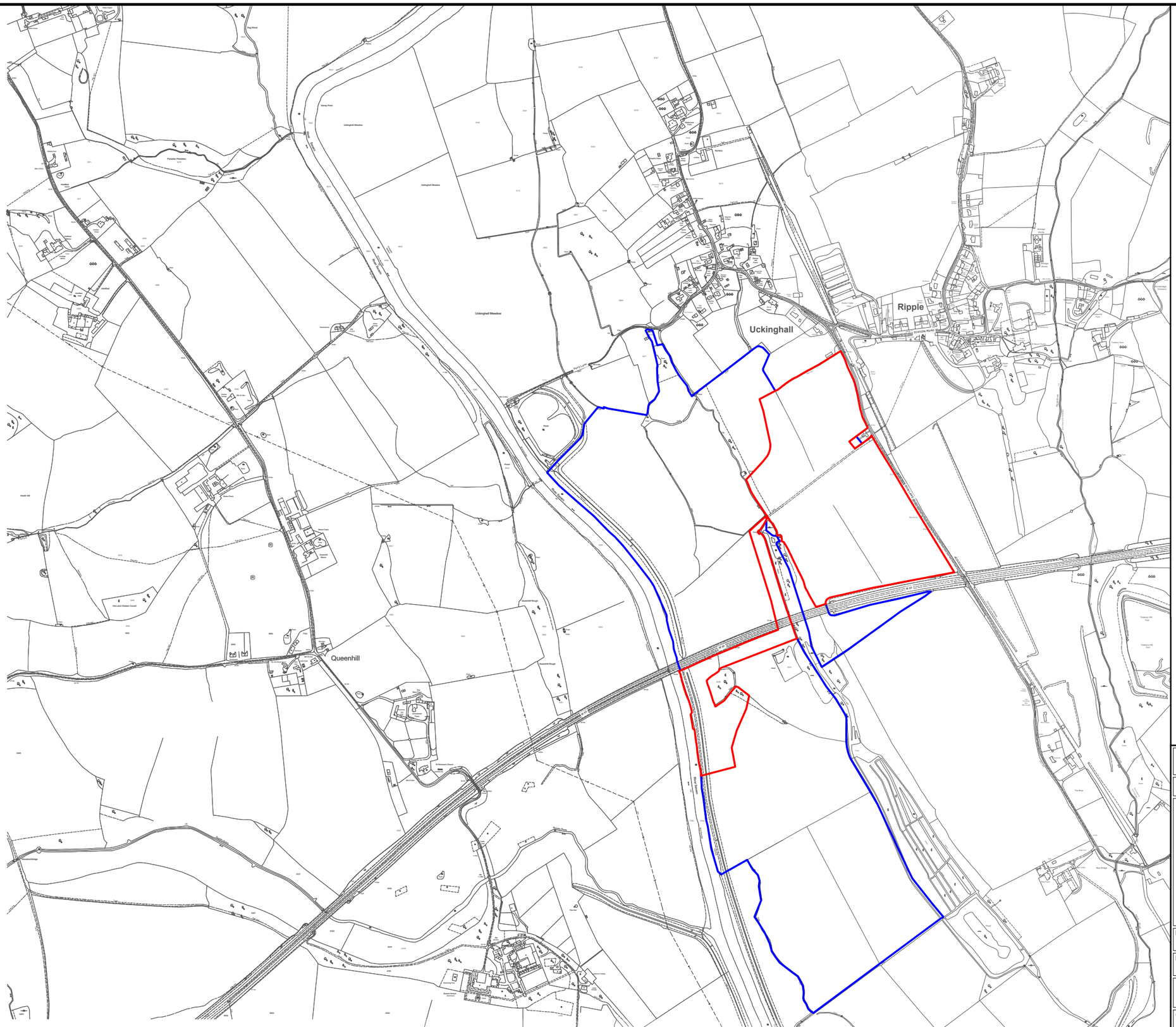

Application Boundary

Other Land under Applicant's Control

N

Revisions			

Planning Department
CEMEX UK Operations
Cemex House
Evreux Way
Rugby
CV21 2DT

Telephone 01788 517000

Drawn By: T Paiman	Company: CEMEX UK Operations Limited
Date: Nov 2021	Site: Ripple East
Scale: 1:10000 @ A3	Project: Sand and Gravel Extraction
Chkd:	Title: Location Plan
OS Ref:	Dwg No: 21-11/P2/RIPL-EAST/1

CEMEX UK Operations Ltd

Proposed extraction of sand and gravel with restoration to agriculture and nature conservation, including ponds, wetlands, hedgerows and lowland mixed deciduous woodland and meadows.

Ripple East, Bow Lane, Ripple, Worcestershire, GL20 6EY

VOLUME 1.0 PLANNING STATEMENT

March 2022

Project:	Ripple East, Bow Lane, Ripple, Worcestershire, GL20 6EY
Client:	CEMEX UK Operations Ltd

Carter Jonas

Karen Hearnshaw
Partner – Minerals and Waste Planning
Regus House
Falcon Drive
Cardiff
CF10 4RU

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Proposed Development Overview

Site:	**Ripple East, Bow Lane, Ripple, Worcestershire, GL20 6**
Proposal Development:	Proposed extraction of sand and gravel with restoration to agriculture and nature conservation, including ponds, wetlands, hedgerows and lowland mixed woodland and meadows.

Applicant: CEMEX UK Operations Limited

This planning application has been prepared on behalf of CEMEX UK Operations Ltd (CEMEX) for the extraction of aggregates (sand and gravel) with restoration to agriculture and nature conservation on land at Ripple East, Bow Lane, Ripple, Worcestershire, GL20 6EY

The application site (Site) is shown on Location Plan reference (ref:) 21-11/P2/RIPL-EAST/1 (included in Volume 1.0, Appendix 2.0 of this planning application).

The Site would be worked and restored over a 3-year period to deliver approximately 475,000 tonnes of sand and gravel in 3 phases at a rate of circa 300,000 tonnes per annum as shown on the indicative Phasing and Method of Working Plans ref 21-11/P2/RIPL-EAST/3 and 21-11/P2/RIPL-EAST/4 (Volume 1.0, Appendix 2.0).

Aggregates extracted from the Site would be transported by barge to CEMEX's operational facility at Ryall House Farm Quarry (Ryall Quarry) for processing and onward delivery to the markets, via the primary route network. Access to the Site from Bow Lane would be used by site staff and visitors and periodically for the delivery/collection of mobile plant and machinery and fuel.

As shown on Restoration Plan ref: 20-10/P2/RIPL-RES-DETL, the Site would be progressively restored using in-situ overburden and soils to a mosaic of land uses including agriculture, woodland, open water, ponds, reedbeds, lowland mixed deciduous woodland and lowland meadows. There is also potential for further community benefit through the provision of a community orchard and a new section of footpath to link with the existing public rights of way network.

1.0 Introduction

1.1 This planning statement provides a detailed description of the proposed development and how it complies with development plan policies.

1.2 It forms part of the planning application along with the application form, certificates and notices, plans and appendices which comprise Volume 1.0.

1.3 The application has been submitted in accordance with the Town and Country Planning Act 1990 (as amended) and complies with all relevant legal requirements and principles of best practice.

1.4 It has been prepared in liaison with a team of environmental consultants whose technical assessments have been used to inform the Environmental Impact Assessment (EIA) of the proposed development and to design the scheme and provide appropriate mitigation measures. The Environmental Statement (ES) and technical appendices are provided in Volume 2.0 and a Non-Technical Summary to the ES in Volume 3.0.

1.5 The fee for the application is set by the Town and Country Planning (Fees for Applications, Deemed Applications, Requests and Site Visits) (England) Regulations 2012 (as amended). Under Part 2, Section 10 of the above regulations it states that operations for the winning and working of minerals will result in a fee of £34,934 for the first 15ha and an additional £138 for each 0.1ha in excess of 15ha. The total site area is 22.8 hectares (ha) and the fee is £45,974.00.

1.6 Hard copies of the full submission (Volumes 1 to 3) may be purchased at a cost of £80 and individual CDs at a cost of £5 from James Carling, Development Manager, CEMEX UK Operations Ltd, CEMEX House, Evreux Way, Rugby CV21 2DT, or by emailing planninggb@cemex.com. Individual non-technical summaries will be free of charge.

1.7 The application will be determined by Worcestershire County Council (WCC) as mineral planning authority. The Site falls within the Malvern Hills District Council local planning authority area (which is covered by the South Worcestershire Development Plan).

The Applicant

1.8 CEMEX is a global supplier of building materials. In addition to ready mixed concrete, cement and aggregates CEMEX also supply and install asphalt materials, manufacture concrete block pavings, rail products, bespoke pre-cast and concrete blocks. CEMEX deliver throughout the UK by road, rail, sea and inland water.

1.9 In 2010, the Company and the RSPB commenced a partnership involving an advisor from the latter

providing biodiversity focused restoration advice. The purpose of this complementary relationship is intended to help CEMEX drive improvement of its biodiversity management to a more local level.

Sustainability

1.10 Sustainability is a key consideration for CEMEX to ensure business continuity and success. CEMEX takes its responsibility towards sustainability very seriously as demonstrated through the following main objectives and priorities.

Enhance our Value Creation

- Lead to sustainable construction
- Low income housing and infrastructure

Manage our Footprint

- Enhance our Carbon Strategy
- Excellence in Environmental and Biodiversity Management

Engage our Stakeholders

- High Priority to Health and Safety
- Strengthen Local Communities
- Partnership with Key Stakeholders 2

1.11 The seven key areas in CEMEX's strategic objectives ensure that the Company measures its impacts on the environment and local communities. Performance and actions are monitored monthly through key performance indicator evaluation, and the monitoring of continual improvement objectives and targets. CEMEX has management and improvement programmes in place for all areas identified in the sustainability wheel. It is also firmly committed to its environmental policy. The Company has a number of other practices in place which demonstrate its commitment to a sustainable environment, most notably:

- *ISO14001 Certification* – CEMEX has attained ISO 14001:2004 accreditation, which sets out the criteria for an environmental management system. This standard maps out a framework that the Company can follow to set up an effective environmental management system and provides assurance that environmental management is being measured and improved. CEMEX has attained this standard for a number of activities including the production of aggregates, asphalt, ready mix concrete and mortar, and the production of building products and bagged aggregates.
- *Responsible Resourcing, BES 6001 Certification* – CEMEX has one of the best portfolios of responsibly sourced construction products in the UK marketplace, certified to BRE's

BES60001 standard, which ensures ethical and responsible performance of products, including all elements of the supply chain. All of CEMEX's main product lines are certified, including aggregates, cement, asphalt and ready mixed concrete. CEMEX's score of 'very good' across all lines demonstrates the high levels of environmental, social, ethical and safety performance in its manufacturing sites and supply chains.

- *Alternative Fuels* – CEMEX is one of the sector leaders in the use of alternative fuels to replace fossil fuels in its cement kilns, which is the most energy intensive process in its organisation. These waste derived fuels range from Secondary Liquid Fuel, derived from difficult waste from paint and solvent manufacturing, waste shredded tyres, and 'Climafuel' derived from the non-recyclable component of domestic and industrial waste. The use of these fuels saves hundreds of thousands of tonnes of landfill waste per annum, safely disposes of the difficult wastes, while the biomass fraction reduces emissions and the carbon footprint of the Company's cement and downstream products such as ready-mixed and pre-cast concrete.
- *Carbon Emissions Reduction* – CEMEX is seeking to concentrate its efforts on reducing emissions through the whole supply chain and in particular in priority areas. It is the first company in the world to carbon label its cement to the PAS 2050 carbon measurement standard, as production of cement accounts for the major emissions from its cement operations and this has demonstrated transparent measurement and a commitment to reduce this footprint over a two-year period. CEMEX has also achieved the Carbon Trust Standard certification for all of its British business units to demonstrate good management practices related to carbon, and a commitment to reduce carbon emissions over a two-year period across all business areas.

2.0 Statutory Background

Environmental Impact Assessment

2.1 The proposed development covers an area of approximately 22.8ha and therefore falls outside Schedule 1 (19) of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 - Statutory Instrument 2017 No.571 (2017 Regulations).

2.2 However, it is listed under Schedule 2, 2(a) – Extractive industry – Quarries, open cast mining and peat extraction (unless included in Schedule 1) and the proposal meets the relevant thresholds or criteria set out in the second column of Schedule 2:

> "All development except the construction of buildings or other ancillary structures where the new floorspace does not exceed 1,000 square metres".

2.3 Therefore, it is necessary to consider whether the proposed development is likely to have significant effects on the environment taking account of the selection criteria in Schedule 3 of the 2017 Regulations. Planning Practice Guidance[1] confirms that not all the criteria will be relevant in every case and that each case should be considered on its own merits in a balanced way.

2.4 A set of indicative thresholds and criteria[2] are available to help determine whether a project is likely to have significant environmental effects. The table also gives an indication of the types of impact that are most likely to be significant for different types of development.

> "However, it should not be presumed that developments above the indicative thresholds should always be subject to assessment, or those falling below these thresholds could never give rise to significant effects, especially where the development is in an environmentally sensitive location. Each development will need to be considered on its merits".

2.5 The proposed development meets the indicative thresholds and criteria as follows:

> "All new open cast mines and underground mines. Clay, sand and gravel workings, quarries covering more than 15 hectares or involve the extraction of more than 30,000 tonnes of mineral per year".

2.6 The table identifies the 'key issues to consider' as follows:

[1] Reference ID: 4-018-20170728
[2] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/630689/eia-thresholds-table.pdf

"The likelihood of significant effects will tend to depend on the scale and duration of the works, and the likely consequent impact of noise, dust, discharges to water and visual intrusion".

2.7 Based on the above, an Environmental Impact Assessment (EIA) has been undertaken and an Environmental Statement (ES) submitted with the application. It describes any significant environmental effects arising from the proposed development and mitigation measures to deal with these.

2.8 The ES and technical appendices are provided as Volumes 2.0 ES and the Non-Technical Summary as Volume 3.0.

2.9 The EIA is a professionally objective process involving a team of specialist consultants employed by the CEMEX to provide independent advice. The ES chapters and accompanying technical appendices have been written by the ES Project Team, whose experience and professional qualifications is set out in the ES Chapter 1.0.

2.10 The EIA process is designed to identify any potential adverse environmental impacts and if appropriate, recommend the use of mitigating measures or monitoring programmes that can be incorporated into the development design to make the proposals acceptable. This will enable the mineral planning authority (mpa), consultees and the general public to reach an informed opinion as to the likely environmental effects of the proposals, should the development be permitted.

2.11 Under the regulations, a non-mandatory screening and scoping opinion to inform the preparation of the EIA can be sought. This Proposed development has not been screened or scoped by the mpa. However, feedback provided by the mpa on submitted planning applications for Ryall North and their pre-application guidance on the Ripple East proposals has informed the scope of the EIA and the design of the proposed working and restoration scheme.

3.0 The Site

Location

3.1 Ripple East, the 'Site' is approximately centred on National Grid Reference SO 8710 3740 and located to the west/south-west of the villages of Ripple and Uckinghall in the Parish of Ripple as shown on the Location Plan ref: 21-11/P2/RIPL-EAST/1. The nearest large town is Tewksbury in Gloucestershire which lies 5km to the south. The county town of Worcester is about 18km to the north

3.2 The planning application area is approximately 22.8 hectares (ha) and is shown on the Proposed Site Plan ref: 21-11/P2/RIPL-EAST/3.

Site Description

3.3 The Site is predominantly in agricultural use. To the west is a narrow belt of woodland which forms the boundary and further west is the former Ripple Quarry, which has been restored to open water lakes and ecological enhancement areas, subject to remediation works. The M50 is in an elevated position on the Queenhill Viaduct and defines the Site's southern boundary. The eastern boundary is marked by a hedgerow and trees along Bow Lane, which provides the only means of vehicular access into the Site.

3.4 There are properties situated along the east side of Bow Lane which are heavily screened by vegetation. The closest residential property is 'Silvermead', located adjacent to the Site access.

Heritage Assets

3.5 Station House is Grade II Listed and lies circa (c) 25m to the east of the Site on the opposite side of Bow Lane.

3.6 Uckinghall Conservation Area lies c.78m to the north and its closest point. It includes 9 Grade II Listed Buildings, including the Grade II Listed and scheduled remains of the Uckinghall Cross.

3.7 The Ripple Conservation Area lies c.240m to the east of the Site at its closest point and includes the 15 Grade II Listed Buildings and the Grade I Listed St. Mary's Church.

3.8 The Towbury Hillfort Scheduled Monument lies c.388m to the south-east of the Site.

Public Access

3.9 Public Footpath (FP) RP549(B) runs along the northern Site boundary linking Bow Lane at the northeast corner of the Site to the River Severn eastern embankment path (FP RP550(C)).

3.10 FP RP550(C) follows the eastern bank of the River Severn to the immediate west of the former Ripple Quarry, after which it heads north through Open Access land, north of the Site towards Uckinghall.

3.11 The Severn Way long distance footpath (RP530 (B)) follows the western bank of the River Severn.

3.12 FP RP547 (C) provides a link from Bow Lane (opposite Silvermead) to Ripple village (Station Road).

Ecology and Conservation

3.13 There are no national or international ecological designations within a 2km radius of the Site (Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA), Special Area of Conservations (SAC), or Ramsar Sites). There are five non-Statutory Local Wildlife Sites (LWS).

Topography and Landscape

3.14 There are no landscape designations covering the Site.

3.15 The existing situation is shown on Plan ref:21-11/P2/RIPL-EAST-2 (Volume 1.0, Appendix 3.0). Topography reaches a maximum elevation of around 18.4m Above Ordnance Datum (m AOD) in the north-east and slopes gently south westwards towards the River Severn. Elevations at the Site drop to around 10.5m AOD in the south-western part of the Site adjacent to the River Severn.

3.16 In the surrounding area topography rises between the Severn valley to 47m AoD to form an area of elevated land known as The Mythe.

Water Environment

3.17 The Site is located within the River Severn catchment. There are three main rivers close to the Site, the River Severn, River Avon and Ripple Brook. All other watercourses in the area are classified as ordinary watercourses.

3.18 There are no waterbodies located within the Site itself. However, outside of the Site, there are two large surface water bodies associated with the former Ripple Quarry (WB1 and WB2). These are located immediately west and south of the Site, one to the north of the M50 overpass and the other to the south of the M50 overpass. There are numerous surface water bodies associated with the existing Ryall Quarry, 1.8 km north of the Site, and these are used as part of the water management system for that facility.

3.19 The Site lies within Flood Zones 1, 2 and 3 and most of the proposed extraction area is within Flood Zone 2.

3.20 The Site is not in a groundwater Source Protection Zone (SPZ) and there are no groundwater SPZs within 10km of the Site.

3.21 The Worcester Member sand and gravel deposits and alluvium are designated as Secondary A aquifers. The Mercia Mudstone Group is designated as a Secondary B aquifer.

3.22 Groundwater level monitoring at the Site indicates a shallow water table of approximately 1.0 – 3.0m below the ground surface. Groundwater levels have been monitored since September 2019 at six monitoring wells and indicate a sloping gradient with groundwater flow towards the south-west and the River Severn.

3.23 Groundwater levels and the geology indicate that groundwater is in hydraulic continuity with surface water features in the area. Groundwater flow in the sand and gravel aquifer is interpreted to flow westwards and southwards across the site discharging into the River Severn and quarry restoration lakes of the Ripple Nature Reserve to the west, respectively.

Utilities

3.24 Low voltage overhead electricity power lines run along the hedgerow roughly north-south across the Site (proposed extraction area), with a short section branching off in the direction of 'Silvermead'.

Geology

3.25 Regional geology data in the Site vicinity is available from the BGS 1:50,000 scale geological map of the area (BGS, 1988). Local data is available from borehole logs installed by CEMEX at and around the Site.

Bedrock geology

3.26 Bedrock geology immediately underlying the Site is comprised of the Triassic Branscombe Mudstone Formation, a constituent formation of the Mercia Mudstone Group. The Branscombe Mudstone Formation is comprised of mainly structureless mudstones and siltstones, commonly with gypsum and anhydrite. The depth to the Branscombe Mudstone Formation bedrock (Mercia Mudstone Group) ranges between 2 and 6.5m. This unit is underlain by the Arden Sandstone Formation, which crops out 70m north of the Site at its closest approach. Locally, the rocks young to the south. A series of roughly north-south trending faults are located within, and to the east of, the study area, one of which is present within the northern part of the Site.

Superficial geology

3.27 Superficial coverage at and around the Site is extensive. Superficial deposits in the area are generally Quaternary sand and gravel deposits of glaciofluvial or fluvial origin deposited by the River Severn and its tributaries.

3.28 The Pleistocene Worcester Member of the Severn Valley Formation crops out at the Site and comprises the economic mineral to be extracted. This unit is a fluvial deposit of cross bedded gravels and sands, rich in pebbles of the Triassic quartzites. In the western corridor area of the Site, alluvium is present, and along the north-eastern edge of the Site the Holt Heath Sand and Gravel Member crops out.

3.29 Borehole logs for the Site variably describe the Worcester Member mineral as silty sand, silty gravel, clayey sand and silty, gravelly sand, with a unit thickness of 0–3.5m. The overburden is predominantly comprised of stiff clay.

Planning History

3.30 There is no planning history relating to the site of significance to this proposal.

3.31 To the west is the former CEMEX Ripple Quarry which is restored, subject to some remedial works.

4.0 Proposed Development and Mitigation

Overview of the Proposed Development

4.1 The proposed development would be a satellite extension to the existing CEMEX Ryall House Farm Quarry (Ryall Quarry) and would provide for continuation of supply of sand and gravel once reserves at the CEMEX operated Ryall North Quarry (Ryall North) site come to an end. The locations of these sites relative to Ripple East are shown on the Context Plan (ref: 21-12/P2/RIPL-EAST-5A).

4.2 The Site would be progressively restored using in-situ overburden and soils to deliver the mixed restoration shown on Plan ref: 20-10/P2/RIPL-RES-DETL.

4.3 The proposed development is for:

> "Proposed extraction of sand and gravel with restoration to agriculture and nature conservation, including ponds, wetlands, hedgerows and lowland deciduous mixed woodland and meadows."

Timescale and Hours of Operations

4.4 The total duration of the proposed development including final restoration would be approximately three years.

4.5 Site operating hours would mirror those at Ryall North.[3]

Except in emergencies, all operations and uses on the Site including the running of any plant or machinery and loading of barges, would take place

- 0730 - 1830 hours Monday to Friday inclusive; and
- 0730 - 1200 hours Saturdays

with no operations on the Site at any time on Sundays or Public Holidays.

Vehicle Movements

4.6 Mineral extracted from the Site would be transported by barge to the CEMEX processing facility at Ryall Quarry. This would be a continuation of arrangements at the former CEMEX operated Ripple Quarry to the west of the Site.

[3] Planning application ref: 15/000013/CM

4.7 The agricultural track and the haul road associated with the former Ripple Quarry would be used to transport extracted materials via dumper truck from the excavation to a stockpiling area and onto the barge loading facility on the River Severn, where a concrete wharf is already in place (Plan ref: 21-11/P2/RIPL-EAST/3).

4.8 The barging system, timelines and volumes would be similar to those at Ryall North, where CEMEX uses 3 barges (160t per barge) to deliver up to a total of 1900t per day, with a 2-hour turnaround time to load, deliver and unload. Deliveries are based on a 5-day working week.

4.9 Annual aggregate production rates and associated would be the same as for the existing operations at Ryall North. Exports from Ryall Quarry would remain consistent during the transfer of operations from Ryall North to Ripple East, being limited by processing capacity and market demand. Therefore, it is anticipated that there would be no change to the operational traffic movements across the highway network. The only change would be the relocation of some staff movements from Ryall North to Ripple East.

4.10 Access to the Site from Bow Lane would be used by site staff and visitors, and periodically for the delivery/collection of mobile plant and machinery and fuel deliveries, associated with soil and overburden removal and storage operations and the extraction activities.

Utilities

4.11 The overhead power lines would be re-routed underground around the eastern periphery of the Site as shown on the Restoration Plan ref: 20-10/P2/RIPL-RES-DETL.

Plant and Infrastructure

4.12 No fixed plant or facilities are proposed on Site.

4.13 Mobile plant/machinery would be delivered and removed via Bow Lane although there would be no requirement for HGVs to export extracted materials from the Site as these would be transported by barge for processing.

4.14 Mobile plant and facilities would be towed outside of the floodplain area in the unlikely event of a flood warning during the (relatively short) operational phase.

Site Preparation and Method of Working

Soils and Overburden

4.15 Soils and overburden would be stripped and stockpiled using an excavator and dozer to shape the screening mounds between 3 and 5m in height, along the eastern periphery of the extraction area.

Phasing

4.16 The Site would be worked in 3 phases in a broadly eastwards and southwards direction as shown on the Method of Working Plans ref: 21-11/P2/RIPL-EAST/4 (Volume 1.0, Appendix 2.0).

4.17 At Year 1, the existing agricultural track would be relocated around the eastern and southern periphery of the Site.

4.18 Temporary protective fencing would be erected as shown on the Tree Protection Plan (Ref: 22-01/L2/RIPL-EAST/3, Volume 1.0 ES Appendix 7.0).

4.19 The hedgerow which bisects this northern end of the Site would be removed prior to stripping Phases 1 and 2.

4.20 The volumes of materials to be stripped and subsequently used to restore the Site are shown on the Restoration Soil Depths Detail Plan ref: 20-10-RIPPLE-P2-RES-SOIL.

4.21 Initially, a small area (Phase 1) would be stripped and the top and subsoils and overburden used to create a screening bund around the property 'Silvermead' (2,856m3, 816m3 and 2,285m3 respectively).

4.22 Some 11,846m3 topsoil, 5,799m3 sub-soil and 6,430m3 overburden would be removed from Phase 2 and some 3,000m3 of the topsoil used to create a screening bund around the eastern boundary of Phase 3.

4.23 Some 26,734m3 topsoil, 13,005m3 subsoil and 10,699 overburden would be removed from the third and final extraction Phase.

4.24 As each phase is stripped, the overburden would be placed in the void to enable progressive low-level infilling and restoration of the Site.

Extraction

4.25 The proposed excavation area covers approximately 11ha and the planned depths range between 1m and 5.5m (average 3.5m).

4.26 The Site would deliver up to 475,000t of sand and gravel. The mineral would be worked on a 'campaign' basis, at a rate of approximately 300,000tpa.

4.27 Extraction would take place using an excavator, loading materials onto articulated dumper trucks. The materials would be transported via a designated haul route, through the former Ripple Quarry site, to a stockpile area adjacent to the wharf, ready for loading onto barges for the onward transport to Ryall House Farm for processing.

4.28 As the water table at the Site is located within the sand and gravel, dewatering by sump pumping would be used to maintain a dry working excavation. Following time to allow settlement of suspended solids, groundwater and surface water would be pumped from the active sump in each phase into the former Ripple Quarry void to the south of the proposed extraction area (water feature WB2) under the conditions of a new abstraction (transfer) licence and an environmental discharge activity permit, both to be obtained from the Environment Agency.

Site Restoration

4.29 The proposed restoration of Ripple East is shown on the Restoration Detail Plan ref: 20-10-RIPPLE-P2-RES-DETL.

4.30 The restoration scheme has been designed with the dual objectives of:

(i) Re-establishing land uses including high grade agricultural land which are appropriate to the locality, with the reinstatement of agricultural land to the previously applicable ALC grades;
(ii) creating new features of nature conservation and biodiversity value, in furtherance of the objectives of the UK and CEMEX's own Biodiversity Action Plans.

4.31 These objectives would be achieved establishing three broad land uses within the restored site, namely:

(i) Reinstatement of agricultural land at lowered ground levels to be managed for arable or grassland production with potential for enhanced headland areas, with a new footpath to be established across the restored agricultural area; and
(ii) Creating new vegetation features within the site – new woodland blocks and new or reinforced hedgerows across the site, which would create boundaries and provide a link between established peripheral hedgerows and features; and
(iii) Establishing and retaining a diverse wetland habitat within the western part of the site, and around the margins of the watercourse to the west. Additional wet woodland establishment by natural colonisation would be encouraged around the margins of the restored ponds.

4.32 In keeping with the character of the Lower Severn Strategic Corridor, the Site would be restored to using on-site materials to a mosaic of land uses including agriculture, woodland, open water, ponds, reedbeds, lowland mixed deciduous woodland, and lowland meadows. The overall aim is to strike a balance between reinstating high quality agricultural land, landscape enhancement, opportunities for habitat creation (including BAP habitats) and increasing flood attenuation. There is potential for further community benefit through the incorporation of a community orchard and a new section of footpath to link with the existing Public Rights of Way (PRoW) network.

4.33 In summary, the key nature conservation features on site, as existing and as proposed would be as listed below.

- Arable Field Margins: grass buffer strips, headlands.
- Hedgerows.
- Ponds: open water and aquatic margins.
- Open Water.
- Reedbed and Aquatic Margins.
- Lowland Mixed Deciduous Woodland.
- Lowland Meadow.

4.34 To achieve optimum levels of self-sustainability it is intended the habitat creation would therefore involve an element of natural colonisation from local sources.

4.35 The Restoration Plan shows the proposed restoration planting mixes for the new hedgerows and woodlands, as well as the seed mix for reinstated grassland areas.

4.36 Tree and shrub species have been carefully selected; restoration planting would comprise native deciduous types found locally within this lowland agricultural area. All tree and shrub planting would be carried out using bare root or cell grown stock.

4.37 All restoration planting would be carried out in the first planting season (November to March) following final placement of soils and reinstatement within each phase.

4.38 Restoration would be achieved using on-site soils and overburden. The materials balance is shown on the Restoration Soils Depths Plan ref: 20-10/RIPPLE/P2-RES-SOIL.

Public Access

4.39 Public Footpath (Ref RP-549) runs along the northern boundary of the Site where it continues west around the northern lake of the recently restored sand and gravel workings (former Ripple Quarry). It will be retained on its current alignment for the duration of the operations. An unworked margin of would provide ‘stand-off’ from the proposed extraction area (Site Plan ref: 21-11/P2/RIPL-EAST/3).

4.40 A conveyor would transfer extracted materials from the wharf stocking area onto the barge. The conveyor would cross at height over PRoW RP-550. A canopy structure similar to that being used at Ryall North would be placed beneath the conveyor, allowing pedestrians to continue to use the path without disruption

4.41 On restoration of the Site, the agricultural track would be reinstated at a lower level on a slightly different alignment, and a new section of footpath provided to link the existing PRoW RP-549 with Bow Lane to the south of Silvermead and the existing PRoW RP-547.

Economic, Social and Environmental Benefits

4.42 The following paragraphs summarise some of the benefits associated with the proposed sand and gravel extraction and subsequent restoration at Ripple East. Further detail is provided in section 6.0 of this Planning Statement, the ES and in particular the *Sustainability and Climate Change Statement* (ES Chapter 3.0).

Sustainable supply of local building materials

4.43 The aggregate extracted is required to facilitate many types of development needed in the County and beyond.

4.44 WCC's website (Major Infrastructure Improvement Schemes) states that "Worcestershire has one of the fastest growing economies in the county. Our investment into infrastructure is greater now than at any stage in the last 30 years."

4.45 Sand and gravel is an essential requirement for building and maintaining new housing and infrastructure. The proposed development supports this policy objective through the provision of up to 475,000t of raw materials for the construction industry.

4.46 Minerals can only be worked where they are found (NPPF para 209). The Site has a proven resource of sand and gravel. The extracted mineral would be transported by barge to the existing CEMEX operated processing facility at Ryall Quarry and from there via the existing primary route network to established markets. The location of Ripple East is such that it would not be practical or desirable to undertake processing on-site and so could only be worked as a satellite extension to Ryall Quarry.

4.47 The County's landbank for sand and gravel is below the minimum 7 years stipulated in the NPPF. The Site would provide for the ongoing supply of construction materials once reserves at the CEMEX operated Ryall North Site come to an end. Ripple East is within an Area of Search for Terrace and Glacial Sand and Gravel within the Lower Severn Strategic Corridor identified in the emerging Minerals Local Plan (MLP) Policy 1. Whilst WCC is yet to confirm future minerals site allocations, the

MLP confirms strategic corridors as the focus for future supplies of sand and gravel. CEMEX is promoting this and other land as extensions to Ryall Quarry through the MLP. There is only one other area of land within the corridor that has been promoted through the Plan and brought forward by another applicant as a planning application, which WCC is yet to determine.

4.48 The Site would provide up to 457,000 tonnes of sand and gravel, which is essential in supporting the construction industry, both locally and more widely, with the associated economic benefits that this brings.

4.49 Further detail is provided in Section 5.0 of this Planning Statement.

Employment

4.50 The proposed development would continue to secure direct employment opportunities within the area, with staff being relocated from Ryall North to Ripple East.

4.51 It would also sustain indirect employment, which includes contractors associated with Site set up, maintenance and repairs and restoration and contract drivers exporting construction materials from Ryall Quarry.

4.52 Induced employment could also arise from those employed by the Site spending their wages received on local goods and services, thereby sustaining local businesses such as shops and garages. As the employees are likely to live locally to the Site, much of their income is likely to enter the local economy, so helping to sustain other employment.

Business Rates

4.53 The Site would contribute thousands of pounds in business rates annually, which would be paid to the local authority in which the Site is located. Business rates are used to fund local services. This would be in addition to the business rates which CEMEX already pays in connection with its operations at Ryall Quarry.

Aggregates Levy

4.54 CEMEX would also pay an aggregates levy on extracted aggregates (the taxable aggregate rate is currently £2.00 per tonne). At Ripple East it is proposed to extract approximately 300,000 tonnes of aggregate per year and therefore CEMEX would pay in the region of £600,000 in Aggregates Levy per year to HM Revenue and Customs.

Environmental and Community Benefits

4.55 The Site is predominantly in agricultural use and of very low ecological value. Following extraction, the land would be progressively restored to a mosaic of land uses including agriculture, woodland, open water, ponds, reedbeds, lowland mixed deciduous woodland and lowland meadows. In addition to the habitat creation and biodiversity enhancements, the restored Site would provide some flood attenuation benefits.

4.56 The existing agricultural track would be reinstated at a lower level and a new section of footpath provided to link the existing PRoW RP-549 (which would remain on its current alignment) with Bow Lane to the south of Silvermead and the existing PRoW RP-549. There is also potential for further community benefit through the incorporation of community land, which it is proposed to plant as a community orchard.

4.57 Further detail is provided in Section 5.0 and 6.0 of this Planning Statement.

5.0 Planning Policy including Need

National Planning Policy

Presumption in Favour of Sustainable Development

5.1 National planning policy is set out in the National Planning Policy Framework (NPPF)[4] . Central to the NPPF is a presumption in favour of sustainable development which applies to plan-making and decision-taking. Sustainable development includes mineral extraction and restoration and avoiding unnecessary sterilisation of minerals. It requires the provision of raw materials and building products to serve the construction industry.

5.2 The NPPF reinforces the plan led system as the starting point of decision taking and, unless material considerations indicate otherwise, development proposals which accord with the Development Plan are to be approved without delay.

5.3 NPPF section 11 states that for decision taking:

> "d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:
>
> i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or
> ii. ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."

5.4 Planning Practice Guidance (PPG)[5] accompanies the NPPF and includes specific guidance on minerals planning[6] covering planning for minerals extraction, assessment of environmental impacts, restoration and aftercare of minerals sites and planning for the supply of aggregate minerals.

5.5 Together the NPPF and PPG provide policy and guidance covering the importance and uses of minerals, safeguarding of finite resources and the sustainable provision of raw materials to meet future needs.

[4] National Planning Policy Framework Ministry of Housing, Communities & Local Government (revised July 2021)
[3] Planning Practice Guidance (updated June 2021) Ministry of Housing, Communities & Local Government
[4] https://www.gov.uk/guidance/minerals#planning-for-minerals-extraction (Reference ID: 27-007-20140306)

Local Planning Policy

Adopted Plans

5.6 Alongside national policy, the Development Plan for this planning application comprises.

- 'Saved' policies of the County of Hereford and Worcester Minerals Local Plan 1997 (MLP 1997).

  In September 2007, five policies from the 1997 Minerals Local Plan were "saved". Particularly relevant to this planning application are Policies 1 (Preferred Areas) and 2 (Other Sand and gravel Deposits). The weight given to them in decision making will depend upon their conformity with national policy.

- South Worcestershire Development Plan 2016 (SWDP)[7]

There is no Neighbourhood Plan covering the Site.

Emerging Plans

5.7 The local plans are being updated. The emerging plans will be a material consideration in the determination of this planning application. The weight afforded to the draft policies depends on their stage of preparation.

Minerals Local Plan

5.8 The review of the Minerals Local Plan is at a relatively advanced stage.

5.9 The Worcestershire Minerals Local Plan: Publication Version (WMLP 2019) was submitted to the Secretary on 17 December 2019. Examination hearings were held between 11 and 13 November 2020 and 18 December 2020. This resulted in the publication of the '*Schedule of Main Modifications'* (June 2021) for consultation until 12 October 2021. WCC has issued a '*Summary of issues raised in representations on Main Modifications* (November 2021).

5.10 The Inspector's Report is anticipated Q1 2022 and adoption in Q2 2022[8].

5.11 The Site is identified within the emerging MLP as:

- Area of Search: Terrace and Glacial Sand and Gravel
- Minerals Safeguarding and Consultation Area: Terrace and Glacial Sand and Gravel
- Ecological Zone: Alluvial Fenlands and River Terrace

[7] Adopted February 2016
[8] Worcestershire Minerals and Waste Local Development Scheme (September 2021-December 2024)

- Environmental Character Area: Protect and Restore
- Biodiversity Delivery Area: Severn and Avon Longdon Marsh

Mineral Site Allocations Development Pan Document

5.12 A Mineral Sites Allocations Development Plan Document (DPD) is being prepared alongside the MLP and will identify specific sites and preferred areas for mineral development.

5.13 The most recent 'Call for Sites' ran from January to March 2020. In June 2020, the Consultation update document was published. This summarised the results of the further "*Call for Sites"* which ran from 16 January 2020 until 13 March 2020. WCC has published a list of sites promoted for consideration but has not yet made any decisions on these sites.

5.14 The consultation document states that:

> "consultation on the proposed methodology for site allocations was carried out in winter 2018/19 and preparation of the DPD fully commenced in Summer 2019. As the MLP does not allocate specific sites or preferred areas, all sites proposed so far (except those which have already been granted planning permission, or which have been withdrawn by their promoter) will be considered afresh for allocation as the DPD is progressed (these are listed in Appendix 1)."

5.15 Consultation on the Preferred Options version of the DPD is scheduled for Q2/Q3 2022 once the MLP has been adopted. WCC anticipates that the timetable will need to be revised during the course of preparing the DPD[9]

5.16 The Site has been shown within the emerging DPD to be:

- Within a 'Strategic Corridor'; and a
- Site submitted for consideration for inclusion as a site allocation.

South Worcestershire Development Plan

5.17 The South Worcestershire Councils (SWCs) will update the existing SWDP and where necessary its vision, objectives, spatial strategy and policies for the future development of the South Worcestershire area. The second part of the plan includes site allocations, policies and policy designations that will provide for the development needs of the area up to 2041.

5.18 In Spring 2021, additional preferred options were published for consultation.

[9] Worcestershire Minerals and Waste Local Development Scheme (September 2021-December 2024)

5.19 It is proposed that the Regulation 19 Publication Consultation will be take place July-August 2022, followed by an Independent Examination February-May 2023, leading to Adoption in October 2023.[10]

5.20 The Plan review has focused on the allocation of further land for houses, jobs and retail.

5.21 The Site, or parts of it, are identified, at the preferred options stages, as:

- Fluvial Flood Zone;
- Risk of surface water flooding; and
- High flood risk area.

Planning Policy Review

Steady and adequate supply of aggregates

5.22 The NPPF refers to the mutually dependent economic, social and environmental roles of the planning system to achieve sustainable development. Section 6.0 of the NPPF confirms the Government's commitment to the "building of a strong, competitive economy."

5.23 The NPPF confirms the Government's commitment to securing economic growth and para 81 sets out that planning policies and decisions should "create the conditions in which business can invest, expand and adapt" and that "significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development".

5.24 Linked to the delivery of these objectives, NPPF para 209 recognises that "minerals can only be worked where they are found" and states that a sufficient supply of minerals is essential to the provision of the "infrastructure, buildings, energy and goods that the country needs."

5.25 Para 213 requires minerals planning authorities to plan for a steady and adequate supply of aggregates by

- "making provision for the land-won and other elements of their Local Aggregate Assessment in their mineral plans…and maintaining landbanks of at least 7 years for sand and gravel…..whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised; and
- ensuring that large landbanks bound up in very few sites do not stifle competition."

[10] https://www.swdevelopmentplan.org/publications/local-development-scheme

5.26 When determining planning applications local planning authorities are to give great weight "to the benefits of mineral extraction, including to the economy" (para 211).

5.27 **The Plan for Growth** published in March 2011[11] set out the government's strategy to put the country on a path to sustainable, long term economic growth. It included a clear signal that the need to support economic growth and recovery should be taken fully into account in the planning system. This is supported by the "presumption in favour of sustainable development" within national policy, as described above.

5.28 **Build Back Better: our plan for growth** published in March 2021[12] sets out the government's strategy for growth in response to the COVID crisis which focuses on infrastructure developments, in addition to skills development and innovation support. This growth will be achieved via the **Ten Point Plan for a Green Industrial Revolution**[13] which reconfirms the drive towards a sustainable future and seeks to accelerate the path towards net zero.

Managed Aggregates Supply System

5.29 The Managed Aggregate Supply System (MASS) is a process which seeks to assist in the planning of "a steady and adequate supply of aggregates" by addressing the significant imbalances in the occurrence of suitable natural aggregate resources in England and the areas where they are most needed.

5.30 PPG para 60 of the Planning for Aggregate Minerals Guidance explains that:

> "The Managed Aggregate Supply System seeks to ensure a steady and adequate supply of aggregate mineral, to handle the significant geographical imbalances in the occurrence of suitable natural aggregate resources, and the areas where they are most needed. It requires mineral planning authorities which have adequate resources of aggregates to make an appropriate contribution to national as well as local supply, while making due allowance for the need to control any environmental damage to an acceptable level."

[11] HM Treasury Department for Business Innovation and Skills (BIS)
[12] Build Back Better: our plan for growth (published March 2021) HM Treasury
[13] The Ten Point Plan for a Green Industrial Revolution (published November 2020) Department for Business, Energy & Industrial Strategy

5.31 Market data[14] suggests that, nationally, permitted reserves of sand and gravel are declining steadily and not being replenished at an equivalent rate through new planning permissions. In the longer term this could result in shortages in material supply and increased cost the economy.

5.32 PPG para 80 states that aggregate landbanks are:

> "..principally a monitoring tool to provide a mineral planning authority with early warning of possible disruption to the provision of an adequate and steady supply of land-won aggregates in their particular area.

5.33 Aggregate landbanks should be used principally as a trigger for a mineral planning authority to review the current provision of aggregates in its area and consider whether to conduct a review of the allocation of sites in the plan.."

5.34 PPG para 84 sets out valid reasons why an application for minerals development is brought forward in a particular area. These may include the location of consented reserves relative to main market areas, the nature, type and qualities of the aggregate and known constraints on the availability of consented reserves that might limit output over the plan period.

Minerals Plan

Adopted Worcestershire Minerals Local Plan

5.35 Saved Policies 1 and 2 from the MLP 2017 are particularly relevant to mineral supply within the County.

Policy 1 – Preferred Areas

"In areas defined on the proposals map as preferred area for sand and gravel extraction, planning permission will be granted for sand and gravel extraction, subject to an evaluation against other relevant development plan policies."

Policy 2 – Other Sand and Gravel Deposits

"Applications for planning permission to extract sand or gravel in an area not within an identified preferred area for sand and gravel extraction will first be assessed against the methodology set out in paras 5.3 and 5.4 of this Plan. If the area is subject to no constraints or only one secondary constraint, planning permission will be granted subject to an evaluation against other relevant

[14] UK Minerals Strategy (July 2018). The UK Minerals Strategy was prepared by the UK minerals and mineral products industry, facilitated by members of the CBI Minerals Group and the Mineral Products Association.

development plan policies. If the area is subject to a primary constraint or more than one secondary constrain planning permission will not normally be granted."

5.36 Whilst a southerly extension to the former Ripple Quarry was identified in the MLP 1997 as a Preferred area for extraction, the Ripple East Site was not identified within the 1997 plan.

5.37 In accordance with Policy 2, the proposed development has been assessed against the relevant development plan policies, as detailed below and within the specialist chapters of the ES.

Emerging Worcestershire Minerals Local Plan Review

Worcestershire Aggregates Landbank - Local Aggregates Assessment

5.38 The emerging MLP reflects the findings set out in the Local Aggregates Assessment 2017, published June 2020 (LAA 2017)[15], which covers the period from 1 January to 31 December 2017.

5.39 The emerging MLP has used the average level of sales over the last 10 years (0.572 mtpa) as a starting point for forecasting future demand.

5.40 Based on this production guideline, the LAA 2017 concluded that permitted reserves within the county as at 31 December 2017 were 3.465Mt, equivalent to 6.06 years and, therefore, below the minimum 7 year requirement for sand and gravel set out in the NPPF.

5.41 It is anticipated that publication of a more up to date LAA will reveal that the landbank has further diminished.

Emerging Minerals Plan

5.42 References to the emerging MLP within this Statement are based on the most up to date published information to be found in the '*Schedule of Main Modifications* and '*Summary of issues raised in representations on Main Modifications*.

5.43 In line with the NPPF, the vision of the emerging MLP seeks to ensure a steady, adequate and sustainable supply of locally and nationally important minerals, with mineral supply being delivered from working and processing at multiple sites over the life of the plan.

5.44 Objective MO1 of the emerging MLP seeks to enable the supply of minerals, whilst Objective MO6 seeks to ensure the prudent use of natural resources.

[15] The LAA 2017 was signed off by the West Midlands Aggregates Working Party (WMAWP) on 23 March 2020 1 site and published in June 2020.

5.45 **Draft Policy MLP 14**[16]: **Scale of Sand and Gravel Provision** and **draft Policy MLP 15**[17]: **Delivering Steady and Adequate Supply of Sand and Gravel** further strengthen the principle of maintaining an adequate supply of minerals through the maintenance of a landbank of permitted sand and gravel reserves of at least 7 years. The intention is that the MLP should be flexible enough to accommodate changes to the balance of demand and supply identified in the annual LAAs (paragraph (para) 5.13).

5.46 In Worcestershire, as at 31 December 2017, permitted reserves of sand and gravel at extant sites totalled 3.465mt. The emerging MLP sets out that a further 11.407mt of sand and gravel will need to be permitted in the county to meet the annual production guideline (of at least 0.572mtpa) and to maintain at least a 7-year landbank of permitted reserves throughout the plan period (to 2036[18]) and beyond.

Future Provision

5.47 This additional 11.407mt will be met from new sites and alterations or extensions to extant sites.

5.48 Due to the quantities of sand and gravel required, the scale and distribution of the resources and the tendency for mineral workings in Worcestershire to be small scale in comparison to other parts of the country, multiple sand and gravel workings are likely to be required over the life of the Plan to achieve this (para 2.27).

Strategic Corridors

5.49 The emerging MLP 'vision' seeks to ensure a steady, adequate and sustainable supply of locally and nationally important minerals, with mineral supply being delivered from working and processing at multiple sites over the life of the plan. These sites are focused on 5 strategic corridors, which include the *Lower Severn Strategic Corridor* as set out in the **draft Policy MLP 1: Spatial Strategy**[19]**.** Draft Policy MLP 1 supports development for sand and gravel within strategic corridors, which it states will not normally be supported elsewhere in the county.

5.50 Draft Policy MLP 14 states

> As the identification of the strategic corridors was informed by the distribution of sand and gravel resources, and they contain extensive areas of search for sand and gravel, proposals for sand and

[16] MLP Schedule of Main Modifications (June 2021) Modification reference MM h2
[17] MLP Schedule of Main Modifications (June 2021) Modification reference MM h4
[18] A change from the year 2035. MLP Schedule of Main Modifications (June 2021) Modification reference MM b1
[19] MLP Schedule of Main Modifications Working Document (June 2021) Modification reference MM d1

gravel development on windfall sites either within or outside the strategic corridors will only be supported where they meet the tests set out in policy MLP 3 or policy MLP 4.

The Site is located within the Lower Severn Strategic Corridor.

Allocated Sites

5.51 **Draft Policy MLP 2**: **Strategic Location of Development**[20] seeks to ensure that there is a sustainable supply of mineral, either from allocated sites, or from preferred areas where it can be demonstrated that sustainable supply cannot be achieved. Allocated sites and preferred areas of search will be set out in the DPD, which is at an early stage in its development.

CEMEX is seeking to promote Ripple East through the DPD for inclusion as an "allocated site", where there is a presumption in favour of the grant of permission.

Areas of Search and Windfall Sites

5.52 **Draft Policy MLP 3**: Strategic Location of Development – relates to proposals within areas of Search and Windfall Sites within the Strategic Corridors.

The Site lies within the Area of Search for Terrace and Glacial Sand and Gravel

5.53 Part (a) of draft Policy MLP 3: confirms that planning permission will be granted for new mineral development and extensions to extant sites within allocated areas of search where there is a shortfall in supply as demonstrated by part c.

c) A shortfall in supply for a broad mineral type will be considered to exist where:

i) there is a shortfall in extant sites and allocated specific sites and/or preferred areas to meet the scale of provision required over the life of the plan; or

ii) there are sufficient extant sites and allocated specific sites and/or preferred areas to meet the scale of provision required over the life of the plan but one of the following applies:

- there is a demonstrated shortfall in the landbank or stock of permitted reserves demonstrated in the most recent Local Aggregate Assessment (for aggregate development proposals)…; or
- there is a demonstrated shortfall in productive capacity in the most recent Local Aggregate Assessment (for aggregate development proposals)…; or
- there is a demonstrated shortfall in supply of the relevant mineral for particular uses or specifications which would be addressed by the proposed development; or

[20] MLP Schedule of Main Modifications Working Document (June 2021) Modification reference MM d4

- there is a demonstrated shortfall for a particular geographic market area which would be addressed by the proposed development.

5.54 Part (b) of draft Policy MLP 3 supports the grant of permission for new mineral developments and extensions to extant sites on windfall sites within the strategic corridors where there is both a shortfall in supply as demonstrated by part (c) and either:

i) the mineral resource was not allocated due to viability, environmental or amenity constraints, and it is clearly demonstrated by the applicant that those constraints can be satisfactorily managed or mitigated; or

ii) the deposits were not known, or were not considered to be resources of local or national importance, and therefore did not inform the identification of mineral allocations, and sufficient geological and market data is provided by the applicant to demonstrate the presence of a nationally or locally important mineral resource.

Consents and planning applications post 31 December 2017 (LAA 2017)

5.55 The plan confirms that the most recent LAA must be referred to by applicants and decision-makers as the production guideline and levels of permitted reserves will vary over the life of the MLP.

5.56 Whilst the LAA 2017 is still the most up to date assessment available, in preparing this application a review has been undertaken of additional consented reserves and planning applications pending decision post 31 December 2017. The results of this exercise is summarised in Table 1 below together with a reasonable prediction of the updated sand and gravel provision requirements over the plan period.

Table 1: Assessment of Sand and Gravel Reserves and Impact on Landbank

LAA 2017[21], emerging Mineral local plan (incl. Main Modifications)		
Permitted reserves as at 31 Dec 2017		3.465 mt
10-year average		0.572 mt
Landbank (at 31 December 2017) (to 2023)		**6.06 years**
Additional Provision (since end 2017)		
Chadwich Lane (approved)[22]	2.4 years	1.35 mt
Est Permitted Reserve (as at 31 December 2021)		2.53 mt
Est Landbank (as at 31 September 2021) (to 2026)		**Under 5 years**
Potential Provision (Planning Applications Submitted - Decisions Pending)		

[21] Figures post end 2017 are based on the assumption that sales were 572,000tpa (10-year average) between 2017 and 2021 and are, therefore, theoretical.
[22] Planning application ref 18/00036/CM - approved 25th March 2021

LAA 2017[21], emerging Mineral local plan (incl. Main Modifications)		
Lea Castle Farm	5.2 years*	3 mt
Bow Farm, nr Ripple	2.6 years*	1.5 mt
Ryall's Court (Phase 5)	0.8 years*	0.475mt
Wildmoor Pinches 4	1.7 years*	1 mt
Total Reserve (potential) (from 2022)		**8.50 mt**
Total Landbank (potential) (from 2022) (to 2036/37)		**14.86 years**
Ryall's Court (Phase 5) would follow on from the existing Ryall North permitted site.	0.8 years*	- 0.475mt
Total Reserve (potential) (from 2022)		**8.03 mt**
Total Landbank (potential) (from 2022) (to 2035)		**14 years**

* Potential addition to the Landbank

Source: LAA 2017 plus planning applications and permissions post 2017, proposed Main Modifications to the draft MLP 2019 and Officers report to committee for Chadwick Lane (PA ref: 18/000036/CM) and for Wilden Lane (PA ref: 20/000042/CM - refused).

5.57 From the above it can be seen that at the end of 2017, the landbank was below 7 years. It remains below 7 years even with additional reserves at Chadwich Lane, permitted subsequently.

5.58 Should all the planning applications referred to in Table 1 and currently being considered by WCC be granted, then the landbank would exceed 7 years for the foreseeable future, but not throughout the life of the MLP, which is to 2036.

5.59 The emerging plan accepts that there is no maximum landbank level and each application will be considered on its own merits. it may be necessary to have a landbank of more than 7 years to allow for the fact that mineral developments can take a significant amount of time to progress from identifying a site to that site contributing to supply[23].

> "The plan recognises that productive capacity at an individual site is not directly related to the size of its permitted reserves and that the contribution which a site can make to the annual supply of materials (its productive capacity) can be directly limited by the maximum possible throughput of a site's processing plant, or directly through measures which seek to minimise or mitigate environmental or amenity impacts, such as limiting operating hours or the number of vehicle movements. With relatively few active sites and limited permitted reserves, the overall security of Worcestershire's productive capacity could be put at risk by commercial decisions or natural events at any individual site….."

[23] MLP Schedule of Main Modifications (June 2021) Modification reference MM h6

5.60 Tables 2 and 3 below list the permitted sites (active) and the applications pending determination as at February 2022. Table 4 provides an indication of the productive capacity from permitted sites and those pending determination, assuming that all are given consent.

Emerging draft Minerals Local Plan Allocations

5.61 The emerging MLP does not include site allocations. These will be set out in the Worcestershire Mineral Site Allocations DPD, which WCC are producing in parallel.

5.62 In June 2020, the Consultation update document was published. This summarised the results of the further "Call for Sites" which ran from 16 January 2020 until 13 March 2020.

5.63 These sites are now being assessed in accordance with the site selection methodology which was consulted on in 2018/19. The results of this assessment will be reported in the Preferred Options draft of the DPD.

5.64 Table 5 lists the sites being promoted within the Lower Severn Strategic Corridor.

Permitted Sites

Table 2: Permitted Sand and Gravel Sites as at February 2022.

Site	Operator	Permission Reference	Resource or Reserve	Conditional Restrictions	Other notes
Clifton Extension	Lafarge Tarmac	15/000006/CM (12 July 2016)	2.2Mt	End date = 31 December 2030 (Con 3)	ACTIVE No limit on output. 200-250,000tpa output 11-yr life plus 1-yr for restoration
Ryall's Court (Ryall North)	Cemex	15/000013/CM	1.4Mt	End date (including restoration) 31 December 2026 (Con 4)	ACTIVE
Cinetic Quarry (also known as Wildmoor Quarry)	Wildmore Quarry Products Ltd Baggeridge Brick Plc				ACTIVE End date = 2042 No limits on productive capacity
Chadwich Lane Quarry Extension to restored quarry	Salop Sand and Gravel	18/000036/CM 23 March 2021	1.35Mt	End date = 31 December 2037 (Con 3)	Worked over 13 years @ 100,000tpa Sand to be transported to Wildmoor Quarry for processing to blend sands.

Source: LAA 2017, Emerging MLP Main Modifications and WCC Online Planning Register

Planning Applications

5.65 Table 3 lists the planning applications awaiting determination as at February 2022. Ryall's Court Phase 5, would follow on from/replace the current supply from the permitted Ryall North workings (ref: 15/000009/CM). Ripple East would following on from Ryall North Phase 5.

Table 3: Planning Applications awaiting determination as at February 2022

Site	Operator	Application Reference	Resource or Reserve	Conditional Restrictions	Other notes
Lea Castle Farm Wolverley	NRS Aggregates	19/000053/CM	3Mt	TO BE DETERMINED	300,000tpa Life 10 years Would increase the landbank by approximately 5.24 years.
Bow Farm, nr Ripple	Cullimore	19/000048/CM	1.5Mt	TO BE DETERMINED	250,000tpa 9 years life Would increase the landbank by approximately 2.62 years.
Ryall's Court (Phase 5)	Cemex	20/000009/CM	475,000	TO BE DETERMINED	2 year life following on from existing Ryall North permitted area. 320,000tpa Extraction end date = 2025 Would increase the landbank by approximately 0.83 years.

Source: WCC Online Planning Register, LAA 2017.

Productive Capacity

Table 4 Sand and Gravel Extraction Timeline (1000 tonnes) and Productive Capacity - Indicative

	Assumptions mtpa	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Clifton Quarry Extension	200-250,000	200	200	200	200	200	200	200	200	200	R					
Ryall's Court - Ryall North (including Phase 5)	300-320,000	300	300	250	R	R										
Chadwich Lane Extension	100,000		100[24]	100	100	100	100	100	100	100	100	100	100	100	100	
Bow Farm, Nr Ripple	250,000			250	250	250	250	250	250		R	R				
Lea Castle Farm	300,000			300	300	300	300	300	300	300	300	300	300	R		
Wildmoor Pinches 4	100-150,000		150	150	150	150	150	150	150	Inert restoration to start 2026				R	R	
RIPPLE EAST	Planning Application				**100**	**300**	**75**									
0.572mtpa																
TOTAL potential output (estimated) Mt		0.5	0.75	1.25	1.1	1.3	1.08	1.0	1.0	0.6	0.4	0.4	0.4	0.1	0.1	0.0

Planning consent	Application awaiting determination	RIPPLE EAST APPLICATION	Restoration	mtpa	Million tonnes per annum

[24] NB pre-commencement conditions to be met including approval and construction of a new haul road and junction.

Table 5: Summary of sites promoted through the call for sites – Lower Severn Strategic Corridor

	MLP Reference ref	Operator	YIELD (t)	Annual output (tpa)	Duration	Start date	Notes
Lower Severn Strategic Corridor							
Powick Manor Farm	M2020 03 12	No operator referenced	2,100,000	150,000-200,000	10-12 years	<5 years	Overburden av. 1.3m. Mineral thickness ranges between 2-3m
Severn Stoke, Sandford	C015-1157	-	-	-	-	-	-
Baynhall Farm Kempsey	M2020 03 13	No operator referenced	-	-	-	0-10 years	Intention to Withdraw this site (April 2020).
Bow Farm, Nr Ripple	F009-2438	No operator referenced	2,000,000	-	-	-	Planning application submitted ref: 19/000048/CM awaiting determination – Applicant: Cullimore
Ripple East (Land south of Bank farm)	D015-1157	Cemex	480,000	300,000	2 years	<5 years	Would be worked as an extension to Ryall House Farm
Ryall Quarry East (now referred to as 'Uckinghall A'	D020-1793	Cemex	(750,000 NB PA for Uckinghall 'A' to 'C' B & C will be for c870,000	300,000	Uckinghall 'A' to 'C' 3 years	< 5 years	Would be worked as an extension to Ryall House Farm

	MLP Reference ref	Operator	YIELD (t)	Annual output (tpa)	Duration	Start date	Notes
North-East of Uckinghall Lane (now referred to as 'Uckinghall 'B' to 'E') (Grid Ref: 387162, 238696)	D020-1793 F010-1793	Cemex	(1,100,000 MP) NB PA for Uckinghall 'A' to 'C' B & C will be for c870,000	-	-	-	Would be worked as an extension to Ryall House Farm and follow on from Ripple East
Ryall House Farm Land opposite the entrance and /Land East of School Lane (now referred to as Uckinghall 'C')	D025-2444	Cemex	Land opposite entrance Land east of School Lane/Uckinghall 'C' 160,000	-	-	-	Would be worked as an extension to Ryall House Farm and follow on from Ripple East
Ryall Quarry North, Land to the South/ Land adjacent to Ryall North Now referred to as Ryall Court Phase 5	D020-1793	Cemex	300,000(MP) 475,000 (actual)	-	2 years	-	Would be worked as an extension to Ryall House Farm
Ryall Court Farm Now referred to as Ryall Court Phase 5	D009-2296	Cemex	400,000(MP) 475,000 actual – see above	-	-	-	

Source: Call for Sites and DPD 2020

Conclusion

5.66 As at the end of December 2017, the landbank for Worcestershire was assessed as being 6.06 years (LAA 2017). Table 1 estimates that as at February 2022, the landbank would be less than 5 years. This accounts for the additional provision arising from the grant of planning permission at Chadwich Lane.

5.67 There are 3 planning applications awaiting determination. Should planning permission be granted on these sites, this will add additional reserves and therefore time to the landbank.

5.68 Should all the planning applications referred to in Tables 1 and 3 currently being considered by WCC be granted, then the landbank would exceed 7 years for the foreseeable future, but not throughout the life of the MLP, which is to 2036.

5.69 The emerging MLP accepts that it may be necessary to have a landbank of more than 7 years to allow for the fact that mineral developments can take a significant amount of time to progress from identifying a site to that site contributing to supply.

5.70 Table 4 shows that even if all the pending planning applications were to be granted consent, by 2030 the sites would not be able to meet the annual productive supply of 0.572mtpa set out in the emerging MLP and LAA 2017.

5.71 The reserve position will have further diminished since the LAA 2017 was published. Also, Table 4 assumes that the annual supply for which the emerging MLP makes provision remains consistent and does not account for any increase in annual sales since 2017.

5.72 Ripple East is in the *Lower Severn Strategic Corridor* where future sand and gravel extraction is supported and would be a satellite extension to the established Ryall Quarry, with the associated infrastructure and markets in place. The Site is being promoted through the Minerals Sites Allocations DPD. Although site allocations have yet to be confirmed, the proposed development is supported by draft policy MLP 3 which confirms that mineral development will be permitted within Areas of Search where there is a shortfall in extant sites and allocated sites or preferred areas to meet the scale of provision required over the life of the plan. It is clear from Table 4 that there is currently insufficient provision from permitted sites and even with all pending applications consented there would remain a shortfall in provision throughout the life of the MLP.

5.73 Based on the assumptions in Table 4, permitted reserves could exceed the annual productive guideline until 2030. However, both the NPPF and the emerging MLP recognise that there is a need

to maintain sufficient productive capacity to supply a variety of markets and end uses from sites across the five strategic corridors.

5.74 Table 5 shows that future supply from within the Lower Severn Strategic Corridor will potentially largely be met from extensions to Ryall Quarry which has the established infrastructure and markets to secure ongoing future supply. Ripple East would 'replace' permitted reserves at Ryall North.

5.75 The draft MLP states:

> "Even where there is considered to be sufficient productive capacity for sand and gravel supply overall, new sites and amendments or extensions to existing sites which contribute to maintaining or enhancing productive capacity will be supported as they will help to ensure the resilience of the mineral supply chain in Worcestershire."

5.76 In accordance with the NPPF and emerging MWLP draft Policies MLP 14 and 15, the Site would contribute to the maintenance of the minimum landbank requirement for sand and gravel over the plan period and the annual production guideline.

SITE RESTORATION

Restoration of mineral sites to a high standard

5.77 The NPPF requires restoration and aftercare of mineral sites to be carried out to high environmental standards through local plan policies and the determining of planning applications (Paras 210 (h) and 211 (e)).

5.78 Guidance on the restoration and aftercare of mineral sites is given in the emerging MLP.

5.79 The Vision of the emerging MLP is for a co-ordinated approach to site restoration, with the aim of delivering high-quality restoration at the earliest opportunity to enable an appropriate after-use. That afteruse should result in "multifunctional benefits and is appropriate in the landscape".

5.80 The emerging MLP acknowledges that mineral workings and their restoration can create significant opportunities for new habitats, sites and features of nature conservation value. They can create habitats that are more resilient to climate change and can aid species dispersal by helping to buffer, extend or create links between existing habitats (para 2.115).

5.81 In addition to biodiversity gains, mineral working and restoration has the potential to reinstate natural flooding processes and provide space for flood attenuation (para 2.130). By viewing individual sites within their wider catchment, opportunities for flood risk betterment can be optimised throughout the life of a mineral development.

5.82 **Draft Policy MLP 9**[25]: **Lower Severn Strategic Corridor**, provides guidance specific to proposals within the corridor. Mineral development will be permitted where it

> "contributes to the quality, character and distinctiveness of the corridor through the conservation, delivery and enhancement of green infrastructure networks."

5.83 This policy prioritises green infrastructure priorities which:

a) create wetland features such as fen and marsh, wet grassland, reedbed and lowland meadows during both working phases and as part of restoration and after-use, including where the following characteristic agricultural land uses are incorporated:

- cropping and horticulture in the Settled Farmlands on River Terraces landscape type; and
- pastoral land use in the Riverside Meadows and Wet Pasture Meadows landscape types.

[25] MLP Schedule of Main Modifications Working Document (June 2021) Modification reference MM f6

The proposed development would help to deliver the Priority a) through the creation of the following UK Biodiversity Action Plan habitats.

- Ponds (seasonal or perched) 0.10 ha
- Aquifer fed naturally fluctuating water bodies 2.78 ha
- Reedbed and Margins 2.08 ha
- Lowland Meadows 3.33 ha
- Nectar rich field margins (length 1520m-6m wide) 0.91 ha
- Agriculture
    - Restored 3.33 ha
    - Unworked margins 4.35 ha
    - Agricultural Access 0.30 ha

b) conserve, enhance and restore characteristic hedgerow patterns and tree cover along watercourses and streamlines; and

The Proposed development would deliver help to deliver the Priority b) through the creation of the following UK Biodiversity Action Plan habitats.

- Lowland Mixed Deciduous Woodland (including woodland edge) 0.71 ha
- Hedgerows (current habitat 0.92ha enhanced + 0.15ha created) 0.97 ha

c) create accessible semi-natural green space, incorporating information or routes which increase the legibility and understanding of the geodiversity, heritage and character of the area.

The proposed development would deliver help to deliver the Priority c) through the creation of the following UK Biodiversity Action Plan habitats.

- Sand face 0.01 ha
- Community Traditional Orchard 0.14 ha

5.84 MLP para 4.124 confirms that the intention to integrate improvements to flood plain connectivity, either alongside agricultural land uses where these are important to the local economy or the character of the areas, or alongside seminatural green spaces where they enhance existing recreation networks.

5.85 **Draft Policy MLP 7**[26]: **Green Infrastructure** supports development where it is demonstrated, how, throughout the lifetime of an extraction site (including its restoration) the delivery of multiple benefits will be optimised and secured in the long term. These benefits include:

- Protecting and enhancing inherent landscape character;
- Conserving, restoring and enhancing ecological networks and deliver net gains for biodiversity;
- Reducing the causes and impacts of flooding;
- Protecting and enhancing the surface water and groundwater resources at the local and catchment scale;
- Improving the condition, legibility and understanding of geodiversity; and
- Enhancing the rights of way network and provision of publicly accessible green space.

Restoration Management and Aftercare

5.86 CEMEX would be responsible for initial restoration and subsequent after-care management in consultation with the landowners and the mpa. Specialist consultants may be appointed to oversee and advise on the implementation of the restoration and after-care scheme.

5.87 An *Outline Restoration and Five-Year Aftercare Scheme* has been submitted to WCC as part of this planning application (Volume 1.0, Appendix 4.0).

5.88 The aftercare programme includes details of soil cultivation, seeding, cropping, fertiliser application, annual maintenance, control of noxious weeds and maintenance of all new tree and shrub planting, together with provisions for any remedial works such as replacement of dead or dying trees needed during the five-year aftercare period.

5.89 The aftercare plan would evolve to reflect the restoration area and the specific habitats which are established, and the ongoing practices deemed to be necessary to maintain and enhance the value of those habitats.

[26] MLP Schedule of Main Modifications Working Document (June 2021) Modification reference MM e1

6.0 LOCAL COMMUNITIES AND THE ENVIRONMENT

Protecting Communities and the Environment

Making Efficient Use of Resources and Environmental Controls

6.1 On conserving and enhancing the natural environment NPPF para 174 says that planning policies and decisions should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological values and soils (in a manner commensurate with their status);
- recognising the wider benefits of ecosystem services; including the economic and other benefits of the best and most versatile land and of trees and woodland;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; and
- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans.

6.2 **Draft Policy MLP 26: Efficient Use of Natural Resources** confirms that mineral development will be permitted where it is demonstrated that the proposed development will make efficient use of natural resources.

6.3 Throughout its lifetime the proposed development should

a) minimise use of water and energy in buildings, plant and transport;

b) optimise on-site energy generation from renewable and low-carbon sources; and

c) balance the benefits of maximising extraction with any benefits of allowing sterilisation of some of the resource, taking account of:

i. the need for the mineral resource;

ii. the ability to deliver the relevant strategic corridor priorities;

iii. the ability to provide a stable and appropriate landform for beneficial after-use;

iv. the ability to deliver high-quality restoration at the earliest opportunity;

v. the appropriateness of importing fill materials on to site, and the likely availability of suitable fill materials;

vi. the need to protect and enhance inherent landscape character; and

vii the need to manage or mitigate impacts on the built, historic, natural and water environment and amenity

6.4 This section sets out how the proposed development meet the requirements of national and local planning policies, based on the conclusions of the submitted technical assessments and the Environmental Statement which address the following topics.

- Sustainability and Climate Change;
- Transport.
- Hydrology, Hydrogeology; Flood Risk and Geology.
- Geotechnical.
- Ecology.
- Habitats Regulations.
- Landscape and Visual Impact
- Noise
- Dust and Air Quality
- Agricultural Land and Soils Resource
- Arboriculture; and
- Health Related Impacts;

Sustainability and Climate Change

6.5 A *Sustainability and Climate Change Statement* is included as ES Chapter 3.0.

6.6 The NPPF has Sustainable Development as one of its fundamental objectives. Para 8 states:

> "Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives) -economic, social and environmental."

6.7 Minerals can only be worked where they are found (NPPF para 209). Ripple East has a proven resource of sand and gravel. The extracted mineral would be transported by barge to CEMEX's existing processing facility at Ryall Quarry and from there via the primary route network to established markets.

6.8 The County's landbank for sand and gravel is below the minimum 7 years stipulated in the NPPF. The proposed development would provide for ongoing supply of construction materials once reserves at Ryall North have come to an end. Further information is set out in Section 5 of this Statement.

6.9 CEMEX believes that climate change "is one of the biggest challenges of our time and supports the urgency of collective action".

6.10 Climate change has been a priority for CEMEX for many years and the Business has researched and maximised the opportunities available to invest in energy efficiency and their use of alternative fuels. They were the first UK manufacturer to introduce low carbon concrete range of products and they are committed to expanding their use of renewable energy and increasing clinker substitution through alternative cementitious materials.

6.11 Through these efforts CEMEX has achieved a significant reduction of more than 24% in their net specific CO2 emissions compared to their 1990 baseline. CEMEX is now committed to achieving a target of a >40% reduction in CO2 emissions by 2030 and delivering net-zero CO2 concrete to all their customers worldwide by 2050.

Biodiverse Mineral Extraction

6.12 CEMEX runs an initiative called *Building a Better Future* which focuses on ensuring its whole operational footprint considers sustainability and the environment at its heart. This guiding principle shapes the manner in which CEMEX designs its mineral extraction proposals.

6.13 CEMEX has earned a distinguished record for quarry restoration, crafting some of the UK's award-winning nature reserves and specialist habitats. To date, they have restored more than 1,000 hectares of priority habitat.

6.14 Working in partnership with the RSPB since 2009 and in accordance with their national biodiversity strategy, CEMEX have an award-winning legacy of creating nature reserves from restored quarries that benefit local communities, as well as wildlife.

Balancing the need for raw materials

6.15 CEMEX applies careful planning to ensure a balance between the need for raw materials and protecting the environment, involving local communities in their land restoration opportunities and maximising the use of recycled materials.

6.16 With over 200 CEMEX locations across the UK, CEMEX provide a national supply network. This enables them to reduce their carbon footprints across the supply chain, lower the volume of imports and support local economies and communities, through the availability of local, responsibly sourced quality products.

CEMEX's Climate Change Action Strategy

6.17 CEMEX are committed to enhancing the sustainability of their operations through their dedicated *Future In Action* (FIA) strategy, which is committed to Net Zero CO2.

6.18 The FIA Strategy focuses on four pillars:

- Sustainable products and solutions (Vertua and Vialow low-carbon products)
- Decarbonising their operations (alternative fuels, renewable energy supply and reduction in net CO2 emissions/cementitious
- Innovation and Partnerships (including with the RSPB); and
- Promoting a Green Economy/Circular Economy (including energy recovery and recycling demolition waste).

6.19 In Q1 2021, CEMEX successfully introduced ground-breaking hydrogen technology as part of its fuel mix in all of its cement plants in Europe. Hydrogen emits zero CO2 from combustion and this innovative technology enables further reduction of fossil fuels and improves energy efficiency.

6.20 Additionally, CEMEX is investing US$25 million in a new system to replace fossil fuels at its Rugby cement plant in the United Kingdom. The new system incorporates the use of green hydrogen in the production process. Once completed, it will have the capability to operate with 100% alternative fuels.

6.21 In 2020, CEMEX launched the Vertua range, which includes the UK's first ready mixed concrete that is a CarbonNeutral ® product, while in Q2 2021, they presented VIALOW, a reduced carbon asphalt which comes with the option to offset residual CO2 to make it a CarbonNeutral product.

6.22 In their supply chain, they are prioritising transport methods such as rail and barge that reduce the numbers of vehicles on the road. In 2020, their use of rail allowed CEMEX to save over 1050,000 road movements and 17,500 tonnes of CO2 compared to using trucks.

6.23 In February 2022 CEMEX announced their introduction of zero emissions electric readymix trucks being the first building materials company to complete a large-scale, multi-country pilot using fully electric ready-mix concrete trucks.

6.24 In 2021, CEMEX joined the *First Movers Coalition* (FMC) and committed to accelerate the innovation and development of decarbonization technologies in heavy-duty on-road trucking services.

6.25 An initial, successful trial was carried out in Germany, followed by a further trial in France that was also a success. CEMEX expects to gradually continue introducing and testing new prototypes for zero-emission ready-mix concrete trucks to its fleet.

6.26 Eliminating emissions from concrete delivery is a component of reaching the net zero CO2 milestone.

6.27 The FMC brings together business leaders with global footprints to create market demand for zero carbon solutions in this decade and jump-start the scaling of these emerging technologies.

Resilience of Ripple East to Climate Change

6.28 The proposed development has the potential to be affected by, and to affect climate change, in the following ways:

- Site location relative to market;
- Use of renewable energy
- Vehicle emissions;
- Flood risk; and
- Changes to Habitats.

Working Scheme

6.29 The design of the Ripple East working scheme incorporates sustainable design principles such as minimising travel distances to minimise fuel use and emissions and using all indigenous soils sustainably.

Site Location Relative to Market

6.30 Minerals can only be worked where they are found, and each county has a requirement set by Government to maintain a landbank of sand and gravel. The Site is needed to maintain the supply of sand and gravel from within Worcestershire to established markets once reserves at Ryall North come to an end.

Renewable Energy

6.31 CEMEX uses 100% renewable electricity at all UK sites, in partnership with energy group Engie. The energy that supplies Ryall Quarry comes from 100% renewable sources including wind and solar energy.

6.32 CEMEX also are looking at a wide range of energy initiatives and ideas that can be rolled out across CEMEX's sites such as solar panels and wind turbines to generate energy and car EV charging points.

6.33 CEMEX continues to strive to introduce renewable energy to existing and new operational sites, working in partnership with external energy companies. The Company is currently investigating solar farms across the County and wind farms that could contract energy to their sites and it is hoped this approach will assist renewable energy use on site.

Vehicle Emissions

6.34 Extracted materials would be transported to Ryall Quarry for processing, with each barge load removing the need for approximately 8 HGV loads.

6.35 The rate of extraction from Ripple East would be similar to current rates at Ryall North. Therefore, there is no anticipated increase in movements associated with onward transportation of the construction materials to markets, above currently permitted levels.

6.36 The size, scale and condition of machinery and transport vehicles used on Site are regularly reviewed, to ensure that they are as energy efficient as possible. CEMEX's own fleet of vehicles are on average under 5 years old and are constantly being replaced to ensure the operation of modern clean and fuel-efficient vehicles. Over 20% of the fleet meets Euro IV or higher standards, with the majority of the remaining fleet exceeding Euro III standards.

6.37 CEMEX's transport strategy ensures that they significantly reduce emissions. All CEMEX fleet drivers are trained in the Safe and Fuel Efficient Driving (SAFED) scheme and are regularly assessed on their fuel usage and driving style. CEMEX runs a dedicated programme entitled *Be CareFUEL*, focussing on all aspects of fuel usage.

Air Quality

6.38 Climate change has the potential to result in reduced air quality as weather patterns change.

6.39 The *Dust and Air Quality Assessment* (Volume 2.0, ES Chapter 10) screened out consideration of traffic emissions associated with operational activities at Ripple East based on the low number of off-site movements, which would be well below the Institute of Air Quality Management thresholds.

Flood Risk

6.40 The effects of climate change that are most likely to impact on the proposed development are changing rainfall patterns, particularly the intensity of rainfall event leading to increased risk of flooding.

6.41 Climate change has been fully accounted for in the *Flood Risk Assessment* (Volume 2.0, ES Chapter 5.0) and *Flood Risk Assessment and Drainage Strategy* (Volume 2.0, Appendix 5.3).

6.42 Site-specific calculations have been performed to estimate surface water runoff generation for the 1 in 100-year event plus allowance for climate change using the industry standard advice given in the NPPF and Environment Agency guidance. Runoff at the Site would increase due to climate change. However, this would be attenuated by the restored waterbodies and, as such, there would not be an increased flood risk downstream.

Water Supply

6.43 In addition to increases in rainfall and temperatures, climate change has the potential to alter the demand for and availability of water supplies.

6.44 ES Chapter 5.0 confirms that there will be a neutral effect on the nearest abstraction (200m south of the excavation area).

Loss of Habitats

6.45 Climate change is leading to loss of species, which have to adapt to new climate patterns and loss of habitat, as well as altered competitive relationships between species. DEFRA's 2020 Biodiversity Strategy[27] states that over 40% of priority habitats and 30% of priority species were declining in the most recent analysis.

6.46 The proposed development would not have an adverse effect on designated sites.

6.47 The Site as existing comprises arable land and was assessed as having a very low ecological value. The hedgerows and woodland around the Site boundary provide the best habitat particularly for birds and bats, and these habitats would be retained and safeguarded through appropriate standoffs.

6.48 Mitigation measures would be in place to avoid the loss of protected species and together with compensation measures the ecological value of the Site would be greatly improved. The restoration proposals would provide a significant habitat improvement for the benefit of all wildlife and would enhance the overall ecological value of the Site.

Restoration

6.49 The Restoration Plan for the Site includes the reinstatement of high-quality agricultural land as well as a diverse range of habitats many of which are identified in the UK Biodiversity Action Plan. The restored Site would enhance green spaces/corridors, avoiding isolated green spaces, and provide enhanced public access through the provision of a new footpath link and potentially, a community orchard.

6.50 Overall, it is predicted that the proposed development would have a positive impact in relation to climate change, by reducing flood risk during the course of the development, by providing additional planting and biodiversity benefits following restoration and by providing aggregate to the local area in a sustainable manner, reducing imports from further afield.

[27] A Strategy for England's wildlife and ecosystem services

Transport

6.51 In accordance with national and local planning policies, NPPF para 110 and draft MLP Policies 26 and 39, the Proposed development would not have an unacceptable impact on the transport network with respect to capacity, congestion and highways safety. Extracted materials would be taken off-site via by barge, so promoting the use of a sustainable transport mode. In line with NPPF para 111, the Proposed development would not give rise to any severe residual cumulative impacts on the road network and, therefore, should not be prevented on highways grounds.

6.52 The extracted mineral would be transported by barge to CEMEX's Ryall Quarry facility for processing. Aggregates would be loaded onto the barge from the existing wharf constructed in connection with the former Ripple Quarry, west of Ripple East. This would avoid the need for HGVs to export materials onto Bow Lane and the local network. Instead, onward transportation of construction materials would be from Ryall Quarry onto the Primary Route Network, via the A38, which is suitable for and already accommodates regular HGV movements.

6.53 Exports would remain consistent during the transfer of operations from Ryall North to Ripple East, being limited by processing capacity and market demand, with no anticipated change to the operational traffic movements across the highway network.

6.54 Of the sand and gravel imported by barge into Ryall Quarry, some would continue to supply the on-site batching plant whilst the majority would continue to be exported to other such plants operated by CEMEX or sold as processed aggregate. Exported aggregates would continue to be transported by a mixture of rigid and articulated lorries, the primary destinations and associated distribution/assignment of delivery vehicle movements is also anticipated to remain the same.

6.55 As with operations at Ryall North, mineral from the Site would be worked on a campaign basis, typically comprising four campaigns per year. Mobile plant would similarly be delivered to the Site at the commencement of each campaign and then collected upon its conclusion, with each delivery/collection typically comprising two low-loaders. Additionally, deliveries of fuel for the mobile plant would be required once every two to three days during each campaign period. The quarry would normally attract no other HGV movements, only circa ten light vehicle movements per day associated with trips by operational and archaeological staff.

Transport Assessment

6.56 A *Transport Assessment* (TA) has been undertaken in line with current best-practice guidance (ES Chapter 4.0, Volume 2.0, ES).

6.57 The TA considered the potential impacts of the proposed development on the operation, character, environment and safety of the surrounding highway network. The assessment focussed on the section of the A38 between its junctions with the A4104 and M50 Junction 1 in respect of day-to-day development traffic, which would primarily be to/from Ryall Quarry, with additional consideration of the local minor road network surrounding the Site in respect of occasional traffic movements associated with the delivery, collection and maintenance of operational plant.

6.58 The TA established that potential effects associated with the proposed development on severance, pedestrian amenity and driver delay would be insignificant given the small change in traffic movements on local roads and the low levels of pedestrian/cycle/equestrian movements. Accidents and safety only were identified as being potentially significant, however, the assessment concluded that the impact/effect would be neutral and therefore insignificant.

6.59 The impact of the change associated with the relocation of some staff movements to the Site is predicted to be negligible.

6.60 Even for the lightly trafficked minor roads that serve the Site, such limited traffic movements would almost certainly represent changes in daily traffic flow of less than 10%. In accordance with Chapter 4.0, Table 4.1 , this suggests a negligible impact in respect of accidents and safety, subject to quality of infrastructure and existing accident records.

6.61 The proposed barging of extracted minerals to Ryall Quarry for processing and onward transportation provides for direct access to/from the primary route network, suitable for and which already accommodates regular HGV movements. Evaluation of existing accident data for the A38 in the vicinity of the site access does not suggest any inherent highway safety issues.

Conclusions

6.62 Evaluation of potential environmental effects identifies only accidents and safety as being potentially significant. Further assessment however identifies such effects as being neutral, treated as insignificant

6.63 No additional mitigation, compensation or enhancement measures in respect of accidents and safety is considered to be necessary; however, in order to reduce the potential for other issues associated with the passage of large vehicles along minor roads to arise, it is proposed that a number of management measures be implemented, equivalent to those implemented in respect of operations at Ryall North. These include agreement with the highway authority on timing, routeing and neighbour notification with respect to deliveries/collections of plant, machinery and fuel. Further detail is provided

in ES Chapter 4.0, paras 4.60 to 4.63 and on Drawing BTP-2010-01 Rev A (Volume 2.0, ES Appendices, Appendix 4.0).

6.64 No likely significant residual effects are identified.

6.65 The proposed development is in accordance with the NPPF and WMLP draft Policies MLP 26 and 39.

Water Environment

6.66 As required by the NPPF para 167 and draft Policies MLP 37, and 38, SWDP Policies 28, 31 and draft SWDPR Policy 32 the proposed development would not give rise to unacceptable impacts in terms of increased flood risk and quality, quantity and flow of surface and groundwater. The restored Site would enhance flood attenuation.

6.67 It is proposed to dewater in order to work the land dry. A small volume of the water derived from the dewatering process would be used on-site for dust suppression. Water abstracted from the void that is not consumed would be discharged to the former Ripple Quarry restoration lakes to the west under the conditions of an abstraction transfer licence and a discharge permit. Suspended solids would be allowed to settle out of suspension in the quarry sump prior to discharge off-site. Once restored, drainage from the Site would be captured by the restored lake in the quarry void.

6.68 Appendix 5.4 contains an assessment of dewatering rates from surface water and groundwater ingress into the quarry void.

Hydrological Impact Assessment and Flood Risk

6.69 A *Hydrological Impact Assessment* (HIA) has been prepared and is included as ES Chapter 5.0 (Volume 2.0, ES).

6.70 As the site exceeds 1 hectare a *Flood Risk Assessment* (FRA) has also been undertaken which is included as ES Chapter 5.0, Appendix 5.3 (Volume 2.0, ES).

6.71 The FRA is in accordance with the NPPF and supporting PPG to satisfy both EA and the Lead Local Flood Authority (WCC) that all potential flood risks to and from the proposed development have been considered.

6.72 The principal objective of the FRA is to demonstrate that the proposed development would not increase the flood risk at the Site or elsewhere. The assessment includes site-specific calculations to estimate surface water run-off for the greenfield, developed, and restored Site. These calculations also account for the effect of climate change, using advice given in the current EA guidance. Site-

specific flood risk mitigation measures have been included with recommendations for a strategy to manage and mitigate flood risks posed to, or resulting from, the Site.

Flood Risk

6.73 The NPPF categorises sand and gravel working as a 'water compatible' land use and therefore, according to the *Flood Risk Vulnerability Classification*[28], the proposed development is acceptable within Flood Zone 1, 2, and 3 (a & b) provided it:

- Remains safe in times of flooding whilst taking climate change into account;
- results in no net loss of floodplain storage;
- does not impede flood water flows; and
- does not increase the volume and rate of surface water runoff leaving the site over its intended design lifetime (thereby increasing local flood risk).

6.74 Each of these requirements is discussed in relation to the proposed development in ES chapter 5.0 and associated appendices.

6.75 Extracted materials would be stockpiled in the vicinity of the wharf. This has been common practice during mineral working developments in this area in the past and the currently modelled flood extents were undertaken with an historical stockpile in place. Whilst the presence of a proposed stockpile in the floodplain would result in some loss of floodplain storage, this would be offset by the creation of quarry voids during the excavation of the material as well as the large, recently created restored lakes adjacent to the Site. The restored quarry void lake area would further increase the storage capacity of the area post restoration, relative to the current arrangements.

6.76 The Drainage Scheme (Appendix 5.3, Volume 2.0, ES) would principally use the large restored lake (WB2), which was used in connection with the previous quarry working, for water attenuation prior to overflowing to the river

6.77 Following restoration, runoff would predominantly be attenuated in the proposed restored lake. From here it would infiltrate to the sand and gravel aquifer, overflow into Stream A and/or WB1 or evaporate.

Hydrological and Hydrogeological Impacts

6.78 The HIA included a review of the baseline hydrogeology and hydrology for the proposed development and surrounding area, identification of receptors and assessment of likely significant

[28] NPPF Annex 3 and Planning Practice Guidance, Table 2 Para 028 Ref: ID 7-028-20140306

hydrological/hydrogeological effects from the proposed development, and recommendations for appropriate monitoring and mitigation measures.

6.79 Hydrological and hydrogeological baseline conditions within the Site and surrounding area were established and a conceptual model developed based on these. In characterising baseline conditions, potential receptors which the proposed development could affect were identified and this work was further informed by a Site visit and water features survey undertaken on 17 March 2020.

6.80 The primary receptors in the study area, which are detailed in the baseline section and could potentially be influenced are:

- Quarry restoration lakes WB1 and WB2;
- Stream A;
- Ripple Lake;
- River Severn and Ripple Brook;
- other water features within the study area;
- the sand and gravel aquifer resource (Secondary A aquifer);
- Ripple Lake and the Napps LWS (including WB3);
- Ripple Meadow LWS; and
- neighbouring licenced or protected rights abstractions.

Proposed Mitigation

6.81 There is potential for significant effects on:

- Ripple Lake and the Napps LWS downstream of the Site; and
- groundwater and surface water quality due to accidental spillage.

6.82 Potential impacts on Ripple Lake and the Napps LWS could comprise lowering of groundwater levels due to dewatering. To mitigate the potential impacts on the LWS, water would be discharged via Stream A to Ripple Lake, or directly to other water features within the LWS, as required to maintain lake levels. Additionally, water would be discharged as required to maintain lake levels in WB1 and WB2. All discharges would be undertaken periodically to maintain a minimum depth of water within the waterbodies sufficient to support flows.

6.83 A fuel or chemical spill is considered unlikely. CEMEX's policy dictates that standard practice would be followed to minimise the impact of refuelling and the storage of fuel and oil etc. on the environment in accordance with the EA guidance and to manage a spill if one should occur. Drainage systems would be regularly inspected to ensure that visible oil is not present. An environmental management system would be established to ensure that all procedures follow standard best practice.

6.84 Although not considered a significant risk, if required settlement lagoons were to be utilised to achieve the required water quality in line with the discharge permit (to be obtained).

Proposed Monitoring

6.85 It is proposed that the following monitoring will be undertaken:

- Groundwater levels in all six monitoring boreholes (monthly);
- Groundwater quality monitoring in all six monitoring boreholes (quarterly);
- Monitoring of surface water levels in WB1, WB2 and Ripple Lake (WB3); and
- Water quality and flow monitoring as required by the abstraction licences and discharge permit (to be obtained).

6.86 Monitoring of water levels in Ripple Lake would be used to inform the requirement for the above mitigation measures.

HIA and FRA Summary Results

6.87 The results of the HIA and FRA are summarised below.

- The conceptual model indicates that the sand and gravel aquifer is hydraulically connected to surface watercourses and waterbodies at the Site. Groundwater flows westwards towards the River Severn.
- Receptors are buildings and infrastructure, waterbodies WB1 and WB2, Stream A, Ripple Lake, the sand and gravel aquifer and neighbouring licenced abstractions.
- Effects on water levels, water quality, licenced abstractions and baseflow have been assessed and these are largely expected to be insignificant. Significant effects could occur on Ripple Lake water levels and on water quality from spillages.
- Effects from spillages are mitigable to insignificant using standard water quality control measures. Impacts on Ripple Lake could be mitigated by periodical discharge of dewatering water via Stream A to Ripple Lake.
- There would be no increased flood risk from the Site, during operation or following restoration, to neighbouring receptors and a drainage strategy has been developed to demonstrate that greenfield runoff rates are not exceeded during the operational and restoration stages.
- Screening bunds constructed during the operational phases would be located outside of the floodplain.
- Available flood storage would increase compared to greenfield conditions for the operational and restoration stages. This would have a beneficial effect on downstream flood risk. Dewatering would be undertaken under the terms of an abstraction (transfer) licence.

- Dewatering of the quarry void would be undertaken under a new abstraction (transfer) licence. Dewatering water will be discharged from the Site under a new discharge activity environmental permit and impacts would be insignificant.
- Long term impacts on groundwater levels and stream flows have been assessed and would not be significant.

6.88 With the mitigation measures in place, it is concluded that residual effects from the proposed development would be Neutral (not significant). Flood risk to downstream receptors would reduce and this has been assessed to be a Slight Benefit

6.89 The proposed development is in accordance with the NPPF, draft Policies MLP 37 and 38 and SWDP Policies 28, 31 and draft SWDPR Policy 32.

Geotechnical Assessment

6.90 The NPPF para 174(e) and SWDP Policy 31, support development which would not give rise to unacceptable levels of land instability.

6.91 An assessment of the impact of the proposed development on the nearby M50 motorway and associated Queenhill Bridge and embankment was undertaken in September 2020. It concluded that with appropriate stand-offs from the motorway, 1v:2h excavation slopes and an appropriate dewatering method in place, the impact on slope instability would be negligible.

6.92 Further to a review in February 2022 and in light of the hydrological and hydrogeological assessment, latest groundwater monitoring data and dewatering assessment, it was considered that the Geotechnical Assessment conclusions remain valid. The initial *Geotechnical Assessment* and review note are included in Volume 1.0, Appendix 5.0.

6.93 The proposed development would be in accordance with the NPPF and SWDP Policy 31.

Ecology

6.94 In accordance with NPPF paras 174 and 179, draft MLP Policy 31, SWDP Policy 22 and draft SWDPR Policy 26, the proposed development would protect priority species and sites of biodiversity (in a manner commensurate with their status) and minimise impacts and provide net gains for biodiversity, including establishing coherent ecological networks. The restored Site would promote the conservation, restoration and enhancement of priority habitats and integration of green infrastructure (draft MLP Policy 7) with the establishment of a mosaic of habitats, many of which are identified in the UK Biodiversity Action Plan and include:

- Ponds (seasonal or perched);
- Aquifer fed naturally occurring fluctuating waterbodies;
- Reedbed and Margins
- Lowland Mixed Deciduous Woodland (including Woodland edge);
- Lowland meadows;
- Traditional Orchards;
- Replacement and new Hedgerows; nectar rich field margins; and
- Agricultural land.

6.95 In accordance with the adopted and emerging Development Plan policies, all the required technical assessments have been undertaken, with the results set out in Chapter 6.0 of the ES (Volume 2.0 ES) and the associated Preliminary Ecological Appraisal (Appendix 6.1), Ecological Impact Assessment (Appendix 6.2) and Invasive Species Survey (Appendix 6.3).

Preliminary Ecological Appraisal and Phase 2 Surveys

6.96 The Preliminary Ecological Appraisal (PEA) comprised desk top analysis of maps and aerial photographs and biological records data search for protected species prior to Phase 1 habitat survey and mapping. All surveys were undertaken in accordance with the Chartered Institute of Ecological and Environmental Management standards and advice and the PEA prepared in line with the requirements of the NPPF and the Natural Environment and Rural Communities Act 2006.

6.97 The findings of the PEA are summarised below and appendices I to V of the PEA provide additional information on the species which were surveyed.

- Within the surveyed area (2km radius) there were no designated sites, therefore, no sites would be directly affected by the proposed development. There were five non-Statutory Local Wildlife Sites (LWS). Ripple Lake and The Napps (LWS) is situated beyond the field boundary on the south-western aspect. This area is designated for its wet woodland and floral species it supports; therefore, this site would not be negatively affected by the proposed works.
- The area which would be affected by the works is predominantly arable land, which has low ecological value.
- One length of defunct hedgerow would be removed as part of the works. Although this hedgerow is species poor, it can, and does, support a range of protected species. This habitat is also a NERC Priority habitat.
- All other habitats affected provide little to no ecological value.

- The woodland, mature trees and standing water have high ecological value. These habitats would not be affected, and recommendations have been made to ensure the works do not affect these habitats and their ecological value.
- Overall, the development will have a low impact on the biodiversity of the site as high value habitats would be retained.
- [redacted]
- The ditches on the Site boundaries provide suitable habitat for water voles although no field signs were identified. The ditches would not be affected by the proposed development and therefore, no water voles would be affected.
- The surveyed area was unsuitable for otter and no otter holts or fields signs were identified within it. It is also highly unlikely this species would utilise the waterbodies surrounding the surveyed area although they do provide a suitable habitat for foraging otters. The otters also have ideal habitat along the River Severn, which the otters could commute to and from. Therefore, no otter holts would be affected by the proposed development.
- No waterbodies, suitable for white clawed crayfish were identified within the surveyed area. There are no records of this species within the local area which makes their presence within the waterbodies surrounding the site highly unlikely. Therefore, no white clawed crayfish would be affected by the proposed development.
- No buildings, or structures, would be affected by the proposed development, therefore, no roosting bats within structures would be affected.
- There were numerous trees on the boundaries of the surveyed area, which were assessed as having low and moderate bat roost potential. The proposed development would not affect the boundaries (see also the Arboricultural Impact Assessment, Volume 1.0, Appendix 7.0) and therefore, no roosting bats within trees would be affected. It is also noted all works would be carried out during the daytime.
- The woodland, hedgerows and waterbodies provide ideal habitat for foraging and commuting bats and were assessed as having high suitability for foraging and commuting bats. The arable land provides low value foraging habitat. The proposed development would affect the arable land and one single length of hedgerow, which is fragmented from any other suitable habitat. Therefore, no foraging or commuting bats would be affected.

- There were ten ponds within 500m of the surveyed area which could provide habitat for great crested newts. The ponds ranged between 'Excellent' and 'Poor' on the HSI assessment. The arable land provides low value habitat for this species although the grassland and hedgerows provide suitable habitat. There are recent records of great crested newts within the local area, including within one of the ponds within 500m. Therefore, the proposed development could have a high impact on this species if they are present within these ponds.
- All habitats on site on site are suitable for nesting birds. Any works carried out during the nesting bird season could have a high impact on nesting birds within the surveyed area.
- The vast majority of the surveyed area provide low value habitat for reptiles and high value habitat such as boundary hedgerows and woodland will be retained. Therefore, the proposed development could have a low impact on any reptiles within the area without care and consideration during the initial works.
- The woodland pocket does support limited suitable habitat for hazel dormice although is fragmented from any larger woodland pockets. The works would not affect any suitable habitat, and therefore, no hazel dormice would be affected by the proposed development.
- The surveyed area is outside of the known UK range for red squirrels. Therefore, no red squirrels would be affected by the proposed development.
- No invasive non-native plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 were identified within the surveyed area. Therefore, no such species would be affected by the proposed development.

6.98 Based on the PEA recommendations the following Phase 2 ecological surveys were undertaken.

- Updated Badger Surveys.
- Full Aquatic Great Crested Newt Surveys.
- Habitat Suitability Index Survey.
- Invasive Species Survey.

6.99 The results of the PEA and Phase 2 surveys were used to inform the Ecological Impact Assessment (EcIA).

6.100 The PEA also includes the following recommendations.

- Birds - Prior to any hedgerows or arable land being disturbed during the nesting season, March to September, a nesting bird survey is carried out to identify the presence of nesting birds. The survey would be carried out within five days or the proposed initial impact on the habitats. If nesting birds are identified in the areas of vegetation the nests should be marked and would remain undisturbed until the young have fledged from the nest.

- Reptiles - all personnel working on the Site are briefed on the potential presence of reptiles on the Site and how to identify the species using the Toolbox Talk included in Appendix VIII of the PEA. In the unlikely event that reptiles are identified site personnel should carefully move the reptiles to suitable areas of habitat outside of the work Site and make note of the species, location found and release location. If a large number of reptiles are identified (5+), it is recommended that all works cease, and the ecologist should be contacted for further advice.
- Habitats - All works should leave a buffer of 8m from the remaining woodland and retained hedgerows to ensure these continue to provide high value habitats for a range of species.
- General - The reinstatement should include areas set aside for wildlife, such as wildlife corridors, and the creation of priority habitats, including species rich grasslands, wetlands and ponds. The reinstatement should also consider the creation of habitats suitable for the species present on and around the site, most notably badgers, bats and great crested newts.

Ecological Impact Assessment

6.101 The results of the assessment are provided in Section 4 of the EcIA and summarised below.

Designated Sites

6.102 The EcIA concludes that with mitigation in the form of ground water level monitoring and adherence to pollution control measures, there would be no Negative Residual Impact on Local Wildlife Sites as a result of the proposed development.

Habitats

6.103 Arable land, hedgerows, woodland, mature trees and standing water – measures have been designed into the proposed development i.e. confinement of works to low ecological value arable land, retention of high ecological value habitats and commuting routes and incorporation of unworked margins. With this mitigation in place, the EcIA concludes that there would be Low Negative Impact on any areas of high ecological value and Low Negative Residual Impact on low ecological value habitats, which include the arable land.

Species

6.104 Badgers – To maintain confidentiality about this protected species, details of the location, survey results and proposed mitigation are provided in ES Chapter 6.0 and the EcIA (Appendix 6.2) but are not included here. The EcIA concludes that with the measures designed into the proposed development (e.g. retention of existing boundary woodlands and vegetation) and additional mitigation to be agreed with Natural England, there would be no Negative Residual Impact on badgers.

6.105 Great Crested Newts (GCN) – The EcIA concludes that with mitigation to be agreed with Natural England through the grant of a European Protected Species Licence (installation of exclusion fencing and pitfall traps) and additional mitigation in the form of the creation of terrestrial habitat outside the quarry working area, there would be a Minor Positive Residual Impact at a Local Level on GCN.

6.106 Bats, Birds, Reptiles – The EcIA concludes that with the measures designed into the proposed development and the additional mitigation outlined in the EcIA and summarised under para 6.100 above (nesting bird survey) there would be no Negative Residual Impact on bats and no Negative Residual Impact at a Local Level on nesting birds or on reptiles.

Conclusions

6.107 The Site is assessed to have a very low ecological value at the present time. The Site comprises arable land which often supports bare ground; this is of minimal ecological value to wildlife. The hedgerows and woodland around the Site boundary provide the best habitat particularly for birds and bats.

6.108 The hedgerows on the boundaries contain the best ecological habitat on the Site and all but one small section of defunct hedgerow, are to be retained and safeguarded through appropriate stand-offs. The woodland edge would also be safeguarded.

6.109 Without mitigation, the proposed preparation phase of the development would cause the loss of existing great crested newt terrestrial land and of a badger sett. However, the mitigation and compensation measures that would be implemented would greatly improve and enhance the ecological value of the Site.

6.110 In addition to the retention and creation of habitats outlined, the restoration scheme is extensive and would provide a mosaic of valuable habitats across the Site many of which are identified in the UK Biodiversity Action Plan.

6.111 The proposed development would have a minimal negative impact on the Site as it is currently of such low ecological value. The restoration scheme would provide a significant improvement of the habitat on the Site for the benefit of all wildlife and would enhance the overall ecological value of the Site.

6.112 The proposed development is in accordance with the NPPF and draft MLP Policy 7 and 31 SWDP Policy 22 and draft SWDPR Policy 26 relating to protection and enhancement of biodiversity and green infrastructure.

Habitats Regulation Assessment

6.113 A Habitat Regulations Assessment (HRA) of the impact of the proposed development on the Severn Estuary/Môr Hafren Designated Special Area of Conservation (SAC) UK0013030, Special Protection Area (SPA) UK9015022 and Ramsar Site UK11081 has been undertaken and is included as Appendix 6.0 of Volume 1.0.

6.114 The Habitats Directive applies the precautionary principle to relevant designated areas, in so much as plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of Natura 2000 sites.

6.115 The purpose of this report is to determine whether the proposed development, either alone or in combination, would have an adverse effect on the integrity of the Severn Estuary SAC/SPA/Ramsar Site with respect to the conservation objectives. This designation is located approximately 30km southwest of the Site.

6.116 Where impacts are considered likely, the report details the mitigation measures and assesses them to ensure these are appropriate in mitigating any impacts.

6.117 Ripple Lake and The Napps, the River Severn and Mythe Brook catchment area, are located adjacent to the Site. Existing barge loading facilities, on the banks of the River Severn, would also be used. Therefore, these areas, which are considered ecologically important for supporting qualifying features for which the Natura 2000 site is designed, could be adversely affected. The specific concerns are migratory fish and overwintering bird species. The Stage 1 and Stage 2 Assessments assess the impact of the proposals on these habitats, which are considered to have actual, or likely functional, linkage to the Severn Estuary SAC/SPA/Ramsar site.

Stage 1 Assessment

6.118 The Stage 1 conclusions are set out in the table below (Table 4 in the HRA document)

Table 4. Summary Table of the Potential Impact and Screening Outcome concluding the Stage 1 assessment.

Potential Impact	Screening Outcome
Hydrology	The proposals could impact upon groundwater levels and flow rates.
Water quality	The proposals could impact upon water quality due to contamination and increased sediments. Therefore, further assessment is necessary.
Air quality	There is potential for an impact on air quality from dust and fumes created during the process and therefore a further assessment is necessary.

Disturbance.	There is potential for a minor impact from construction activity noise and increase human presence. Therefore, further assessment is necessary.
Direct loss or damage of habitats	Damage of habitats could be caused by the changes in hydrology and water and air quality. Therefore, further assessment is necessary.
Introduction or spread of non-native invasive species.	No likely significant effect.
Change in management regimes	No likely significant effect.
Urbanisation	No likely significant effect.

6.119 As the Stage 1 Assessment identified 'likely significant effects' (LSEs) on the qualifying features of the Severn Estuary SAC/SPA/Ramsar Site, a Stage 2 – Appropriate Assessment was required.

Appropriate Assessment

6.120 Section 8 of the HRA considers the potential threats/impacts on qualifying features of the Severn Estuary SAC/SPA/Ramsar Site present on functionally linked land within the locality of the proposed development in the context of the mitigation measures identified in the ES chapters for hydrology, hydrogeology, flood risk and geology, noise and dust and air quality.

6.121 The overall assessment, taking account of the precautions and mitigation implemented pre, during and post works, determined that there would be no deleterious effects on the integrity of the Severn Estuary SAC/SPA/Ramsar Site. As there would be no impact on the conservation objectives for this Site and no in combination effects, it was not necessary to undertake Stage 3 of the HRA process.

Landscape and Visual Impact

6.122 In accordance with the NPPF (paras 210 and 174), the proposed development could be implemented without unacceptable adverse impacts on the natural environment, taking account of the effects of cumulative impacts and recognising the intrinsic character and beauty of the countryside. The proposed phased restoration would ensure that the land is restored progressively and to a high standard with appropriate aftercare (Plan ref: 20/10/RIPPL/P2/RES-DETL and Appendix 4.0 *Outline Restoration and Five-Year Aftercare Scheme*).

6.123 In accordance with the draft MLP, the restored Site would strengthen the landscape characteristics, connectivity and legibility including through the re-instating and strengthening hedgerows and habitats (draft Policy MLP 33: Landscape). The proposed development would be supported by draft Policy MLP 7: Green Infrastructure in conserving and enhancing green networks, particularly woodland, throughout the life of the development, to achieve net gains.

6.124 The existing agricultural track would be reinstated at a lower level and a new section of footpath provided to link the existing PRoW RP-549 (which would remain on its current alignment) with Bow Lane to the south of Silvermead and the existing PRoW RP-549 (draft MLP 30: Access and Recreation). The proposed development would not cause visual harm to sensitive receptors (draft Policy MLP 28: Amenity).

6.125 It would contribute towards the delivery of the Lower Severn Strategic Corridor priorities (MLP 9) which include creating wetland features, wetland grassland, reedbed and lowland meadows, conserving, enhancing and restoring characteristic hedgerow patterns and tree cover along watercourses and streamlines and creating a community orchard.

Landscape and Visual Impact Assessment

6.126 In line with SWDP Policy 25: Landscape Character, the planning application is accompanied by a *Landscape and Visual Impact Assessment* (LVIA). The LVIA and associated appendices are included as ES Chapter 7.0 and Appendix 7.1 – Assessment Methodology and 7.2 – Viewpoint Locations.

6.127 The Zone of Theoretical Visibility is shown on Plate 1 in ES Chapter 7.0. Following a field visit the study area was reduced to within 1km of the Site's boundaries. This was due to the Site being well screened on 3 sides with relatively few locations available with views to the Site's interior, together with the low-level nature of the proposed development, which would not be visible outside of this more restricted visual envelope.

6.128 The Site lies within National Character Area (NCA) 106 – "Severn and Avon Vales". The most relevant Statement of Environmental Opportunity (SEO) is SEO 1:

> **SEO 1**: Protect and manage the landscape, heritage and biodiversity associated with the Severn Estuary, the river valleys and other hydrological features, planning for a landscape scale expansion of wetlands, inter-tidal habitats and unimproved grasslands along river floodplains through, restoration, expansion and re-linkage of existing remnant areas of semi-natural habitat."

6.129 The Site can support this wider aim through:

- Maintaining, restoring and creating areas of wetland habitat;
- Managing standing water features to maintain their significant biodiversity interest;
- Management of agricultural drainage/land use, increasing flood water storage capacity and reducing surface water run-off and soil erosion.

6.130 At County level, the Site lies within the 'Malvern Hills Character Area' and within the 'Settled Farmlands on River Terrace' Landscape Character Type (LCT) and Landscape Description Unit MW69 "Holly Green Settled Farmlands on River Terraces".

6.131 Landscape guidelines for managing change are as follows:

- Retain the integrity of the dispersed settlement pattern;
- Conserve and enhance tree cover along watercourse;
- Seek to maintain cropping/horticultural land uses;
- Enhance patterns of tree cover associated with settlement; and
- Conserve and enhance patterns of hedgerows.

6.132 The River Meadows LCT which encompasses the River Severn corridor and grassland either side of the channel is to the immediate west.

6.133 Landscape guidelines for managing change are as follows:

- Seek to retain the unity of the linear form of these landscapes;
- Conserve all existing areas of permanent pasture;
- Seek opportunities to encourage the conversion of arable land back to pastur;e
- Conserve and enhance continuous tree cover along hedgelines, ditches and watercourses;
- Conserve existing wetland habitats and seek opportunities for further wetland habitat creation;
- Avoid building or road construction works;
- Avoid further drainage of waterside meadows; and
- Explore opportunities to return to patterns and processes of natural flooding cycles where feasible.

Design and Assessment

6.134 The proposed development has undergone a series of changes, to refine the proposals, with the aim of avoiding and minimising potentially significant landscape and visual effects and it has been informed by local character assessments and planning policy.

6.135 The assessment process considered a variety of aspects, including extent of mineral extraction (lateral and vertical), phased working and restoration and the use of visual screening and restoration and after use.

6.136 The assessment took into consideration the sensitivities of the landscape characteristics (within the Site and outside of the Site) of the landscape character and of visual receptors and their likely response to any changes in visual amenity.

6.137 11 viewpoint locations were identified within the study area, although 3 were scoped out due to their similar nature to chosen viewpoints and to keep the assessment proportionate to the nature of the development proposed. The selected viewpoint locations/viewpoints are shown on Figures L1-L9 (Appendix 7.2). The viewpoints are described in Table 3 and paras 7.90 to 7.114 of ES Chapter 7.0.

6.138 There is a single assessed view where the Site is visible in its entirety, from the slightly elevated section of Bow Lane towards its crossing point with the M50 motorway just beyond the southeast corner of the Site.

6.139 There are only a limited number of public viewpoints where parts of the Site and the proposed development would be clearly visible. These include close range views from the nearest property 'Silvermead' and the public footpath (549) inside the northern Site boundary (Refer to Viewpoints 4 and 6). Mitigation is incorporated to address these impacts, including unworked margins and screening soil bunds, movement of extracted materials by barge rather than by road, limited on-site plant and machinery, short term, phased working (north-south) and progressive restoration at the earliest opportunity.

6.140 The restoration design would re-establish high grade agricultural land and create new features of nature conservation and biodiversity value, in furtherance of the objectives of the national and local landscape character designations and UK and CEMEX's own Biodiversity Action Plan.

Conclusions

6.141 Overall, the characteristics and landscape character of the Site and the local area in the vicinity of the Site have been assessed as having Medium value.

6.142 Accounting for mitigation, none of the adverse visual effects are considered to be Significant. The majority of the Site is well screened by boundary vegetation and linear woodland surrounding it. It is only the lower eastern and southern sides of the site (Bow Lane and M50 corridor) which have more open aspects allowing for views over the entirety of the Site. However, these views are also restricted to the close range as beyond this intervening topography, field boundary vegetation and the well-enclosed river terrace position largely prevent views from any further afield.

6.143 The adverse effects on visual amenity are considered limited to an overall maximum level of Moderate-Major and Not Significant but more generally Moderate and below, noting that these are

short-term effects lasting predominantly during periods of closest working. It is noted that Moderate level effects relate to locations within publicly accessible locations within the site or residences at the very edge of the Site which are generally of higher sensitivity. In all cases, the effects are temporary and/or short-term, relating to the visible phase of works.

6.144 Due to the limited visibility of the Site, particularly once new woodland and hedgerow planting have established, the beneficial effects upon restoration are generally restricted to a Minor or lower beneficial effect in the long term.

6.145 At a Site level, the overall effects on landscape characteristics and character within the Site is restricted to a Moderate/Major (not Significant), reducing further once new planting and other restoration features are established. In terms of the wider locality, key characteristics are broadly retained and much of the Site is generally not discernible from the wider landscape character area. Due to the phasing of works, progressive restoration and mitigation, perceptible effects on landscape character are anticipated to reduce to a Minor-Moderate and Minor level of effect in the local area.

6.146 At a Site level, upon restoration the effects are considered to be of Minor Beneficial significance during the residual period. Due to predicted limited perceptibility within the wider locality, the overall residual effects on character may be considered to be Negligible–Minor Beneficial effect, allowing greater potential for landscape diversity and connectivity.

6.147 The proposed development is in accordance with the NPPF and draft policies MLP 7, 9, 28, 30 and 33)

Archaeology and Cultural Heritage

6.148 In accordance with NPPF para, Policy MLP 7 and MLP 9 and draft Policy MLP 32 and SWDP Policy 6 and 24 and draft SWDPR Policy 5 and 28, the importance, management and safeguarding of the historic environment resource has been assessed and addressed.

Archaeology and Heritage Assessment and Conclusions

6.149 An *Archaeology and Cultural Heritage Assessment* has been undertaken and is included as ES Chapter 8.0. It is supported by four technical appendices: Historic Desk-Based Assessment (Appendix 8.1); Geophysical Survey (Appendix 8.2); Archaeological Strategy (Appendix 8.3); and Written Scheme of Investigation (WSI) for an Archaeological Evaluation (Appendix 8.4).

6.150 The known archaeological resource within Site comprises features of prehistoric/Roman settlement and agriculture identified by geophysical survey and also potential further below-ground remains

which are not yet recorded. Additional features of much lesser heritage significance include remnant former medieval/post-medieval field boundaries and furrows, and potential remains of former twentieth-century buildings.

6.151 Prior to determination of the planning application, trial trenching will be undertaken to ascertain whether there are any further archaeological remains of the prehistoric and Roman periods which would be affected by the proposed development. The results will be incorporated as part of an addendum to this Chapter. The WSI (Appendix 8.4) has been provided to the Worcestershire County Archaeologist. It was based on a draft application boundary and working scheme and will need to be finalised based on this submitted planning application.

6.152 It is anticipated that any surviving archaeological remains would not be of the highest significance and thus mitigation through preservation *in-situ* of any below ground archaeological remains would not be required. As such and in line with the provisions of the NPPF and Development Plan Policy, a programme of industry-standard archaeological mitigation is proposed to record known and potential archaeological remains. NPPF para 205 notes that it is appropriate to record and advance understanding of the significance of any heritage assets to be lost, but also that the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted. It is therefore the case that the implementation of suitable recording as mitigation measures does not reduce the measured significance of the development effect upon them. It is concluded that the significance of the effect of development following mitigation would be Moderate Adverse upon the known and considered potential remains within the Site. Other archaeological remains, largely associated with the medieval and post-medieval agricultural use of the areas, are of lesser interest and the effects would not be significant.

6.153 The proposed development would not affect the settings or harm the significance of the majority of the designated heritage assets located within the environs of the Site. A temporary indirect Moderate Adverse effect during the operational phase of proposed development is identified on the significance of the Grade II Listed Station House due to the introduction of changes to its setting. Whilst embedded mitigation would serve to limit this effect, no additional mitigation can be identified that would serve to further reduce this over the 12 to 18 month period of the proposed development. However, the effect on this heritage receptor would be temporary in nature only and would reduce to Neutral following completion of the proposed landscape restoration works.

6.154 The proposed development is in accordance with the NPPF, Policy MLP 7 and MLP 9 and draft Policy MLP 32 and SWDP Policy 6 and 24 and draft SWDPR Policy 5 and 28.

Noise

6.155 In accordance with the NPPF paras 174 and 211 and draft Policy MLP 28 and draft Policy SWDPR 35, the proposed development would not give rise to unacceptable noise impacts.

6.156 Traffic related emissions were 'screened out' of the assessment owing to the low off-site HGV movements (6 HGV movements per year) which would be well below the Institute of Air Quality Management thresholds.

6.157 A baseline air quality evaluation and assessment of dust and air quality impacts was undertaken on sensitive receptors within a 250m area of the Site.

6.158 It is expected that the plant and equipment to be used at Ripple East would be the same as that currently used at Ryall North. The sound power levels are derived from either BS5228, from measurements made at Ryall North, from manufacturer's datasheets or taken from machine badges. These are expected to be the maximum noise emission levels.

6.159 The extracted minerals would be transported by barge for processing at Ryall Quarry. This is an operational site which adheres to several planning conditions under planning permission reference 15/000012/CM. Best practice measures are in place to control noise form the Site in accordance with planning condition 5.

6.160 Surface mineral extraction operations, by their nature, generate noise due to the use of heavy machinery. During operations the risk of noise impacts would vary depending on the activity being undertaken and the location at which it is being carried out. The operational effects of the proposed development would include:

- Soil and overburden stripping and handling operations and screen mound construction operations;
- Minerals extraction operations and transportation to the wharf stockpile area;
- Wharf loading operations; and
- Restoration operations.

6.161 The proposed phased working incorporates an unworked margin of at least 50m from the residential receptors to the east, the closest being the property 'Silvermead'. Stripped topsoil, subsoil and over-burden would be placed in screening bunds along the eastern boundary of the working area. Best practice measures would be implemented, such as Site operator awareness and good neighbour policies, controlling drop heights and keeping plant in good working order.

Noise Assessment

6.162 A *Noise Assessment* has been undertaken to assess compliance with the relevant standards at the nearest noise-sensitive receptors during the proposed operational hours of the plant and equipment at the Site. The assessment and associated appendices are included as ES Chapter 9.0 and Appendix 9.0 (Volume 2.0).

6.163 A baseline noise survey was undertaken on a normal mid-week working day in accordance with the requirements of *BS7445:1996, Description and measurement of environmental noise*. The survey determined the prevailing ambient and background noise levels at locations representative of the nearest noise-sensitive receptors to the Site and informed the derivation of noise limits in accordance with the *Planning Practice Guidance for Minerals* (PPGM).

6.164 The 3 monitoring locations MP1 – Silvermead, MP2 – Gildridge and MP3 – Barley House are shown on Figure 9-2 (in ES Chapter 9.0) for the nearest noise sensitive receptors which are:

- Silvermead, Bow Lane;
- Station House, Bow Lane;
- Gildridge, Station Road;
- Toad Hall, Station Road;
- The Paddock, Ferry Lane;
- Barley House, Ferry Lane; and
- Residential property south of Barley House, Ferry Lane.

6.165 The assessment is based on the results of a series of noise predictions undertaken in accordance with the calculation methodology outlined in British Standard 5228-1:2009+A1:2014 *Code of practice for noise and vibration control on construction and open* sites and the results of the baseline noise survey.

6.166 The assessment represents a worst-case scenario where all plant would operate on top of the soils/overburden, with no screening to noise-sensitive receptors in place, for both the temporary and day to day operations.

6.167 Table 9.12 (ES Chapter 9.0) sets out the predicted worst-case noise levels from temporary operations and Table 9.13 the worst-case predicted noise levels generated by extraction, haulage and wharf loading operations at all locations assessed.

6.168 The noise assessment shows that noise levels at the nearby receptors generated by temporary, short-term operations would be well below the nominal 70dB $L_{Aeq,1hr}$ noise limit outlined in the PPGM at all locations assessed.

6.169 The assessment has also shown that noise levels at the nearby receptors, generated by normal, day to day operations would remain below the limits derived from the measured background noise levels in accordance with the guidance contained in the PPGM at all locations assessed.

6.170 The predicted noise levels from normal operations would also remain below the prevailing ambient noise levels at the nearby receptors and, therefore, a good standard of residential amenity would be maintained and the noise exposure would be below the lowest observed effect level.

Conclusion

6.171 Based on the operational activities described in, the application of good site management practices and subject to the adoption of the noise limits derived in accordance with the relevant guidance, the Site could be worked without causing adverse impacts at the nearby receptors.

6.172 The proposed development would be in accordance with the NPPF paras 174 and 211 and draft Policy MLP 28 and draft Policy SWDPR 35.

Air Quality

6.173 In accordance with the NPPF paras 174 and 211 and draft Polic7 MLP 29 and draft SWDPR Policy 36, the proposed development would not give rise to unacceptable impacts on air quality.

6.174 It is expected that the plant and equipment to be used at Ripple East would be the same as that currently used at Ryall North. No processing would take place at Ripple East.

6.175 The extracted minerals would be transported by barge for processing at Ryall Quarry. This is an operational site which adheres to several planning conditions under planning permission reference 15/000012/CM. Best practice measures are in place to keep the public highway clean and to control dust emissions in accordance with planning conditions 2 and 5.

6.176 The operational effects of the proposed development would include:

- Site preparation and restoration;
- mineral extraction;
- materials handling;
- on-site transportation;
- stockpiles and other exposed surfaces; and
- off-site transportation (from Ryall Quarry).

6.177 The proposed phased working at Ripple East incorporates an unworked margin of at least 50m from the closest residential receptor, ‘Silvermead’. Best practice measures would also be implemented

such as: timing of operations in relation to weather conditions; phasing of extraction and restoration; grass seeding soil bunds; controlling stockpile heights and drop heights; and introducing on-site speed limits.

Air Quality Assessment

6.178 An *Air Quality Assessment (AQA)* covering dust and traffic related emissions has been undertaken and the results are set out in ES Chapter 10. The assessment was prepared in accordance with guidance produced by the Institute of Air Quality Management (IAQM) and Department for Environment, Food and Rural Affairs (Defra).

6.179 The AQA considered the potential effects of dust and traffic emissions (Nitrogen Dioxide NO^2 and Particulate Matter PM^{10}) on air quality.

6.180 Traffic related emissions were 'screened out' owing to the low off-site HGV movements (6 HGV movements per year) which are well below the IAQM thresholds.

6.181 A baseline air quality evaluation and assessment of dust and air quality impacts was undertaken on sensitive receptors within a 250m area of the Site.

6.182 The sensitive residential receptor locations which could potentially be affected by dust from the Proposed development are listed in Table 10.5 of ES Chapter 10.0 and shown on Figure 1 (Volume 2.0, Appendix 10.0).

- R1 (Silvermead property)
- R2 (Residential property on Bow Lane)
- R3 (Residential property on Bow Lane)
- R4 (Residential property on Bow Lane)
- R5 (Residential property on Bow Lane)
- R6 (Residential property on Station Road)
- R7 (Residential property on Station Road)
- R8 (Residential property on Station Road)
- R9 (footpath on the northern boundary)
- R10 (Caravan Encampment)

6.183 Provided that the suggested dust mitigation measures are applied, the assessment shows there would be at most slight adverse impacts at the existing receptors. Tables 10.8 to 10.13 in ES Chapter 10.0 summarise the likely significant effects arising from the proposed activities during site preparation, extraction, materials handling, on-site and off-site transportation, stockpiling and restoration.

6.184 Silvermead, the Caravan encampment and a residential property on Bow Lane (R2) may experience up to a moderate adverse effect from the proposed development. However, with rigorous application of the proposed mitigation measures and best practice measures, adverse dust and air quality impacts in the vicinity of the Site are not predicted to be significant.

Conclusions

6.185 The AQA assessment shows that the proposed development at Ripple East could be undertaken in a manner unlikely to cause significant adverse air quality or dust impacts in the vicinity, and with reference to best practice guidance the overall impact is considered to be not significant. It is in accordance with national policy and draft Policy MLP 29 and draft SWDPR Policy 36.

Agriculture and Soils

6.186 The proposed development is in accordance with the NPPF (para 174) and local planning policies (draft MLP Policies 34 and 35) which seek to ensure that soils are protected and that account is taken of the economic and other benefits of the best and most versatile (BMV) agricultural land, the long-term potential of which should be safeguarded.

6.187 All soils would be retained on-site with appropriate provision made for soil stripping, handling and storage and for the re-use of soils (draft MLP Policy 34). The restoration scheme optimises the restoration of agricultural land quality and integration of green infrastructure components (draft MLP Policy 35).

6.188 The topsoil and upper subsoil should be retained for restoring high quality agricultural land, while low nutrient sandy soils can be restored to heathland and scrub (Para 4.122 of MWLP (2019)).

Agricultural Land Classification and Soils Resource Survey

6.189 An *Agricultural Land Classification (ALC) and Soil Resource Assessment* considers the impact of the proposed development on agricultural land quality and soil resources. The results are set out in ES Chapter 11.0 (Volume 2.0, ES).

6.190 The survey area extended to approximately 11.3 ha of gently undulating arable land. A detailed ALC survey was undertaken in December 2019 in accordance with the ALC System of England and Wales (Revised guidelines for grading the quality of land MAFF October 1988).

6.191 The full ALC and Soils Resource Report undertaken in line with Natural England current Good Practice Guidance is included as Appendix 11.0. It comprises the ALC report accompanied by 2 plans showing the soil survey locations (Drawing Ref: R14/1) and the distribution of ALC Grades (Drawing ref: R14/2).

Survey Results

6.192 The soils are described as "Deep well drained coarse loamy soils, locally over gravels". All the land is free-draining but the light textured soils over sand and gravel are limited by droughtiness. Where the soils are shallow over gravel the land is limited to grade 3b, but the deeper profiles are grade 3a.

6.193 The ALC grades are summarised as grade 3a (5.44ha) and grade 3b (5.86ha).

6.194 The main soil resource is the medium sandy loam topsoil which commonly occurs at a depth of between 35 and 40cm. This overlies a shallow band of loamy medium sand and sand upper subsoil with an average depth of 38cm, which sits on medium sand and gravel.

Agricultural Land and Soils Assessment

6.195 From the baseline information the proposed development could adversely affect 5.44ha of agricultural land in ALC Subgrade 3a (High sensitivity) and 5.86 hectares in ALC Subgrade 3b (Medium sensitivity) before the restoration of 3.97ha of grade 3a and 0.39ha of grade 3b. Additionally, 2.67ha would be restored as Conservation Grassland (potential grade 3b quality).

6.196 Therefore, there would be a permanent loss of 1.47ha of subgrade 3a (low magnitude) and 2.8ha of subgrade 3b (low magnitude) after Conservation Grassland is taken into account. The latter would be restored as marginal wetland and conservation lakes.

6.197 The Level of Effect on ALC subgrades 3a and 3b would be Minor in both cases, which is not significant. If the area of conservation grassland is not considered to be restored as grade 3b potential the level of effect on grade 3b land would remain Minor. The long-term impact of the proposed development on best and most versatile land quality is assessed to be neutral, with the potential to be marginally positive.

6.198 The medium sandy loam topsoil and loamy medium sand subsoil both have a Low sensitivity. The Level of Effect on Soils would be Minor, which is not significant.

6.199 ES Chapter 11.0, paras 11.44 to 11.58 describe the implementation of best practice soil handling and management measures which would help to minimise soil damage and achieve the target profiles to restore grade 3a land, conservation grassland (3b potential) and improve 4ha of adjacent undisturbed land by one sub-grade by spreading 0.15m of topsoil (Restoration Plan and Soils Depths Plans 20/10/RIPPL/P2-RES DETL and 20/10/RIPPL/P2-RES SOIL (Volume 1.0, Appendix 2.0).

Additional Mitigation

6.200 The assessment recommends that a detailed pitting survey be undertaken in advance of each phase to inform the depths and textures of the topsoil and subsoil that would be encountered and confirm

the depth to the mineral deposit. An audit would be carried out at the end of each soil moving phase to measure the predicted soil movements against the actual events. Monitoring in this way would allow the scheme to be progressively managed within the stated aims of restoration quality.

6.201 An *Outline Restoration and 5-year Aftercare Scheme* has been submitted with this application (Volume 1.0, Appendix 4.0) to be agreed with the mpa.

Conclusions

6.202 The proposed development takes account of the national and local planning policies relating to agricultural land (particularly BMV grades 1, 2 and 3a) and restoration following mineral working, including all the matters, which are commonly raised by Natural England and the relevant policies in NPPF for the protection of BMV land and the sustainable use of soils.

6.203 The effect of development is that agricultural land is temporarily taken out of production, but there is only a minor permanent loss of subgrade 3a agricultural land and subgrade 3b, which is restored as conservation lakes and marginal wetland. Additionally, the opportunity would be taken to use the available surplus topsoil resource to improve adjacent undisturbed agricultural land.

6.204 The level of effect on both agricultural land quality and soils is Minor in both cases, which is Not Significant.

6.205 The proposed development is in accordance with the NPPF and MLP draft Policies 34 and 35.

Arboriculture

6.206 In line with NPPF paragraph 180 (c) the proposed development would not result in the loss or deterioration of irreplaceable habitats[29]. In accordance with paragraph 174 (b), it would contribute to and enhance the local environment including by recognising the benefits of trees and woodlands. Most of the existing vegetation would be retained with suitable exclusions zones incorporated into the working scheme to protect trees during operations.

6.207 The Site would be restored to a high quality and include the introduction of native tree species (NPPF, Section 17, paragraph 211 (e)).

6.208 Through the provision of a mosaic of new habitats, the proposed development would protect and enhance inherent landscape character (draft Policy MLP 7 - Green Infrastructure) and contribute to

[29] NPPF para 180 (c) states that these include ancient woodland and ancient or veteran trees.

the conservation, enhancement and restoration of characteristic hedgerow patterns and tree cover along watercourses and streamlines (draft Policy MLP 9 - Lower Severn Strategic Corridor).

6.209 An *Outline Restoration and Five-Year Aftercare Scheme* is included as Appendix 4.0 (Volume 1.0), which provides for the appropriate management of retained and new vegetation.

Arboricultural Impact Assessment and Method Statement

6.210 A site visit and tree inspection survey was carried out based on British Standard BS5837:2012 "*Trees in Relation to Design, Demolition and Construction to Construction - Recommendations*". Its purpose was to inspect the existing tree resource within and adjacent to the Site boundary, to assess the general condition and amenity value of the trees, the potential impact of the proposed development and to identify the need for mitigation measures.

6.211 All the site information used for the assessment and grading of the individual trees, groups, woodlands and hedgerows has been recorded in a Tree Survey Table using the *Cascade Chart for Tree Quality Assessment* (BS 5837:2012) from which the template has also been taken (Volume 2.0, ES Appendix, 12.0 – ref: 22-01/L2/RIPL-EAST/1).

6.212 The *Arboricultural Impact Assessment* (AIA) *and Method Statement* includes a *Tree Constraints Plan* (TCP) and *Tree Protection Plan* (TPP) which are included in Volume 1.0, Appendix 7.0 (ref: 22-01/L2/RIPL-EAST/2 and 3).

6.213 In total 2 No. individual trees and 3 No. tree groups were surveyed. None would need to be removed during or as a result of the proposed development. Stand-off margins would be applied and tree protection fencing installed around the trees to be retained, adjacent to the development areas.

6.214 Guidance on the stand-off distances needed to prevent damage to retained trees and hedgerows during the extraction phases have been calculated and are shown on the TCP. The TPP shows the precise location and specification of protective fences and any other physical protection measures including ground protection to protect the Root Protection Area (RPA). Specifications for barrier fencing are included in Appendix 7.0 (Volume 1.0).

6.215 A section of Hedgerow H1 (shown on the TCP (ref: 22-01/L2/RIPL-EAST) coincides with the proposed extraction area and would need to be removed. It is proposed to translocate this hedge to the eastern boundary to gap fill and reinforce the existing hedge, where it is poor in some areas. This would have the advantage of providing an established hedgerow which would have obvious amenity benefits through strengthening the screening from the road.

6.216 Where hedgerows are retained, it is recommended that a minimum of a 2.5m standoff (measured from the stem of the hedge at ground level) is provided, which must be maintained for the duration of the proposed development. It is not practical or necessary to provide protective fencing for these areas.

6.217 It would be necessary to transport the extracted mineral by dumper truck to the barge loading point to the west of the Site, via the existing compacted track that runs between G1 and G2 (coloured yellow on the TPP). As this track is located partially within the RPAs of these 2 groups, it would be important to confine all vehicle movements to the compacted track and ensure the remaining boundaries of the RPAs are segregated with protective fencing.

6.218 Before any Site work commences a schedule would be prepared detailing any tree works required to implement the proposed development. This is likely to consist of the minor removal of low limbs that overhang haul road, where it coincides with the existing crossing, dissecting G1 and G2, by a competent tree surgeon.

6.219 The project Arboriculturist would need to carry out an assessment of tree maintenance once the type and size of machinery using this corridor has been confirmed.

6.220 It may be necessary to ensure that an ecology survey has been undertaken to identify trees or hedgerows that have the potential to provide habitats for wildlife. Therefore, it is recommended that an ecologist is engaged at an early stage to advise and carry out any survey work found to be necessary.

6.221 All work must be carried out by a competent tree surgeon to BS 3998:2010 *Tree work-Recommendations* or as modified by more recent research. It is advisable to select a contractor from the local authority list and preferably one approved by the Arboricultural Association[30].

Conclusions

6.222 Careful planning and continued consultation during the preparation of the tree survey and Site access layout plans has minimised the need to remove any trees of merit. Therefore, it is considered that the proposed development would not significantly change the amenity of the area.

6.223 Provided suitable protection is adopted during the operation of the Site and during the restoration phases, and where RPAs are compromised and mitigation is offered by means of the Arboricultural

[30] Telephone 01242 522152, website www.trees.org.uk/contractors.htm Their Register of Contractors is available free from The Malthouse, Stroud Green, Standish, Stonehouse, Gloucestershire GL10 3DL

Method Statement, it is reasonable to conclude that the proposed development would have a minor to negligible effect on the amenity of the area in respect of loss of trees.

6.224 The restoration proposals include the creation of new woodland blocks and new or reinforced hedgerows across the Site, which would create boundaries and provide a link between established peripheral hedgerows and features.

6.225 The proposed development is in accordance with the NPPF and draft Policies MLP 7 and 9.

Health Related Impacts

6.226 An assessment of *Health Related Impacts* is included as ES Chapter 12.0.

6.227 The NPPF supports the role of planning in creating healthy, inclusive communities by supporting local strategies to improve health, social and cultural wellbeing for all and by working with public health leads and health organisations to understand and take account of the health status and needs of the local population.

6.228 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 state in Section 4 (2) that:

> "The EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant (emphasis added) effect so the proposed development on the following factors:
>
> a) Population and human health."

6.229 WCC's *Validation Document*[31] provides "applicants and their agents with guidance on the information required by the County Council to support proposals for development when submitting a planning application."

6.230 With regard to the assessment of health impacts, the Document states that:

> "A Health Impact Assessment (HIA) is a structured way of predicting the health implications of a planning proposal on a population. HIA should aim to enhance the positive aspects of a proposal through assessment, while avoiding or minimising any negative impacts, with particular emphasis on disadvantaged sections of communities that might be affected.

[31] Validation Document, Update March 2020, Worcestershire County Council

HIA Screening is a process to determine the scale of health and wellbeing impacts generated by the development proposal. In areas covered by the South Worcestershire Development Plan, a HIA Screening will be required for all major developments. They include:

- the winning and working of minerals or the use of land for mineral-working deposits..”

6.231 WCC states that:

“HIA Screening should be undertaken and submitted to the County Planning Authority by the applicant. If the screening exercise identifies health and wellbeing impacts on the local population, the applicant may be asked to undertake and submit a full HIA.”

6.232 Based on the above, an initial Screening exercise was undertaken using WCC’s *Health Impact Assessment Screening Template*[32]. The completed template is included as Appendix to this chapter.

6.233 The screening exercise did not identify any likely significant health-related impacts associated with the proposals for sand and gravel extraction and restoration at Ripple East. However, for completeness and in response to advice from WCC’s Planning Development Management Team, further consideration has been given to the potential for any impacts.

6.234 The findings are set out in ES Chapter 12.0 and summarised in the *Health Impact Assessment Template* (Volume 2.0, Appendix 12.2).

6.235 The Chapter has been prepared in accordance with the Supplementary Planning Document (SPD)[33] *Planning for Health in South Worcestershire* and should be read in conjunction with the ES and technical appendices.

Conclusions

6.236 This assessment draws heavily on the extensive work undertaken for the EIA and in preparing the ES.

6.237 Overall, Worcestershire is not seen as a deprived area compared to England as a whole. The profile generally shows that life expectancy and employment are higher than the national average and within Ripple, the majority of the population consider that they have “good health” or “very good health”, which reflects both the county and national picture.

[32] Appendix 4, Validation Document
[33] September 2017 prepared jointly by Malvern Hills District Council, Worcester City Council, Wychavon District Council, in conjunction with WCC

6.238 Table 1 in ES Chapter 12.0 shows how the proposed development performs in relation to the wellbeing principles for South Worcestershire. The summary of health effects associated with the proposed development is included in Table 2 and this should be read in conjunction with the ES.

6.239 From the assessment, it is concluded that the proposed development would contribute positively to these principles, both directly and indirectly. It is not predicted to give rise to any significant adverse health-related impacts or undermine the health profile. Conversely, there would be some benefits.

6.240 The proposed Development would be in accordance with MLP Policy 28 and SWDP Policy 31.

Cumulative Impacts

6.241 This assessment has identified and taken account of interrelations between the various potential effects associated with the proposed Development, as well as cumulative effects of the proposed development in combination with off-site development.

6.242 The NPPF, paras 211 and 111 and Draft MLP Policy 28 support proposals which would not give rise to unacceptable cumulative effects from the site and/or sites in the locality with respect to dust, odour, noise and vibration, light, visual impacts and/or contamination, or result in severe residual cumulative impacts on the road network.

6.243 In November 2019, planning application reference 19/000048/CM was submitted to WCC by Moreton C. Cullimore. The site, 'land at Bow Farm' (Bow Farm), near Ripple, covers some 65 hectares and is located to the south of the proposed development at Ripple East, and to the south of the M50. The proposal is for the extraction of approximately 1.5 million tonnes (mt) of sand and gravel extraction at a rate of up to 250,000t per annum. The land would be restored using approximately 1.4mt of imported inert material to wetlands, nature conservation and agriculture. The working and restoration of the site would last approximately 9 years. Processing would take place on site with a new access constructed onto the A38. WCC is yet to determine the application.

Transport

6.244 Sand and gravel extracted from Ripple East would be transported by barge along the River Severn to CEMEX's operational facility at Ryall Quarry for processing. From here the construction materials would be delivered to the markets via the existing access with the A38. Therefore, the proposed development would not involve HGV movements on the local network in the vicinity of Ripple East and access to the Site from Bow Lane would be used only by Site staff and visitors, and periodically for the delivery/collection of mobile plant and machinery and fuel.

6.245 Exports from Ryall Quarry would remain consistent during the transfer of operations from CEMEX's current operations at Ryall North to Ripple East, being limited by processing capacity and market demand.

6.246 The Bow Farm proposals involve the direct export and import of material by road via a new access proposed to be formed along the A38 to the south of M50 Junction 1. The planning application was accompanied by a Transport Assessment (Mode Transport Planning, November 2019) which forecasts 5% of operational trips, equating to 7 two-way HGV traffic movements per day, to travel along the A38 to the north of M50 Junction 1 through the study area considered by the Transport Assessment for the Ripple East proposals.

6.247 Notwithstanding the forecast traffic movements associated with the Bow Farm proposals, as no change in traffic movements across the highway network as a whole is forecast to occur as a result of the Ripple East Proposed Development, there would be no cumulative impact, any resulting effects being wholly attributable to and needing to be addressed by the Bow Farm scheme.

Hydrology, Hydrogeology and Flood Risk

6.248 Cumulative impacts on the water environment could occur through positive interference of cones of depression caused by dewatering and abstraction.

6.249 CEMEX's operations at Ryall Quarry are sufficiently distant from the proposed development such that there would be no overlap with the predicted 303m radius of the proposed dewatering at Ripple East.

6.250 No interference is expected with the Bow Farm planning application as this development does not propose to undertake any dewatering activity.

6.251 There could be some interference between the dewatering operation and neighbouring abstractions which lie to the north of the Site, or abstract from WB2 (details are provided in ES Chapter 5.0). However, these lie outside the radius of influence and any interference is expected to be minimal. The cumulative level of effect of the proposed development on the groundwater environment is expected to be neutral.

6.252 The *Drainage Strategy* (Volume 2.0, ES, Appendix 5.3) ensures that there would be no cumulative flooding impacts. The creation of waterbodies may produce a long-term beneficial impact.

6.253 With regards to flood risk and drainage, there would be no significant cumulative impacts as each development must independently ensure that the key considerations set out on in Appendix 5.3, paragraph 5.3.100 are met; including no net loss of floodplain storage, no impeding of flood water flows and no increase in the volume and rate of surface water runoff leaving the Site.

Ecology

6.254 Given the low residual adverse impacts of the proposed development on ecology combined with the long-term positive effects on habitats and wildlife associated with the restoration of Ripple East:

- the proposed development would maintain and significantly enhance the biodiversity on Site, particularly those of Local and National priorities which would provide a long-term benefit in a Local to County context;
- although the pre-operational and operation phases are disruptive and contribute to ecological impacts on a local level, in the medium to long term the proposed development would not contribute to, or adversely effect, any other ecological impacts; and
- in the medium to long term, the proposed development may provide an opportunity to off-set and mitigate any existing or future adverse ecological impacts that may occur within the local landscape.

6.255 The *Ecological Impact Assessment* (Volume 2.0, ES Appendices, Appendix 6.2) concludes that cumulative impacts arising from habitat loss in combination with the proposed 'Bow Farm' development are discounted as the Ripple East extraction area would be confined to the low ecological value arable land and a single section of defunct hedgerow.

Landscape and Visual Impact

Cumulative Landscape Effects

6.256 A small cumulative effect is predicted as the Site lies adjacent to the recently restored Ripple Quarry. So, whilst Ripple East would be an additional area of sand and gravel extraction in the landscape it is of a relatively small scale and would be perceived as an extension to the area of the former Ripple Quarry. As Ripple Quarry forms parts of the extant baseline, it is accounted for in the landscape and visual assessment and as the Site would be progressively restored, adverse cumulative effects on the landscape are not considered material.

6.257 The Ripple East restoration scheme is of a similar nature to that for the former Ripple Quarry and as such the habitats proposed are also to allow for potential landscape scale linkages and interactions, which would be positive.

6.258 There is no discernible intervisibility with the Bow Farm proposals. A small cumulative effect is predicted for users of the M50 Motorway as it bisects the two proposed sites.

Cumulative Visual Effects

6.259 Whilst the Site lies adjacent to the former Ripple Quarry to the immediate west there are only glimpsed views available between the two sites from locations directly surrounding them. The woodland running the full length of the east side of Ripple Quarry effectively subdivides the sites into two distinct areas of landscape which are, in most views within the wider landscape, experienced separately. It is mainly from locations from within the Ripple East Site or from its boundaries such as Bow Lane, or the River Severn path directly opposite, where it is possible to have intervisibility between the two sites.

6.260 Therefore, there are some locations in the close vicinity of the two sites where a combined effect of a simultaneous nature is possible looking from the same direction. The neighbouring Ripple Quarry has been restored, subject to some remedial works and therefore, adverse visual effects experienced (albeit mostly not significant ones) from changes occurring to the Ripple East Site are not likely to be affected by the proximity of the Ripple Quarry to the immediate west. In most situations the quarries are viewed within the foreground to midground of wider views being set down in relation to distant landscape elements (such as the Malvern Hills) and are also well contained within the tract of landscape within the River Severn Terraces. Once fully restored the Ripple East Site should not detract from these views and complement the neighbouring Ripple East Site in terms of landscape structure and diversity.

6.261 There are no further cumulative visual effects with other proposed mineral workings in the wider landscape.

6.262 There may be some sequential visual effects in relation to the proposed development, such as from along the River Severn path to the east of the River channel. Due to the incorporated mitigation and the isolated, very limited extent of views afforded along this route, sequential visual effects would not be considered to give rise to greater (more significant) levels of effect compared to the individual effects for each viewpoint location as assessed.

Archaeology and Cultural Heritage

6.263 The EIA has assessed the potential cumulative effects on the setting of heritage assets and concluded that there would be no additional effects from development, when considered in-combination with the proposed development at Ripple East.

6.264 The *Historic Environment Desk-Based Assessment* (Technical Appendix 8.1) and the baseline summary provided in ES Chapter 8.0, has examined the results of archaeological investigations undertaken in connection with the Bow Farm planning application.

6.265 The archaeological desk-based assessment submitted with the Bow Farm application concluded that those proposals (including sand and gravel extraction, and processing plant infrastructure) would potentially have a Moderate adverse effect upon the significance of the Towbury Hillfort, noting that this would be in the short term due to restoration measures.

6.266 The significance of the hillfort has been articulated in ES Chapter 8.0 (Ripple East). Principal amongst the contributions to its significance are the earthworks themselves. Views out from the monument are very restricted due to the woodland, but where they are possible, these views contribute to the significance of the monument. The monument was designed to have wide-ranging views, including the river valley and the retention of these extensive views out from the monument is a factor in preserving its significance. Both this planning application for Ripple East and in-combination with the Bow Farm proposals, represent change within a wider landscape of multiple historic components, within limited views from the monument. That change is more extensive when considered in-combination, than the present Site alone. However, the key facets of the setting of the monument remain the same. The in-combination change would not reduce the availability of views; and the change within the landscape viewed (from post-medieval field enclosures to mineral extraction, and then restored landscape) would not lead to harm to the significance of the monument, greater than judged with regard to each application.

6.267 Similarly, it has been noted in ES Chapter 8.0 of this planning application, that excavation of below-ground remains within the present Site may potentially provide evidential value for further understanding the nature of the relationship between settlements and the hillfort. The remains may provide further information on the character and role of the Towbury Hillfort, and potentially increase knowledge of its prehistoric role and significance. Remains are not a visible or intelligible element in the landscape or experience of the hillfort, and thus again it is not considered that their excavation and study, in-combination with the results of work at Bow Farm, would cause additional harm than that identified (to Towbury Hillfort, or any other designated heritage assets) in ES Chapter 8.0, or identified separately in the Bow Farm application with regard to those proposals.

Noise

6.268 Due to the separation distance between the Bow Farm site and the noise-sensitive receptors identified in the noise assessment for the proposed development at Ripple East, noise from operations associated with the Bow Farm site are unlikely to increase the predicted noise levels shown in Table 9.13 of ES Chapter 9.0 for Ripple East. Therefore, there are no anticipated cumulative noise impacts given the distance of Bow Lane from Ripple East, and the proximity of the M50.

Dust and Air Quality

6.269 Should the activities at Bow Farm and Ripple East occur at the same time, there is not considered to be a risk of significant cumulative effects due to the sensitivity of the area in close proximity to both Sites, and the effectiveness of best practice control measures that will be conditioned for both Sites.

Agricultural Land Classification and Soils Resource

6.270 There would be no significant adverse effects on agricultural land or soil resources in combination with the Bow Farm proposals.

Arboriculture

6.271 The proposed development would not require the removal of any trees and most of the existing vegetation within the Ripple East Site would be retained. Protection fencing would be installed adjacent to the development around the trees to be retained and would remain in place for the duration of the works and until restoration has been completed.

6.272 The restoration proposals include the creation of new woodland blocks and new or reinforced hedgerows across the Site, which would create boundaries and provide a link between established peripheral hedgerows and features.

6.273 No significant adverse cumulative effects with nearby development proposals have been identified.

Net and Residual Effects

6.274 Table 13-1 in ES Chapter 13.0 summarises the overall conclusions from the key impacts arising from the proposed development. It describes the impact of each activity, any mitigation strategy or measure proposed to address the impact and the residual effect on the receptor following mitigation.

6.275 Full implementation of the recommended mitigation strategies will be key to the outcomes described throughout the ES.

7.0 SUMMARY AND CONCLUSION

7.1 This planning application has been prepared on behalf of CEMEX UK Operations Ltd (CEMEX) for the proposed extraction of sand and gravel with restoration to agriculture and nature conservation on land at Ripple East, Bow Lane, Ripple, Worcestershire, GL20 6EY.

7.2 The Site would be worked and restored over a 3-year period to supply Worcestershire with up to 475,000 tonnes of sand and gravel in 3 phases at a rate of circa 300,000 tonnes per annum.

7.3 Sand and gravel is an essential requirement for building and maintaining new housing and infrastructure and minerals can only be worked where they are found. Ripple East is within an Area of Search for Terrace and Glacial Sand and Gravel, within the Lower Severn Strategic Corridor identified in the emerging Minerals Local Plan (MLP). Whilst WCC is yet to confirm future minerals site allocations, the MLP confirms strategic corridors as the focus for future supplies of sand and gravel. CEMEX is promoting this and other land as extensions to Ryall Quarry through the MLP.

7.4 Aggregates extracted from Ripple East would be transported by barge to CEMEX's operational facility at Ryall Quarry for processing and onward delivery of construction materials to their established markets, via the primary route network. This would avoid the need for HGVs to use the local road network in the vicinity of the Site except for periodic delivery and collection of mobile plant and fuel.

7.5 Annual aggregate production rates would be the same as for the existing operations at Ryall North. Exports from Ryall Quarry would remain consistent during the transfer of operations from Ryall North to Ripple East, being limited by processing capacity and market demand. Therefore, it is anticipated that there would be no change to the operational traffic movements across the highway network. The only change would be the relocation of some staff movements from Ryall North to Ripple East.

7.6 The Site would be progressively restored using in-situ overburden and soils to a mosaic of land uses including agriculture, woodland, open water, ponds, reedbeds, lowland mixed deciduous woodland and lowland meadows, delivering significant habitat improvement for the benefit of all wildlife as well as enhancement of the green infrastructure networks.

7.7 This Statement includes a comprehensive assessment of the national and local planning policy context against which Worcestershire County Council will determine the planning application. Section 5.0 sets out how the proposed development would contribute to the replenishment of the County's aggregates landbank which is below the national minimum requirement of at least 7 years

of permitted reserves, providing for continuation of raw materials once reserves at the CEMEX operated Ryall North site come to an end.

7.8 An Environmental Impact Assessment has been undertaken and a comprehensive Environmental Statement accompanies this planning application. It demonstrates that with mitigation and best practice measures in place, the proposed development could be undertaken without unacceptable impacts on the environment or amenity. Furthermore, it would deliver substantial benefits by providing a sustainable supply of construction materials, sustaining direct and indirect employment, substantially enhancing ecological value and green infrastructure together, providing an additional public footpath link and potentially a community orchard, increased flood attenuation and financial contribution through business rates and the aggregates levy.

7.9 At the heart of the National Planning Policy Framework (NPPF) is a presumption in favour of sustainable development which applies both to plan-making and decision-taking. It is concluded that the proposed development for sand and gravel extraction with progressive restoration at Ripple East would be in accordance with the requirements of national and local planning policies and should be granted.

APPENDICES

Appendix 1

Application Form and Certificate

Appendix 2

Application Plans

Location Plan	21-11/P2/RIPL-EAST-1
Site Plan	21-11/P2/RIPL-EAST-2
Phasing Plan	21-11/P/2/RIPL-EAST-3
Method of Working	21-11/P2/RIPL-EAST-4
Restoration Plan	20-10/P2/RIPL-RES-DETL
Soil Depths	20-10/P2/RIPL-RES-SOIL

Appendix 3

Plans submitted for Information

Existing Site	21-11/P2/RIPL-EAST-2
Location Context Plan	21-12/P2/RIPL-EAST-5A

Appendix 4

Aftercare and Management

Outline Restoration and 5-Year Aftercare Scheme

Appendix 1: Annual Aftercare Table

Appendix 2: Annual Programme of Management

Appendix 3: Field Gate Detail (L/FE/25) and Fencing Detail (L/FE/2)

Appendix 5

Geotechnical Assessment

Appendix 6

Habitats Regulations Assessment

Appendix 7

Arboricultural Impact Assessment and Method Statement

Tree Survey	Drawing ref: 22-01/L2/RIPL-EAST/1
Tree Constraints Plan	Drawing ref: 22-01/L2/RIPL-EAST/2
Tree Protection Plan	Drawing ref: 22-01/L2/RIPL-EAST/3
Tree Protection Fencing	Drawing ref: L/FE/02