M54 to M6 Link Road

TR010054

Volume 6

6.3 Environmental Statement Appendices

Appendix 10.1 Minerals Safeguarding Report

Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

January 2020

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

M54 to M6 Link Road

Development Consent Order 202[ ]

6.3 Environmental Statement Appendices

Appendix 10.1 Minerals Safeguarding Report

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1 Introduction

1.1 Background

1.1.1 Highways England are developing a link road between the M54 and M6 to provide a link between Junction 1 of the M54, M6 North and the A460 to Cannock. The M54 to M6 Link Road (herein referred to as 'the Scheme') aims to reduce congestion on local / regional routes, particularly the A449 and A460 and deliver improved transport links to encourage the development of the surrounding area.

1.1.2 The Scheme is defined as a Nationally Significant Infrastructure Project (NSIP) under Section 14(1)(h) and Section 22 of the Planning Act 2008 (as amended by Article 3 of The Highway and Railway (NSIP) Order 2013) and therefore a Development Consent Order (DCO) is required.

1.1.3 The Scheme is listed within Schedule 2 Regulation 3(1) Part 10 (f) (construction of roads) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and has the potential to generate significant environmental effects by virtue of its nature, scale and location and therefore is subject to an Environmental Impact Assessment (EIA), as reported in the Environmental Statement (ES) [TR010054/APP/6.1].

1.1.4 Highways England submitted an EIA Scoping Report to the Planning Inspectorate on 11th January 2019, detailing the proposed technical content and methodologies to be used during the EIA.

1.2 Site location and surroundings

1.2.1 The Scheme is located within the administrative boundary of Staffordshire County Council (SCC), South Staffordshire Council (SSC) and the City of Wolverhampton Council (CWC) between the national and regional routes the M54, M6 and the A460. The nearest residential areas include the villages of Shareshill and Little Saredon to the north-west, Featherstone and Hilton to the west and Essington to the south. The Scheme is located in a predominantly rural area consisting mainly of mixed agricultural land and scattered woodland.

1.3 Responsibilities

1.3.1 SCC is the Minerals Planning Authority and as such is responsible for planning control of minerals development including minerals supply, minerals safeguarding areas, site allocations and determination of mineral planning applications.

1.3.2 The local authority, SSC, is not a mineral planning authority but needs to have regard to MSA, site allocations and mineral planning applications when permitting development.

1.3.3 A very small portion of the Scheme, located immediately to the south of Junction 2 of the M54, is within the boundary of CWC. As a unitary authority, CWC is the minerals planning authority for this part of the Scheme and will need to be consulted on minerals safeguarding issues. However, as no additional construction works are proposed in this area of the Scheme, there are no substantive minerals safeguarding issues to be assessed.

1.4 Scoping opinion

1.4.1 In response for the request of a scoping opinion the Planning Inspectorate published a Scoping Opinion on 21st February 2019 (Refer to Appendix 4.1 in Volume 3 of the Environmental Statement [TR010054/APP/6.3]). Section 4.6 of the Scoping Opinion covers material assets and waste and focuses on minerals safeguarding which states:

"The Proposed Development is located within a Mineral Safeguarding Area (MSA) but there are no active or allocated minerals extraction sites within The Scheme boundary. The Applicant therefore proposes to scope this matter out of the assessment. In their response in Appendix 2, Staffordshire County Council confirm that the information on the MSA is correct.

However, the Applicant should consider the relevant NPS requirements (paragraph 5.182) which states: Where a proposed development has an impact on a Mineral Safeguarding Area (MSA), the Secretary of State should ensure that the Applicant has put forward appropriate mitigation measures to safeguard mineral resources. Staffordshire CC have requested the Applicant to assess the impact of the Proposed Development on potential operations on the Hilton Main site, as well as its impact on land adjoining the mineral site and within the MSA.

In light of this, the Inspectorate does not agree that this matter can be scoped out at this stage, and requests that further assessment is undertaken within the ES, where significant effects could occur."

1.5 Report structure

1.5.1 This report addresses the points raised by SCC (acting in its capacity as Minerals Planning Authority), and the Planning Inspectorate in its Scoping Opinion and is structured as follows:

- a summary of minerals safeguarding policy;
- a discussion of the need for the Scheme;
- an assessment of the practicability and environmental acceptability of prior extraction;
- an assessment of minerals safeguarding infrastructure in the vicinity of the Scheme;
- given the above, an assessment of whether the policy tests in the Staffordshire County Council Minerals Local Plan are met; and
- Conclusions.

2 Minerals Safeguarding Policy

2.1 Introduction

2.1.1 When determining a DCO application, the Planning Inspectorate is required to have regard to relevant National Policy Statements (NPS), as well as national and local planning policy.

2.1.2 The relevant NPS for The Scheme is the National Policy Statement for National Networks (NPSNN). The relevant national and local planning policy documents which are of material consideration to the determination of the DCO application are as follows:

- National Planning Policy Framework (NPPF) (Ref 1) as interpreted and explained in the associated Planning Practice Guidance (PPG) (Ref 2);
- Minerals Local Plan for Staffordshire (2015-2030) adopted February 2017 (Ref 3);
- Staffordshire County Council Policies and Proposals Map for the Minerals Local Plan for Staffordshire (2015-2030) (Ref 3);
- Staffordshire County Council Annual Monitoring Report 2017/2018 (Ref 4);
- South Staffordshire Council Core Strategy Development Plan Document adopted December 2012 (Ref 5); and
- South Staffordshire District Council Site Allocations document adopted September 2018 (Ref 6).

2.1.3 In addition, the following documents are considered relevant when considering minerals safeguarding policy:

- British Geological Survey: Provision of Geological Information and a Revision of Mineral Consultation Areas for Staffordshire County Council (2006) (Ref 7); and
- British Geological Survey: Mineral Safeguarding in England good practice advice (2011) (Ref 8).

2.2 National Policy Statement for National Networks

2.2.1 There are 12 designated National Policy Statements (NPS), setting out government policy on different types of national infrastructure development, including energy, transport, water, waste water and waste. The National Policy Statement for National Networks (NPSNN) was published in December 2014 by the Department for Transport (Ref 9).

2.2.2 In relation to safeguarding mineral resources, paragraph 5.169 states:

"Applicants should safeguard any mineral resources on the proposed site as far as possible."

2.2.3 Paragraph 5.182 goes on to state:

"Where a proposed development has an impact on a Mineral Safeguarding Area (MSA), the Secretary of State should ensure that the applicant has put forward appropriate mitigation measures to safeguard mineral resources."

2.3 National Planning Policy Framework (NPPF)

2.3.1 The revised National Planning Policy Framework (NPPF) was published in February 2019. Under section 17 Facilitating the sustainable use of minerals, the NPPF states (at paragraph 204):

"Planning policies should…c) safeguard mineral resources by defining Mineral Safeguarding Areas; and adopt appropriate policies so that known locations of specific minerals resources of local and national importance are not sterilised by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked); d) set out policies to encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place…"

2.4 Minerals Local Plan for Staffordshire and the Policies and Proposals Map (2015-2030)

2.4.1 SCC adopted the Minerals Local Plan (MLP) and the accompanying policies and proposals map in February 2017, which covers the period to 2030. Together, these documents replaced the 'saved policies' in the Staffordshire and Stoke-on-Trent Minerals Local Plan 1994 to 2006.

2.4.2 The Policies and Proposals Map of the MLP shows that The Scheme falls within the Minerals Safeguarding Area (MSA) for Sand and Gravel, specifically within the bedrock deposits of the Triassic Sherwood Sandstone (conglomerate) and superficial sands and gravels. The Scheme also partially falls within the MSA for brick clay (Etruria Formation clay) (see Figure 1).

2.4.3 The Policies and Proposals Map of the MLP also shows that the Scheme crosses Hilton Park, a non-operational mineral infrastructure site operated by Hanson.

Identification of Minerals Safeguarding Areas

2.4.4 To support work on the MLP in 2006, SCC commissioned the British Geological Survey (BGS) to assist in delineating Mineral Safeguarding Areas (MSAs) and Mineral Consultation Areas (MCAs).

2.4.5 The subsequent report, Provision of Geological Information and a Revision of Mineral Consultation Areas for SCC, produced by BGS in 2006, provided evidence to inform a policy for safeguarding minerals. Based on the assessment of the best available geological knowledge, eight mineral resources were considered of economic importance in the foreseeable future in Staffordshire, warranting safeguarding for future generations: Sand and Gravel (superficial and bedrock), Limestone, Cement Shale, Etruria Formation Clays, Anhydrite and Gypsum, Hollington Formation Building Stone, Silica Sand associated with the Rough Rock Formation and Shallow Coal with associated fireclays.

2.4.6 The BGS report notes (in Table 3) that each MSA identified for use in the MLP includes a buffer zone which has been determined through consultation with the minerals industry. For sand and gravel a 250 m buffer has been applied and for brick clay a 50 m buffer has been applied. The table of buffer zones has been reproduced in Table 2.1.

Table 2.1: Buffers applied to identified mineral resources)

Rock Type	Resource	Buffer
Hard rock (generally requires blasting)	Limestone.	500 m
Soft rock (requires no blasting)	Sand and gravel, coal and fire clay, silica sand, cement shale, building stone.	250 m
Clay (uses small excavators)	Brick Clay.	50 m
Underground gypsum mining	Gypsum.	0 m

Identification of safeguarded minerals infrastructure sites

2.4.7 SCC has identified Safeguarded Mineral Infrastructure Sites and placed a 250 m buffer around each site. SCC has classified mineral infrastructure sites into two groups as "operational" and "non-operational[1]" sites.

2.4.8 There are no operational minerals infrastructure sites within the Scheme boundary. The Hilton Park non-operational mineral infrastructure site is crossed by the Scheme.

Minerals Local Plan Policies

2.4.9 Specifically, in relation to safeguarding mineral resources and safeguarding mineral infrastructure sites, Strategic Objective 1 the provision of minerals to support sustainable economic development, states:

"To support sustainable economic development, the provision of minerals will […] ensure that important economic mineral resources are not needlessly sterilised."

2.4.10 Policy 3: Safeguarding Minerals of Local and National Importance and Important Infrastructure also states:

"3.1 The following mineral resources, within the Mineral Safeguarding Areas shown on the Policies and Proposals Map, will be safeguarded against needless sterilisation by non-mineral development:

a) Sand and gravel (superficial and bedrock)

b) Limestone

c) Cement shale

d) Etruria Formation clays

e) Anhydrite and gypsum

f) Hollington Formation building stones

g) Silica sand associated with the Rough Rock Formation

h) Shallow coal with associated fireclays

[1] These are non-operational sites that are classified as statutorily dormant for the purposes of minerals review and an application for the approval of new conditions would be required before mineral extraction could recommence. Reserves associated with these sites are included in the SCC assessment of the landbank

3.2 Within a Mineral Safeguarding Area, non-mineral development except for those types of development set out in appendix 6, should not be permitted until the prospective developer has produced evidence prior to determination of the planning application to demonstrate:

a) the existence, the quantity, the quality and the value of the underlying or adjacent mineral resource; and

b) that proposals for non-mineral development in the vicinity of permitted mineral sites or mineral site allocations would not unduly restrict the mineral operations.

3.3 Within a Mineral Safeguarding Area, where important mineral resources do exist, except for those types of development set out in appendix 6, non-mineral development should not be permitted unless it has been demonstrated that:

a) the non–mineral development is temporary and does not permanently sterilise the mineral; or,

b) the material planning benefits of the non-mineral development would outweigh the material planning benefits of the underlying or adjacent mineral; or,

c) it is not practicable or environmentally acceptable in the foreseeable future to extract the mineral.

3.4 Within a Mineral Safeguarding Area, where important minerals do exist and the above criteria have not been met, the non-mineral development except for those types of development set out in appendix 6, should not be permitted unless the development includes provision for the extraction of the mineral prior to the development being implemented.

Safeguarding important mineral infrastructure sites

3.5 Where there are mineral infrastructure sites used for mineral processing, handling, and transportation, except for those types of development set out in appendix 6, non-mineral development should not be permitted unless it has been demonstrated that:

a) the non-mineral development would not unduly restrict the use of the mineral infrastructure site; or

b) the material planning benefits of the non-mineral development would outweigh the material planning benefits of the mineral infrastructure site; or,

c) the mineral infrastructure can be relocated; or

d) alternative capacity can be provided elsewhere."

2.4.11 The text which accompanies Policy 3 in the MLP states (at section 7.22) "*Policy 3 aims to safeguard a range of mineral resources that are considered to be of economic importance within the foreseeable future but not limited to the timeframe of the Plan and takes into account a review of mineral resources in the county produced by the British Geological Survey (BGS) in 2006."*

2.4.12 The MLP goes on to state (at section 7.24) "*Policy 3 also aims to safeguard: mineral sites and mineral site allocations (Policy 3.2 (b)); and, mineral infrastructure sites*

used for mineral processing, handling, and transportation (Policy 3.5); from non-mineral development which would unduly restrict the use of those sites."

2.4.13 Appendix 6 of the MLP lists the exemptions criteria for mineral safeguarding. The Scheme does not fall under one of the categories listed where exemptions are considered to apply, and therefore Highways England are required to provide evidence to demonstrate that the requirements of Policy 3 have been met.

2.5 South Staffordshire Council Core Strategy (2012)

2.5.1 SSC adopted the Core Strategy as a Development Plan Document in December 2012. It replaced the SSC Local Plan adopted in 1996 and sets out the spatial planning strategy for the District up to 2028.

2.5.2 Specifically, in relation to safeguarding minerals and mineral infrastructure, Core Policy 3 Sustainable Development and Climate Change states:

"*…The Council will require development to be designed to cater for the effects of climate change, making prudent use of natural resources, enabling opportunities for renewable energy and energy efficiency and helping to minimise any environmental impacts. This will be achieved by… n) consideration of the impact that development will have on the sterilisation of mineral resources and the potential for future extraction of these minerals…"*

2.6 South Staffordshire Site Allocations Document (2018)

2.6.1 The SSC Site Allocations Document (SAD) was adopted in September 2018 and together with the Core Strategy replaced the SSC Local Plan adopted in 1996. The SAD sets out site specific proposals and policies for the use of land to guide future development, in order to help to deliver the vision and objectives of the Core Strategy. There are no policies contained within the SAD that relate specifically to minerals safeguarding.

2.7 Commentary

2.7.1 The above planning policy applies at both the local and national level. It is necessary to demonstrate whether the tests set out in Policy 3 of the SCC MLP in relation to the identified mineral resources and mineral infrastructure sites are relevant in this case, namely safeguarding of bedrock and superficial sands and gravels and Etruria Formation clay resources, and the mineral infrastructure site at Hilton Park. In doing so, the tests in paragraph 204 of the NPPF and paragraphs 5.169 and 5.182 of the NPSNN will also be addressed. This assessment is undertaken and presented in the following sections.

3 Need for the Scheme

3.1 Requirement for the Scheme

3.1.1 Section 104 of the Planning Act 2008 (the Act) sets out that in deciding any application for a Development Consent Order (DCO), "*the Secretary of State must have regard to any national policy statement which has effect in relation to development of the description to which the application relates*." It goes on to state that: "*The Secretary of State must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8) applies."*

3.1.2 The planning statement [TR010054/APP/7.2] which forms part of the DCO application contains a comprehensive planning policy assessment which identifies the key planning considerations and assesses the Scheme against the development plan policy and other material considerations. The sections below highlight particularly relevant policies which need to be considered when assessing the need for the Scheme.

National Policy Statement for National Networks

3.1.3 The NPSNN provides guidance for promoters of national network NSIPs and also provides detail on the need for specified schemes and the policy for determining them.

3.1.4 The introduction to Section 2 of the NPSNN sets out a summary of the Government's vision and strategic objectives for the national networks:

"The Government will deliver national networks that meet the country's long-term needs; supporting a prosperous and competitive economy and improving overall quality of life, as part of a wider transport system. This means:

- *Networks with the capacity and connectivity and resilience to support national and local economic activity and facilitate growth and create jobs.*
- *Networks which support and improve journey quality, reliability and safety.*
- *Networks which support the delivery of environmental goals and the move to a low carbon economy.*
- *Networks which join up our communities and link effectively to each other."*

3.1.5 Paragraphs 2.1 to 2.11 of the NPSNN set out the summary of need for improvements to the road and rail network. The critical need to improve the national networks to address road congestion and support economic growth is identified.

3.1.6 Development of the national road network including The Scheme would support and promote national and local economic growth and regeneration by reducing congestion and journey times, increasing capacity and improving journey times. The NPSNN recognises that improving transport links is key to facilitating growth and The Scheme would allow for greater movement of people and goods along the strategic highway network with increased efficiency.

3.1.7 The Government has concluded that there is a compelling need for development of the national networks in paragraph 2.10 of the NPSNN by confirming that:

"*The Government has therefore concluded that at a strategic level there is a compelling need for development of the national networks – both as individual networks and as an integrated system. The Examining Authority and the Secretary of State should therefore start their assessment of applications for infrastructure covered by this NPSNN on that basis."*

3.1.8 The NPSNN identifies the critical need to improve the national networks to address road congestion and support economic growth. The NPSNN states in paragraph 2.23 that the Government's wider policy is to bring forward improvements and enhancements to the network which will include (amongst other means) junction improvements, new slip roads and upgraded technology to:

"*Address congestion and improve performance and resilience at junctions, which are a major source of congestion."*

National Planning Policy Framework

3.1.9 The revised National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied. The NPPF does not contain specific policies for NSIPs, however the NPPF is a material consideration that the Planning Inspectorate would be anticipated to consider when determining the DCO application, the following paragraphs are therefore considered relevant.

3.1.10 When considering the needs for the proposed development and the presumption in favour of sustainable development, Paragraphs 7-8 of the NPPF states:

"7. The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

8. 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):

a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure…"

3.1.11 Paragraph 11 of the NPPF states:

"Plans and decisions should apply a presumption in favour of sustainable development. For plan-making this means that:

plans should positively seek opportunities to meet the development needs of their area, and be sufficiently flexible to adapt to rapid change;…

For decision taking this means:…

c) approving development proposals that accord with an up-to-date development plan without delay…;"

3.1.12 In relation to Strategic Policies, paragraph 20 of the NPPF states:

"Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for...

b) infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);

c) community facilities (such as health, education and cultural infrastructure); and

d) conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation."

3.1.13 Paragraph 22 of the NPPF goes on to state:

"*Strategic policies should look ahead over a minimum 15 year period from adoption, to anticipate and respond to long-term requirements and opportunities, such as those arising from major improvements in infrastructure*."

3.1.14 Chapter 6 of the NPPF concerns building a strong and competitive economy, and paragraph 80 states:

"*Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. 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. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potentia*l."

3.1.15 Section 9 of the NPPF sets out a requirement to promote sustainable transport, including objectives as set out in paragraph 102 to realise opportunities from existing or proposed transport infrastructure, identify and pursue opportunities to promote walking, cycling and public transport use, and to assess the environmental impacts of transport infrastructure and identify opportunities to avoid or mitigate any adverse effect or achieve net environmental gains.

3.1.16 Paragraph 103 states:

"*Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes….Opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making*."

3.1.17 The NPPF goes on to state in paragraph 104 that: "*planning policies should identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development*".

Staffordshire County Council Minerals Local Plan (2017)

3.1.18 There are no policies contained within the MLP that directly reference the Scheme, however, in relation to non-minerals development in a MSA, the SCC MLP addresses this issue in Policy 3 (see section 2.4 above).

South Staffordshire Council Core Strategy (2012)

3.1.19 The SSC Core Strategy supports development of the Scheme to make a significant contribution to improving strategic transport infrastructure. During preparation of the Core Strategy, SSC asked all its neighbouring authorities to submit details of any unmet requirements and identify any cross-boundary issues. Four of the neighbouring authorities identified transport links as a significant issue, with the M54, the M6 and the A34 being specifically identified.

3.1.20 Whilst there are no policies that directly relate to the Scheme, there are a number of policies that relate to the provision of sustainable transport and infrastructure. Core Policy 3 states:

"The Council will require development to be designed to cater for the effects of climate change, making prudent use of natural resources, enabling opportunities for renewable energy and energy efficiency and helping to minimise any environmental impacts. This will be achieved by:

… b) supporting and encouraging development which facilitates sustainable modes of transport …

…m) protecting the amenities of our residents and seeking to improve their overall quality of life through the provision of appropriate infrastructure, facilities and services."

3.1.21 Core Policy 5 relates to infrastructure delivery, and states:

"New development must be supported by the required infrastructure at the appropriate stage. The Council will work with the Local Strategic Partnership and its partners to ensure the co-ordinated delivery of facilities and infrastructure to support sustainable communities, and the delivery of the Spatial Strategy for South Staffordshire.

The physical, social and community and green infrastructure required is set out in the Infrastructure Delivery Plan (IDP). Strategic and local infrastructure needs are identified in the IDP and provision will be linked to the phasing of new development. …New facilities and infrastructure, of an appropriate scale, must be located and designed so that they are integrated, accessible and compatible with the character, local distinctiveness and needs of the local community.

New development will be required to provide the necessary infrastructure at a timely stage to meet the community needs arising from the proposal..."

3.1.22 In relation to infrastructure requirements in particular, paragraph 7.65 which accompanies Core Policy 5 states

"In general, infrastructure requirements can also be divided into strategic and local.

Strategic Infrastructure refers to facilities or services serving a wider area that may be the whole District or beyond – for example investment in water, gas and electricity networks. Strategic infrastructure may also include major road schemes …"

3.1.23 Core Policy 7 goes on to state:

"*The Council will support measures which provide the infrastructure necessary to support economic development, supporting transport investment which will help sustain the local economy giving priority to schemes which improve links and improve local accessibility between homes and jobs across the District*"

3.1.24 Core Policy 11 relates to sustainable transport, and states:

"*The Council will seek to ensure that accessibility will be improved and transport choice widened…Development proposals will, either individually or collectively, have to make appropriate provisions for:*

- *reducing the need to travel;*
- *widening travel choices and making travel by sustainable means of transport more attractive than the private car;*
- *improving road safety;*
- *improving air quality and reducing the impact of travel upon the environment, in particular reducing carbon emissions that contribute to climate change.*

The Council will work with its partners to improve accessibility by enhancing sustainable transport opportunities in the District and encouraging development that reduces the need to travel. The Council will also work with its partners outside the District to support and improve cross boundary public transport services. Future growth and development in South Staffordshire will be focused on the Main Service Villages and in sustainable locations to reduce the need to travel…

…The following national and regional transport infrastructure schemes may be delivered in the plan period:

- *M54/M6/M6 Toll Link Road"*

3.1.25 Paragraph 9.55 goes on to state "*Due to the rural nature of South Staffordshire, the car will continue to be the main form of transport to access jobs, facilities and services in the District until improvements can be made to rural transport*."

3.1.26 Map 2 in the SSC CS identifies the Scheme as 'M54-M6/M6 (Toll) Link Road Proposal'.

South Staffordshire Council Infrastructure Delivery Plan (2017)

3.1.27 The South Staffordshire Infrastructure Delivery Plan (IDP) (Ref 10) summarises the infrastructure and investment needed to deliver the vision and aspirations for the SSC SAD and the most recent version was published in November 2017. The IDP gives a broad indication of what infrastructure is required, where, when, how much it will cost, who is responsible for delivery and how it will be funded during the plan period. The IDP is informed by discussions that have taken place with key infrastructure delivery agencies and is a 'live' document continuously updated

through the plan period to reflect new requirements when they are known and also to identify when infrastructure needs have been met.

3.1.28 The priorities and resources identified in the IDP are used as material considerations in decision making alongside the SAD to assist in the provision of new development, helping to deliver the necessary infrastructure for places to become more sustainable and resilient.

3.1.29 Appendix A of the IDP lists a number of locality specific infrastructure improvements, and under the heading 'Road – Strategic and Local Highway Network' the M54/M6 Toll Link Road is identified specifically as a national infrastructure project. The IDP anticipates that the Scheme will come forward in 11-15 years.

South Staffordshire Site Allocations Document

3.1.30 There are no planning policies that relate specifically to The Scheme, however paragraph 9.22 of the SAD states:

"*Through the Local Plan review process and further cross-boundary employment land assessments, the Council will also consider the implications of the Highways England preferred solution (to be confirmed) to the proposed new northern motorway link road connecting the M54/M6/M6 (TOLL). It is anticipated that a preferred route will be identified in 2018, following further consultation on the remaining two route options under consideration."*

3.2 Requirement for sand and gravel

National Planning Policy Framework

3.2.1 In relation to sand and gravel specifically, the NPPF states at paragraph 207 "Minerals planning authorities should plan for a steady and adequate supply of aggregates by:… f) maintaining landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised."

Staffordshire County Council Minerals Local Plan

3.2.2 Section 1.1 of the MLP states "*Quarries in the county have produced two thirds of the sand and gravel sold in the West Midlands and the greatest output of clay and shale compared with any other county in England*."

3.2.3 Of relevance is Policy 1: Provision for Sand and Gravel, which states (inter alia):

"*1.1 Provision will be made to maintain at least a 7 year landbank of permitted reserves based on production capacity of 5.0 million tonnes of sand and gravel per annum. This production capacity will be provided initially from existing permitted reserves and by granting planning permissions to extend the following sand and gravel sites:*

a) Captains Barn Farm (Inset Map 1)

b) Croxden (Inset Map 2)

c) Uttoxeter (Inset Map 3)

d) Newbold (Inset Map 4)

e) Barton (Inset Map 5)

f) Alrewas (Inset Map 6)

g) Calf Heath (Four Ashes) (Inset Map 7)

h) Saredon (Inset Map 8)

i) Cranebrook (Inset Map 9)

j) Hints / Hopwas (Inset Map 10)

k) Weeford (Moneymore) (Inset Map 11)

(The allocated extension sites listed above are shown on the Policies and Proposals Map and accompanying Inset Maps included in appendix 1.)

1.2 Any proposals to develop the allocated extension sites will only be supported where it has been demonstrated that they accord with the Plan policies, including Policy 4 and address the development considerations listed in appendix 1.

1.3 Planning permission to extend a site will normally be conditioned so that the extension area can only be worked following cessation of mineral working within the existing site unless it has been demonstrated that there are operational reasons why this is not practicable.

Proposals for new sand and gravel sites within the area of search

1.4 Proposals for new sites within the area of search to the west of the A38 shown on the Policies and Proposals Map will only be supported where it has been demonstrated that permitted reserves or allocated extensions to existing sites listed above cannot meet the required level of provision stated in paragraph 1.1.

1.5 Any proposals to develop new sites within the area of search to the west of the A38 will only be supported where it has been demonstrated that they accord with the Plan policies, including Policy 4 and address the development considerations listed in appendix 1.

Proposals for any other sand and gravel sites (extensions / new sites)

1.6 Proposals for any other sand and gravel sites (extensions / new sites) will only be supported where it has been demonstrated that:

a) the permitted reserves, the allocated extensions to existing sites listed above or mineral resources from within the area of search would not meet the required level of provision stated in paragraph 1.1; or,

b) the proposals would secure significant material planning benefits that outweigh any material planning objections."

3.2.4 None of the allocated extension sites above are within the Scheme boundary. The closest is Saredon Quarry, located approximately 1 km north-west of the Scheme.

3.2.5 Paragraph 2.1 goes on to state:

'The old Plan favoured an approach based on "concentrating sand and gravel workings in specified locations by either developing new sites or more particularly extending existing sites where it would be environmentally acceptable". Having

reviewed this approach, in the light of the Government guidance, the pattern of supply and demand for the next 15 years and the accompanying Sustainability Appraisal, it is reasonable to conclude that this approach can continue but will need to be supplemented by making provision for new sand and gravel sites from 2025 onwards. This has led to the identification of a new area of search (see Policy 1).'

3.2.6 The new area of search is identified within the appendices which accompany the MLP, is located to the west of the A38, along the Trent Valley. The Scheme does not fall within this area of search."

Staffordshire County Council Annual Monitoring Report

3.2.7 Up to date information concerning the status of permitted mineral sites is essential when determining the need for additional facilities and is recorded in Annual Monitoring Reports (AMR). This information includes the quantity of mineral worked and the extent of remaining reserves.

3.2.8 The most up to date AMR for SCC covers the period 2016-2017. With regards to sand and gravel, the AMR states:

"Survey data for 2017 indicates that the landbank for sand and gravel was greater than the target of 7 years and the planned level of provision is sufficient when compared with the 10-year sales average (2008 – 17). During 2017/18 permissions were issued to implement two of the allocated site extensions. Potential changes to demand including the effects of major development projects such as HS2 are monitored in the LAA."

3.2.9 The AMR goes on to identify 18 operational sand and gravel quarries and 5 non-operational[2] sand and gravel quarries within the county (Annex A).

3.2.10 Table 3.1 below demonstrates the provision of sand and gravel within SCC for 2017 as identified in the AMR.

[2] These are non-operational sites that are classified as statutorily dormant for the purposes of minerals review and an application for the approval of new conditions would be required before mineral extraction could recommence. Reserves associated with these sites are included in the assessment of the landbank

Table 3.1: Provision of sand and gravel within SCC (2017)

Relevant Indicators	
Total sales for aggregate use	4.743 million tonnes
10 years average of sand and gravel sales (2008-2017)	4.179 million tonnes
3 years mean average of sand and gravel sales (2015 to 2017)	4.609 million tonnes
Permitted reserves (not including reserves associated with "dormant" sites)	62.94 million tonnes as of 1 January 2018
Landbank based on planned level of provision i.e. 5 million tonnes per annum	12.6 years
Throughput capacity in Staffordshire (including Stoke-on-Trent) to produce recycled aggregate	1.3 million tonnes per annum.
Sales of building sand (Based on Aggregate Minerals Survey - sales for 2014)	4% of total sand and gravel sales
Concreting sand (Based on aggregate Minerals Survey - sales for 2014)	27% of total sand and gravel sales
Permissions granted within allocated sites/ area of search up to 31 March 2018 (refer to Table 10 in appendix 1)	2 out of 12
Permissions granted outside allocated sites/ area up to 31 March 2018 since adoption of Plan	0
Attendance of West Midlands Aggregate Working Party meetings 2017/18 by County Council.	100%
Attendance of RTAB meetings 2017/18 by County Council	100%
Analysis of relevant targets	
Sales of sand and gravel to meet planned level of provision - Is 10-year sales average less than planned level of provision i.e. 5 million tonnes per annum?	✓
Maintain at least a 7-year landbank of sand and gravel reserves based on meeting level of provision	✓
All sites to be located in line with location criteria set out in Policy 1 unless meeting the criteria of Policy 1.6	✓
100% attendance of AWP/ RTAB meetings	✓

Summary

3.2.11 The planning policy review has identified that there is support for the delivery of the Scheme at a National and Local level. Support for the Scheme is set out in the NPSNN, NPPF and the Development Plan Documents adopted by SCC and SSC.

3.2.12 National and Local Policy also identifies the need to provide an adequate supply of minerals required by society to provide the goods required by society and to support economic growth. The Scheme passes through a Mineral Safeguard Area for bedrock and superficial sand and gravel. The Scheme also crosses safeguarded mineral infrastructure for bedrock sand and gravel. The Scheme does not however cross active, permitted or allocated extensions to mineral sites.

3.2.13 Planning policy requires that a land bank equivalent to 7 years of supply sand and gravel should be maintained. The most recent AMR (2017) demonstrates that the land bank is far in excess of and nearly double the required minimum and currently stands at 12.6 years.

3.2.14 While there is a need to provide sand and gravel it is considered that adequate provision has been made within the land bank and allocated sites will provide a suitable supply of this mineral going forwards.

3.2.15 When the need for the Scheme is compared to that for further sand and gravel extraction, it is clear that the need for the former outweighs the latter, particularly given that there is already a 12-year land bank. The test set out in the MLP Policy 3 is therefore satisfied, meaning that prior extraction is not required in this case.

3.3 Requirement for brick clay

National Planning Policy Framework

3.3.1 In relation to Brick Clay, Paragraph 208 of the NPPF states:

"Minerals planning authorities should plan for a steady and adequate supply of industrial minerals by:

a) co-operating with neighbouring and more distant authorities to ensure an adequate provision of industrial minerals to support their likely use in industrial and manufacturing processes;

b) encouraging safeguarding or stockpiling so that important minerals remain available for use;

c) maintaining a stock of permitted reserves to support the level of actual and proposed investment required for new or existing plant, and the maintenance and improvement of existing plant and equipment68; and

d) taking account of the need for provision of brick clay from a number of different sources to enable appropriate blends to be made."

3.3.2 Footnote 68 goes on to state:

"These reserves should be at least 10 years for individual silica sand sites; at least 15 years for cement primary (chalk and limestone) and secondary (clay and shale) materials to maintain an existing plant, and for silica sand sites where significant new capital is required; and at least 25 years for brick clay, and for cement primary and secondary materials to support a new kiln."

Staffordshire County Council Minerals Local Plan

3.3.3 The main policy that is relevant in the MLP is Policy 3, which identifies that the outcrops of Etruria Formation clays are safeguarded from sterilisation (see section 2.4.3 above).

3.3.4 With regards to Brick Clay, the MLP states at paragraph 3.2:

"The Etruria Formation is the principal brick clay resource in Staffordshire and is recognised nationally as a premium clay resource."

3.3.5 Paragraph 3.12 states:

"Clay from the Etruria Formation is also used at works outside Staffordshire and it is known that clay from quarries in south Staffordshire (with long term permissions) is used to supply works in Walsall and Warwickshire and this is likely to continue during the Plan period. There is also a permitted clay site in Stoke-on-Trent. At this stage, there is no need for planned provision for works outside the county and we will continue to liaise with the neighbouring mineral planning authorities in Stoke-on-Trent, Telford, Walsall and Warwickshire to monitor cross border requirements for clay."

3.3.6 Paragraph 3.13 and 3.14 go on to state:

"3.13 National policy requires that a stock of permitted reserves of 25 years is provided for each works using brick clay and our assessment of the requirements of the local works in Staffordshire indicates that there are sufficient reserves except in relation to the Wilnecote works as explained above. Where recent permissions have been granted for clay reserves, permissions have been granted subject to obligations that secure the use of clays to support the manufacture of clay products at local works. The Plan does not include allocations for additional reserves of brick clay.

3.14 Due to the location of outcrops of the Etruria Formation on the urban periphery of Newcastle under Lyme, Cheslyn Hay and Tamworth, and the relative scarcity of the resource, there is a need to safeguard clays from sterilisation caused by built development (refer to Policy 3). In addition national policy encourages stockpiling so that important minerals remain available for use, for example, where clays may be extracted ancillary to the extraction of coal."

Staffordshire County Council Annual Monitoring Report

3.3.7 With regards to Brick Clay, Paragraph 17 of the AMR states:

"Stocks of permitted clay reserves are adequate to maintain a 25-year supply for four of the five clay product works in the county. At the Wilnecote Works, there are proposals to import clay to supplement permitted reserves."

3.3.8 The AMR goes on to identify nine operational clay quarries and two non-operational clay quarries (See Annex A).

3.3.9 Table 3.2 below demonstrates the provision of Brick Clay within SCC for 2017 as identified in the AMR.

Table 3.2 Provision of Brick Clay within SCC (2017)

Relevant Indicators	
Clay supply / reserves used at clay product works listed in Appendix 5: Table 5 Assessment of landbanks for Brick and Tile Works in Staffordshire".	
Parkhouse, Newcastle	450,000 to 500,000tpa to the three works in Newcastle/ 13.6Mt reserves permitted in Aug 2012 at Knutton Quarry (refer to N.05/20/214 M).

Relevant Indicators	
Chesterton, Newcastle	See information for Parkhouse
Keele Works, Newcastle	See information for Parkhouse
Wilnecote, Tamworth	80,000tpa/ 806,000t approved in 2017 subject to completion of legal agreement (refer to T.16/02/905 MW)
Lodge Lane, Cannock	90,000 – 100,000tpa (refer to SS.EA/10). Supply based on output from Redhurst Quarry with an output of 200,000tpa currently permitted to 2042 (refer to SS.14/07/608A MW).

Analysis of relevant targets	
Maintain at least 25 years stock of permitted reserves for clay product works listed in appendix 5.	
Parkhouse, Newcastle	✓
Chesterton, Newcastle	✓
Keele Works, Newcastle	✓
Wilnecote, Tamworth	×
Lodge Lane, Cannock	✓

Summary

3.3.10 When the need for the Scheme is compared to that for further brick clay extraction, it is clear to that need for the former outweighs the latter, particularly given that there is already a 25 year land bank in four of the 5 clay pits in Staffordshire. The test set out in the MLP Policy 3 is therefore satisfied, meaning that prior extraction is not required in this case.

3.4 Conclusions

3.4.1 National and local planning policy has identified that there is a requirement to improve transport infrastructure within South Staffordshire and its neighbouring authorities. Four authorities in addition to SSC identified transport links as a significant issue, and the M54, the M6 and the A34 were specifically identified.

3.4.2 The Scheme is identified within the SSC Core Strategy and SAD as a strategic allocation that is anticipated to come forward within the Plan period. The Scheme has been assessed alongside other proposed alternatives for strategic development in South Staffordshire and the route proposed is considered the most appropriate. The Scheme is an essential part of the delivery of infrastructure for South Staffordshire and the surrounding area, and would improve capacity, connectivity, and improve journey quality, reliability and safety.

3.4.3 It follows from the above recital of the planning policies which apply at both the local and national level, that there is a clear need for the Scheme to proceed.

3.4.4 The preceding assessment demonstrates that there is no overriding need for the extraction of sand and gravel at the site given the current 12.5-year supply.

3.4.5 With regards to Brick Clay, the current 25 year supply is met at 4 of the 5 existing brickworks, and at Wilnecote works, a recent decision to approve a planning application for the importation of clay also provides for future supply.

3.4.6 The MLP does not include allocations for additional reserves of brick clay, and therefore it is considered that there is no pressing need for further sites to come forward in the Plan period. The preceding assessment therefore demonstrates that there is no overriding need for further brick clay extraction.

3.4.7 When taking the above into account, it is considered that the need for the proposed development outweighs the need for prior extraction of the underlying sand and gravel or brick clay in this instance.

4 Practicability and Environmental Acceptability for the Extraction of Mineral Reserves and Infrastructure

4.1 Environmental constraints

Prior extraction

4.1.1 Prior extraction refers to the removal of economic mineral resources that are found at or close to the ground surface (shallow resources) from development sites, prior to the commencement of construction work. When considering the area covered by the DCO application in which prior extraction could practically be undertaken, the following constraints need to be taken into account:

- the protection of any landscape features;
- the potential for damage to designated habitats and/or species;
- the presence of archaeological remains within the site area and taking into consideration their setting;
- the presence of historic buildings or structures within the site area and taking account of their setting; and
- proximity of the site to an existing sensitive development e.g. residential property.

Constraints

4.1.2 A desktop assessment has been undertaken of potential environmental constraints which are likely to apply both within and nearby to the Scheme boundary. The following potential environmental and planning designations (Figure 2) were considered where they apply:

- National Parks;
- Areas of Outstanding Natural Beauty (AONBs);
- Special Areas for Conservation (SAC);
- Special Protection Areas (SPA);
- Ramsar Sites;
- National Nature Reserves (NNR);
- Sites of Special Scientific Interest (SSSI);
- Ancient Woodland;
- Local Nature Reserves (LNR);
- Sites of biological Importance (SBI) equivalent to “Local Wildlife Site”;
- World Heritage Sites;
- Registered Battlefields;
- Scheduled Monuments;
- Registered Parks and Gardens;
- Listed Buildings;

- Conservation Areas;
- Watercourses;
- Flood Zones 2 and 3;
- Air Quality Management Areas (AQMA);
- Green Belt;
- Public highway network;
- Public Rights of Way;
- Electrical infrastructure (power lines and substation)
- Land within 100 metres of a residential property; and
- Land within 100 metres of other sensitive receptors (e.g. sewage works, educational facilities, industrial uses etc)

4.1.3 Figure 3 shows any constraints on mineral extraction within or adjacent to the Scheme arising from the above designations. These have been derived in the form of buffer zones:

- mineral extraction should be more than 20 m from Local Nature Reserves;
- mineral extraction should be more than 25 m from identified watercourses;
- mineral extraction should avoid areas of Flood Zone 2 and Flood Zone 3 where possible;
- mineral extraction should be more than 20 m from ancient woodland;
- mineral extraction should be more than 20 m from electrical infrastructure;
- mineral extraction should be more than 10 m from public roads;
- mineral extraction should be more than 20 m from public rights of way; and
- mineral extraction should be more than 100 m from residential properties and other sensitive receptors.

Assessment

4.1.4 The main points arising from the assessment of environmental constraints are as follows:

- The Scheme boundary includes a number of roads, namely the M54, the M6, the A460 and minor roads, Hilton Lane, Dark Lane and Park Road.
- a number of ponds and watercourses are located within or cross the Scheme boundary.
- the majority of the Scheme lies within Flood Zone 1 i.e. an area considered as having a less than 0.1% (1 in 1000) annual probability of flooding from rivers or sea, part of the Scheme boundary to the north east lies within flood zone 2 and 3.
- The Scheme boundary contains several areas of ancient woodland; hedgerows and trees.
- there are a number of residential properties within close proximity to the Scheme boundary, and are concentrated within Featherstone and Shareshill, along the A460.

- a number of Sites of Biological Interest (equivalent to a Local Wildlife Site) are located within the Scheme boundary.
- The Scheme boundary is crossed by overhead power lines to the south-west.
- A railway line crosses through the Scheme boundary to the south west.
- a number of public rights of way are within the Scheme boundary.

4.1.5 The constraints identified above result in a site that is dissected into parcels of land with a number of sensitive receptors located close to potential areas of mineral extraction. Prior extraction would therefore require excavation of a number of discrete areas of mineral restricted in size and depth.

4.1.6 The main environmental effects arising from prior extraction are considered to be those on:

- landscape and visual amenity;
- ecology and biodiversity;
- traffic and transport (including access);
- noise;
- air quality/dust;
- lighting;
- water resources (hydrology); and
- flood risk.

4.1.7 Unlike the Scheme which is capable of being designed to maintain, enhance and safeguard the above constraints, mineral extraction is more likely to result in other adverse effects (e.g. effects on residential amenity, enjoyment of public rights of way network, routes of watercourses etc).

4.2 Mineral resources

4.2.1 Policy 3.2 of the MLP requires the prospective developer to produce evidence prior to determination of the planning application to demonstrate:

"a) the existence, the quantity, the quality and the value of the underlying or adjacent mineral resource…"

Bedrock sands and gravels

4.2.2 The geological map (Ref 11) shows the majority of the Scheme is located on the outcrop of the Kidderminster Formation of the Sherwood Sandstone Group of Triassic Age . The associate memoir (Ref 12), states that the Kidderminster Formation comprises pebble/cobble conglomerates interbedded with sandstones with mudstone beds. The conglomerates within the Kidderminster Formation, formerly known as the Bunter Pebble Beds, are the safeguarded mineral. The BGS report, Provision of Geological Information and a Revision of Mineral Consultation Areas for SCC, states that these loosely bound, sandy pebble beds (conglomerates) are a major source of concrete aggregate. Importantly, in terms of resource potential, the proportion of gravel to sand is of prime importance, and where devoid of pebbles the formation is of limited value as an aggregate resource.

4.2.3 The geological map shows that the base of the Kidderminster Formation, defined by its unconformable junction with the underlying Salop Formation, lies just to the east of the Scheme. The geological map also shows that the Kidderminster formation dips gently at 3° and increases in thickness to the west. Based on the shallow dip to the west the maximum thickness of the Kidderminster Formation within the Scheme boundary is likely to be around 30 – 40 m.

4.2.4 The ground investigation undertaken in support of the Scheme, together with historic ground investigation borehole logs along the route held by the British Geological Survey[3] indicate that the Kidderminster Formation largely comprises weathered sands or weakly cemented sandstones with varying proportions of gravel and cobbles with occasional lenses of coarse gravel and cobbles which may be concentrated toward the base of the formation. The base of the Kidderminster Formation was only encountered in the east of the Scheme.

Etruria formation

4.2.5 The Scheme is located on the edge of the outcrop of the safeguarded Etruria Formation clays. The map and memoir for BGS states that the Etruria Formation comprises of mudstones, sandstones and conglomerates Etruria Formation mudstones are a historic and current brick clay resource. The geological map indicates that the Etruria Formation only outcrops within the extreme eastern parts of the Scheme boundary in areas where no new construction is proposed, along the M6, A462 and the junction of the A460 and the M6 Toll.

Superficial Sands and Gravels

4.2.6 Safeguarded superficial sands and gravels only outcrop in the extreme east of the Scheme boundary in the vicinity of Junction 2 of the M54. No new road construction is proposed in this area. Historic borehole logs show the superficial sands and gravels in this area to comprise dense brown sands and gravels with cobbles.

4.3 Assessment

4.3.1 Policy 3 of the SCC MLP establishes that proposals for non-mineral development within Mineral Safeguarding Areas will not be permitted unless it is appropriate and practicable to extract the mineral prior to the development taking place, having regards to the other policies in the MLP.

Bedrock sand and gravel

4.3.2 There is insufficient ground investigation information to fully prove the maximum thickness of the Kidderminster Formation within the Scheme boundary or to assess fully distribution and thickness of bedrock sand and gravel resources. There is also insufficient information to accurately determine the ratio of safeguarded conglomerate resources to unworkable mineral.

4.3.3 Notwithstanding this, the above information and the environmental constraints mapping shown in Figure 3 has been utilised to provide a high-level calculation of

[3] Historic ground investigation logs held by the British Geological Survey have difficulty in distinguishing the Kidderminster Formation from superficial sands and gravels. The geological map and associated memoir indicate that glacial sands and gravels, if present, are only likely to be of limited thickness .

the potential volume of bedrock sand and gravel present within the Scheme boundary which could be extracted by prior excavation without significant environmental impacts.

4.3.4 The design parameters used for the assessment were:

- the environmental stand-offs in Section 4.1.3 and shown on Figure 3 dividing the potentially workable area into four approximately rectangular phases;
- maximum side slopes of 1:2.5 gradient;
- a minimum width of 20 m for the base of each phase (to allow movement of plant;
- average depth of phases of 20 m (given the presumed variation in the thickness of the Kidderminster Formation across the outcrop);
- 10% to 30% recovery of conglomerate is assumed based on borehole logs (which may be uneconomic);
- worked mineral would require on-site processing in the vicinity of the Scheme with discarded mineral (sand) placed back within the worked void; and
- individual extraction areas of less than 100,000 m^3 in volume are considered to be too small to economic.

4.3.5 This preliminary assessment identified a potential resource of between around 0.2 to 0.5 million m^3 of conglomerate, representing a tonnage of around 0.4 to 1.0 million tonnes (at an assumed as-dug density of 2 tonnes per cubic metre).

4.3.6 Mineral extraction would leave voids which would require restoration. Conventionally, mineral workings are either restored wet (i.e. to water bodies) or used as landfills for either non-hazardous or inert wastes. As wet restoration or restoration by non-hazardous landfilling is incompatible with the Scheme (rendering the site unsuitable to accommodate new roads and infrastructure), restoration with suitable inert waste would be required. Restoration to original ground levels might require import of between 0.2 and 0.5 million m^3 of suitable inert waste regulated under an Environmental Permit.

4.3.7 Even if working the mineral is either practicable and economic (which is by no means certain), the exploitation of the bedrock sand and gravel resource by prior extraction and subsequent restoration would therefore significantly delay the commencement and completion of the Scheme.

Etruria formation clays and superficial sand and gravel

4.3.8 The geological map indicates that both the Etruria Formation and the safeguarded superficial sands and gravels only outcrop within parts of the Scheme boundary where no new construction is proposed. Consequently, mineral in these areas is already permanently sterilised and would not be further affected by the Scheme.

5 Mineral Infrastructure Sites

5.1 Introduction

5.1.1 SCC have requested the Applicant assess the impact of the Scheme on potential operations on the Hilton Main site (also known as Hilton Park) as well as its impact on land adjoining the mineral site and within the MSA.

5.1.2 Section 2 identified the relevant planning policy and requirements in relation to safeguarding mineral infrastructure sites, namely MLP Policy 3.2(b) and Policy 3.5. It is therefore necessary for the Scheme to demonstrate whether the tests are relevant in this case.

5.1.3 This section summarises the potential impact on the identified mineral infrastructure site at Hilton Park Quarry.

5.2 Hilton Park Quarry

5.2.1 Hilton Park Quarry is located in the south east of the Scheme (Figure 1) and is split in half by the M54 and by the Scheme boundary. There is an underpass that could connect the two parts of the site should operations resume at some point in the future.

5.2.2 Hilton Park Quarry has been non-operational for many years, but there remain permitted reserves. Planning permission for bedrock sand and gravel extraction was originally granted in 1955 and expires in 2042.

5.2.3 Hanson have confirmed that only a small amount of mineral extraction has been undertaken historically and there is no mineral infrastructure currently located on the site (e.g. site reception facilities, processing plant etc). Access to the site is from the A460 (Cannock Road) to the north west, along a track to the south of Lower Lodge as shown in Figure 1. The Scheme would not cross the permitted mineral extraction area, but would cross the access track to the site.

5.3 Assessment

5.3.1 The Scheme would sever the existing access to the site. Consultation between Highways England, Hanson and SCC has been undertaken to discuss access arrangements. An access road off the eastern dumbbell of the new M54 Junction 1 would be provided to maintain access to the site. The access road would allow for two way HGV movements immediately on and off the roundabout tapering down to a single lane after the point at which it would become a private road. The existing access is a single lane track therefore it is considered that operations at the Hilton Park site would not be prohibited by the Scheme should it become operational in the future.

5.3.2 Therefore it has been demonstrated that the Scheme would not unduly restrict the mineral operations at the Hilton Park site should operations recommence at some point in the future. The requirements of MLP Policy 3 relating to safeguarding mineral infrastructure sites (specifically Policy 3.2 (b) and Policy 3.5 (a)) have been met.

6 Policy Tests

6.1 Introduction

6.1.1 This section examines the degree to which the Scheme satisfies the tests set out in the SCC MLP Policy 3.

Minerals Local Plan Policy 3.2

6.1.2 The Scheme must satisfy the tests set out in Policy 3.2 i.e. Within a Mineral Safeguarding Area, non-mineral development should not be permitted until the prospective developer has produced evidence prior to determination of the planning application to demonstrate:

- the existence, the quantity, the quality and the value of the underlying or adjacent mineral resource; and
- that proposals for non-mineral development in the vicinity of permitted mineral sites or mineral site allocations would not unduly restrict the mineral operations.

6.1.3 Section 4 has highlighted the existence, quantity, quality and value of the underlying or adjacent mineral resource and has concluded that the safeguarded Bedrock Sands and Gravel resource would be sterilised by the Scheme. Prior extraction of this mineral may neither be practicable or economic.

6.1.4 Even if practicable and economic, the extraction of the bedrock sand and gravel resource by prior extraction and subsequent restoration would significantly delay the commencement and completion of the Scheme.

6.1.5 The areas within the Scheme boundary underlain by safeguarded Etruria Formation and Superficial Sands and Gravels are already overlain by existing highway infrastructure and as such are already permanently sterilised.

6.1.6 Section 5 highlights that the Scheme would not unduly restrict permitted mineral sites or mineral site allocations, discussions between Highways England, Hanson and SCC are currently underway to provide a replacement access off a new roundabout/junction so that operations at the Hilton Park site would not be prohibited by the Scheme should it become operational in the future.

6.1.7 Therefore, it is considered that the requirements of Policy 3.2 have been met.

Minerals Local Plan Policy 3.3

6.1.8 The Scheme must satisfy the further tests set out in Policy 3.3, i.e. Non mineral development will not be permitted unless it has been demonstrated that:

- the non–mineral development is temporary and does not permanently sterilise the mineral; or,
- the material planning benefits of the non-mineral development would outweigh the material planning benefits of the underlying or adjacent mineral; or,
- it is not practicable or environmentally acceptable in the foreseeable future to extract the mineral.

6.2 Sterilisation

6.2.1 As the Scheme would be a permanent installation, it follows that the first point of Policy 3.3 does not apply and therefore the latter points must be discussed in further detail.

6.3 Material planning benefits

Requirement for the Scheme

6.3.1 Section 3 of this Minerals Safeguarding Assessment has identified the need for the Scheme as demonstrated by both local and national planning policy.

6.3.2 SSC and four neighbouring authorities have identified transport links as a significant trans-boundary issue within Staffordshire, with the M54 and the M6 being specifically identified.

6.3.3 The Scheme has been identified as a nationally significant infrastructure project that is likely to come forward in the next 11-15 years. The alignment of the Scheme has been subject to extensive assessment and consultation and the proposed alignment is considered to be the most appropriate. Therefore it is considered that there are material planning benefits to allow the Scheme to proceed.

Requirement for sand and gravel

6.3.4 Section 3 also demonstrates that there is no immediate recognised need for additional provision of sand and gravel and brick clay.

6.3.5 The most recently published AMR for SCC identifies 18 operational sand and gravel quarries and 5 non-operational sand and gravel quarries within the county. The landbank for sand and gravel was reported as 12.5 years, greater than the national target of 7 years, which demonstrates that there is no pressing continual need for further supply to be provided.

6.3.6 The MLP also allocates 11 extensions to existing sand and gravel quarries (two of which have already been granted planning consent).

6.3.7 No new sand and gravel quarry sites have been allocated for the plan period. An area of search has been allocated for future sand and gravel extraction by SCC, but this is located to the west of the A38, and not in the vicinity of the Scheme.

6.3.8 Whilst a potential bedrock sand and gravel resource has been identified within the Scheme boundary, exploitation of this mineral may not be either practicable or economic. The prior extraction of the bedrock sand and gravel resource and subsequent restoration would also significantly delay the commencement and completion of the Scheme.

6.3.9 The area within the Scheme boundary underlain by safeguarded Superficial Sands and Gravels is overlain by existing highway infrastructure and as such this mineral is already permanently sterilised.

Requirement for brick clay

6.3.10 The AMR reports that the current 25-year supply is met at four of the five existing brickworks, and at Wilnecote works, a recent decision to approve a planning application for the importation of clay also provides for future supply

6.3.11 The MLP did not allocate extensions to existing brick clay quarries or identify any new sites for brick clay extraction, therefore this suggests that SCC are satisfied that the supply for brick clay in Staffordshire is met.

6.3.12 The areas within the Scheme boundary underlain by safeguarded Etruria Formation are already overlain by existing highway infrastructure and as such are already permanently sterilised.

Summary

6.3.13 When the material planning benefits for the Scheme are compared to the material planning benefits of the underlying mineral, it is clear that the need for the former outweighs the latter and that the second test set out in the SCC MLP Policy 3.3 is satisfied.

6.4 Practicable or environmentally acceptable

6.4.1 It can be inferred from the third test in the SCC MLP that prior extraction is not required if prior extraction is neither practicable or environmentally acceptable.

6.4.2 Section 4 of this Minerals Safeguarding Assessment has identified that the environmental and physical constraints affecting the land within the Scheme boundary mean that prior extraction can only take place in a number of parcels of land, each subject to significant environmental or practical constraints.

6.4.3 Given the small proportion of conglomerate resource identified, prior-extraction may neither be practicable or economic.

6.4.4 Prior extraction would also significantly delay the commencement and, completion of the Scheme for which there is an identified need. Given this, prior extraction is therefore neither appropriate or practicable.

7 Conclusions

7.1.1 The preceding assessment demonstrates that:

- Geological maps and ground investigations undertaken has provided evidence to demonstrate the existence of the underlying or adjacent mineral resource, it has shown that there may be a bedrock sand and gravel resource.
- There is insufficient information on the quantity, the quality and the value of the bedrock sand and gravel resource.
- When considering the material planning benefits and the need for the Scheme is compared to that of the underlying mineral resource, it is clear that the need for the former outweighs the latter.
- Prior extraction would significantly delay the commencement and completion of the Scheme for which there is an identified need. The Scheme also identifies a number of environmental constraints if prior extraction of the mineral resource was undertaken. Given this, prior extraction of sand and gravel or brick clay may neither be practicable or environmentally acceptable.
- The Scheme would not unduly restrict mineral operations at the safeguarded Hilton Park site.

7.1.2 Overall it therefore follows that the prior extraction of sand and gravel or brick clay is not required in this case in order to comply with SCC MLP Policy 3.

8 References

Ref 1 National Planning Policy Framework (https://www.gov.uk/government/publications/national-planning-policy-framework--2)

Ref 2 Planning Practice Guidance (https://www.gov.uk/government/collections/planning-practice-guidance)

Ref 3 Minerals Local Plan for Staffordshire (2015-2030) (2017)

Ref 4 Staffordshire County Council Annual Monitoring Report 2017/2018 (2018)

Ref 5 South Staffordshire Council Core Strategy Development Plan Document (2012)

Ref 6 South Staffordshire Council Site Allocations (2018)

Ref 7 British Geological Survey, Provision of Geological Information and a Revision of Mineral Consultation Areas for Staffordshire County Council (2006)

Ref 8 British Geological Survey, Mineral Safeguarding in England good practice advice (2011)

Ref 9 National Policy Statement for National Networks (https://www.gov.uk/government/publications/national-policy-statement-for-national-networks)

Ref 10 South Staffordshire Council Infrastructure Delivery Plan (2017)

Ref 11 British Geological Survey (2001), Wolverhampton, England and Wales Sheet 153, Solid and Drift Geology, 1:50,000

Ref 12 British Geological Survey (2003), Geology of the Wolverhampton and Telford district: sheet description of the 1:50,000 series sheet 153 (England & Wales)

Figures

Hilton Park Quarry (Non-operational)

0 0.5 1 2 km

Legend

- The Scheme Boundary
- Active Quarries and Mines
- Minerals Plan Allocated Sites
- Safeguarded Mineral Infrastructure Sites

Mineral Safeguarding Area

- Superficial Sand and Gravel
- Bedrock Sand
- Brick Clay

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Revised Template	EC / AR	21/01/2020	P03
Revised Template	EC / AR	03/10/19	P02
First Issue	DM / LK	24/04/18	P01
Revision Details	By / Check	Date	Suffix

Purpose of issue: DCO APPLICATION

Client: Highways England, The Cube, 199 Wharfside Street, Birmingham, B1 1RN

Working on behalf of: highways england

Development Consent Order Number: TR010054

Project Title: M54 TO M6 LINK ROAD

Drawing Title: FIGURE 1 MINERAL SAFEGUARDING AREAS

Designed	Drawn	Checked	Approved	Date
EC	HW	IC	TP	21/01/2020

Internal Project No. 60536736	Suitability S2
Scale @ A3 1:30,000	Zone M54 to M6 Link Road

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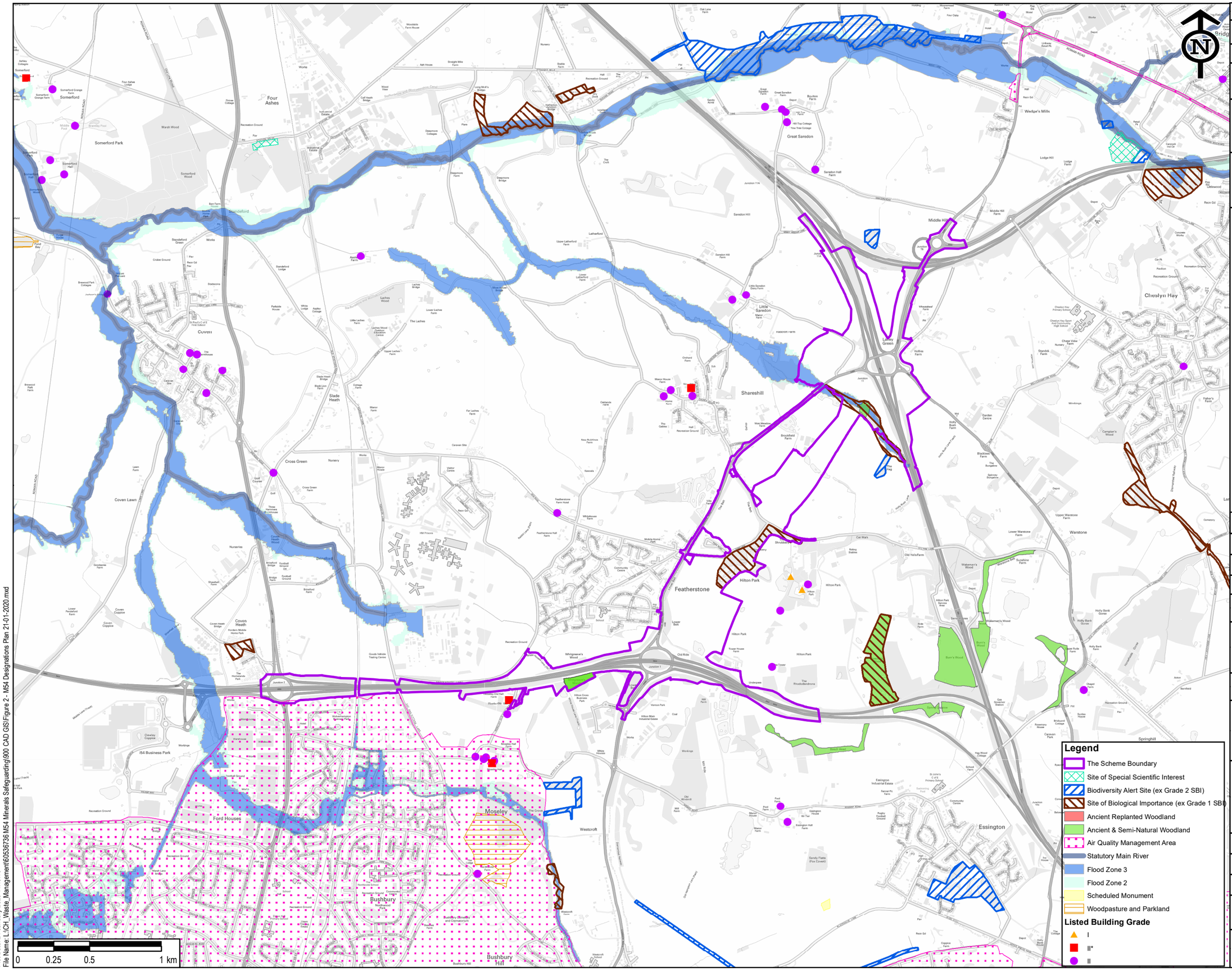
Drawing Number: Highways England PIN | Originator | Volume | Location | Type | Role | Number
HE514465 | -ACM | -EGN | M54_SW_PR_Z | -DR - EG - 0001

Rev: P03

Plot Date: 21 January 2020 11:02:07
File Name: L:\CH_Waste_Management\60536736 M54 Minerals Safeguarding\900 CAD GIS\Figure 1 - Mineral Safeguarding Areas 21-01-2020.mxd



Legend

- The Scheme Boundary
- Site of Special Scientific Interest
- Biodiversity Alert Site (ex Grade 2 SBI)
- Site of Biological Importance (ex Grade 1 SBI)
- Ancient Replanted Woodland
- Ancient & Semi-Natural Woodland
- Air Quality Management Area
- Statutory Main River
- Flood Zone 3
- Flood Zone 2
- Scheduled Monument
- Woodpasture and Parkland

Listed Building Grade

- I
- II*
- II

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Revision Details	By / Check	Date	Suffix
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Revised Template	EC / AR	03/10/19	P02
First Issue	DM / LK	24/04/18	P01

Purpose of issue: DCO APPLICATION

Client: Highways England, The Cube, 199 Wharfside Street, Birmingham, B1 1RN

Working on behalf of: highways england

Development Consent Order Number: TR010054

Project Title: M54 TO M6 LINK ROAD

Drawing Title: FIGURE 2 DESIGNATIONS PLAN

Designed	Drawn	Checked	Approved	Date
EC	HW	IC	TP	21/01/2020

Internal Project No.	Suitability
60536736	S2
Scale @ A3: 1:24,000	Zone: M54 to M6 Link Road

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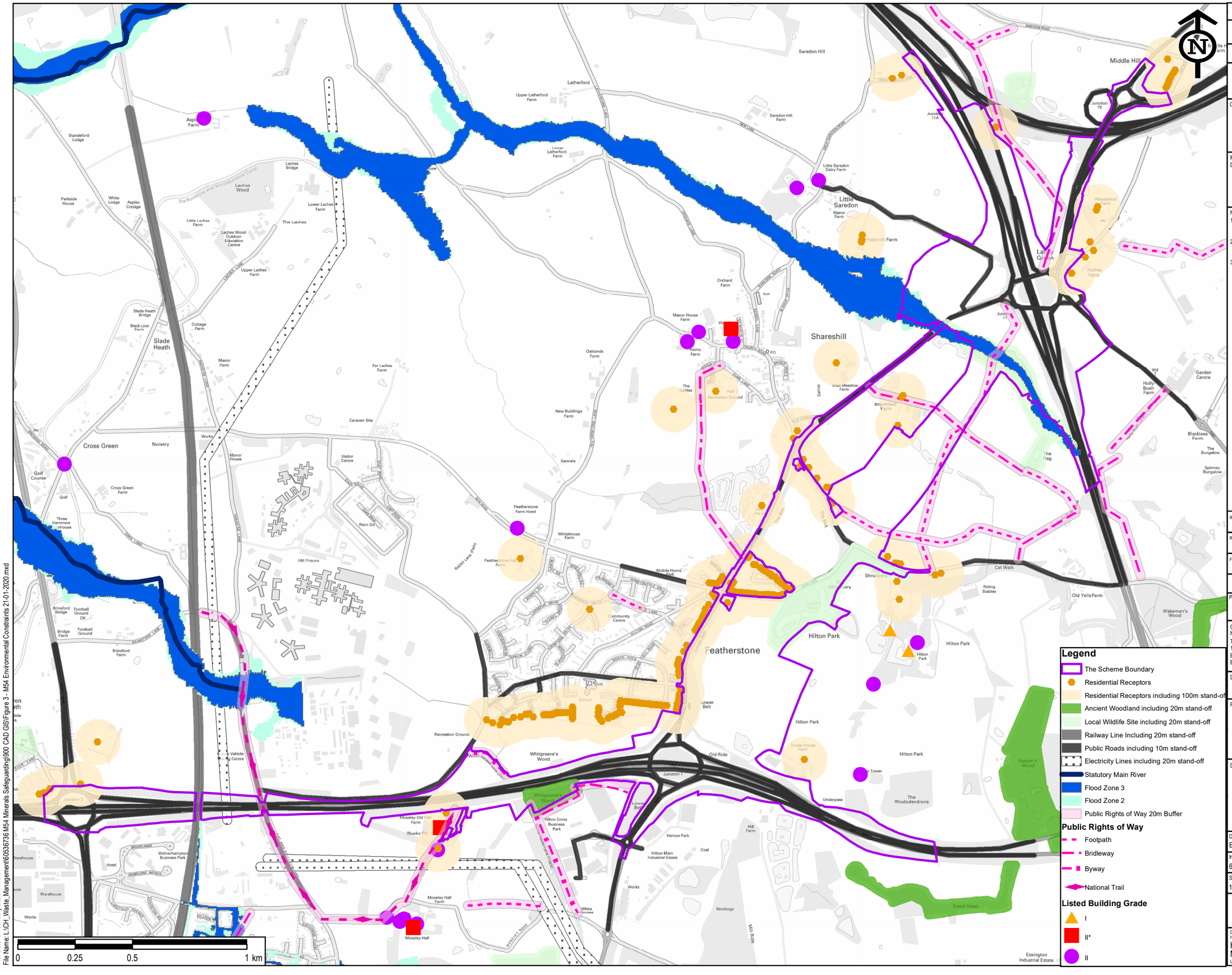
Drawing Number: Highways England PIN	Originator	Volume	Rev
HE514465	-ACM	-EGN -	P03
Location: M54_SW_PR_Z		-DR - EG - 0002	
		Type | Role | Number	

Plot Date: 21 January 2020 11:48:16
File Name: L:\CH_Waste_Management\60536736 M54 Minerals Safeguarding\900 CAD GIS\Figure 2 - M54 Designations Plan 21-01-2020.mxd



Legend

- The Scheme Boundary
- Residential Receptors
- Residential Receptors including 100m stand-off
- Ancient Woodland including 20m stand-off
- Local Wildlife Site including 20m stand-off
- Railway Line Including 20m stand-off
- Public Roads including 10m stand-off
- Electricity Lines including 20m stand-off
- Statutory Main River
- Flood Zone 3
- Flood Zone 2
- Public Rights of Way 20m Buffer

Public Rights of Way

- Footpath
- Bridleway
- Byway
- National Trail

Listed Building Grade

- I
- II*
- II

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Revision Details	By / Check	Date	Suffix

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Client: Highways England, The Cube, 199 Wharfside Street, Birmingham, B1 1RN

Working on behalf of: highways england

Development Consent Order Number: TR010054

Project Title: M54 TO M6 LINK ROAD

Drawing Title: FIGURE 3 ENVIRONMENTAL CONSTRAINTS

Designed	Drawn	Checked	Approved	Date
EC	HW	IC	TP	21/01/2020

Internal Project No. 60536736	Suitability S2
Scale @ A3 1:15,000	Zone M54 to M6 Link Road

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HE514465		-ACM	-EGN	-	P03
M54_SW_PR_Z			-DR - EG - 0003		
Location			Type	Role / Number	

Plot Date: 21 January 2020 11:18:31
File Name: L:\CH_Waste_Management\60536736 M54 Minerals Safeguarding\900 CAD GIS\Figure 3 - M54 Environmental Constraints 21-01-2020.mxd

Annex A: List of Quarries in Staffordshire (from Staffordshire County Council Annual Monitoring Report 2016/2017)

APPENDIX 1 MINERALS

Table 8: Non-Energy Mineral Sites with Permitted Reserves

Site	Mineral Type	Cessation date for mineral working
Staffordshire Moorlands		
Broadmoreside	Building stone	2020
Captains Barn Farm	Sand & Gravel	2026
Cauldon Cement	Limestone/ Shale	2042/ 2030
Cauldon Low	Limestone	2042
Croxden	Sand & Gravel	2023
Freehay & Mobberley	Sand & Gravel	2025
Hurst	Silica Sand	2036
Kingsley	Clay	2042
Pitclays/Richmore Hill	Silica Sand	2042
Redstone	Building stone	2035
Tearne	Building stone	2042
Wardlow & Wredon	Limestone	2046
Newcastle under Lyme		
Apedale South	Clay	2042
Chatterley	Clay	2030
High Carr	Clay	2019
Keele	Clay	2043
Knutton	Clay	2042
Lordsley/Trentham	Sand & Gravel	2042
Rufus/Bradwell Wood	Clay	2042
Stafford		
Weavers Hill	Sand & Gravel	2022
East Staffordshire		
Barton	Sand & Gravel	2030
Fauld	Anhydrite/Gypsum	2028
Great Gate	Building stone	2042
Kevin	Limestone	2028
Leasowes Farm/Uttoxeter	Sand & Gravel	2023[12]
Newbold (with Tucklesholme)	Sand & Gravel	2029
South Staffordshire		
Campions Wood	Clay	2033
Cheslyn Hay/Rosemary Works	Clay	2042
Essington Works	Clay	2042
Four Ashes/Calf Heath	Sand & Gravel	2021
Hilton Park	Sand & Gravel	2042
Himley Road North	Clay	2042
Himley Road South	Clay	2042
Hollybank	Clay	2030

[12] Refer to approval of ES.16/15/524 MW subject to completion of section 106 legal agreement.

Site	Mineral Type	Cessation date for mineral working
Poolhouse Road	Sand & Gravel	2042
Pottal Pool	Sand & Gravel	2034
Redhurst & Essington	Clay	2042
Saredon	Sand & Gravel	2030
Seisdon & Trysull	Sand & Gravel	2018
Walkmill Lane	Clay	2042
Warstones	Clay	2035
Whittington Hall Lane	Sand & Gravel	2042
Cannock Chase		
Rugeley	Sand & Gravel	2031
Lichfield		
Alrewas & Whitemoor Haye	Sand & Gravel	2027
Cranebrook	Sand & Gravel	2033
Hints	Sand & Gravel	2025
Moneymore	Sand & Gravel	2025/2042
Shire Oak	Sand & Gravel	2025
Weeford	Sand & Gravel	2042
Tamworth		
Wilnecote	Clay	2035

Table 9: Sand and Gravel allocations in Minerals Local Plan and implementation update

Site Allocation	Relevant permission	Comment
Captains Barn Farm	None	-
Croxden	None	-
Uttoxeter	None	-
Newbold	None	-
Barton	None	Application ES.17/11/502 M received on 15 January 2018 – not yet determined.
Alrewas	L.14/03/817 MW dated 17 May 2017	Implemented
Calf Heath	None	Note proposals for the West Midlands (rail) Interchange affect this allocation.
Saredon	None	-
Cranebrook	L.15/15/802 MW dated 13 February 2018	Implemented
Hints / Hopwas	L.15/04/805-808 MW dated 22 October 2018	Implemented
Weeford (Moneymore)	None	-
Area of search to the west of the A38	None	Note proposals for borrow pits associated with HS2 phase 2a
Non-allocated sites	Shire Oak Quarry extension permitted on 18 June 2018 (ref: L.16/05/809 MW)	-