



**Planning and Compulsory Purchase Act 2004
Town and Country Planning
(Local Planning) (England) Regulations 2012**

REGULATION 18

**CUMBRIA MINERALS AND WASTE LOCAL PLAN
2014 to 2029**

SUPPLEMENTARY SITES CONSULTATION

SUSTAINABILITY APPRAISAL

**APPENDIX 1: DETAILED APPRAISALS OF SITES, IDENTIFICATION
OF SIGNIFICANT IMPACTS & MITIGATION PROPOSALS**

LOCATION OF DETAILED APPRAISALS

District	Reference	Name	Ha	Postcode	Proposal	Page range
Barrow-in-Furness	S1	Roosecote	28.4	LA13 0QY	Preferred Area for sand and gravel extraction	29 - 36
Barrow-in-Furness	S2	Goldmire	1.8	LA14 4QF	Area of Search for limestone extraction	37 - 43
Copeland (northern boundary in Allerdale)	S3	Distington	1.7	CA14 4JP	Increase in area for waste management/treatment facilities	44 - 50
Eden	S4	Flusco Waste	12.3	CA11 0HN	Area for waste management/treatment and reallocation of area for inert waste recycling	51 – 57
Carlisle	S5	Hespin Wood	7.4	CA6 4BJ	Increased area for waste management/treatment.	58 - 65
Carlisle	S7	Kirkhouse	61.8 10.2	CA8 1LA	Area of Search for sand & gravel extraction Allocation as an inert landfill and inert waste recycling/secondary aggregate	66 - 73
Eden	S8	Blencowe	4.7	CA11 0DE	Area of Search for limestone extraction	74 - 80
South Lakeland	S9	Roan Edge	7.7	LA8 0AP	Area of Search for gritstone, and expand inert waste landfill and inert recycling/secondary aggregate production	81 - 87
South Lakeland	S10 (M14)	Kirkby Slate Quarry	2	LA17 7YB	Area for infill of mineral wastes, additional to M14	88 - 92
Carlisle	S11 (CA30)	Kingmoor Road	3.2*	CA3 9PS	Boundary change to existing site allocation for waste treatment and management	93 - 98

*including existing waste management facility

S1 – Roosecote Quarry (Barrow) – Preferred Area for sand and gravel extraction – 28.4 Ha

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact). This is shown in the 'Score' column.

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP1: To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		0
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	There is no scope to use alternative modes to remove material from the site. Access will be via the existing quarry access.	0
SP3: To provide everyone with a decent home	-To help meet local housing need	√	√	√	Very likely	The site can contribute to maintaining the supply of sufficient primary aggregate to meet needs in the southwest of the county. The Cumbria Local Enterprise Partnership announced £47m worth of investment through the Growth Deal (2015-2021) which could create 3000 new homes. Aggregates are expected to be needed for improvement at Barrow Waterfront, Port of Workington Infrastructure and Ulverston Infrastructure Programme. Further infrastructure projects planned: North West Coastal Connections, new nuclear power station at Moorside, BAE systems shipyard at Barrow, Siemens and Glaxo Smith Kline at Ulverston.	+
SP4: To improve the level of skills, education and training	-Education and training	√	√	√	Quite likely	Site presently employs two directly and 10 associated with haulage and admin. Extending the working life of the quarry could allow opportunities for new staff to join and undertake training.	(+)
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive	√	√	√	Very likely	The closest human receptors are a few houses at Page Bank Lane, approximately 500m to the east. There are also houses on Dungeon Lane (800m north west). Roosecote is 1km northwest and Rampside 1.5km south of the quarry. Visual mitigation may	-

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		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	receptors -Impact on the sense of well being of people					be necessary from the Rampside Road, but due to the profile of the land the quarry extension area would not be visible to residents. The location implies movement of aggregate past properties and through the major road network via the south east corner of Barrow-in-Furness. Noise, vibration and dust impacts would result though it is not clear that they would exceed those experienced from the existing workings unless either output increased, or area S1 was worked (or restored) at the same time as the existing area and site M12.	
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		0

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EN1: To protect and enhance biodiversity	<ul style="list-style-type: none"> -Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources 	(√)	(√)	(√)	Quite likely	<p>There are two ephemeral water bodies that could support great crested newts and, although most of the habitat within the site is not optimal to support their foraging, these are qualifying species of the Morecambe Bay SAC, SPA and Ramsar, which are only 256m away. The fields may be also used by roosting/resting birds from the mudflats while the tide is in.</p> <p>The relevant conservation objectives of the South Walney and Piel Channel Flats SSSI relate to maintaining in or restoring to, favourable condition the habitats of coastal lagoons, shallow coastal waters and for breeding and non-breeding birds.</p> <p>Potential loss of habitat and the uncertainty about potential for compensatory habitat, especially in combination with site M12, the NWCC National Grid powerline and other developments in Barrow will need to be investigated.</p> <p>The preferred option for the NWCC is a tunnel under Morecambe Bay and the development would involve considerable dewatering. The effect of excavation on local water table levels and water-sensitive wildlife sites, particularly if extraction takes place below the water table, needs further investigation. Mitigation measures may be necessary.</p> <p>The built complex of the gas terminals lies between this site and the European Site, and it is considered unlikely that silt laden water would flow from the quarry or that any restoration proposals for the site would have an adverse impact. Best practice mitigation of dust blow-off risk and appropriate drainage design would be required.</p> <p>The site's broken hedgerows between fields would be lost. There is only one of any significance on site that may support breeding</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
						birds and foraging bats. The hedgerows on site are a small percentage of those available in the wider area. Grey partridge, lapwing, red shank and tree sparrow are all recorded in the area. Although the site offers some potential for restoration to provide biodiversity improvement, most appears to be good quality agricultural land and restoration to this use would be a priority. However, the land may be utilised for the gas works expansion.	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	√	√	√	Limited likelihood	The site is not remote but is semi-rural with a gas terminal, and a vacant site, between it and the coast. It is between two elevated positions and mitigation (bundling) may only be necessary from the Ramside Road (on the eastern side). There is a significant strip of trees that will screen the area directly adjacent to it, so it is only on the approach from the elevated positions on the road that the site will be seen from. The land is under environmental stewardship, meaning the land occupier is receiving funds to compensate for having to undertake agricultural activities in a more environmentally friendly way.	(-)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EN3: To improve the quality of the built environment	<ul style="list-style-type: none"> -Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriate development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area 	√	√	√	Quite likely	<p>There may be ground-level heritage assets in the vicinity, and a survey, and potentially recording of threatened remains, will be required as part of a planning application.</p> <p>It would be prudent to require a future planning application to propose possible mitigation of impacts on Moor Head Cottages (Grade II listed buildings) in the event that the properties are to be renovated and re-occupied while the site is being worked.</p> <p>The site is not in a flood risk zone due to its elevation.</p> <p>Site drainage and any risks of material being washed off the site are low as the flow is likely to be north east towards the existing quarry and not onto adjacent agricultural land. Consideration will need to be given to extending the drainage plan for the existing site to provide appropriate mitigation (collection/dispersal) of run-off in this area.</p>	(-)
NR1: To improve local air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> -Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals 	(√)	(√)	(√)	Quite likely	<p>There is concern over NO² levels near the gas power terminal boundary but not enough to declare the area an Air Quality Management Area (AQMA). It is therefore not an area in which measures are being implemented to improve air quality.</p> <p>As with other minerals sites, there is inevitable scope for dust and other emissions from extraction and vehicle movements, but these could be controlled with best practice mitigation unless cumulative impacts arise from simultaneous development on all areas identified for mineral working, and/or from other developments in adjacent areas. However, faster development would decrease the duration of impacts.</p> <p>Movement of materials by other modes is not possible.</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	and waste sectors						
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	√	√	√	Quite Likely	The nearest open flowing water is Sarah Beck about 1km to the east of the site. There are (ephemeral) ponds in the curtilage of the proposed site. The site is over a major aquifer at high risk and an important consideration may be the scope to affect groundwater and its effect on water levels and quality. These matters would need to be addressed at the planning application stage, in combination with other developments in the area.	(-)
NR3: To restore and protect land and soil	-To reduce contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat	(√)	(√)	(√)	Inevitable and possibly permanent	Development would take good quality agricultural land used as pasture. This loss may or may not be permanent as there maybe plans to expand the gas facility onto the site once restored. Alternatively there would be scope to return the site to its original use if and when extraction ends. The topsoil should be stored to enable restoration to this use if it is considered the priority.	(-)
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of	√	√	√	Very likely	This extension to the existing sand and gravel quarry would increase and maintain the supply of sand and gravel to the local area. The vast majority of sand and gravel quarries are located in the north and east of Cumbria and there is a policy in the draft MWLP to "minimise road miles". Maintenance of a sand and quarry to service the local area is a positive benefit. Extraction of the mineral prior to use of the site for extension to the gas terminal, or a new energy development, would also be a benefit.	++

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	secondary aggregate rather than primary materials -Support use of co-products from minerals working						
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	(√)	(√)	(√)	Limited likelihood	The purpose of the site is to provide continuity of supply in the event of increased demand in the area and, therefore, it is likely that jobs would be re-located if this occurs, with no increase in employment. (See additional comment under Secondary impacts in the summary section.)	(+)
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need	(√)	(√)	(√)	Limited (probably no) impact	Comments as above. It is also unclear whether the site is served by regular public transport, so employees would need a car impacting the scope for sustainable commuting.	0
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact	No direct impact, but a secondary impact of providing aggregate to support development.	0

S1. Summary of Assessment
<p>This site is assessed as largely sustainable. Its main advantage is judged in planning terms insofar as it would maintain a supply of aggregate to serve the Furness peninsula and possibly a limited area beyond, and enable recovery of a mineral resource prior to non-mineral development.</p> <p>Specific issues include groundwater impacts and potential effects on qualifying species for European Sites.</p> <p>Extraction would result in the temporary loss of a modest area of good quality agricultural land and would have to be justified on the basis of maintaining the county landbank of sand and gravel. If this were to be permanent, due to a subsequent use of the land, this would have to be justified as part of the planning application for that proposal.</p>
Secondary, Cumulative & Synergistic Impacts
<p>Secondary: the provision of sustained supply of local aggregate would support local infrastructure development.</p> <p>Cumulative: possible risk if site allocation M12 at Roosecote Quarry and this supplementary site are both opened simultaneously, or if other developments (new energy infrastructure and National Grid connection occur simultaneously).</p> <p>Otherwise none identified</p> <p>Synergistic: none identified. Site M12 (on the east side of Rampside Road) would provide additional, longer term supply.</p>
Mitigation Proposed
<p>The key mitigation requirement would be to protect the groundwater from any quarrying impacts. A programme of phasing would need to be agreed, in order to limit possible cumulative impacts with the existing quarry. The water bodies would require surveying for the presence of Great Crested Newts. Surveys also required for birds from the nearby Special Protection Area likely to use the site for loafing, feeding, etc. Other best practice mitigation measures appropriate to sand and gravel extraction would be required.</p>
Additional Comments
<p>The current Roose Quarry now has a 10 year lease, and mineral extraction in the additional area is supported by the landowner. This assessment assumes that the allocation would be brought in the short to medium term to provide continuity of supply to meet the needs of the Barrow area.</p>

S2 Goldmire Quarry – Area of Search for limestone extraction - 1.8 Ha

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Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP1: To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		o
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				Depends on use	The proposed allocation is immediately to the south of the existing quarry and, therefore, it is expected that access will remain the same, via Goldmire Beck. At this stage it is difficult to assess whether this will improve using sustainable transport choices.	-/+
SP3: To provide everyone with a decent home	-To help meet local housing need				Quite Likely	The provision of limestone supports the production of concrete for construction projects including residential developments.	(+)
SP4: To improve the level of skills, education and training	-Education and training		√	√	No impact	Extending the site would allow the site to remain open and present new opportunities for staff to join and undertake site training.	+
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people		√	√	Very likely	The proposed quarry is within 350 metres of the nearest residents at Goose Green. The prevailing wind direction is from the south/south west and, therefore, dust and noise emissions can be expected to have an impact on residents. It is not clear, however, whether or not such emissions will exceed those experienced from the existing quarry. Lastly, there is a footpath to the south of the proposed allocation, which may affect local walkers, as the site will be visible.	-

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	<ul style="list-style-type: none"> -community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport 				No impact		0
EN1: To protect and enhance biodiversity	<ul style="list-style-type: none"> -Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources 		√	√	Quite likely	<p>The site is currently located on agricultural land with a belt of trees to the north and west, although it is understood that these trees will not be lost.</p> <p>The site is 2.4 km to the east of Morecambe Bay SAC and Duddon Estuary SPA and Ramsar and 4.9 km from the Morecambe Bay SPA and Ramsar. The Habitat Regulations Assessment concluded that there were no likely significant effects on these designations from this extension to Goldmire Quarry.</p> <p>The proposed site is adjacent to Hagg Spring Wood (Ancient Woodland) and a number of other areas of Ancient Woodland (which are all UK Priority Habitats) lie within 1km of the site.</p> <p>The area is popular for farmland birds, including curlew, grey partridge and lapwing. Further ecological surveys are recommended to confirm whether bats are present.</p>	-
EN2: To preserve, enhance and manage landscape quality and character for future generations	<ul style="list-style-type: none"> -Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect 		√	√	Quite likely	<p>Previous assessment notes that there are no national landscape designations within 5km of the proposed allocation area. Three local landscape designations have been identified within 5km, including Local Landscape and Green Wedges.</p> <p>Visibility from these locally designated landscapes would be predominantly restricted and would not result in significant</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	importance of remoteness and tranquillity					<p>effects.</p> <p>The southern edge would result in removal of approximately 1.8ha of agricultural land and a minor extent of native tree and shrub vegetation present along the elevated southern boundary of the current working void. Due to the limited extent of agricultural land and native tree and shrub vegetation affected in the context of that present within the surrounding localised landscape, the predicted effects upon the landscape fabric would be minor.</p> <p>The effects upon landscape character would be an increase in the extent of the limestone quarry.</p> <p>The proposed allocation would create an increase to the existing visual effects currently experienced.</p>	
EN3: To improve the quality of the built environment	<ul style="list-style-type: none"> -Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area 				No impact	<p>There are ground-level heritage assets in the vicinity and a programme of survey, and possible mitigation, may be required as part of a planning application.</p> <p>The nearest listed buildings are located in Dalton-in -Furness together with a Conservation Area. Impacts should be assessed.</p> <p>The allocation is not located in a flood zone area due to its elevation.</p>	7/0

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
NR1: To improve local air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> -Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors 		√	√	Quite Likely	<p>The site is not located within an Air Quality Management Area (AQMA). It is therefore not an area in which measures are being implemented to improve air quality.</p> <p>Nevertheless, as with other minerals sites, there is inevitable scope for dust and other emissions from extraction and vehicle movements. The proposed quarry is within 0.4km of the nearest residents. However, impacts can be controlled with best practice mitigation.</p> <p>There is a policy in the draft MWLP to “minimise road miles”; however, the nearest alternative limestone aggregate quarry is at Stainton, less than 2.5 km away, and it has permission until 2042. There is, therefore, no clear benefit as regards greenhouse gas emissions.</p> <p>Movement of materials by other modes is not possible.</p>	-

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water		√	√	Quite likely	<p>The nearest flowing water is Poaka Beck, 300 meters south of site. In addition, there are three relatively large water bodies adjacent to the already existing quarry. Further assessment may consider the impact on the water quality on these water bodies. The site slopes towards Poaka Beck and so the drainage of material should be taken into consideration. In 2014 the Poaka Beck overall water body was classified as 'moderate'.</p> <p>The proposed site is not within a flood risk zone though consideration will need to be given to site drainage plan for the existing site to provide appropriate mitigation (collection/dispersal) of run-off in the proposed area. The site lies in an intermediate groundwater vulnerability zone, but there are no major aquifers on site.</p>	-
NR3: To restore and protect land and soil	<ul style="list-style-type: none"> -To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat 	√	√	√	Inevitable but impermanent	<p>With the extension of the quarry, there will be the inevitable loss of agricultural land. However, in the long term there would be opportunity to restore the site back to its original use when extraction terminates.</p> <p>The topsoil should be stored to enable restoration to this use if it is considered the priority.</p> <p>The proposed site is on top of a hill and there is a risk of material being washed off the site towards the Poaka Beck and across agricultural land.</p>	(-)
NR4: To manage mineral resources sustainability and minimise waste	<ul style="list-style-type: none"> -Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the 		√	√	Quite likely	<p>There is a very large landbank for limestone in the county, and a number of limestone quarries in the south east of Cumbria. The nearest alternative limestone aggregate quarry is at Stainton, less than 2.5 km away, and it has permission until 2042.</p> <p>Maintenance of a second limestone quarry to service the local area may, therefore, be of some but not overwhelming benefit.</p>	(+)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working						
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment		√	√	Limited likelihood	The purpose of the site is to provide a contingency and/or continuity of supply in the event that resources at Goldmire Quarry are exhausted. It is therefore likely that jobs would be re-located if this occurs, with no increase in employment.	0
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need		√	√	Limited likelihood	Comments as above	0
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		0

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	

S2. Summary of Assessment
Overall, the site is assessed as largely sustainable. The allocation is immediately to the south of the existing site and is therefore an appropriate land use and is not located in or in close proximity to any significant environmental designations. There would need to be a programme of phasing to avoid or mitigate cumulative impacts affecting noise, dust, traffic, vibration and possibly visual impact. Nevertheless, the visual and landscape issues have been previously assessed and it remains that with appropriate mitigation in place, these will be controlled.
Secondary, Cumulative & Synergistic Impacts
Secondary: the provision of sustained supply of local aggregate would support local infrastructure development. Cumulative impacts: if the enlarged site operates at an increased rate, there would be an increase in-combination effects associated with noise and dust emissions. Synergistic: none identified. Other rural aggregates sites are considered inappropriate locations for secondary aggregates reprocessing because of their remoteness and the additional impacts this would introduce.
Mitigation Proposed
Key mitigation includes controlling the level of dust and noise emissions reaching sensitive receptors. A programme of phasing would need to be agreed, in order to limit possible cumulative impacts with the existing quarry. Mitigation may be required to protect the groundwater from any quarrying impacts.

S3 Distington – Increase in area for waste management facility 1.7 Ha

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<i>Assessment framework</i>		<i>Permanence</i>			<i>Characteristics of impacts</i>		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP1: To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		0
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices		√	√	No impact		0
SP3: To provide everyone with a decent home	-To help meet local housing need				No impact		0
SP4: To improve the level of skills, education and training	-Education and training		√	√	Quite likely	Potential to provide training through the Waste Management Industry Training (WAMITAB) for any additional workers on site. WAMITAB offers various schemes to ensure waste facilities are operated by technically competent people with the relevant knowledge and skills.	(+)
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people		√	√	Quite likely	The closest residential property (Holme Leigh) is 130 metres away and Furnace Row (15 houses) lies within 300m. The nature of the waste activities is unknown, and may be on external areas. The occupiers of these properties could be adversely affected by the development of facilities on the proposed area. It can be expected that with the additional area allocated, there	-(-)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
						may be an increase in odour, dust, noise or litter - this would need further assessment. The location implies the use of the existing road network and, therefore, there may be an increase in emissions associated with increased transport.	
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		0

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EN1: To protect and enhance biodiversity	<ul style="list-style-type: none"> -Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources 		√	√	Very likely	<p>Distington Beck, which is used as a corridor by a range of species is only 70m away, as is the nearest County Wildlife Site. It is unclear at this stage whether the tree lines bordering the site are occupied by foraging/commuting bats, and it is recommended that this is assessed further.</p> <p>The area is known to be occupied by farmland birds, including grey partridge.</p> <p>There are no designated sites on or within the proposed allocation. The nearest is the River Derwent and Bassenthwaite Lake SAC, located 4.2km from site. The northern edge borders good quality semi-improved grassland, although this is non-priority and this would not be affected.</p>	-
EN2: To preserve, enhance and manage landscape quality and character for future generations	<ul style="list-style-type: none"> -Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity 				No impact	<p>The setting of National Parks, AONB's, World Heritage Site, Heritage Coast, Registered Historic Parks and Gardens, Listed Buildings, Conservation Areas or Scheduled Monuments has been assessed as 'no impact' as none are close enough to be affected.</p>	0

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EN3: To improve the quality of the built environment	<ul style="list-style-type: none"> -Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area 				No impact	<p>The site is located in a semi-rural area, with the nearest village being Distington. The proposed allocation is well hidden from buildings and in an already industrial area – arguably it is a suitable use of land. The whole area is recognised as ‘Less Favoured Area’ – disadvantaged – and is therefore not suitable for agriculture.</p> <p>There are no listed buildings or scheduled monuments present on/or near site.</p>	0
NR1: To improve local air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> -Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources 		(√)	(√)	Quite likely	<p>The closest residential property (Holme Leigh) is 130 metres away and Furnace Row (15 houses) lies within 300m. The nature of the waste activities is unknown, and may be on external areas. The occupiers of these properties could be adversely affected by the development of facilities on the proposed area.</p> <p>It can be expected that with the additional area allocated, there may be an increase in odour and/or dust, which would need further assessment.</p> <p>The site is not located in an Air Quality Management Area meaning there are no plans to improve air quality in this area.</p>	-

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	-promote climate change adaptation in the minerals and waste sectors						
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water		√	√	Quite Likely	<p>Distington Beck is approximately 100 metres north of site and is in Flood Zone 3, but the proposed site is within Flood Zone 1. This part of the site slopes down towards Distington Beck and, therefore, the risk of material being washed off site are possible.</p> <p>Distington Beck has an overall 'good' status according to the EA catchment explorer and, therefore, water quality should be maintained.</p>	-
NR3: To restore and protect land and soil	<p>-To reduce amount of contaminated land in the area</p> <p>-Loss of high grade agricultural land and Greenfield sites</p> <p>-Potential to cause soil degradation, pollution</p> <p>- the use of peat</p>		√	√	Limited impact	The whole area is recognised as a 'Less Favoured Area' – disadvantaged – and is therefore not suitable for agriculture. The loss of land is therefore not significant.	(-)
NR4: To manage mineral resources sustainability and minimise waste	<p>-Reflect the waste management hierarchy</p> <p>-Promote the use of renewable forms of energy</p> <p>-Provide flow of minerals to meet demand within the</p>		√	√	Very likely	The site will provide further opportunity to recycle waste, as the capacity reaches its limit at the already existing facility. The Distington site also includes a materials recovery facility to provide an opportunity for the sorting of commercial and industrial wastes and the operator is the principal sub-contractor to Sellafield.	+

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	<p>area</p> <ul style="list-style-type: none"> -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working 						
EC1: To retain existing jobs and create new employment opportunities	<ul style="list-style-type: none"> -Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment 		(√)	(√)	Quite Likely	This is an expansion of the waste management facility and could help secure the jobs at the MRF and transfer facilities, potentially leading to a mildly significant benefit from additional job opportunities.	(+)
EC2: To improve access to jobs	<ul style="list-style-type: none"> -Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need 		(√)	(√)		See above	(+)
EC3: To diversify and strengthen the local Economy	<ul style="list-style-type: none"> -Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals 				No impact		

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	recycling and use of co-products						

S3. Summary of Assessment
<p>The proposed allocation at Distington is a generally sustainable option due to the expansion of recycling services at an existing waste treatment facility in a largely industrial setting. Impacts on some 16 residential properties would need to be assessed. There are no significant environmental constraints associated with the proposed allocation. The main issues will be the loss of habitat provided as compensation for previous losses due to the original development, impacts on use of the Beck area as a wildlife corridor and the potential for materials to wash off into Distington Beck. Appropriate mitigation should be selected to ensure pollution incidents are avoided.</p>
Secondary, Cumulative & Synergistic Impacts
<p>Secondary: the provision of a waste management facility would promote and increase recycling levels.</p> <p>Cumulative impacts: there is the possibility for an increase in odour, noise or litter associated with the expansion of the waste management facility. There may also be an increase in traffic levels.</p> <p>Synergistic: none identified – the allocation is appropriately located behind the existing site. Other locations may introduce impacts to new receptors.</p>
Mitigation Proposed
<p>Existing mitigation measures should be sufficient to deal with operational impacts, though a future planning application will need to provide evidence to this effect. Expansion of the facility towards housing, and into an area set aside in the existing facility's permission for screening and also for biodiversity connectivity and use, is likely to need mitigation. Surveys will be needed to check for use or occupancy of the extension land by any of the various local protected species. It would be advisable to evaluate the effect of water drainage off the site into Distington Beck and onto adjacent land, if this has not been done already.</p>

S4 Flusco waste management complex – area for waste management/treatment and re-location of area for inert waste recycling - 12.3 Ha

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact). This is shown in the 'Score' column.

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP1: To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		O
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport spaces				No impact	The reallocated area for inert waste recycling is part of an existing waste management site. Both this area and the proposed area for waste management/treatment have good access to the A66 and M6 as well as Penrith. There is no scope for alternative transport.	O
SP3: To provide everyone with a decent home	-To help meet local housing need				No impact		O
SP4: To improve the level of skills, education and training	-Education and training		√	√	Limited likelihood	Relocating the inert waste recycling and waste management/treatment areas within the overall area of the facility could possibly enable expansion and provide opportunities for new staff to join and undertake training e.g. WAMITAB.	(+)
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well		√	√	Quite likely	The site is in a rural location, but there are residential properties 450m to the east at Newbiggin and it is 500m north east to Bank House. However, the current location for the inert waste recycling function is approximately 200m to residential properties at Oak Bank and restrictive conditions have been required in order to limit noise. The relocation of the activity to an area within the	(+)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	being of people					Silver Fields Quarry void would, therefore, reduce impacts. However, if the relocation above, and the allocation within the quarry main waste site were to enable increase in intensity of use, increased traffic could have impacts on a caravan park that already has planning permission 200m to the north and with an entrance directly opposite the Flusco entrance.	
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		0
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources		(√)	(√)	Quite likely	There are limited biodiversity designations within the vicinity of the site. The closest is Newton Reigny Moss SSSI at 1.9km. The River Eden SAC/River Eden and Tributaries SSSI are 2km south and the Great Blencow Meadows and Fens SSSI 3.2km north of the site. Habitats Regulations Assessment of the Minerals and Waste Development Framework assessed the proposal as having no likely significant effect on the River Eden SAC. There is a water body on the eastern boundary of the current inert waste area, which supports a large GCN population, and there are also GCN within the entrance area to the Silver Fields Quarry, proposed for relocation. The original restoration plan for the old Blencow Quarry to the north of the Flusco site, included creating shallows within the residual water body. A similar proposal to include wildlife habitats around the pond is planned as part of the permitted caravan park. GCN migration between the Flusco site and the pond to the north	(-)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
						<p>is therefore a possibility.</p> <p>HGV routeing to access the relocated inert waste recycling area is unclear, and impacts on biodiversity, including GCN, through changes to access tracks and lanes within the site should be investigated.</p> <p>Mitigation with respect to GCN is secured under the current planning permission and should be considered with respect to any development in the proposed areas.</p>	
EN2: To preserve, enhance and manage landscape quality and character for future generations	<ul style="list-style-type: none"> -Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity 		√	√	quite likely	<p>There are no landscape designations in the vicinity and the site itself is not in a designation.</p> <p>The site is about 1km outside the Lake District National Park. From the eastern facing slopes of the Lake District peaks you would not be able to see the site, as the relocated inert waste recycling area would be within the Silver Fields Quarry void. The other area where an allocation is suggested is already in use for waste purposes and in the lee of the current landfilled area.</p> <p>There is an access track that runs between the two proposed areas, which is edged by mature trees. Any increase in internal HGV and other traffic in the site could impact on the trees with moderate negative landscape impacts as viewed from Flusco Pike or nearby rights of way.</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EN3: To improve the quality of the built environment	<ul style="list-style-type: none"> -Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area 		√	√	No impact	<p>There are five Listed Buildings within 600m of the site; The Hill is 480m to the east of the sites. The Summer House on top of Flusco Pike is 155m south of the new area, but its setting would not be significantly impacted by the new waste treatment/management areas, which are re-locations of existing facilities within the existing permitted site.</p> <p>The reallocated area is in a zone assessed as having a less than 1 in 1,000 annual probability of flooding from a river and very low risk from surface water flooding. Surface runoff to neighbouring land would not be increased.</p>	0
NR1: To improve local air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> -Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable 		√	√	Quite likely	<p>Dust emissions are a likely consequence of inert waste recycling but the area for relocation is further from residential properties and within a deeper quarry void than the current area. Appropriate mitigation measures such as dust suppression, should be used.</p> <p>If the re-location and amendments to the use of the existing site were to result in an increase in capacity/intensity, there would be impacts from increased traffic.</p> <p>If current routing agreements avoiding Newbiggin were retained, the existing and proposed holiday park, which utilise the road to the A66, would be the most sensitive receptors affected.</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	energy sources -promote climate change adaptation in the minerals and waste sectors						
NR2: To improve water quality and water resources	-Adequate protection for water bodies and the marine environment and promote the efficient use of water		√	√	Limited likelihood	The nearest flowing watercourse is the River Petteril 1.3km to the west. However, the hydrogeology of the area is complex with some lack of clarity about the linkages between the water body on the site and aquifers in the area. There is also a large variation in depth of the water table. Material could be washed from the site in surface water, but as neither mineral extraction nor landfill are part of this proposal (being operated under an existing separate planning permission), further adverse impacts are unlikely.	(-)
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat		√	√	No impact	The areas are already in either waste or mineral use, and no loss of agricultural land is involved.	
NR4: To manage mineral resources sustainability and	-Reflect the waste management hierarchy -Promote the use of		√	√	Quite likely	The reallocation of parts of the Flusco site could increase facilities to reuse inert waste and reduce both the need for extraction of new mineral, and increase recycling.	(+)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
minimise waste	<ul style="list-style-type: none"> renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working 						
EC1: To retain existing jobs and create new employment opportunities	<ul style="list-style-type: none"> -Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment 		√	√	Quite likely	The proposed areas could secure jobs within the existing facilities, leading to a mildly significant positive benefit.	(+)
EC2: To improve access to jobs	<ul style="list-style-type: none"> -Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need 				No impact	The site is a little distance from Penrith with no public transport. The location site suggests most employees would have to have a car to reach the site. (However this is assessed as neutral if they have been previously working on site.)	0

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EC3: To diversify and strengthen the local Economy	<ul style="list-style-type: none"> -Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products 				No impact		0

S4. Summary of Assessment
<p>The 'honey-potting' of waste uses with the existing waste management facility is a positive use of land, however if the intensity of use and HGV movements, both outside and within the site were to increase, there could be impacts on air quality, biodiversity and landscape. The allocation could possibly safeguards jobs.</p> <p>Impacts are likely to be comparable to those created by the existing workings on site, though a planning application will need to demonstrate that mitigation applied to the existing site are capable of dealing with the impacts of these additional uses.</p>
Secondary, Cumulative & Synergistic Impacts
<p>Secondary: any increased recycling of inert waste would reduce demand for new inert material.</p> <p>Cumulative: the relocation of existing waste activities on site , plus some potential increase in uses, are not expected to create any significant cumulative impacts. However there is another supplementary site submission for a development of a limestone quarry 780m north of the reallocated area and if both were granted permission to operate simultaneously cumulative impacts in terms of road traffic, emissions, dust and noise may occur and require mitigation.</p> <p>Synergistic: the site is already used for minerals extraction and waste management and locating additional facilities on the same site avoids creation of facilities in areas not already used. The site is relatively near Penrith along the A66 and able to contribute to the provision of inert waste management options for the area.</p>
Mitigation Proposed
<p>Existing mitigation measures should be sufficient to deal with operational impacts though a future planning application will need to provide evidence to this effect. In particular, consideration of cumulative impacts will need to be given to minimising the road traffic, emissions, dust, noise and visual impacts on residential properties nearby. Additional surveys may be needed to check for use or occupancy of the land by any of the various local protected species.</p>

S5 Hespín Wood Waste Management Complex – Area for waste management/treatment facility - 7.4 Ha

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact). This is shown in the 'Score' column.

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP1: To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		0
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices		√	√	No impact	The suggested allocation at Hespín Wood is located within 5 miles of the centre of Carlisle. The site itself is highly accessible, running parallel and directly connected to the M6. However, most of the area referred to is already in use for waste purposes and the proposal is largely related to changing those uses. There is no public transport to the site and it is unlikely that employees will use more sustainable methods to commute such as walking or cycling.	0
SP3: To provide everyone with a decent home	-To help meet local housing need				No impact		0
SP4: To improve the level of skills, education and training	-Education and training		√	√	No impact	There is no evidence that the new uses introduced would have more employees, or create more training than the uses currently in place.	0

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP5: To improve the health and sense of well being of people	<ul style="list-style-type: none"> -Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people 		√	√	Depends on use	<p>The closest residential properties are within 150 – 200 metres east of site, at Todhills, and noise and odour from the current waste facilities within the Hespun Wood complex have been considered in the past.</p> <p>The area is separated from Todhills by the M6, which has an acoustic fence between the residential properties at Todhills and the motorway. The fence serves to screen Hespun Wood from Todhills both visually and acoustically.</p> <p>The natures of the new waste uses have not been specified, but may involve the removal of the inert waste recycling and construction of an Energy from Waste plant. This could reduce noise, but odour and air quality would need further assessment, especially in combination with other uses on the complex.</p> <p>The location implies the use of the existing road network and potentially increased transport, on nearby roads. Traffic Assessment would be required.</p>	(-)
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	<ul style="list-style-type: none"> -community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport 				No impact		0

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EN1: To protect and enhance biodiversity	<ul style="list-style-type: none"> -Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources 		√	√	Very likely (for woodland loss)	<p>The site itself is outside any significant environmental designations. The nearest include the River Eden SAC, River Eden Tributaries SSSI, and Upper Solway Flats & Marshes SPA, 1.4 km to the south west of site. These designations extend further north, but do not come any closer to site. A large majority of River Eden's banks are recognised as priority habitat – coastal saltmarsh.</p> <p>The main loss would be the woodland covering the eastern edge of site, an area recognised by the National Inventory of Woodland and Trees. It is unclear at this stage whether the trees present on and near to site are occupied by foraging/commuting bats, and it is recommended that this is assessed further.</p> <p>A small pocket of deciduous woodland (priority habitat) borders the south western section, although this is unlikely to be directly impacted.</p> <p>Farmland birds occupy the wider area, including Curlew, Grey Partridge, Lapwing, Redshank, Snipe and Tree Sparrow.</p>	-
EN2: To preserve, enhance and manage landscape quality and character for future generations	<ul style="list-style-type: none"> -Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect 		√	√	Limited likelihood (WHS)	<p>There is a World Heritage Site (WHS), 'Frontiers of the Roman Empire', located 2.5 to 3km from the site. The site may be in view of the WHS. Nevertheless, the allocation is on land already in use for waste management, so arguably will not change the setting significantly.</p> <p>The setting of National Parks, AONB's, Heritage Coast, Registered Historic Parks and Gardens, Listed Buildings, Conservation Areas or Scheduled Monuments has been</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	importance of remoteness and tranquillity					assessed as 'no impact' as none are close enough to be affected.	
EN3: To improve the quality of the built environment	<ul style="list-style-type: none"> -Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area 				No impact	<p>The site is located in a semi-rural area, with Carlisle being the nearest main urban area. There are no Listed Buildings or Scheduled Monuments in close proximity to the site.</p> <p>The northern area of the site is in an area at risk of flooding from Surface Water, although this is insignificant. Hespin Wood is not in Flood Zones 2 or 3.</p> <p>As mentioned previously, noise or dust pollution will be minimised by the M6 and the already existing acoustic fences at Todhills.</p>	0
NR1: To improve local air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> -Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development 		(√)	(√)	Depends on use	<p>Dust could reduce if the inert waste recycling facility is relocated off the site; however, as noted previously, air quality and odour should be assessed.</p> <p>The HRA notes the potential for in combination effects with site allocation CA31 where an EfW plant was also proposed, and also the landfill, composting, and MBT plant at Hespin Wood.</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	<p>and application of clean/carbon efficient technologies</p> <ul style="list-style-type: none"> -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors 					<p>The allocation is likely to include a waste disposal facility, which can have an adverse impact on recycling; however, co-location with the recycling facilities (MRF and MBT) could minimise the effect.</p> <p>There is the possibility that an additional area will increase the level of traffic, to and from site. However, there may also be potential benefits, as waste will not need to be transferred to more distant recycling facilities.</p>	
NR2: To improve water quality and water resources	-Adequate protection for water bodies and the marine environment and promote the efficient use of water				No impact	The site does not contain any major water bodies, just a few drains. In addition, the site is not located in a Flood Risk Zone. Therefore, there is a limited possibility of material being washed off if normal mitigation is implemented.	0
NR3: To restore and protect land and soil	<ul style="list-style-type: none"> -To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat 				No impact	<p>Minimal chance of contaminated land if waste is managed appropriately.</p> <p>The proposal will not result in the loss of any high grade agricultural land.</p>	0

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
NR4: To manage mineral resources sustainability and minimise waste	<ul style="list-style-type: none"> -Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working 		√	√	Depends on use	The changes suggested at the site could enhance opportunity to recycle waste due to the co-location of facilities, even if the new uses included a waste disposal facility, which can have a negative impact on the waste hierarchy.	(+)
EC1: To retain existing jobs and create new employment opportunities	<ul style="list-style-type: none"> -Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment 		(√)	(√)	Quite likely	The expansion and re-organisation of the waste management facilities would help secure the jobs at the site, potentially leading to a number of additional opportunities.	+
EC2: To improve access to jobs	-Increase access for all to a range of jobs		(√)	(√)		See above	+

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	-Encourage the location of employment opportunities in areas of greatest need						
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		0

S5. Summary of Assessment
<p>Existing mitigation measures should be sufficient to deal with operational impacts though a future planning application will need to provide evidence to this effect. If a planning application for an Energy from Waste plant on the site were to be submitted, consideration of airborne emissions in particular would need to be considered.</p> <p>Mitigation may also be required during such a plant's construction, especially if there were significant increases in traffic. There is insufficient information on drainage from the site and cumulative impacts from increased waste management operations – mitigation may be required.</p> <p>Surveys may be needed to check for use or occupancy of the land by any of the various local protected species. Ultimately the additional space allocated to a waste management complex will encourage recycling and discourage waste going to landfill.</p>
Secondary, Cumulative & Synergistic Impacts
<p>Secondary: the provision of a waste management facility would facilitate, promote and increase recycling levels. Cumulative impacts: as there is already a waste management facilities on site there is the possibility for an increase in odour associated with the expansion of the waste management facility. Similarly there may also be an increase in</p>

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
<p>traffic levels associated with increased capacity.</p> <p>Synergistic: the allocation is appropriately located next to the existing site and allows for sharing of resources to manage and treat waste. Other locations may introduce impacts to new receptors.</p>							
Mitigation Proposed							
Existing mitigation measures should be sufficient to deal with operational impacts though a future planning application will need to provide evidence to this effect. Additional survey may be needed to check for use or occupancy of the extension land by any of the various local protected species.							

S7 Kirkhouse Quarry – Area of Search (61.8 Ha) for sand & gravel extraction, plus allocation (10.2 ha) of existing quarry for inert landfill and inert waste recycling/ secondary aggregate production

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact). This is shown in the 'Score' column.

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP1: To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		0
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	There is no scope for alternative transport, although this is a generic issue for many minerals sites. Nevertheless, the site is well connected between Carlisle and Brampton, which may promote a sustainable option to commute.	0
SP3: To provide everyone with a decent home	-To help meet local housing need	√	√	√	Very likely	Sand has been worked from Kirkhouse Quarry since 1990, with the first quarry now worked out. It is estimated that the remaining reserves at Kirkhouse will be exhausted before the end of 2023. The sand extracted from Kirkhouse is manufactured to produce a variety of fine aggregates including for use of building, plastering concrete and asphalt sands. In addition, the sand is used as a specialist product for golf course engineering and compost mix. The extension of the existing site would provide material to meet housing needs in the local and Carlisle area.	+

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP4: To improve the level of skills, education and training	-Education and training		√	√	Quite likely	Extending the working life of the quarry would allow opportunities for new staff to join and developing an inert landfill and inert waste recycling facility will provide opportunities to undertake training, e.g. WAMITAB.	+
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Very likely, possibly inevitable	The additional 61 ha proposed for mineral extraction at Kirkhouse Quarry, and the use of the existing quarry for inert waste recycling and landfill, would increase the exposure of nearby residents in Farlam to noise and dust emissions. Extraction from the entire 61 ha suggested would be likely to either extend the duration, or increase intensity of the impacts to a considerable extent. Odour is assumed not to be an issue, as waste imports are inert and should not create detectable quantities of methane. The nearest residential properties are within 100 – 200 metres of the southernmost boundary of the proposed site. Although with the prevailing wind direction being from the south/south west, the impact may be reduced or minimal. Relevant industry standard mitigation measures (buffering and/or bunding, possibly with vegetation screening) would be necessary.	-(-)
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		0

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EN1: To protect and enhance biodiversity	<ul style="list-style-type: none"> -Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources 		√	√	Inevitable	<p>There are no significant designations (i.e. SSSIs, SACs, SPAs etc.) present on or in close proximity of site. The closest designation is the North Pennine Moors SAC/SPA, and the River Eden SAC and River Eden and Tributaries SSSI, located approximately 2.2 km to the south west of the site. However, there is a stretch of woodland in the north west section, which is designated as National Inventory of Woodland and Trees. In addition, there is a small stretch of priority habitat – deciduous woodland in the same area.</p> <p>The northernmost area and central area contain woodland, which is under the English Woodland Grant Schemes – these are in place to encourage the creation and stewardship of woodlands. In addition, both areas require a felling license for anyone wishing to fell any growing trees.</p> <p>The central area proposed is composed of entirely woodland and there may be potential for foraging/commuting bats, a European protected species – and further ecological surveys would be required.</p> <p>Desk based assessment has confirmed that this a popular area for a variety of farmland birds including black grouse, curlew, grey partridge, lapwing, redshank, snipe, tree sparrow and yellow wagtail.</p> <p>The extension of the quarry and development for inert waste management will inevitably have some impact on the receptors identified above. Appropriate mitigation will need to be implemented. However, extraction from the entire 61 ha suggested would be likely to either extend the duration, or increase intensity of the impacts to a considerable extent.</p>	-(-)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	<ul style="list-style-type: none"> -Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity 	√	√	√	Very likely	<p>Some visible impact is inevitable from neighbouring villages such as Farlam and Kirkhouse, although the area has already been used for extraction previously, so to some degree this may be accepted as an appropriate land use.</p> <p>The development of inert waste management within quarried areas would have a similar visual impact to the quarry.</p> <p>The visual impacts from Talkin Tarn Country Park should be minimal as the lake is surrounded by Tarn Wood. Ground-level impacts can be addressed by bunding or vegetation screening that can be planned as part of the restoration of the site.</p> <p>Extraction from near the ground surface should not require plant that will be visible over long distances and there should only be low buildings (e.g. temporary accommodation for the site office on the site).</p>	-
EN3: To improve the quality of the built environment	<ul style="list-style-type: none"> -Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment 		√	√	Limited likelihood	<p>There are no designated built heritage assets on site, the nearest are listed buildings in Farlam and Kirkhouse.</p> <p>The majority of site is in a low flood risk zone, the exception being in the northern part of site where a ford runs parallel to and is an area of medium to high risk. The extracted pit will provide an area for any overland flow to accumulate, implying there is unlikely to be a risk to adjacent land and property.</p> <p>There is evidence that this is the best and most versatile agricultural land, so restoration to agriculture may be a priority.</p>	0

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	within the area						
NR1: To improve local air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> -Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors 	?	?	?	Quite likely	<p>Workings clearly have the scope to increase dust emissions from extraction, inert waste recycling and landfill and traffic movements. Road transport is the only option for importing inert waste or moving material off the site. By extending Kirkhouse Quarry, particularly if the intensity and output of the site was increased, the potential for dust emissions to reach sensitive receptors in Farlam increases.</p> <p>Extraction from the entire 61 ha suggested would be likely to extend the duration of the impacts to a considerable extent.</p> <p>The site does not fall within an Air Quality Management Area (AQMA).</p>	-

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact	There is one small pond located on site. The main potential risk is from dust contamination (resulting in siltation) of water sensitive habitats and designations in the vicinity of the site, but this should be capable of being mitigated using standard measures. If inert waste that contain contaminates was landfilled, then there is the risk of leaching into the water table. However, normal operating procedures should screen out that potential.	(-)
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat		√	√	Very likely	There is no evidence of historic landfills on site, which could have suggested the possibility of contaminated land. There is 60% likelihood that the site is Best and Most Versatile agricultural land, and the topsoil should be stored to enable restoration to this use. Any loss could be compensated by ecological and other benefits from alternative restoration proposals for the site.	-(-)
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather	√	√	√	Very likely	The site provides sand and gravel, and an additional Area of Search assists in maintaining the land bank for Cumbria. However, it is not likely that the entire 61 ha suggested would be required to maintain an adequate landbank throughout the Plan period. The representation also seeks the allocation of the quarry for construction, demolition and excavation waste recycling. In bringing in these types of material, the operator would seek first to process and recycle these materials. The recycled materials would expand the range of products available from the quarry, recognising and reflecting an increased demand for recycled product. Landfilling would be reserved for materials that cannot	+(+)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	than primary materials -Support use of co-products from minerals working					be recycled and residual materials from the recycling process.	
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	?	?	?	Very unlikely	In order to reduce impacts, it may be necessary to phase working of the rest of this site and this would limit the scope for new jobs to be created. See also comments under Secondary Impacts in the closing summary.	0
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	See above.	0
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		0

S7. Summary of Assessment

The sustainability of this site for future extraction is justified primarily by the need to ensure an adequate supply of sand and gravel and maintain landbanks for the County. The location is an important source of sand and gravel available to markets in the north of Cumbria. Furthermore, it is estimated that the remaining reserves at Kirkhouse will be

<p>exhausted before 2023. The extension of an existing site is usually more sustainable than new sites where no extraction has previously taken place, although the areas proposed are significantly larger than those worked previously, and there is no evidence that all of the area put forward is required.</p>
<p>Secondary: as with other aggregates sites, this one can contribute to the supply of local aggregates supporting the local construction / development sectors.</p> <p>Cumulative: impacts should decline if the site is worked after the other two quarries have closed or if it one of them remains open. In the event that it has to be developed while the other two sites are operating the planning application will need to pay particular attention to cumulative impacts in terms of road traffic, emissions, dust and noise.</p> <p>Synergistic: the rural setting of the site suggests that it is not appropriate for secondary aggregates reprocessing as this would necessitate use of equipment that would generate new visual, noise, traffic and vibration impacts. Any such activities should only be supported if there is evidence that reprocessing capacity is not coming forward in locations closer to waste sources and materials markets.</p>
<p>Mitigation Proposed</p> <p>Existing mitigation measures should be sufficient to deal with operational quarrying impacts, though a future planning application will need to provide evidence to this effect. This is assumed to include use of buffering, bunding, visual screening, noise suppression on compressors and other equipment, wheel washing and dust suppression during dry periods, etc. A programme of phasing would need to be agreed, in order to limit possible cumulative impacts with the existing quarry. Surveys may be needed to check for use or occupancy of the land by any of the various local protected species. Mitigation may be required for loss of woodland.</p> <p>Further consideration of cumulative impacts will need to be given to the proposal for inert waste recycling and inert waste landfill operations at the site; in particular, minimising the road traffic, emissions, dust, noise and visual impacts on residential properties nearby. A programme of phasing the sand and gravel extraction in order to provide a void space for the landfill, will be required.</p>
<p>Additional Comment</p> <p>A planning condition may be necessary to prevent extraction beginning until such time as one or both of the existing quarries is nearing exhaustion in order to limit cumulative impacts, though the condition should allow this to occur if the extra capacity is needed to maintain the sand and gravel landbank.</p>

S8 Blencowe – Area of Search for limestone extraction – 4.7 Ha

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact). This is shown in the 'Score' column.

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
SP1: To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		0
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport				No impact	There is no scope for alternative transport although this is a generic issue for many minerals sites.	0
SP3: To provide everyone with a decent home	-To help meet local housing need			(√)	Very likely if indirect	The proposed site could contribute to maintaining the supply of sufficient limestone to meet the needs of the concrete plant at Flusco, though it is not guaranteed that all or indeed any of the stone would be sent there. Material could help supply housing development projects, as outlined in Eden DC's Housing and Employment Development Plans in the longer term.	(+)
SP4: To improve the level of skills, education and training	-Education and training		√	√	Quite likely	Creating a new quarry could extend work availability and allow opportunities for new staff to join and undertake training.	(+)
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people		√	√	Quite likely	The site is in a rural location, but there are residential properties 100m to the east. The village of Newbiggin is 600m south, whilst Greystoke is 2km north west from the proposed site. The disused quarry on the southern boundary has planning permission for a caravan park with 172 holiday homes and new grassland habitat.	-(-)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
						Noise, vibration and dust are likely to be produced by the quarrying activities and, without mitigation, these will impact on the nearest neighbours. The location implies movement of limestone either 1.5km along minor roads to the Flusco site or to the M6 road network for use further afield. Vehicles would travel past housing and the entrance to an existing holiday park, but would not go through any villages.	
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		0
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources		(√)	(√)	Limited likelihood	There are limited biodiversity designations within the vicinity of the site. The closest is a Newton Reigny Moss SSSI 1.1km east of the site. The River Eden SAC is 3.6km south. The Habitats Regulations Assessment of the Supplementary Sites considers that this site would not affect the integrity of the SAC. The unrestored quarry has filled with water and has formed a pond on the southern boundary of the proposed new quarry. The original restoration plan for the unrestored quarry included creating shallows within the residual water body. It is highly likely to support GCN, but surveys would be required to confirm this. The planning permission for the caravan park south of the proposed quarry includes wildlife habitats around the retained pond as mitigation. The proposed site is an arable field with only narrow field	-(-)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
						<p>boundaries able to support biodiversity. The proposed access is along an existing tarmac road beside a dry stone wall. The access road crosses a disused railway line that may be used as a wildlife corridor and surveys would be required to determine its use.</p> <p>There is an area of common land connected to the south west corner of the site; although an optimal habitat to support biodiversity, it is small and isolated within an area of agricultural land.</p>	
EN2: To preserve, enhance and manage landscape quality and character for future generations	<ul style="list-style-type: none"> -Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity 		√	√	Very likely	<p>There are no landscape designations in the vicinity and the site itself is not in a designation. Development will result in an inevitable intrusion into currently open arable land. When the holiday park is completed, there may be a visual impact and screening would be required.</p> <p>The site is about 2km outside the Lake District National Park. From the eastern facing slopes of the Lake District peaks you may be able to see the site and visual screening may be required. A future planning application would need to be supported by a landscape assessment (and provide evidence of dialogue with the NP Authority).</p> <p>There is a footpath that runs 475m to the south and west of the site and a farm track that runs along the edge of the site to common land on the south west corner of the site.</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
EN3: To improve the quality of the built environment	<ul style="list-style-type: none"> -Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area 		√	√	Quite likely	<p>There are 10 Listed Buildings within 2km of the site, but only two are within 1km. Bunkers Hill a Grade II building is 590m north and The Hill is 800m south of the proposed site. Due to the profile of the land it is unlikely that you could see the site from Bunkers Hill, but it would be visible from The Hill.</p> <p>The site is not at risk of flooding.</p> <p>As with all minerals developments, some adverse impacts are inevitable. Assessment of the noise predicted should be made to model the extent of noise nuisance created and design effective mitigation. Visual and dust nuisance can be managed through standard mitigation.</p> <p>In the long term, there is potential scope for improvement of the site through biodiversity enhancement, provided this has a higher priority than restoration to agricultural use.</p>	-
NR1: To improve local air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> -Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources 				Quite likely	<p>Dust emissions are a likely consequence of extraction and transport of aggregates, but this can be mitigated using appropriate measures such as dust suppression, routeing agreement, etc.</p> <p>The adjacent houses and proposed holiday park would be the most sensitive receptors.</p> <p>The existing tarmac track would presumably be widened and a new exit created to the minor road to the west that connects to the concrete works at Flusco and the A66 via minor roads.</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
	-promote climate change adaptation in the minerals and waste sectors						
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water			√	Quite likely	<p>The nearest flowing watercourse is the River Petteril 1km to the west, part of the River Eden SAC. Further investigation of impacts on the water table and subsequent indirect impacts on the River Eden SAC, will be required.</p> <p>Material washed off the site is likely to drain towards the disused quarry pond to the south. As this is to be part of the holiday park, alternative run-off routes will be required.</p> <p>The elevated position of the proposed site will mean that some material may be blown onto the surrounding agricultural fields and the holiday park; mitigation such as damping down may be required.</p>	-(-)
NR3: To restore and protect land and soil	<p>-To reduce amount of contaminated land in the area</p> <p>-Loss of high grade agricultural land and Greenfield sites</p> <p>-Potential to cause soil degradation, pollution</p> <p>- the use of peat</p>			(√)	Depends on restoration	<p>Degradation: as noted elsewhere, there is scope for material blown off the site to be deposited on adjacent land. While this may not be contamination it should be avoided nevertheless.</p> <p>Improvement: land is in arable use but designated within a disadvantaged farming area and utilising environmental stewardship scheme to provide boundary habitats.</p> <p>Restoration of the site post excavation could either be to agriculture or habitat creation.</p>	(+)/(-)
NR4: To manage mineral resources sustainability and minimise waste	<p>-Reflect the waste management hierarchy</p> <p>-Promote the use of renewable forms of energy</p> <p>-Provide flow of minerals to</p>		√	√	Very likely	<p>The site is greenfield and would constitute a new quarry, albeit adjacent to a disused limestone quarry. It is proposed to supply the local concrete works, but this is not guaranteed. The current crushed rock landbank in Cumbria is over 40 years.</p>	(+)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
	<p>meet demand within the area</p> <ul style="list-style-type: none"> -Protect/conserv e mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working 					Therefore, the effect is possibly mildly beneficial.	
EC1: To retain existing jobs and create new employment opportunities	<ul style="list-style-type: none"> -Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment 				Very Likely	The new quarry may operate at the same time as the Silver Fields Quarry at Flusco, so there may be new employment opportunities.	(+)
EC2: To improve access to jobs	<ul style="list-style-type: none"> -Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need 				No impact	The site is a little distance from Penrith with no public transport. The location site suggests employees would have to use a car to reach the site.	0
EC3: To diversify and strengthen the local Economy	<ul style="list-style-type: none"> -Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, 				No impact		0

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
	minerals recycling and use of co-products						

S8. Summary of Assessment

The proposed new quarry is adjacent to a disused quarry. Mitigation would be required to make the new quarry a compatible land use beside the new caravan site and the likelihood of Great Crested Newts using the park and site S8. This allocation could provide local supply of mineral and may also safeguard jobs. Any future development of the site as a quarry would need planning permission and the applicant would need to demonstrate that mitigation could make the quarry a suitable neighbour for the caravan park.

The quality of the existing arable land is poor and there is a possibility for restoration alternatives, including BAP priority habitat to complement the area on the south west corner of the proposed site and the newly created habitat in the caravan park.

Secondary, Cumulative & Synergistic Impacts

Secondary: as with other aggregates sites, this one can contribute to the supply of local aggregates supporting the local construction/development sectors.

Cumulative: the caravan park and new quarry together, may create adverse cumulative impacts on protected species. In the event that excavation starts while the Silver Fields Quarry is being worked, then cumulative impacts in terms of road traffic, emissions, dust and noise may occur. There is another supplementary site proposed as S4 Flusco Waste Management Complex, which is 780m south; if it were to operate simultaneously with this proposal, then there would be cumulative impacts of noise, dust, visual and traffic impacts.

Synergistic: the site is close to its potential markets, as well as relatively near Penrith along the A66.

Mitigation Proposed

This would be a new quarry. Mitigation will be required to minimise the road traffic, emissions, dust and noise impacts, on the adjacent planned caravan park, on existing businesses along any lorry route and on the residents of Newbiggin. This is assumed to include use of buffering, bunding, visual screening, noise suppression on compressors and other equipment, wheel washing and dust suppression during dry periods, etc. Specific mitigation will be needed to deal with impacts.

Surveys will be needed to check for the presence of Great Crested Newts and also a walkover of the railway corridor habitat to determine its biodiversity value. A programme of phasing would need to be agreed, in order to limit possible cumulative impacts with Silver Fields Quarry at the Flusco complex.

Additional Comment

A programme of phasing would need to be agreed, in order to limit possible cumulative impacts with Silver Fields Quarry at the Flusco complex.

S9 Roan Edge – Area of Search for extraction of gritstone (4.8 Ha) and allocation of area for inert landfill and waste recycling/secondary aggregate production – Total area 7.7 ha.

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact). This is shown in the 'Score' column.

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
SP1: To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		0
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	There is no scope to use alternative transport modes although the site is well located in terms of access onto the A684 and the M6.	0
SP3: To provide everyone with a decent home	-To help meet local housing need				No impact		0
SP4: To improve the level of skills, education and training	-Education and training		√	√	Limited likelihood	Extending the working life of the waste management facility could allow opportunities for new staff to join and undertake training.	(+)
SP5: To improve the health and sense of well being of people	-Impact on human health, noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people		√	√	Very limited likelihood	There could be potential impact on the well-being of users of the public footpath adjacent to the site. The assessment score recognises the existence of the impact but does not take account of the benefits of likely mitigation.	-
SP6: To create vibrant, active, inclusive and open-minded communities with a	-community identity - social cohesion and help continue local traditions -To promote recreational				No impact	Recreational impacts are covered by the comments above.	0

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
strong sense of local history	and cultural activity the arts, heritage, dialect and sport						
EN1: To protect and enhance biodiversity	<ul style="list-style-type: none"> -Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources 		√	√	Limited Likelihood	<p>There are no designations on the site itself. The nearest county-level designations are 350m-1.75km; the closest is on the opposite side of the M6. Any risk to the air environment may be mitigated naturally, in that the site is in an exposed relatively upland location, which may help dust to disperse (though this does not obviate the need for appropriate mitigation of this impact).</p> <p>Previous HRA has not identified any risk of impact on Natura 2000 sites.</p> <p>The loss of agricultural land will result in the loss of habitat, even if it is unfavourable.</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	<ul style="list-style-type: none"> -Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity 	?	√	√	Very likely	<p>The proposed site is in a 'Less Favoured Area – Severely Disadvantaged', making it difficult for farmers to use the land and compete.</p> <p>The site is in a relatively open semi-upland location and it is assumed the extension will have similar characteristics to the existing works.</p> <p>The site may or may not be visible from the adjacent footpath, due to the profile of the land.</p> <p>The site will be visible from the M6 and there will need to be effective screening; this is likely to include bunding, which will need to be profiled to look natural. It may also be visible from higher open ground to the east, but its immediate surroundings are hummocky land, which provides a degree of natural screening (e.g. the site is not visible from the A684).</p>	-(-)
EN3: To improve the quality of the built environment	<ul style="list-style-type: none"> -Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -Appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions, etc. arising from minerals developments and associated land use -Enhance the degraded 				No impact	<p>There are no heritage assets in the vicinity of the site. Its remote location limits the impact of inevitable effects of waste operations, which will be addressed with continued use of existing on-site mitigation measures.</p> <p>The site is in the lowest flood risk zone, so consideration will need to be given to extending the drainage plan for the existing site to provide appropriate mitigation (collection/dispersal) of run-off in the extension area.</p> <p>There is no scope to improve the built environment within this rural area.</p>	0

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
	urban and rural environment within the area						
NR1: To improve local air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> -Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from Waste facilities and contribute to the use of renewable energy sources -Promote climate change adaptation in the minerals and waste sectors 				Quite likely	<p>There is no scope for alternative transport modes though, as noted above, the site is well located with respect to the strategic road network with access onto the M6 very close by, and this should have some limited beneficial impact on emission levels.</p> <p>Extraction of gritstone and secondary aggregate production and, to a less extent, inert waste landfilling all produce dust, but these emissions should be manageable through dust suppression mitigation.</p>	(-)
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water		√	√	Very likely	<p>Two small streams flow east and south from the site and these are the sensitive receptors on site that feed into Killington Reservoir. These will require protection.</p> <p>It would also be prudent to assess the effect of the extension on the local groundwater regime while using existing mitigation measures to prevent airborne contamination of any waterbodies with silt.</p>	-(-)
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area				No adverse impact	The site is proposed for secondary aggregate production and inert landfill in the longer term, so there is little opportunity for	-

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
	<ul style="list-style-type: none"> -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution -The use of peat 					<p>habitat creation or improvement in the short term.</p> <p>Dust blown off the site could cause contamination, but this will be limited by appropriate mitigation; the open nature of the area may assist dispersal; and the poor quality of the land implies any impact would not be significant.</p>	
NR4: To manage mineral resources sustainability and minimise waste	<ul style="list-style-type: none"> -Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect/conservate mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working 	√	√	√	Inevitable	<p>At present, Roan Edge is the only licensed inert waste facility providing landfill, recycling and washing facilities in the area. The nearest alternative facilities are all over 35km away.</p> <p>The production of secondary aggregates is a sustainable use of by-products and recycling inert waste is a good re-use of materials.</p> <p>In order to facilitate a void space for the proposed inert waste landfill, and a platform for increased recycling/aggregates production, gritstone extraction is proposed. This does have a use in local construction projects, but is not specifically safeguarded in the Local Plan, as it is of lesser quality and importance than the underlying high specification roadstones (HSA), which are safeguarded.</p> <p>There could be cumulative impacts with gritstone extraction occurring at the same time as HSA extraction on the adjacent operating quarry. Furthermore, sterilisation of the HSA underlying site S9 could occur.</p>	-(-)
EC1: To retain existing jobs and create new employment opportunities	<ul style="list-style-type: none"> -Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or 	√	√	√	Very likely, if not inevitable	Assumed to support existing jobs in the local inert waste recycling/secondary aggregates production sectors and possibly to create new ones.	+

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/depends on use	Explain the nature/scale for each impact as necessary	
	investment						
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	The site is in a remote location that is unlikely to be served by public transport or easily accessible by non-car modes.	0
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		0

S9. Summary of Assessment
<p>.The biggest impacts are likely to be on landscape and visual, especially from the motorway and on users of the adjacent right of way. It is located in a position sufficiently distant from designated natural receptors that maintenance of existing mitigation measures may be sufficient to deal with any impacts. There are potential impacts on the two streams that flow from the site.</p> <p>It benefits from good access to the strategic road network, though it lacks access to alternative modes of transport.</p> <p>It is an important facility in the area for inert waste recycling and secondary aggregate production.</p> <p>Sterilisation of the underlying high specification roadstones could occur.</p>
Secondary, Cumulative & Synergistic Impacts
<p>Secondary: none identified.</p> <p>Cumulative impacts: site S9 slightly overlaps site M30 (allocated in the February 2015 draft MWLP Preferred Options), which is for extraction of high specification roadstone. If both were worked, there would be cumulative impacts.</p> <p>Synergistic: scope for habitat creation when the site is restored, although this will be long term, as area is proposed for materials storage for screening.</p>

Mitigation Proposed

Further extraction of gritstone on the site is to provide a void space for increased capacity of inert waste landfill and also to eventually provide a larger platform on which to recycle greater amounts of inert wastes and produce more secondary aggregates. In the long term, it is not sustainable to continue digging a hole to provide a waste disposal route.

Consideration may need to be given to the effect of additional below-ground level working on the groundwater regime and also to the pattern of runoff down the slope to the east of the site. Measures to prevent contamination of the existing watercourses will need to be implemented. Mitigation will be required to minimise the road traffic, emissions, dust, noise and visual impacts of the operations. This is assumed to include use of buffering, bunding, visual screening, noise suppression on compressors and other equipment, wheel washing and dust suppression during dry periods, etc. Specific mitigation will be needed to deal with impacts.

Evidence of the sustainable use of the gritstone that it is proposed to extract on this site, may be required. Cumulative impacts with the adjacent high specification roadstones (HSA) quarry may need to be considered.

Ecological survey of the site to check for use by protected species may be warranted. The bridleway/footpath running between the existing HSA quarry and the proposed site may need to be relocated.

Additional Comment

It is not evident how quickly the extension might be worked and it has been assumed it will be sooner rather than later. Any change will delay the impacts, but not alter their scale.

S10 Kirkby Slate Quarry – boundary change to existing site allocation (M14) – 2ha additional site for infill and restoration of former Quarry

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact). This is shown in the 'Score' column.

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP1: To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		0
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices					Infill and restoration of the newly proposed area (S10) could bring further areas of the Kirkby Moor SSSI into favourable condition and provide improved access to the countryside.	(+)
SP3: To provide everyone with a decent home	-To help meet local housing need		√	√	Very likely	The site provides locally distinctive building materials.	+
SP4: To improve the level of skills, education and training	-Education and training				No impact		0
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people		√	√	No impact	The nearest housing is 1km distant and any existing mitigation measures should be capable of limiting any impacts.	0
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				Some likelihood (but very indirect)	The site supplies a local, regional and national market. It provides a supply of a locally distinctive building material, which must be used to maintain local character in new or renovated buildings. The infill of Winnow End Quarry will enable re-organisation of operations within the existing quarry.	0

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EN1: To protect and enhance biodiversity	<ul style="list-style-type: none"> -Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources 		(√)	(√)	Limited likelihood	There are a large number of ecological designations in the vicinity of the site. Restoration of the exhausted Winnow End Quarry would help bring Kirkby Moor SSSI (heather moorland and other varied habitats) back into favourable condition. There may also be scope to designate a RIGS within the existing quarry. Although some limited adverse biodiversity impact may occur while the area is being worked, the overall potential is considered to be positive.	+
EN2: To preserve, enhance and manage landscape quality and character for future generations	<ul style="list-style-type: none"> -Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity 		?	?	Limited likelihood	Restoration of the exhausted Winnow End Quarry would help the visual impact of the working quarry on the SSSI. The National Park boundary is 1km to the north but the extension would not create any new adverse visual impact. There are public rights of way crossing the high ground to the east of the existing quarry and the impact on them, and need for re-routeing will need further investigation.	(+)
EN3: To improve the quality of the built environment	<ul style="list-style-type: none"> -Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area 		(√)	(√)	Limited if any adverse likelihood	<p>The nearest heritage assets are 490m and 770m south of the site – they are a cairn and ring mound, Scheduled Monuments. Although there are no know archaeological assets within site S10, there is potential and mitigation may be required.</p> <p>There is no identified flood risk, though consideration will need to be given to extending the drainage plan for the existing site to provide appropriate mitigation (collection/dispersal) of run-off in the area to be restored.</p> <p>There is no scope to improve the built environment within this rural area.</p>	?

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
NR1: To improve local air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> -Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors 		(√)	(√)	Limited likelihood	Existing mitigation in respect of dust and emissions will need to be replicated. The location of the site gives no obvious scope for sustainable transport using alternative modes and it is not clear that it has any implications for the other assessment criteria.	o
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water		(√)	(√)	Limited likelihood	There are two open waterbodies at the northeast side of the existing quarry that are described as reservoirs on OS maps and a spring at the western edge of the wider site. Both appear to offer the risk of potential contamination of water supply (or uncertain use) and potential risk of siltation by blown dust would need to be addressed in mitigation measures (though it is assumed these are established for the wider site).	-
NR3: To restore and protect land and soil	<ul style="list-style-type: none"> -To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat 				No impact	It is not clear that any part of S10 or M14 would affect any of these criteria and the area lying outside the existing quarry is assessed as low quality agricultural land. The restoration priority would therefore be that identified in the assessment against objective EN1.	o
NR4: To manage mineral resources sustainability and minimise waste	<ul style="list-style-type: none"> -Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as 		√	√	Very likely	The allocation of M14 provides for limited extraction and safeguarding of a very distinctive mineral that cannot be readily substituted by secondary materials and which is in limited supply from other sources. The allocation of site S10 for infill, would aid the re-organisation of stockpiles, etc., within the existing operational quarry, in order to safely access further reserves.	+(+)

Assessment framework		Permanence			Characteristics of impacts		
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	Score
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working						
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment		√	√	Very likely	Sites M14 and S10 could provide scope to maintain employment levels in slate extraction in this part of the county, though there is no obvious scope for new jobs.	+
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	No overall change and the relatively remote location makes it inaccessible using non-car modes.	o
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		o

Summary of Assessment
The allocation of M14 falls largely within the existing permitted slate quarry and includes a small eastward extension, which is limited by the wind farm on higher ground to the east. The boundary change to include the worked out Winnow End Quarry for infill and restoration should help to provide more efficient working programme within Kirkby Slate Quarry, and provide access to further reserves. S10 (M14) would appear to offer limited scope for additional adverse impacts, while providing for the continuing supply of slate for local (i.e. county-wide) use to maintain locally distinctive design or for a wider, national market.
Secondary, Cumulative & Synergistic Impacts
Secondary: will contribute to securing longer-term supply of a type of material required to maintain local distinctiveness in building design while also indirectly sustaining employment in this sector of the mineral extraction industry. Cumulative: it appears unlikely that the boundary change to this allocation will result in any cumulative impacts with ongoing extraction on the main site.

Synergistic: restoration potential for extended and improved SSSI habitat.

Mitigation Proposed

No specific requirements other than the measures in use across the existing site. Any increase in surface water and soil/silt contamination from the infill and restoration of the former Winnow End Quarry would need to be addressed in the overall re-organisation of the Slate Quarry.

Additional Comment

A programme of extraction and other operational phasing will be required.

S11 – Kingmoor Road, Carlisle – boundary change to existing site allocation (CA30) for waste – additional area approx. 0.3ha (total 3.2 ha)

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact). This is shown in the 'Score' column.

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
SP1: To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		0
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Very likely	The site is proposed to re-instate a recycling facility (with the intention of capacity increase and/or diversification) on a relatively accessible location at the urban fringe (though a low bridge creates some restrictions),	+
SP3: To provide everyone with a decent home	-To help meet local housing need				No impact		0
SP4: To improve the level of skills, education and training	-Education and training				No impact		0
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Quite likely but depends on type and scale of use	Site entrance faces housing and shops so any growth in throughput or change in use would need to consider whether any increase in impacts would be excessive. As a result, a moderate increase in throughput rather than change or broadening of use (introducing new impacts) would appear preferable. The site is well connected to the Carlisle Northern Development Route but the access is impeded by a rail bridge with a 4.2m height restriction that would prevent it being used by larger HGVs and which would have to access the site from the south passing a substantial number of residential properties.	-(-)
SP6: To create vibrant, active, inclusive and open-minded communities	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural	√	?	?	Possible	The allocation includes additional land to the northwest of the former waste facility, which is currently allocated for leisure use in the Carlisle Local Plan. It is not clear whether redevelopment could require compensatory	(-)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
with a strong sense of local history	activity the arts, heritage, dialect and sport					provision in the medium term or whether there is a suitable location in the vicinity that is more accessible to local residents and which does not adjoin the existing industrial land use. It would appear to entail potential net loss of some public open space. The proposed boundary change to extend the allocation southwards could provide the extra space needed without using the full footprint of a northern extension, were it to be granted permission in the future.	
EN1: To protect and enhance biodiversity	<ul style="list-style-type: none"> -Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources 	√	√	√	Inevitable	<p>The site is adjoined to the west by Kingmoor Sidings Local Nature Reserve (mixed woodland) and to the east it faces the Kingmoor Sidings County Wildlife Site. Development could result in cumulative impacts on both assets (though the former is more likely to be affected). This situation suggests that any diversification of use may have impacts that were not mitigated during operations at the site before the fire.</p> <p>The proposed extension to the north of the site is known to contain habitat used by great crested newts and, therefore, development of the site would require provision of compensatory habitat in the vicinity if this can be found. With the boundary change proposed to the allocation southwards, this could provide the area required for re-instatement of the facility, without seeking use of the northern extension at all.</p> <p>Use of the adjacent plot (for expansion) by protected species, breeding birds, etc. would also need further survey.</p>	--

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	<ul style="list-style-type: none"> -Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity 	√	√	√	Limited likelihood	<p>The site is 100m from the edge of the World Heritage Site Visual Impact Zone, but appears to be screened by woodland in the adjacent Local Nature Reserve. Impact is likely to be negligible, provided any new structures do not exceed the previous scale or elevation of those when the site was operational. As noted above, part of the allocation would take land designated for leisure use, implying some adverse impact on amenity unless there is compensatory provision in a more accessible location in the surroundings.</p> <p>A key issue is that with the requested boundary change, the site would be 450m from the Stanwix Conservation Area. Any traffic unable to access the site from the Carlisle Northern Development Route, would have to use Etterby Scaur and Eden Place, passing through the Area.</p>	(-)
EN3: To improve the quality of the built environment	<ul style="list-style-type: none"> -Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area 	√	√	√	Varies from very likely to limited likelihood depending on impact	<p>Historic impact: see assessment above.</p> <p>Flood risk: the site is in the lowest flood risk zone.</p> <p>Amenity impacts: the main issue will be limiting any cumulative impacts on nearby properties and natural receptors as a result of any increase in throughput or change in waste management function.</p>	(-)

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
NR1: To improve local air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> -Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors 	?	?	?	Limited likelihood	<p>Closure of the site following the fire in 2014, has meant that waste has been taken to the Hespin Wood Waste Management Complex, some way north of the city. A re-instatement of this site to waste management use will help to reduce waste miles back to their earlier level.</p> <p>Any increase in throughput as a result of integration with these other waste sites would need a review of the suitability of existing mitigation measures.</p>	?
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	√	√	√	Quite likely	<p>Previous contaminated land survey has identified the potential risk of contaminants being washed by surface flow or percolation into the brook to the west of the site, which provides a pathway to the River Eden SAC. This risk could be addressed if the plot is covered by hard standing with drainage to foul sewer. Any open waste management use on the extension could also result in dust blow-off, which might also contaminate the brook, although this is likely to be a lesser risk than that from water dispersal.</p> <p>There is a designated river along the northern extension boundary of the site, which would require a certain stand-off.</p>	-(-)
NR3: To restore and protect land and soil	<ul style="list-style-type: none"> -To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat 	√	√	√	Quite likely	The proposed northern expansion of the allocation is a 'greened' area of former brownfield land that is known to be contaminated and which would require remediation if it was developed (particularly if this involved excavation of foundations and/or piling work).	-
NR4: To manage mineral resources sustainability and minimise waste	<ul style="list-style-type: none"> -Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area 	?	?	?	Quite likely but depends on use	Re-instatement of the site as a recycling facility will provide a relatively conveniently located facility serving Carlisle, its surroundings, and possibly a wider catchment in the north of the county. As such the proposal supports the initial assessment criterion.	+

Assessment framework		Permanence			Characteristics of impacts		Score
SA Objective	Evaluation criteria	Duration			Certainty	Nature/scale of impact(s)	
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable / very or quite likely / limited likelihood / no effect / depends on use	Explain the nature / scale for each impact as necessary	
	<ul style="list-style-type: none"> -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working 						
EC1: To retain existing jobs and create new employment opportunities	<ul style="list-style-type: none"> -Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment 	√	√	√	Quite likely	If re-instated, expansion of throughput or waste management functions has the potential to generate new jobs in the city (recognising the impacts of expanding the size and capacity of the site).	(+)
EC2: To improve access to jobs	<ul style="list-style-type: none"> -Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need 	√	√	√	Quite likely	As above. Though the proximity of the site to residential property creates problems, its location implies it is readily accessible on foot, by cycle or public transport, rather than private car.	+
EC3: To diversify and strengthen the local Economy	<ul style="list-style-type: none"> -Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products 	?	?	?	Depends on use	The immediate priority appears to be bringing the facility back into use to provide recycling capacity within the city rather than using contingencies some distance away. However, its benefit in terms of other criteria appears to be limited.	?

S 10 Summary of Assessment

This site appears to be well-located to serve the catchment, but it has a number of significant drawbacks. It is located very close to housing and ecological assets, and a nearby low bridge restricts access to the site from one direction. The northward extension of the plot is known to contain habitat for great crested newts, while it is also contaminated from a former industrial use, and the range of mitigation measures needed to deal with both of these matters will be substantial and is likely to entail significant cost. Expanding the site southwards, as proposed by the boundary change, could provide a more sustainable, and cheaper, option.

The aim for the site after re-instatement, appears to be to increase throughput without changing or broadening its waste management function, as this would appear to offer a reduced risk of increasing any existing impacts or creating new ones as a result of introducing new waste functions and equipment on the site. The height restriction on the rail bridge to the northwest and the desirability of avoiding (or at least minimising) lorry movements through the nearby Conservation Area, suggests that the scope to increase capacity should be limited and controlled by planning conditions applied to vehicle size and routeing.

Secondary, Cumulative & Synergistic Impacts

Secondary: none identified.

Cumulative: these would result primarily from any increase in throughput at the re-instated site and its effect on noise, traffic, dust, odours, etc. There may be some cumulative impact with traffic generated by two other industrial units immediately to the south.

Synergistic: none identified.

Mitigation Proposed

Any increase in the throughput or change in the range of waste facilities, compared to the previous waste facility, should result in a review of mitigation measures for the intended future use. The inclusion of the additional land to the south would further increase potential throughput and associated traffic or noise. However, if the inclusion enabled the area of land to the north of the previous facility to be omitted from the development, leaving only the footprint of the former waste facility and offices, then the Great Crested Newt habitat could be left undisturbed. This would remove the need to secure compensatory habitat or for any occupants of the site to be relocated. A survey of the use of the site by protected species, following the period of inactivity caused by the fire, also appears advisable. Appropriate mitigation of land contamination risks, particularly in terms of disturbance and excavation of material that could then find its way into surface watercourses is also necessary, as is the need to prevent water running off the site and percolating into the soil beneath, carrying contaminants in solution into adjacent watercourses or uncontaminated greenfield land.