

SITE DESCRIPTION 2

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INTRODUCTION

- 2.1 As set out in Chapter 1, Schedule 4 of the EIA Regulations requires that an ES should include a description of the Site.
- 2.2 This Chapter summarises the existing characteristics of the Site and its surroundings. More detailed baseline descriptions are provided within the individual ES Chapters, notably Chapter 6 describes the highway network and Chapter 9 sets out the hydrological and hydrogeological regimes in the area. Chapter 10 describes the landscape character of the area whilst Chapter 11 describes the ecological interests respectively.
- 2.3 These existing condition provide a baseline against which the effects of the proposals may be evaluated.

LOCATION AND DESCRIPTION

- 2.4 The Site comprises an area of approximately 6.5 hectares.
- 2.5 For identification purposes, the Site is centred on National Grid Reference **TQ 10749 13796** and edged red on the plans accompanying this planning application.
- 2.6 The Site is located directly north of the A283 and approximately 2km east of the centre of Storrington, in West Sussex.







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- 2.7 Washington Sandpit (previously operated by Hanson Aggregates), adjoins a much larger extraction site known as Sandgate Park operated by CEMEX UK, previously RMC Aggregates. There is no physical boundary between the two sites, both joining to form one contiguous extractive operation.
- 2.8 A small number of houses to the north have limited views of the Site but will not have views of the working area as the previous extraction of sand has left a deep depression in the landscape. The further extraction of sand will take place in this depression effectively screening the operations on Site. Sand screening and ancillary operations will also take place at a level lower than the surrounding ground levels.
- 2.9 The application site is well-screened by woodland and existing vegetation with only limited views of the site available. A small number of houses to the north have limited views of the Washington Pit.
- 2.10 The A283 forms the approximate boundary between two National Character Areas (NCAs), namely the South Downs and Wealden Greensand NCAs as defined by Natural England. The site is within the Wealden Greensand NCA its character to the north of the A283 but is influenced by the South Downs NCA directly to the south, which is now designated as the South Downs National Park.
- 2.11 The South Downs form a prominent escarpment to the south rising to over 200m AOD in elevation, running east to west, and with the crest of the ridge approximately 1.5km to the south of the site within the South Downs National Park.
- 2.12 To the north the ground is generally undulating with shallow valleys and low hills such as Washington Common to the northeast of the site.

Access

- 2.13 Access to the Site is achieved via Hampers Lane Vehicular access to the application is currently via a private haul road that connects onto Hamper's Lane some 8-metres north of the existing priority T-junction that is created where Hamper's Lane connects onto the A283-Storrington Road. This junction will be improved as part of the planning permission (DC/10/1457) which will increase the distance over which visibility is available from the junction, and increase the separation distance between the site access and the A283-Storrington Road junction.
- 2.14 The junction has been considered in the context of its geometry, past safety performance and swept-path analysis has been undertaken to assess whether vehicles departing the site access would block inbound traffic from the main road. The assessment concludes that the geometry of the junction is sufficient of the intended purpose, as evidenced by the recent and historic use of the access by HGVS, and there is not existing unacceptable safety



risk at the junction that would indicate a deficiency in the layout of the highway.

- 2.15 All vehicles will arrive and depart the site from the east. Some 1.3 kilometres east of the application site, at the Washington Roundabout, the A283-Storrington Road becomes a designated lorry route. Also at this location, access is also provided onto the A24-London Road which is also designated as a lorry route.
- 2.16 The location of the quarry therefore lends itself to providing proximate access onto those roads considered most suitable for lorry traffic.

Water Environment

Aquifer Characteristics

- 2.17 With reference to the British Geological Survey, Solid and Drift Geology Map, Brighton and Worthing, England and Wales Sheet 318/333, 1:50,000 scale, the solid geology underlying the Site is the Folkestone Formation overlain within the northern and western area of the Site by Head. This Folkestone Formation is classified by the Environment Agency as a Principal aquifer defined as having 'high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.'
- 2.18 The Site is located outside a Groundwater Source Protection Zone.
- 2.19 The Head deposit is classified by the Environment Agency as a Secondary (undifferentiated) defined as having 'previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.'

Groundwater Levels and Flow

- 2.20 Hydrogeological gradients (indicated upon the Hydrogeological Map for South Downs and Adjacent Parts of the Weald) would suggest that groundwater flow beneath the application site would be towards the south.
- 2.21 The EA confirm that they do not monitor groundwater levels or quality within 4km of the application site. With reference to the geology of Britain viewer published on the British Geological Survey website, borehole TQ11SW98 is located within the Site. However, at the time of writing, information from this borehole was not available.
- 2.22 Notwithstanding the above, records from 3 boreholes within close proximity to the Site are summarised in Chapter 9 of this ES which essentially indicated that groundwater table varies between 12.8m and 20.05m below ground level (bgl).



- 2.23 However, knowledge of current operation of the Site and the adjoining CEMEX Quarry indicates that excavation is not carried out below 17m AOD.
- 2.24 With ground levels across the Site varying from 58.00m to a surveyed water level of 30.15m AOD, current site operational constraints suggests a water table located some 13.15m below the lowest 'dry' area of the Site.
- 2.25 It is therefore likely that due to local abstraction of groundwater, the water table has been artificially lowered and it may rise to those recorded by the British Geological Survey following the restoration of the Site, without intervention, if pumping of the pond were to cease.

Groundwater Abstractions, Use and Quality

2.26 Based upon the EA's Groundwater Source Protection Zone mapping, the application site is located outside of all Groundwater Source Protection Zones.

Flooding and Flood Risk

2.27 Flood Zone Maps published by the EA, show that the Site is entirely within 'low probability of occurrence' Flood Zone 1 (defined as land which could be at risk of flooding from fluvial or tidal flood events with less than 0.1% (1:1,000 year) annual probability of occurrence i.e. considered to be at 'low probability' of flooding).



Fig 2-1 Flood Zone Mapping



Local Hydrology

- 2.28 The Site lies adjacent to the South Downs National Park (SDNP) with the northern boundary of the Site defined by a tributary of the River Stor which flows in a general north westerly direction.
- 2.29 With reference to the 1:25,000 scale Ordnance Survey mapping, there are a number of ponds within close proximity of the Site. These appear to drain into the tributary.
- 2.30 No specific groundwater quality data is available for the application site and the quality of the tributary has not been assessed as part of the EA's River Basin Management Plan. However, the latter has identified the River Arun, into which the River Tor discharges, to have a moderate biological and physio-chemical quality.

Nature Conservation

Natural Areas

- 2.31 The site falls within the Wealden Greensand Natural Area, as defined by Natural England. The Wealden Greensand Natural Area follows the outcrop of upper and Lower Greensand which curves around the western end of the Wealden anticline in West Sussex, East Hampshire and Surrey and forms a conspicuous ridge running west to east across Surry and Kent terminating in coastal cliffs at Folkestone Warren.
- 2.32 The Natural Area is characterised by lowland heath that today is concentrate in West Sussex, Hampshire and western Surrey.
- 2.33 The application site does not have any statutory nature conservation designations.
- 2.34 There are no internationally designated statutory nature conservation sites within a 5km radius of the site.
- 2.35 Within a 2km radius of the application site there are three Sites of Special Scientific Interest (SSSI) namely:
 - Sullington Warren SSSI;
 - Chantry Mill SSSI (geological SSSI and as such not considered further in under this ecological assessment); and
 - Amberley Mount and Sullington Hill SSSI.





Fig 2-2 Statutory and Non-Statutory Designated Sites

Habitats

UK Priority Habitats

2.36 According to the Natural England GIS database of UK Priority Habitats, there are several areas identified as priority habitats located within the 2km search area that include: Chalk Stream, Lowland Calcareous Grassland, Lowland Heathland, Open Water and Traditional Orchard.



2.37 The application site does not support any priority habitat except for part of the lake,

identified as Open Water, that extends over the flooded pit floor of the adjacent restored sandpit to the west of the Washington Sandpit.



Landscape and Visual

- 2.38 The site is in or near to two National Character Areas (NCAs), as defined by Natural England, namely the South Downs (125) and Wealden Greensand (120) NCAs, with the A283 forming the approximate boundary between them. The site itself lies within the Wealden Greensand NCA to the north of the A283 but its character is influenced by the South Downs NCA directly to the south.
- 2.39 The South Downs form a prominent escarpment to the south rising to over 200m AOD in elevation, running east to west, and with the crest of the ridge approximately 1.5km to the south of the site within the South Downs NCA. The scarp slopes provide a backdrop to the landscape of the Wealden Greensand.
- 2.40 To the north within the Wealden Greensand the ground is generally undulating with shallow valleys and low hills such as Washington Common to the northeast of the site.

Characteristics of the Site

2.41 It is important to understand how the site relates to the adjacent landscape to understand how well the development might be absorbed into the landscape in the short-medium-long term.

Natural and Semi-natural Characteristics

- 2.42 The site is located within the undulating landscape of the Wealden Greensand area close to the South Downs escarpment.
- 2.43 The adjacent landscape has an elevation of approximately 59m AOD, with an access track descending down into the pit from the southeast corner of the application site. The base of the pit is currently at 26m AOD and to the west the site merges with the existing lagoons within the adjacent CEMEX sand pit.
- 2.44 The site boundaries to the north, east and south are generally well vegetated with hedgerows and tree growth. A variable density of hedgerows exists within the adjacent landscape, with many small areas of broadleaved woodland. Small areas of heathland are also present and these tend to be more heavily wooded. Overall the local landscape has a well wooded and vegetated appearance within the lowland areas, but becomes open with limited woodland and hedgerows on the more elevated ground rising to the South Downs in the south.

Cultural and Social Factors

2.45 The site is located within a farmed landscape of mixed arable and pasture, with predominantly small to medium-sized fields.



- 2.46 The site lies between the settlements of Storrington and Washington which are connected by the A283 which runs east to west. To the east the A283 forms a junction with the A24 at Washington; the A24 runs north to south and forms the main route across the South Downs near to the site.
- 2.47 The site has been worked for minerals historically and the latest workings represent the removal of the last areas of workable sand within the site. The active CEMEX Sandgate Quarry site to the west forms part of a larger overall sand pit with the proposed development site. The CEMEX site is largely screened by vegetation, although the plant site buildings and sand stocks are visible above the vegetation from viewpoints in the south and immediate west.
- 2.48 The local area has a legacy of mineral extraction with the following sites present in a band along the line of the A283 to the north of the South Downs including
 - a 'Pit (Dis)' or disused pit is marked on the Ordnance Survey 1:25,000 map directly east of Hampers Lane. The southern edge of this site is currently being developed as Milford Grange, a large residential development, with earth movements and excavations clearly visible through the hedgeline to the east of Hampers Lane;
 - A large active sand pit exists to the east of the A24 called Rock Common Sandpit; and
 - To the west the disused Chantry Lane Sandpit is present close to Storrington.
- 2.49 The residential area of Heath Common to the north is set into the wooded landscape to the north of the site. This area has a suburban character with large private houses hidden behind tall hedges and wooded belts, fences and walls.

Planning Background and History

- 2.50 It is understood from the previous Committee Report that an Interim Development Order (IDO) was granted in 1948 and subsequent planning permissions have been granted for site extensions and inert landfill¹.
- 2.51 On the 5th July 1994, a consolidating planning permission was issued under reference SG/37/93 in response to a requirement under the Planning and Compensation Act 1991.
- 2.52 In 1998 a Section 73 Application was made to extend the end-date of the 1994 permission to the 31st December 2008, and to vary the working scheme for the Site.

¹ West Sussex County Council Committee Report, Section 3.1, Agenda Item NO. 4(b) App Ref DC/2500/08(SR)



- 2.53 It is understood that sand extraction has continued intermittently at an extraction rate significantly less than was envisaged in the previous application.
- 2.54 In 1999 the achievable reserve was calculated to be 224,000 tonnes in 1999 (ref letter to B Johnson at WSCC dated 6th July 1999).
- 2.55 In 2008 it is understood that the reserve was estimated to be 150,000 tonnes which is dependent on the adjacent dewatering Sandgate Quarry operated by CEMEX, and could in theory extend to 250,000 tonnes if the water table was lowered sufficiently to excavate down to the permitted level of 17m AOD (ref. condition 3 of Planning Permission) however this was dependent on the adjacent de-watering and lack of suitable discharge point.
- 2.56 The former extension of life application by Hanson was to complete the extraction of all available reserves at the Site within a 10 year period (finishing 2018), thereby avoiding the unnecessary sterilisation of a valuable resource. However, throughout the consultation period Hanson agreed to limit this period of time to only five years (2013) as at the time (pre 2008 recession) enquiries from potential customers were on the increase. Extraction throughout the last five years has unfortunately been extremely slow due to the economic down turn therefore there remains an estimated reserve of 100,000 tonnes of sand which would effectively be sterilised if an extension of time is not permitted.
- 2.57 Finally, in 2013 Britaniacrest Recycling Ltd applied to extend the life of extraction activities at the sandpit by a further two years up until 31st December 2015 (APNO. WSCC/086/13/SR) at the time of writing this application is pending consideration.

SURROUNDING AREA

- 2.58 The site is sandwiched between the settlement of Washington located approximately 1.5km to the East of the Site and the settlement of Storrington located approximately 2km to the West.
- 2.59 The site is in or near to two National Character Areas (NCAs), as defined by Natural England, namely the South Downs (125) and Wealden Greensand (120) NCAs, with the A283 forming the approximate boundary between them. The site itself lies within the Wealden Greensand NCA to the north of the A283 but its character is influenced by the South Downs NCA directly to the south.
- 2.60 The South Downs form a prominent escarpment to the south rising to over 200m AOD in elevation, running east to west, and with the crest of the ridge approximately 1.5km to the south of the site within the South Downs NCA. The scarp slopes provide a backdrop to the landscape of the Wealden Greensand.
- 2.61 The site boundaries to the north, east and south are generally well vegetated with hedgerows and tree growth. A variable density of hedgerows exists



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within the adjacent landscape, with many small areas of broadleaved woodland. Small areas of heathland are also present and these tend to be more heavily wooded. Overall the local landscape has a well wooded and vegetated appearance within the lowland areas, but becomes open with limited woodland and hedgerows on the more elevated ground rising to the South Downs in the south

- 2.62 To the north within the Wealden Greensand the ground is generally undulating with shallow valleys and low hills such as Washington Common to the northeast of the site.
- 2.63 The nearest residential properties to the Site are the Oaks (situated to the North of the Site), Cardrona (situated on Hampers Lane to the East of the Site) and Chanctonbury Lodge situated on Washington Road to the South of the Site).