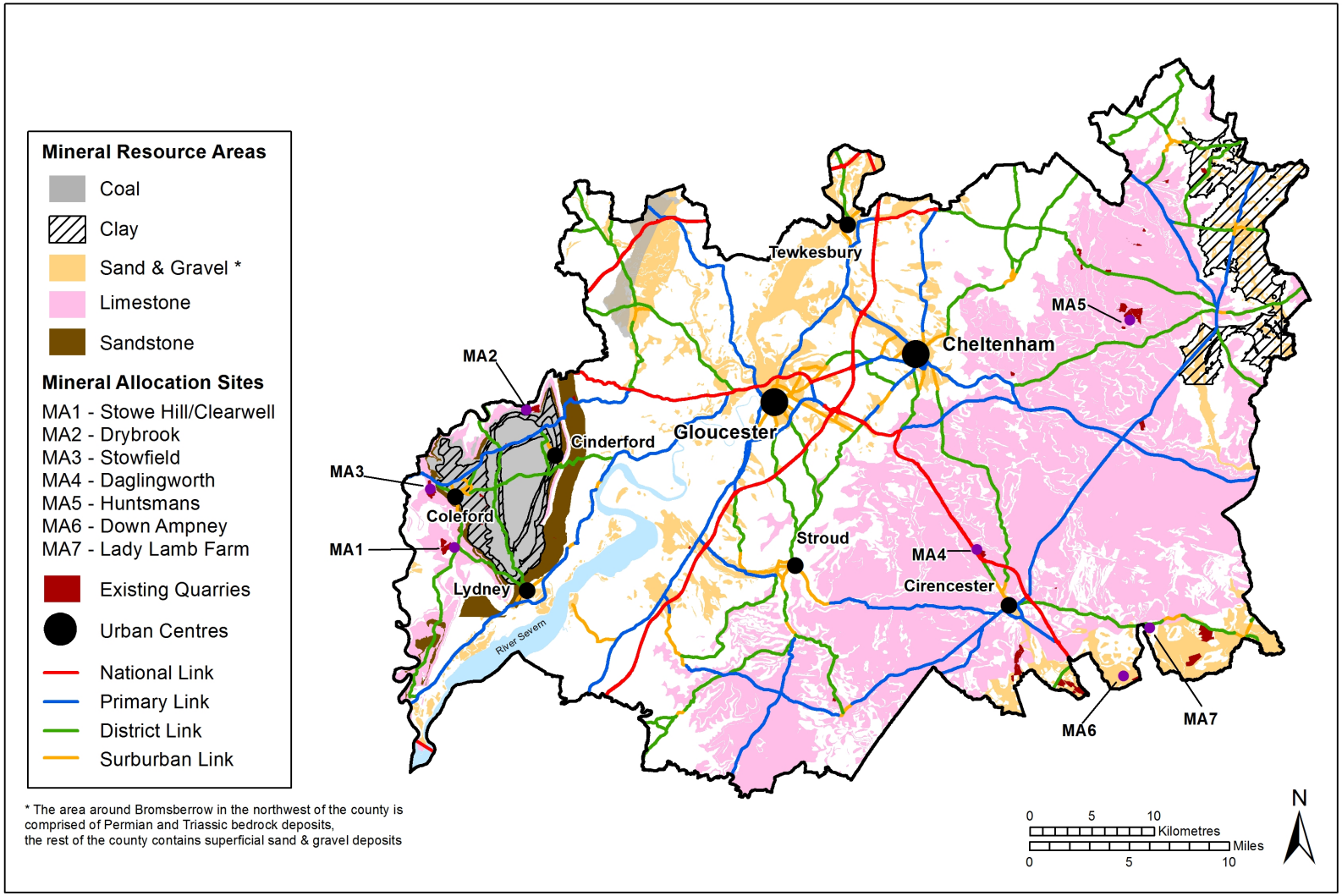
APPENDIX 1

KEY DIAGRAM

Appendix 1 | Key diagram



APPENDIX 2

SAFEGUARDED MINERAL INFRASTRUCTURE SITES

Appendix 2 | Safeguarded mineral infrastructure sites

Mineral infrastructure	Site location
Wharfage with storage / handling / processing potential	The Docks, Sharpness, Berkeley, GL13 9UX
Concrete batching plant	Land at Naunton Quarry, Buckle Street, Naunton, GL54 3BA
	Land at the Old Bakery, Lower Tuffley Lane, Gloucester, GL2 5DP
	Land at Netherhills, Fromebridge Lane, Whitminster, GL2 7PD
	Land at Claydon Pike Works, Claydon Pike, Lechlade, GL7 3DT
	Land at Swindon Road, Cheltenham, GL51 9NB
	Hayricks Wharf, Tewkesbury Road, Cheltenham, GL51 9AA
	Land at Barnwood Junction, Myers Road Off Horton Road, Gloucester, GL1 3QA
	The Old Ryeford Sawmills, Ryeford Industrial Estate, Stonehouse, GL10 3HE
	Land at the Old Airfield, Moreton Valence, GL2 7NG
	Land at Golden Valley, Gloucester Road, Cheltenham, GL51 0TT
	Land at Ruardean Hill, Drybrook, GL17 9AR
	Land at Shorncote Quarry, Ewen Road, South Cerney, GL7 6DE
Coated Road stone Plant	Land at Stowfield Quarry, Staunton Road, Coleford GL16 8NS
	Land at Clearwell Quarry, Stowe Green, St. Briavels, GL15 6QW
	Land at Naunton Quarry, Buckle Street, Naunton, GL54 3BA
Concrete Products Plant	Land at Cerney Wick Quarry, Spine Road East, South Cerney, Gloucestershire, GL7 5TL
Sites for handling and / or processing and distributing recycled and secondary	Land at the Old Airfield, Moreton Valence, GL2 7NA
	Land at Netherhills, Fromebridge Lane, Whitminster, GL2 7PD

aggregates	Land at Allstone, Myers Rd, Gloucester, GL1 3QD Land off Buckle Street, Honeybourne, Evesham, WR11 7QE Land at Babdown Industrial Estate, Beverston, GL8 8YL Land at Overton Farm, Maisemore, GL2 8HR Land at Shorncote Quarry, Ewen Road, South Cerney, GL7 6DE Land at Javelin Park, Haresfield, GL10 3DP Land at Cowfield Mill, Northway Lane, Tewkesbury GL20 8JG Land at Shurdington Road, Shurdington, Cheltenham GL51 4HU

APPENDIX 3

FORECAST OF AGGREGATE SUPPLIES AND PROVISION FIGURES

Appendix 3 | Forecast of aggregate supplies and provision figures

10-year rolling average of annual sales for primary land-won aggregates from within Gloucestershire (2007-2016 inclusive): -

- **1.452 million tonnes per annum for crushed rock**
- **0.742 million tonnes per annum for sand and gravel;**

Source data: 6th LAA for Gloucestershire

Remaining reserves of primary land-won aggregates from within Gloucestershire as at the end of 31/12/2016: -

- **24.32 million tonnes for crushed rock;**
- **4.41 million tonnes for sand and gravel**

Source data: 6th LAA for Gloucestershire

Number of years' worth of provision to be considered by the plan			
Crushed Rock		**Sand and gravel**	
Year prior to submission (2017) #	1	Year prior to submission (2017) #	1
Plan period (2018-2032) ##	15	Plan period (2018-2032) ##	15
Landbank at end of plan (2033-2042) ###	10	Landbank at end of plan (2033-2039) ###	7
Total number of years	**26**	**Total number of years**	**23**

Included because reserve data is only available up until 31/12/2016 at this time;
See NPPF 2012 – paragraph 157, bullet 2;
See NPPF 2012 – paragraph 145, bullet 6

Mineral	A Number of years	B Minimum annual provision amount (in mt)	C Total requirement to meet minimum provision	D Landbank as at 31/12/2016	E Permissions granted (in mt) since 31/12/2016	F Minimum provision requirement to be considered by the plan C-(D+E)
Carboniferous Limestone	26	*1.0164	26.426	*** 16.00	0	10.426
Jurassic Limestone	26	** 0.4356	11.326	*** 8.31	0	3.016
Total Crushed Rock	**26**	**1.452**	**37.752**	**24.31**	**0**	**13.442**
Sand and gravel	**23**	**0.742**	**17.066**	**4.41**	**3.2**	**9.456**

* Based on 70% of 1.452mt
** Based on 30% of 1.452mt
*** Taken from the 6th Gloucestershire's Local Aggregate Assessment (LAA): - https://www.gloucestershire.gov.uk/planning-and-environment/planning-policy/local-aggregates-assessment-laa/

APPENDIX 4

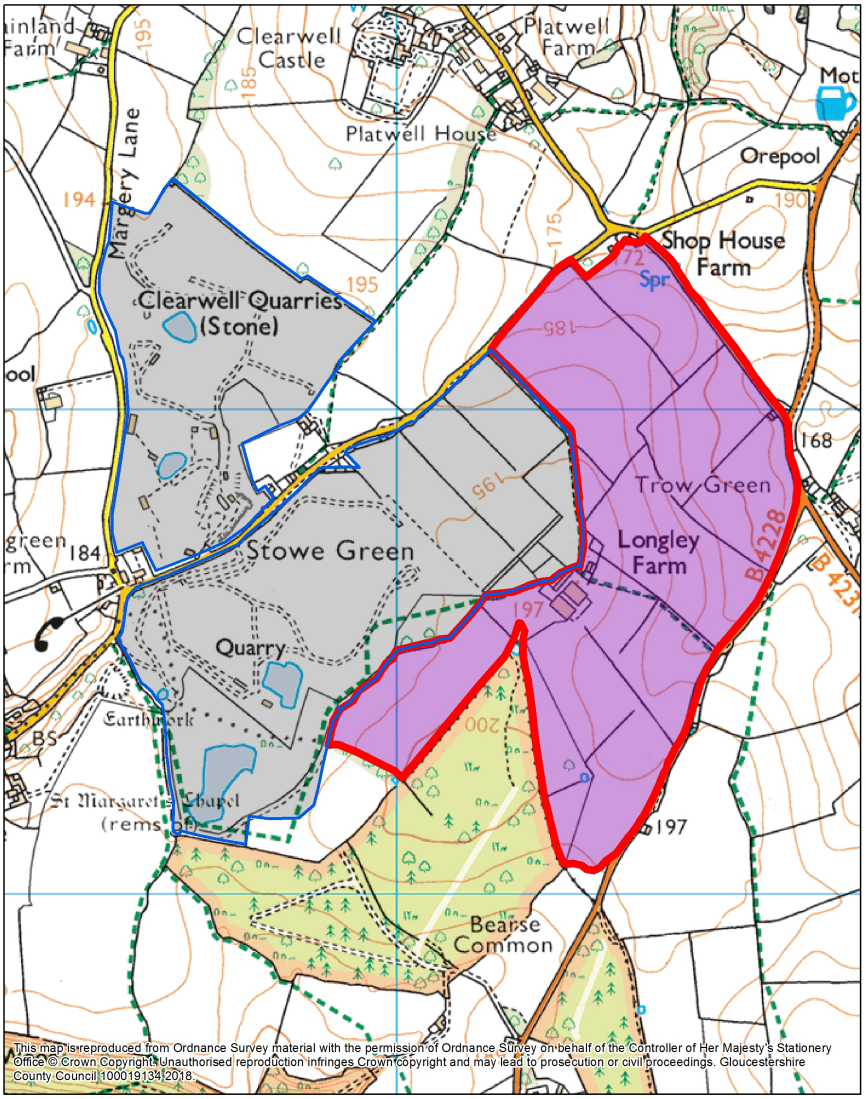
DETAILED DEVELOPMENT REQUIREMENTS FOR PLAN ALLOCATIONS

Appendix 4 | Detailed development requirements for plan allocations

- Allocation 01: Land east of Stowe Hill Quarry;
- Allocation 02: Land west of Drybrook Quarry;
- Allocation 03: Depth extension to Stowfield Quarry;
- Allocation 04: Land northwest of Daglingworth Quarry;
- Allocation 05: Land south and west of Naunton Quarry[269];
- Allocation 06: Land south east of Down Ampney;
- Allocation 07: Land at Lady Lamb Farm, west of Fairford;

[269] From November 2017 the quarry formerly known as "Huntsman's Quarry" was renamed Naunton Quarry by the site owner

Allocation 01: Land east of Stowe Hill Quarry					
Aggregate type	Forest of Dean (Carboniferous) Limestone			Allocation type	Preferred area
Yield and Illustrative aggregate supply potential	The entire allocation may yield in the region of 10mt to 17mt of crushed rock limestone. Based upon the existing operating capacity permitted at the Stowe Hill / Clearwell Quarries complex, the allocation could make a contribution towards the maintenance of steady local aggregate supplies by as much as 28 years worth of additional working beyond that already permitted.				
Site area	Approximately 54 ha	District	Forest of Dean	Parish	Newland
Relevant planning permissions (as of Nov 2017)	DF/2238/W: Concrete batching plant and ancillary facilities | dated - 19/12/02; DF/2238/1/A: Operation of a coated roadstone (asphalt) plant | dated – 01/11/05; DF/2238/X: Extension of Stowe Hill Quarry and consolidation of existing consents | dated - 05/01/07;				



Site Allocation
Existing Quarries

01: Land east of Stowe Hill Quarry

0 500 Yards
0 500 Metres

Gloucestershire COUNTY COUNCIL

N

Detailed Development Requirements for Allocation 01 : Land east of Stowe Hill Quarry;	
Theme	**Specific Requirement**
Local communities Potentially linked to the requirements of policies: DM01; DM02; DM03; MR01	An initial Health Impact Assessment (HIA) screening exercise should be carried out at the project inception stage to establish how best to assess and take account of the potential health impacts of local communities within the sphere of influence of the allocation[270]. Whether a dedicated HIA is prepared or related information is to be presented as part of another type of assessment, the different groups within the population that might be affected should be highlighted and any relevant health characteristics taken into account[271]. It will be necessary for the wider amenity impacts on affected local communities to be assessed incorporating the individual residential properties, farms and commercial enterprises located close to the allocation and those that comprise the nearby hamlets of Stowe, Stowe Green, Trow Green, Mork and Lower Cross and the villages of Clearwell, Sling and St. Briavels. An understanding of the scale and significance of possible attributable threats to the health and well-being of those communities that reside along freight routes used to support aggregate supplies from Stowe Hill Quarry will also be required. In addition, carefully considered commitments regarding measures to avoid and / or mitigate adverse amenity impacts and to maximise and enhance positive effects upon health and well being should be submitted.
Economic development Potentially linked to the requirements of policies: DM01; DM02 DM09	An Economic Impact Assessment (EcIA) should be carried out to identify potential economic impacts and their significance as a result of further aggregate working at Stowe Hill Quarry. Whether a dedicated EcIA is prepared or related information is to be presented as part of another type of assessment, it must establish whether current local economic conditions are likely to be influenced and the scale and significance of any positive contribution to economic well being at the local, sub-national and national levels, having taken into account the occurrence of possible negative economic impacts. The EcIA should be based on a balanced and credible analysis of evidence that has been published and / or has been robustly generated to support the proposal. Information concerning the potential impact on local employment both direct and indirectly will be crucial. The prospect of new jobs being generated should be highlighted. Commitments to secure employment and training opportunities that will benefit local communities (e.g. provision of local apprenticeships) will be best placed set out within the EcIA. This is in addition to any evidence to show how existing direct and indirect employment will be safeguarded. The possibility that existing non-minerals related local businesses and / or permitted emerging enterprises could be exposed to undue economic risk from further aggregate working at Stowe Hill Quarry must be explored. The nature of any risks to other businesses, their likely significance and any proposed means of mitigation will need to form part of the EcIA.
Operational matters / site infrastructure Potentially linked to the requirements of policies: DM01; DM02; DM03; DM06; DM09; MR01	The existing permitted production limit of 600,000 tonnes per annum or 60,000 tonnes per calendar month should not be exceeded in association the working of the allocation, unless it can be demonstrated an alternative production limit will be acceptable in planning terms. It is preferable that all site infrastructure including plant, necessary to support future working is also concentrated within the Stowe Hill Quarry unit so that the restoration of the adjacent Clearwell Quarry can be achieved as soon as is practicably possible. Alternative site infrastructure proposals must be robustly justified and accompanied by sufficient evidence to show how they will be environmentally acceptable.

[270] Best practice on HIA screening is contained within the Department of Health (DoH) Health Impact Assessment (HIA) of Government Policy document (July 2010): *A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process.* This guide can be obtained at:- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216009/dh_120110.pdf

[271] Public Health England regularly prepares Health Profiles at the county level. This information may be a useful starting point for preparing a robust and credible evidence base on the nature of local communities that may be affected. Information on Health Profiles can be obtained at: - https://fingertips.phe.org.uk/

Highways Potentially linked to the requirements of policies: DM01; DM02; DM03	A Transport Assessment (TA) will be required. Advice on the content of a TA should be sought from the Local Highway Authority at the earliest possible opportunity as part of pre-application preparations. Highways matters, which will need to be investigated include: - the creation of a safe and suitable vehicular access; and the continued adherence to acceptable, established freight routes (vehicular movements associated with the working of the allocation should ideally use the A48 via the B4321 (Bream Road) or the A4136 via the B4228, which are classified as mostly 'District Links' and recognised as part of the 'Primary Route Corridor for HGVs'). It is preferable that consideration is given to alternative access arrangements to those currently afforded to Stowe Hill Quarry and that service the current plant area within Clearwell Quarry. A previously approved proposal has already considered the possibility of a new route off the B4228[272]. This was supported by the MPA and could prove to be materially significant in the assessment of transport impacts with any future working proposals. Furthermore, the TA should pay particular attention to any freight routes that include the A48. This is due to the presence of the declared Lydney Air Quality Management Area (AQMA) and restrictions at the Bream Road junction with Lydney High Street. All proposed routing plans will need to take account of Gloucestershire Local Transport Plan policies LTP PD 3.1 and LTP PD 3.4[273] and follow the advice contained within the Gloucestershire Freight Gateway[274].
Public Rights of Way (PRoW) Potentially linked to the requirements of policies: DM03; MR01	An assessment of the PRoW network should be undertaken with particular attention given to paths RNE 66/1, RNE 67/1 and FSB 138/1. Details of possible temporary diversions or permanent re-routings of any affected paths will be required. It is strongly encouraged that advice is sought at the earliest possible opportunity from the Local Highways Authority in respect of this matter.
Flood risk Potentially linked to the requirements of policies: DM02; DM04; MR01	A site-specific flood risk assessment (FRA) will be required. The possibilities of elevated flood risk from all minerals-related development activities (e.g. site preparation, working, processing and site restoration) resulting from changes in groundwater and increased surface run-off will need to be investigated. Although the risks posed from all forms of flooding under current conditions and those forecast in the future incorporating anticipated climate change impacts, will also need to be assessed. Possible cumulative / in-combination impacts on flood risk associated with permitted mineral working and other related activities such as restoration and aftercare at the existing Stowe Hill Quarry and the adjacent Clearwell Quarry will need to be considered. In addition, potential flood-risk sensitive receptors such as the residential properties and commercial premises of the hamlets of Stowe, Stowe Green, Trow Green and the villages of Clearwell and Sling and will require investigation. The FRA must scrutinise the application of flood risk mitigation measures and provide a strategy for their implementation. During the preparation and operational phases of the development, flood risk mitigation matters requiring attention include: - the siting of any hard-standing, buildings, storage and stockpiling of quarry materials, and other site infrastructure away from areas at a greater risk of susceptibility to flooding. For the restoration phase the incorporation of suitable flood risk mitigation must be carefully considered. This will likely involve the application of a sustainable drainage system with the core aim of ensuring the pre-development rate of surface water run-off will not be exceeded in line with SuDS guidance. It will also need to be effectively integrated with any previously approved flood risk management solution at the existing Stowe Hill Quarry. Where infilling using inert materials (imported and / or internal to the site) for profiling landforms, this must also incorporate sufficient provision for suitable safe pathways for ground water to move around and through the allocation to make sure that groundwater levels do not rise above those recorded prior to minerals development.

[272] Planning permission under reference 09/0072/FDMAJM included a new haul road and vehicular access off the B4228. The permission was granted in 2013 but has now lapsed following the cessation of the conditional time period for commencement.

[273] Gloucestershire Freight Network Policies LTP PD 3.1 (Gloucestershire's Freight Network) and LTP 3.4 (Construction Management Plans) are set out in Gloucestershire's Local Transport Plan (2015 – 2031) Policy Document 3 – Freight can be obtained at: - https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/freight/

[274] The Gloucestershire Freight Gateway can be obtained at:- http://freightgateway.co.uk/gloucestershire/

Water resources Potentially linked to the requirements of policies: DM01; DM05; MR01	A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. As the underlying geology of the allocation is classified as a Principal aquifer, attention will need to be given to identifying and quantifying risks associated with all possible minerals-related development activities (e.g. working, processing and site restoration) to groundwater resources and for establishing a stringent monitoring regime commencing 24-months prior to development, continuing throughout the operational phase, and including site restoration and aftercare. In addition, potential hydrological impacts on nearby surface water bodies (up to 5km) will require scrutiny. These include: - several tributaries of Oakwood Brook, a small spring and the resulting flow into the Slade Brook, several unnamed springs to the north of the allocation, Valley Brook, Warth Brook and Cannop Brook. However, a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. Particular attention will need to be given to the potential hydrological / hydrogeological impacts on the Slade Brook SSSI. This contains a karst feature – an active tufa-forming stream, which is likely to be sensitive to local hydrological and hydro-geochemical change. There are known hydrological linkages between the SSSI and the allocated area. An holistic approach should be adopted when considering the Slade Brook SSSI with technical advice on this matter sought from both the EA and Natural England at the earliest possible opportunity. Avoiding the derogation of the SSSI must be the primary focus. Possible cumulative / in-combination hydrological / hydrogeological impacts associated with permitted mineral working and other related activities should also be considered such as proposed restoration and aftercare at the existing Stowe Hill Quarry and the adjacent Clearwell Quarry. The HIA will need to establish mitigation requirements and where necessary provide a strategy for their implementation. It must also incorporate a strategic, catchment-scale view of water resource management and identify how development of the allocation may positively contribute towards protecting and improving the water environment in line with the Severn River Basin Management Plan (RBMP) and Wye and Severn Tidal Tributaries Catchment Flood Management Plans (CFMP)[275].

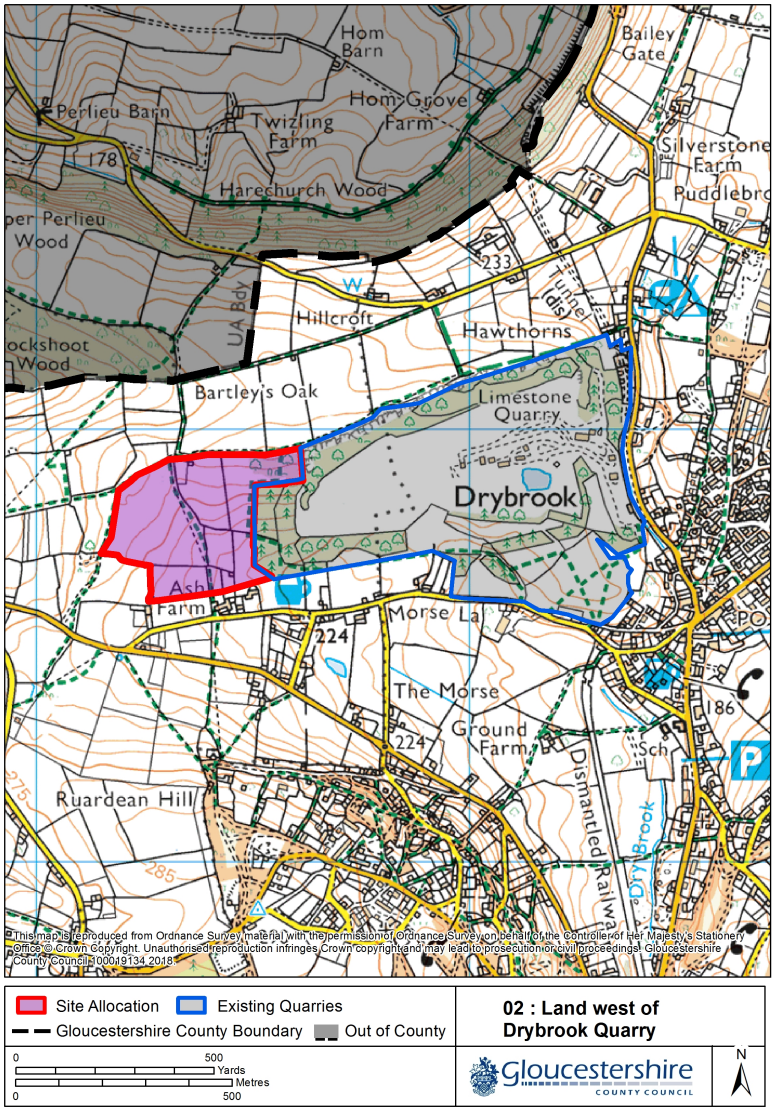
[275] Information on river basin and catchment management plans (RBMPs and CFMPs) can be obtained at: - https://www.gov.uk/government/collections/catchment-flood-management-plans

Natural environment Potentially linked to the requirements of policies: DM05; DM06; DM07; MR01	A comprehensive assessment of the natural environment will be required. This should include natural assets present in, which rely upon, and / or that are located within the sphere of influence of the allocation and contribute to the county's green infrastructure. The assessment must identify potential impacts and scrutinise their significance taking into account the different activities / stages of minerals development (e.g. the preparation of land prior to mineral working, mineral working and processing and subsequent restoration incorporating aftercare). Environmental designations in the locality that will need careful consideration include: - the Wye Valley & FoD Bat Sites SAC, Wye Valley Woodlands SAC, River Wye SAC, Old Bow & Old Ham Mines SSSI, Devil's Chapel Scowles SSSI, Tudor Farm Bank SSSI, River Wye SSSI and Slade Brook SSSI. In addition, any priority habitats and / or priority species, which encompass or have been recorded in, which rely upon, and / or that are located within the sphere of influence of the allocation must be investigated. A further crucial aspect of the assessment will be the provision of sufficient details concerning measures to avoid, reduce, remedy and / or compensate possible unacceptable negative effects. Any scheme of mitigation must also be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. In totality, the assessment of natural resources must demonstrate how any issues arising, have been considered in a holistic manner and within a strategic context (e.g. the implications for the county's green infrastructure). In particular it must be clear as to how the characteristic habitats and the supported wildlife of the local ecological networks will not be subject to unacceptable adverse impacts. Where opportunities exist to deliver tangible benefits (both during and post-mineral working), due consideration should also be given to possible collaborations and coordination with the programme of nature conservation actions to enhance the county's green infrastructure as identified for the Forest of Dean Nature Improvement Area (NIA). An analysis of whether any significant effects are likely to arise on the Wye Valley and Forest of Dean Bat Sites SAC, the Wye Valley Woodlands Sites SAC and / or the River Wye SAC either alone or in combination with other plans or projects, must be carried out at the planning application stage through a formal HRA screening process, establishing the requirement for an Appropriate Assessment (AA) and thus highlighting the mitigation measures required.
Geodiversity Potentially linked to the requirements of policies: DM06; MR01	In the event the existing Stowe Green / Clearwell Quarries Regionally Important Geological and Geomorphological Site (RIGS ref: 236) may be affected, a proportionately detailed assessment of possible impacts will need to be carried out. At the earliest opportunity advice should ideally be sought from the Gloucestershire Geology Trust. Key items that will need careful consideration include whether mitigation is possible and how this might be achieved; and to what extent future management practices can practicably and reasonably be brought forward to maximise opportunities to improve the protection of geological assets, enable greater access to them, and / or facilitate greater scientific understanding.
Soil resources Potentially linked to the requirements of policies: DM07; MR01	A Soil Survey and Agricultural Land Classification (ALC) Report will be required. This will need to establish baseline conditions of soil resources (i.e. quality and quantity) contained in the allocation and within its sphere of influence. The allocation lies within an area that may contain grade 3 agricultural land (good to moderate quality). This will need further investigation, possibly through a detailed site survey in order to: - determine the extent of the resource; establish the sub-grade of the soil (i.e. whether it is 'good' (3a) and / or 'moderate' (3b)); and assess the relationship of the resource to the individual proposal under consideration along with the wider allocation. In the presence of potentially valuable soil resources, a Soil Handling Strategy must also be prepared. This should consider the details of how best to safeguard against possible damage to existing soil quality and the potential, where practicable for the quality to be improved. A holistic approach to the management of soil resources will be needed, particularly with respect to possible implications for the proposed programme of working (e.g. progressive or otherwise) and the successful delivery of the restoration strategy and aftercare programme.

Historic environment - including archaeology Potentially linked to the requirements of policies: DM08; DM09; MR01	A Heritage Statement (HS) will be required to establish the presence of heritage assets that could be affected and to assess the nature, extent and importance of their significance and their settings. The HS must also provide a detailed analysis of potential impacts and their envisaged significance associated with all activities related to the working of the allocation. Where the potential for adverse impacts is identified, details of the means of avoiding such impacts or delivering sufficient mitigation to eradicate and / or reduce their significance to an acceptable degree must be included. The prime focus should be on the preservation of key heritage assets. A proportionately detailed, reasoned justification will be necessary in every instance that harm to, or the potential loss of a heritage asset is envisaged. Information regarding how recording and / or the excavation of heritage assets may also be necessary. The HS must be comprehensive in its coverage by considering both designated and undesignated heritage assets including those of potential archaeological interest. Information contained on the Gloucestershire Historic Environment Record (G-HER) should be interrogated along with the National Heritage List (NHL) produced by Historic England. Of potential relevance to the allocation is the grade II historic park at Clearwell Castle (NL list entry: 1000758) and the grade II listed building known as Toll House (NL list entry: 1186347).
Landscape and visual impact Potentially linked to the requirements of policies: DM01; DM02; DM08; DM09; MR01	A Landscape and Visual Impact Assessment (LVIA) prepared in line with best practice guidelines will be required. It must comprise of an analysis of the landscapes which are contained, and are within the sphere of influence of the allocation. Matters requiring careful scrutiny include: - the sensitivity of affected landscape characteristics; possible effects upon them; and the relative significance of these effects in relation to all proposed mineral-development activities and their evolving influence over time (e.g. working, processing, site restoration and aftercare). Key landscapes types likely to require assessment include: - the National landscape character NCA105 (Forest of Dean and Lower Wye) and the regional / local level classification – The Limestone Plateau landscape character type and the Tidenham Chase landscape character area, which are described in the Forest of Dean Landscape Character Assessment. The Wye Valley AONB lies less than 1km of the allocation and therefore special consideration must also be given to the particular elements and features that contribute to the landscape character of the designation. It is important that the LVIA applies published landscape studies when establishing baseline conditions. Specifically in terms of visual impact, the LVIA must identify visual receptors that are likely to be affected, determine their sensitivity to potential impacts and consider the relative significance of the impacts identified. Sensitive visual receptors that should be considered as a minimum, include: - the individual properties, farms and agricultural premises that surround the perimeter of the allocation, the properties that form the hamlet of Trow Green; the settlements of Clearwell and Bream; nearby sections of the B4231 / Bream Avenue and B4228; and the network of paths and recreational routes in the locality. In assessing both landscape and visual impacts possible cumulative / in-combination effects associated with the existing permitted mineral operations at Stowe Hill Quarry and Clearwell Quarry will need to be taken into account. A further essential element is the provision of details concerning measures to avoid, reduce, remedy and / or compensate any possible negative effects deemed sufficiently harmful to render a proposal unacceptable in planning terms. Any scheme of mitigation put forward must be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. It should also be reflective of the different activities / stages that are likely to have a material effect on anticipated landscape and visual impacts (e.g. resulting from the preparation of land prior to mineral working, mineral working itself, and subsequent restoration incorporating aftercare).

Restoration opportunities and constraints Potentially linked to the requirements of policies: DM01; DM04; DM05; DM06; DM07; DM09; MR01	A restoration strategy including appropriate and sufficient commitments towards an aftercare programme will be required. The strategy must be coherent and where necessary holistic in its approach to ensure an effective solution is deliverable across the entire allocation. Progressive restoration techniques should be applied unless it can be demonstrated and justified to be of greater benefit and / or less harmful to adopt alternative arrangements. In developing the strategy, evidence must be presented to show how compatibility with the existing local environment will be achieved and the approved restoration schemes of the existing Stowe Hill and Clearwell Quarries will not be prejudiced. Where the public rights of way network has been affected, attention will need to be given to the integration of acceptable long-term resolutions such as the reinstatement or permanent re-routing of affected paths. Opportunities to contribute to the ambitions of the Gloucestershire Nature Partnership such as supporting the enhancement of the county's green infrastructure and the nature conservation actions for the Forest of Dean Nature Improvement Area (NIA) should be taken. Consideration should also be given to the possibility of facilitating other beneficial land uses and / or positively contributing to the future management of land as identified in locally applicable plans and strategies such as the Forest of Dean Core Strategy and the Wye Valley AONB Management Plan (the AONB designation is located less than 1km from the allocation). Furthermore, all proposed restoration solutions must be mindful of climate change and seek to deliver a greater degree of environmental resilience to its envisaged impacts. Under certain conditions this could involve the careful integration of measures to facilitate desirable habitat shifts to take place, which may act as suitable refuges for displaced and / or vulnerable species. An outline aftercare management plan covering at least the 1st five-years post-mineral working period will normally be required as part of the restoration strategy. This must set out commitments for carrying out aftercare into the future and for undertaking a more detailed programme up to 12 months prior to the commencement of restoration. A longer timeframe of aftercare may be necessary where nature conservation and informal recreation after-uses are likely to dominate.

Allocation 02: Land west of Drybrook Quarry					
Aggregate type	Forest of Dean (Carboniferous) Limestone			Allocation type	Preferred area
Illustrative aggregate supply potential	The entire allocation may yield in the region of 4mt of crushed rock limestone. However, under potentially constrained circumstances[276], this could fall to around 3mt. Based upon established operating practices at the existing permitted Drybrook Quarry, the allocation could make a contribution towards the maintenance of steady local aggregate supplies by as much as 16 years' worth of additional working beyond that already permitted.				
Site area	Approx. 10ha	District	Forest of Dean	Parish	Ruardean
Relevant planning permissions (as of Nov. 2017)	14/0032/FDMAJM: Extended time for previously permitted operations | dated – 21/10/14				



[276] A gas pipeline has been identified running through part of the allocated area. It is currently unknown whether it is technically achievable and / or viable for aggregate working to take place beyond the gas pipeline. It is also likely that a stand-off / buffer zone may be required.

Detailed Development Requirements for Allocation 02 : Land west of Drybrook Quarry;	
Theme	**Specific Requirement**
Local communities Potentially linked to the requirements of policies: DM01; DM02; DM03	An initial Health Impact Assessment (HIA) screening exercise should be carried out at the project inception stage to establish how best to assess and take account of potential health impacts on local communities within the sphere of influence of the allocation[277]. Whether a dedicated HIA is prepared or related information is to be presented as part of another type of assessment, the different groups within the population that might be affected should be highlighted and any relevant health characteristics taken into account[278]. It will be necessary for the wider amenity impacts on affected local communities to be assessed incorporating the individual residential properties, farms and commercial enterprises located nearby to the allocation and those that comprise the settlements of Ruardean, Ruardean Hill, Drybrook and Puddlebrook. An understanding of the scale and significance of possible attributable threats to the health and well-being of those communities that reside along freight routes used to support aggregate supplies from Drybrook Quarry will also be required. In addition, carefully considered commitments regarding measures to avoid and / or mitigate adverse amenity impacts and to maximise and enhance positive effects upon health and well being should be submitted.
Economic development Potentially linked to the requirements of policies: DM01; DM02	An Economic Impact Assessment (EcIA) should be carried out to identify potential economic impacts and their significance as a result of further aggregate working at Drybrook Quarry. Whether a dedicated EcIA is prepared or related information is to be presented as part of another type of assessment, it must establish whether current local economic conditions are likely to be influenced and the scale and significance of any positive contribution to economic well being at the local, sub-national and national levels, having taken into account the occurrence of possible negative economic impacts. The EcIA should be based on a balanced and credible analysis of evidence that has been published and / or has been robustly generated to support the proposal. Information concerning the potential impact on local employment both direct and indirectly will be crucial. The prospect of new jobs being generated should be highlighted. Commitments to secure employment and training opportunities that will benefit local communities (e.g. provision of local apprenticeships) will be best placed set out within the EcIA. This is in addition to any evidence that will show how existing direct and indirect employment will be safeguarded. The possibility that existing non-minerals related local businesses and / or permitted emerging enterprises could be exposed to undue economic risk from further aggregate working at Drybrook Quarry must also be explored. The nature of any risks to other businesses, their likely significance and any proposed means of mitigation will need to form part of the EcIA.
Operational Matters / Site Infrastructure Potentially linked to requirements of policies: DM01; DM02; DM03; DM06; DM09	The working of the allocation should not exceed the established production capacity of Drybrook Quarry, which stands at 250,000 tonnes per annum. This capacity figure accords with the envisaged amount of production applied to the transport evidence that supported the current planning permission at Drybrook Quarry. Although not conditionally restricted to 250,000 tonnes per annum, this figure could be materially significant when considering future working proposals. Any higher production level should be accompanied by sufficient evidence to demonstrate it would be environmentally acceptable. Site infrastructure necessary to support the working of the allocation should be provided through the permitted facilities contained within Drybrook Quarry and accord with the relevant requirements set out under the extant permission. Any alternative site infrastructure arrangements must be accompanied by sufficiently robust evidence to demonstrate they will be acceptable in planning terms.

[277] Best practice on HIA screening is contained within the Department of Health (DoH) Health Impact Assessment (HIA) of Government Policy document (July 2010): *A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process.* This guide can be obtained at:- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216009/dh_120110.pdf

[278] Public Health England regularly prepares Health Profiles at the county level. This information may be a useful starting point for preparing a robust and credible evidence base on the nature of local communities that may be affected. Information on Health Profiles can be obtained at: - https://fingertips.phe.org.uk/

Highways Potentially linked to the requirements of policies: - DM01; DM02; DM03	A Transport Assessment (TA) will be required. Advice on the content of a TA should be sought from the Local Highway Authority at the earliest possible opportunity as part of pre-application preparations. Highways matters likely to require investigation include using the existing vehicular access arrangements and following the existing acceptable, established freight routes (i.e. the A4136 via Drybrook Road, which is recognised as part of the 'Primary Route Corridor for HGVs'). Aggregate supplies from the working of the allocation should ideally continue to use the existing Hawthorns Road entrance rather than create a new or additional access. Any alternative routing proposals will need to take account of Gloucestershire Local Transport Plan policies LTP PD 3.1 and LTP PD 3.4[279] and follow the advice contained within the Gloucestershire Freight Gateway[280].
Public Rights of Way (PRoW) Potentially linked to the requirements of policies: DM03; MR01	An assessment of the PRoW network should be undertaken with particular attention given to paths DRD 11 and 43. Details of possible temporary diversions or permanent re-routings of any affected paths will be required. It is strongly encouraged that advice is sought at the earliest possible opportunity from the Local Highway Authority in respect of this matter.
Flood risk Potentially linked to the requirements of policies: DM02; DM04; MR01	A site-specific flood risk assessment (FRA) will be required. The possibilities of elevated flood risk from all minerals-related development activities (e.g. site preparation, working, processing and site restoration) resulting from changes in groundwater and increased surface run-off will need to be investigated. Although the risks posed from all forms of flooding under current conditions and those forecast in the future incorporating anticipated climate change impacts, should also be assessed. Possible cumulative / in-combination impacts on flood risk associated with permitted mineral working and other related activities such as restoration and aftercare at the existing Drybrook Quarry will need to be considered. In addition, potential flood-risk sensitive receptors such as the residential properties and commercial premises located within Drybrook, Ruardean, and the northern side of Ruardean Hill will require investigation. The FRA must scrutinise the application of flood risk mitigation measures and provide a strategy for their implementation. During the preparation and operational phases of the development, flood risk mitigation matters likely to require attention include the siting of any hard-standing, buildings, storage and stockpiling of quarry materials, and other site infrastructure away from areas at a greater risk of susceptibility to flooding. For the restoration phase the incorporation of suitable flood risk mitigation must be carefully considered. This will likely involve the application of a sustainable drainage system with the core aim of ensuring the pre-development rate of surface water run-off will not be exceeded in line with SuDS guidance. It will also need to be effectively integrated with any previously approved flood risk management solution at the existing Drybrook Quarry. For infilling using inert materials (imported and / or internal to the site) for profiling landforms, this must also incorporate sufficient provision for suitable safe pathways for ground water to move around and through the allocation to make sure that groundwater levels do not rise above those recorded prior to minerals development.

[279] Gloucestershire Freight Network Policies LTP PD 3.1 (Gloucestershire's Freight Network) and LTP 3.4 (Construction Management Plans) are set out in the Gloucestershire's Local Transport Plan (2015 – 2031) Policy Document 3 – Freight can be obtained at: - https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/freight/

[280] The Gloucestershire Freight Gateway can be obtained at:- http://freightgateway.co.uk/gloucestershire/

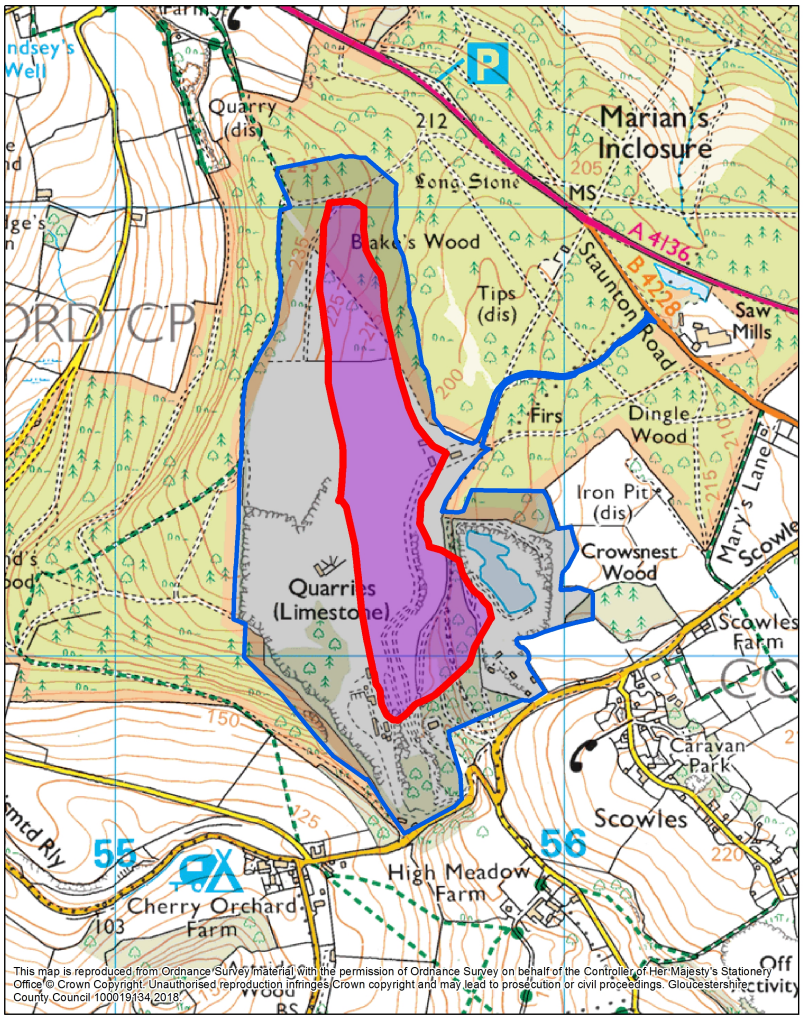
Water resources Potentially linked to the requirements of policies: DM01; DM05; MR01	A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. As the underlying geology of the allocation is classified as a Principal aquifer, attention will need to be given to identifying and quantifying risks associated with all possible minerals-related development activities (e.g. working, processing and site restoration) to groundwater resources and for establishing a stringent monitoring regime commencing at least 12-months prior to development, continuing throughout the operational phase and including site restoration and aftercare. In addition, potential hydrological impacts on nearby surface water bodies (within 1km) will require scrutiny. These includes: - Cinderford Brook to Blackpool Brook, Dry Brook, Bailey Brook, Lodgegrove Brook and the quarry lagoons within the existing Drybrook Quarry. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. Possible cumulative / in-combination hydrological / hydrogeological impacts associated with permitted mineral working and other related activities should also be considered such as proposed restoration and aftercare at the existing Drybrook Quarry. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management and identify how development of the allocation may positively contribute towards protecting and improving the water environment in line with the Severn River Basin Management Plan (RBMP) and and Wye and Severn Tidal Tributaries Catchment Flood Management Plans (CFMP) [281]
Natural environment Potentially linked to the requirements of policies: DM05; DM06; DM07; MR01	A comprehensive assessment of the natural environment will be required. This should consider the natural assets present in, which rely upon, and / or that are located within the sphere of influence of the allocation and contribute to the county's green infrastructure. The assessment must identify potential impacts and scrutinise their significance taking into account the different activities / stages of minerals development (e.g. the preparation of land prior to mineral working, mineral working and processing and subsequent restoration incorporating aftercare). Environmental designations in the locality that will need careful consideration include: - Woodlands near Hope Mansell Local Wildlife Site (Herefordshire), Lea Bailey Enclosure Local Wildlife Site (Herefordshire) and Ruardean Hills KWS. In addition, any priority habitats and / or priority species, which encompass or have been recorded in, which rely upon, and / or that are located within the sphere of influence of the allocation must be investigated. A further crucial aspect of the assessment will be the provision of sufficient details concerning measures to avoid, reduce, remedy and / or compensate possible unacceptable negative effects. Any scheme of mitigation must also be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. In totality, the assessment of natural resources must demonstrate how any issues which arising, have been considered in a holistic manner and within a strategic context (e.g. the implications for the county's green infrastructure). In particular it must be clear as to how the characteristic habitats and the supported wildlife of the local ecological networks will not be subject to unacceptable adverse impacts. Where opportunities exist to deliver tangible benefits (both during and post-mineral working), due consideration should also be given to possible collaborations and coordination with the programme of nature conservation actions to enhance the county's green infrastructure as identified for the Forest of Dean Nature Improvement Area (NIA).

[281] Information on river basin and catchment management plans (RBMPs and CFMPs) can be obtained at: - https://www.gov.uk/government/collections/catchment-flood-management-plans

Soil resources Potentially linked to the requirements of policies: DM07; MR01	A Soil Survey and Agricultural Land Classification (ALC) Report will be required. This will need to establish baseline conditions of soil resources (i.e. quality and quantity) contained in the allocation and within its sphere of influence. The allocation lies within an area that may contain grade 3 agricultural land (good to moderate quality). This will need to be further investigated, possibly through a detailed site survey in order to: - determine the extent of the resource; establish the sub-grade of the soil (i.e. whether it is 'good' (3a) and / or 'moderate' (3b)); and assess the relationship of the resource to the individual proposal under consideration and the wider allocation. In the presence of potentially valuable soil resources, a Soil Handling Strategy must also be prepared. This should consider the details of how best to safeguard against possible damage to existing soil quality and the potential, where practicable for the quality to be improved. A holistic approach to the management of soil resources will be needed, particularly with respect to implications to the proposed programme of working (e.g. progressive or otherwise) and the successful delivery of the restoration strategy.
Historic environment - including archaeology Potentially linked to the requirements of policies: DM08; DM09; MR01	A Heritage Statement (HS) is required to establish the presence of heritage assets that could be affected and to assess the nature, extent and importance of their significance and their settings. The HS must also provide a detailed analysis of potential impacts and their envisaged significance associated with all activities related to the working of the allocation. Where the potential for adverse impacts is identified, details of the means of avoiding such impacts or delivering sufficient mitigation to eradicate and / or reduce their significance to an acceptable degree must be included. The prime focus should be on the preservation of key heritage assets. A proportionately detailed, reasoned justification will be necessary in every instance that harm to, or the potential loss of a heritage asset is envisaged. Information regarding how recording and / or the excavation of heritage assets may also be necessary. The HS must be comprehensive in its coverage by considering both designated and undesignated heritage assets including those of potential archaeological interest. Information contained on the Gloucestershire Historic Environment Record (G-HER) should be interrogated along with the National Heritage List (NHL) produced by Historic England. Of potential relevance to the allocation is evidence of early activity from the prehistoric or Roman period, which has been drawn from recordings at the adjacent Drybrook quarry and the surrounding landscape. This will need to be appropriately evaluated.
Landscape and visual impact Potentially linked to the requirements of policies: DM01; DM02; DM09; MR01	A Landscape and Visual Impact Assessment (LVIA) prepared in line with best practice guidelines will be required. It must comprise an analysis of the landscapes which contain, and are within the sphere of influence of the allocation. Matters requiring careful scrutiny include the sensitivity of affected landscapes, possible effects upon them and the relative significance of these effects in relation to all activities associated with minerals development and how these evolve over time (e.g. working, processing, site restoration and aftercare). Key landscapes likely to require assessment include: - the National landscape character NCA 105 (Forest of Dean and Lower Wye) and the regional / local level classification – The Limestone Hills landscape character type and the Ruardean Hills landscape character area, which are both described in the Forest of Dean Landscape Character Assessment. It is important that the LVIA applies published landscape studies when establishing baseline conditions. Specifically, in terms of visual impact, the LVIA must identify visual receptors that are likely to be affected, determine their sensitivity to potential impacts and consider the relative significance of the impacts identified. Sensitive visual receptors that should be considered as a minimum, include: - individual properties, farms and agricultural premises particularly those located at the western end of Morse Lane, the properties that comprise the south east and south west of Drybrook; the settlement of Ruardean, and the network of paths and recreational routes in the locality. In assessing both landscape and visual impacts possible cumulative / in-combination effects associated with the existing permitted mineral operations at the existing Drybrook Quarry will need to be taken into account. A further essential element of the LVIA is the provision of details concerning measures to avoid, reduce, remedy and / or compensate any possible negative effects deemed sufficiently harmful to render a proposal unacceptable in planning terms. Any scheme of mitigation put forward must be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. It should also be reflective of the different activities / stages that are likely to have a material effect on the landscape and visual impacts experienced (e.g. resulting from the preparation of land prior to working, mineral working itself and processing, and subsequent restoration incorporating aftercare).

Restoration opportunities and constraints Potentially linked to the requirements of policies: DM01; DM04; DM05; DM06; DM07; DM09; MR01	A restoration strategy including appropriate and sufficient commitments towards aftercare programme will be required. The strategy must be coherent and where necessary holistic in its approach to ensure an effective solution is deliverable across the entire allocation. Progressive restoration techniques should be applied unless it can be demonstrated and justified to be of greater benefit and / or less harmful to apply alternative arrangements. In developing the strategy, evidence must be presented to show how compatibility with the existing local environment will be achieved and the approved restoration scheme of the existing Drybrook Quarry will not be prejudiced. Where the public rights of way network has been affected, attention will need to be given to the integration of acceptable long-term resolutions such as the reinstatement or permanent re-routing of affected paths. Opportunities to contribute to the ambitions of the Gloucestershire Nature Partnership such as supporting the enhancement of the county's green infrastructure and the nature conservation actions for the Forest of Dean Nature Improvement Area (NIA) should be taken. Consideration should also be given to the possibility of facilitating other beneficial land uses and / or positively contributing to the future management of land as identified in locally applicable plans and strategies such as the Forest of Dean Core Strategy. Furthermore, all proposed restoration solutions must be mindful of climate change and the need to deliver a greater degree of environmental resilience. Under certain conditions this could involve the careful integration of measures to facilitate desirable habitat shifts to take place, which may act as suitable refuges for displaced and / or vulnerable species. An outline aftercare management plan covering at least the 1st five-year post-mineral working period should be incorporated into the overall restoration strategy. This must set out the commitments for carrying out aftercare and for undertaking a more detailed programme up to 12 months prior to the commencement of restoration. It must also contain the direction for future management of any restored areas. A longer timeframe of aftercare may be necessary where nature conservation and informal recreation after-uses are likely to dominate.

Allocation 03: Depth extension to Stowfield Quarry					
Aggregate type	Forest of Dean (Carboniferous) Limestone			Allocation type	Preferred Area
Yield and illustrative aggregate supply potential	The entire allocation may yield approximately 7.4mt of crushed rock limestone. Based upon the existing operating capacity permitted at Stowfield Quarry, the allocation could make a contribution towards the maintenance of steady local aggregate supplies by as much as 9 years worth of additional working beyond that already permitted. However, this timeframe could shorten considerable to around 6 additional years, if an outstanding legal agreement was to be completed, which allows for the operating capacity of Stowfield Quarry to increase.				
Site area:	Approx. 20 ha	District	Forest of Dean	Parishes	Coleford and Staunton Coleford
Relevant planning permissions: (as of Nov. 2017)	09/0013/FDMAJM: Extension to Stowfield and Rogers Quarries | dated – 11/04/11; 16/0018/FDMAJM: Extended operation of site infrastructure | dated – 21/02/17				



Detailed Development Requirements for Allocation 03: Depth extension to Stowfield Quarry	
Theme	**Specific Requirement**
Local communities Potentially linked to the requirements of policies: DM01; DM02; DM03; MR01	An initial Health Impact Assessment (HIA) screening exercise should be carried out at the project inception stage to establish how best to assess and take account of potential health impacts on local communities within the sphere of influence of the allocation[282]. Whether a dedicated HIA is prepared or related information is to be presented as part of another type of assessment, the different groups within the population that might be affected should be highlighted and any relevant health characteristics taken into account[283]. It will be necessary for the wider amenity impacts on affected local communities to be assessed incorporating the individual residential properties, farms and commercial enterprises located nearby to the allocation and those that comprise the nearby hamlets and villages of Crossways, Scowles, Staunton and Newland. An understanding of the scale and significance of possible attributable threats to the health and well-being of those communities that reside along freight routes used to support aggregate supplies from Stowfield Quarry will also be required. In addition, carefully considered commitments regarding measures to avoid and / or mitigate adverse amenity impacts and to maximise and enhance positive effects upon health and well being should be submitted.
Economic development Potentially linked to the requirements of policies: DM01; DM02 DM09	An Economic Impact Assessment (EcIA) should be carried out to identify potential economic impacts and their significance as a result of further aggregate working at Stowfield Quarry. Whether a dedicated EcIA is prepared or related information is to be presented as part of another type of assessment, it must establish whether current local economic conditions are likely to be influenced and the scale and significance of any positive contribution to economic well being at the local, sub-national and national levels, having taken into account the occurrence of possible negative economic impacts. The EcIA should be based on a balanced and credible analysis of evidence that has been published and / or has been robustly generated to support the proposal. Information concerning the potential impact on local employment both direct and indirectly will be crucial. The prospect of new jobs being generated should be highlighted. Commitments to secure employment and training opportunities that will benefit local communities (e.g. provision of local apprenticeships) will be best placed set out within the EcIA. This is in addition to any evidence to show how existing direct and indirect employment will be safeguarded. The possibility that existing non-minerals related local businesses and / or permitted emerging enterprises could be exposed to undue economic risk from further aggregate working at Stowfield Quarry must be explored. The nature of any risks to other businesses, their likely significance and any proposed means of mitigation will need to form part of the EcIA.
Operational matters / site infrastructure Potentially linked to the requirements of policies: DM01; DM02; DM03; DM06; DM09; MR01	The extant production limit for the existing Stowfield Quarry is 800,000 tonnes per annum. However, subject to meeting conditions of a Section 106 legal agreement, the limit could rise to 1.2 million tonnes per annum or 400,000 tonnes per quarter. The working of the depth extension should not exceed the extant production limit in place at the time of determination, unless it can be demonstrated an alternative limit would be environmentally acceptable. Site infrastructure necessary to support the working of the allocation should be provided through the permitted facilities contained within Stowfield Quarry and accord with the relevant requirements set out under the extant permission. Any alternative site infrastructure arrangements must be accompanied by sufficiently robust evidence to demonstrate they will be acceptable in planning terms.

[282] Best practice on HIA screening is contained within the Department of Health (DoH) Health Impact Assessment (HIA) of Government Policy document (July 2010): *A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process.* This guide can be obtained at:- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216009/dh_120110.pdf

[283] Public Health England regularly prepares Health Profiles at the county level. This information may be a useful starting point for preparing a robust and credible evidence base on the nature of local communities that may be affected. Information on Health Profiles can be obtained at: - https://fingertips.phe.org.uk/

Highways Potentially linked to the requirements of policies: DM01; DM02; DM03	A Transport Assessment (TA) will be required. Advice on the content of a TA should be sought from the Local Highway Authority at the earliest possible opportunity as part of pre-application preparations. Highways matters, which will need to be investigated, include the continuation of the existing vehicular access off the Staunton Road and use of the established, acceptable freight routes (i.e. the A4136 via Staunton Road, which is recognised as part of the 'Primary Route Corridor for HGVs'). Any alternative routing proposals will need to take account of Gloucestershire Local Transport Plan policies LTP PD 3.1 and LTP PD 3.4[284] and follow the advice contained within the Gloucestershire Freight Gateway[285].
Flood risk Potentially linked to the requirements of policies: DM02; DM04; MR01	A site-specific flood risk assessment (FRA) will be required. The possibilities of elevated flood risks from all minerals-related development activities (e.g. site preparation, working, processing and site restoration) resulting from changes in groundwater and increased surface run-off will need to be assessed. Although the risks posed from all forms of flooding under current conditions and those forecast in the future incorporating anticipated climate change impacts should also considered. Possible cumulative / in-combination impacts on flood risk associated with permitted mineral working and other related activities such as restoration and aftercare at the existing Stowfield Quarry will need to be investigated. In addition, potential flood-risk sensitive receptors such as the residential properties and commercial premises located within and near to the village of Scowles, particularly along Scowles Road will require assessment. The FRA must scrutinise the application of flood risk mitigation measures and provide a strategy for their implementation. During the preparation and operational phases of the development, flood risk mitigation matters that will require attention include: - the siting of any hard-standing, buildings, storage and stockpiling of quarry materials, and other site infrastructure away from areas at a greater risk of susceptibility to flooding. For the restoration phase the incorporation of suitable flood risk mitigation must be carefully considered. This will likely involve the application of a sustainable drainage system with the core aim of ensuring the pre-development rate of surface water run-off will not be exceeded in line with SuDS guidance. It will also need to be effectively integrated with any previously approved flood risk management solution at the existing Stowfield Quarry. For any infilling using inert materials (imported and / or internal to the site) for profiling landforms, this must also incorporate sufficient provision for suitable safe pathways for ground water to move around and through the allocation to make sure that groundwater levels do not rise above those recorded prior to minerals development.
Soil resources Potentially linked to the requirements of policies: DM07; MR01	A review of previous soil / agricultural land quality assessments associated with the existing Stowfield Quarry will be required. Particular attention should be given to any possible impacts a deepening would have on matters such as resource safeguarding through soil handling and storage. For example: a deepening proposal(s) is likely to affect current soil storage timescales as it will ultimately delay the overall restoration and the return to normal soil conditions for the site.
Geodiversity Potentially linked to the requirements of policies: DM06; MR01	In the event the existing Stowfield Quarry Regionally Important Geological and Geomorphological Site (RIGS ref: 237) may be affected, a proportionately detailed assessment of possible impacts will need to be carried out. At the earliest opportunity advice should ideally be sought from the Gloucestershire Geology Trust. Key items that will need careful consideration include whether mitigation is possible and how this might be achieved; and to what extent future management practices can practicably and reasonably be brought forward (e.g. ramp access or path) to maximise opportunities to improve the protection of geological assets, enable greater access to them, and / or facilitate greater scientific understanding.

[284] Gloucestershire Freight Network Policies LTP PD 3.1 (Gloucestershire's Freight Network) and LTP 3.4 (Construction Management Plans) are set out in the Gloucestershire's Local Transport Plan (2015 – 2031) Policy Document 3 – Freight can be obtained at: - https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/freight/

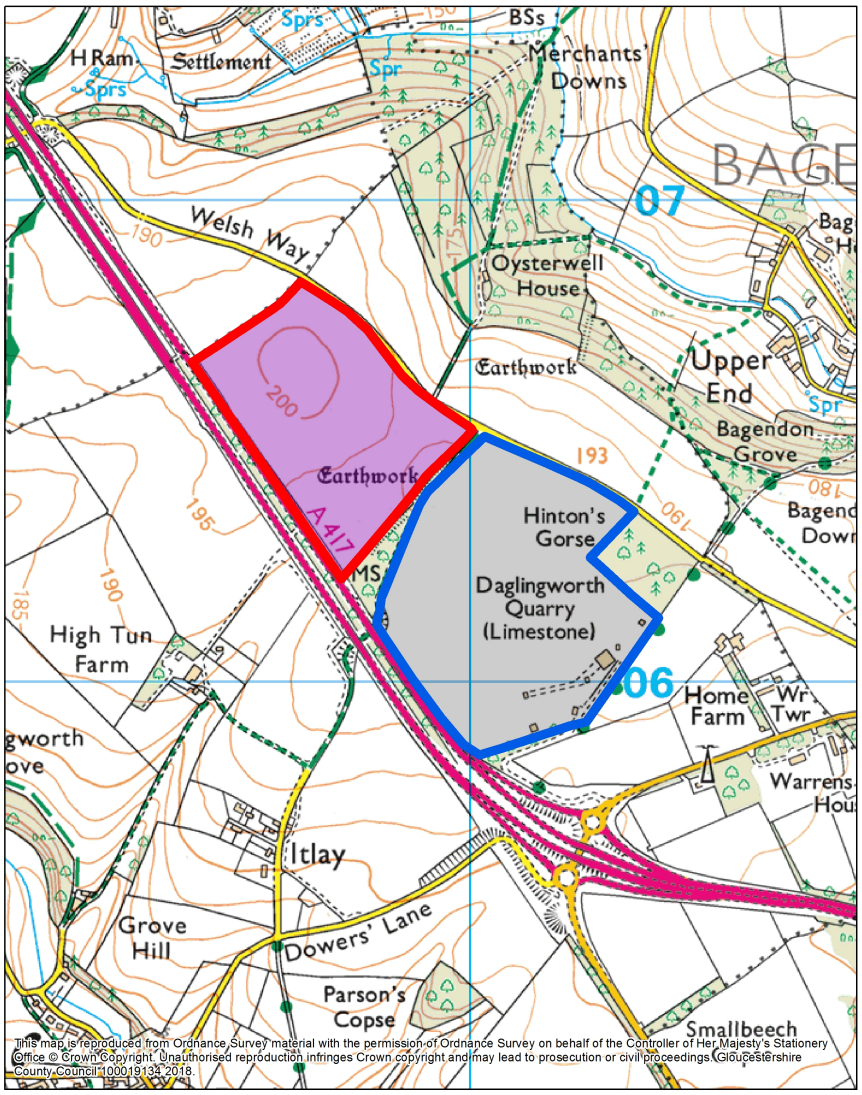
[285] The Gloucestershire Freight Gateway can be obtained at:- http://freightgateway.co.uk/gloucestershire/

Historic environment - including archaeology Potentially linked to the requirements of policies: DM08; DM09; MR01	A review of previous assessments of heritage assets including those of archaeological interest associated with the existing Stowfield Quarry will be required. It will be essential that previously agreed protection measures are not prejudiced and that any alternative arrangements will be acceptable in planning terms.
Water resources Potentially linked to the requirements of policies: DM01; DM05; MR01	A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. As the underlying geology of the allocation is classified as a Principal aquifer, attention will need to be given to identifying and quantifying risks associated with all possible minerals-related development activities (e.g. working, processing and site restoration) to groundwater resources and for establishing a stringent monitoring regime commencing at least 12-months prior to development, continuing throughout the operational phase and including site restoration and aftercare. In addition, potential hydrological impacts on nearby surface water bodies (within 1km) will require scrutiny. These includes: - Whippington Brook, an unnamed drain, tributary and pond at Swan Pool, and the lagoon within Stowfield Quarry. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. Possible cumulative / in-combination hydrological / hydrogeological impacts associated with permitted mineral working and other related activities such as proposed restoration and aftercare at the existing Stowfield Quarry should also be considered. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management and identify how development of the allocation may positively contribute towards protecting and the improving water environment in line with the Severn River Basin Management Plan (RBMP) and Wye and Severn Tidal Tributaries Catchment Flood Management Plans (CFMP) [286]
Landscape and visual impact Potentially linked to the requirements of policies: DM01; DM02; DM09; MR01	A review of landscape and visual impacts associated with the existing Stowfield Quarry focused on possible additional or heightened impacts relate to deepening will be required. The review should seek to identify and establish the significance of any changes on previously identified sensitive receptors. Care should be taken to ensure any possible cumulative / in-combination effects associated with the existing quarry are taken into account. Where necessary, the review should detail any measures to avoid, reduce, remedy and / or compensate any possible negative effects deemed sufficiently harmful to render a proposal unacceptable in planning terms. Any scheme of mitigation put forward must be accompanied by a clear strategy for implementation that is able to demonstrate deliverability. It should also be reflective of the different activities / stages that are likely to have a material effect on landscape and visual impacts (e.g. resulting from the preparation of land prior to working, mineral working itself and processing, and subsequent restoration incorporating aftercare).

[286] Information on river basin and catchment management plans (RBMPs and CFMPs) can be obtained at: - https://www.gov.uk/government/collections/catchment-flood-management-plans

Natural environment Potentially linked to the requirements of policies: DM05; DM06; DM07; MR01	A review of previous assessment of natural environment affected by the existing Stowfield Quarry will be required. This should probably focus on those natural assets which rely upon, and / or that are located within the sphere of influence of the depth extension. This may include species, which remain active within or have colonised the existing quarry site since working has taken place. The assessment must identify potential impacts and scrutinise their significance taking into account the different activities / stages of minerals development (e.g. mineral working and processing and subsequent restoration incorporating aftercare). Environmental designations in the locality that will need to be considered include: - Wye Valley Woodlands Sites SAC; the Wye Valley & FoD Bat Sites SAC, Dingle Wood SSSI; Swanpool Wood & Furnace Grove SSSI; Blakes Wood LWS; Whitecliffe Recreation Ground LWS; and Staunton Woods LWS. In addition, any priority habitats and / or priority species, which rely upon, and / or that are located within the sphere of influence of the allocation must be investigated. A further crucial aspect of the assessment will be the provision of sufficient details concerning any measures needed to avoid, reduce, remedy and / or compensate possible unacceptable negative effects. Any scheme of mitigation must also be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. In totality, the assessment of natural resources must demonstrate how any issues which arising, have been considered in a holistic manner taking account of the established environmental capacity identified at the existing Stowfield Quarry. Where opportunities exist to deliver tangible environmental benefits (both during and post-mineral working), these should be assessed. Furthermore, any possibly to enhance existing / or planned for programmes of nature conservation actions to enhance the county's green infrastructure as identified within the existing Stowfield Quarry should be explored. An analysis of whether any significant effects are likely to arise on the Wye Valley Woodlands Sites SAC and / or the Wye Valley & FoD Bat Sites SAC either alone or in combination with other plans or projects, must be carried out at planning application stage through a formal HRA screening process, establishing the requirement for an Appropriate Assessment and thus highlighting the mitigation measures required
Restoration opportunities and constraints Potentially linked to the requirements of policies: DM01; DM04; DM05; DM06; DM07; DM09; MR01	A restoration strategy will be required. This must be fully integrated with existing permitted restoration proposals at Stowfield Quarry. Carefully consideration of how deepening may alter the final landform, landscaping and potential future land uses and how significant such changes may prove to be will be crucial. A review of any habitat creation and biodiversity ambitions previously identified for Stowfield Quarry should be carried out. Furthermore, restoration proposals must be mindful of climate change the potential need to deliver a greater degree of environmental resilience. Under certain conditions this could involve the careful integration of measures to facilitate desirable habitat shifts to take place, which may act as suitable refuges for displaced and / or vulnerable species. An outline aftercare management plan covering at least the 1st five-year post-mineral working period should be incorporated into the restoration strategy. This must set out the commitments for carrying out aftercare and for undertaking a more detailed programme up to 12 months prior to the commencement of restoration. It must also contain the direction for future management of the restored area. A longer timeframe of aftercare may be necessary where nature conservation and informal recreation after-uses are to be identified.

Allocation 04: Land northwest of Daglingworth Quarry					
Aggregate type	Cotswolds (Jurassic) Limestone		Allocation type	Preferred Area	
Yield and illustrative aggregate supply potential	The entire allocation may yield up to 9mt of crushed rock limestone. Based upon established operating capacities at the existing permitted Daglingworth Quarry, the allocation could support the maintenance of steady local aggregate supplies for upwards of 30 years beyond that already permitted				
Site Area	Approx. 17ha	District	Cotswold	Parish	Daglingworth
Relevant planning permissions: (as of Nov. 2017)	CT.0511/V: Review of Mineral Planning Permissions; New conditions | dated – 21/01/00				



Detailed Development Requirements for Allocation 04: Land northwest of Daglingworth Quarry	
Theme	**Specific Requirement**
Local communities Potentially linked to the requirements of policies DM01; DM02; DM03; MR01	An initial Health Impact Assessment (HIA) screening exercise should be carried out at the project inception stage to establish how best to assess and take account of potential health impacts on local communities within the sphere of influence of the allocation[287]. Whether a dedicated HIA is prepared or related information is to be presented as part of another type of assessment, the different groups within the population that might be affected should be highlighted and any relevant health characteristics taken into account[288]. It will be necessary for the wider amenity impacts on affected local communities to be assessed incorporating the individual residential properties, farms and commercial enterprises located nearby to the allocation and those that comprise the hamlets of Itlay and Upper End near to Bagendon. An understanding of the scale and significance of possible attributable threats to the health and well-being of those communities that reside along freight routes used to support aggregate supplies from Daglingworth Quarry will also be required. In addition, carefully considered commitments regarding measures to avoid and / or mitigate adverse amenity impacts and to maximise and enhance positive effects upon health and well being should be submitted.
Economic development Potentially linked to the requirements of policies: DM01; DM02 DM09	An Economic Impact Assessment (EcIA) should be carried out to identify potential economic impacts and their significance as a result of further aggregate working at Daglingworth Quarry. Whether a dedicated EcIA is prepared or related information is to be presented as part of another type of assessment, it must establish whether current local economic conditions are likely to be influenced and the scale and significance of any positive contribution to economic well being at the local, sub-national and national levels, having taken into account the occurrence of possible negative economic impacts. The EcIA should be based on a balanced and credible analysis of evidence that has been published and / or has been robustly generated to support the proposal. Information concerning the potential impact on local employment both direct and indirectly will be crucial. The prospect of new jobs being generated should be highlighted. Commitments to secure employment and training opportunities that will benefit local communities (e.g. provision of local apprenticeships) will be best placed set out within the EcIA. This is in addition to any evidence which shows how existing direct and indirect employment will be safeguarded. The possibility that existing non-minerals related local businesses and / or permitted emerging enterprises could be exposed to undue economic risk from further aggregate working at Daglingworth Quarry must be explored. The nature of any risks to other businesses, their likely significance and any proposed means of mitigation will need to form part of the EcIA.
Operational matters / site infrastructure Potentially linked to the requirements of policies: DM01; DM02; DM03; DM06; DM09; MR01	The working of the allocation should not to exceed the established production capacity of Daglingworth Quarry, which stands at around 250,000 tonnes per annum. This capacity figure accords with the envisaged amount of production reported within the evidence base that supported the allocation of the site previously within the adopted Gloucestershire Minerals Local Plan 2003. Whilst no conditional restrictions apply to the extant permission, the figure could be materially significant when considering future working proposals. Any higher production level should ideally be accompanied by sufficient evidence to demonstrate it would be environmentally acceptable in planning terms. Site infrastructure necessary to support the working of the allocation should be provided through the permitted facilities contained within Daglingworth Quarry and accord with the relevant requirements set out under the extant permission. A service tunnel will most likely be required in order to achieve the necessary movement of worked primary minerals for processing and eventual sale. Any alternative site infrastructure proposals must be accompanied by robust evidence to demonstrate these will be acceptable in planning terms.

[287] Best practice on HIA screening is contained within the Department of Health (DoH) Health Impact Assessment (HIA) of Government Policy document (July 2010): *A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process.* This guide can be obtained at:- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216009/dh_120110.pdf

[288] Public Health England regularly prepares Health Profiles at the county level. This information may be a useful starting point for preparing a robust and credible evidence base on the nature of local communities that may be affected. Information on Health Profiles can be obtained at: - https://fingertips.phe.org.uk/

Highways Potentially linked to the requirements of policies: DM01; DM02; DM03	A Transport Assessment (TA) will be required. Advice on the content of a TA should be sought from the Local Highway Authority and Highways England at the earliest possible opportunity as part of pre-application preparations. Highways matters, which will need to be investigated, include the continued use of the existing vehicular access off the Welsh Way and Daglingworth junction with the A417. The A417 should be used as the established freight route as it forms part of the 'Primary Route Corridor for HGVs'. Any alternative routing proposals will need to take account of Gloucestershire Local Transport Plan policies LTP PD 3.1 and LTP PD 3.4[289], and follow the advice contained within the Gloucestershire Freight Gateway[290].
Public Rights of Way (PRoW) Potentially linked to the requirements of policies: DM03; MR01	An assessment of the PRoW network should be undertaken with particular attention given to paths BDH3/2 and 10/1. Details of possible temporary diversions or permanent re-routings of any affected paths will be required. It is strongly encouraged that advice is sought at the earliest possible opportunity from the Local Highway Authority in respect of this matter.
Flood risk Potentially linked to the requirements of policies: DM02; DM04; MR01	A site-specific flood risk assessment (FRA) will be required. The possibilities of elevated flood risks from all minerals-related development activities (e.g. site preparation, working, processing and site restoration) resulting from changes in groundwater and increases in surface run-off will need to be investigated. Although the risks posed from all forms of flooding under current conditions and those forecast in the future incorporating anticipated climate change impacts, will need to be assessed. Possible cumulative / in-combination impacts on flood risk associated with permitted mineral working and other related activities such as restoration and aftercare at the existing Daglingworth Quarry will need to be considered. In addition, potential flood-risk sensitive receptors such as the residential properties and commercial premises located within and surrounding the hamlet of Itlay and the villages of Daglingworth and Bagendon will require investigation. The FRA must scrutinise the application of flood risk mitigation measures and provide a strategy for their implementation. During the preparation and operational phases of the development, flood risk mitigation matters likely to require: -the siting of any hard-standing, buildings, storage and stockpiling of quarry materials, and other site infrastructure away from areas at a greater risk of susceptibility to flooding. For the restoration phase the incorporation of suitable flood risk mitigation must be carefully considered. This will likely involve the application of a sustainable drainage system with the core aim of ensuring the pre-development rate of surface water run-off will not be exceeded in line with SuDS guidance. It will also need to be effectively integrated with any previously approved flood risk management solution at the existing Daglingworth Quarry. For infilling using inert materials (imported and / or internal to the site) for profiling landforms this must also incorporate sufficient provision for suitable safe pathways for ground water to move around and through the allocation to make sure that groundwater levels do not rise above those recorded prior to minerals development.

[289] Gloucestershire Freight Network Policies LTP PD 3.1 (Gloucestershire's Freight Network) and LTP 3.4 (Construction Management Plans) are set out in the Gloucestershire's Local Transport Plan (2015 – 2031) – Policy Document 3 – Freight can be obtained at: - https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/freight/

[290] The Gloucestershire Freight Gateway can be obtained at:- http://freightgateway.co.uk/gloucestershire/

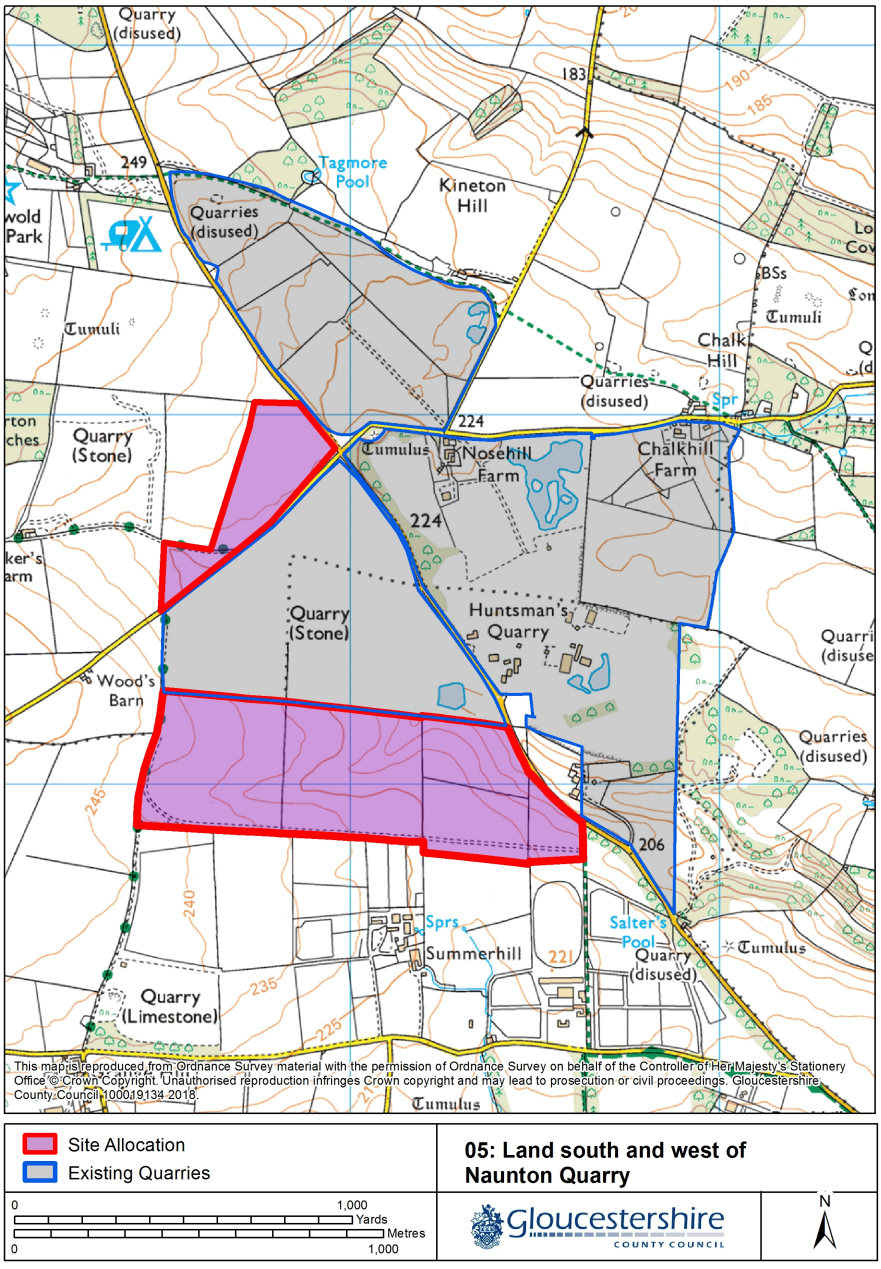
Water resources Potentially linked to requirements of policies: DM01; DM05; MR01	A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. As the underlying geology of the allocation is classified as a Principal aquifer, attention will need to be given to identifying and quantifying risks associated with all possible minerals-related development activities (e.g. working, processing and site restoration) to groundwater resources and for establishing a stringent monitoring regime commencing at least 12-months prior to development, continuing throughout the operational phase and including site restoration and aftercare. The allocation also lies within a Source Protection Zone 1 (SPZ1). This will require a very specific risk assessment to be carried out to consider potential pollution of potable water supplies and other sensitive commercial water supplies. Beyond the allocation, potential hydrological impacts on nearby surface water bodies (within 1km) will require scrutiny. These include: - Elkstone Brook and Daglington Stream. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. For example, the River Churn is just over 3 km to the South East of the allocation. Possible cumulative / in-combination hydrological / hydrogeological impacts associated with permitted mineral working and other related activities such as proposed restoration and aftercare at the existing Daglingworth Quarry should also be considered. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management by identifying how development of the allocation may positively contribute towards protecting and the improving water environment in line with the Thames River Basin Management Plan (RBMP) and also the Severn RBMP, which covers an area that may be within the sphere of influence of the allocation and the Thames and Severn Tidal Tributaries Catchment Flood Management Plans (CFMPs) [291]
Natural environment Potentially linked to the requirements of policies: DM05; DM06; DM07; MR01	A comprehensive assessment of the natural environment will be required. This should include those natural assets that are present, which rely upon, and / or that are located within the sphere of influence of the allocation and contribute to the county's green infrastructure. The assessment must identify potential impacts and scrutinise their significance taking into account the different activities / stages of minerals development (e.g. the preparation of land prior to mineral working, mineral working and processing and subsequent restoration incorporating aftercare). Environmental designations in the locality that will need careful consideration include: - High Tun Farm KWS, Itlay LWS, Stancombe Grove & Oysterwell Wood LWS, Bagendon Grove & Oysterwell Wood LWS, Merchants Downs LWS, Daglingworth & Snakes Groves LWS, Duntisbourne Grove LWS and Five Acre Grove (Bagendon) LWS. In addition, any priority habitats and / or priority species, which encompass or have been recorded in, which rely upon, and / or that are located within the sphere of influence of the allocation must be investigated. A further crucial aspect of the assessment will be the provision of sufficient details concerning measures deemed necessary to avoid, reduce, remedy and / or compensate possible unacceptable negative effects. Any scheme of mitigation must also be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. In totality, the assessment of natural resources must demonstrate how any issues which arising, have been considered in a holistic manner and within a strategic context (e.g. the implications for the county's green infrastructure). Where opportunities exist to deliver tangible benefits (both during and post-mineral working), due consideration should be given to possible collaborations and coordination with the programme of nature conservation actions to enhance the county's green infrastructure as identified for the nearby Cotswold Valley Nature Improvement Area (NIA).

[291] Information on river basin and catchment management plans (RBMPs and CFMPs) can be obtained at: - https://www.gov.uk/government/collections/catchment-flood-management-plans

Geodiversity Potentially linked to the requirements of policies: DM06; MR01	In the event the existing Daglingworth Quarry Regionally Important Geological and Geomorphological Sites (RIGS ref: 164 and 165) will be affected, a proportionately detailed assessment of possible impacts must be carried out. At the earliest opportunity advice should be sought from the Gloucestershire Geology Trust. Key items that will need careful consideration include: - whether mitigation is possible and how this might be achieved; and to what extent future management practices can practicably and reasonably be brought forward to maximise opportunities to improve the protection of geological assets, enable greater access to them, and / or facilitate greater public awareness and scientific understanding.
Soil resources Potentially linked to requirements of policies: DM07; MR01	A Soil Survey and Agricultural Land Classification (ALC) Report is required. This will need to establish baseline conditions of soil resources (i.e. quality and quantity) contained in the allocation and within its sphere of influence. The allocation lies within an area that may contain grade 3 agricultural land (good to moderate quality). This will need further investigation, possibly through a detailed site survey in order to: - determine the extent of the resource; establish the sub-grade of the soil (i.e. whether it is 'good' (3a) and / or 'moderate' (3b)); and assess the relationship of the resource to the individual proposal under consideration and the wider allocation. In the presence of potentially valuable soil resources, a Soil Handling Strategy must also be prepared. This should consider the details of how best to safeguard against possible damage to existing soil quality and the potential, where practicable for the quality to be improved. A holistic approach to the management of soil resources will be needed, particularly with respect to implications to the proposed programme of working (e.g. progressive or otherwise) and the successful delivery of the restoration strategy.
Historic environment - including archaeology Potentially linked to the requirements of policies: DM08; DM09; MR01	A Heritage Statement (HS) will be required to establish the presence of heritage assets that could be affected and to assess the nature, extent and importance of their significance and their settings. The HS must also provide a detailed analysis of potential impacts and their envisaged significance associated with all activities related to the working of the allocation. Where the potential for adverse impacts is identified, details of the means of avoiding such impacts or delivering sufficient mitigation to eradicate and / or reduce their significance to an acceptable degree must be included. The prime focus should be on the preservation of key heritage assets. A proportionately detailed, reasoned justification will be necessary in every instance that harm to, or the potential loss of a heritage asset is envisaged. Information regarding how recording and / or the excavation of heritage assets may also be necessary. The HS must be comprehensive in its coverage by considering both designated and undesignated heritage assets including those of potential archaeological interest. Information contained on the Gloucestershire Historic Environment Record (G-HER) should be interrogated along with the National Heritage List (NHL) produced by Historic England. Of potential relevance that could result in restrictions upon future working proposals is the grade II listed milestone (NL list entry: 1090206); a possible Bronze Age barrow; an earthworks that borders the south eastern boundary of the allocation and forms part of the late Iron Age / early Roman settlement of Bagendon .

Landscape and visual impact Potentially linked to the requirements of policies: DM01; DM02; DM09; MR01	A Landscape and Visual Impact Assessment (LVIA) prepared in line with best practice guidelines will be required. It must comprise an analysis of the landscapes which contain, and are within the sphere of influence of the allocation. Matters requiring careful scrutiny include the likely sensitivity of affected landscapes, possible effects upon them and the relative significance of these effects in relation to all activities associated with minerals development and how these evolve over time (e.g. working, processing, site restoration and aftercare). Key landscapes likely to require assessment include: - national landscape character NCA 107 (Cotswolds) and the regional / local level classification – The High Wold Dip Slope landscape character type and area. As the allocation is located within the Cotswold AONB special consideration must also be given to the particular elements and features that contribute to the landscape character of the designation. It is important that the LVIA applies published landscape studies when establishing baseline conditions. In terms of visual impact the LVIA must identify visual receptors that are likely to be affected, determine their sensitivity to potential impacts and consider the relative significance of the impacts identified. Sensitive visual receptors that should be considered as a minimum include: - a number of individual properties, farms and agricultural premises; the settlements of Woodmancote and Bagendon; several nearby paths and recreational routes and the highway network including stretches of the A417, Welsh Way and Cutham Lane. In assessing both landscape and visual impacts possible cumulative / in-combination effects associated with the existing permitted mineral operations at the existing Daglingworth Quarry will need to be taken into account. A further essential element of the LVIA is the provision of details concerning measures to avoid, reduce, remedy and / or compensate any possible negative effects deemed sufficiently harmful to render a proposal unacceptable in planning terms. Any scheme of mitigation put forward must be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. It should also be reflective of the different activities / stages that are likely to have a material effect on the landscape and visual impacts experienced (e.g. resulting from the preparation of land prior to working, mineral working itself and processing, and subsequent restoration incorporating aftercare).
Restoration opportunities and constraints Potentially linked to the requirements of policies: DM01; DM04; DM05; DM06; DM07; DM09; MR01	A restoration strategy will be required. Where necessary, individual proposals must give due consideration to their contribution to the delivery of a coherent and combined solution encompassing the entire allocation. Progressive restoration techniques should be applied unless it can be demonstrated and justified to be of greater benefit and / or less harmful to apply alternative arrangements. In developing the overall restoration strategy, evidence must be presented to show how compatibility with the existing local environment and the approved restoration scheme for the existing Daglingworth Quarry will not be prejudiced. Where the public rights of way network is impacted, attention will need to be given to the integration of acceptable long-term resolutions such as the reinstatement or permanent re-routing of affected paths. Opportunities to support the enhancement of the county's green infrastructure and contribute to the nature conservation actions proposed for the nearby Cotswold Valley Nature Improvement Area should be investigated. Consideration should also be given to the possibility of facilitating other beneficial land uses and / or positively contributing to the future management of land as identified in locally applicable plans and strategies such as the Cotswold District Local Plan and Cotswold AONB Management Plan. Furthermore, all proposed restoration solutions must be mindful of climate change and the need to deliver a greater degree of environmental resilience to its envisaged impacts. Under certain conditions this could involve the careful integration of measures to facilitate desirable habitat shifts to take place, which may act as suitable refuges for displaced and / or vulnerable species. An outline aftercare management plan covering at least the 1st five-year post-mineral working period should be incorporated into the overall restoration strategy. This must set out the commitments for carrying out aftercare and for undertaking a more detailed programme up to 12 months prior to the commencement of restoration. It must also contain the direction for future management of any restored areas. A longer timeframe of aftercare may be necessary where nature conservation and informal recreation after-uses are likely to dominate.

Allocation 05: Land south and west of Naunton Quarry					
Aggregate type	Cotswolds (Jurassic) Limestone			Allocation type	Preferred Area
Yield and illustrative aggregate supply potential	The entire allocation may yield in the region of 10mt of crushed rock limestone. Based upon established operating capacities at the existing permitted Naunton Quarry, the allocation could support the maintenance of steady local aggregate supplies by as much as 20 years worth of additional working beyond that already permitted				
Site area	Approx. 39ha	District	Cotswold	Parishes	Naunton and Temple Guiting
Relevant planning permissions: (as of Nov. 2017)	CD.0165/1/X: Existing quarry deepening with revised restoration | dated – 21/04/06; 13/0090/CWMAJM: Revised restoration and site infrastructure | dated – 28/01/14; 14/0052/CWMAJM: Extended operation of concrete batching plant | dated – 15/07/14.				



Detailed Development Requirements for Allocation 05: Land south and west of Naunton Quarry	
Theme	**Specific Requirement**
Local communities Potentially linked to the requirements of policies:DM01; DM02; DM03; MR01	An initial Health Impact Assessment (HIA) screening exercise should be carried out at the project inception stage to establish how best to assess and take account of potential health impacts on local communities within the sphere of influence of the allocation[292]. Whether a dedicated HIA is prepared or related information is to be presented as part of another type of assessment, the different groups within the population that might be affected should be highlighted and any relevant health characteristics taken into account[293]. It will be necessary for the wider amenity impacts on affected local communities to be assessed incorporating the individual residential properties, farms and commercial enterprises located nearby to the allocation. An understanding of the scale and significance of possible attributable threats to the health and well-being of those communities that reside along freight routes to be used to support aggregate supplies from Naunton Quarry will also be required. In addition, carefully considered commitments regarding measures to avoid and / or mitigate adverse amenity impacts and to maximise and enhance positive effects upon health and well being should be submitted.
Economic development Potentially linked to the requirements of policies: DM01; DM02 DM09	An Economic Impact Assessment (EcIA) should be carried out to identify potential economic impacts and their significance as a result of further aggregate working at Naunton Quarry. Whether a dedicated EcIA is prepared or related information is to be presented as part of another type of assessment, it must establish whether current local economic conditions are likely to be influenced and the scale and significance of any positive contribution to economic well being at the local, sub-national and national levels, having taken into account the occurrence of possible negative economic impacts. The EcIA should be based on a balanced and credible analysis of evidence that has been published and / or has been robustly generated to support the proposal. Information concerning the potential impact on local employment both direct and indirectly will be crucial. The prospect of new jobs being generated should be highlighted. Commitments to secure employment and training opportunities that will benefit local communities (e.g. provision of local apprenticeships) will be best placed set out within the EcIA. This is in addition to any evidence to show how existing direct and indirect employment will be safeguarded. The possibility that existing non-minerals related local businesses and / or permitted emerging enterprises could be exposed to undue economic risk from further aggregate working at Naunton Quarry must be explored. The nature of any risks to other businesses, their likely significance and any proposed means of mitigation will need to form part of the EcIA.
Operational Matters / site infrastructure Potentially linked to the requirements of policies: DM01; DM02 DM03; DM06; DM09; MR01	The existing production limit of 500,000 tonnes per annum from Naunton Quarry should not be exceeded in association with the working of the allocated units, unless it can be demonstrated an alternative production limit will be environmentally acceptable in planning terms. To support the working of the allocated units, existing site infrastructure contained within the existing Naunton Quarry should be used and this should also occur under the conditional restrictions imposed by relevant extant permissions. Any alternative site infrastructure proposals must be robustly justified and accompanied by sufficient evidence to show how they will be environmentally acceptable in planning terms.

[292] Best practice on HIA screening is contained within the Department of Health (DoH) Health Impact Assessment (HIA) of Government Policy document (July 2010): *A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process.* This guide can be obtained at:- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216009/dh_120110.pdf

[293] Public Health England regularly prepares Health Profiles at the county level. This information may be a useful starting point for preparing a robust and credible evidence base on the nature of local communities that may be affected. Information on Health Profiles can be obtained at: - https://fingertips.phe.org.uk/

Highways Potentially linked to the requirements of policies: DM01; DM02 DM03	A Transport Assessment (TA) will be required. Advice on the content of a TA should be sought from the Local Highway Authority at the earliest possible opportunity as part of pre-application preparations. Highways matters, which will need to be investigated include: - the continued use of the existing main vehicular access off Buckle Street for the importation of any required materials and the sales of worked minerals associated with the working of the allocated units; the continued use of established, acceptable freight routes, which include the A429 via Buckle Street, and the A40 and A436, which are recognised as part of the 'Primary Route Corridor for HGVs'; and in the case of the western allocated unit, the creation of a new, safe service access that will need to cross the Snowshill Road to Chapel Ash. Where any alternative routing proposals emerge, these will need to take account of Gloucestershire Local Transport Plan policies LTP PD 3.1 and LTP PD 3.4[294], follow the advice contained within the Gloucestershire Freight Gateway[295], and also meet the requirements of the Cotswold Lorry Management Zone.
Flood risk Potentially linked to the requirements of policies: DM02; DM04; MR01	A site-specific flood risk assessment (FRA) will be required. The possibilities of elevated flood risks from all minerals-related development activities (e.g. site preparation, working, processing and site restoration) resulting from changes in groundwater and increased surface run-off should be investigated. Although the risks posed from all forms of flooding under current conditions and those forecast in the future incorporating anticipated climate change impacts, will also need to be assessed. Possible cumulative / in-combination impacts on flood risk associated with permitted mineral working and other related activities such as restoration and aftercare at the existing Naunton Quarry and nearby existing Tinker's Barn Quarry will need to be considered. In addition, potential flood-risk sensitive receptors such as the isolated residential properties and agricultural / equestrian-related commercial premises largely located to the south of the allocation will require investigation. The FRA must scrutinise the application of flood risk mitigation measures and provide a strategy for their implementation. During the preparation and operational phases of the development, flood risk mitigation matters requiring attention include: - the siting of any hard-standing, buildings, storage and stockpiling of quarry materials, and other site infrastructure away from areas at a greater risk of susceptibility to flooding. For the restoration phase the incorporation of suitable flood risk mitigation must be carefully considered. This will likely involve the application of a sustainable drainage system with the core aim of ensuring the pre-development rate of surface water run-off will not be exceeded in line with SuDS guidance. It will also need to be effectively integrated with any previously approved flood risk management solution at the existing Naunton Quarry and where relevant the existing Tinker's Barn Quarry. For infilling using inert materials (imported and / or internal to the site) for profiling landforms this must also incorporate sufficient provision for suitable safe pathways for ground water to move around and through the allocation to make sure that groundwater levels do not rise above those recorded prior to minerals development.

[294] Gloucestershire Freight Network Policies LTP PD 3.1 (Gloucestershire's Freight Network) and LTP 3.4 (Construction Management Plans) are set out in the Gloucestershire's Local Transport Plan (2015 – 2031) Policy Document 3 – Freight can be obtained at: - https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/freight/

[295] The Gloucestershire Freight Gateway can be obtained at:- http://freightgateway.co.uk/gloucestershire/

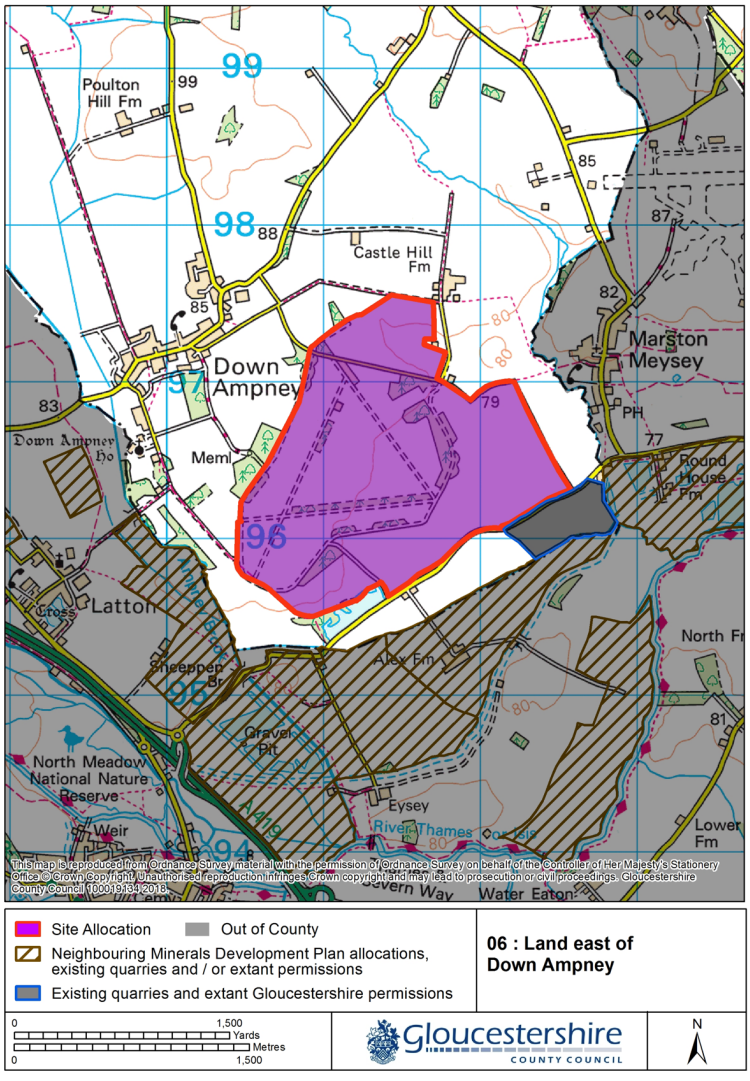
Water resources Potentially linked to the requirements of policies: DM01; DM05 MR01	A hydrological / hydrogeological impact assessment (HIA) in accordance with EA guidance will be required. As the underlying geology of the allocated units has been classified as a Principal aquifer, attention will need to be given to identifying and quantifying risks associated with all possible minerals-related development activities (e.g. working, processing and site restoration) to groundwater resources and for establishing a stringent monitoring regime commencing at least 12-months prior to development, continuing throughout the operational phase and including site restoration and aftercare. In addition, potential hydrological impacts on nearby surface water bodies (up to 3km) will require scrutiny. These includes: - the River Windrush, River Eye, several springs feeding an unnamed tributary of the Windrush; and small ponds and a small lake that are linked to existing and previous mineral working at the existing Naunton Quarry. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. Possible cumulative / in-combination hydrological / hydrogeological impacts associated with permitted mineral working and other related activities should also be considered such as proposed restoration and aftercare proposals at the existing Naunton Quarry and also the nearby Tinker's Barn Quarry. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management by identifying how development of the allocated units may positively contribute towards protecting and the improving water environment in line with the Thames River Basin Management Plan (RBMP) and the Severn RBMP, which covers an area that may be within the sphere of influence of the allocation and the Thames and Severn Tidal Tributaries Catchment Flood Management Plans (CFMPs [296].
Natural environment Potentially linked to the requirements of policies: DM05; DM06; DM07; MR01	A comprehensive assessment of the natural environment will be required. This should include those natural assets present in, which rely upon, and / or that are located within the sphere of influence of the allocated units and contribute to the county's green infrastructure. The assessment must identify potential impacts and scrutinise their significance taking into account the different activities / stages of minerals development (e.g. the preparation of land prior to mineral working, mineral working and processing and subsequent restoration incorporating aftercare). Environmental designations in the locality that will need careful consideration include: - Huntsman's Quarry SSSI, Barton Bushes SSSI, Warren Beds KWS and Barton Vale KWS. In addition, any priority habitats and / or priority species, which encompass or have been recorded in, which rely upon, and / or that are located within the sphere of influence of the allocated units must be investigated. A further crucial aspect of the assessment will be the provision of sufficient details concerning measures deemed necessary to avoid, reduce, remedy and / or compensate possible unacceptable negative effects. Any scheme of mitigation must also be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. In totality, the assessment of natural resources must demonstrate how any issues which arising, have been considered in a holistic manner and within a strategic context (e.g. the implications for the county's green infrastructure). In particular it must be clear as to how the characteristic habitats and the supported wildlife of the Barton, Brockhill, Naunton and Swell Strategic Nature Areas (SNAs) will not be subject to unacceptable adverse impacts. Where opportunities exist to deliver tangible benefits both during and post-mineral working, due consideration should be given to possible collaborations and coordination with the programme of nature conservation actions to enhance the county's green infrastructure as identified for the nearby Cotswold Valley Nature Improvement Area (NIA).

[296] Information on river basin and catchment management plans (RBMPs and CFMPs) can be obtained at: - https://www.gov.uk/government/collections/catchment-flood-management-plans

Geodiversity Potentially linked to the requirements of policies: DM06; MR01	In the event the existing Huntsman's Quarry Regionally Important Geological and Geomorphological Site (RIGS ref: 92) will be affected, a proportionately detailed assessment of possible impacts must be carried out. In addition, due to previous recorded exposures of 'Cotswold Slates' and fossil-bearing rocks, a wider analysis of potential geodiversity resources is required. At the earliest opportunity advice should be sought from the Gloucestershire Geology Trust. Key items that will need careful consideration include whether mitigation is possible and how this might be achieved; and to what extent future management practices can practicably and reasonably be brought forward to maximise opportunities to improve the protection of geological assets, enable greater access to them, and / or facilitate greater scientific understanding.
Soil resources Potentially linked to the requirements of policies: DM07; MR01	A Soil Survey and Agricultural Land Classification (ALC) Report will be required. This will need to establish baseline conditions of soil resources (i.e. quality and quantity) contained in the allocation and within its sphere of influence. The allocated units lie within an area that may contain grade 3 agricultural land (good to moderate quality). This will need further investigation, possibly through a detailed site survey in order to: - determine the extent of the resource; establish the sub-grade of the soil (i.e. whether it is 'good' (3a) and / or 'moderate' (3b)); and assess the relationship of the soil resource to any individual proposal under consideration and the overall impact of the allocated units. In the presence of potentially valuable soil resources, a Soil Handling Strategy must also be prepared. This should consider the details of how best to safeguard against possible damage to existing soil quality and the potential, where practicable for the quality to be improved. A holistic approach to the management of soil resources will be needed, particularly with respect to implications to the proposed programme of working (e.g. progressive or otherwise) and the successful delivery of the restoration strategy.
Historic environment - including archaeology Potentially linked to the requirements of policies: DM08; DM09; MR01	A Heritage Statement (HS) will be required to establish the presence of heritage assets that could be affected and to assess the nature, extent and importance of their significance and their settings. The HS must also provide a detailed analysis of potential impacts and their envisaged significance associated with all activities related to the working of the allocation. Where the potential for adverse impacts is identified, details of the means of avoiding such impacts or delivering sufficient mitigation to eradicate and / or reduce their significance to an acceptable degree must be included. The prime focus should be on the preservation of key heritage assets. A proportionately detailed, reasoned justification will be necessary in every instance that harm to, or the potential loss of a heritage asset is envisaged. Information regarding how recording and / or the excavation of heritage assets may also be necessary. The HS must be comprehensive in its coverage by considering both designated and undesignated heritage assets including those of potential archaeological interest. Information contained on the Gloucestershire Historic Environment Record (G-HER) should be interrogated along with the National Heritage List (NHL) produced by Historic England. Of potential relevance to the allocated units are the Bowl Barrow Scheduled Monuments at Nosehill Farm and Bemborough Farm (NH list entries: 1011981, 1008786 and 1020654); and the Summerhill prehistoric site Scheduled Monument (NH list entry: 1003339.).

Landscape and visual impact Potentially linked to the requirements of policies: DM01; DM02 DM09	A Landscape and Visual Impact Assessment (LVIA) prepared in line with best practice guidelines will be required. It must comprise an analysis of the landscapes which contain, and are within the sphere of influence of the allocation. Matters to be scrutinised include:- the likely sensitivity of affected landscapes, possible effects upon them and the relative significance of these effects in relation to all activities associated with minerals development and how these evolve over time (e.g. working, processing, site restoration and aftercare). Key landscapes likely to require assessment include: - national landscape character NCA 107 (Cotswolds) and the regional / local level classification – The High Wold Dip Slope landscape character type and area. As the allocated units are located within the Cotswold AONB special consideration must also be given to the particular elements and features that contribute to the landscape character of the designation. It is important that the LVIA applies published landscape studies when establishing baseline conditions. In terms of visual impact the LVIA must identify visual receptors that are likely to be affected, determine their sensitivity to potential impacts and consider the relative significance of the impacts identified. Sensitive visual receptors that should be considered as a minimum include: - the recreational facilities associated with Cotswold Farm Park, the Summerhill prehistoric site and Bowl Barrows Scheduled Ancient Monuments and stretches of the local highway network along Buckle Street and the Snowshill Road to Chapel Ash. In assessing both landscape and visual impacts possible cumulative / in-combination effects associated with the existing permitted mineral operations at the existing Naunton Quarry and Tinker's Barn Quarry will need to be taken into account. A further essential element of the LVIA is the provision of details concerning measures to avoid, reduce, remedy and / or compensate any possible negative effects deemed sufficiently harmful to render a proposal unacceptable in planning terms. Any scheme of mitigation put forward must be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. It should also be reflective of the different activities / stages that are likely to have a material effect on the landscape and visual impacts experienced (e.g. resulting from the preparation of land prior to working, mineral working itself and processing, and subsequent restoration incorporating aftercare).
Restoration opportunities and constraints Potentially linked to the requirements of policies: DM01; DM04; DM05; DM06; DM07; DM09; MR01	A restoration strategy will be required. Where necessary, individual proposals must give due consideration to their contribution to the delivery of a coherent and combined solution encompassing the relevant allocated unit. Progressive restoration techniques should be applied unless it can be demonstrated and justified to be of greater benefit and / or less harmful to apply alternative arrangements. In developing the overall restoration strategy, evidence must be presented to show how compatibility with the existing local environment will be achieved and the approved restoration schemes for the existing Naunton and Tinker's Barn Quarries will not be prejudiced. Where any part of public rights of way network has been affected by development of the allocated units, attention will need to be given to the integration of acceptable long term resolutions such as the reinstatement or permanent re-routing of affected paths. Opportunities to contribute to the ambitions of the Gloucestershire Nature Partnership such as supporting the enhancement of the county's green infrastructure and the nature conservation actions for the nearby Cotswold Valley Nature Improvement Area (NIA) should be taken. Consideration should also be given to the possibility of facilitating other beneficial land uses and / or positively contributing to the future management of land as identified in locally applicable plans and strategies such as the Cotswold District Local Plan and Cotswold AONB Management Plan. Furthermore, all proposed restoration solutions must be mindful of climate change and the need to deliver a greater degree of environmental resilience to its envisaged impacts. Under certain conditions this could involve the careful integration of measures to facilitate desirable habitat shifts to take place, which may act as suitable refuges for displaced and / or vulnerable species. An outline aftercare management plan covering at least the 1st five-year post-mineral working period should be incorporated into the overall restoration strategy. This must set out the commitments for carrying out aftercare and for undertaking a more detailed programme up to 12 months prior to the commencement of restoration. It must also contain the direction for future management of any restored areas. A longer timeframe of aftercare may be necessary where nature conservation and informal recreation after-uses are likely to dominate.

Allocation 06: Land south east of Down Ampney					
Aggregate type	Sand and gravel		Allocation Type	Preferred Area	
Yield and illustrative aggregate supply potential	The entire allocation may yield approximately 7.8mt of sand and gravel. Whilst the absence of any existing working means there are no established or restricted capacities to generate a likely supply scenario, industry interest has indicated that the allocation could meaningfully contribute to the maintenance of steady local aggregate supplies for at least around 15.5 years[297].				
Site area	Approx. 250ha	District	Cotswold	Parish	Down Ampney
Relevant planning permissions: (as of Nov. 2017)	No extant planning permissions associated with the future working of allocation 06: Land east of Down Ampney.				



[297] Established mineral resource information for this locality indicates that the allocation does not represent the full extent of potential workable and viable sand and gravel resources .The fact that these resources have not been specifically identified as a plan allocation should not prejudice their future consideration either as part of a new allocation in a review of the plan or through their submission as part of planning proposals for mineral working. However, if proposals were to come forward to work unallocated resources during the current plan period; these would be rigorously assessed against MLP plan policy MA02.

Development Requirements for Allocation 6: Land east of Down Ampney	
Theme	**Specific Requirement**
Local communities Potentially linked to the requirements of policies: DM01; DM02 DM03; MR01	An initial Health Impact Assessment (HIA) screening exercise should be carried out at the project inception stage to establish how best to assess and take account of potential health impacts on local communities within the sphere of influence of the allocation[298]. Whether a dedicated HIA is prepared or related information is to be presented as part of another type of assessment, the different groups within the population that might be affected should be highlighted and any relevant health characteristics taken into account[299]. It will be necessary for the wider amenity impacts on affected local communities to be assessed incorporating the individual residential properties, farms and commercial enterprises located nearby to the allocation and those that comprise the villages of Down Ampney (including Broadleaze); Latton; and Marston Meysey. An understanding of the scale and significance of possible attributable threats to the health and well-being of those communities that reside along any proposed freight routes used to support aggregate supplies will also be required. In addition, carefully considered commitments regarding measures to avoid and / or mitigate adverse amenity impacts and to maximise and enhance positive effects upon health and well being should be submitted.
Economic development Potentially linked to the requirements of policies: DM01; DM02	An Economic Impact Assessment (EcIA) should be carried out to identify potential economic impacts and their significance as a result of aggregate working taking place at land south east of Down Ampney. Whether a dedicated EcIA is prepared or related information is to be presented as part of another type of assessment, it must establish whether current local economic conditions are likely to be influenced and the scale and significance of any positive contribution to economic well being at the local, sub-national and national levels, having taken into account the occurrence of possible negative economic impacts. The EcIA should be based on a balanced and credible analysis of evidence that has been published and / or has been robustly generated to support the proposal. Information concerning the potential impact on local employment both direct and indirectly will be crucial. The prospect of new jobs being generated should be highlighted. Commitments to secure employment and training opportunities that will benefit local communities (e.g. provision of local apprenticeships) will be best placed set out within the EcIA. This is in addition to any evidence to show how existing direct and indirect employment will be safeguarded. The possibility that existing non-minerals related local businesses and / or permitted emerging enterprises could be exposed to undue economic risk from aggregate working starting up at land south east of Down Ampney must be explored. The nature of any risks to other businesses, their likely significance and any proposed means of mitigation will need to form part of the EcIA.
Operational matters / site infrastructure Potentially linked to the requirements of policies: DM01; DM02 DM03; DM06; DM09	A production limit and restricted hours of operation may form part of an acceptable mitigation package for ensuring the amenity of local communities and the quality and health of the natural environment are not subject to unacceptable adverse impacts resulting from mineral-related activities with the allocation and also cumulatively from minerals developments permitted within the locality. In addition, site infrastructure may need to be subject to restrictions such as the removal of permitted development rights

[298] Best practice on HIA screening is contained within the Department of Health (DoH) Health Impact Assessment (HIA) of Government Policy document (July 2010): *A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process.* This guide can be obtained at:- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216009/dh_120110.pdf

[299] Public Health England regularly prepares Health Profiles at the county level. This information may be a useful starting point for preparing a robust and credible evidence base on the nature of local communities that may be affected. Information on Health Profiles can be obtained at: - https://fingertips.phe.org.uk/

Highways Potentially linked to the requirements of policies: DM01; DM02; DM03	A Transport Assessment (TA) will be required. Advice on the necessary content of a TA should be sought from the Local Highway Authority, Highways England and also the neighbouring Local Highway Authority for Wiltshire (Wiltshire Council) at the earliest possible opportunity as part of pre-application preparations. Highways matters, which will need to be investigated include: - the creation of a safe and suitable means of vehicular access that will achieve the shortest possible route to the A419 the avoidance, wherever possible of associated vehicular movements through, the locally significant settlement of Latton; and the establishment of acceptable freight routes using the A419, which do not create a conflict with Gloucestershire Local Transport Plan policies LTP PD 3.1 and LTP PD 3.4[300], and follow the advice contained within the Gloucestershire Freight Gateway[301] or its future replacement, In addition, where it is relevant, consideration should be given to the Wiltshire Local Transport Plan Freight Strategy[302]. For matters relating to potential impacts on the maintenance of the highway, this is dealt with under s.59 of the Highways Act 1980 and the provision available to recover expenses due to extraordinary traffic.
Public Rights of Way (PRoW) Potentially linked to the requirements of policies: DM03; MR01	An assessment of the PRoW network should be undertaken with particular attention given to paths BDA 2/1, 9/2, 7, 10/1 and 11,. Details of possible temporary diversions or permanent re-routings of any affected paths will be required. It is strongly encouraged that advice is sought at the earliest possible opportunity from the Local Highway Authority in respect of this matter.
Flood risk Potentially linked to the requirements of policies: DM02; DM04; MR01	A site-specific flood risk assessment (FRA) will be required. A number of parcels of land within the allocation have been identified as Flood Zones 2 (medium probability of river flooding) and 3 (high probability of river flooding). In addition, the majority of the allocation is recorded as susceptible to groundwater flooding and there are small areas considered to be at either medium or high risk of surface water flooding largely associated with the field drains located within the southern, eastern and northern sections of the allocation. The possibilities of elevated flood risks from all minerals-related development activities (e.g. site preparation, working, processing and site restoration) resulting from changes in groundwater flows, increased surface run-off and the discharge of water (following dewatering) into receiving stream that are already at capacity, will need to assessed . The risks posed from all forms of flooding under current conditions and those forecast in the future incorporating anticipated climate change impacts, should also be investigated. Possible cumulative / in-combination impacts on flood risk associated with permitted mineral working and other related activities such as restoration and aftercare at nearby permitted mineral workings including Whetstone Bridge Quarry and Roundhouse Farm Quarry and Eysey Manor Quarry (the final two are located across the administrative border in Wiltshire) should also be considered. In addition, potential flood-risk sensitive receptors should be assessed to determine their significance and sensitivity. Nearby to the allocation this includes a number of isolated residential properties and agricultural and other commercial premises situated close to the allocation boundary and the villages of Down Ampney, Marston Meysey and Latton. More distant sensitive receptors made up of the hamlet of Dunfield; the villages of Kempsford and Castle Eaton; the town of Cricklade and RAF Fairford will also require investigation. The FRA must scrutinise the application of flood risk mitigation measures and provide a strategy for their implementation. During the preparation and operational phases of the development, flood risk mitigation matters likely to require attention include: - the siting of any hard-standing; buildings; storage and stockpiling of quarry materials; and other site infrastructure away from areas at a greater risk of susceptibility to flooding. For the restoration phase the incorporation of suitable flood risk mitigation must be carefully considered. This will likely involve the application of a sustainable drainage system with the core aim of ensuring the pre-development rate of surface water run-off will not be exceeded in line with SuDS guidance. Where infilling using inert materials (imported and / or internal to the site) for the profiling of landforms,

[300] Gloucestershire Freight Network Policies LTP PD 3.1 (Gloucestershire's Freight Network) and LTP 3.4 (Construction Management Plans) are set out in the Gloucestershire's Local Transport Plan (2015 – 2031) – Policy Document 3 – Freight can be obtained at: - https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/freight/

[301] The Gloucestershire Freight Gateway can be obtained at:- http://freightgateway.co.uk/gloucestershire/

[302] The Wiltshire Local Transport Plan (2011 - 2026) Freight Strategy can be obtained at: - www.wiltshire.gov.uk/ltp3-freight-strategy.pdf

	this must not negatively impact any upon existing floodplain storage and incorporate sufficient provision for suitable safe pathways for ground water to move around and through the allocation to make sure that groundwater levels do not rise above those recorded prior to minerals development.
Water resources Potentially linked to the requirements of policies: DM01; DM05; MR01	A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. The superficial deposits of the allocation host a Secondary 'A' shallow aquifer for which little information is known as to its properties. Consequently, a detailed analysis of the existing local groundwater regime will be essential. The assessment must also afford attention to identifying and quantifying groundwater risks associated with all possible minerals-related development activities (e.g. working, processing, site restoration including aftercare) and establish a stringent monitoring regime commencing at least 12-months prior to the commencement of the development, continuing throughout the operational phase and including site restoration and aftercare. The allocation mostly lies within a Source Protection Zone 2 (SPZ2) although a small area falls within a Source Protection Zone 1 (SPZ1). A very specific risk assessment will therefore need to be carried out to consider potential pollution of potable water supplies and other sensitive commercial water supplies in order to demonstrate there will be no significant environmental impacts and that appropriate protection and / or mitigation and management measures will be put in place. Any landfill or deposit for recovery (DfR) activities will require an appropriate EA permit. Advice from the EA in respect of this matter should be sought at earliest opportunity. Beyond the allocation, potential hydrological impacts on nearby surface water bodies (up to 3km) will require scrutiny. These include: - Marston Meysey Brook; Ampney and Poulton Brooks; River Thames (from the River Churn to River Coln); River Churn (Baunton to Cricklade); Thames & Severn Canal; a number of unnamed tributaries and drains to the River Thames and Ampney Brook; and several ponds and lakes some of which can be traced back to previous and existing mineral workings in the locality. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. Possible cumulative / in-combination hydrological / hydrogeological impacts associated with nearby permitted mineral workings and other related activities such as restoration and aftercare should also be considered. This includes: - Whetstone Bridge Quarry and Roundhouse Farm Quarry and Eysey Manor Quarry (the final two are located across the administrative border in Wiltshire). An early up-to-date survey of the status of nearby mineral workings would be beneficial to this exercise. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management by identifying how development of the allocation may positively contribute towards protecting and the improving water environment in line with the Thames River Basin Management Plan (RBMP) and the Thames Catchment Flood Management Plans (CFMP) [303].

[303] information on river basin and catchment flood management plans (RBMPs and CFMPs)) can be obtained at: - https://www.gov.uk/government/collections/catchment-flood-management-plans

Natural environment Potentially linked to the requirements of policies: DM05; DM06; DM07; MR01	A comprehensive assessment of the natural environment will be required. This should include those natural assets present in, which rely upon, and / or that are located within the sphere of influence of the allocation and contribute to the county's green infrastructure. The assessment must identify potential impacts and scrutinise their significance taking into account the different activities / stages of minerals development (e.g. the preparation of land prior to mineral working, mineral working and processing and subsequent restoration incorporating aftercare). Environmental designations in the locality that will need careful consideration include: - North Meadow and Clattinger Farm SAC; North Meadow SSSI / NNR; and Down Ampney Pits LWS. In the event that of the Cotswold Water Park SSSI is re-notified for its breeding and overwintering bird assemblages, an assessment should be carried out to establish whether adverse effects from proposed mineral developments may occur including the disturbance of the important bird assemblages. In addition, any priority habitats and / or priority species, which encompass or have been recorded in, which rely upon, and / or that are located within the sphere of influence of the allocation must be investigated. A further crucial aspect of the assessment will be the provision of sufficient details concerning measures deemed necessary to avoid, reduce, remedy and / or compensate possible unacceptable negative effects. Any scheme of mitigation must also be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. In totality, the assessment of natural resources must demonstrate how any issues which arise, have been considered in a holistic manner and within a strategic context (e.g. the implications for the county's green infrastructure). In particular it must be clear how local ecological networks will not be subject to unacceptable adverse impacts. Where opportunities exist to deliver tangible benefits, due consideration should be given to possible collaborations and coordination with the programme of nature conservation actions to enhance the county's green infrastructure as identified for the Cotswold Water Park Nature Improvement Area (NIA).
Soil resources Potentially linked to the requirements of policies: DM07; MR01	A Soil Survey and Agricultural Land Classification (ALC) Report will be required. This will need to establish baseline conditions of soil resources (i.e. quality and quantity) contained in the allocation and within its sphere of influence. The allocation lies within an area that may contain grades 2 and 3 agricultural land (very good to good or moderate quality). This will need to be further investigated, possibly through a detailed site survey in order to: - determine the extent of the resource; establish the relevant sub-grade of the soil (i.e. whether the grade 3 quality is 'good' (3a) and / or 'moderate' (3b)); and assess the relationship of the resource to the individual proposal under consideration and also the wider allocation. In the presence of potentially valuable soil resources, a Soil Handling Strategy must also be prepared. This should consider the details of how best to safeguard against possible damage to existing soil quality and the potential, where practicable for the quality to be improved. A holistic approach to the management of soil resources will be needed, particularly with respect to implications to the proposed programme of working (e.g. progressive or otherwise) and the successful delivery of the restoration strategy.
Historic environment - including archaeology Potentially linked to the requirements of policies: DM08; DM09; MR01	A Heritage Statement (HS) is required to establish the presence of heritage assets that could be affected and to assess the nature, extent and importance of their significance and their settings. The HS must also provide a detailed analysis of potential impacts and their envisaged significance associated with all activities related to the working of the allocation. Where the potential for adverse impacts is identified, details of the means of avoiding such impacts or delivering sufficient mitigation to eradicate and / or reduce their significance to an acceptable degree must be included. This could include limitations on operations including the working of minerals. The prime focus should be on the preservation of key heritage assets. A proportionately detailed, reasoned justification will be necessary in every instance that harm to, or the potential loss of a heritage asset is envisaged. Information regarding how recording and / or the excavation of heritage assets may also be necessary. The HS must be comprehensive in its coverage by considering both designated and undesignated heritage assets including those of potential archaeological interest. Information contained on the Gloucestershire Historic Environment Record (G-HER) should be interrogated along with the National Heritage List (NHL) produced by Historic England. The settlement at Bean Hay Copse Scheduled Monument (NH list entry: 1003446) and several grade II listed buildings at Castle Hill Farm (NH list entries: 1341032 and 1304915) are located near to the boundary of the allocation and will likely require some degree of analysis. There are also numerous records of prehistoric and Roman activity in the locality, which will likely require further investigation. In addition, 20th century military activity within the allocation is very evident and should also be carefully

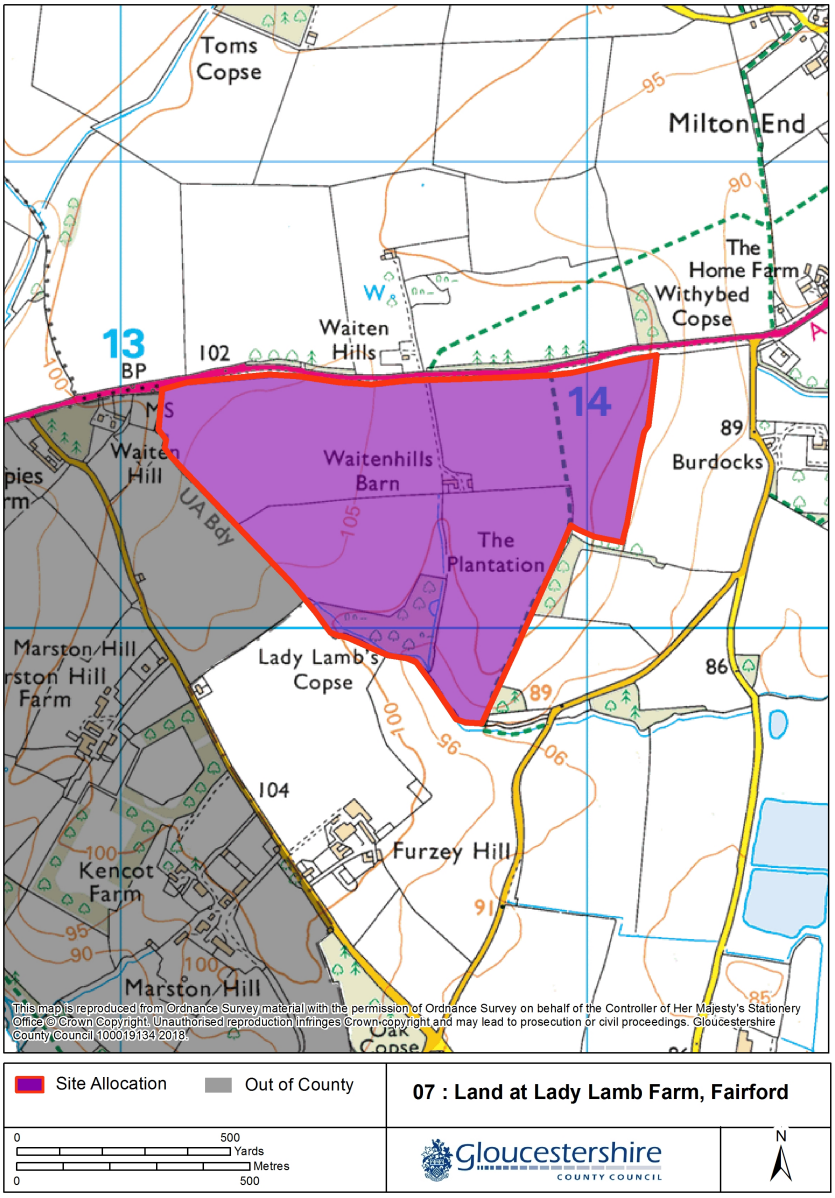
	assessed[304].
Landscape and visual impact Potentially linked to the requirements of policies: DM01; DM02; DM09; MR01	A Landscape and Visual Impact Assessment (LVIA) prepared in line with best practice guidelines will be required. It must comprise an analysis of the landscapes which contain, and are within the sphere of influence of the allocation. Matters requiring careful scrutiny include the likely sensitivity of affected landscapes, possible effects upon them and the relative significance of these effects in relation to all activities associated with minerals development and how these evolve over time (e.g. working, processing, site restoration and aftercare). Key landscapes likely to require assessment include: - national landscape character NCA 108 (Upper Thames Clay Vales) and the regional and local level classifications – the River Basin Lowland Landscape Character Type and the Down Ampney Landscape Character Area. It is important that the LVIA applies published landscape studies when establishing baseline conditions. In terms of visual impact the LVIA must identify visual receptors that are likely to be affected, determine their sensitivity to potential impacts and consider the relative significance of the impacts identified. Sensitive visual receptors that should be considered as a minimum include: - the individual properties, farmsteads and agricultural premises surrounding the allocation; the settlements of Down Ampney, Marston Meysey and Latton; the network of paths and recreational routes in the locality including the Thames Path National Trail and the local highway network, particularly along the southern and eastern boundary, which includes stretches of the Eastern Spine Road. In assessing both landscape and visual impacts possible cumulative / in-combination effects associated with the existing nearby permitted mineral operations at Whetstone Bridge, Roundhouse Farm Quarry and Eysey Manor Quarry (the final two are located across the administrative border in Wiltshire) will need to be taken into account. A further essential element of the LVIA is the provision of details concerning measures to avoid, reduce, remedy and / or compensate any possible negative effects deemed sufficiently harmful to render a proposal unacceptable in planning terms. Any scheme of mitigation put forward must be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. It should also be reflective of the different activities / stages that are likely to have a material effect on the landscape and visual impacts experienced (e.g. resulting from the preparation of land prior to working, mineral working itself and processing, and subsequent restoration incorporating aftercare).
Aerodrome safeguarding Potentially linked to the requirements of policies: DM11; MR01	A Bird Hazard Management Scheme (BHMS) will be required. Advice with respect to its scope and content should be sought at the earliest possible opportunity from Defence Infrastructure Organisation (DIO) Safeguarding. The BHMS should establish the nature, scale and significance of any potential bird hazards associated with all mineral-related activities that support the working of the allocation. Particular attention will need to be given to the functioning of nearby RAF Fairford due to the location of the allocation within the statutory safeguarding aerodrome height, technical and a statutory birdstrike safeguarding consultation zones and an area where Instrumental Landing Systems (ILS) may need to operate. Although, other nearby aerodromes could require investigation and may need to be taken into account. Consultation with the DIO will be required if any equipment is proposed that exceeds 15.2 metres in height above ground level. Details of the deliverable measures and securable commitments to manage and reduce the frequency and severity of any possible bird hazard risks to an acceptable level and that effective monitoring of their success over time, , including post- mineral working, restoration and aftercare, should form a major element of the BHMS.

[304] Historic England has published research, information and advice on Historic Military Airfields, which may of assistance in preparing heritage assessments: - https://historicengland.org.uk/research/current-research/assessing-significance/military/historic-military-airfields/

Restoration opportunities and constraints Potentially linked to the requirements of policies: DM01; DM04; DM05; DM06: DM07; DM09; DM11; MR01	A restoration strategy will be required. Where necessary, individual proposals must give due consideration to their contribution to the delivery of a coherent and combined solution encompassing the entire allocation. Progressive restoration techniques should be applied unless it is demonstrated and justified to be of greater benefit and / or less harmful to apply alternative arrangements. In developing the overall restoration strategy, evidence must be presented to show how integration can be achieved with the existing local environment. Particular attention must be given to continued aviation safeguarding and the avoidance of any increased risk of bird strike at nearby RAF Fairford Fairford and / or other nearby aerodromes. This may significantly restrict opportunities to achieve wet restoration, particularly involving the introduction of new open water bodies.. Where the public rights of way network has been affected by development of the allocation, attention will need to be given to the integration of acceptable long term resolutions such as the reinstatement or permanent re-routing of affected paths. Opportunities to contribute to the ambitions of the Gloucestershire Nature Partnership such as supporting the enhancement of the county's green infrastructure and the nature conservation actions for the Cotswold Water Park Nature Improvement Area (NIA) should be taken. Consideration should also be given to the possibility of facilitating other beneficial land uses and / or positively contributing to the future management of land as identified in locally applicable plans and strategies such as the Cotswold District Local Plan and the Cotswold Water Park Master Plan. This could, under the right circumstances, include facilitating new infrastructure that will contribute towards the long-term restoration and possible expansion ambitions of the Thames and Severn Canal network[305]. Furthermore, all proposed restoration solutions must be mindful of climate change and the need to deliver a greater degree of environmental resilience to its envisaged impacts. Under certain conditions this could involve the careful integration of measures to facilitate desirable habitat shifts to take place, which may act as suitable refuges for displaced and / or vulnerable species. An outline aftercare management plan covering at least the 1st five-year post-mineral working period should be incorporated into the overall restoration strategy. This must set out the commitments for carrying out aftercare and for undertaking a more detailed programme up to 12 months prior to the commencement of restoration. It must also contain the direction for future management of any restored areas. A longer timeframe of aftercare may be necessary where nature conservation and informal recreation after-uses are likely to dominate.

[305] Detailed information about proposals to restore the Thames and Severn Canal can be obtained from the Cotswold Canal Trust at: - https://cotswoldcanals.com/about-us/

Allocation 07: Land at Lady Lamb Farm, west of Fairford					
Aggregate type	Sand and gravel	Allocation Type	Area of Search		
Yield and illustrative aggregate supply potential	The entire allocation may yield in the region of 3mt of sand and gravel. The absence of any existing working means there are no established or restricted capacities to generate a likely supply scenario. However, accounting for the size and scale of possible supporting infrastructure commensurate to the type of mineral operation envisaged, a meaningfully contribute to the maintenance of steady local aggregate supplies could amount to about 12 years.				
Site area	Approx. 84ha	District	Cotswold	Parish	Fairford
Relevant planning permissions: (as of Nov. 2017)	No extant planning permissions associated with the future working of allocation 07: Land at Lady Lamb Farm, Fairford.				



Detailed Development Requirements for Allocation 07: Land at Lady Lamb Farm, Fairford	
Theme	**Specific Requirement**
Local communities Potentially linked to the requirements of policies: DM01; DM02; DM03	An initial Health Impact Assessment (HIA) screening exercise should be carried out at the project inception stage to establish how best to assess and take account of potential health impacts on local communities within the sphere of influence of the allocation[306]. Whether a dedicated HIA is prepared or related information is to be presented as part of another type of assessment, the different groups within the population that might be affected should be highlighted and any relevant health characteristics taken into account[307]. It will be necessary for the wider amenity impacts on affected local communities to be assessed incorporating the individual residential properties, farms and commercial enterprises located nearby to the allocation and those that comprise the western side of the town of Fairford and the hamlets and villages of Meysey Hampton and Furzey Hill. An understanding of the scale and significance of possible attributable threats to the health and well-being of those communities that reside along any proposed freight routes to support aggregate supplies will also be required. In addition, carefully considered commitments regarding measures to avoid and / or mitigate adverse amenity impacts and to maximise and enhance positive effects upon health and well being should be submitted.
Economic development Potentially linked to the requirements of policies: DM01; DM02	An Economic Impact Assessment (EcIA should be carried out to identify potential economic impacts and their significance as a result of aggregate working taking place at land at Lady Lamb Farm. Whether a dedicated EcIA is prepared or related information is to be presented as part of another type of assessment, it must establish whether current local economic conditions are likely to be influenced and the scale and significance of any positive contribution to economic well being at the local, sub-national and national levels, having taken into account the occurrence of possible negative economic impacts. The EcIA should be based on a balanced and credible analysis of evidence that has been published and / or has been robustly generated to support the proposal. Information concerning the potential impact on local employment both direct and indirectly will be crucial. The prospect of new jobs being generated should be highlighted. Commitments to secure employment and training opportunities that will benefit local communities (e.g. provision of local apprenticeships) will be best placed set out within the EcIA. This is in addition to any evidence to show how existing direct and indirect employment will be safeguarded. The possibility that existing non-minerals related local businesses and / or permitted emerging enterprises could be exposed to undue economic risk from aggregate working starting up at land at Lady Lamb Farm must be explored. The nature of any risks to other businesses, their likely significance and any proposed means of mitigation will need to form part of the EcIA.
Operational Matters / Site Infrastructure Potentially linked to the requirements of policies: DM01; DM02; DM03; DM06; DM09 MR01	A production limit and restricted hours of operation may form part of an acceptable mitigation package for ensuring the amenity of local communities and the quality and health of the natural environment are not subject to unacceptable adverse impacts resulting from mineral-related activities with the allocation and also cumulatively from minerals developments permitted within the locality. In addition, site infrastructure may need to be subject to restrictions such as the removal of permitted development rights.

[306] Best practice on HIA screening is contained within the Department of Health (DoH) Health Impact Assessment (HIA) of Government Policy document (July 2010): *A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process.* This guide can be obtained at:- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216009/dh_120110.pdf

[307] Public Health England regularly prepares Health Profiles at the county level. This information may be a useful starting point for preparing a robust and credible evidence base on the nature of local communities that may be affected. Information on Health Profiles can be obtained at: - https://fingertips.phe.org.uk/

Highways Potentially linked to the requirements of policies: DM01; DM02; DM03	A Transport Assessment (TA) will be required. Advice on the necessary content of a TA should be sought from the Local Highway Authority at the earliest possible opportunity as part of pre-application preparations. Highways matters, which will need to be investigated include the creation of a safe and suitable means of vehicular access onto the A417 and acceptable freight routes, which do no create a conflict with Gloucestershire Local Transport Plan policies LTP PD 3.1 and LTP PD 3.4[308] and follow the advice contained within the Gloucestershire Freight Gateway[309]. Wherever possible minerals-related traffic should avoid routes that run through the locally significant settlements of Fairford and Lechlade. However, if this is demonstrably unavoidable, the effectiveness and realistic deliverability of proposed mitigation measures will be rigorously scrutinised. Of paramount importance will be measures that will reduce the risk both in terms of frequency and severity of adverse impacts on the effective and efficient functioning of the local highway network, the safety for all potential road users and the amenity of local communities.
Public Rights of Way (PRoW) Potentially linked to the requirements of policies: DM03; MR01	An assessment of the PRoW network should be undertaken with particular attention given to path BFA 6/1. Details of possible temporary diversions or permanent re-routings of any affected paths will be required. It is strongly encouraged that advice is sought at the earliest possible opportunity from the Local Highway Authority in respect of this matter.
Flood risk Potentially linked to the requirements of policies: DM02; DM04; MR01	A site-specific flood risk assessment (FRA) will be required. Parts of the allocation, particularly running along the field drains are recorded as susceptible to groundwater flooding. However, no parts have been identified as being at risk of river or surface water flooding. Nevertheless, the possibilities of elevated flood risks from all minerals-related development activities (e.g. site preparation, working, processing and site restoration) resulting from any changes in groundwater flows, increased surface run-off and the discharge of water (following de-watering) into receiving stream that are already at capacity, are likely to require particular attention. Although the risks posed from all forms of flooding under current conditions and those forecast in the future incorporating anticipated climate change impacts, should be assessed. Potential flood-risk sensitive receptors need to be identified and their significance and sensitivity scrutinised. This includes a number of isolated residential properties and agricultural and other commercial premises particularly surrounding Marston Hill, Furzey Hill and Waiten Hill. Although at some distance to the allocation, is the village of Whelford that may require some investigation as a consequence of possible hydrological impacts on Dudgrove Brook. The FRA must scrutinise the application of flood risk mitigation measures and provide a strategy for their implementation. During the preparation and operational phases of the development, flood risk mitigation matters likely to require attention include the siting of any hard-standing, buildings, storage and stockpiling of quarry materials, and other site infrastructure away from areas at a greater risk of susceptibility to flooding. For the restoration phase the incorporation of suitable flood risk mitigation must be carefully considered. This will likely involve the application of a sustainable drainage system with the core aim of ensuring the pre-development rate of surface water run-off will not be exceeded in line with SuDS guidance. Where infilling using inert materials (imported and / or internal to the site) for the profiling of land forms is proposed, this must not negatively impact upon any existing floodplain storage and incorporate sufficient provision for suitable safe pathways for ground water to move around and through the allocation to make sure that groundwater levels do not rise above those recorded prior to minerals development.

[308] Gloucestershire Freight Network Policies LTP PD 3.1 (Gloucestershire's Freight Network) and LTP 3.4 (Construction Management Plans) are set out in the Gloucestershire's Local Transport Plan (2015 – 2031) Policy Document 3 – Freight can be obtained at: - https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/freight/

[309] The Gloucestershire Freight Gateway can be obtained at:- http://freightgateway.co.uk/gloucestershire/

Water resources Potentially linked to the requirements of policies: DM01; DM05; MR01	A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. The superficial deposits of the allocation host a Secondary 'A' shallow aquifer for which little information is known as to its properties. Consequently, a detailed analysis of the existing local groundwater regime will be essential. The assessment must also afford attention to identifying and quantifying groundwater risks associated with all possible minerals-related development activities (e.g. working, processing, site restoration including aftercare) and establish a stringent monitoring regime commencing at least 12-months prior to the commencement of the development, continuing throughout the operational phase and including site restoration and aftercare. The allocation also lies within a Source Protection Zone 1 (SPZ1). This will require a very specific risk assessment to be carried out to consider potential pollution of potable water supplies and other sensitive commercial water supplies. Beyond the allocation, possible hydrological impacts on nearby surface water bodies (up to 3km) will require scrutiny. These include: Marston Meysey Brook; Dudgrove Brook; River Coln; a network of drains and tributaries to the River Coln; and several ponds and lakes some of which can be traced back to previous mineral workings in the locality. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management by identifying how development of the allocation may positively contribute towards protecting and the improving water environment in line with the Thames River Basin Management Plan (RBMP) and Thames Catchment Flood Management Plan (CFMP)[310].
Natural environment Potentially linked to the requirements of policies: DM05; DM06; DM07; MR01	A comprehensive assessment of the natural environment will be required. This should include those natural assets present in, which rely upon, and / or that are located within the sphere of influence of the allocation and contribute to the county's green infrastructure. The assessment must identify potential impacts and scrutinise their significance taking into account the different activities / stages of minerals development (e.g. the preparation of land prior to mineral working, mineral working and processing and subsequent restoration incorporating aftercare). Careful consideration will need to be given to Cotswold Water Park KWS as the key environmental designation in the locality. The re-notification of the Cotswold Water Park SSSI for its breeding and overwintering bird assemblages should also be assessed to establish whether adverse effects from proposed mineral developments may occur including the disturbance of the important bird assemblages. In addition, any priority habitats and / or priority species, which encompass or have been recorded in, which rely upon, and / or that are located within the sphere of influence of the allocation must be investigated. A further crucial aspect of the assessment will be the provision of sufficient details concerning measures deemed necessary to avoid, reduce, remedy and / or compensate possible unacceptable negative effects. Any scheme of mitigation must also be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. In totality, the assessment of natural resources must demonstrate how any issues which arising, have been considered in a holistic manner and within a strategic context (e.g. the implications for the county's green infrastructure). In particular it must be clear as to how local ecological networks will not be subject to unacceptable adverse impacts. Where opportunities exist to deliver tangible benefits, due consideration should be given to possible collaborations and coordination with the programme of nature conservation actions to enhance the county's green infrastructure as identified for the Cotswold Water Park Nature Improvement Area (NIA).

[310] information on river basin and catchment flood management plans (RBMPs and CFMPs) can be obtained at: - https://www.gov.uk/government/collections/catchment-flood-management-plans

Soil resources Potentially linked to the requirements of policies: DM07; MR01	A Soil Survey and Agricultural Land Classification (ALC) Report will be required. This will need to establish baseline conditions of soil resources (i.e. quality and quantity) contained in the allocation and within its sphere of influence. The allocation lies within an area that may contain grades 2 and 3 agricultural land (very good to good or moderate quality). This will need to be further investigated, possibly through a detailed site survey in order to: - determine the extent of the resource; establish the sub-grade of the soil (i.e. whether the grade 3 quality is 'good' (3a) and / or 'moderate' (3b)); and assess the relationship of the resource to the individual proposal under consideration and the wider allocation. In the presence of potentially valuable soil resources, a Soil Handling Strategy must also be prepared. This should consider the details of how best to safeguard against possible damage to existing soil quality and the potential, where practicable for the quality to be improved. A holistic approach to the management of soil resources will be needed, particularly with respect to implications to the proposed programme of working (e.g. progressive or otherwise) and the successful delivery of the restoration strategy.
Historic environment – including archaeology Potentially linked to the requirements of policies: DM08; DM09; MR01	A Heritage Statement (HS) will be required to establish the presence of heritage assets that could be affected and to assess the nature, extent and importance of their significance and their settings. The HS must also provide a detailed analysis of potential impacts and their envisaged significance associated with all activities related to the working of the allocation. Where the potential for adverse impacts is identified, details of the means of avoiding such impacts or delivering sufficient mitigation to eradicate and / or reduce their significance to an acceptable degree must be included. The prime focus should be on the preservation of key heritage assets. A proportionately detailed, reasoned justification will be necessary in every instance that harm to, or the potential loss of a heritage asset is envisaged. Information regarding how recording and / or the excavation of heritage assets may also be necessary. The HS must be comprehensive in its coverage by considering both designated and undesignated heritage assets including those of potential archaeological interest. Information contained on the Gloucestershire Historic Environment Record (G-HER) should be interrogated along with the National Heritage List (NHL) produced by Historic England. Of potential relevance to the allocation are: - the grade II listed farmhouse at Furzey Hill (NH list entry: 1303321); the grade II listed building known as The Lodge (NH list entry: 1089981); and the Hengiform barrow and associated ring ditch south of Burdocks Scheduled Monument (NH list entry: 1014394).
Landscape and visual Impact Potentially linked to the requirements of policies: DM01; DM02; DM09; MR01	A Landscape and Visual Impact Assessment (LVIA) prepared in line with best practice guidelines will be required. It must comprise an analysis of the landscapes which contain, and are within the sphere of influence of the allocation. Matters requiring careful scrutiny include the likely sensitivity of affected landscapes, possible effects upon them and the relative significance of these effects in relation to all activities associated with minerals development and how these evolve over time (e.g. working, processing, site restoration and aftercare). Key landscapes likely to require assessment include: - national landscape character NCA 108 (Upper Thames Clay Vales) and the regional and local level classifications – the River Basin Lowland Landscape Character Type and the Fairford and Lechlade Landscape Character Area. It is important that the LVIA applies published landscape studies when establishing baseline conditions. In terms of visual impact the LVIA must identify visual receptors that are likely to be affected, determine their sensitivity to potential impacts and consider the relative significance of the impacts identified. Sensitive visual receptors that should be considered as a minimum include: - the individual properties, farmsteads and agricultural premises that surround the allocation, some of which are of historic significance and are listed; the network of paths and recreational routes in the locality and the local highway network along the northern boundary of the allocation, which is adjacent to the A417 and near to the western boundary along Marston Hill Road. A further essential element of the LVIA is the provision of details concerning measures to avoid, reduce, remedy and / or compensate any possible negative effects deemed sufficiently harmful to render a proposal unacceptable in planning terms. Any scheme of mitigation put forward must be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. It should also be reflective of the different activities / stages that are likely to have a material effect on the landscape and visual impacts experienced (e.g. resulting from the preparation of land prior to mineral working, mineral working and processing, and subsequent restoration incorporating aftercare).

Aerodrome Safeguarding Potentially linked to the requirements of policies: DM11; MR01	A Bird Hazard Management Scheme (BHMS) will be required. Advice with respect to its scope and content should ideally be sought at the earliest possible opportunity from Defence Infrastructure Organisation (DIO) Safeguarding. The BHMS should establish the nature, scale and significance of any potential bird hazards associated with all mineral-related activities that support the working of the allocation. Particularly attention will need to be given to the functioning of nearby RAF Fairford due to the location of the allocation within the statutory safeguarding aerodrome height, technical and birdstrike safeguarding consultation zones and an area where Instrumental Landing Systems (ILS) may need to operate. Consultation with the DIO will be required if any equipment is proposed that exceeds 15.2 metres in height above ground level. Although, other nearby aerodromes could require investigation and may need to be taken into account. Details of the deliverable measures and securable commitments to manage and reduce the frequency and severity of any possible bird hazard risks to an acceptable level and that effective monitoring of their success over time, including post- mineral working, restoration and aftercare, should form a major element of the BHMS.
Restoration opportunities and constraints Potentially linked to the requirements of policies: DM01; DM04; DM05; DM06; DM07; DM09 DM11; MR01	A restoration strategy will be required. Where necessary, individual proposals must give due consideration to their contribution to the delivery of a coherent and combined solution encompassing the entire allocation. Progressive restoration techniques should be applied unless it can be demonstrated and justified to be of greater benefit and / or less harmful to apply alternative arrangements. In developing the overall restoration strategy, evidence must be presented to show how compatibility and wherever possible, integration can be achieved with the existing local environment. Particular attention must be given to continued aviation safeguarding and the avoidance of increased risk of bird strike at nearby RAF Fairford and / or other nearby aerodromes. This may significantly restrict opportunities to achieve wet restoration, particularly involving the introduction of new open water bodies. Where the public rights of way network has been affected by development of the allocation, attention will need to be given to the integration of acceptable long term resolutions such as the reinstatement or permanent re-routing of affected paths. Opportunities to contribute to the ambitions of the Gloucestershire Nature Partnership such as supporting the enhancement of the county's green infrastructure and the nature conservation actions for the Cotswold Water Park Nature Improvement Area (NIA) should be taken. Consideration should also be given to the possibility of facilitating other beneficial land uses and / or positively contributing to the future management of land as identified in locally applicable plans and strategies such as the Fairford Neighbourhood Plan, Cotswold District Local Plan and the Cotswold Water Park Master Plan. Furthermore, all proposed restoration solutions must be mindful of climate change and the need to deliver a greater degree of environmental resilience to its envisaged impacts. Under certain conditions this could involve the careful integration of measures to facilitate desirable habitat shifts to take place, which may act as suitable refuges for displaced and / or vulnerable species. An outline aftercare management plan covering at least the 1st five-year post-mineral working period should be incorporated into the overall restoration strategy. This must set out the commitments for the carrying out aftercare and for undertaking a more detailed programme up to 12 months prior to the commencement of restoration. It must also contain the direction for future management of any restored areas. A longer timeframe of aftercare may be necessary where nature conservation and informal recreation after-uses are likely to dominate.

APPENDIX 5

SCHEDULE OF FORMER MLP POLICIES THAT HAVE BEEN SUPERSEDED / DELETED BY THE ADOPTION OF THE MINERALS LOCAL PLAN FOR GLOUCESTERSHIRE (2018-2032)

Appendix 5 | Schedule of former MLP Policies that have been superseded / deleted by the adoption of the Minerals Local Plan for Gloucestershire (2018 – 2032)

Former MLP Policy	Title	Status prior to adoption of the MLP for Gloucestershire (i.e. saved or not saved under transitional arrangements[311])	Status at adoption of the MLP for Gloucestershire
E1	International and European Sites of Nature Conservation	Not Saved	Replaced by Policy DM06 | Biodiversity and Geodiversity
E2	Areas of Outstanding Natural Beauty	Saved	Replaced by Policy DM09 | Landscape
E3	Nationally Important Sites of Nature Conservation	Not Saved	Replaced by Policy DM06 | Biodiversity and Geodiversity
E4	Nationally Important Archaeological Sites (including Scheduled Ancient Monuments)	Saved	Replaced by Policy DM08 | Historic Environment
E5	Listed Buildings and Conservation Areas	Not Saved	Replaced by Policy DM08 | Historic Environment
E6	Other Nationally Important Sites of Historic Interest	Saved	Replaced by Policy DM08 | Historic Environment
E7	Best and Most Versatile Agricultural Land	Not Saved	Replaced by Policy DM07 | Soil Resources
E8	Regionally and Locally Important Designated Sites	Saved	Replaced by Policy DM06 | Biodiversity and Geodiversity
E9	Green Belt	Saved	Replaced by Policy DM10 | Gloucester-Cheltenham Green Belt
E10	National, Regional	Saved	Replaced by Policy DM06 |

[311] Transitional arrangements were put in place by the Government of the time after the introduction of the Planning and Compulsory Purchase Act 2004. These sought to encourage local planning authorities to update their adopted local plans by instigating a review of the status of the policies contained within them. The review for Gloucestershire concluded that not all policies contained within the adopted minerals and waste plans should be 'saved', and remain part of the local development plan. Two schedules of 'saved' policies were published in autumn 2007.

	and Local Biodiversity		Biodiversity and Geodiversity
E11	Protection of the Water Environment	Saved	Replaced by Policy DM05 | Water resources
E12	Flood Risk/Flood Plain Development	Not Saved	Replaced by Policy DM04 | Flood risk
E13	Riparian Buffer Zones	Saved	Replaced by a combination of Policy DM04 | Flood risk and Policy DM05 | Water resources
E14	Protecting the Local Environment – County-Wide	Saved	Replaced by DM01 | Amenity, DM02 | Cumulative impact and DM09 | Landscape
E15	Protecting the Local Environment – Cotswolds Water Park	Saved	Replaced by DM01 | Amenity, DM02 | Cumulative impact, and DM09 | Landscape
E16	Economic Development	Saved	Replaced by DM01 | Amenity and DM02 | Cumulative impact
E17	Safeguarding Public Access	Saved	Replaced by DM03 | Transport
E18	Opportunities for Improved Access	Saved	Replaced by DM03 | Transport
E19	Transport	Saved	Replaced by DM03 | Transport
E20	Highways	Saved	Replaced by DM03 | Transport
E21	Safeguarding Railhead and Wharves	Not Saved	Replaced by MS02 | Safeguarding mineral infrastructure
A1	County Contribution to the local apportionment of the Regional Guidelines	Saved	Replaced by MW01 | Aggregate provision
A2	Landbanks	Saved	Replaced by MW01 | Aggregate provision
A3	Future Aggregates Mineral Development within Preferred Areas	Saved	Replaced by MA01 | Aggregate working within allocations and MW01 | Aggregate provision
A4	Future Aggregates Mineral Development outside Preferred Areas	Saved	Replaced by MA02 | Aggregate working outside of allocations and MW01 | Aggregate provision
A5	Areas of Future Crushed Rock Aggregates Mineral	Saved	Replaced by MA01 | Aggregate working within allocations and MW01 | Aggregate provision

	Development – Forest of Dean		
A6	Areas of Future Crushed Rock Aggregates Mineral Development – Cotswold	Saved	Replaced by MA01 | Aggregate working within allocations and MW01 | Aggregate provision
A7	Areas of Future Sand and Gravel Aggregates minerals Development – Upper Thames Valley	Saved	Replaced by MA01 | Aggregate working within allocations and MW01 | Aggregate provision
NE1	Supply of Building Stone	Saved	Replaced by Policy MW02 | Natural building stone
NE2	Clay	Saved	Replaced by Policy MW03 | Clay for civil engineering purposes and Policy MW04 | Brick clay
EM1	Opencast Coal Extraction	Saved	Replaced by Policy MW05 | Coal
EM2	Small Scale Underground Mining	Saved	Replaced by Policy MW05 | Coal
EM3	Colliery Spoil	Saved	Replaced by Policy MW05 | Coal
EM4	Existing Colliery Spoil Tips	Saved	Replaced by Policy MW05 | Coal
EM5	Reworking Colliery Spoil Tips	Saved	Replaced by Policy MW05 | Coal
EM6	Oil and Gas	Not Saved	The policy has not been replaced and as it was not saved, does not remain in force. Please refer to paragraphs 55-64 of the new MLP for an explanation.
EX1	Mineral Exploration	Not Saved	The policy has not been replaced and as it was not saved, does not remain in force. Please refer to paragraphs 55-64 of the new MLP for an explanation.
SE1	Processing Secondary Materials	Not Saved	Replaced by SR01| Maximising the use of secondary and recycled aggregates, MS02 | Safeguarding mineral infrastructure and MW06 | Ancillary minerals development
SE2	Minerals Waste Minimisation	Not Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses and MA02 | Aggregate working outside of allocations
SE3	Safeguarding	Not Saved	Replaced by MS01 | Non-mineral developments within MSAs and

	Mineral Resources		MS02 | Safeguarding mineral infrastructure
SE4	Prior Extraction of Mineral Resources	Not Saved	Replaced by MS01 | Non-mineral developments within MSAs
R1	Beneficial Reclamation of Worked-Out Mineral Sites	Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses
R2	After-use	Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses
R3	Progressive Restoration	Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses
R4	Enhancing Worked-Out Mineral Sites	Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses
DC1	Mitigation of Environmental Effects	Saved	Replaced by DM01 | Amenity, DM02 | Cumulative impact, DM03 | Transport, DM05 | Water resources, DM06 | Biodiversity and Geodiversity and DM07 | Soil Resources
DC2	Ancillary Development	Saved	Replaced by MW06 | Ancillary minerals development
DC3	Importation of Material	Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses
DC4	Safeguarding Aerodromes	Saved	Replaced by Policy DM11 | Aerodrome safeguarding and aviation safety
DC5	Planning Obligations	Saved	This policy has been superseded by the CIL Regulations. As such it no longer remains in force and has not been replaced.
DC6	Planning Obligations – Eastern Spine Road	Saved	This policy has been superseded by the CIL Regulations. As such it no longer remains in force and has not been replaced.
DC7	Borrow Pits	Saved	Replaced by policies MA02 | Aggregate working outside of allocations, MW01 | Aggregate provision, MW02 | Natural building stone, MW03 | Clay for civil engineering purposes, Policy MW04 | Brick clay and MW05 | Coal

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