

4.0 DESCRIPTION OF FORESEEABLE DEVELOPMENTS

4.1 Introduction

As part of the Regulation 22 request for further information, the Planning Inspectorate requires an updated Cumulative Impact Assessment (CIA) that identifies any likely significant effects occurring as a result of the proposed development with other reasonably foreseeable developments.

Due to the scale of the Gent Fairhead & Co Limited's (GFC's) landholdings and its connections with adjacent and surrounding landowners, the foreseeable developments that would affect any CIA today are predominantly associated with the ongoing quarrying and restoration operations across Bradwell Quarry and the IWMF services connections.

Since 2008, quarrying operations have progressed across Site A2 (with restoration operations ongoing) and commenced within Site A3 and A4. The integrated waste management facility (IWMF) site lies within the permitted areas of the Bradwell Quarry where current sand and gravel extraction with low level restoration to agriculture/biodiversity/water and woodland is anticipated to be completed by 2018; however, further 'preferred' and 'reserved' sites are allocated in the adopted 2014 Minerals Local Plan that would extend the life of the quarry, subject to detailed submission and approval to Essex County Council.

It is clear that the current situation is quite different to that which could have been known in 2008. Nevertheless, in responding to the Regulation 22, GFC has commissioned its consultants to review all past submissions in full, to update the ES, and to reconsider the CIA with regard to all current foreseeable developments, the details of which are outlined in this Section of the Addendum ES.

4.2 Electricity Underground Cable Connection from the IWMF to the National Grid

4.2.1 Historic Routing Alternatives for the Underground Cable Connection

The connection of the Rivenhall Airfield site to the national power networks has been discussed with the local electricity distribution network operator on many occasions since 2007. Prior to the permission for the IWMF, GFC's first planning application for a waste management facility (Reference ESS/38/06/BTE granted ECC 2008) comprised a Materials Recycling Facility, Mechanical Biological Treatment and Anaerobic Digestion (AD) and was entitled the "Recycling & Composting Facility". As such, the power export at that time was expected to be in the region of 10 to 12 MW; less than that now proposed by the IWMF. In discussions with the distribution network operator (DNO), which was EDF Energy at that time, it was understood that a connection was feasible in principle but that no detailed design work or confirmation could be undertaken until an order was placed to connect.

It is common in all commissions of significant connections to the mains services supply for electricity, water, gas and telecommunications, that network providers cannot determine exactly where services can be connected until they are confident that the proposed connection will definitely go ahead based on their re-assessment of the precise network demands at that time (which could be several years after planning permission for the connection project). The network provider is obliged to make a connection, but precise details of where and how cannot be finalised until such time as the project developer commits to making the connection by paying substantial development and connection fees. For example, after a project receives its planning permission it is possible that other projects may come forward and commence development (i.e. nearby residential or industrial development, solar or wind farms etc) thereby requiring the network provider to modify its equipment and mains services routes.

With regard to the waste management facility development projects on Rivenhall Airfield, in the first application (ESS/38/06/BTE) that included an electricity grid connection it was understood that such connection could be made where the national grid lines crossed GFC's site at the point where the access road crosses the river tributary at the entrance to the quarry processing area. At that point, it was expected that electricity from the generators would be transformed from 400V to 33kV for transmission to the National Grid. It was also made clear in the commercial offers made to GFC regarding this connection that the DNO (EDF at that time) would be responsible for connecting GFC to its network from an agreed location on GFC's land. EDF explained that, whilst it would need to perform a costly and lengthy network survey to establish the most suitable electrical connection point, it would nevertheless determine the best route, obtain all necessary permissions and consents or way-leaves, and make the connection.

With regard to the IWMF, which included the additional combined heat and power (CHP) facility and therefore the extra potential power export, the original Planning Application Supporting Statement (page PASS-28), and reinforced by the Regulation 19 Statement (19.5.3) dated December 2008, stated:

"The electricity supply company (EDF) will need to confirm by means of network survey the most suitable electrical connection point. However, it is most likely that the grid connection point will be at the transformer station just west of the Coggeshall/Kelvedon road, which is known to be suitable for the connection of 23.65 MW of generating capacity".

In the event that the electrical network survey indicates an alternative Grid connection point, then an alternative route along the access road or across open country may be necessary. The landowner GFC has been made aware of this possibility and has agreed to co-operate as necessary in providing wayleaves for the connection. EDF also has CPO powers if needed to make the connection."

At that time (2008), the route to this transformer was predominantly in GFC land control alongside Cuthedge Lane eastwards to Scrip's Farm from where only a short connection would be required on third-party agricultural land (one of GFC's group of landowners) of less than 1 km across agricultural fields (i.e. potentially limiting the overall environmental impact with a route running alongside field margins).

By the time of the Public Inquiry in September 2009, Steven Smith of Golder Associates (UK) Limited presented the updated position as given in a recent EDF Letter dated 24 July 2009. By considering their network in greater detail, EDF had decided that it was now more likely that a connection to its major substation at Braintree would be necessary. The 24 July 2009 letter read as follows:-

"EDF Energy Networks has confirmed that an underground cable could connect to high-voltage electricity sub-station in Braintree.

The conceptual assessment undertaken by EDF indicates that the IWMF would be connected to the sub-station using a 33kV cable extending a distance of approximately 8,500 m (4,250 m of which is assumed to be in verge, and 4,250m in carriageway). The proposed route of the underground cable would be subject to concluding necessary easements; however, EDF also has Compulsory Purchase Order (CPO) powers if needed to make the connection."

This historic review demonstrates why cable routes cannot be finalised until the developer is ready to make the connection, i.e. when all planning permission, financial and contractual arrangements have been satisfied to allow commencement of construction. In the design and planning of the waste management facility at Rivenhall Airfield, eight years have passed since the original consultation with the electricity network provider and three different points of connection have been considered and reviewed during that time.

4.2.2 Planning and Environmental Assessment of the Underground Cable Connection

In common with other similar power generation projects, when laid underground in Public Highway (whether pavement or verge) or within other open ground, the grid connection is Permitted Development under the original Town & County Planning Act (General Permitted Development) Order (1995) as amended. Today, this means it is Class B(a) Development by an Electricity Undertaking under Part 15 of the 2015 General Permitted Development Order (GPDO).

Early discussions with EDF confirmed that, provided the connection was underground, the GPDO would apply and that they would obtain any other land easement or other consents necessary to follow their preferred route. As explained above, the route could not be confirmed definitively until GFC was ready to proceed with the connection and place the order that would commit to funds. This is because the DNO cannot be sure of its network requirements until it has a definitive date on which the generator is ready to commence electricity supply. In the interim period since GFC's first discussions with EDF in 2007, apart from the change of DNO from EDF to UKPN, there have been three possible connection locations (discussed above) and there could have been additional off-takers and generators connecting to the same grid supply point during this 8-year period. The DNO is unable to confirm the exact connection point and the route until it is satisfied that the generator will build its generation facility. Whilst this remains the case today, because of the capacity of the Braintree Substation, GFC does not expect any future major change to this connection location.

Recently, it is understood that GFC has successfully entered into a Contract for Difference (CfD) with the Low Carbon Contracts Company (which administers the CfD Programme on behalf of the Department for Energy & Climate Change) for the sale of its electricity. As a condition of and prior to tendering for that Contract, GFC accepted a binding Grid Connection Offer from UKPN (the DNO) to connect at the Braintree Substation. In other words, GFC now has more certainty that it will be able to make the connection; the exact route of the connection is yet to be determined following detailed study of a number of options by the DNO.

This procedure and position has been explained in the series of applications and at the Public Inquiry. It is the DNO's responsibility to establish the connection to the IWMF, and it has the powers to do so. The Waste Planning Authority accepted this position, as did the Inspector at the 2009 Inquiry. Neither requested further information in this regard. It was appreciated that the construction of the IWMF would require 3 years and that construction of the grid connection could be carried out in 1 year; hence, there would be sufficient time during the early construction period to finalise the route of the grid connection, and to complete that connection in time for the first generation of electricity at the site.

The final outline planning route as presented to the 2009 Public Inquiry indicated that the 33kv cable would be laid underground for some 8.5 km "from the generation station to the Braintree Grid substation". Although a route map was not provided, this distance was assumed by the DNO to comprise of 2.5 km of GFC's Access Road and a further 6 km (maximum) on the A120 trunk road westwards to the substation just west of Galleys corner.

In terms of Environmental Impact, the project to be assessed is the laying of three ducts of 200 mm diameter or less in a single services trench approximately 1 m wide and up to 1.275 m deep. This cable duct was originally shown in a combined services trench in the typical cross-sectional construction drawings for the access road in the 2008 planning application drawings. The environmental impact of laying the cable within the site boundary was inherently assessed within the planning application as part of the access road construction.

Outside GFC's site boundary, the laying of the cables is covered by the GPDO, as explained above, and without knowledge of the ultimate route to be chosen by the UKPN, no detailed environmental impact assessment (EIA) could have been undertaken, and it had to be assumed that the route would be along the existing A120.

GFC understood that no further assessment could have been undertaken beyond the A120 entrance because of the considerable uncertainty about the potential (final) route.

Having explained GFC's position with regard to past environmental assessments, in the light of the recent Regulation 22 request, GFC has employed its proposed Independent Connection Provider (ICP), Green Frog Connect Ltd, to assess a number of potential ("most likely") route options between the IWMF and the Grid substation at Braintree, along with GFC's land agent and environmental consultants, in order to agree and assess the potential environmental impacts and proposed mitigation measures.

New environmental statements (ESs) regarding the most likely electricity cable route are presented within each of the following relevant Chapters of this Addendum ES. Where appropriate, the updated ES is followed immediately by supporting appendices, including reports by consultants providing their detailed assessments.

The electricity cable installation statement is presented within this chapter of the Addendum ES as Appendix 4A.

4.3 River Blackwater Abstraction and Discharge Pipelines

4.3.1 Water Management at the IWMF – Current Permissions

Water is required by the IWMF to operate the AD plant and the Mechanical Biological Treatment (MBT) plant, and as boiler water for the CHP plant, and the Pulp Plant. In addition, small quantities of water are required for operation of the Material Recycling Facility and for the welfare facilities at the IWMF.

Mains water would be used to service the IWMF's offices, workshops, welfare facilities and the boiler water for the CHP plant. A small 150 mm diameter mains water supply currently serves the Woodhouse Farm complex and the old World War II hanger and the mains line still passes through the IWMF footprint area; this will be easily diverted by minor local works. The remaining water requirement will be secured by abstraction from the River Blackwater, followed by storage in lagoons formed by the IWMF construction and the mineral extraction restoration proposals, and finally by recirculation of water on site.

The requirement for water and the disposal of water at site was considered in detail, as part of the original planning application (Golder, 2008) and as part of the detailed site design.

The EIA, which accompanied the original planning application, considered abstraction of water from the River Blackwater on the basis that the efficient operations at the proposed wastewater treatment plant (WWTP) within the IWMF would not require discharge of return effluent to the River. However, it continues to be the case that the River Blackwater will be used as the primary water source of non-potable water for industrial use at the site. At present, there is no discharge licence or permission to pump treated effluent into the river.

Abstraction and discharge licences are issued and regulated by the Environment Agency. GFC holds an existing licence from the Environment Agency (no. AN/037/0031/001) to abstract 250,000 m³ of water per year from the River Blackwater during the months November to March inclusive. The licence was issued in 2009, and states the following conditions:

- "water abstraction at NGR TL 8343 2223 from a pumping sump with two pumps with a combined capacity of not more than 100l/sec (NOTE: this point is on the

River Blackwater where the old access road to the former Blackwater Aggregates Coggeshal Pit quarry crosses the River Blackwater (ie in GFC's land ownership/control);

- *for the purpose of filling reservoirs for the subsequent purpose of process water for waste treatment, processing and recycling;*
- *the maximum quantity of water to be abstracted is not to exceed:*
 - 360 m³/hr;
 - 8,640 m³/day; and
 - 250,000 m³/yr.
- *no abstraction is permitted when the flow in the River Blackwater (as gauged by the Agency) at Appleford Bridge gauging station (NGR TL 845 158) is equal or less than 1,309l/sec (1.309 m³s⁻¹); and*
- *no abstraction shall take place until the Licence holder has provided a storage facility, capable of storing at least 250,000 m³ of water which is constructed or lined so that it remains impermeable."*

In this mode of operation, water discharged from the IWMF would be treated and recirculated for re-used within the various IWMF processes.

Mass balance calculations undertaken by Gent Fairhead, with support of their technical advisors SLR Consulting Ltd, shows that in this scenario the consumptive use of water would be about 500 m³/day to operate the IWMF (principally to sustain the pulp plant and to quench bottom ash, and partly within the AD and MBT plants). It is calculated that up to 1,500 m³/day of discharge water from the WWTP would be collected, treated and reused in the IWMF.

4.3.2 Water Management at the IWMF – Foreseeable Developments

Whilst abstraction and discharge licences are issued and regulated by the Environment Agency, in the case of the River Blackwater at Bradwell, the largest abstractor is the Essex & Suffolk Water Company (E&SW) owned by Northumbrian Water Limited (NWL). This is because, in order to ensure there is sufficient potable water running into its reservoirs at Abberton and Hanningfield, E&SW operate, in conjunction with the EA, a scheme of transfer known as The Ely Ouse to Essex Transfer Scheme (EOETS) that transfers water from the Ouse by man-made channels and pipelines to the headwaters of the Rivers Stour and Blackwater.

In joint discussions with E&SW and the EA over recent years, it has been made clear to GFC that both parties would need to agree any scheme of abstraction for GFC because of the priority and scale and of the E&SW licence. However, it has been confirmed informally by both parties that GFC's abstraction requirements should be feasible in principle, subject to detailed assessment, application and approval.

The option to apply for a discharge licence always exists and is currently being considered and designed by GFC based on its discussions with the EA and the E&SW. As GFC intends to make the formal application within a few weeks of the date of this Addendum ES, the draft designs that have been prepared very recently have been reviewed by GFC's environmental team, in order to prepare their ESs and CIAs. The abstraction and discharge licence application would be made to the Environment Agency, and will be subject to their detailed assessment and ultimate approval.

Any discharge application (for any UK site) must comply with the European Water Framework Directive, whereby any discharge must not have a detrimental effect on the receiving bodies existing water quality (i.e. it must be of an equivalent or cleaner standard than the existing water course). When an application for an abstraction or discharge licence is made

to the Environment Agency, it is intended that any potential net losses would be balanced against Abstraction Licence Serial Number AN/037/0031/001, i.e. the total net water demand would be no greater than the current permitted abstraction volume of 250,000 m³.

The existing (and any future) abstraction licence is controlled by the "Hands Off Flow" within the River Blackwater. This means that abstraction has to stop when the river flow falls below the particular flow that is set by the EA. The existing abstraction licence is seasonal, allowing abstraction throughout the winter; however, records indicate that the River Blackwater flows regularly above the Hands Off Flow during the summer. Therefore, in preparing the draft abstraction and discharge licence application, the arrangements associated with a constant all year round abstraction and discharge linked to the Hands Off Flow have been assessed. Essentially, this means that in times of drought the IWMF could contribute and support flows within the River Blackwater by discharging its effluent (that by design will be of an equivalent or higher quality than that in the river) at those times when abstraction ceases due to the Hands Off Flow having been reached in the River.

Considering the above, if an application was made to the Environment Agency (and permitted) to allow the all year round abstraction (linked to the Hands Off Flow) and constant discharge it would reduce the need/frequency for larger instantaneous peaks in abstraction and promote better management of water levels within the two lagoons on the IWMF site and within the restored adjacent quarry. The restored New Field Lagoon, part of previous mineral quarrying permissions, holds a variable capacity of fresh (surface) water in excess of 250,000 m³. Allowing for seasonal fluctuation in water level it could offer storage capacity of up to and in excess of 726,000 m³. In addition, the Upper Lagoon will be constructed in front of the IWMF buildings to provide storage for surface run-off and to control inputs to the IWMF; this will have a storage capacity of approximately 25,000 m³.

Essentially, the operation of a Closed Loop water management system from the IWMF to the River Blackwater will be proposed in the new application. In this proposal, abstraction of water from the River Blackwater and the return of cleaner water to maintain a water demand no greater than the current abstraction volume of 250,000 m³) would promote improved control in the management of water that is abstracted, stored and discharged to and from the Site.

GFC has been in discussions with the EA and E&SW for the past few years during its detailed design of the paper de-inking pulp plant and the associated wastewater treatment plant (WWTP). As a result, the sophisticated series of treatment processes now confirmed in the detailed design (as submitted to the planning authority with the Section 73 and submission of details application, and to the Environment Agency with the Environmental Permit application) will produce an effluent that is of an equivalent or cleaner quality than the incoming water abstracted directly from the river. Whilst this was always the intention of the originally permitted system (i.e. no need for return of treated effluent), the certainty of the final design and operating system allows consideration of other alternatives with regard to the methodology and use of river water.

Following completion of the detailed design for the IWMF, it is understood that GFC proposes to make the formal application for a second alternative abstraction and discharge system from/to the River Blackwater, compared with the currently permitted scheme.

4.3.3 Planning and Environmental Assessment of the Abstraction/Discharge Pipelines

GFC's abstraction licence states that the Purpose of Abstraction is for "filling reservoirs for the subsequent purpose of process water for waste treatment, processing and recycling". In the original planning application, water pipelines were indicated in service trenches in the cross-sectional detail of the proposed access road. The environmental assessment of the construction of the access road inherently considered the provision of the pipeline. Where the pipeline may not have been laid on the access road alignment, GFC has control over

two mineral quarry workings between the IWMF and the River Blackwater (namely Bradwell Quarry and Coggeshall Pit) such that the abstraction pipeline could be laid within disturbed and restored mineral workings, thereby not leading to any increased environmental impact.

As for the electricity cable and other statutory services, if laid underground in Public Highway (whether pavement or verge) or within other open ground by the statutory undertaker, water supply pipelines are Permitted Development under the original Town & County Planning Act (General Permitted Development) Order (1995) as amended. Today, this means that it is Class A Development by Water or Hydraulic Power Undertakings under Part 13 of the 2015 General Permitted Development Order (GPDO).

As this Regulation 22 submission requires consideration of “all foreseeable developments”, it must include projects that GFC is currently considering, even though they might be the subject of future application(s) details and are not strictly necessary to be permitted for the implementation of the current IWMF permission.

There are two possible routes for pipeline connections for the abstraction of water from the River Blackwater and subsequent pumping to water storage lagoons and control systems for the IWMF. There are no existing river water abstraction systems installed on the River Blackwater, or associated pipelines, for the purposes of extracting water for use at the IWMF, although as explained above GFC has held a license to abstract river water, as issued by the Environment Agency, for several years. On the basis of the two alternative schemes, there would be different proposed routes as follows:

- Route A – Based on existing abstraction licence, i.e. abstraction pipeline only; and
- Route B – Based on the proposed abstraction and discharge licence application, i.e. abstraction and discharge pipelines.

4.3.4 Route A – Possible River Abstraction Pipeline from Existing Abstraction Point

The existing river abstraction license location (there is currently no abstraction hardware at present) is at the footbridge over the River Blackwater on the old access road (Public Footpath No 72/33) to the former Coggeshall Sand & Gravel Pit. If GFC ultimately connects to this point (and its preferred option is to use its access road route as explained below), through its shared ownership of Blackwater Aggregates it would be able to route the pipeline through land effectively under its control.

Initially, the pipeline would pass beneath or immediately alongside the old concrete access road into Coggeshall Pit. It would then run south of the public footpath (No 22 - The Essex Way) along the northern edge to the northeast corner of Coggeshall Pit from where it will turn sharp left to head south and then southwest just inside the western edge of Coggeshall Pit. GFC's land control would permit the pipeline to be placed just within the restored workings of the quarry or, if practicalities do now allow, just outside in the edge of the virgin agricultural field to the west.

Passing under Cuthedge Lane, the pipeline would continue south-westwards inside the edge of the agricultural field that surrounds Herons Farm, and then straight across restored agricultural quarry in the old mineral extraction area Site R, avoiding areas of new planting, proposed landscaping and hedgerows by skirting around these features and the existing silt ponds, until it reaches the access road to the IWMF, just to the southeast of Maxey's Spring. From this point, the pipeline would be laid within the construction of the new access road up to its connection into the IWMF. On this basis, 1.7 km of pipeline would be laid in agricultural fields prior to its inclusion within the access road.

4.3.5 Route B - Proposed River Abstraction & Discharge Pipelines to new Abstraction Point

The alternative pipeline route is based on a design and application that it is understood GFC may make in the next few weeks (e.g. first quarter 2016), although the operation of the IWMF is not dependent upon this scheme. As this alternative would result in better husbandry of river water resources in the river and the IWMF, the single pipeline trench (1.6 m wide) would therefore include two abstraction mains (one at 90 mm diameter and one at 250 mm diameter) and one discharge main (at 90 mm diameter). The alternative scheme would comprise both pumping of fresh water from the River to the IWMF via the abstraction mains, and pumping of treated clean effluent back to the River from the IWMF via the one discharge main.

Under the proposed scheme, a new abstraction point and, separately, a discharge point would be constructed on the River Blackwater some 15 m apart and upstream of an existing weir (at Grid Ref TL 8183 2267). These new structures would be approximately 300 m east of the existing site access road Bailey Bridge that crosses the River Blackwater just south of the A120. From this point southwards and south-eastwards the pipelines would be laid in the site access road for the whole of its remaining length to the IWMF. Where the proposed pipelines cross public highway in 2 locations (namely where the existing access road crosses Church Road and Ash Lane) using trenchless construction techniques such as directional drilling, rather than open trenching.

A water main installation statement is presented within this chapter of the Addendum ES as Appendix 4B.

4.4 Mineral Extraction and Restoration – On-going Operations

4.4.1 Site A2

On 9 February 2012 planning permission (ESS/32/11/BTE) was granted to Blackwater Aggregates for the Minerals Local Plan extraction area known as “A2” namely:

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).

Whilst the development of Site A2 has resulted in a localised change in ground levels in and around the vicinity of the Site, in line with the Site Specific Issues to be Addressed within Essex County Council’s emerging Replacement Minerals Local Plan, it was stated that: “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”.

In developing the detailed planning application and EIA for Site A2, the assessment considered baseline conditions established by the permissions already obtained for the existing operations at Bradwell Quarry and where relevant, other planning permissions (namely the IWMF) to minimise and mitigate impacts from Site A2 equal to or less than the conditions benchmarked and approved by the Planning Authority.

It was fully recognised that a valid unimplemented planning permission for the IWMF overlapped Site A2. Because this planning permission could be implemented during the life of the mineral proposals related to Site A2; the cumulative impacts of its implementation during the life of the mineral proposals were assessed and addressed within the ESs for Site A2.

The grant of planning permission (ESS/32/11/BTE) for Site A2, underpins the fact that the environmental baseline for the IWMF and its cumulative impact (subject to implementation) was considered and assessed within the local environmental setting at that time (2011).

4.4.2 Site A3 and A4

On 26 March 2015 planning permission (ESS/24/14/BTE) was granted to Blackwater Aggregates for the Minerals Local Plant extraction area known as "A3 & A4" namely:

Extraction of an estimated reserve of 3 million of sand and gravel (from Sites 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).

As before, the EIA submitted with this application took into account the requirements of the emerging Replacement Minerals Local Plan and considered the cumulative impacts associated with its development against Site A2 and the unimplemented IWMF planning permission.

4.4.3 New Field Stockpile & Sheepcotes Lagoon

In terms of the IWMF permission, the existing IWMF scheme is based on the removal of overburden from the site and transportation by road to disposal elsewhere off site. However, considering the ongoing quarrying and restoration operations across Bradwell Quarry, subject to an operational review by Blackwater Aggregates, there is the potential opportunity for overburden and sand and gravel from the IWMF site to be integrated into the wider quarrying and restoration scheme, thereby mitigating the need for the off site disposal of site won indigenous materials.

In the next few weeks (i.e. first quarter of 2016), it is understood that Blackwater Aggregates' will make an application for a variation of conditions to modify the existing restoration scheme for Bradwell Quarry under planning permission ESS/24/14/BTE (Site A3 and A4). The revised Site A3 and A4 restoration scheme will result in a variation a number of conditions, particularly restoration contours, an extension to the overall timescales of the quarrying and restoration operations (directly associated with the rate of sand and gravel extraction); a variation in the proposed sequencing and timescales of the proposed restoration scheme and the importation of sand and gravel and stockpiled overburden from the IWMF area of the Site (which lies within the Site A2 area of Bradwell Quarry).

The integrated use and retention of the overburden and restoration soils within Bradwell Quarry will result in site won indigenous restoration soils being excavated from the footprint of the IWMF site, which could be relocated and stockpiled across New Field in a planned and systematic manner over a 6 to 8 month period. As the stockpile is created, to maintain continuity of the existing quarrying operations, particularly the provision of a sustainable water supply to the screening and washing plant, a temporary lagoon would be created within the former Site A2 quarry 'Sheepcotes Lagoon'. The subsequent excavation of the stockpile and use of the overburden soils within the overall restoration scheme would be integrated into the final site restoration scheme over a period of 3 to 5 years.

It is understood that the proposed sequencing associated with the creation of the 'New Field Stockpile' and 'Sheepcotes Lagoon', and their integration with the development of the IWMF, will be presented by Blackwater Aggregates' in the near future within its application to the MPA.

4.4.4 Future Quarrying Operations

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 for the 'preferred' and 'reserve' sites across Bradwell Quarry require:

"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."

Therefore, 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.

4.5 Local Development Framework Projects

4.5.1 List of Potential Developments

GFC has been advised that the best source of information regarding other potential local developments of any significant size is the Braintree District Council's (BDC's) "New Local Plan: Call for Sites – Updated Schedule May 2015". This lists and maps all land that landowners or their planning agents have submitted to BDC in order to put forward their land for possible development within its future Local Plan. At this stage in the process, therefore, there are many more sites on the maps than are ultimately likely to be accepted and taken forward.

The site list and associated map includes submissions for all types of potential development in the District Council's control, such as residential, employment/commercial, education, care/health, mixed and unspecified. The map and list are found under the BDC New Local Plan – Call for Sites May 2015 at the following web-site link:

<http://maps.braintree.gov.uk/localviewweb/sites/localplancls/>

GFC and Honace have evaluated the lists and maps and instructed all of the team of specialist environmental consultant to review the details and reconsider their CIA accordingly. The background to the preparation and status of the list of potential development sites is as follows.

4.5.2 The Local Plan

The entire IWMF site and the immediate surrounds are wholly within the area of the BDC. GFC's Directors are local farmers, landowners and developers, and along with their professional advisers have considerable direct experience of the BDC land development planning system. The following represents the current position in BDC with regard to its up to date position in preparing the Local Development Framework (LDF), as taken directly from BDC's website on 10 December 2015.

Currently BDC's preparation of its LDF is in process and it appears that the current timetable anticipates adoption of the Local Plan by September 2017, based on the following background.

The Local Plan will “set out strategic and non-strategic allocations for land use, and policies for the determination of planning applications”. The current status of the Local Plan at 10 December 2015 is quoted as follows: “None at present, issues and options consultation to begin in early 2015.”

The New Local Plan will include all major planning policy for the District in a single document and will need to meet the requirements of the National Planning Policy Framework (NPPF). Once complete it will replace both the Core Strategy (2011) and the Local Plan Review (2005).

One of the main requirements in the NPPF is for local authorities to significantly boost their supply of housing and this applies across the Country. A document called a Strategic Housing Market Assessment (SHMA) helps the BDC work out how many houses are needed and of what type. It estimates this need to be between 761 to 883 new homes per year. A range of housing need requirements was considered by the BDC in September 2014 and further evidence on whether this is achievable will be collected before a decision on a precise number as part of the draft Plan to be published in Autumn 2015.

The Local Plan is not just about new homes but must ensure that housing growth is supported by infrastructure, jobs and community facilities. The BDC will be working with key stakeholders such as the NHS, education and highways authorities to ensure that vital community facilities such as schools, GP surgeries and roads and public transport links are in place to support existing residents as well as new communities. Open spaces and community facilities will also be protected and new spaces and facilities will be supported.

An important part of the Plan will be promoting economic growth and prosperity in the District. The Plan will need to ensure that land is available to support new employment areas and that the right jobs can be provided in the right places for local residents.

The BDC is also working with other local neighbouring authorities to ensure that any cross boundary issues are dealt with appropriately and to ensure that growth across all authorities can be delivered effectively with the necessary infrastructure improvements.

4.5.3 Evidence to be Collected and the Call for Sites

The first stage of work on the new Local Plan will involve collecting evidence on a variety of subjects such as employment, landscape, open space and highways to feed into a draft plan. As these documents are completed and approved by the Local Plan Sub-committee they will be listed on BDC’s website “evidence base page”.

The Call For Sites was an opportunity for developers, landowners and other interested parties to put forward to the Council sites for development within Braintree District that they believe are suitable for development for homes, jobs or other uses. The site suggestions received by BDC will be used to begin the preparation of the new Local Plan.

The call for sites has not determined if a site should be allocated for development. It is a technical exercise aimed at identifying potential sites for development. All proposals will be considered, but it is unlikely that all sites put forward will be included in the new Local Plan. It is likely that the BDC has received many more submissions than it requires to meet housing need and not all sites will be considered suitable for development.

The Call for Sites was held from August until 5 p.m. on Friday 24 October 2014. Further sites were accepted during the Issues and Scoping consultation held in early 2015. As at December 2015, no new submissions will be considered prior to the publication of the Draft Local Plan.

BDC is working closely with adjacent authorities to meet the duty to co-operate on cross-boundary strategic issues, such as meeting housing need. This work will include the

consideration of larger sites to meet the combined housing need of authorities in a sustainable way. Braintree District Council will accordingly work with adjacent authorities to evaluate proposals for land close to the District boundaries that could potentially form part of a cross-boundary development. In the case of the IWMF site, it is generally significant distance from adjacent authorities. The nearest is Maldon District Council to the southeast but this is well beyond the physical barriers of the A12 Trunk Road and the main London to Norwich railway line. In other words, there are no known "larger cross-boundary" sites that are relevant to the IWMF CIA.

4.5.4 Potential Development Sites assessed in the Cumulative Impact Assessment

The website confirms that the "Proposals Map", explaining geographically the adopted policies and proposals within the Development Plan Documents, is still under development (at the Issues and Options stage) and "A final Proposals Map will be published in the new Local Plan" i.e. September 2017. In the meantime, the BDC website provides interactive map details of all sites that have been submitted under the Call for Sites by landowners in the District who wish to put forward sites for development that they believe are suitable for homes, jobs or other uses. The website link for this map is as follows:

<http://maps.braintree.gov.uk/localviewweb/sites/localplancfs/>

Whilst the Development Plan Documents are still at the Issues and Options stage, it is recognised that these potential developments have limited weight in current planning terms. Nevertheless, as part of GFC's updated Environmental Assessment and CIA for this Regulation 22, it has instructed its consultants to review this map on the website, which as stated above, clearly shows all sites that have been put forward but not selected for final inclusion; in other words the worst case regarding the potential extent of future development. The updated ES and the relevant CIAs contained within the Addendum ES have taken this map and the potential development of the sites into account.