



**Response to 'Essex Minerals Local Plan Review 2024'
Regulation 18 Consultation Documents**

for

Candidate Site A95 – Land at Bellhouse Farm South

Prepared By

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On Behalf of

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April 2024

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1 Introduction and Strategic Context

1.1 Introduction

1.1.1 This document has been produced as clarification and response, along with additional information, to the initial considerations and judgements of the Essex County Council 'Assessment of Candidate Sand and Gravel Sites' which form part of the current Regulation 18 Consultation of the Review of the Essex Minerals Local Plan 2014.

1.1.2 This specifically relates to the Land at Bellhouse Farm South – Candidate Site A95. We have also prepared, and submitted, additional representations with regard to Heckfordbridge Site 2 (Full Site) – Candidate Site A62.

1.1.3 The structure of this report is as follows:

- Providing context as to the purpose of the Call for Sites and Essex Mineral Planning Authorities position with regard to mineral need;
- Strategic context in relation to the four identified Candidate Sites capable of delivering most mineral resource;
- Consideration of the suitability of the methodologies produced and utilised by the MPA with regard to assessing submitted Candidate Sites;
- Providing our Red/Amber/Green Assessment of Candidate Site A62 against the methodologies produced by the MPA, with justification for changing sensitivities where necessary;
- Comparison of the updated RAG Assessment for Candidate Site A62 against the three sites referenced above; and,
- Conclusion of overall assessment.

1.2 Strategic Context

1.2.1 Following a review of the Plan in 2019, the Council determined a need to produce a new Minerals Local Plan. The emerging 'Replacement Essex Minerals Local Plan' (MLP) covers a plan period of 2025-2040. It is understood that whilst this Regulation 18 public consultation presents the Replacement Minerals Local Plan; including Plan provision figures and the assessments of submitted sites, this Draft Plan does not present a list of preferred site allocations to meet the newly quantified minerals need for the County.

Preferred site allocations will be presented in the next version of the Replacement Minerals Local Plan, following any reassessment required as part of consultation responses received on the methodology and its application across each site.

- 1.2.2 As stated at paragraph 2.19 of the Replacement MLP, the majority (81%) of sand and gravel reserves extracted within Greater Essex are consumed within Greater Essex. In 2019, of the remaining 19% of reserve, 12% were exported to the remainder of East of England market, and 7% into 'elsewhere' within the UK. Regarding transport to market, most mineral is transport by HGV's on the road network, however there are two main rail transshipment sites within Essex (Harlow and Marks Tey – Tarmac operated).
- 1.2.3 Current operations at Colchester Quarry, for which Candidate Site A95 – Land at Bellhouse Farm South would be an extension of, provides for markets both local and further afield, see below:
- 36% - Onsite DM and RMX Plants;
 - 60% - Into the Essex market, external plants and merchants; and,
 - 4% - Transport by rail, via Marks Tey, into the Greater London markets.
- 1.2.4 Since the initial Candidate Site Submission in March 2022, a full Environmental Impact Assessment has been undertaken and submitted for the extraction and processing of the 830,000 tonnes of sand and gravel within the area known as 'Land at Bellhouse Farm South' (Planning Application Ref: ESS/113/23/COL). The application is currently under determination.
- 1.2.5 As was stated within the Candidate Site Submission, the mineral extracted within the 'Land at Bellhouse Farm South' is to be transported, via mineral field conveyor, to the existing Colchester Quarry processing plant. The mineral conveyor is proposed to connect to the existing field conveyor within the Bellhouse / Abbotstone Quarry area, passing beneath Warren Lane and connecting directly into the plant site.
- 1.2.6 The estimated yield after processing the mineral within the extension area comprises approximately 838,000 tonnes of Sand and Gravel. Mineral extraction is anticipated to be completed within 2 years.
- 1.2.7 The proposed restoration of the site is largely back to agricultural land, with an area of species rich grassland / lowland meadow and additional / strengthened hedgerows and woodland planting.

1.2.8 In support of the Environmental Impact Assessment, the following works were undertaken and submitted in support of the application:

- Landscape and Visual Impact Assessment;
- Nature Conservation and Ecology;
 - Preliminary Ecological Appraisal Report;
 - Breeding Bird survey Report;
 - Wintering Bird Survey Report;
 - Reptile Survey Report;
 - Otter and Water Voles Survey Report;
 - Bat Activity and Roost Survey Report;
 - Invertebrate Survey Report;
 - Badger Survey Report;
 - Great Crested Newt eDNA Report
 - Habitat Regulations Assessment;
 - Biodiversity Net Gain Assessment;
 - Ancient Woodland Assessment; and
 - Arboricultural Survey Report.
- Noise Assessment;
- Air Quality Assessment;
- Cultural Heritage Assessment;
- Transport Statement;
- The Impact on Water Resources; and
 - Hydrological and Hydrogeological Impact Assessment; and,

- Flood Risk Assessment.
- Agricultural Land Classification and Soil Resources.

1.2.9 In addition to the assessment work listed above, a number of plans accompanied the application, similar to those of which were submitted as part of the initial Candidate Site submission but updated following assessment work. These updated plans have been submitted as appendices to this report to assist in the updated assessment as Appendix 1.

- Site Location Plan: Drawing No. KD.BELL.3.D.001;
- Application Site Plan: Drawing No. KD.BELL.3.D.002;
- Context Plan: Drawing No. KD.BELL.3.D.003;
- Current Situation: Drawing No. KD.BELL.3.D.004;
- Block Proposals Plan: Drawing No. KD.BELL.3.D.005;
- Phase 1: Drawing No. KD.BELL.3.D.006;
- Phase 2: Drawing No. KD.BELL.3.D.007;
- Concept Restoration: Drawing No. KD.BELL.3.D.008; and
- Cross Sections: Drawing No. KD.BELL.3.D.009

2 Methodology Assessment

- 2.1.1 Whilst we appreciate there is difficulty in developing methodologies which are to be utilised in the assessment of a vast number of sites, there are a number of the methodologies which we find overly restrictive and ultimately not fully fit for purpose.
- 2.1.2 One general comment, to avoid repetition below, regarding the wording used within almost all of the methodologies, is the categorisations for level of mitigation required to make an impact acceptable. Using the terms 'Low, Medium, Moderate, High' are appropriate, however some guidance text would have been beneficial for understanding how the MPA would apply those terms. For example, use of stand-offs being a 'Low' level mitigation.
- 2.1.3 The section below provides comments on a number of the methodologies which we believe require consideration as the assessment of sites continues, and the Replacement MLP progresses.

Landscape and Visual Sensitivity

- 2.1.4 In respect of the methodology used, there is a great emphasis placed upon the sensitivity of both landscape and visual receptors but very little on both the potential *magnitude* (of effect) the proposed development (Candidate Site) could have on these receptors, and none to very little consideration of *mitigation* and enhancement measures proposed within the initial Candidate site submissions.
- 2.1.5 The Guidelines for Landscape and Visual Impact Assessment third edition produced by the Landscape Institute and Institute of Environmental Management and Assessment 2013 defining sensitivity as "a term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor". With Magnitude (of effect) "a term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration".
- 2.1.6 Mitigation measures being those proposed to prevent, reduce and where possible offset any significant adverse effects (or to avoid, reduce and if possible, remedy identified effects) e.g. in respect of Candidate Site A95, minor temporary screening bunds, advanced native planting, standoff to residential properties and phased working and restoration to minimise areas of disturbance at any one point in time.

- 2.1.7 Enhancement being proposals that seek to improve the landscape resource and the visual amenity of the proposed development site and its wider setting, over and above its baseline condition e.g. in respect of Candidate Site A95 initial works will involve green infrastructure planting and wildlife habitat creation within an approximate 80m wide and 300 linear metre corridor within the Roman River Valley. This land adjoins a woodland block to the east known as Hanging Wood and a part hedge / native oak hedgeline to the west. The southern boundary being the Roman River. The aim of the improvement works being to enhance both the landscape structure / planting and wildlife corridor, creating linkages and connectivity and promoting biodiversity enhancement.
- 2.1.8 Planting will involve native trees (principally oak trees) with a diverse mix of native species and shrub understory including hazel. The appropriate number of native trees and shrubs to be planted being 2,225. The corridor will also be prepared and cultivated for the establishment of species rich Lowland Meadow. All planting and seeding works will be subject to initial Aftercare and then a long term management plan. To aid in the re-establishment and enhancement of landscape structure planting and species diversity 240 linear metres of new hedgerow will also be planted (~1,440 number hedge plants) including 24 No. Hedgerow trees.
- 2.1.9 The sensitivity and magnitude of effect including any mitigation and enhancement measures should then be utilised to produce a Residual Effects Assessment. This has not been carried out and as such the Initial RAG Landscape and Visual Sensitivity Assessment is of two high a level to consider the Candidate sites properly and potentially falsely ranking them.

Transport and Access

- 2.1.10 We consider Transport and Access together here as the comments are related. The Transport methodology looks solely at the category of the road that the access from the quarry is linked to, and the Access methodology looks at the access point itself.
- 2.1.11 Although not included within the methodology considerations, the RAG Assessment considers the impacts of the proposed mineral field conveyor under 'Access'. This is outside the scope of the methodology provided for Access, and we feel better suited to be considered under Transport. The methodology for Access we do not consider to be inappropriate, providing it does solely consider the access point where mineral will

exit the site to enter market. For this element our issue lies with the consideration of the conveyor.

2.1.12 We feel, as the conveyor is the means of transport for mineral from source to the processing plant, it would be better suited to assessment as part of the Transport section.

2.1.13 Furthermore, the methodology for Transport solely considers the category of the road which services the site access. We understand from the note within the methodology on 'Secondary Distributor routes', which Warren Lane is, that the MPA acknowledges some Secondary Distributor routes have been upgraded to account for HGV use; however, this does not result in the route scoring better, but rather any route which hasn't been upgraded scoring worse. Warren Lane has been upgraded for HGV use and therefore we are of the opinion that the route should be able to score better on the matrix. Additionally, the matrix does not consider whether a route has been operating with mineral traffic for a substantial period of time acceptably, as is the case for Colchester Quarry.

Soil Quality

2.1.14 No issues are taken with the categorisation of RAG Sensitivity based on the Grade of the soil quality onsite, however the level of mitigation required against each criteria is restrictive and overly critical. Handling of soils at a minerals site is standard practice, and Tarmac comply with the MAFF Good Practice Guide for Handling Soils as part of their existing operations. Furthermore, the storage of soils within screening bunds forms standard methodologies for working mineral sites and therefore would not constitute 'medium' or 'high' levels of mitigation which RAG 'Amber' and above would suggest.

Services and Utilities

2.1.15 We find that the methodology associated with the Services and Utilities is overly restrictive. It is common for one or more services to be present within the boundary of mineral operations. Steps to overcome this range from a simple standoff to the service being designed into the working scheme of a quarry, or with agreement of the Service / Utility provider, the pipes or cables would be rerouted to avoid impact. Categorising a site 'Red' simply for having a Service or Utility present and stating "the site is likely to have a serious impact on utilities and mitigation to make the Site acceptable would be difficult", is overly negative and not strictly the case.

Health and Amenity

- 2.1.16 The main point to raise here is that the RAG Assessment based the RAG Sensitivity only on the submitted red line boundary as opposed to the associated Block Phasing Plan submitted. The submitted scheme highlights how easily impacts can be mitigated with simple and typical mitigation measures included in mineral practice. Examples of these are standoffs from sensitive receptors, screening soil bunds strategically placed between operations and receptors, as well as strategically placed planting. Consideration of the submitted scheme justifiably lowers the overall assessment of impact.
- 2.1.17 Additionally, as part of this response, amendments have been made to remove any residential buildings from within the red line boundary.

3 Candidate Site A95 – Land at Bellhouse Farm South Assessment

3.1.1 We believe that the assessment provided for Land at Bellhouse Farm South (A95) included a number of unjustifiably adverse findings as part of the RAG Assessment. Each section of the report below, provides our assessment of the submitted site against the criteria and methodologies included within the Appendices of the consultation documents.

3.2 Landscape and Visual

RAG Assessment – Red/Amber

Our Assessment - Amber

Please see paragraphs 2.1.4 – 2.1.8 for discussion with regard to our considerations of the methodology wording and the MPA’s implementation of the methodology with respect to both Transport and Access.

3.2.1 A Landscape and Visual Impact Assessment was produced and submitted as part of the planning application for mineral extraction at the Candidate Site. The site is not located within a nationally designated landscape. It is, however, located in proximity to Bellhouse Farm, which is a Grade II Listed Building (to the north) and Hanging Wood which is an Ancient Woodland (to the south east). There are no public rights of way which cross the proposed mineral extraction area, but a section of PROW (Stanway 15) runs along both the western and northern boundaries of the site. To the southwest and south east respectively there are Listed Buildings associated with the Copford Hall and All Angles Church curtilage Grade II* and Upper Hill Farm Grade II.

3.2.2 The submitted LVIA considered the characteristics of the National Landscape Character Area 111: Northern Thames Basin, as well as the County Level Landscape Character Area, and Borough Level Landscape Character Areas River Valley A2: Wooded Roman River Valley LCA and Farmland Plateau B3 – Southern Colchester Farmland Plateau, as identified within the RAG Assessment.

3.2.3 The table below, taken from the LVIA, provides justified assessment of the sensitivity of each Landscape Character Area.

Landscape Character Area	Assessed Level of Sensitivity	Reasoning / Comment
County Level Landscape Character – Essex County		
South Colchester Farmlands LCA	Medium	The character area covers a large geographic land area and comprises a combination of both robust and typical landscape character elements

		and features, including topography, land use and structural vegetation, along with urban areas and associated form, primary and secondary transportation routes, and historic and operational mineral development.
Borough Level Landscape Character – Colchester Borough		
River Valley A2 – Wooded Roman River Valley LCA	Medium / High	The character area covers a medium scale and fairly typically robust landscape, which is principally rural, but with discordant features and land uses to its outer boundaries, including both mineral development and leisure / commercial land uses (e.g. Colchester Zoo). Several heritage assets are present.
Farmland Plateau B3 – Southern Colchester Farmland Plateau LCA	Medium	The character area covers a medium scale with a combination of typically defining landscape elements and features and natural morphology, together with areas of past and operational mineral development, urban and transportation influences both within and to outer boundaries. Several heritage assets are present.

3.2.4 With regard to Magnitude of Effect, it is assessed that the potential magnitude of effect during the extraction operational period on landscape character is **Low Adverse**. At post restoration the magnitude of effect is assessed as **Low Adverse to Medium Beneficial**.

3.2.5 As part of the finalised submitted scheme, the following mitigation measures are integrated into the development scheme:

- The in-situ retention of land identified within the Wooded Roman River Valley LCA located within the south of the site.
- Enhancement of this area to strengthen its landscape structure planting with the establishment of a new woodland block which would link into Hanging Wood to the east and hedge to the west.
- Creation of new wildlife habitat including cultivation and seeding works to establish species rich lowland meadow between the Roman River Valley and the new woodland block.
- Planting 240 linear metres of new hedgerow along the western and northern boundaries of the extraction site, and species diversifying / beating up of approximately 180 linear metres of existing hedgerow.
- Ability to connect into the existing Colchester Quarry infrastructure, so not

requiring any new fixed plant or road access.

- The concentration of the extraction area soils to ensure identical best and most versatile agricultural land can be reinstated.
- The restoration scheme, as illustrated on Drawing No. KD.BELL.3.D.008 will comprise wildlife and landscape enhancement assessed by the consultant Ecologist to result in a 40.92% increase in Biodiversity.

3.2.6 A total of 21 representative visual receptor location points were identified following the production of Zones of Theoretical Visual Influence (ZTVI). It is assessed that the proposed mineral extraction and progressive restoration of land within the site will result in potential **None to Low to Moderate Adverse** Effects during the Operational Stage of the quarry and **None to Low Beneficial** Effect Post Restoration.

3.2.7 It is noted that the County Landscape Officer is satisfied with the visual receptor locations and judges that these are representative of potential views of the application site. A concern has been raised in respect of the judged susceptibility of the PROW visual receptors which are considered to be of Medium susceptibility in the submitted LVIA. The officer judges that the specific right of way where receptors could have views of the site should be considered as having a High susceptibility to change from the proposed development in this location. We strongly disagree with this. The reasons being:

- Users of the local PROW network may have transitional views as they pass by or view from distance, the proposed development. These temporary views forming part of a much longer visual experience as walkers travel through the local area. This type of sensitivity must be lower than that of a residential receptor that could receive a static, permanent or temporary view of the development, which we would judge as being of High sensitivity.
- The PROW in question are also not designated, which could increase the sensitivity to a change in use by receptors using these pathways i.e the PROW are not located with a National Park or AONB nor are they specific local designated routes. There has to be a gradation in the sensitivity of PROW to specific development change, otherwise every receptor on a path / PROW in the county would be of a High sensitivity.
- In this specific application, the officer concludes the judgement of PROW has a

High sensitivity with the submitted LVIA's assessed Medium level of magnitude of effect. The resulting level of significance being Notable i.e Significant Adverse.

- Even if we address this judgement of High sensitivity, we would, and the scheme still could, simply place temporary visual mitigation measures along the short section of PROW i.e 10, 11 and 12. This mitigation measure could be a line of temporary agricultural straw bales which would prevent users of the short section of PROW from viewing the proposed quarry operations and restoration, for the short duration of the proposals. This mitigation measure would be appropriate for its agricultural location. The receptors level of significance would then be considered as Moderate Adverse, resulting from a High sensitivity and a Low Magnitude of Effect.
- A further comment is raised by the officer which states “we cannot concur with the none to Low Beneficial level to the significance of the Effect”. No alternative assessment of level of effect is provided by the officer but it is not highlighted as a significant adverse effect, to which there is a big jump.

3.2.8 Overall Assessment of Landscape and Visual Sensitivity Medium (*Amber*) within which both mitigation and enhancement measures will reduce potential adverse effects and establish benefits to landscape, visual, amenity, public access, habitat creation and Biodiversity Net Gain.

3.3 Biodiversity

RAG Assessment – *Red/Amber*

Our Assessment – *Amber/Green*

3.3.1 The RAG Assessment states that *“The Site is graded Red-Amber because it could have major impacts upon the adjacent ancient woodland, which is irreplaceable habitat, and a serious impact upon the LoWS, the Roman River and Priority habitats and species and would involve the loss of two mature oak trees. Impacts may include changes to the hydrology of the ancient woodland, smothering of leaves by dust, disturbance e.g. by noise and lighting; impacts to water quality of the River and disturbance to protected and Priority species using the River corridor e.g. otters and bats. It could result in disturbance and loss of habitat for Priority farmland species, e.g. Skylarks. Any application would require demonstration that the operations would not affect the hydrology of the adjacent ancient woodland, the Roman River, veteran trees and other boundary habitats and it is likely that mitigation would require a substantial buffer from*

the ancient woodland and Roman River. Quarrying or excavation within 16 metres of this Main River must meet Environmental Agency requirements. Other mitigation measures may be required, such as watering to suppress dust and wildlife sensitive lighting.”

3.3.2 The Candidate Site submission in March 2022 was accompanied by detailed survey work with regard to Ecology. This included a Preliminary Ecological Appraisal (PEA), and its associated appendices, and a Biodiversity Net Gain Calculation based off the Concept Restoration Plan (Drawing No. KD.BELL.D.004). In summary the PEA recommended that a number of individual species surveys are undertaken to support a future application, however the range of potentially present species is not uncommon for such a site, and there are considered to be no insurmountable issues associated with the potential presence of protected species which might prevent the development from proceeding. The Biodiversity Net Gain Assessment concluded an achievable net gain of 18.28%.

3.3.3 As stated in Section 1, since the initial Candidate Site Submission, further survey work has been undertaken in support of the submitted planning application (Ref: ESS/113/23/COL). A comprehensive list of this work is included in paragraph 1.2.6 of this report. The updated Biodiversity Net Gain Assessment, based on the submitted planning application scheme (KD.BELL.3.D.005), resulted in a 40.92% net gain.

3.3.4 From a review of the ‘Biodiversity RAG Sensitivity Grade Table’ included within Consultation Document Appendix C, the assessment can be broken down into five main criteria:

- Level of likely ecological impact and level of mitigation required;
- Impact to International or National designations;
- Level of mitigation required subject to a Habitat Regulations Assessment;
- Impact to irreplaceable habitats; and,
- Impact to local designations and priority species.

Level of likely ecological impact and level of mitigation required – Amber/Green

3.3.5 As stated above, an series of individual species surveys have followed the initial PEA submitted in March 2022. The surveys found that the site area does not have a wide

diversity of habitats or, attendant fauna. The proposed development will not have any significant negative impacts on any designated sites, habitats and fauna, following the implementation of mitigation measures. Positive minor impacts are anticipated as a result of the restoration scheme on the habitats present on the site area.

- 3.3.6 A series of mitigation measures have been detailed to provide protection and enhancements for the protected species known to occur on the site including breeding birds, wintering birds and foraging bats. These also include a number of enhancements for habitats such as hedgerow enhancement, pond creation, lowland meadow creation and woodland/shrub planting all of which are illustrated on the Concept Restoration Scheme originally submitted as part of the Candidate Site Submission (KD.BELL.D.001) and that submitted as part of the planning application (KD.BELL.3.D.008).
- 3.3.7 Proximity to the Roman River was considered at the earliest stage of scheme design for the Candidate Site and a standoff, inclusive of upfront Species Rich Lowland Meadow and upfront Native Tree and Shrub Planting, was included within the scheme to mitigate impact.
- 3.3.8 The measures outlined above are not highly engineered structures or methods to mitigate impact, instead relate to standard mineral operational practices (e.g. standoffs), and provision of suitable habitat post restoration to provide an overall gain in biodiversity, calculated at 40.92% for the submitted site scheme. This BNG score would provide a substantial improvement on the current biodiversity present within the site. This is a low level of mitigation, appropriate to the scale of the proposed development and typically standard for mineral sites, with much of the site not requiring mitigation as it is currently in use for intensive agriculture.

Impact to International or National designations – Green

- 3.3.9 As has been established by the original submission, and the RAG assessment, the Candidate Site is not located within 2km of a National or International designation. The site falls outside the Site of Special Scientific Interest (SSSI) Minerals Buffer Zone of the 'Abberton Reservoir' SSSI which is located ~4.5km southeast. The Abberton Reservoir is also a designated Special Protection Area and Ramsar site.
- 3.3.10 It is noted within the RAG assessment that the site is upstream of a number of SSSI, Special Area of Conservation and Marine Conservation Areas. The Candidate Site is adjacent to the Roman River, however due to suggested standoffs, the closest point of potential mineral extraction is between ~65m – ~85m north of the River along its entire

southern boundary. Whilst it is acknowledged that the River creates a potential pollution pathway, the closest of these SSSI's is the Roman River SSSI almost 7km east of the site at the closest boundary. Due to the potential impact being hydrological, this relationship between the Candidate Site and the Roman River was assessed as part of the Hydrological and Hydrogeological Impact Assessment which found that *“impacts upon groundwater levels and flows may affect surface water levels and flows where groundwater dependent. As discussed, water features, including the Roman River, in meaningful proximity to the Site are not in direct hydraulic continuity with the Site. Further, intercepted such waters will be returned to ground without intervening consumptive use and will remain available as baseflow to the Roman River. Impacts in this regard are thus not anticipated”*. Therefore, as *“the Site is not likely to have any impact upon international or national designations that requires mitigation”*, it is in line with the *Green* criteria.

Level of mitigation required subject to a Habitat Regulations Assessment – Green

3.3.11 The nearest European Protected site is the Abberton Reservoir Special Protection Area and Ramsar Site. This is over 4.5km southeast of the proposed Candidate Site and resultingly no interaction between the Candidate Site and protected sites are anticipated. A Habitats Regulations Assessment was prepared and submitted in support of the planning application for Bellhouse Farm South, which concluded that the site will have no direct impacts on designated sites. Additionally, Natural England have provided a consultee response to the planning application (14th February 2024), stating no objection to the proposed scheme as they are satisfied there will not be significant adverse impacts on European / International sites. The Council Ecologist, within their response to the application, agree that there are not likely to be significant effects and support the conclusions of the Habitat Regulations Assessment.

3.3.12 Resultingly, it can be determined that the Candidate site is *Green* in this regard.

Impact to irreplaceable habitats – Amber/Green

3.3.13 With regard to irreplaceable habitats and the Candidate Site, consideration is given to Ancient Woodland (AW) within 500m of the Site in accordance with the assessment methodology. This identifies Gol Grove / Hanging Wood Ancient and Semi-Natural Woodland adjacent to the site in the south east.

3.3.14 As part of the planning application submission, an Ancient Woodland Assessment was undertaken to consider the potential impacts of the proposed development on the

designations. Between Gol Grove and Hanging Wood is a third block of woodland referred to as 'Central Unnamed Wood'. The impact of all three were considered as part of the assessment. The assessment concluded the following: *"The existing quarrying and landfill restoration operations at Bellhouse Quarry are currently not physically adversely affecting the woodlands. It is noted that woodland fringe is variable in both species' density and physical cover along sections of the quarry boundary. It is also understood that in accordance with the Permitted Concept Restoration Site for Bellhouse Quarry that new / additional woodland planting will take place along this boundary. This will enhance both the structure of the woods and potential for Biodiversity. It is considered that the proposed western extension to Bellhouse Quarry will not result in harm to the woodland blocks. Mitigation and enhancement including standoffs, new native planting will have beneficial effects allowing greater woodland connectivity along the Roman River Valley. This will also provide a new connecting corridor for wildlife."*

- 3.3.15 Therefore on the basis of the above and the fact that the standoff proposed prevents interaction between the areas and the proposed planting will result in beneficial impacts, we disagree that *"the Site could have moderate impacts upon irreplaceable habitats (ancient woodland)"*. As such the impact is assessed as *Amber/Green*.

Impact to local designations and priority species – Amber/Green

- 3.3.16 It is acknowledged from the RAG assessment that there are a number of Local Wildlife Sites (LoWS) and Priority Habitats within proximity to the Candidate Site. The following is taken from the RAG Assessment of the Candidate Site:

- "The closest Local Wildlife Site is Gol Grove and Hanging Wood Local Wildlife Site (Co58) which is immediately south-east of the Site. The LoWS comprises the ancient woods of Gol Grove and Hanging Wood which are connected to each other by mature but recent oak wood and an area of tall swamp and tall willow scrub woodland. The ancient woodlands are irreplaceable habitat.
- The Proforma proposes that processing and distribution would be via Bellhouse Quarry and landfill and would use a field conveyor. Access to the Site for machinery and the conveyor would either require removal of part of the Hedgerow – and therefore direct loss of Priority Hedgerow habitats. This Hedgerow was planted as part of the Bellhouse Quarry permission, and it is now tall and substantial. If the access is located near to the ancient woodland and

pond - where the hedgerow is thinner it could create additional dust and disturbance in this location. Activities which have the highest potential to generate dust, such as haul roads and mineral stockpiles, should be located away from the woodland and the other existing habitats, and should be regularly dampened to minimise dust emissions.”

3.3.17 As set out in the submitted planning application documentation, to accommodate the proposed development, a section of only ~20m of hedgerow / would require removal to allow access to the conveyor and into the site. This is part of the hedgerow that forms the field boundaries to the Bellhouse landfill site to the east. It is not anticipated that the removal of this 20m section will have any impact as this was assessed as a Category C hedgerow and only a small section is to be removed. In terms of potential impact to Gol Grove / Hanging Wood has been explored in paragraphs 3.3.13 – 3.3.14 above.

3.3.18 Subject to conditions suggested by the County Ecologist, the proposed development is deemed acceptable in ecological terms. Overall, from the assessment undertaken and detailed above, it is considered that a RAG Sensitivity of *Amber/Green* would be appropriate for biodiversity aspects of the candidate site.

3.3.19 One final comment on the Biodiversity Assessment is that it would have been beneficial to see how the MPA scored each of the individual five criteria used for the overall RAG Sensitivity in order to settle on their assessment of Red/Amber. This would have allowed for a direct comparison to the assessment included above.

3.4 Historic Buildings

RAG Assessment – Red

Our Assessment – Amber/Green

3.4.1 The RAG Assessment identifies seven Listed Buildings within close proximity to the Candidate Site. Four to the north (west of the site) and three to the south. These being:

North of the Site –

- Bellhouse Farmhouse (List UID: 1224861);
- Barn to East of Bellhouse Farmhouse (List UID: 1266618); and,
- Barn to North East of Bellhouse Farmhouse (List UID: 1224838).

West of the Site –

- Copford Hall (List UID: 1224861);
- Stables Cottage (List UID: 1238915);
- Boathouse at Copford Hall (List UID: 1273946); and
- Church of St Michael and All Angels (List UID: 1274018).

3.4.2 None of the listed buildings are located within the red line boundary submitted for the Candidate Site. The closest listings are those associated with Bellhouse Farm to the north of the site. All of the listed buildings referenced above are Grade II listed, with the exception of Church of St Michael and All Angels which is Grade I listed. In addition to those listed above, the Cultural heritage Assessment submitted as part of the Planning Application also considered Upper Hill Farmhouse (Grade II listed) ~450m south east of site.

3.4.3 The submitted Block Proposals Plan (both for Candidate Site Submission and Planning Application) identifies an 80m standoff from the closest Bellhouse Farmhouse building to the operations within Phase 1, with an intervening soil bund located within the standoff, screening views of the listed buildings to the site. The Cultural Heritage Assessment submitted concludes the following:

- Bellhouse Farmhouse and barns – Predicted effects on setting range from Moderate Adverse during the creation of the bund to Negligible Adverse after restoration;
- Copford Hall and Church Group - Predicted effects on setting range are Minor Adverse during extraction to Neutral / Negligible Adverse after restoration; and,
- Upper Hill Farmhouse – Predicted effects on setting are Negligible Adverse during extraction to Neutral after restoration.

3.4.4 As is demonstrated on the submitted Block Phasing Plan, only simple mitigation measures such as the proposed standoffs / screening bunds, typical of mineral operations would be required to make the site acceptable. Furthermore, Historic England have responded as a Consultee to the planning application (08th February 2024) stating No Objection to the proposed development. The Council Heritage Officer assessed the impact of the three groups of heritage assets identified above. The agreed

with the assessment for both the Bellhouse Farm group and Copford Hall group of assets, and subject to appropriate conditions, find the impact acceptable to the Upper Hill Farmhouse group. As a result we assess that the site is befitting of an *Amber/Green* assessment.

3.5 Archaeology

RAG Assessment – Amber

Our Assessment – Amber

- 3.5.1 The RAG Assessment states that the lies adjacent to an area which contains extensive cropmarks. The cropmarks comprise a series of rectilinear enclosures all of which have been excavated as part of the exiting quarrying activity on the eastern side of the Site. The excavation has shown that the deposits are of Late Iron Age and Roman date.
- 3.5.2 Geophysical Survey work undertaken as part of the Cultural Heritage Assessment submitted with the planning application found no evidence of settlements, which was also confirmed by trial trenching undertaken within the site area. Geophysical Survey work and Trial Trenching found evidence of at least one structure during the Early iron Age with evidence of loom weights & spindle whorl suggesting of a building and possible animal husbandry. There was also evidence present of ploughing.
- 3.5.3 The findings of the work was assessed to have local significance rising to regional significance if Early Iron Age remains are present. With regard to mitigation it is proposed to conduct 'Strip, Map and Sample' involving Archaeological Supervision of soil stripping in the site area where any evidence found can be recorded. A Written Scheme of Investigation would be agreed with the MPA.
- 3.5.4 The impact has been demonstrated to be acceptable, and this is acknowledged by the Council Archaeologist, with suitable mitigation measures and conditions proposed to ensure an appropriate level of impact.

3.6 Flooding

RAG Assessment – Amber

Our Assessment – Amber/Green

- 3.6.1 The proposed Candidate Site is located within Flood Zone 1, lowest likelihood of fluvial flooding, as evidence by the Environment Agency's Flood Map for Planning. It also

contains only small areas of potential low risk surface water flooding (between 0.1-1% chance of surface water flooding annually).

3.6.2 The Level 1 Strategic Flood Risk Assessment (SFRA) produced by Colchester Borough Council, at Figure 5, provides an overview of the entire boroughs Groundwater Flood Risk with the area broken into 1km² grids. The site largely falls within one grid squares with small areas of three further grid squares being present to the west and north. The SFRA identifies the site as being within an area of low (<25%) susceptibility. The two northern grid squares which cover a small area of the site are of medium (25%-50%) susceptibility, however these are located largely within the standoff illustrated on the submitted Block Phasing Plan. It is important to recognise that the SFRA is 'broad' and does not contain site specific investigations.

3.6.3 As stated within the Biodiversity section above, the Hydrological and Hydrogeological Impact Assessment submitted in support of the submitted planning application, assessed that *"impacts upon groundwater levels and flows may affect surface water levels and flows where groundwater dependent. As discussed, water features, including the Roman River, in meaningful proximity to the Site are not in direct hydraulic continuity with the Site. Further, intercepted such waters will be returned to ground without intervening consumptive use and will remain available as baseflow to the Roman River. Impacts in this regard are thus not anticipated"*.

3.6.4 Resultingly, we find that the Candidate Site is befitting of *Amber/Green* against the RAG methodology.

3.7 Transport

RAG Assessment – Amber

Our Assessment – Amber/Green

Please see paragraphs 2.1.9 – 2.1.12 for discussion with regard to our considerations of the methodology wording and the MPA's implementation of the methodology with respect to both Transport and Access.

3.7.1 As stated above, we consider the methodology for Transport and Access to not be fully fit for purpose. The MPA, using the strict RAG methodology, assess Transport as 'Amber' due to Warren Lane being classified as a 'Secondary Distributor route'. However, as is acknowledged within the justification, Warren Lane has been improved to accommodate use by HGVs. We suggest that this should result in an assessment of

'Amber/Green' as opposed to 'Amber', particularly as Warren Lane has always supported the movement of mineral from Colchester Quarry and it provides access to the Strategic Highway Network (A12) without the need to pass through residential areas due to the connectivity provided by Stanway Western Bypass.

3.7.2 Furthermore, the Council Highways Department had no comments to make on the proposal.

3.8 Access

RAG Assessment – Green

Our Assessment – Green

Please see paragraphs 2.1.9 – 2.1.12 for discussion with regard to our considerations of the methodology wording and the MPA's implementation of the methodology with respect to both Transport and Access.

3.8.1 It is proposed that the mineral extracted from the Candidate site would be transported to the existing Colchester Quarry plant site via mineral field conveyor, as is standard practice for existing and proposed mineral operations at Colchester Quarry.

3.8.2 With regard to access, the mineral extracted once processed, would enter the highway through the existing site access east off Warren Lane into Colchester Quarry. This access is long established, and requires no mitigation to make it acceptable. The access, in its current design, is purpose built use by HGV's to transport mineral.

3.9 Public Rights of Way

RAG Assessment – Green

Our Assessment – Green

3.9.1 As stated in the RAG Assessment "PROW 128_12 and PROW 149_15 are 5m west of the Site. PROW 149_12 is 5m north of the Site. There are no PROWs within or bordering the Site. The Site is likely to have no impact on PROWs that requires mitigation." Nonetheless, mitigation measures have been included within the submitted planning application which includes planting of 240 linear metres of new hedgerow along the western and northern boundaries of the site, and species diversifying / beating up of approximately 180 linear metres of existing hedgerow. This will provide an increased level of screening for the users of the PROW.

3.10 Geo-Environmental

RAG Assessment – *Green*

Our Assessment – *Green*

3.10.1 As stated in the RAG Assessment, the site is more than 20m from a LoGS and therefore is likely to have no impact on the geological environment that requires mitigation as geological features will be preserved and maintained.

3.11 Hydrology, Hydrogeology & Drainage

RAG Assessment – *Red/Amber*

Our Assessment – *Amber*

3.11.1 The site is only present within Zone III – Total Catchment Groundwater Source Protection Zone with an unproductive / medium to low groundwater vulnerability, and a Drinking Water Safeguard Zone (Surface Water). The RAG Assessment incorrectly states that the Roman River is located within the Red Line Boundary, when it is actually located immediately adjacent to the southern boundary of the site. A 65-85m standoff is included within the submitted scheme between the limit of extraction and the Roman River providing mitigation.

3.11.2 As stated elsewhere within this report, the Hydrological and Hydrogeological Impact Assessment submitted with the planning application states, *“impacts upon groundwater levels and flows may affect surface water levels and flows where groundwater dependent. As discussed, water features, including the Roman River, in meaningful proximity to the Site are not in direct hydraulic continuity with the Site. Further, intercepted such waters will be returned to ground without intervening consumptive use and will remain available as baseflow to the Roman River. Impacts in this regard are thus not anticipated.”* Mitigation measures that include best practice to limit risk of groundwater quality degradation via accidental spillages / leakage of fuels / oils / solvents would be implemented. Furthermore a Hydrometric Monitoring Scheme (HMS) will be produced and implemented.

3.11.3 Assessment concludes that there is no hydrogeologically or hydrologically based reason that the proposed development cannot proceed subject to the mitigation measures / planning controls recommended within the assessment.

3.11.4 Subject to the suggested mitigation measures it can be concluded that the Candidate Site is befitting of an *‘Amber’* assessment.

3.12 Air Quality

RAG Assessment – Green

Our Assessment – Green

3.12.1 As stated in the RAG Assessment, the site is more than 2km from an Air Quality Management Area and therefore is likely to have no impact on air quality that requires mitigation.

3.13 Soil Quality

RAG Assessment – Amber

Our Assessment – Amber / Green

3.13.1 The Agricultural Land Classification and Soil Resources Report submitted in support of the planning application at the Candidate Site finds that the site consists of approximately 48% Grade 3a, 51% Grade 3b and 1% Non-Agricultural Land. In accordance with the RAG Methodology the Candidate Site should rank *Amber / Green* in this regard.

3.13.2 In order to reduce impact to soils during stripping and stockpiling, handling with machinery will be avoided during or shortly after heavy rainfall. Soils would be stripped using the excavator and dumper method described by Sheet 1 in the MAFF Good Practice Guide for Handling Soils.

3.13.3 Soils will be stored in bunds which will also provide landscape screening of the site. The bunds should be constructed either by excavator or bulldozer (Sheets 2 and 14 in the MAFF Good Practice Guide) avoiding over-compaction. If stripped along with the turf, the topsoil stockpile surface would be expected to revegetate naturally to protect from erosion. Subsoil stockpiles would require seeding if to be left in situ for more than six months.

3.14 Services & Utilities

RAG Assessment – Red / Amber

Our Assessment – Amber

3.14.1 Due to the presence of 11kV overhead electricity cables and the presence of Cadent Gas mains within 100m of the site, the RAG Grade is '*Red / Amber*' against the methodology included within the consultation documents.

3.14.2 However, as detailed within paragraph 2.1.15, this methodology is overly restrictive and does not account for the fact the presence of these services within a mineral site

is not uncommon. A number of services / utilities companies have provided consultation responses in relation to the planning application; including Lumen Technologies Plan, BPA, Colt Technologies Services, ESP Utilities, GTC Apparatus, Anglian Water, UK Power Networks and Northumbrian Water for which no issues have been raised. Cadent Gas have responded with a document demonstrating that there are no pipes within the site boundary and informed that they would assess the proposals in house before commenting further.

3.14.3 Due to the lack of objection, and achievable mitigation, the grading of the site is more aligned to *Amber*.

3.15 Health & Amenity

RAG Assessment – Red

Our Assessment – Amber

3.15.1 Whilst there are no residential properties present within the site boundary, Bellhouse Farm is located to the north of the site and therefore in accordance with the strict methodology provided by the MPA the site is assessed as 'Red'. However, the criteria of "therefore the site is likely to have a serious impact on health and amenity, and mitigation to make the Site acceptable would be likely be difficult to achieve", is not accurate.

3.15.2 Mitigation measures to make aspects such as dust and noise acceptable are relatively simple and typical of a mineral extraction operation. Aspects of these have been included within the submitted Block Phasing Plan which includes for standoffs of at least 80m between the extraction limit and the Bellhouse Farm residential receptor to the north, and erection of screening bunds for the duration of the operational life of the quarry. There would be an improvement to public amenity post restoration with the establishment of ~750m of Public Rights of Way. The Colchester Environmental Health Officers have assessed the submitted planning application and provided 'No Objection' in relation to both noise and air quality aspects.

3.15.3 We therefore assess that due to inclusion of typical / relatively easily implemented mitigation measures will not be difficult to achieve, the assessment of Health & Amenity is therefore at most, *Amber*, however due to the lack of objection from Environmental Health Officers sensitivity could arguably be reduced further.

3.16 Green Belt

RAG Assessment – Green

Our Assessment – Green

3.16.1 As stated in the RAG Assessment, the site is not within Green Belt. The nearest Green Belt is 25.9km away. The site is likely to have no impact on preservation of the openness of the Green Belt that requires mitigation and would not conflict with the purpose of including land within it.

3.17 Airport Safeguarding Zones

RAG Assessment – Green

Our Assessment – Green

3.17.1 As stated in the RAG Assessment, the site is not within an Airport Safeguarding Zone. The nearest Airport Safeguarding Zone is 6.5km away. The site is likely to have no impacts on aircraft safety that require mitigation and would not increase the risk of bird strikes for aircraft.

Summary of Re-Assessed Candidate Site A95 Against RAG Assessment

Criteria	A95 – Land at Bellhouse Farm South	A95 – Land at Bellhouse Farm South (Re-assessed)
Landscape and Visual Sensitivity	<i>Red / Amber</i>	<i>Amber</i>
Biodiversity	<i>Red / Amber</i>	<i>Amber / Green</i>
Historic Buildings	<i>Red</i>	<i>Amber / Green</i>
Archaeology	<i>Amber</i>	<i>Amber</i>
Flooding	<i>Amber</i>	<i>Amber / Green</i>
Transport	<i>Amber</i>	<i>Amber</i>
Access	<i>Green</i>	<i>Green</i>
Public Rights of Way	<i>Green</i>	<i>Green</i>
Geo-Environmental	<i>Green</i>	<i>Green</i>
Hydrology, Hydrogeology and Drainage	<i>Red / Amber</i>	<i>Amber</i>
Air Quality	<i>Green</i>	<i>Green</i>
Soil Quality	<i>Amber</i>	<i>Amber / Green</i>
Services & Utilities	<i>Red / Amber</i>	<i>Amber</i>
Health & Amenity	<i>Red</i>	<i>Amber</i>
Green Belt	<i>Green</i>	<i>Green</i>
Airport Safeguarding Zones	<i>Green</i>	<i>Green</i>

4 Conclusion

- 4.1.1 This report provides a justified re-assessment of Land at Bellhouse Farm South utilising the Methodologies produced by Essex County Council in the 'Assessment of Candidate Sand and Gravel Sites' which form part of the current Regulation 18 Consultation of the Review of the Essex Minerals Local Plan 2014.
- 4.1.2 We have reviewed the extensive consultation material published by Essex County Council, including the Replacement Minerals Local Plan, Assessment of Candidate Sites, Assessment Methodologies and Sustainability Appraisal, with particular focus given to the RAG assessment of the Candidate Site A95 – Land at Bellhouse Farm South.
- 4.1.3 Since the initial submission of the Candidate Site in March 2022, an Environmental Impact Assessment has been prepared and submitted for the 830,000 tonnes within the Candidate Site land (Planning Application Ref: ESS/113/23/COL). It is aimed, subject to achieving planning permission that the mineral within the extension are will enter market in 2025.
- 4.1.4 The Replacement MLP was received to understand the mineral need position of Essex County Council. Looking at the total tonnage of sand and gravel required to be allocated within the Replacement MLP, it is identified that in order to demonstrate a 7 year landbank at the end of the plan period (2040), that a total of 87.56 million tonnes of resource is needed to be allocated. This is under the assumption that annual sales will total the annual apportionment of the Replacement MLP, of 3.98Mtpa.
- 4.1.5 The MPA do not seek to allocate the full 87.56mt through the Replacement MLP as there is existing permitted reserve. It is anticipated that at the time of adoption in 2025, there will be a permitted reserve of 22.95mt. This would leave a requirement of 64.56mt to be allocated through the Replacement MLP.
- 4.1.6 We question whether a number of the methodologies used in the assessment of the Candidate Sites are fully fit for purpose. Where issues are raised (namely Landscape and Visual Sensitivity, Transport, Access, Soil Quality, Services and Utilities, and Health and Amenity), justification is provided as to why, and where appropriate alternate suggestions are made.
- 4.1.7 Following our re-assessment of the RAG Grades against the published methodologies, we found that in an number of cases, the RAG assessment was overly critical and could justifiably be lowered. Where we have provided an assessment of reduced impact this

has been evidenced using the assessment work conducted in support of the submitted Environmental Impact Assessment.

- 4.1.8 Whilst we agreed with the RAG assessment for Archaeology, Transport, Access, Public Rights of Way, Geo-Environmental, Air Quality, Green Belt and Airport Safeguarding Zone; we found the assessment could be justifiably lowered for Landscape & Visual, Biodiversity, Historic Buildings, Flooding, Hydrology, Hydrogeology and Drainage, Soil Quality, Services & Utilities and Health & Amenity.
- 4.1.9 For a number of the elements which we agreed with the RAG Assessment, we believe had the methodologies been more fit for purpose then the assessment could have been lowered.
- 4.1.10 Overall, as can be seen from the Summary Table, Candidate Site A95 justifiably performs well. Resultingly, we request that Land at Bellhouse Farm South (Candidate Site A95) be allocated within the Replacement Minerals Local Plan 2040.

Appendix 1 – Updated Drawings