

GPP

GP PLANNING LTD

PLANNING STATEMENT/ DESIGN AND ACCESS STATEMENT

PROPOSED RESTORATION OF FORMER QUARRY BY IMPORTATION OF INERT WASTE

ASTWICK QUARRY, BUCKINGHAM ROAD, EVENLEY,
NORTHAMPTONSHIRE, NN13 5LL

CHURCHILL WASTE MANAGEMENT LTD.

4th May 2018
Revision 1



CONTENTS

1	INTRODUCTION	3
1.1	The Planning Application	3
1.2	The Application Site and its Setting	3
1.3	Planning History	4
2	PROPOSED DEVELOPMENT	6
2.1	Background	6
2.2	Summary of Proposed Operations	6
3	ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS	8
3.1	Overview	8
3.2	Screening	9
4	PLANNING POLICY CONTEXT	10
4.1	Introduction	10
4.2	The Development Plan	10
4.3	Other Material Considerations	11
5	ASSESSMENT OF PROPOSAL.....	12
5.1	Introduction	12
5.2	Location of Development.....	12
5.3	Waste Management Capacity & Need.....	12
5.4	Catchment Area.....	13
5.5	Development Criteria for Waste Management Facilities	14
6	ENVIRONMENTAL CONSIDERATIONS	15
6.1	Overview	15
6.2	Ecology	15
6.3	Landscape and Visual Impact	24
6.4	A Traffic and Transportation.....	25
6.5	Flood Risk Assessment	26
6.6	Noise	30
6.7	Dust	31
7	CONCLUSIONS.....	33

APPENDICES

APPENDIX 1: CATCHMENT PLAN

APPENDIX 2: VERIFICATION SURVEY

APPENDIX 3: FLOOD RISK ASSESSMENT

1 INTRODUCTION

1.1 The Planning Application

- 1.1.1 This Planning Application is submitted to Northamptonshire County Council on behalf of Churchill Waste Management Ltd. (the Applicant) and seeks planning permission for restoration of a former quarry by importation of inert waste materials at Astwick Quarry, Evenley, Northamptonshire (the Site).
- 1.1.2 Consent was previously granted on the Site for the formation of three fishing lakes from the former quarry excavations through the importation of inert infill material to create suitable water depths.
- 1.1.3 This Proposal involves the importation of around 284,000m³ of inert waste to infill the remainder of the quarry void and part of the adjoining field to ensure a natural landform is created.
- 1.1.4 Access will be via the existing access onto the B4031.
- 1.1.5 This submission includes the following documents and drawings:

Documents

- Planning Form/Certificates;
- Planning Statement / Design and Access Statement;
- Ecological Verification Survey, March 2018, REC Reference:105240EC1R0
- Flood Risk Assessment, 28th March 2018, Abington Consulting Engineers

Drawings

- Site Location Plan – GPP/CWM/AQ/18/01 Revision 1
- Site Plan – GPP/CMW/AQ/18/02 Revision 2
- Phasing Plan - GPP/CMW/AQ/18/05 Revision 1
- Final Restoration Levels - GPP/CMW/AQ/18/04 Revision 2
- Topographical Survey 9110/58/19A
- Proposed Design – 9110/58/14C
- Sections – 9110/58/17A

Fee

- Cheque made payable to Northamptonshire County Council for the sum of £19,188.

1.2 The Application Site and its Setting

- 1.2.1 The Site is located approximately 4km to the south west of Brackley and 2km east of Croughton village. It sits to the north of the B4031 and is accessed via an existing entrance track off that road into the south east corner of the Site. The Site extends to 8.12ha, comprising the void

associated with former quarrying and previous use as a lake, rough grassland and part of an existing agricultural field. The Site slopes from the north down to the south and there are a number of existing trees along the western edge of the Site and in the south eastern corner.

- 1.2.2 Existing access roads travel through the Site to the west and to adjacent land outside the applicant's ownership to the north.
- 1.2.3 An existing watercourse running north east to south west, is located to the west of the Site. Another much smaller watercourse runs towards the Site from the east, disappearing underground at a point to the east of the proposal Site.
- 1.2.4 The nearest SSSI lies about 8km to the south west.
- 1.2.5 There is a schedule ancient monument (SAM) about 300m to the north of the lake (Site of the medieval village of Astwick).
- 1.2.6 The nearest Listed building lies approximately 350m to the south east.
- 1.2.7 There are a number of residential properties in the hamlet of Astwick that lies to the south/south west of the Site in fairly close proximity, the nearest which are Astwick Cottages some 80m to the south, beyond the B4031.
- 1.2.8 The Site lies within Flood Zone 1 (low risk).

1.3 Planning History

- 1.3.1 Permissions for limestone quarrying at the Site date back to the late 1950s (BRAR/58/84) and early 1960s (BRAR/60/77). Further permissions for limestone extraction were granted in 1968 (BRAR/68/38) to Stone Hill Quarries, Peterborough, and in 1972 to RMC when for many years it was subsequently operated by its subsidiary companies, Butterley Aggregate and Hall Aggregates (Eastern Counties) Ltd.
- 1.3.2 On 10th May 1989 South Northamptonshire Council granted permission for the "Extraction of limestone and clay/shale overburden and part backfilling with surplus excavated materials in connection with the M40 Motorway and Bicester Bypass road construction works" (SN/89/229C). The permission was subject to 24 conditions which included restoration and aftercare obligations. The permission covered two parcels of land; the current Site to the west of the stream and the Site to the east of the stream, north of the B4031.
- 1.3.3 Planning permission for the re-restoration of the western part of the old quarry and recycling operations was granted by South Northamptonshire Council on 6th December 1999, (SN/99/560C).
- 1.3.4 Planning permission for the extension of re-restoration works involving the deposit of inert soils on the northern part of the old quarry (SN/2007/0318) was granted on 17th May 2007 by Northamptonshire County Council.
- 1.3.5 Planning permission for "Creation of three coarse fishing lakes for recreational purposes including access track, car and coach parking, facilities building and ancillary importation and

infill of inert material" was granted on 31st May 2012 by the County Council (12/00013/WASFUL).

- 1.3.6 Planning permission for "Importation of inert waste materials to create a fishing lake, and ancillary works and development including an access track, stock ponds, parking facilities, a facilities building and temporary bund" was granted by the County Council on 3rd May 2017 (16/00043/WASFUL).

2 PROPOSED DEVELOPMENT

2.1 Background

- 2.1.1 The proposed development Site extends to approximately 8ha. The extent of the planning application Site is edged red on the Site Plan (Drawing reference: GPP/CWM/AQ/18/02 Revision 2).
- 2.1.2 Extraction of limestone from the quarry ceased some 25-30 years ago. The old quarry gradually filled with groundwater and the surrounding land was partially restored being sown to grass or planted with trees and shrubs. The old quarry is now partially infilled with inert material in accordance with planning permission 12/00013/WAS.
- 2.1.3 The extant planning permission for a single fishing lake, granted in 2017, has partly been implemented. It is now evident that a fishing lake will not be commercially viable in this location. Thus there is a need to review the restoration aims for the former quarry. Informal discussions with officers from the County Council have been supportive of infilling the lake so that the old mineral workings can be properly restored to a beneficial agricultural use.
- 2.1.4 The proposal is designed to properly restore the quarry with the objective of providing a positive environmental benefit for agriculture and amenity. Existing ground levels will be raised to create a landform in sympathy with the adjoining land and to facilitate drainage to adjoining ditches so that the surface can be put to beneficial agricultural use. Existing wetland habitat features of identified conservation interest will be largely retained and will be positively managed.

2.2 Summary of Proposed Operations

- 2.2.1 The proposed works will involve the use of inert waste for Site restoration. The existing and proposed contours are shown on Drawings 9110/58/14C and these are illustrated in cross-sections on Drawing No 9110/58/17A. A volume of 284,000m³ is needed to achieve the proposed contours.
- 2.2.2 Access will be onto the B4031 at the existing entrance, which is a purpose-built access designed for HGV movements, approved under an earlier planning consent. The Applicant will continue to honour the existing legal agreement with the County Council on lorry routeing, to ensure that all traffic entering or leaving the Site is from the A43 (T) to the east and will avoid the village of Croughton.
- 2.2.3 A Balancing Pond will be excavated adjacent to the western boundary of the Site (as shown on Drawing No. GPP/CMW/AQ/18/04 rev 2) with a base depth of 114m designed to ensure that revisions in the Site's contours and infilling of the lake does not give rise to flood risk.

Inputs & Timescale

- 2.2.4 The life of the operation is in part dependent upon the volume of inert material arising in the area. Historically those operations have achieved a rate of approximately 76,000 tonnes per

annum (47,000 m³). The proposed development would result in an average input of 56,800m³ of material over a period of 5 years to secure final restoration.

- 2.2.5 Assuming that the material will be imported in 15m³ per lorry loads, this equates to 3,786 loads/year.

Phasing

- 2.2.6 The Site will be filled in 4 distinct phases as shown on Drawing No. GPP/CWM/AQ/18/05.

Restoration

- 2.2.7 Following completion of infilling operations, it is intended to carry out soil cultivations of the restored area. The Site will be subject to an agreed 5-year aftercare scheme to an approved agricultural after use.
- 2.2.8 Where necessary, waste stockpiles will be located adjacent to the existing wheel wash. No stockpiles will exceed 5m in height.
- 2.2.9 The proposed development will utilise mobile plant, limited to 360° excavators and bulldozers.

3 ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS

3.1 Overview

3.1.1 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 set out the criteria for Schedule 1 developments for which an Environmental Impact Assessment (EIA) is mandatory and a list of Schedule 2 developments for which an EIA may be required. An assessment of whether the proposed development falls within Schedule 1 or Schedule 2 is set out below.

Schedule 1

3.1.2 Schedule 1 identifies twenty different categories of development which requires EIA. The Proposed Development is not listed as a Schedule 1 development.

Schedule 2

3.1.3 In terms of Schedule 2 of the Environmental Impact Assessment Regulations 2017, the Proposed Development falls within paragraph 11(b) which states that an EIA may be required should the area of development exceed the indicative threshold of 0.5ha.

3.1.4 The basic test of the need for an EIA, in a particular case, is the likelihood of significant adverse effects on the environment by virtue of factors such as its nature, size and location. National Planning Practice Guidance states that an EIA may be required for Schedule 2 developments in three cases:

- For major developments which are of more than local importance;
- For developments which are proposed within particularly environmentally sensitive or vulnerable locations; and
- For developments with unusually complex and potentially hazardous environmental effects.

3.1.5 The EIA Regulations provide definitions of those areas that are regarded as 'sensitive' and these include Sites of Special Scientific Interest (SSSI), National Parks, Areas of Outstanding Natural Beauty, World Heritage Sites, Conservation Areas, Scheduled Ancient Monuments and internationally designated Sites. None of these apply in this case.

3.1.6 The NPPG states that:

The aim of the EIA is to protect the environment by ensuring that a Local Planning Authority, when deciding whether to grant planning permission for a project is likely to have significant effects on the environment, does so in the knowledge of the likely significant effects and takes this into account in the decision-making process.

3.1.7 It then goes on to suggest that:

The more environmentally sensitive the location, the more likely it is that the effects will be significant and require an assessment.

3.1.8 The test in relation to the need for EIA in this particular case is the likelihood of significant adverse effects on the environment.

3.2 Screening

3.2.1 In determining whether a proposed development is subject to an EIA, a 'screening' process is used to determine whether the Proposed Development is likely to give rise to significant adverse effects on the environment.

3.2.2 It is the role of the Local Planning Authority to determine whether the Proposed Development is a type listed in Schedule 1 of Schedule 2 of The Regulations.

3.2.3 If the Proposed Development is listed in Schedule 2 and exceeds the relevant thresholds or criteria set out in the exclusions threshold and criteria list, the Proposed Development will need to be screened by the Local Planning Authority to determine whether significant effects are likely and hence whether an EIA is required.

3.2.4 Notwithstanding this, National Planning Practice Guidance warns that:

It should not be presumed that development above the indicative threshold should always be subject to assessment or those falling below these thresholds could never give rise to significant effects especially where the development is in an environmentally sensitive area. Each development will need to be considered on merit.

3.2.5 The geographical location of the development is not considered to be environmentally sensitive as the Site has been subject to previous infilling. The characteristics of the potential impact of the development are also not considered to be environmentally significant. The proposed development is therefore considered **not** to require an Environmental Impact Assessment.

3.2.6 This Application is therefore not supported by an Environmental Statement.

4 PLANNING POLICY CONTEXT

4.1 Introduction

4.1.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that the determination of a Planning Application must be made in accordance with the Development Plan, unless material considerations indicate otherwise. In this case, the Development Plan consists of the following documents:

- Northamptonshire Minerals and Waste Local Plan (adopted July 2017)
- West Northants Joint Core Strategy (adopted September 2014)
- Saved Policies of the South Northamptonshire Local Plan (adopted 1997 plus alteration 2007)

4.1.2 Other material considerations include the National Planning Policy Framework (NPPF), National Planning Practice Guidance (NPPG) and National Planning Policy for Waste (NPPW). Relevant policies of the Development Plan are identified below along with the main documents that are likely to be considered material to the Application.

4.2 The Development Plan

West Northamptonshire Joint Core Strategy

4.2.1 The relevant policies of the Joint Core Strategy are considered to be:

- Policy SA - Presumption in Favour of Sustainable Development;
- Policy R2 – Rural Economy
- Policy BN2 – Biodiversity
- Policy BN5 – The Historic Environment and Landscape

Northamptonshire Minerals and Waste Local Plan

4.2.2 The Northamptonshire Minerals and Waste Local Plan sets out the land use planning strategy for minerals and waste related development in the County. The relevant policies of the Minerals and Waste Plan are considered to be:

- Policy 10: Northamptonshire’s Waste Management Capacity; and
- Policy 11: Spatial Strategy for Waste Management
- Policy 14: Strategy for Waste Disposal

4.2.3 Paragraph 5.52 that supports Policy 11 notes that:

The intended functional role of facilities should be considered within the broader context of creating a sustainable waste management network within Northamptonshire. The intended functional role and contribution that the development makes towards the waste management capacity requirements should be clearly set in the proposal.

4.2.4 It goes on to state that:

Proposals should also demonstrate that the intended catchment area for the facility is in general conformity with the principle of managing waste close to its source. In this regard, the operation of the facility should minimise transportation of waste from its source and collect and recover waste in the most efficient way possible.

4.2.5 The following policies are also considered to be relevant:

- Policy 18: Addressing the Impact of Proposed Minerals and Waste Development;
- Policy 19: Encouraging Sustainable Transport;
- Policy 21: Landscape Character.

South Northamptonshire Local Plan Saved Policies

4.2.6 There are a number of saved policies of relevance:

- Policy G3 – General
- Policy EV2 - Development in the Open Countryside
- Policy EV21 – Hedgerows, Ponds and other Landscape features
- Policy EV24 – County Wildlife Sites etc.

4.3 Other Material Considerations

4.3.1 The National Planning Practice Guidance confirms that the National Planning Policy Framework represents up-to-date government planning policy and must be taken into account where it is relevant to a planning application. The content of the following documents is therefore considered material to the determination of this planning application:

- National Planning Policy Framework (March 2012) (NPPF)
- National Planning Policy for Waste (October 2014) (NPPW)

5 ASSESSMENT OF PROPOSAL

5.1 Introduction

5.1.1 From an assessment of the Development Plan and other relevant material, the following are considered to be the main planning issues associated with the application proposal:

- Location of Development;
- Waste Management Capacity & Need, and
- Development Criteria for Waste Management Facilities.

5.1.2 Environmental considerations are dealt with separately within Section 6.

5.1.3 The above matters are considered in turn below.

5.2 Location of Development

5.2.1 The Waste Spatial Strategy in the Northamptonshire Minerals and Waste Local Plan sets out the expected location of a network of waste management facilities in the County. Policy 11 states that..." *In the rural hinterlands only facilities with a local or neighbourhood catchment providing for preliminary treatment, or that are incompatible with urban development, should be provided. Where it is the latter they should deal with waste generated from identified urban areas and be appropriately located to serve those areas*".

5.2.2 The application proposal is not within the central spine and so falls within the rural hinterlands definition of the policy. However, the inert waste will be sourced from the local area as shown on the attached catchment area plan. Also given the given the Site's context it is considered that the proposal should be regarded as restoration of a former quarry and therefore should be primarily judged against Policy 14 (see below).

5.3 Waste Management Capacity & Need

5.3.1 Following an assessment of waste arisings and permitted waste management capacity in the County, Policy 10 of the adopted MWLP sets out Northamptonshire's waste management capacity. It states that:

The development of a sustainable waste management network to support growth and self-sufficiency within Northamptonshire will involve the provision of facilities to meet the following indicative waste management capacity requirements during this plan period.

5.3.2 Policy 10 of the MWLP also confirms how additional capacity will be provided. Provision " *will come from a mix of existing Sites, intensification or redevelopment of existing Sites and new Sites, providing that the spatial strategy for waste management and are assessed as meeting environmental, amenity and other requirements*".

- 5.3.3 The MWLP identifies the County's waste management and disposal capacity, future indicative capacity requirements and the anticipated capacity gap over a period to 2031 (the Plan period).
- 5.3.4 The Plan deals with a range of facilities that will be needed to manage the various anticipated waste streams produced in the County.
- 5.3.5 It is considered that the need for the development should be based on restoration of a mineral Site and, as such, the proposal would fall to be considered under MWLP Policy 14:

"Provision for inert waste disposal or recovery should be made at mineral extraction Sites requiring restoration, unless it can be clearly demonstrated that an alternative location would not prejudice the restoration of these Sites."

- 5.3.6 The supporting text to the Policy elaborates on this requirement at paragraph 5.77:

"The expectation is that disposal of inert waste (also known as clean fill) will normally be at currently worked mineral extraction Sites, where the material can be used as much needed restoration material. As at 1 January 2016 there was broadly 9 Mt of material required to restore Sites currently worked or with a planning permission (granted or agreed). Therefore preference would be for disposal or recovery of inert wastes to support the restoration of committed or allocated mineral extraction Sites rather than alternative proposals that would prejudice such restoration"

- 5.3.7 In terms of locations for inert disposal the Plan states at para 5.82:
"Inert waste disposal facilities have not been specifically identified through the spatial strategy for waste management. No inert waste disposal facilities have been allocated in this Local Plan. Proposals for additional capacity will be required to conform to relevant policies in the Local Plan"
- 5.3.8 In terms of inert recovery/landfill, Table 6 in the MWLP shows that a constant 0.16mtpa capacity will be required over the Plan period.
- 5.3.9 Table 7 of the MWLP identifies the indicative capacity gap for the various waste management methods expected over the Plan period. The table shows a capacity "gap" for inert recovery/landfill from +0.88mtpa in 2016 to -0.02mtpa in 2031.
- 5.3.1 The proposal Site will import 85,000 tonnes per annum and so will help to meet the inert recycling capacity gap and will meet the general requirements of Policy 10. There is a clear and defined need for the additional throughput that facilitates the delivery of inert waste management capacity requirements in a sustainable manner.

5.4 Catchment Area

- 5.4.1 The adopted MWLP requires proposals to identify the relevant catchment area and demonstrate how this is linked to the Site. In this case, the catchment area is considered to be at the sub-regional level where waste managed on Site originates from within Northamptonshire or an equivalent geographical area as shown on Figure 1.

5.5 Development Criteria for Waste Management Facilities

- 5.5.1 Policy 18 of the Adopted MWLP sets out the overarching development criteria for minerals and waste development. The proposal Site is compliant with the Policy and will meet all of the criteria, subject to mitigation where necessary. Further detail is set out in Section 6.

6 ENVIRONMENTAL CONSIDERATIONS

6.1 Overview

6.1.1 Having regard to the existing permission(s) for the Site, the Development Plan and national policy guidance, the main environmental considerations associated with the Proposed Development are:

- Ecology
- Traffic and Transportation
- Landscape and Visual Impact
- Flood Risk Assessment
- Noise
- Dust

6.1.2 Policy 18 of the adopted MWLP provides an overarching requirement for proposals to be acceptable in terms of their impact upon the environment. It states that;

Proposals for minerals and waste development must demonstrate that the following matters have been considered and addressed:

- *protecting Northamptonshire's natural resources and key environmental designations (including heritage assets);*
- *avoiding and/or minimising potentially adverse impacts to an acceptable level, specifically addressing air emissions (including dust) odour, bioaerosols, noise and vibration, slope stability, vermin and pests, bird strike, litter, land use conflict and cumulative impact;*
- *impacts on flood risk as well as the flow and quantity of the surface and groundwater;*
- *ensuring the built development is of a design and layout that has regard to its visual appearance in the context of the defining characteristics of the local area;*
- *ensuring access is sustainable, safe and environmentally acceptable; and*
- *ensuring that local amenity is protected.*

6.1.3 The following sections assess the potential impacts from the Proposed Development.

6.2 Ecology

6.2.1 Policy 18 of the adopted MWLP requires that any proposed development should protect Northamptonshire's natural resources and key environmental designations. This sentiment is also echoed in national policy within the NPPF and the NPPW's guidance notes.

6.2.2 Resource and Environmental Consultants Ltd (REC) were commissioned by Churchill Waste Management Ltd to undertake a Verification Survey of the Site. The full report is attached as Appendix 2. The following text is an edited summary of the main findings of the report.

Previous Studies

- 6.2.3 In April 2017 Ecological Planning Design and Management produced a Management Plan for the Site following monthly ecological surveillance visits to review the habitat condition of the Site. A great crested newt survey was undertaken in 2016 to determine the status of the species onsite. The Management Plan was produced in support of developing the Site into a recreational coarse fishing facility utilising inert material to profile and infill the quarry void.
- 6.2.4 Two distinct stands of mature wet woodlands were identified along the western boundary, the northern stand dominated by alder whilst the southern stand was dominated by crack willow. Both stands had a patchy shrub layer and the southern stand also supported a patchy herbaceous layer. The woods had a structurally varied canopy with several mature canopy trees covered with dense ivy characteristics which create the potential for use by nesting birds and roosting bats. The linear nature and wet wood character of the woods was considered likely to provide a feature of value for commuting and foraging bats.
- 6.2.5 Short mown, species poor grassland stretched around the perimeter of the quarry void and was dominated by coarse grasses including false oat-grass and cocks foot. The sward was maintained short to deter reptiles and ground nesting birds. Tall ruderal vegetation was scattered within the grassland and included creeping thistle, common nettle and common ragwort.
- 6.2.6 Grassland around the southern portion of the Site was found to contain a range of tall and short herb species providing some floristic diversity, indicating the possibility of locally more strongly calcareous grassland character. Grassland areas were considered generally species poor and structurally uniform in character and of limited intrinsic nature conservation interest, however, they were considered to have potential value for reptiles and ground nesting birds.
- 6.2.7 The quarry void was determined to lack any nature conservation interest as a result of dewatering and infilling. Of some value was a strip of retained vegetation along the margin which included patches of calcareous grassland supporting a number of plant species with restricted distributions including bee orchid, spiked sedge and woolly thistle.
- 6.2.8 The great crested newt survey was undertaken in 2016 by Turnstone Ecology to determine the status of the species within the Site. Two off-Site ponds were identified in adjacent land to the east and west and the on-site quarry void which contained water at the time. Four further ponds were located within 250m from the Site which were not surveyed as they were not deemed to be directly affected by the proposed works. No great crested newts or eggs were found in any ponds; however, smooth newt, common frog and common toad were recorded in the off Site ponds.

Objective

- 6.2.9 The purpose of the Verification Survey was to identify:
- The major habitats present and any significant changes from previous surveys;
 - The potential for legally protected species to be present, and

- The need to undertake additional ecological surveys for key receptors such as protected species, flora, etc.

6.2.10 The Verification Survey included a desktop review and a Site walkover. The results of this review were used to assess the nature conservation importance of the Site. The potential for each habitat to support protected species was also noted. The Verification Survey does not constitute a full survey for protected species to standard survey methodologies, but is used as a tool to recommend which surveys are required for protected species (or other species of significant nature conservation interest). Recommendations for further ecological surveys, if necessary, are made at the end of the report.

Survey Methodology

- 6.2.11 The desktop study involved conducting database searches for statutory and non-statutory designated Sites, legally protected species and features of interest within and immediately surrounding the Site within a 1 km radius. The central grid reference of the Site was used as the central point of all searches. The baseline conditions were based on a review of existing available information.
- 6.2.12 The Verification Survey of the Site was carried out on the 23rd March 2018 and weather conditions were overcast, still, dry and cold. The field survey comprised a walkover of the land and habitats present, with a classification of the habitats to Phase 1 Habitat Survey standard, following the 'Preliminary Ecological Appraisal' methodology as set out in the 'Guidelines for Preliminary Ecological Appraisal' (Chartered Institute of Ecology and Environmental Management [CIEEM], 2017), which is a development of the method described in the 'Handbook for Phase 1 Habitat Survey – a technique for environmental audit' (Joint Nature Conservation Committee, 2010).
- 6.2.13 The potential of the Site to support legally protected or national/local BAP species was assessed from field observations carried out during the Site walkover and combined with the results of the desk top study. The likelihood of occurrence of any protected and/or invasive species is ranked as follows and relies on habitat suitability and an evaluation of existing data:
- **Negligible** - while presence cannot be absolutely discounted, the Site includes very limited or poor quality habitat for a particular species or species group. There may be no local returns from a data search and the surrounding habitats are considered unlikely to support wider populations of a species/species group. The Site may also be outside or peripheral to the known natural range for a species/species group;
 - **Low** - habitats within the Site are of poor to moderate quality for a given species/species group. There are few or no returns from the data search, but presence cannot be discounted on the basis of national distribution, the nature of surrounding habitats, habitat fragmentation or recent on-Site disturbance, etc.;
 - **Medium** - habitats within the Site are of moderate quality providing opportunities for a given species/species group. Desk study reveals local occurrence or Site is within the national distribution and with suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, habitat isolation, and/or disturbance; and

- **High** - habitats within the Site are of high quality for a given species/species group. Desk- top study provides evidence of local occurrence. The Site is within/peripheral to a national or regional stronghold and/or has good quality surrounding habitat and good connectivity.

6.2.14 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the Site. This is based on the suitability of the habitat, known distribution of the species in the local area (provided by data searches) and any direct evidence within the survey area. It should not be taken as providing a full and definitive survey of any protected species group. It is only representative of the time the survey was carried out. Additional surveys may be recommended if, on the basis of the preliminary assessment or during subsequent surveys, it is considered reasonably likely that protected species may be present. Desk study data is not likely to be exhaustive and it is therefore possible that protected species not identified during the data search do in fact occur within the vicinity of the Site.

Results

6.2.15 The desk study revealed there are no Statutory Designated Sites located within the search area.

6.2.16 The desk study highlighted the presence of several Non-Statutory Designated Sites within the search area. These Sites are detailed below;

- Slade Covert Local Wildlife Site (LWS): This 7.5ha semi-natural deciduous woodland is located approximately 1km east of Site and includes sycamore, ash, cherry and wych elm alongside ground flora including dog's mercury, and herb bennett.
- Old Astwick Village Moat Local Wildlife Site (LWS): This LWS is located approximately 1km north of Site and comprises a moat in the centre of the ancient village of Astwick supporting a variety of habitats including swamp vegetation, marshy grassland and scrub.
- Croughton Spinney Local Wildlife Site (LWS): This 1ha small patch of woodland, possibly an ancient remnant, is located approximately 730m north of the Site. The woodland is dominated by ash with occasional scots pine with a diverse scrub layer and bound by an ancient hedgerow. Scrub species present include hawthorn, midland thorn, elder crab apple), field maple, wayfaring tree, dogwood, privet blackthorn, buckthorn, and bramble.
- Croughton Spring Copse Local Wildlife Site (LWS): This 1.3ha patch of wet woodland dominated by planted sycamore and ash alongside wych elm, oak and beech is located approximately 1.3km west of the Site on a spring. Despite a lot of rank undergrowth the Site has a diverse ground flora including dog's mercury, enchanter's-nightshade and lords and ladies.
- The Moors Local Wildlife Site (LWS): This 1.1ha Site comprises a dredged pond surrounded by derelict woodland and located approximately 1.2km west of the Site. Although recently dredged at the time of survey a rich assemblage of submerged vegetation including lesser pond weed, spiked milfoil, water mint and bittersweet.

- Croughton Pocket Park: The Park is located approximately 1.4km west of the Site and covers 0.2ha. No further details were available.

6.2.17 A number of Potential Wildlife Sites are present in the vicinity of the Site. These Sites are either known or thought to be of higher biodiversity value than the average countryside but have not been confirmed to be of Local Wildlife Site standard. These include a large area of land (known as Site No.154) associated with RAF Croughton approximately 250m south of the Site and covering 190ha. Another Site known as Site no. 151 covering 2.5ha is located approximately 1.2km north of the Site. The Site itself is located within a Potential Wildlife Site which covers 30ha, incorporating large agricultural field parcels to the north and west of the Site.

Biodiversity Action Plans

6.2.18 Consultation with Natural England's 'Magic Map' website identified numerous small patches of UKBAP Deciduous Woodland within the search area. The closest was located on the Site along the western boundary, associated with the wet woodland habitat onsite.

6.2.19 A single small patch of Traditional Orchard was located approximately 1.4km south east of the Site associated with the hamlet of Juniper Hill.

Habitats

Quarry Void

6.2.20 The large central void which dominated the Site held water at the time of survey from recent heavy snow and rainfall (See Target Note 1). No distinct marginal vegetation such as that recorded in the previous report was present. Large portions of the margins comprised bare ground, a result of infilling and re-profiling activities.

6.2.21 A pump was located within the void although it was not currently working because of the recent inclement weather.

Poor Semi-Improved Grassland

6.2.22 The poor semi-improved grassland encircling the void was the same as for the previous survey. The sward was universally short and species composition similar to the previous survey with cocksfoot and false oat grass dominating alongside common and widespread herbs and forbs. Evidence of seasonal flooding was present with numerous flushes of hard rush along the southern portion of the grass land in close proximity to a wet ditch.

Wet Woodlands

6.2.23 The wet woodland along the western boundary was as for the previous survey.

Scattered Trees

6.2.24 Two small, recently planted stands of trees not identified in the previous study were located in the south-east portion of the Site near the Site entrance. All trees were semi-mature and included English oak, field maple and cherry with occasional shrub species including hawthorn.

Ground flora was limited to common shade tolerant species including common nettle and ground ivy.

- 6.2.25 A further small stand merged into the wet woodland area around the south-east corner of the quarry void and comprised similar species to the two other stands detailed above with the addition of ash.

Wet Ditch

- 6.2.26 A wet ditch, not identified in the previous study, was located parallel to the southern boundary hedge and stretched across a large portion of the boundary. The ditch had steep banks and the channel which was frequently inundated with bramble alongside tall ruderals including teasel, common hogweed and willow herbs on the banks. A line of immature ash had recently been planted along the southern bank of the ditch.

Species Poor Hedge

- 6.2.27 A species poor over mature hedge was located along the southern boundary. The hedge was dominated by blackthorn with frequent hazel interspersed throughout.

Earth Mounds/Debris Piles

- 6.2.28 A large earth mound was located along a stretch of the southern bank of the quarry void from bank profiling and infilling operations. A number of other smaller mounds and debris piles were present across the Site, predominantly in the south eastern section of the Site near the Site entrance.

Protected Species

Avifauna

- 6.2.29 Consultation with Northamptonshire Biological Records Centre (NBRC) identified records of notable/protected bird species in the vicinity of the Site. Species recorded include skylark, yellowhammer, hobby, kestrel, linnet, curlew, dunnock and shelduck. A pair of little ringed plover were recorded in the quarry void during the great crested newt survey undertaken by Turnstone Ecology in 2016.
- 6.2.30 During the Site survey a number of bird species were observed including red kite, wren black bird and carrion crow alongside black headed gull, coot and tufted duck utilising the wet quarry void.
- 6.2.31 No ground nesting birds were observed during the survey and the grassland is considered unsuitable due to management maintaining a short sward within the grassland.
- 6.2.32 The Site supported breeding bird habitat in the form of wet woodlands, a boundary hedge and the small stands of trees. Although the quarry void was wet at the time of survey and supported some common wildfowl it is understood the void is usually dry with the pump operating 24hours a day. As such the void is not considered a valued ecological feature for bird species.

6.2.33 The Site is assessed as having 'low' potential to support notable bird species and due to the prevalence of similar habitat in the vicinity it is assessed as being of 'local' value only.

Amphibians

6.2.34 Consultation revealed no amphibian records within the search area. A previous great crested newt (GCN) survey revealed GCN were absent from the Site. However, common frog, common toad and smooth newt were recorded in the ponds adjacent to the east and west of the Site. No amphibians were recorded onsite. As such the likely presence of notable amphibians within the Site is considered to be 'negligible'. However, the likely presence of common amphibians is considered 'low'.

Terrestrial Mammals

6.2.35 Consultation with NBRC identified records for badger and brown hare in the vicinity of the Site. Two records for badger were located within the adjacent RAF Croughton; the closest was located approximately 600m southwest of the Site. Brown hare have also been recorded within RAF Croughton and along the western boundary of the Site. No signs of badger or hare were identified during the survey.

6.2.36 The Site is considered sub optimal for hare with the grassland maintained at a short sward, therefore their likely presence is assessed as negligible.

6.2.37 The Site supports suitable habitat for badger within the woodland along the western boundary. This area will be retained as part of the proposed development. The likely presence of badger on Site is assessed as 'low' and with similar habitat in the vicinity, the Site's ecological value is assessed as of 'local' value only.

Bats

6.2.38 The previous survey 'confirmed presence' of bats onsite via the monthly monitoring undertaken in 2016. Bat droppings were observed on the entrance of bat boxes within the wet woodlands along the western boundary. The Site's value for bats was therefore assessed as moderate, with confirmed roosts on Site, and value for foraging and commuting bats.

Reptiles

6.2.39 No records for reptiles were identified following consultation with NBRC. Grassland on Site is maintained at a short sward via regular management, largely unsuitable for reptiles. The woodlands and associated margins and hedge features have some limited potential to provide foraging and basking opportunities for the species. It is understood these features will be retained. The likely presence of the species onsite is considered 'low'.

Invertebrates

6.2.40 Consultation identified records for a number of notable invertebrates within the vicinity of the Site. Species recorded included small heath dingy skipper grizzled skipper mouse moth and

lattice heath. No notable invertebrate species have been recorded onsite or observed during the survey.

- 6.2.41 The Site was predominantly species poor and dominated by managed, short sward grassland considered sub optimal for this species group. As such the likely presence of notable invertebrates is considered 'low'.

Flora

- 6.2.42 Consultation with NBRC identified records of notable flora within the vicinity of the Site. Basil Thyme, dwarf spurge, field scabious, corn mint, spiny restharrow, prickly poppy, night-flowering catchfly and spikey speedwell have all been recorded in land adjacent to the Site.

Water Vole

- 6.2.43 Consultation with NBRC identified two records for water vole in the vicinity of the Site. The closest record was associated with a drain within RAF Croughton approximately 630m west of the Site. A further record was located approximately 640m south east of the Site again within RAF Croughton.
- 6.2.44 The Site supported habitat considered suitable for this species in the form of the wet ditch in close proximity to the southern boundary however the nature and condition of the ditch were sub optimal for the species. The ditch was isolated and not connected to any ditches in the vicinity, starting and ending within the Site. It was also frequently inundated with dense bramble with no marginal, emergent or submerged vegetation. As such the likely presence of water vole on Site was considered as negligible.

Invasive Species

- 6.2.45 No records for invasive species were identified and no invasive species were identified during the survey.

Conclusions and Recommendations

Designated Sites

- 6.2.46 No statutory Sites were identified within the search area.
- 6.2.47 A number of Local Wildlife Sites were located in the vicinity of the Site, the closest being Croughton Spinney LWS, approximately 750m north of the Site. The development is not considered to have a significant impact on the surrounding LWS Sites due to relatively small scale of and nature of the development.

Habitats

- 6.2.48 The majority of the habitats on Site were species poor with limited ecological value and the proposals do not involve the loss of any habitat onsite. The only valuable habitat feature was the wet woodlands along the western boundary.

Wet Woodlands

6.2.49 The wet woodlands along the western boundary were identified as a feature of 'county' level importance in the previous survey and in its current state is still considered to be a feature of 'county' level importance. As such it is recommended that this habitat is retained and safeguarded. During Site operations, it is recommended that a minimum 10m buffer strip be retained between the woodland edge and the operational area. This area should be marked out with a suitable barrier and signage should be erected to mark out working limits. All Site operatives should be inducted as to their working limits with respect of the woodland. Post operations, it is recommended that the woodland be sensitively managed to promote the habitats. Recommendations include fencing the area off to prevent any impacts from grazing cattle, and rotational thinning of any scrub.

Protected Species*Bats*

- 6.2.50 The development is not anticipated to have any impact on the bat community present within the Site.
- 6.2.51 Bat presence has been confirmed on the Site within the wet woodlands along the western Site boundary in the previous study. The majority of this area will be retained and not impacted by the proposed development. A buffer from the retained woodland should be sufficient to prevent any impacts on the confirmed bat roosts. A full bat scoping survey of the area will be undertaken prior to works commencing on the creation of the pond.

Reptiles and Amphibians

- 6.2.52 The Site was dominated by managed grassland with a short sward which is not considered suitable habitat for reptiles. Furthermore, consultation revealed no records in the vicinity. However, in line with the previous management plan a precautionary approach is recommended and includes the following;
- Areas of coarse grassland, small stands of trees and debris piles across Site should be hand searched by a suitably qualified ecologist prior to any planned disturbance, dismantling or soil stripping; and,
 - Maintain short sward through regular mowing to discourage reptiles from colonising the Site.
- 6.2.53 The Site was found to have negligible value for notable amphibians, though it is anticipated that some common amphibians may utilise the Site. The above precautionary approach will also prevent any negative impacts on common amphibians.
- 6.2.54 A small attenuation feature pond will be created as part of the development proposals. Biodiversity enhancement the pond is encourage the establishment of a rich community of submerged, floating and emergent marginal plants providing suitable habitat for amphibians. We also recommend a buffer of approximately 5m is maintained around the pond to prevent poaching by grazing livestock. This buffer will be maintained as undisturbed rough grassland

with a long sward providing suitable terrestrial habitat for amphibians with sheltering and foraging opportunities.

Avifauna

- 6.2.55 It is not anticipated that the Site supports significant numbers of notable bird species. The quarry void in the past has been noted to support breeding little ringed plover. However, the void is usually devoid of water due to continuous pumping. As such the void is not considered to be an important ecological feature for this species group.
- 6.2.56 It is recommended that the grassland is maintained at a short sward to deter ground nesting birds during the construction (Infilling and dewatering) stage of the development. Any vegetation removal should be undertaken outside of the breeding bird season (March to September inclusive). However, should these works be required within the breeding bird season then a check for breeding birds will be undertaken by a suitably experienced surveyor prior (within 24 hours) to works commencing. If a nest (or nest in construction) is found, a suitable stand-off area will be maintained until the young have fledged.
- 6.2.57 In line with the NPPF, it is recommended that any proposed tree and shrub planting includes native fruit bearing specimens to increase foraging opportunities for birds within the Site. Species such as hazel, rowan and wild cherry.
- 6.2.58 The installation of 5 bird boxes on suitable trees across the Site is recommended to enhance breeding opportunities for birds across the Site.
- 6.2.59 In light of the findings of the Ecological Verification Survey it is envisaged that the proposed development would not result in adverse impacts on features of nature conservation interest in compliance with both Policy 18 of the adopted MWLP and the NPPG.

6.3 Landscape and Visual Impact

- 6.3.1 Policy 18 of the adopted MWLP seeks to "*ensure that the built development is of a design and layout that has regard to its visual appearance in the context of the local area*". This is then supplemented by Paragraph 7 of the NPPW (Appendix B) which states that there is a need to assess:

- a) the potential for design-led solutions to produce acceptable development, which respects landscape character;*
- b) the need to protect landscapes or designated areas of national importance, and*
- c) localised height restrictions.*

- 6.3.2 In assessing the impact of the proposed development on the landscape, reference is made to Northamptonshire's Environmental Character and Green Infrastructure Suite.
- 6.3.3 The proposed development Site is located within the Croughton Plateau. This is an elevated area of land in south east Northamptonshire that extends into neighbouring Oxfordshire. The plateau includes a consistent elevation of 130m AOD which is formed from a broad outcrop of Jurassic limestone. The flat land form combined with a limited tree cover and sparse settlement

pattern ensure that wide views and a sense of openness are characteristic of the plateau landscape.

- 6.3.4 The area is characterised by large and medium sized arable fields apart from a more intimate pastoral landscape evident in the vicinity of villages such as Charlton and Croughton. Hedgerows are showing signs of decline and developers are encouraged to maintain the network and to re-plant damaged or declining stretches. The US Airforce Communications Base at RAF Croughton imposes a distinctive utilitarian character to the local area, and the Base is a significant local landmark with its system of masts and receivers forming prominent and distinctive features on the horizons. Woodland and screen belts are not characteristic and where screening is required, more sensitive naturalistic broad leaf copses should be encouraged.
- 6.3.5 With arable farming being the prominent land use, there is limited wildlife interest across the plateau.
- 6.3.6 An assessment of the current landscape classification places it within the Limestone Plateau. The limestone plateau has open expansive and sometime exposed character with long distance views to wide horizons. This is interspaced with low hedgerows or stone walls and limited woodland and tree cover. The strategies identified are to preserve the openness of the landscape character.
- 6.3.7 The proposed development will alter the local landscape by restoring a previous water feature to agricultural land. Prior to the site being quarried, the land was in agricultural use.
- 6.3.8 The proposed sites levels will result in a gradually sloping landform rising from 118m AOD to 124.5m AOD. However, the proposed final contour level of 125m AOD in the centre of the site. The contours are designed to tie in with land to the north to present a final restored site that is sympathetic and not incongruous with its surroundings.
- 6.3.9 The Proposed Development will not give rise to significant impacts on either the landscape or give rise to adverse visual impacts that cannot be mitigated. The Proposed Development is therefore compliant with Policy 18 and 21 of the adopted MWLP and supplementary national guidance contained within the NPPW.

6.4 A Traffic and Transportation

- 6.4.1 A Transport Assessment (TA) was undertaken by David Tucker Associates (DTA) in 2012 in respect of a proposed commercial course fishery at the site. Although carried out 6 years ago many of the factors are still applicable to this application in respect of proposed HGV movements and the condition of the local highway network.
- 6.4.2 This Assessment was based on 144,000m³ of material for the infilling operation over a period of 3 years, which equated to 4800 loads/year. The TA noted that previous operations had not led to any identifiable operational or highway safety impact.
- 6.4.3 The 2012 TA also noted that:

In the context of the flows on the B4031, the level of traffic generated by the Site is extremely modest and equates to around 1% of the overall flows on the road throughout the day. Even if it the proposed development were considered to be generating "new" traffic, the impact in terms of highway safety and operation would not be material.

- 6.4.4 The 2012 TA therefore concluded that the proposed development would have no material impact on the safety or operation of the adjacent road network.
- 6.4.5 The current proposal would generate in the order of 3,786 loads/year over a 5-year period. This results in the equivalent of an average 1-2 loads per day.
- 6.4.6 Furthermore, there are no sensitive receptors identified between the Site and A43. There are such receptors to the west, but as noted above, existing measures are in place and enforced to prevent HGVs routing through the village.
- 6.4.7 The further importation of inert material and hence the increase in length of operations will have an immaterial impact having regard to the previous permitted use.
- 6.4.8 There have not been any adverse issues arising from operations at the Site over the last 15 years, and it is therefore concluded that no off-site improvements are necessary as a result of the current proposals.
- 6.4.9 As the HGV traffic generated from the Site will not be significantly greater than historic and permitted levels there is not expected to be any detrimental impact to highway safety or capacity.
- 6.4.10 The Site will utilise a long established existing access to the public highway. The proposed level of HGV movements will not result in any significant impact of the local highway network. The proposal will therefore be compliant with MWLP Policy 18.

6.5 Flood Risk Assessment

- 6.5.1 Policy 18 of the adopted MWLP seeks to secure against the "impacts on flood risk as well as the flow and quantity of the surface and ground water".
- 6.5.2 Appendix B of the NPPW further considers the impact of flood risk, warning that;

Considerations will include proximity of vulnerable surface and groundwater or aquifers...The suitability of locations subject to flooding with consequent issues relating to the management of potential risk posed to water quality from waste contamination, will also need particular care.

- 6.5.3 A Flood Risk Assessment for the proposed development has been carried out by Abington Consulting Engineers. The report dated 28 March 2018 can be found in Appendix 3. The Flood Risk Assessment has been carried out to assess the effects of flooding on the development and how the development might affect flood risk elsewhere. Consideration has been given to the following sources of flooding:

- Rivers
- Sea

- Run-off from land
- Groundwater
- Sewers
- Reservoirs, Canals and other artificial sources

6.5.4 A drainage strategy has been developed to demonstrate that surface water run-off can be managed satisfactorily and comply with the SUDS Hierarchy.

Sequential Test

6.5.5 The Environment Agency's flood plain map shows all of the Site falls within Flood Zone 1 which is described as having a 'low probability' of flooding respectively as defined in Table 1 in the NPPG (less than 1 in 1000 annual probability).

6.5.6 Table 2 in the NPPG lists inert waste landfill activity as a 'waste treatment' facility and would therefore be 'Less Vulnerable' development. The final use will be agriculture and is therefore also classed as 'Less Vulnerable'. Using the Sequential Test set out in the NPPG, Less Vulnerable uses are permitted in Flood Zone 1 and would therefore pass the Sequential Test.

Potential Sources of Flooding

6.5.7 The following mechanisms have been identified as potential sources of flooding:

- Fluvial flooding from the watercourse on the western boundary of the development.
- Surface water run-off from the development.
- Surface water run-off from areas adjacent to the site.
- Ground water.

6.5.8 There are no public surface water sewers in the area.

6.5.9 There are no reservoirs, canals or other artificial sources of flooding identified in the area other than the lake itself which might be a source of flood risk.

Appraisal of Sources of Flooding

Fluvial flooding

6.5.10 The Environment Agency's flood risk map shows the site is located in Flood Zone 1 which has a 'low' risk of flooding, typically less than 1 in 1000 year annual probability. Therefore, the development is not considered at any significant risk from fluvial flooding.

Surface water run-off from the development

6.5.11 In terms of rainfall run-off, the existing lake is effectively 'saturated' and therefore can be considered as entirely impermeable. However, the lake does provide some attenuation within the freeboard between the outlet invert and the top of bank. The limitation on discharge is provided by the existing 610mm diameter outfall pipe.

6.5.12 The existing footprint of the lake will be filled with inert waste. The FRA has assumed a worst-case scenario where the material imported is impermeable. As the attenuation from the existing lake will be lost, compensatory attenuation should be provided.

Surface water run-off from land adjacent to the site

6.5.13 The lake has a relatively small surface water run-off catchment as shown on the catchment drawing in Appendix 1 in the FRA. As the existing lake attenuates flows from this area and this will be lost when it is filled, compensatory attenuation should be provided.

Groundwater

6.5.14 The lake is primarily fed by groundwater and filling it with inert waste will force groundwater to divert around the lake. The Hydrogeological report accompanying the previous planning application demonstrates that there is no flood risk as a result of this.

Flood Risk Management Measures

6.5.15 The natural geology on site is shown on the mapping presented in Appendix 2 of the FRA. This shows that the bedrock is Bladon Member (limestone).

6.5.16 Although the original geology was probably permeable, most of the site is disturbed ground and has been backfilled with quarry waste. Therefore the permeability of the ground cannot be certain and is not considered reliable enough to be utilised for surface water disposal.

6.5.17 There are no public surface water sewers near to the site in which to discharge run-off.

6.5.18 There is watercourse draining the existing lake which can be used for surface water disposal.

6.5.19 The assessment has been carried out in compliance with NPPF and NPPG. The proposed development has been assessed against the Sequential Test as set out in the NPPG and the development complies with the requirements of this test as being appropriate or compatible development in Flood Zone 1.

6.5.20 Table 6.5.1 below is an extract from 'SUDS a Practical Guide published by the Environment Agency Thames Region (2006). It sets out the Sustainable Drainage Systems (SUDS) hierarchy in terms of the most to least sustainable solutions.

<i>Most Sustainable</i>	<i>SUDS technique</i>	<i>Flood Reduction</i>	<i>Pollution Reduction</i>	<i>Landscape & Wildlife Benefit</i>
	Living roofs	✓	✓	✓
	Basins and ponds - Constructed wetlands - Balancing ponds - Detention basins - Retention ponds	✓	✓	✓
	Filter strips and swales	✓	✓	✓
	Infiltration devices - soakaways - infiltration trenches and basins	✓	✓	✓
	Permeable surfaces and filter drains - gravelled areas - solid paving blocks - porous paviers	✓	✓	
	Tanked systems - over-sized pipes/tanks - storms cells	✓		
	<i>Least Sustainable</i>			

Figure 6.5.1: SUDS Hierarchy

6.5.21 The most appropriate surface water disposal techniques should be selected from this table once site constraints and disposal options have been established. Where appropriate, more than one design solution should be chosen.

Proposed Drainage Solution

6.5.22 The rate of discharge from the lake is limited by the existing 610mm diameter outfall pipe. When the lake is pumped out to make way for the waste filling operation, the water from the lake should be pumped down the outfall and therefore the existing maximum discharge rate will not be exceeded. This operation should be carried out during a period of dry weather when there is a low risk of flooding.

6.5.23 In advance of backfilling the lake, a new attenuation pond and perimeter ditches should be constructed to intercept any run-off. The pond should be in the form of the permanent attenuation pond proposed for the final drainage scheme.

6.5.24 In order to intercept the run-off from the final landform, perimeter ditches should be provided as shown on the propose drainage drawing presented in Appendix 1 of the FRA. The ditches are designed to intercept surface water run-off from the whole of the catchment of the existing lake. The ditches will connect to the attenuation pond.

6.5.25 The pond will utilise a 610mm diameter outfall pipe to mimic the existing discharge from the catchment. This will connect to the existing watercourse as before.

6.5.26 The catchment discharging into the proposed attenuation pond consists of three areas:

- 1) Existing greenfield to the east of the development.

- 2) Existing quarried area to the north of the development.
- 3) The proposed landfill area.

6.5.27 The Institute of Hydrology's report 124 'Flood Estimation for Small Catchments' has been used to derive the green-field run-off rate for the existing greenfield area to the east of the development. Q100 has been calculated to be 384.7 l/s for this area. In order to feed this into the attenuation calculations, an equivalent impermeable area has been calculated as 2.03 ha based upon an impermeable area generating an equivalent Q100 flow.

6.5.28 The existing quarried area and the proposed landfill area are both assumed to be impermeable to simulate the worst case scenario in terms of impermeable fill. Therefore, the areas of these two parts of the catchment have been combined for the purposes of assessing the volume of surface water attenuation required.

6.5.29 The volume of water to be attenuated in the pond for the whole catchment has been calculated as 4610m³ for a 100 year storm event plus a 40% allowance for climate change. This is based on FEH data at the request of the LLFA.

Off Site Impacts and Proposed Mitigation Measures

6.5.30 There will be no increase in surface water run-off from the development site and therefore there will be no off site impact of from the development in respect of flood risk.

6.5.31 The owner will be responsible for maintaining the drainage system on site. All site drainage and will be regularly inspected for blockages, silting and functionality, and the appropriate remedial works undertaken after inspection.

Conclusions

6.5.32 The development has been shown to comply with the requirements of the Sequential Test.

6.5.33 The provision of a new balancing pond will provide attenuation equivalent to that provided by the original lake.

6.5.34 Appropriate drainage management will ensure that the development will be safe from surface water run-off and there will be no increased run-off from the development.

6.5.35 The surface water drainage proposals follow the requirements of the SUDS Hierarchy.

6.5.36 The Proposed Development is therefore compliant with Policy 18 of the adopted MWLP and national guidance on flood risk.

6.6 Noise

6.6.1 Policy 18 of the adopted MWLP states that it is necessary to minimise noise at any proposed development. Appendix B of the NPPW states that;

Considerations will include the proximity to sensitive receptors. The operation of large waste management facilities in particular can produce noise affecting both the

inside and outside of buildings, including noise and vibration from goods vehicle traffic movements to and from a Site. Intermittent and sustained operating noise may be a problem if not properly managed particularly if night time working is involved.

- 6.6.2 The nearest residential receptors are located within 100m of the Site. A large part of the infilling operation will be carried out within the redundant quarry void. Levels across the site will then be raised to achieve the proposed landform. There is an existing bund along the southern edge of the site that assists in providing noise mitigation. This will be retained until the final restoration phase, at which point it will be levelled across the site.
- 6.6.3 Noise assessments have previously been carried out and submitted with previous planning applications referred to in Section 2. The recent operations have not caused any adverse impact on the amenity of the closest residential dwellings.
- 6.6.4 Access into the Site for the purposes of tipping the imported inert infill will be via the existing highways access and then via a short section of temporary track to be constructed out of crushed stone, topped with road planings directly into the redundant quarry.
- 6.6.5 Most of the imported inert infill will be tipped directly into the infill Site and levelled. If the loads contain a percentage of top soil, the load will be screened. The screener will be similar to the screening equipment recently utilised on the infill Site located to the north.
- 6.6.6 Noise will be monitored during the infilling phase to ensure that the noise levels are acceptable and do not cause any unacceptable impact on the residential amenity of the dwellings at Astwick.
- 6.6.7 The Proposed Development is therefore compliant with MWLP Policy 18 and national planning guidance on noise.

6.7 Dust

- 6.7.1 Policy 18 of the Adopted MWLP also requires consideration of the risk of dust arising from the proposed waste management development. This is echoed in the NPPW which states that;
- Consideration will include the proximity of sensitive receptors, including ecological as well as human receptors, and the extent to which adverse emissions can be controlled through the use of appropriate and well-maintained and managed equipment and vehicles.*
- 6.7.2 The infilling operation will not create any unacceptable levels of dust. All roadways will either be appropriately surfaced. A bowser will be retained on site to dampen surfaces in extremely dry weather conditions as a precaution.
- 6.7.3 The prevailing wind will be blowing across the development Site, away from the residential dwellings in Astwick. Therefore, there would be no risk of any dust impacting on the residential amenity of those dwellings, even in the unlikely event that any dust was created.
- 6.7.4 The type of waste handled and the proposed operations should not give rise to dust problems.
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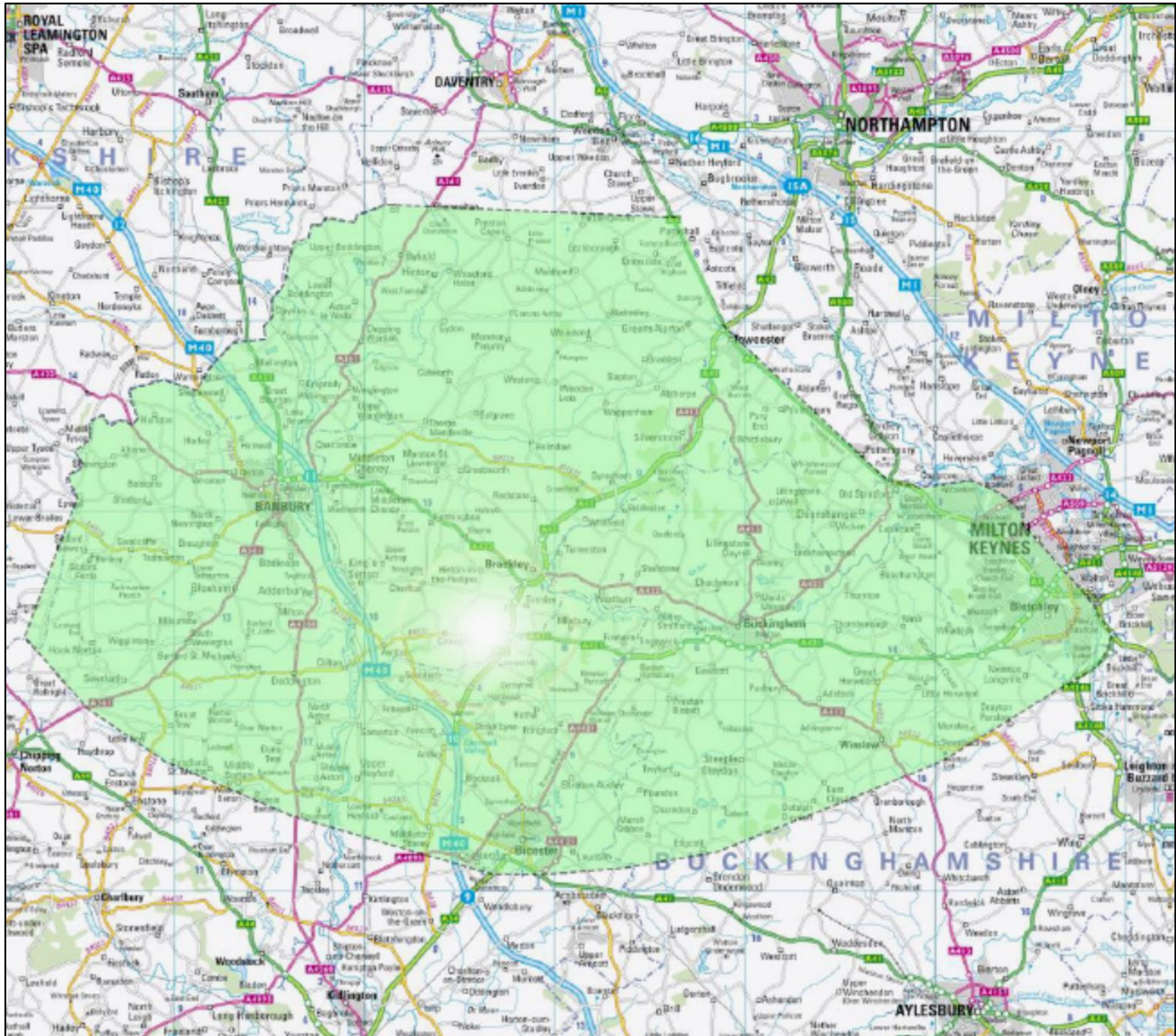
6.8 Design and Access

- 6.8.1 The Proposed Development does not include any built development and only mobile plant will be deployed on Site. As a result, there are no relevant design matters that require consideration as part of this application.
- 6.8.2 Access to the site is via a well-established access to the public highway which has been used in connection with previous permitted development at similar levels to those proposed. There are no highway safety concerns.

7 CONCLUSIONS

- 7.1.1 The proposed development has been assessed against the main policies of the MWLP and other relevant material considerations and is compliant in all respects.
- 7.1.2 The proposal seeks to fully and properly restore a disused quarry. The inert waste will be sourced from the local area. It is considered that the proposal should be regarded primarily as restoration of a former quarry and would therefore fully accord with Policy 14 of the MWLP.
- 7.1.3 The proposed additional inert landfill capacity will help to meet the shortfall in future waste management capacity for inert waste disposal.
- 7.1.4 The potential traffic impacts of the proposal have been assessed on a worst-case scenario basis and have found to be acceptable.
- 7.1.5 There will no adverse impacts on hydrogeology and the proposal will not cause any increased flood risk.
- 7.1.6 The proposal will not give rise to unacceptable impacts as a result of additional noise or dust generation. There will also be no unacceptable impacts upon features of nature conservation interest or landscape or visual issues.
- 7.1.7 The Proposed Development is therefore considered to constitute sustainable development and is compliant with the Development Plan and the requirements of a suite of national policy including the NPPF, NPPG and NPPW.

APPENDIX 1: CATCHMENT PLAN



APPENDIX 2: VERIFICATION SURVEY

APPENDIX 3: FLOOD RISK ASSESSMENT