

8.0 CHAPTER 8 – LANDSCAPE ASSESSMENT

8.1 Introduction and Current Site Setting

Across the footprint of the integrated waste management facility (IWMF), quarrying and restoration operations within Site A2 has resulted in the loss of the former airfield runway(s), an aircraft Hangar, airfield buildings, and agricultural fields that were originally present at the site – leaving predominantly bare ground.

The Site A2 quarrying operations have retained the majority of the woodland(s) tree preservation order (TPO), although some individual and groups of TPO trees were removed. Areas of Open Habitat have been established adjacent to Woodhouse Farm for Great Crested Newts, by stripping agricultural soils from the field due east of Woodhouse Farm (0.8 ha), and a hedgerow has been relocated from the Site A2/IWMF area into Wayfarer's Field. The overlapping footprint of Site A2 and IWMF areas has resulted in the implementation of shared ecological mitigation measures.

Quarrying operations have ceased within Site A2 and are now focussed within Site A3 and A4 – to the northeast of the IWMF site. Across the footprint of Site A2, quarry restoration works are ongoing, and within the IWMF footprint area, overburden has been stockpiled.

8.2 Landscape Baseline Conditions 2015

The only changes in the baseline situation are that Hangar No 2 has already been removed, together with an ancillary building to its north and associated woody vegetation, and arable land and hard surfaced areas of the former airfield runways to facilitate the permitted quarrying operations by Blackwater Aggregates. On 9 February 2012 planning permission (ESS/32/11/BTE) was granted to Blackwater Aggregates for the extension of its quarrying operations into an area known as "Site A2" which overlaps and incorporates a significant area of the IWMF footprint.

The application was described as follows:

"Extraction of an estimated reserve of 900,000 tonnes of sand and gravel and retention of existing access onto the A120, private haul road, sand and gravel processing plant, ready mixed concrete plant, bagging plant, dry silo mortar plant and water management system, internal haul roads and recontouring of existing extraction area (known as Site R in Minerals Local Plan) with restoration to a combination of agriculture, woodland, nature conservation, water lagoons and to levels appropriate to safeguard implementation of planning permission ESS/37/08/BTE (Integrated Waste Management Facility)".

In addition, planning permission was granted in March 2015 for the extension of quarrying operations into Site A3 and A4 (ESS/03/14/BTE) to the north of the IWMF site for the following:

"Extraction of an estimated reserve of 3 million tonnes of sand and gravel (from Site A3 and A4 as identified in the Pre-Submission Draft Replacement Minerals Local Plan) and retention of existing access onto the A120, private haul road, sand and gravel processing plant, ready mixed concrete plant, bagging plant, dry silo mortar plant and water management system, internal haul roads and recontouring of existing extraction areas (Sites R and A2) with restoration to a combination of agriculture, woodland, biodiversity, water lagoons and to levels appropriate to safeguard implementation of planning permission ESS/37/08/BTE (Integrated Waste Management Facility)."

The Environmental Impact Assessment (EIA) submitted with the application(s) took into account the requirements of the Minerals Local Plan and considered the cumulative impacts

associated with its development against Site A2, Site A3 and A4 and the unimplemented IWMF planning permission.

Whilst the development of Site A2 has resulted in a localised change in ground levels in and around the vicinity of the IWMF site, this would be in line with the Site Specific Issues within the Minerals Local Plan, stated as follows:

“Careful consideration has been given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and would blend with the levels and planting of the strategic waste management development (Ref ESS/37/08/BTE) if implemented.”

Recent and ongoing quarrying operations in and around the IWMF have resulted in a change in landform, but have not affected the overall landscape mitigation strategy associated with its development.

A report dated July 2015 by Hankinson Duckett Associates reconsidered the Landscape and Visual Impact Assessment (LVIA) in relation to the original planning application and was submitted to Essex County Council with GFC's Section 73 application and Submission of Details in July 2015 (document “S5 – Landscape”); this report is reproduced in full within this Addendum ES as Appendix A5. The following descriptions and analyses draw upon the results of that study and report. Where this report discusses the proposed treatment of the stainless steel stack, the cladding to the buildings, and the green (sedum) roof, these details were also submitted with GFC's July 2015 Section 73 application and are reproduced immediately following this Chapter of the Addendum ES as Appendices 8B (Stack Cladding details), 8C (Building Cladding) and 8D (Green/sedum roof).

8.2.1 Landscape Character

Changes have taken place to the landscape character publication at a national level (now published as a web-based resource), but other than this, the description of the baseline landscape character at the regional and district level has not changed from the 2008 Landscape and Visual Impact Assessment (LVIA). The only changes to the description of landscape character at the local level are changes in the permitted and proposed quantities of sand and gravel to be extracted in the local area. It is proposed that Bradwell Quarry will continue to expand, but this would be followed by an ongoing programme of restoration once extraction has ceased. The landscape quality of the study area was assessed as Good (Category 3) to Ordinary (Category 4) and although this assessment has not changed in the intervening period, it is anticipated that landscape quality should improve in the long term with the implementation of planting proposals not only within the red line boundary but also as part of the restoration proposals for the worked out areas of sand and gravel extraction.

Drawings showing details of the soft landscape proposals, as per the requirements of planning condition No. 57, were submitted with GFC's July 2015 Section 73 application and are reproduced immediately following this Chapter of the Addendum ES as Appendix 8E.

8.2.2 Visual Receptors

The current views experienced by the principal visual receptors within the vicinity of the site as described in Tables 8-4, 8-5, 8-6 and 8-7 of the original LVIA have only changed where receptors are likely to have views of the recently extended quarrying operations. Sand and gravel extraction is now ongoing on the land between some visual receptors and the site of the proposed IWMF. Otherwise, the descriptions of views as described in the baseline of the LVIA have not changed.

8.2.3 Landscape Designations and Other Landscape Elements

The Regional Strategy for the East of England was revoked in January 2013, and the Braintree District Local Plan (BLP) Review has been superseded by the Core Strategy (adopted in September 2011). Appendix 1 of the Core Strategy lists those BLP Review policies that have been replaced by Core Strategy Policies. Policy RLP79 regarding Special Landscape Area has been replaced by Core Strategy Policy CS8 Natural Environment and Biodiversity, and Policy RLP78 regarding Countryside Protection has been replaced by Policy CS5 on Countryside. In Appendix 1 of the Core Strategy, there is not a direct replacement for Policy RLP87 on Protected Lanes or Policy RLP81 which provided guidance on trees, woodlands, grasslands and hedgerows.

The baseline conditions described for topography, geology and hydrology have not changed from those reported in the LVIA. In the land use and vegetation section of the LVIA, the areas of grassland (1.5 ha) and arable land referred to have already been removed by quarrying operations and similarly, Hangar No 2 and two smaller dilapidated brick buildings to the northwest of the hangar as described in the historical and cultural components section have already been removed in advance of quarrying.

8.3 Updated Landscape Assessment 2015

8.3.1 Impact on Landscape Character

The LVIA assessed the effects of the proposed development on landscape character in the context of the existing site conditions and the condition of the surrounding landscape at a baseline of June 2008. Since June 2008, permitted quarrying operations have taken place on the site, therefore the current baseline has seen a marked degree of change in the landscape since the previous baseline. This assessment has therefore looked at the conditions on site as they currently exist (at March 2015) and assesses the degree of change from this time resulting from the development to determine the overall impact of the IWMF.

The published regional landscape character assessment for the area (Essex LCA, 2003) has not been updated since the LVIA was written, therefore the sensitivity of the Central Essex Farmlands landscape character area to change has not been altered from its original classification of low. The landscape has demonstrated that it is able to tolerate change, albeit temporarily, with the extraction of minerals, and the proposed restoration scheme following quarry operations will replace some of the distinctive qualities that contribute to landscape character.

The local landscape character area was identified as industrial, and although many of the site's features associated with its use as an airfield, and more recently as a storage facility, have been removed by the quarry operations, the site continues to exert an industrialising influence on the surrounding rural character. The landscape character of the study area continues to be able to accept large degrees of change. An industrial structure would be introduced into an industrial landscape, so it would not be out of keeping with the current character. Built development would be separated from the surrounding rural landscape by areas of existing and proposed woodland.

8.3.2 Impact on Landscape Resource

The loss of existing vegetation on the site resulting from the construction of the IWMF would be unchanged from that previously assessed. Vegetation to the north of the former Hangar No 2 has already been removed as part of the Site A2 quarrying operations, together with the former small derelict airfield buildings (including the control tower) around which this vegetation was clustered. An area of approximately 1,400 m² has been removed from this location, as reported in the former LVIA, comprising group G1, together with trees T1,

T2 and T8. The main block of woodland along the southern edge of the site has not been affected by the current quarrying.

The total area of existing woodland to be removed as a result of the IWMF would be unchanged from 1.6 ha. The retained woodland would still be managed as previously proposed, to promote a greater age range in the trees retained and improve the woodland's ecological diversity, and the trees would continue to be monitored for any signs of stress arising from potential de-watering. The four mature oak trees on the northeast edge of the site (see T4 to T7 on Drawing 19-2B presented at the end of this Chapter) would still be retained with the revised scheme.

All trees within the red line boundary (including those mentioned above) are protected by Tree Preservation Order (Ref 11/2001 as issued by Braintree District Council) and any losses arising from the construction of the proposed IWMF would need to be mitigated with compensatory planting. The location of barrier fencing erected to adequately protect the retained trees from damage during the construction phase of the works is shown on Drawing 19-3B (presented at the end of this Chapter).

Quarrying operations within Site A2 have already resulted in the removal of the areas of grassland and Grade 3a arable land within the red line boundary (previously reported as 1.5 ha of grassland and 10.9 ha of arable land). A 250 m long hedgerow, that had been planted along the northern edge of the former runway, as part of the advanced works for Bradwell Quarry, has since been translocated during the Site A2 mineral operations to the Wayfarer's Field where it delineates the southeast boundary of the additional woodland planting. With some vegetation losses having already taken place with the quarrying, the magnitude of change on landscape resources is likely to be less than the Medium as assessed previously. Given the extent of the quarrying operations within Site A2, the magnitude of change on the current and proposed restored landform would be Low.

The short-term impact on the landscape character of the area was reported in the previous LVIA as Minor Adverse (based upon an assessment of Low sensitivity and Medium magnitude of change); this remains unchanged. Similarly, long-term landscape impacts on the wider landscape (the 'North Essex Claylands') were reported as Negligible; this assessment will also remain unchanged.

8.3.3 Visual Impact Assessment 2015

Although quarrying operations within Site A2 have now changed the baseline situation as it was reported previously in the 2008 LVIA which has resulted in quarrying and restoration operations taking place on land between some of the visual receptors and the site of the proposed IWMF, it is considered unlikely that the visual impacts on each receptor group arising from the proposals would be different from that reported previously in Tables 8-9 to 8-12 of the LVIA.

The LVIA concluded that the property of Deeks Cottage (Location R5 on Figure 8-4 presented at the end of this Chapter) was the only residential receptor likely to experience Moderate Adverse levels of visual impact as a result of the construction of the proposed IWMF. This property, and others along Cuthedge Lane, now have quarrying between them and the location of the proposed IWMF, so their visual amenity has, albeit temporarily, been reduced, but restoration is likely to contribute to screening of the proposed IWMF. In addition to Deeks Cottage, the residential properties of Haywards (R4), Herrings Farm (R6), Sheepcotes Farm (R11) and a limited number of properties on the eastern edge of Silver End (R12 and R13) were assessed as having Minor Adverse levels of visual impact as a result of the approved IWMF during construction, and these levels of visual impact are unlikely to be altered with the construction of the proposed IWMF.

The assessment of visual effects on users of public footpaths is also unlikely to change from that reported in the LVIA as a result of the proposed IWMF. The Moderate Adverse visual impacts at Year 1 for users of P2 and P6 (on Figure 8-4 presented at the end of this Chapter) would remain, with other paths in the area assessed as Minor Adverse. During operation of the IWMF, the levels of visual impacts experienced by footpath users would remain at Minor Adverse.

In summary, the low levels of visual impact would not be altered.

8.4 Cumulative Impact Assessment 2015

The landscape assessments set out within Chapter 8 of the EIA for the IWMF proposal were undertaken on the basis that the landscape mitigation measures would be integrated into the restoration proposals for the adjacent quarrying operations to screen long distance views of the IWMF buildings, i.e. the IWMF buildings would be lowered into the ground, sections of existing woodland would be retained around the perimeter of the site, new woodland and hedgerows would be planted and off-site compensatory habitats would be created, etc. These measures would also augment the landscape resource of the area. Where the IWMF's chimney extends above the surrounding woodland it will be clad in stainless steel to reflect and mirror the surrounding environment and make its appearance as unobtrusive as possible.

The planning application boundaries of the former Site A2 and existing Site A3 and A4 quarrying operations included the IWMF site to ensure that the 'Site Specific Issues to be Addressed' set out within Essex County Council's emerging Replacement Minerals Local Plan and adopted 2014 Minerals Local Plan were addressed, namely:

"Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and could blend with the levels and planting of the strategic waste management development (Ref ESS/37/08/BTE) if implemented."

The preparation of the Site A2 and Site A3 and A4 planning application(s) and EIA(s) captured changes in environmental legislation and present an assessment of the cumulative impacts most likely to arise should the IWMF be developed. When preparing the original EIA for the IWMF, it considered the cumulative effects of the IWMF's construction and operation alongside permitted quarrying operations within Bradwell Quarry which were planned to cease in 2022, i.e. considering the IWMF and quarrying operations. The cumulative impacts presented within the recent Site A2 and Site A3 and A4 EIAs (which extend quarrying operations in and around the IWMF site) considered the potential development (implementation) of the IWMF, i.e. quarrying operations and IWMF.

Similarly the future extension of quarrying operations across Bradwell Quarry into Site A5 (as a 'preferred' site) and Sites A6 and A7 (as 'reserve' sites) must provide a landform that blends with the surrounding topography and landscape mitigation proposals around the IWMF.

The potential stockpiling of overburden materials from within the footprint of the IWMF across New Field would provide materials which could be used to meet a predicted shortfall in restoration soils. The integrated use and retention of the overburden and restoration soils within Bradwell Quarry will require the temporary stockpiling of the materials across New Field and the creation of a temporary lagoon within the footprint of the existing Site A2 quarry. On a short term basis, the creation of the 'New Field Stockpile' and the formation of the temporary 'Sheepcotes Lagoon' would be integrated within the overall restoration scheme for Bradwell Quarry and implemented under standard operational practices. The overall design and arrangement of the stockpile would allow for the storage, retention and subsequent reuse of natural indigenous site won materials to be retained within the Site, rather than their excavation and transportation off-site for reuse or disposal. Original ground

levels in and around the Site are at or around 50 m AOD, and the maximum height and elevation of the stockpile within New Field will be limited to 8 m or 58 m AOD. However, the landscape impact associated with the stockpiling operations would be Low and of a temporary and short term nature (3 to 5 years). The mitigation proposals and residual effects of the stockpiling operations on either the IWMF or Bradwell Quarry would remain unchanged.

A recent study into the potential works for electricity cable and water abstraction and discharge pipelines to the IWMF was commissioned by GFC and the report by Hankinson Duckett Associates "Cable and Water Main Connections LVA" is presented immediately after this Chapter of the Addendum ES as Appendix 8A. With regard to the Landscape Impacts associated with the installation of these services, whilst they may result in the temporary loss of approximately 50 m of hedgerow, which would be reinstated through new planting, it was considered that the impacts associated with the works would be short term. Therefore, the overall impacts associated with the IWMF development from a landscape perspective are considered low resulting from the route(s) proposed.

It was also concluded in the most recent HDA Report (Appendix 8A – Section 5.2) that in terms of cumulative impact assessment from a landscape perspective, the EIA for the IWMF proposal and wider foreseeable developments in and around the Site have been considered and assessed.