtkinsRéalis	Part B4: 4
Operating Standards [6]	EN-000004	. 47.1	, tittinor todilo	Part B4: Appendix 2 Waste Acceptance Procedures
Environment Management System Summary [7]	MAMX-ATK-ENV-FDRXX-RP- EN-000006	N/A	AtkinsRéalis	Part B2: 3d
Supporting documents				
Remediation Option Appraisal, Enabling Earthworks and Remediation Strategy [13] – Document covers the majority of the Foundry Central East site but excludes a strip along the western boundary	10047374-AUK-XX-XX-RP-ZZ- 893-01-FCE_ROA&S	N/A	Arcadis	Part B4: Appendix 2 Waste Acceptance Procedures
Remediation Option Appraisal, Enabling Earthworks and Remediation Strategy [14]** - Document covers the Foundry Central West site as well as a strip of land within the western boundary of Foundry Central West.	10047374-AUK-XX-XX-RP-ZZ- 748-02-FCW_ROA&S	N/A	Arcadis	Part B4: Appendix 2 Waste Acceptance Procedures



Name / Purpose	Reference	Parent Document	Author	Permit application form and question reference
Earthworks Specification [8]	10047374-AUK-XX-XX-RP-ZZ- 831-01-FCE_Earthworks	N/A	Arcadis	Part B4: Appendix 2 Waste Recovery Plan
Desk Study [10]	10047374-AUK-XX-XX-RP-ZZ- 818-01-FCE_Phase_1	Environmental Setting and Site Design Report and Risk Assessment [3]	Arcadis	Part B4: Appendix 2
Groundsure Report (Desk Study Input)	GS-SZE-5RJ-4BC-N4C	Desk Study Appendix D [10] [10]	Groundsure	Part B4: Appendix 2
Desk Study [11]	10047374-AUK-XX-XX-DR-ZZ- 735-02-FCW_Phase_1	Environmental Setting and Site Design Report and Risk Assessment [3]	Arcadis	Part B4: Appendix 2
Groundsure Report (Desk Study Input)	GS-5ZB-C5M-F7Z-9U2	Desk Study Appendix D [11]	Groundsure	Part B4: Appendix 2
Drawings				
Site Location Plan	TSWK-STDC-FDR-ZZ-SK-C- 0009	N/A	STDC	Part B4:4 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report
Site Setting	10047374-AUK-XX-XX-DR-ZZ- 820-01-FCE_Setting	Desk Study [10]	Arcadis	Part B4:4 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report



Name / Purpose	Reference	Parent Document	Author	Permit application form and question reference
	And			
	MAMX-ATK-ENV-XX-DR-EN- 000003	N/A	AtkinsRéalis	
				Part B2: 5a
Site Layout Plan / Site Surface Plan / Utilities Plan	TSWK-STDC-FDR-ZZ-DR-C- 0029	N/A	STDC	Part B4:4 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report
Development Platform Elevation	MAM1-ATK-EAC-XX-DR-EN- 00002	N/A	AtkinsRéalis	Part B4:4 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report
Planning and permit boundaries	MAMX-ATK-ENV-XX-DR-EN- 000001	N/A	AtkinsRéalis	For information/site context
Remediation strategies and permit boundaries	MAMX-ATK-ENV-XX-DR-EN- 000002	N/A	AtkinsRéalis	For information/site context
Site Infrastructure Plan / Activity Layout Plan / Remediation Phasing Plan / Area of Waste Recovery	TSWK-STDC-FDR-ZZ-DR-C- 0030	N/A	STDC	Part B2: 3d Environmental Management System
				Part B4: 4
				Part B2: 6 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report
Emissions sources, receptors and monitoring points	TSWK-STDC-FDR-ZZ-DR-C- 0037	N/A	STDC	Part B2: 6
				Part B4: 2



Name / Purpose	Reference	Parent Document	Author	Permit application form and question reference
				Part B4: Appendix 2 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report
Exploratory Hole Locations	10047374-AUK-XX-XX-DR-ZZ- 894-01-FCE_GI_AII*	Contaminated Land Generic Quantitative Risk Assessment	Arcadis	Part B2: 6 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report
Regional Geology	GS-SZE-5RJ-4BC-N4C*	Groundsure Report	Groundsure	Part B2: 6 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report
Surface Water Features	GS-SZE-5RJ-4BC-N4C*	Groundsure Report	Groundsure	Part B2: 6 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report
Geological Cross Sections	10047374-AUK-XX-XX-DR-ZZ- 899-01-FCE_CS A-BH3 to B-BH27; B-BH5 to B-BH23; S1-TPE65 to B-BH11; B-BH21 to B-BH23; B-BH11 to B-BH25	Remediation Option Appraisal, Enabling Earthworks and Remediation Strategy [13]	Arcadis	Part B2: 6 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report
Local and Regional Hydrogeology	Embedded in text: Hydrogeological Risk Assessment [4]	N/A	Arcadis	Part B2: 6 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report



Name / Purpose	Reference	Parent Document	Author	Permit application form and question reference
Groundwater Monitoring Boreholes	10047374-AUK-XX-XX-DR-ZZ- 1109-Z1-FCE_Permit GW_Loc	Groundwater Monitoring and Maintenance Plan within Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report [3]	Arcadis	Part B2: 6 Part B4: Appendix 2 Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report
	10047374-AUK-XX-XX-DR-ZZ- 1099-GIS	Hydrogeological Risk Assessment [4]	Arcadis	

<sup>\*</sup>It should be noted that the boundary on these drawings does not match the permit boundary in the south west corner, the information in the drawings is still considered to represent site conditions. Refer to MAMX-ATK-ENV-XX-DR-EN-000001 and MAMX-ATK-ENV-XX-DR-EN-000002 for planning, and remediation strategy boundaries.



<sup>\*\*</sup>The Remediation Strategy submitted through planning for Foundry Central West includes a thin strip of land along the western boundary of the present Foundry Central East permit boundary. Both remediation strategies are therefore applicable to the site. The conclusions of each report are the same and therefore throughout this suite of documents, reference is made to the Foundry Central East Remediation Strategy only [13]

#### 8. **Assessments Summary**

**Table 8-1 - Document Conclusions** 

Document Name	Document Reference	Conclusions
Waste Recovery Plan [1]	MAMX-ATK-ENV- FDRXX-RP-EN- 000005	Justification that the re-use of Teesworks-won material is recovery and that a deposit for recovery permit is suitable for the works. The decision for recovery financial substitution test was confirmed by the Environment Agency on 26 <sup>th</sup> July 2024.
DfR Bespoke Permit Non- technical Summary and Additional Information [2]	MAMX-ATK-ENV- FDRXX-RP-EN- 000002	This document.  Summary of information location and permit application interaction between documents. Inclusion of a non-technical summary of the project, and a detailed technical description of the works.
Conceptual Site Model, Environmental Setting and Site Design Report and Risk Assessment [3]	MAMX-ATK-ENV- FDRXX-RP-EN- 000003	The conceptual site model identifies the nearest human and environmental receptors. The risk assessment identifies low to very low risk of impact to receptors. This document details how these pollutant linkages will be managed during the works in alignment with the remediation strategy. All management and mitigation of these risks will be assessed and detailed within the CEMP.
Hydrogeological Risk Assessment [4]	10047374-AUK-XX- XX-RP-ZZ-1038-01- Foundry Central East HRA	The HRA assesses the risk to geological and controlled waters receptors from the permitted activity. The HRA assessed nine materials for recovery, and identified priority substances to be taken forward to modelling (six hazardous and three non-hazardous substances). Three materials were deemed suitable for recovery without further assessment. Predictive assessment on the other six materials demonstrated that the requirement to limit entry of non-hazardous substances and prevent entry of hazardous substances was met.
Ecological Risk Assessment [5]	INCA 2024-37	The ERA identifies that the risk to the SPA/RAMSAR is considered to be low. Mitigation measures in the form of bird nest check prior to works commencing, survey for invasive species, measures to prevent mammals from being trapped in excavations will be implemented. The prevention of contaminants from migrating to the SPA will be assessed as part of the HRA. Dust management will be assessed and documented within the CEMP.
Waste Acceptance Procedures [6]	MAMX-ATK-ENV- FDRXX-RP-EN- 000004	List of accepted waste codes, Waste Acceptance Criteria and the process for implementing acceptance for material recovery which includes crushing,



<b>Document Name</b>	Document Reference	Conclusions		
		blending, screening and stabilisation, as required and storage and backfilling.		
Environment Management System Summary [7]	MAMX-ATK-ENV- FDRXX-RP-EN- 000006	Summary of management and mitigation of environmental risks in accordance with the governance outlined in the Teesworks Environment Management System. Detail of requirements for site specific elements, as part of the permit, to be included in the Construction Environmental Management Plan (CEMP). This includes a stockpile management plan. Note that the permitted works will be programmed by the contractor, who will determine the order of excavation and recovery, but the works will encompass the entire site.		



### 9. References

- [1] AtkinsRéalis, Foundry Central East, Waste Recovery Plan, South Tees Development Corporation, MAMX-ATK-ENV-FDRXX-RP-EN-000005, 2025.
- [2] AtkinsRéalis, "Foundry Central East, Deposit for Recovery Bespoke Environmental Permit Non-Technical Summary and Additional Information, South Tees Development Corporation. MAMX-ATK-ENV-FDRXX-RP-EN-000002," 2025.
- [3] AtkinsRéalis, "Foundry Central East, Conceptual Site Model, Risk Assessment and Environmental Setting and Site Design Report, South tees Development Corporation, MAMX-ATK-ENV-FDRXX-RP-EN-000003," 2025.
- [4] Arcadis, "Hydrogeological Risk Assessment Foundry Central East 10047374-AUK-XX-XX-RP-ZZ-1038-01-Foundry Central East HRA," 2025.
- [5] INCA, Ecological Risk Assessment, Foundry Central East, INCA 2024-37, 2024.
- [6] AtkinsRéalis, Foundry Central East, Waste Acceptance Procedures, South Tees development Corporation, South tees Development Corporation, MAMX-ATK-ENV-FDRXX-RP-EN-000004, 2025.
- [7] AtkinsRéalis, Foundry Central East, Summary of Environmental Management System, South Tees Development Corporation, MAMX-ATK-ENV-FDRXX-RP-EN-000006, 2025.
- [8] Arcadis, "Foundry Central East, Earthworks Specification, 10047374-AUK-XX-XX-RP-ZZ-831-01-FCE\_Earthworks," 2025.
- [9] E. Agency, "Waste Classification Technical Guidance," [Online]. Available: https://assets.publishing.service.gov.uk/media/6152d0b78fa8f5610b9c222b/Waste\_classification\_technical\_guidance\_WM3.pdf.. [Accessed February 2025].
- [10 Arcadis, "Phase 1 Contaminated Land Desk Study, Foundry Central East: 10047374-AUK-XX-XX-RP-ZZ-818-] 01-FCE\_Phase\_1," May 2024.
- [11 Arcadis, "Phase 1 Desk Study Foundry Central West 10047374-AUK-XX-XX-DR-ZZ-735-02-FCW\_Phase 1," 2024.
- [12 Teesworks, "Masterplan," [Online]. Available: https://www.teesworks.co.uk/the-development/masterplan. ] [Accessed June 2024].
- [13 Arcadis, "Remediation Options Appraisal, Enabling Earthworks and Remediation Strategy, Foundry Site Foundry Central East, Teesworks. 10047374-AUK-XX-XX-RP-ZZ-893-01-FCE\_ROA&S rev. 1," 2025.
- [14 Arcadis, "Remediation Options Appraisal, Enabling Earthworks and Remediation Strategy, Foundry Central West. 10047374-AUK-XX-XX-RP-ZZ-748-02-FCW\_ROA&S.," 2024.



[15 S. f. Highways, "Manual of Contract Documents for Highway Works. Volume 1 Specification for Highway ] Works.," 2017.



# **AtkinsRéalis**

