

# ENVIRONMENTAL STATEMENT CHAPTER 2: DESCRIPTION OF SITE AND SURROUNDINGS

Land South of Rover Way, Cardiff CF24 5PH

Harsco Metals Group Limited

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### APPENDICES

Appendix 2-1: Site Location Plan (prepared by Carter Jonas)	
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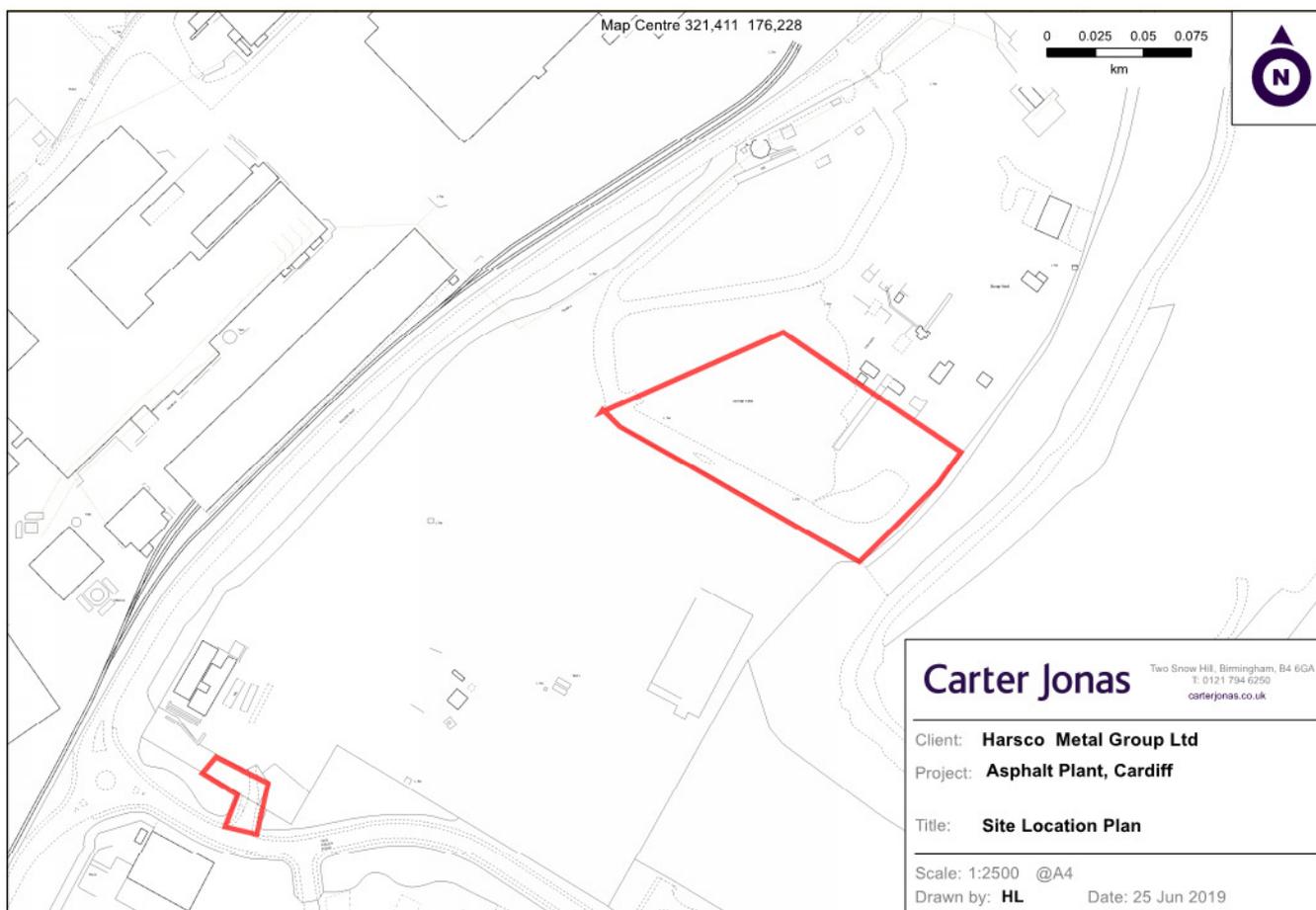
## 2.1.0 Site Location and Setting

2.1.1 This chapter of the Environmental Statement (ES) provides a description of the application site and its setting within the local geographic area.

### Site Location

2.1.2 The application site, which is approximately 1.13 hectares (11,300m<sup>2</sup>) in area, is located entirely within the administrative boundary of Cardiff Council and the electoral ward of Splott. The site is located within the eastern confines of Cardiff, approximately 2.5km east of the city centre and immediately south of Tremorfa. A scale copy of the site location plan is provided within Appendix 2-1 for your reference.

Figure 2-1: Site Location Plan Extract

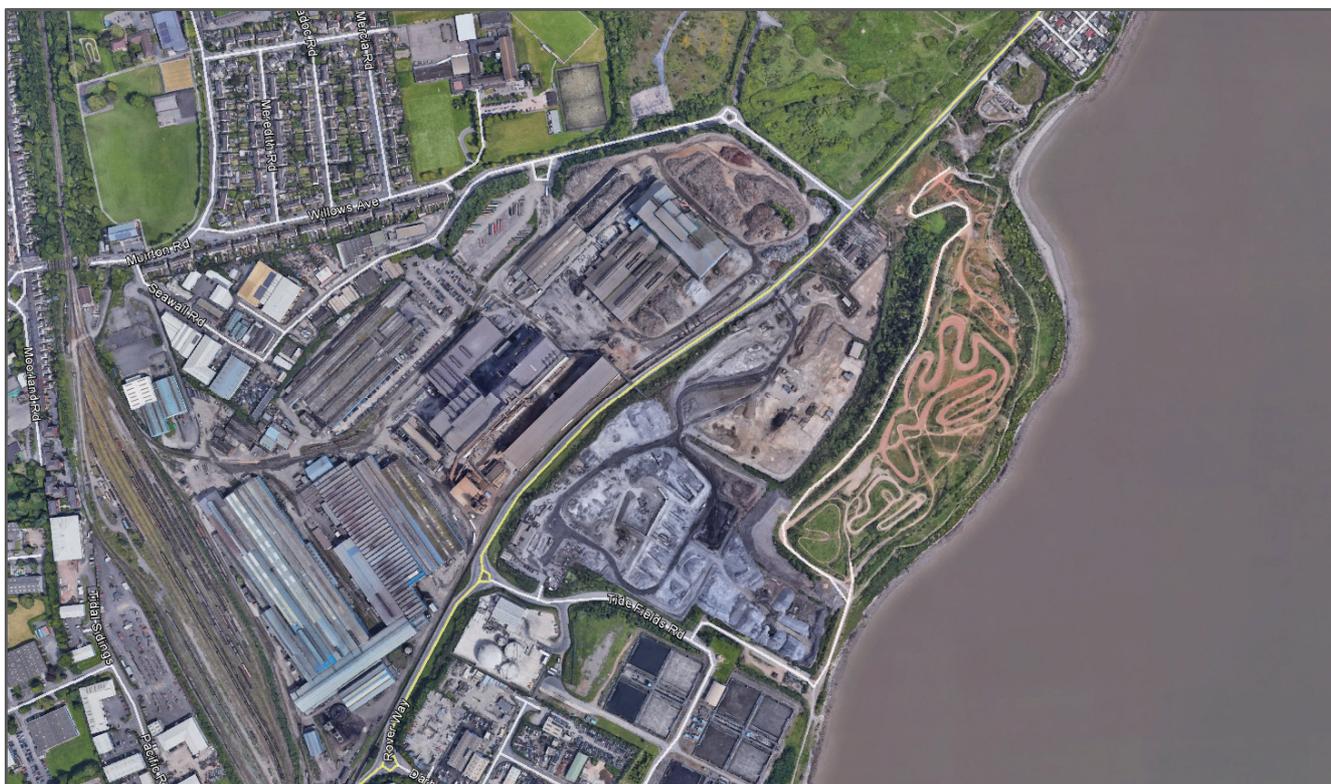


### Existing Site & Surroundings

2.1.3 The site, which is irregular in shape, is located within the southern extent of the wider Celsa Steel UK site on Rover Way. This southern operational area is bound by Rover Way to the north and west, beyond which is the remainder of the Celsa Steel UK site, including the principal smelt shop and other industrial buildings. Tide Fields Road bounds the site to the south, beyond which is a Welsh Water works. Finally, the site is bound by an unnamed track to the east, beyond which is Cardiff Motocross Centre MX and the Severn Estuary. An aerial image of the wider Celsa Steel site and

surrounding area is provided within Figure 2-2 below.

**Figure 2-2: Existing Celsa Steel Site Layout (Aerial Photo)**



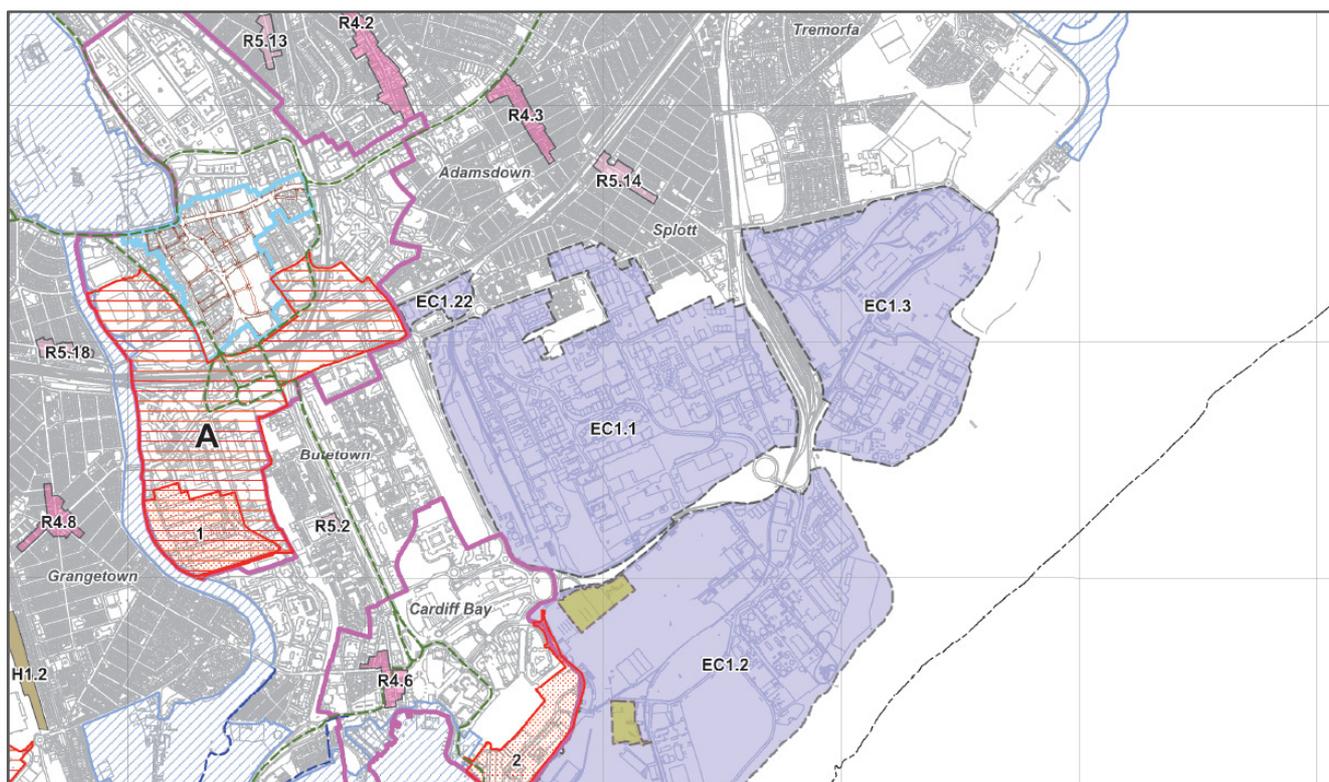
- 2.1.4 Access into the southern Celsa Steel site is taken either from the northern boundary, via Rover Way, or via the southern boundary, via Tide Fields Road.
- 2.1.5 The asphalt plant is to be located within a circa 1 hectare (10,022m<sup>2</sup>) plot within the north-eastern confines of the southern Celsa Steel UK site. This plot is bound by internal haul roads along its north-western and south-western bounds. The asphalt plant area is then bound by further operational waste sorting land to the north-east and scrub land to the south-east, beyond which is the Cardiff Motocross Centre MX and the Severn Estuary.

## 2.2.0 Planning Designations and History

### Planning Designations

2.2.1 The Cardiff Local Development Plan, as adopted in 2006, provides the statutory framework for the development and use of land within Cardiff over the plan period (2006-2026). Within the Proposals Map, an extract of which is provided within Figure 2-3 below, the site is identified as being located within employment allocation EC1.3

**Figure 2-3: Extract of Local Development Plan Proposals Map**



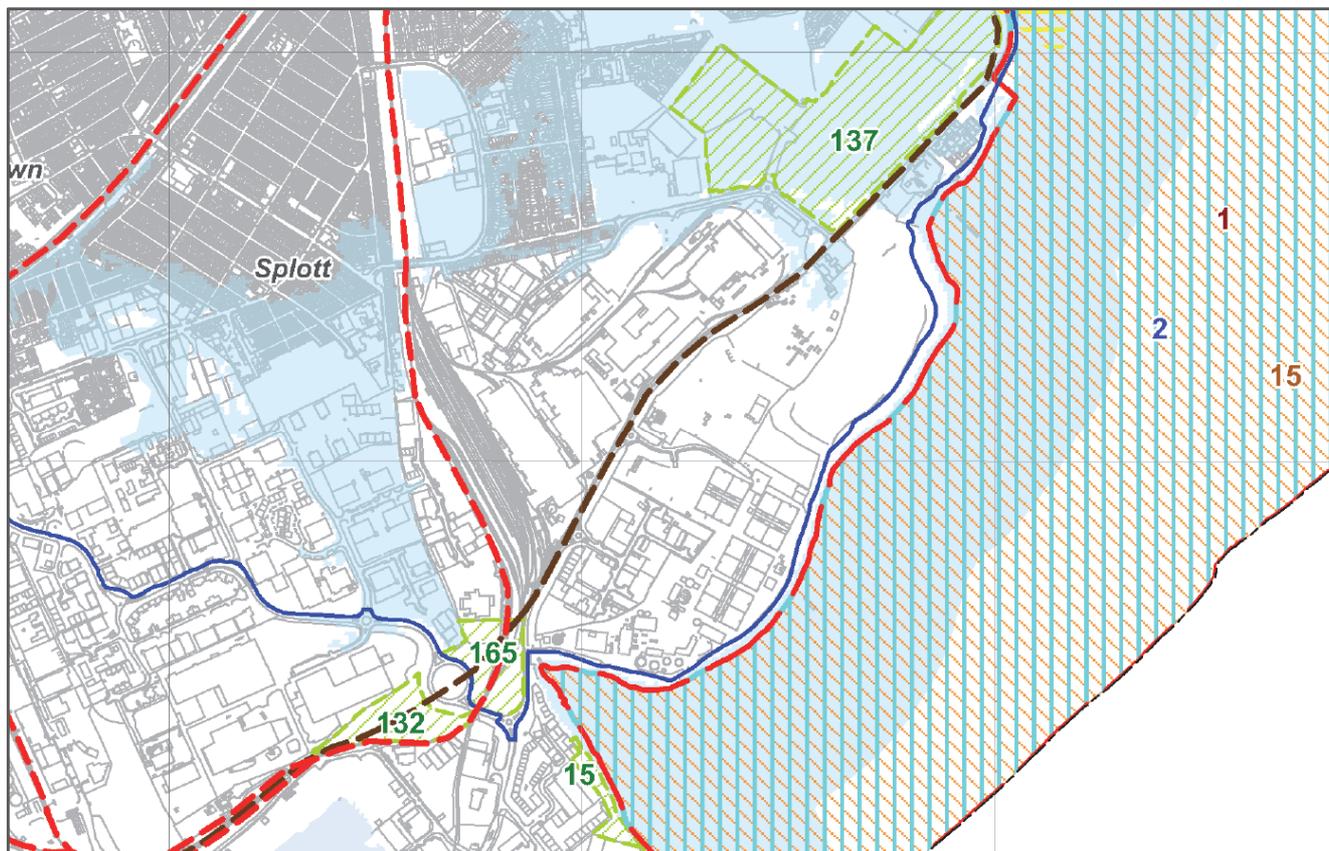
2.2.2 Policy EC1 relates to ‘Existing Employment Land’ and states that *“The city’s existing employment areas outside of the Central and Bay Business Areas (as designated on the Proposals Map) will be protected for B Use Class employment generating uses (together with appropriate ancillary and/or complementary uses and activities as referred to in Policy EC2) as described in the table below”*

**Table 2-1: Policy EC1 Designation**

Site Ref	Site Name	Primary Use/Activity	Status
EC1.3	Rover Way (Celsa Steel Works, Tremorfa Industrial Estate, Seawall Road)	B2, B8	Primary

2.2.3 In addition to the above, the Local Development Plan also contains a ‘Constraints Map’ which identifies areas which have been allocated for the purposes of environmental, cultural or heritage related protection. An extract of this ‘Constraints Map’ is provided within Figure 2-4 below.

**Figure 2-4: Extract of Local Development Plan Constraints Map**



2.2.4 As can be noted from Figure 2-4 above, the Severn Estuary is designated as a Special Protection Area and RAMSAR, Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC).

### Planning History

2.2.5 There is no online planning history available for the application site itself. However, there is a range of planning history associated with the wider Celsa Steel site which has been outlined, in brief, within Table 2-2 below.

**Table 2-2: Celsa Steel Planning History**

Application Reference	Description of Development	Determination	Determination Date
03/02631/C	Weighbridge, weighbridge cabin and 2 high mast lights	Granted	6 <sup>th</sup> January 2004
04/01027/E	Construction of new melt shop and associated facilities on the site of the former nail factory	Granted	13 <sup>th</sup> August 2004
04/02363/R	Amendment of Condition 8 (Construction Traffic Movement) of Outline planning	Granted	19 <sup>th</sup> November 2004

Application Reference	Description of Development	Determination	Determination Date
	permission 04/01027/E		
04/02511/E	Construction of new melt shop and associated facilities	Granted	16 <sup>th</sup> December 2004
09/00540/E	Erection of elevated covered walkway/access to melt shop offices	Granted	1 <sup>st</sup> June 2009
14/01358/DCI	Construction of new entrance road and crossover into car park	Granted	9 <sup>th</sup> September 2014
14/02560/MNR	Discharge of Condition 3 (Trees) of 14/01358/DCI	Granted	6 <sup>th</sup> November 2014
18/02065/MJR	Proposed industrial building (Class B2) to house scrap metal sorting machinery, in addition to related works, associated with existing site use	Granted	23 <sup>rd</sup> November 2018
SC/19/00001/MJR	EIA Screening for Proposed Asphalt Plant	Response Issued	9 <sup>th</sup> April 2019
SC/19/00005/MJR	EIA Scoping for Proposed Asphalt Plant	Response Issued	17 <sup>th</sup> May 2019

## 2.3.0 Site Conditions

### Historical Mapping

2.3.1 The history of the site has been traced using historical Ordnance Survey maps obtained from Landmark Information Group. The maps are presented within the Geotechnical and Geo-Environmental Report provided within Appendix 8-1, whilst Table 2-3 below summarises the site's history.

**Table 2-3: Historical Mapping**

Approximate Dates	On-Site	Off-Site
1880	The site locates on a salt marsh in the estuary. A channel runs to the northeast of the site. The site locates below Mean High Water	Land locates immediately northwest of the site. The land is undeveloped.
1885 / 1886	As Previously	Tharsis Copper Works locates 1.4 km southwest of the site.
1900 / 1901	As Previously	Urban development and a Railway Line locate over 1km west of the site.
1919 / 1920	As Previously	As Previously
1922	As Previously	As Previously
1938 / 1947	As Previously	Further urban expansion is shown 475m northwest of the site in Splott
1947 (Aerial Photo)	Site can be seen to comprise mud flats	Evidence of Cardiff Airport 550m north of the site
1947 / 1954	As Previously	Sewage outfalls locate 250m northeast and 500m east-northeast of the site.
1952 / 1957	As Previously	Tremorfa Rolling Mill locates 500m southwest of the site. A pumping station locates 470m northeast of the site.
1965	The site comprises part of a large tip extending onto the flats. Mean High Water locates to the east of the reclaimed land	As Previously
1975	As Previously	The tip is shown to have extended southeast. Tracks traverse the tip. A steel rolling mill and other unspecified works locate 300m southwest. Rover Works locate 700m north on Pengam Moor. A school locates 450m northwest.
1982	Study site is undeveloped.	Shows buildings on the current CELSA Works site.
1989	The tips are traversed by railway/tram lines	A substation locates 250m north of the site. Extensive development of industrial buildings at the current CELSA site. A caravan site locates 600m northeast of the site.
1992	As Previously	
2003	As Previously	A superstore locates on Pengam Green 750m northeast of the site.
2009	Study site is labelled as a scrap yard	As Previously
2018	Site labelled as a Recycling Site. Conveyors locate within the site	As Previously

## Topography & Setting

- 2.3.2 The site encompasses a large relatively flat open area comprising recovered land made of slag with areas of hardstanding. The flat area was reported to extend beyond the current study site and the area was surrounded by a high metal security fence. An electricity sub-station was noted approximately 200m northeast of the site and a gantry passed over the entrance to the site and runs to the northeast of the site.

## Geology, Hydrogeology & Hydrology

- 2.3.3 The site is mapped as being underlain by the Mercia Mudstone Group that is overlain by superficial deposits of Alluvium. Map information also indicates that the site formerly comprised a refuse tip and as such the presence of Made Ground/fill was deemed to be likely.
- 2.3.4 The site is reported to be located outside of the South Wales Coal Field.
- 2.3.5 The superficial Alluvium has been designated as a Secondary (Undifferentiated) Aquifer whereas the Mercia Mudstone Group is denoted as a Secondary (B) Aquifer.
- 2.3.6 The closest licensed groundwater abstraction is reported approximately 210m to the south west of the site. This abstraction is for commercial purposes, including mineral washing and cooling, and is held by Celsa Manufacturing (UK) Ltd.
- 2.3.7 No potable groundwater abstractions or Source Protection Zones (SPZs) were identified within a 2km radius of the site.
- 2.3.8 The closest surface water feature to the study site is denoted some 330m to the south east of the site (at its closest point). Map information suggests that this entry relates to the River Severn estuary.
- 2.3.9 No pollution incidents to Controlled Waters are recorded within a 250m radius of the site.

## Radon

- 2.3.10 The Envirocheck report states that the site is not located in an area where 1% of homes are above the action level and as such new structures would not require radon protection measures.

## Waste

- 2.3.11 The study site is denoted as an historical and BGS recorded landfill site that is reported to have accepted inert and commercial waste. The TFW report provided limiting information relating to this on site landfill and no information relating to correspondence with the Local Authority to confirm the dates of operation, the types of waste accepted and whether this site has been subject to routine monitoring.
- 2.3.12 Several further historical landfill sites, reported to have accepted inert, industrial household and special wastes, are recorded within a 250m radius of the site.

## Sensitive Land Uses

- 2.3.13 The Severn Estuary, reported some 230m to the south east of the site (at its closest point), is designated as a Site of Special Scientific Interest (SSSI), a Special Areas of Conservation, a Ramsar Site and a Special Protection Area.

## Hydrology, Hydrogeology and Flood Risk

### Hydrological Features

- 2.3.14 There are no hydrological features located on the Site. Rhymney River is located approximately 1km north of the Site, and the Bristol Channel located approximately 230m to the east of the Site. Cardiff Bay is located approximately 3km south west of the Site. A combined sewer passes under the eastern part of the Site, from northeast to southwest.

### Existing Drainage Arrangements

- 2.3.15 The site is currently laid mainly to concrete, however, in places the concrete has deteriorated. There is evidence that some parts of the concrete hardstanding may have been formally drained, however, there are no records of the former drainage system. In the absence of any watercourses, or drains, in the vicinity of the site, it is likely that the any drainage system that may have existed discharged to soakaways rather than to the combined sewer.

### Geological and Hydrological Features

- 2.3.16 The site is underlain by a mantle of very dense made ground over alluvium which is underlain by the Mercia Mudstone Group. This consistent with published geological mapping that indicates the site is underlain by the '*Mercia Mudstone Group - Mudstone*' with superficial deposits of '*Tidal Flat Deposits - Clay, Silt and Sand*'.
- 2.3.17 Made ground is encountered to a depth of between 7.3 and 7.7m indicating the extensive filling that has taken place in the past.
- 2.3.18 The bedrock beneath the site is designated by Natural Resources Wales as a Secondary B aquifer<sup>1</sup>, described as 'predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.'

### Sources of Flooding

- 2.3.19 A summary of the potential sources of flooding and the flood risk arising from them is presented in Table 2-4.

**Table 2-4: Potential Sources of Flooding**

Potential Source of Flooding	Flood Risk at the Site
Fluvial or Tidal Flooding	Yes

<sup>1</sup> British Geological Survey Aquifer designation data, <http://mapapps2.bgs.ac.uk/geindex/home.html>

Potential Source of Flooding	Flood Risk at the Site
Surface Water/Land	No
Groundwater	No
Sewers	No
Reservoirs, Canals and other Artificial Sources	No

2.3.20 The Development Advice Map data shows that the Site lies within Zone B, however a review of information provided by Natural Resources Wales concludes that there is currently not a significant risk of flooding to the Site from fluvial or tidal sources.

## Transport

### Highway Network

#### *Tide Fields Road*

2.3.21 Tide Fields Road provides the principal access point to the Celsa Steel Works southern site and the application site of the proposed development. This road is a single carriageway link enabling traffic flow in both directions and with central white line road markings. This road includes pedestrian infrastructure with street lighting and footways along both edges of the carriageway. Tide Fields Road continues east for approximately 300 metres in length before coming to a dead end and ‘Stop’ road markings at Welsh Water, providing a no through route.

2.3.22 This link is heavily used by large industrial vehicles which is reflected in its poor condition through lack of maintenance. There is a section of road beyond the Celsa site access which is undulating and rutted with numerous potholes. It is also noted that site traffic from Celsa Steel and the proposed operation will not utilise this part of the link; the road is also infrequently used by members of the public.

2.3.23 There is regular street lighting, a sufficient footway in terms of width and condition, and the road is subject to a 30mph speed restriction.

#### *Rover Way*

2.3.24 This road adjoins Tide Fields Road by a small raised roundabout junction. Rover Way extends approximately 2.32km (1.44 miles) to the north and approximately 887 metres to the south; bordered by two larger roundabouts which adjoin the A4232 and Ocean Way respectively.

2.3.25 The existing roundabout accommodates single flow traffic comfortably however it is in a poor state of repair.

2.3.26 Rover Way is subject to a 40mph speed restriction and is well lit with street lighting throughout its full length. A shared pedestrian footway/cycle way runs the full length of the road to the south, and for approximately 750 metres of the road to the north, the provision finishing approximately 45 metres from the junction with Seawall Road.

2.3.27 The road contains central road markings throughout its full length which are partly worn in places,

whilst the shared footway/cycle way borders the western edge of this carriageway.

### **Wider Highway Network**

- 2.3.28 The M4 is located approximately 6.81km (4.23 miles) directly north of the site. This provides strategic links across South Wales and into the West of England via both the M4 or the M48 utilising either of the Severn Crossing bridges.
- 2.3.29 The M4 is easily accessible from the site by following Rover Way northbound to the A4232 which extends approximately 1.92km (1.2 miles) before entering the A48 and continuing northbound. The A48 continues for approximately 2.58km (1.6 miles) before linking to the A4232 via a grade-separated roundabout junction. The M4 is accessible from here via the exit off the A48 and the second exit of the corresponding roundabout back onto the A4232; or alternatively the M4 can be accessed by continuing along the A48 and onto the A48(M). This link then continues for approximately 3.76km (2.34 miles) before reaching the M4. The M4 then forks onto the M48 or continues to the Second Severn Crossing near to the hamlet of Llanfihangel Rigiet, East Wales.

### **Pedestrian Infrastructure**

- 2.3.30 Pedestrian amenity is of a poor standard along Rover Way and Tide Fields Road. The footways are usable however considered hazardous for use due to undulations and a poor state of repair. Street lighting is provided at regular intervals along Tide Fields Road and Rover Way.
- 2.3.31 In context of the location of the site, within the immediate vicinity any pedestrian access both to and from the site will be via Tide Fields Road. The footway extends east on Tide Fields Road approximately 52 metres from the existing site access and adjoins the roundabout junction with Rover Way which provides crossing facilities in the form of dropped kerbs, tactile paving and islands.
- 2.3.32 The pedestrian infrastructure bordering this link continues north approximately 750 metres and ceases at the junction leading to Seawall Road and extends south to the roundabout junction with Ocean Way. A footpath extends from the eastern edge of Celsa Steel Works and follows the coastline and estuary north until meeting with the roundabout junction with the A4232. This footpath also extends south adjacent to Rover Way approximately 970 metres.

### **Cycling Infrastructure**

- 2.3.33 Tide Fields Road is considered unacceptable for use by bicycle with its poor condition and lack of maintenance. Rover Way provides infrastructure to accommodate cyclists in the form of a shared foot/cycle way; however, the width is undesirable for use by pedestrians and cyclists singularly and in conjunction. This road is heavily trafficked by both cars and HGVs and is therefore not seen as an appropriate route for cycle use.
- 2.3.34 The shared foot/cycle way is in a poor state of repair with a large amount of debris littering the infrastructure, large cracks are prevalent, and the path is clearly uneven.
- 2.3.35 The Sustrans National Cycle Network map has been reviewed and there are no on or off-road cycle routes within a 2km radius of the site.

### **Public Transport**

- 2.3.36 Reasonable walking distance is considered to be up to 400 metres in the case of accessing bus based

public transport. This distance equates to a 5-minute walk time assuming a walk speed of 80 metres per minute. There are no bus stops located within 400 metres of the site; the nearest being an approximate 18-minute walk away at a distance of 1.42km (0.88 miles).

2.3.37 There are no railway stations within a 2km radius of the site.

## Ecology and Trees

### Ecology

2.3.38 The application site itself does not support any statutory designated sites or non-statutory designations for nature conservation.

2.3.39 The Severn Estuary is located approximately 230m to the south and east of the application site boundary. At this location the Severn Estuary supports multiple overlapping statutory wildlife site designations including:

- Special Area of Protection (SPA) (Site reference UK9015022);
- Special Area of Conservation (SAC) (Site reference UK0013030);
- Ramsar (Site reference UK11081); and
- Site of Special Scientific Interest (SSSI).

2.3.40 Two non-statutory designated Sites of Importance for Nature Conservation (SINCs) occur within a 1km radius of the site; namely Penham Moors SINC (400m to the north) and Tidal Sidings SINC (850m to the south west).

2.3.41 The application site itself comprises an area of existing concrete hard-standing, overlain in places by pools of ephemeral standing water that collect during heavy rainfall. The habitats of the application site were considered to have no significant ecological or nature conservation importance.

2.3.42 The application site is not considered to support any population of any species that is of nature conservation or ecological importance.

### Trees & Hedgerow

2.3.43 There are no trees or hedgerow located within the application site.

## Heritage

2.3.44 No Designated Historic Assets (DHAs) of national importance lie within the Proposed Development area (Site boundary). Based on information supplied by GGAT's Historic Environment Record (HER), there are eight Listed Buildings, one Scheduled Monument (SAM) and the western boundary of the Gwent Levels Historic Landscape (alluvial wetlands) located within 2km of the Site. The eight Listed Buildings, all designated Grade II, are within the south-eastern side of Cardiff, immediately north of the Docklands Area.

2.3.45 The Site is located south of Rover Way, on reclaimed land. Based on historic mapping, the land on which the Site is located was formally marine mudflats (known as the Cardiff Flats). 19<sup>th</sup> century

mapping clearly shows the SSW-NNE marshland coastline and the centre of the Site located 200m offshore within the mudflats. Mid- to late-20<sup>th</sup> century mapping shows the area reclaimed, part of which was used to construct Cardiff Airport (during the late 1930s)<sup>2</sup> and later the Rover Works over the airfield during the late 1950s.

- 2.3.46 Between 1957 and 1967, historic map evidence shows evidence of land reclamation and the construction of ‘slag heaps’ over the Site. By 1967, the East Moors Steelworks had been erected, and a mineral railway and production sheds fed by a conveyor [belt] occupied the centre of the Site. Throughout the history of the steelworks, the centre of the Site was never fully developed, although a thick concrete mat with a substantial [historic] sub-base covered the Site. The East Moors Steelworks eventually ceased production in 1978. Steel production continued on-site with Allied Steel and Wire; however, this company went into receivership in 2002. The Site was bought by the Spanish firm Celsa in 2003 and continued steel production until 2007.
- 2.3.47 Based on the historic mapping and online sources, there are potentially a small number of non-designated historic assets of local importance present within a 2km buffer from the Site boundary (such as the aircraft hangars located off Seawall Road, the historic foreshore and historic railway bridges on Splot Road). To the east of the 2km buffer zone, and slightly encroaching it, is the designated Historic Landscape of the Gwent Levels<sup>3</sup>, whilst to the west of the Site is the 19<sup>th</sup> and 20<sup>th</sup> century docklands and townscape of Cardiff.

<sup>2</sup> Alas known as Pengam Airport, the airfield was also used in World War II, but was closed in 1954. A number of hangars from this period still stand and would be regarded as NDHAs.

<sup>3</sup> The Gwent Levels Historic Landscape is of Outstanding Historic Interest in Wales, as cited in Part 2:1 of the Register of Landscapes, Parks and Gardens of Outstanding Historic Interest in Wales, 1998. The area (Ref. number HLW(Gt)2) includes the Gwent Levels Sites of Special Scientific Interest (various) and Redwick Conservation Area.

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