

committee DEVELOPMENT & REGULATION

date 22 November 2013

MINERALS AND WASTE DEVELOPMENT

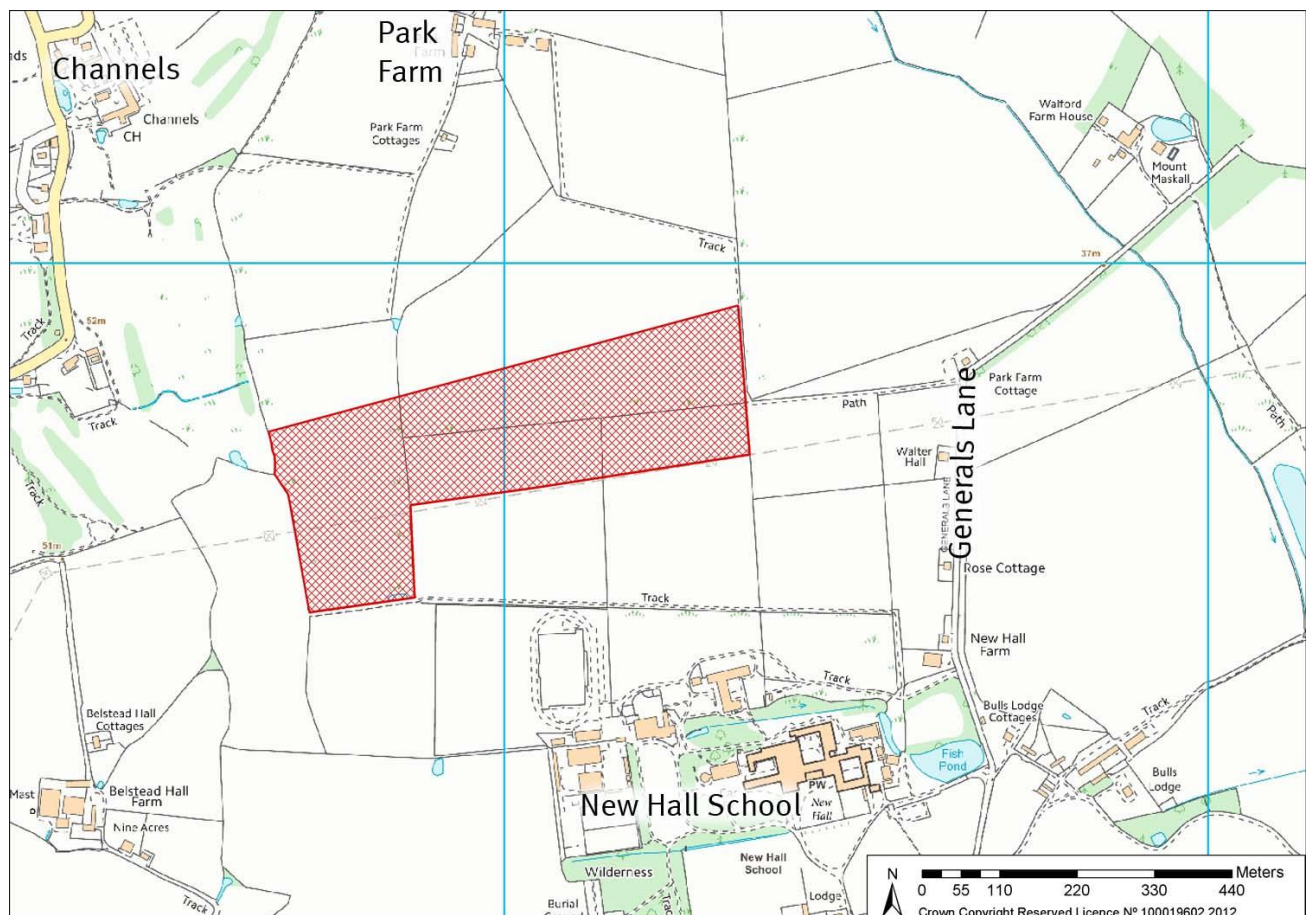
Proposal: The winning and working of sand and gravel and associated dry screen processing plant, temporary storage of minerals and soils and associated infrastructure. In addition backfilling of the void with soils and overburden arising from the development of mixed uses (Ref. 09/01314/EIA) on land adjacent to the mineral working.

Location: Land to the South of Park Farm, Springfield, Chelmsford.

Ref: ESS/21/12/CHL

Report by Director for Operations, Environment and Economy

Enquiries to: Claire Tomalin Tel: 01245 437541



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1. BACKGROUND

On the 23rd November 2012 the Committee resolved to grant planning permission for the above development to allow the extraction of minerals and infilling of the resulting void with overburden arising from the mixed use development proposed at Greater Beaulieu Park Development. The Greater Beaulieu Park Development is subject of a separate planning application (CCC Ref. 09/01314/EIA) being dealt with Chelmsford City Council, this application has been resolved to be granted outline planning permission, subject to legal agreements and conditions. CCC is continuing to have positive discussions with the applicant to complete the legal agreements.

The principle of mineral extraction in this area already been established through the grant of planning CHL/1890/87 in June 1990. The mineral reserve was originally to be worked as part of the Bulls Lodge Quarry. The application site is within the Chelmsford Borough Local Development Framework - North Chelmsford Area Action Plan identified for mixed use development. The application was brought forward to ensure the mineral reserve is worked prior to the development of land as part of the mixed use development i.e. the Greater Beaulieu Park (GBP).

To the west of the site planning permission has already been granted by Chelmsford City Council for residential and leisure use on land north and south of Belsteads Farm and Channels Golf Club and work has commenced on the access arrangements from Essex Regiment Way.

The County's resolution to grant planning permission was subject to conditions and all relevant landowners/interested parties entering into necessary legal agreements.

The resolution was updated to include changes set out within the November 2012 Addendum and changes made at committee at that time.

2. CURRENT POSITION

The authority has been progressing the completion legal agreements as required by the resolution.

Drafts of both the legal agreements and conditions have been exchanged and discussions are on going with the applicants to progress this draft. The need for this application for the separate and early extraction of the mineral is only necessitated by the mixed use development, thus the applicant has been focussing their attention on completing the legal agreements with Chelmsford City Council, with respect to the mixed use development, possibly to the detriment of the minerals application.

The applicant has through discussions requested that certain conditions that would normally be worded as details being required prior to commencement of development, that the details are required at an early stage, but not necessarily tied to the commencement date, to allow greater flexibility. Subject to the details

being approved at an appropriate stage to ensure that the details are in place to ensure that there are no adverse impacts from the development, it is considered that this is acceptable and in accordance with principles of the NFFP to facilitate development.

Since the original resolution of the mineral application Chelmsford City Council have reviewed their Core Strategy Policies in light of the NPPF, no policies have been amended that are relevant to the determination of this application.

There are no material considerations affecting the original resolution to grant permission that have arisen since the Committee last considered the proposal.

3. RECOMMENDED

- 1 The Committee re-endorse the previous decision to grant planning permission subject to the head of terms of the legal agreement and planning conditions as set out below, and;
- 2 A further report be submitted to the Committee should negotiations not proceed towards signing the necessary legal agreement by the end of May 2014 to allow Members to review progress.

Heads of terms of the legal agreement(s)

The prior completion, within 6 months, of Legal Agreements under the Planning Acts to secure obligations or such alternative forms as may be agreed by the Director for Operations, Environment and Economy and the County Council's Legal Officer, following further discussions with the applicant to cover the following matters:

- The scheme of obligations relating to the application site as currently set out within the existing s52 legal agreement associated with planning permissions CHL/1890/87 and CHL/1019/87 will require to be altered and/or restructured or a new legal agreement agreed to take account of the proposals.
- Not to commence implementation of the mineral/backfill development until lawful commencement of GBP development (CCC application ref: 09/01314/EIA).
- Prior to commencement of the mineral/backfill development to obtain approval from ECC of the habitat management plan as required by CCC application reference ref: 09/01314/EIA, subject to Chelmsford City Council confirming they intend to approve the same habitat management plan.
- Prior to commencement of the mineral development to obtain approval from ECC of the construction and environmental management plan as required by CCC application ref: 09/01314/EIA, subject to Chelmsford City Council being in a position confirming they intend to approve the same construction and environmental management plan.

- Prior to commencement of dewatering of the application site to obtain approval from ECC of the drainage management system (in particular with respect to the settlement pond and discharge of water resulting from dewatering and surface water from the application site) as required by CCC application Ref. 09/01314/EIA, subject to Chelmsford City Council confirming they intend to approve the same drainage management system.
- Groundwater monitoring outside the application site as described within the application and Environmental Statement
- Scheme of mitigation to be submitted should the water level in ponds outside the site drop significantly due to activities associated with the mineral/backfill development.
- Requirement for applicant to serve Unilateral Undertakings (UU) (the wording of which to be agreed in advance with MPA) on licensed abstractors. The UUs obligating to put licensed abstractors on mains water supply should there be significant detrimental impact upon water abstractions resulting from the mineral/backfill development.
- Early implementation of planting on the north and west boundary of New Hall School, as proposed by planning application CCC Ref: 09/01314/EIA.
- Access/egress to and from the public highway for vehicles associated with the mineral/backfill development only at locations as approved under planning application CCC Ref: 09/01314/EIA

Planning permission be granted subject to the conditions

Conditions relating to the following matters:

- COMM1 Commencement within 5 years
- COM3 Compliance with Submitted Details
- PROD 1 Export restriction - no greater rate than 325,000 tonnes per annum
- CESS5 Cessation of Mineral Development within 4 years, cessation of landfilling and restoration within 8 years except for restoration of boundary with Bulls Lodge Quarry extraction
- CESS3 Removal of Ancillary Development
- CESS7 Revised Restoration in Event of Suspension of Operations
- HOUR2 Hours of working (Mineral Specific)
07:00 to 18:30 hours Monday to Friday
07:00 to 13:00 hours Saturdays
and at no other times or on Sundays, Bank or Public Holidays.
- The schedule of work and timescales shall be carried out to accommodate the infrastructure delivery plan set out in the proposal of application ref. 09/01314/EIA
- South and east facing slopes of stores of overburden and subsoil shall be no greater than 1:3 and shall be topsoiled and seeded in first available planting season and subject to a programme of maintenance

- LGHT1 Fixed Lighting Restriction
- ECO3 Protection of Breeding Birds
- Submission of method statement with respect to removal of hedgerow
- Scheme of mitigation should ponds within the site dry due to mineral operations
- 10m standoff to all retained hedgerow and hedgerow trees
- NSE1 Noise Limits
- NSE2 Temporary Noisy Operations
- NSE3 Monitoring Noise Levels
- NSE5 White Noise Alarms
- NSE6 Silencing of Plant and Machinery
- HIGH3 Surfacing/Maintenance of Haul Road
- HIGH2 Vehicular Access
- DUST1 Dust Suppression Scheme – including source of water for dust suppression
- POLL6 Groundwater Monitoring
- Flood risk mitigation in accordance with FRA Dec 2011
- Details of method of soil stripping and placement
- LS4 Stripping of Top and Subsoil
- LS5 Maintenance of Bunds
- LS8 Soil Handled in a Dry and Friable Condition
- LS10 Notification of Commencement of Soil Stripping
- LS12 Topsoil and Subsoil Storage
- ARC1 Advance Archaeological Investigation
- No material other than overburden, subsoils and excavation waste (except topsoils) shall be disposed in the void
- POLL 4 Fuel/Chemical Storage
- POLL 8 Prevention of Plant and Machinery Pollution
- Scheme for removal of suspended solids from surface water run-off
- RES4 Final Landform
- Interim restoration scheme to rough grassland for phases where infilling complete, but redevelopment under GBP development not planned within 6 months
- Submission of restoration details for northern boundary area as indicated hatched on ES4.16 ensuring levels tie in with those permitted as part of CHL/1890/87 or any subsequent amendment
- Nature and use of infilling materials in accordance with report by URS Mineral Extraction and Backfill dated May 2012 and ensure the made up ground over which the Radial Distributor Road associated with application Ref 09/01314/EIA being dealt with by CCC is backfilled with appropriate material and compacted to finished levels to support the new RDR design requirements.
- MIN1 No Importation
- WAST6 No Crushing of Stone
- GPDO2 Removal of PD Rights
- Scheme of mitigation should ponds inside the site dry due to mineral operations

- No extraction or infilling at the site 4 years after commencement until the submission and approval of a reassessment of the impact of the proposals on ecology and the water environment.
- Submission of details of use of surplus topsoils

APPENDIX A (With Nov 2012 Addendum incorporated)

AGENDA ITEM

committee DEVELOPMENT & REGULATION

date 23 November 2012

MINERALS AND WASTE DEVELOPMENT

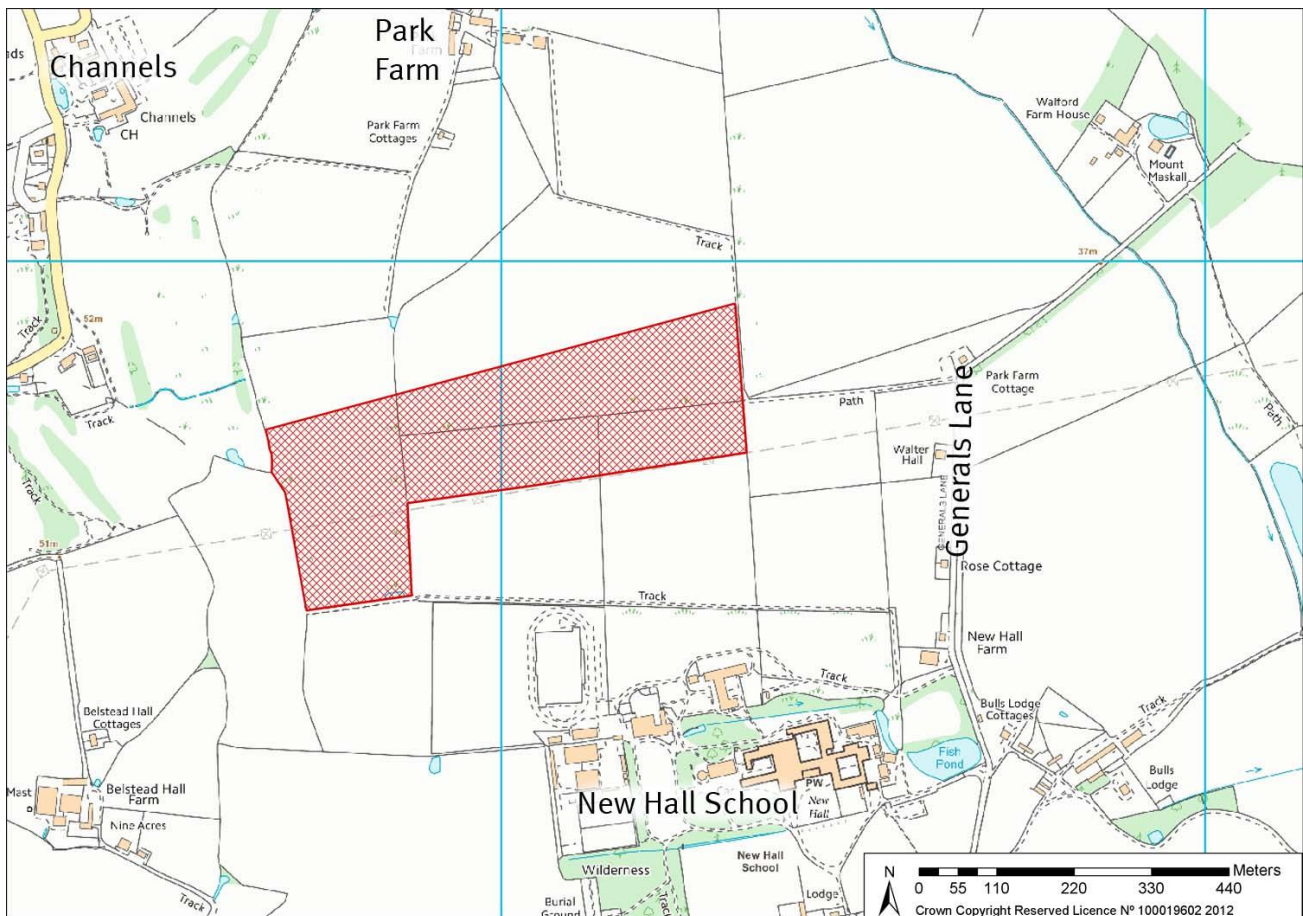
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Location: **Land to the South of Park Farm, Springfield, Chelmsford.**

Ref: **ESS/21/12/CHL**

Report by Head of Environmental Planning

Enquiries to: Claire Tomalin Tel: 01245 437541



1. BACKGROUND AND SITE HISTORY

The principle of mineral extraction has already been established through the grant of planning CHL/1890/87 in June 1990. This mineral reserve is currently permitted to be worked as part of the Bulls Lodge Quarry, but is not phased to be worked for a number of years. The application site is within the Chelmsford Borough Local Development Framework - North Chelmsford Area Action Plan identified for mixed use development. This application has been brought forward to ensure the mineral reserve is worked prior to the development of land as part of the mixed use development i.e. the Greater Beaulieu Park (GBP) development currently subject of an application to Chelmsford City Council (Ref. 09/01314/EIA). To the west of the site planning permission has already been resolved to be granted by Chelmsford City Council for residential and leisure use on land north and south of Belsteads Farm and Channels Golf Club.

The proposals were subject to a request for an EIA Screening Opinion (Ref ESS/61/10/CHL and an EIA Scoping Opinion (ref ESS/48/11/CHL/SPO)

2. SITE

The site is located north east side of Chelmsford, approximately 800m from the urban edge (existing Beaulieu Park) of Chelmsford. The land is currently in agricultural use and is made up of parts of three fields, divided by hedgerows. The nearest properties are New Hall School (Listed Building and Registered park & garden), the school boundary at approx 70m at the closest point, the nearest school building at 300m to the south east, which includes residential properties for staff and accommodation for boarding pupils. In addition there are properties along Generals Lane to east, the closest being Park Farm Cottages at 300m and Walter Hall at 270m and Park Farm at 490m to the north and Belstead Hall Cottages and Belstead Hall Farm 380m and 350m respectively to the south west. Abutting on the north west corner of the site lies Channels Golf Club and 600m to the west north west lies Falcon Bowling and Social Club.

The application site is wholly located within the adopted Chelmsford Borough Local Development Framework - North Chelmsford Area Action Plan area; the majority of the site is within site allocation 11 – Land north of the new road and part within Site Allocation 8 – Land North of New Hall School. To the west of the site lies Site Allocation 6 - Land north and south of Belsteads Farm Lane and Channels Golf Club.

There is public footpath Springfield No. 4 which lies to the south of the site and forms part of the Centenary Circle Trail around Chelmsford. An electricity power lines crosses, the southern part of the site, but no pylons are within the site.

The site lies within Springfield Parish, but lies adjacent to 3 other Parish Councils, Boreham, Broomfield and Little Waltham.

3. PROPOSAL

The proposal is to work 325,000 tonnes (203,000m³) of sand and gravel over a 2 -

3 year period. The sand and gravel would be dry screened using a mobile screening plant. The plant would be located below natural ground levels, after the initial excavation of overburdens to make a void.

The sand and gravel would be utilised in the construction of the adjacent GBP development, such that would be no need for sand and gravel to be exported via the public highway. Vehicle movements to and from the public highway would be limited to staff and plant. Access from the site to the GBP development would be in the lower south east corner of the site via a haul road and access for staff and plant to the public highway would be controlled by the planning permission for GBP development (Chelmsford Borough Council Ref. 09/01314/EIA).

The site would be worked in 13 phases working in an east to west direction. The base of the sand and gravel and the thickness of the seam ranges significantly across the site from 4.7m to 16.5m below ground, the thickness ranging from 0.4m to 8.4m. Approximately 30% of the sand and gravel is saturated with water; such the site would require to be dewatered to allow extraction below the water table. The water would be discharged to the west to a settlement pond forming part of the drainage system for the GBP development.

Soils and overburden would be stored on the south side of the site which dual as screening bunds. These bunds rise up to 5 m above natural ground levels.

It is proposed to use soils and overburden generated by the adjacent GBP development to partially infill the mineral void approximately 131,000m³, bringing the site levels to existing natural ground levels in the south east of site and then sloping down towards the south, the Radial Distributor Road part of the GBP development to be located 3m below natural ground levels and then dropping to 6m below ground levels, such that it would in the future tie in with the low level restoration of Bulls Lodge Quarry. The applicant anticipates that sufficient material would have been generated by 2016 from the GBP development.

The northern edge of the site would be restored at the time Bulls Lodge Quarry completes its extraction to the north of the application site.

The applicant has proposed that the while it is anticipated that the extraction would take 2 to 3 years and restoration with backfilling complete in the fourth year, due a range of factors that could influence the programme of development of the GBP development (and therefore the rate at which mineral would be used and backfill materials generated) and the uncertainty as to when Bull Lodge Quarry operators extraction and restoration to the north would be completed, a period of 8 years has been proposed to complete the extraction and restoration.

The application is accompanied by an Environmental Statement submitted under the EIA Regulations 2011.

4. POLICIES

The following policies of the:

- Regional Spatial Strategy for the East of England, adopted May 2008 and

Submission Revised Regional Spatial Strategy (sRSS) for the East of England (sRRS) submitted 2010,

- Essex and Southend on Sea Replacement Structure Plan (RSP), adopted 2001 (saved policies September 2007),
- Minerals Local Plan, adopted 1997 (saved policies September 2007)
- Essex and Southend Waste Local Plan (WLP), adopted 2001 (saved policies September 2007)
- Chelmsford Borough Development Framework 2001-2021 Core Strategy and Development Control Policies (CBDF - CSDC) the adopted Feb 2008
- The North Chelmsford Area Action Plan adopted July 2011

provide the development plan framework for this application. The following policies are of relevance to this application:

5.

	<u>sRSS</u>	<u>RSP</u>	<u>MLP</u>	<u>WLP</u>	<u>CCBD F- CSDC</u>
Achieving Sustainable Development	SS1				CP1
Strategic and Regional Road Networks	T6				
Landscape Conservation	ENV2		MLP13	W10E	
Biodiversity and Earth Heritage	ENV3		MLP13	W10E	
Agriculture, Land and Soils	ENV4				
The Historic Environment	ENV6		MLP13	W10E	
Ground water protection	WAT3		MLP13	W4B	
Flood Risk Management	WAT4				
Regional aggregates supply	M1		MLP1		
Sterilisation & safeguarding of Mineral Sites		MIN4			
Mineral working at preferred sites			MLP2		
Preferred methods of access to highway network			MLP3 MLP13	W4C	DC6
Restoration and aftercare			MLP8		
Feasible & timely restoration scheme			MLP9	W10 C	
Location of processing plant			MLP10		
Environmental Standards			MLP13	W10E	
Sustainable waste management				W3A	
Protection of water environment				W4A	CP10
Protection of groundwater				W4B	
Landfill on non-preferred sites				W9B	
Conditions & legal agreements				W10A	
Hours of operation				W10F	
Protect & enhance Rights of Way				W10 H	
Securing Sustainable Development					CP1
The Borough-Wide Spatial Strategy					CP2
Protection of Historic Environment					CP9

Minimising Environmental Impact					CP13
Environmental Quality and Landscape Character					CP14
Development in the Countryside					DC2
Protection of amenity					DC4
Health Impact Assessments					DC8
Biodiversity					DC13
Listed Buildings					DC18
Registered Parks and Gardens					DC20
Archaeology					DC21
Amenity & pollution					DC29
Traffic Management					DC41

It is noted that the Localism Act includes a Government commitment to revoke Regional Plans. Until the Regional Spatial Strategy for the East of England has been revoked, it remains part of the development plan. However, the Government's intention to revoke the plan is a material consideration in planning decisions.

The National Planning Policy Framework (NPPF), published in March 2012, sets out requirements for the determination of planning applications and is also a material consideration.

Paragraph 214 of the National Planning Policy Framework (NPPF) states that for 12 months from the day of publication, decision-takers may continue to give full weight to relevant policies adopted since 2004 (i.e. Development plan documents adopted in accordance with the Planning & Compulsory Purchase Act 2004 or published in the London Plan) even if there is a limited degree of conflict with the Framework.

It is considered that the Chelmsford Borough Development Framework 2001-2021 Core Strategy and Development Control Policies (adopted Feb 2008) and The North Chelmsford Area Action Plan (adopted July 2011) fall within the meaning of paragraph 214 and should be given full weight even if there is a limited degree of conflict with the Framework.

Paragraph 215 of the NPPF states, in summary, that due weight should be given to relevant policies in existing plans and for 12 months following publication of the NPPF, according to their degree of consistency with the Framework. The level of consistency of the policies contained within the Essex & Southend-On-Sea Structure Plan, Minerals Local Plan and the Essex and Southend Waste Local Plan is considered at **Appendix 1**.

6. CONSULTATIONS

CHELMSFORD CITY COUNCIL – No objection, subject to planning conditions, requiring mitigation as set out in the Environmental Statement, full details of the restoration programme, including that restoration levels are capable of accommodating the Radial Distributor Road (forming part of the GBP development) and the levels marry with the restoration levels of Bulls Lodge Quarry.

Further that the applicant should be asked to demonstrate that the GBP development, would generate enough surplus material in the infill the void to the proposed restoration levels.

Comment: Additional information was submitted to demonstrate that would be adequate material generated within the GBP development to achieve the proposed restoration levels.

ENVIRONMENT AGENCY: No objection subject to imposition of conditions to address the following matters:

- Groundwater – Due to potential for dewatering to impact upon private groundwater abstraction points, groundwater monitoring is required both prior to dewatering, during operations and post restoration. Preferably monitoring also undertaken at private abstraction points to establish pre-extraction conditions;
- Flood risk – Flood risk mitigation measures described in the Flood Risk Assessment should be secured by condition;
- Scheme for removal of suspended solids from surface water run-off

NATURAL ENGLAND: No objection, subject to conditions to

- ensure proposed mitigation with respect to protected species is in accordance with that proposed in the ES;
- protect the soil resource, in terms of soil handling , storage and afteruse.

ESSEX WILDLIFE TRUST: No comments received.

ENGLISH HERITAGE: No objection, subject to the application being considered in the context of the mixed use development 09/01314/EIA due to the setting of New Hall grade 1 Listed Building.

NATIONAL GRID: No comments received.

NATIONAL PLANNING CASEWORK UNIT: No comments.

CPRE: No comments received.

CHELMSFORD BOROUGH RAMBLERS ASSOCIATION: No comments received

HIGHWAY AUTHORITY – No objection, subject to conditions to:

- ensure the made up ground over which the Radial Distributor Road associated with application Ref 09/01314/EIA being dealt with by CCC is backfilled with appropriate material and compacted to finished levels to support the new RDR design requirements;
- The schedule of work and timescales shall be carried out to accommodate the infrastructure delivery plan set out in the proposal of application ref. 09/01314/EIA.

HIGHWAY AUTHORITY (Public Rights of Way) – No objection, as the route of the public right of way is not directly affected. Protection and future enhancement

would be delivered through the GBP development.

COUNTY COUNCIL'S NOISE CONSULTANT – No objection, consider that the proposed development is unlikely to result in adverse impact, due largely to the separation distances. Consider it would be appropriate to impose maximum noise limits for nearby properties and require monitoring as necessary to demonstrate compliance.

PLACE SERVICES (Ecology) ENVIRONMENT, SUSTAINABILITY AND HIGHWAYS – No objection. Comments that the ES relies upon ecological mitigation provided within the ES of the GBP development ES, the mitigation should have been presented within the ES for this development, in particular with respect loss of 50m hedge protection of veteran trees. Essential mitigation proposed within the GBP development is secured as part of these proposals. Welcomes the potential for Biodiversity off-setting.

PLACE SERVICES (Landscape) ENVIRONMENT, SUSTAINABILITY AND HIGHWAYS – Raises concern that the landscape and visual assessment does not appear to have assessed the impact of the workings on all the adjacent properties. Screening is not provided on all the boundaries of New Hall School, particularly that adjacent to the playing fields.

PLACE SERVICES (Archaeology) ENVIRONMENT, SUSTAINABILITY AND HIGHWAYS – No objection. The ES has identified a number of archaeological sites will require excavation and recording secured through appropriate conditions.

PLACE SERVICES (Historic Buildings) ENVIRONMENT, SUSTAINABILITY AND HIGHWAYS – No objection. Mineral extraction and the wider development are undesirable in the context of a Tudor palace at New Hall and its former parkland, the ES and mitigation are appropriate response in the circumstances.

SPRINGFIELD PARISH COUNCIL – No comments received.

LITTLE WALTHAM PARISH COUNCIL (adjacent) – No comments received.

BOREHAM PARISH COUNCIL (adjacent) – No objection.

BROOMFIELD PARISH COUNCIL (adjacent) – No comments received.

LOCAL MEMBER – CHELMSFORD – Springfield: No objection.

LOCAL MEMBER – CHELMSFORD – Broomfield & Writtle (adjacent): Any comments received will be reported.

LOCAL MEMBER – CHELMSFORD – Chelmer (adjacent): Any comments received will be reported.

7. REPRESENTATIONS

No properties lie within 250m of the boundary and therefore no properties were directly notified of the application. No letters of representation have been received as a result of site or press notices.

8. APPRAISAL

The key issues for consideration are:

- A Need & Principle of the Development
- B Relationship With Mixed Use Development And Legal Agreements
- C Landscape and visual Impact
- D Impact on Residential & Local Amenity – air quality, dust and noise
- E Ground & Surface Water
- F Ecology
- G Historic Environment
- H Traffic and Highways
- I Agriculture and Soils
- J Public Rights Of Way
- K Phasing, Reinstatement/Restoration & Timescale

A NEED & PRINCIPLE OF THE DEVELOPMENT

The application site already has an extant planning permission for sand and gravel extraction (Ref: CHL/1890/87). At that time the site was a preferred site in the Minerals Subject Plan (Adopted 1991) and the reserves within the site form part of the Landbank of sand and gravel for Essex. Therefore the principle of mineral extraction is already accepted and established and therefore the proposals are in accordance with M1 and MLP2.

The application site also lies within Site Allocations 8 and 11 of the adopted North Chelmsford Area Action Plan (NCAAP)(which allocates the land for mixed use development). At the preparation stage for this document it was highlighted that it was essential that the mineral within the site should be worked prior to the mixed use development to prevent its sterilisation. This was accepted by all parties, landowner, mineral owner, District and County Council, to ensure it's conformity with MIN4 of the Replacement Structure Plan and protect the permitted mineral reserves of Essex. Under the existing mineral permission CHL/1890/87 the mineral is not phased to be worked for a number of years, beyond the timescale for the mixed use development. A Statement of Common Ground was submitted to the Examination In Public with respect to NCAAP, with agreement that an application to work this area for minerals prior to the mixed use development would be made; hence the current application has been submitted. The application meets the requirements of the North Chelmsford Area Action Plan which requires prior extraction and is in accordance with MLP policy MIN4.

The current application also proposes the partial infilling of the void created by mineral extraction to enable the levels to be blended with the adjacent unworked land to the south and ensure the Radial Distributor Road forming part of the mixed use development was not required to have unnecessary slopes. The inert waste to infill the void would utilise overburdens and soils generated by the excavations required as a result of the adjacent mixed use development. The site would be restored to pre-existing ground levels in the southern half of the site, the northern half would be restored at 3m below natural ground levels and utilised to locate the

Radial Distributor Road for the GBP development and remainder dropping to 6m below existing ground levels, such that in the future it would tie with the low level restoration of Bulls Lodge Quarry.

WLP policy W9B seeks to minimise landfilling and landraising for its own sake, the amount of landfilling permitted only being that necessary and essential to achieve satisfactory restoration. It is considered that while low-level restoration had been proposed under the original restoration scheme permitted under CHL/1890/87, this was appropriate with respect to agricultural restoration, but due to its proposed afteruse for mixed development, including the radial distributor road the proposed partial reinstatement of levels is necessary. It is therefore considered the proposals accord with W9B. In addition by utilising waste overburdens and subsoils from the adjacent site, it avoids the need for this material to be disposed of elsewhere and the associated HGV movements. It is therefore considered that the development is considered to be sustainable development as set out in NPPF meeting the economic role, by assisting in providing infrastructure, while ensuring extraction of a valuable mineral resource, the social role helping to deliver housing and environmental role finding a sustainable use for waste materials arising from the development.

The sand and gravel would be processed through a mobile dry screen plant to be located within the void; this is conformity with MLP policy MLP10 which seeks to locate primary processing plant within the mineral extraction site. Mineral at Bulls Lodge Quarry is currently processed through a wet screen process, while this ensures the best use of the quality of the material, there is nothing to prevent sand and gravel being exported direct from the Bulls Lodge Quarry without processing, such that while the current proposals would not result in the most beneficial processing and maximising of value of the mineral resource than if it had been processed through the Bulls Lodge Quarry Plant, it has to be recognised that this could have happened even if worked as a phase of Bulls Lodge Quarry rather than separately. In addition because this section of reserve is being worked in isolation of the bigger reserve in Park Farm, it is economically unviable to establish either a haul road or conveyor to Bulls Lodge Quarry processing plant and transportation by road would have increased road miles. On site wet processing would require disposal of silt which could potentially lead to instability in the restored land which would be subject to built development, therefore dry screening is considered acceptable in the circumstances.

The dry screened minerals are proposed to be used in the construction of the mixed use development, reducing the amount of mineral requiring to be imported to the GBP development and reducing the number of vehicle movements associated with both export of the processed mineral.

It is therefore considered that the use of dry screening accords with MLP policy MLP10 and is sustainable in that it meets the NPPF economic role by co-ordinating development requirements and the environmental role by using natural resources prudently.

While the principle of the development is accepted it is necessary to consider whether there would be any significant adverse environmental effects or other

material considerations that would prevent the grant of planning permission.

B RELATIONSHIP WITH MIXED USE DEVELOPMENT AND LEGAL AGREEMENTS

As explained above, the need for this application and early working of this mineral is a direct result of the requirement to ensure the mineral is worked prior to its redevelopment for mixed use development. The mineral application area is only a small part of the application area of the GBP development. In addressing the impacts for the mineral/waste development the ES has it relied upon mitigation proposed as part of the ES for the GBP development. In order to ensure this mitigation is deliverable it is essential that the mineral development can only be commenced when the GBP development has commenced.

In addition as the mineral is to be wholly used within the GBP development, with no proposed export of minerals from outside the GBP development, it is essential to ensure that the GBP development is commenced prior to mineral extraction to ensure there is a use for the mineral.

To address these two matters it is necessary for the developer to provide a legal obligation through a legal agreement not to commence the mineral development until the GBP development has lawfully commenced (the developer is the same for both developments), both CCC and ECC would be a party to the legal agreement. The developer is willing to enter into such an agreement, subject to planning permission being granted.

There is an existing legal agreement (Section 52) signed in 1990 associated with the Bulls Lodge Quarry permissions to which the application land is subject, which involved various parties including all landowners, the mineral company and both Chelmsford Borough Council and Essex County Council. This existing legal agreement covered a number of matters, including protection of the North East Chelmsford By-Pass route (at that time), restoration obligations and all the conditions of the two Bulls Lodge Quarry permissions. Subject to planning permission being granted, there would need to be a legal agreement to address the existing agreement and carrying forward and update any relevant clauses of the s52 agreement to the application site, as to whether this is a separate legal agreement or part of S106 is a matter being resolved by the applicant and County's legal team.

Also through this report other matters requiring legal obligations as a result of the mineral/waste development have also been identified.

The need for such an agreement meets the key dimensions of sustainable development set out within the NPPF by achieving the economic role supporting growth through co-ordinating development and the environmental role contributing to protecting and enhancing the environment.

C LANDSCAPE AND VISUAL IMPACT

The landscape is characterised by medium fields with hedgerows, with small

copses and concentrated isolated farmsteads. The surrounding land consists mainly of urban fringe (existing Beaulieu Park housing development); land in rural use and of note is the Grade 1 Listed New Hall Buildings and associated registered park and garden which contribute to the value placed on this landscape. However, the Boreham airfield and past and current mineral workings to the north east and west have eroded the landscape quality through loss of hedgerows. The site itself is not subject to any National or local landscape designations. The ES concluded the impact would be low adverse.

Policies MLP13, W10E, ENV2, CP9, CP13, DC18 and DC20 seek to protect and enhance the landscape, countryside and historic landscape character, including Listed Buildings and Historic Parks and Gardens.

The elements of the proposal most likely to impact on the landscape character are the storage bunds, plant and equipment. Storage bunds have been located on the southside of the development to screen views of the mineral extraction and the processing plant is to be located below natural grounds levels to reduce its impact.

Concern has been expressed by the County's landscape officer that the ES could have more thoroughly considered the landscape and visual impact particularly with respect to New Hall School and nearest residential properties. The applicant was requested to provide additional bunding to supplement that proposed but is unable due to the need to retain stand offs from existing vegetation and ponds. The applicant states that no advanced planting has been proposed as part of the development, due to the short-timescale of the development. Landscaping on the boundary of New Hall School is proposed as part of the GBP development and in order to ensure this is planted at an early stage a commitment for such could be required through a legal obligation, should planning permission be granted.

The proposed storage bunds in themselves would introduce features into the landscape and in order to soften their impact it is considered that where the storage mounds face south and east their slopes should be slackened from 1:1 to 1:3 and topsoiled to ensure successful grass seeding to soften their impact, this could be secured by condition.

With respect to the visual impact the ES included a visual impact assessment. The ES concluded that the development would result in a slight significant impact, with the main impact being on users of the PROW, from most residential properties in most cases it was concluded within the ES that the development would not be visible.

Policies MLP13, W10E, CP13 and DC4 seek to protect local and residential amenity from adverse effects of visual intrusion.

The nearest residential properties are within the New Hall School grounds to the south, along Generals Lane to the east and at Belsteads Farm to the south west. In addition footpath Springfield 4 runs outside the site but along the southern boundary. The ground in the vicinity of the site is relatively flat, but does fall to the south towards New Hall School. Views are interrupted by hedgerows and hedgerow trees. All hedgerows, apart from a 50m section which does not provide

screening to nearby residents, would be retained and protected on site. Proposed bunding would further prevent views of the extraction areas from residential properties. Views from the public right of way would in part be obscured by the existing hedgerow and copse to its north and an overburden bund is proposed in the south west of the site screening views of the majority of the south west area of the mineral extraction and processing area, apart from views of the haul road and entrance to mineral void (which lies between the screening bunds). However the hedge and copse in the south east of this part of the site would screen views to a certain extent.

It is considered subject to the slackening of outwards faces of the bunds and grass seeding of the bunds and early planting of vegetation as part of the GBP development, as described above, the development would not result in an adverse landscape or visual impact. It is therefore considered the proposals would be in accordance with policies MLP13, W10E, ENV2, CP9, CP13, DC4, DC18 and DC20. It is considered subject to the suggested conditions and obligations there would be no significant adverse landscape and visual impact and the proposals comply with NPPF objectives with respect to its social and environmental role, supporting healthy communities and protecting the natural and historical environment.

D IMPACT ON RESIDENTIAL & LOCAL AMENITY – AIR QUALITY, DUST AND NOISE

The ES included a noise impact assessment of the proposals and impact upon air quality assessment which addressed dust only. The matter of vehicle emissions was not considered as the urban fringe location was likely to have low pollutant levels such that increase caused by the development would be unlikely to exceed national air quality levels.

Policies MLP13, W10E, CP13, DC8, and DC29 seek to protect residential and local amenity from the adverse impacts of noise and dust.

Dust

The nearest residential properties are at Belsteads Farm (240m), New Hall School (270m) and properties on Generals Lane (approximately 300m). In addition the playing fields of New Hall School are located within 100m of the extraction area. The Channels Golf Course lies within approximately 70m of the extraction, although this area is now in principle resolved to be redeveloped for housing, in order to protect the residential amenity of the occupants of these new houses (from both dust and noise disturbance) the nearest areas to the mineral working are either areas of public open space or occupation of residential properties within 100m of the mineral working are to be controlled by condition, through the housing permission, to be only occupied after completion of permitted mineral extraction.

It was concluded within the ES that with respect to residential amenity due to the distances of greater than 100m and prevailing winds from the south-west, subject to utilisation of standard dust suppression measures (which could be secured by condition) the ES concluded there would be negligible adverse effects.

In order to protect the residential amenity of the occupants of properties to be built as part of the GBP development a condition would be imposed by CCC on the GBP planning permission preventing occupation of any new houses within 100m of the proposed mineral extraction.

It is therefore considered subject to appropriate conditions with respect to dust suppression the proposal are in accordance with policies MLP13, W10E, CP13, DC8, DC29 and proposals comply with NPPF objectives with respect to its environmental role, by minimising pollution.

Noise

The nearest noise sensitive residential properties are as those described above with respect to dust, in addition within the grounds of New Hall School the closest residential property is 300m from the mineral working. The noise assessment calculated likely noise levels during the proposed operations in relation to the surrounding properties.

Policies MLP13, W10E and DC29 seek to protect residential and local amenity from adverse noise impact.

The noise assessment demonstrated that the mineral and infilling operations could be carried out such that the recommended increase in noise levels above background would not be exceeded, except for temporary operations, such as soil stripping and bund formation which are permitted for a limited period each year at a high noise levels. The noise would in part be minimised by the construction of the proposed overburden/soil storage mounds between the mineral/landfill workings and the residential properties.

The County Council's Noise consultant has raised no objection to the application, subject to appropriate conditions setting the maximum noise limits for the nearest noise sensitive properties, setting the maximum temporary noise level limit and requiring noise monitoring as necessary to show compliance with the permitted levels. It was noted that the noise assessment was made against guidance within MPS2 which has now been superseded by the NPPF, but it is considered that the noise assessment is still appropriate and meets the noise requirements of the NPPF.

With respect to both noise and dust it would be appropriate to impose hours of operation conditions to protect residential amenity from disturbance outside normal operating hours.

It is therefore considered subject to securing the conditions with respect to the proposed bunding and noise limits, noise monitoring and hours of operation; the proposals would accord with policies MLP13, W10E and DC29. Also that the proposals deliver sustainable development meeting the environmental role of the NPPF by minimising pollution

E GROUND & SURFACE WATER

The ES includes a hydrogeological assessment, surface water assessment and

Flood Risk Assessment. The proposal would require dewatering of the mineral void to enable full extraction of the reserve.

Policies WAT1, WAT3, WAT4, MLP13, W10E, W4A, W4B, CP13 and DC29 seek to protect groundwater, prevent increased flood risk and ensure sustainable drainage systems.

The hydrogeological assessment identified that there appeared to be differing zones of saturation with partial saturation in the north and full saturation of the sand and gravels in the south. In addition that there appears a hydraulic barrier in a general south west and north east direction. There are 5 licensed abstractions: 3 are located in New Hall School and the others at New Hall Farm and Walter Hall Farm on Generals lane, and these are understood to be for domestic or agricultural uses. It is unclear the general flow of the groundwater, a number of different investigations having concluded different directions. The effect of dewatering and the potential draw down impact has been assessed and there is potential for impact upon the licensed abstraction points. The applicants have proposed mitigation would be to connect the users to mains water supply should serious degradation be caused. The applicant has been reluctant to investigate these private abstractors to ascertain existing conditions, due to the fact that it is unlikely there would be an adverse impact. Investigations by the MPA indicate that the abstractors are already connected to mains water, but it is considered appropriate to require groundwater monitoring in and outside the site, to assess the extent of any impact and through a legal obligation to provide connection to the mains, should this prove necessary, should planning permission be granted.

There are seven ponds within the vicinity of the site (considered important due to the potential for Great Crested Newts) including that within Channels LWS. These were assessed not to be in hydraulic connectivity with the groundwater and therefore would be unaffected by the dewatering. It was assessed that groundwater was likely to have connectivity to springs in the south west and Boreham Brook in the northwest, but the distance to these features was such that the impact was not significant.

Water from the dewatering of the site is proposed to be discharged into the surface water system drainage system proposed as part of the GBP development, which would go via a settlement pond within the Neighbourhood development before being discharged to River Chelmer. Groundwater quality in the site was assessed to be good such that it would have no adverse impacts when discharged to the River Chelmer. The settlement pond would ensure that suspended solids would have settled before being discharged to the River Chelmer.

The site in terms of surface water straddles a watershed boundary, whereby water to the south and west drains to the River Chelmer, while water to the northeast drains to the Boreham Brook and then to the River Chelmer. As water from dewatering would be discharged to the River Chelmer while there might be some reduction due to evaporation, there was unlikely to be an adverse impact on flows within the River Chelmer.

With respect to Flood Risk Assessment the site is located within Flood Zone 1 with

the River Chelmer 1.2km to the west, such that no flood risk issues would arise as a result of the development.

The EA have raised no objection to the proposals, subject to appropriate condition/obligations to control the impact of the development with respect to dewatering controlling the rate of discharge, ground water monitoring to assess the impact on groundwater levels and drawn down effects. The EA has advised the applicant should contact current holders of abstraction licence in the area to establish current conditions of the abstraction, such should there be degradation it can be established whether this is associated with the mineral working or not.

It is considered subject to appropriate conditions as required by the EA (as described above) and with respect to good site practice, the quality of ground and surface water could be protected. It would be necessary to secure mitigation with respect to ground water abstraction users through a legal agreement, as well as for the management of surface water which is proposed to be discharged off site within the GBP development. Subject to such controls it is considered the proposals are in accordance with Policies WAT1, WAT3, WAT4, MLP13, W10E, W4A, W4B, CP13 and DC29 and meet the environmental objectives of the NPPF.

F ECOLOGY

The ES included an ecological assessment. The only locally designated nature conservation site is LWS Channels Golf course, abutting the site on the north west boundary. Notable habitats and species within the site were assessed to be ponds that could support GCN populations species rich hedgerow, with mature trees, that could support bats and breeding birds

Policies ENV3, MLP13, W10E, and DC13 seek in combination to maintain and enhance sites of biodiversity and geological value.

The ponds identified as potential GCN habitat are considered not to be in hydraulic connectivity with the groundwater and would therefore be unaffected by the dewatering operations. However, if upon implementation this was found not to be the case, topping up of the ponds could be controlled through condition/obligation utilising water within the GBP development. A 10m standoff is proposed from field margins to protect hedgerows and hedgerow trees to be retained and newly planted trees belts which contain slow worms and lizards. A section of "important hedgerow" to be lost contains no veteran trees and subject to avoiding bird nesting season and bio-diversity mitigation proposed within the GBP development, there would be no significant adverse impact from the loss of this potential habitat corridor.

The cumulative effects of the mineral development, Belsteads Farm Development (Channels Golf Club land) and the GBP development have been considered, few habitats of high conservation value would be directly affected, however loss of linear features such as hedges and stream channels would result in fragmented habitats and corridors, which could result in significant impact. Mitigation is proposed through the master plan process for the developments, which includes retention of the majority of ponds, key wildlife corridors and utilising water drainage

to feed ponds and recharge groundwater. An ecological Management Plan is required as part of the GBP development. In order to ensure this is in place, a legal obligation could be required as it relates to development not in the control of the Mineral Planning Authority.

Natural England has raised no objection to the application, subject to the interconnection of the mitigation proposed within the two application minerals and mixed use development being appropriately secured. The County's ecologist has also raised no objection, although did comment that while it's appreciated that mitigation is to be provided via the GBP development, the ES should have specifically set out the mitigation necessary for the minerals development within the minerals development ES.

It is considered, subject to conditions and a legal obligation to ensure proposed mitigation is secured, it is considered there would not significant adverse impact on bio-diversity and the proposals are in accordance with policies ENV3, MLP13, W10E, and DC13 and meets the NPPF requirements with respect to achieving an environmental role, protecting and enhancing our natural environment.

G HISTORIC ENVIRONMENT

The application was supported by an historic environment assessment including archaeological assessment, historic built heritage and historic landscapes. The archaeological assessment identified some archaeological remains of Iron Age and Roman British rural settlement and mitigation is proposed through preservation by recording. No Listed Buildings are within the site and eleven Listed Buildings were noted, in particular New Hall Grade 1 Listed Building and New Hall Grade II registered park and garden. It was noted that New Hall Tudor palace has been substantially altered by truncation and addition, but does retain considerable architectural and historical value. The outlook to the north towards the mineral site is considered not to contribute to the asset as there are modern school developments. Other Listed Buildings are at such a distance with intervening vegetation that there was considered to be no adverse impact on their setting.

Policies ENV6, MLP13, W10E, CP9, DC13, DC20 and DC 21 seek to protect, enhance and preserve the historic environment, including archaeological remains and the setting of Listed Buildings, Registered Parks & Gardens.

The county's historic environment team have raised no objection, subject to an appropriate archaeological assessment. It was commented by the County's Historic building officer that the impact of mineral extraction was undesirable on the New Hall Tudor Palace, but in the context of the GBP development the assessment and mitigation proposed was an appropriate response.

It is considered subject to appropriate conditions to ensure archaeological assessment and an obligation for early planting on the northern boundary of New Hall School proposed as part of the GBP development the proposals would not have a significant adverse impact on the archaeological remains or setting of the surrounding listed buildings provided the site is operated as proposed. It is therefore considered the proposals are in accordance with ENV6, MLP13, W10E,

CP9, DC13, DC20 and DC 21 and is in compliance with the NPPF in that the proposals achieve the social role supporting the cultural well-being and protecting and the environmental role enhancing the built and historic environment.

H TRAFFIC AND HIGHWAYS

The application would generate only limited traffic movements. Mineral extracted from the site is proposed to be utilised in the construction of the GBP development, while fill material to restore the void is to also be sourced from the construction works from excavations, such that there would be no need for HGV's exporting mineral outside the confines of the GBP development scheme for which there are internal haul roads proposed.

Policies T6, MLP3, MLP13, W4C and DC6 seek to ensure that suitable safe access is provided onto the public highway and that sustainable forms of transportation are utilised.

The only traffic to be generated would be the initial bringing on site of necessary plant and machinery and daily movements associated with staff. Access to the public highway would be controlled through the traffic and access arrangements for the GBP development. Appropriate conditions could be imposed to ensure access from the site is only from the proposed internal haul roads and through an obligation in a legal agreement that access to the public highway only via those routes/access points approved under the GBP development.

It is considered that there would be no adverse impact on the highway network and that the utilisation of minerals and disposal of materials in association with GBP development ensures a sustainable use of mineral resources and a sustainable means of disposing of excavation waste minimising the need for HGV movements to the public highway. It is considered that the proposals are in accordance with policies T6, MLP3, MLP13, W4C and DC6 and meet the NPPF aim for planning to sustainable development through co-ordinating development requirements, its economic role, and reducing carbon emissions from vehicles achieving its environmental role.

I AGRICULTURE AND SOILS

The proposal would result in the loss of agricultural land; however, the principle of this loss of agricultural land has already been established and accepted through the adoption of the Chelmsford North Area Action Plan.

Policies MLP8 and MLP9 seek to ensure restoration to a beneficial afteruse and where appropriate return best and most versatile land to agricultural. Policies MLP8 and W10E seek to protect best and most versatile agricultural land. Since preparation of the MLP and WLP the emphasis on restoration to agriculture has been amended through both the sRSS policy ENV6 and the NPPF (paragraph), such that while agricultural land should be protected more importantly it is the soil resource that should be protected, such that should it be required for agriculture it is still available. The NPPF refers to the protection of soils.

Natural England in their consultation response has highlighted the need for protection of soils and their sustainable afteruse.

The soils stripped from the mineral working are proposed to be stripped according to best practice and stockpiled on site and conditions to secure such could be controlled through conditions. Topsoil is valuable resource that should be protected, it is considered appropriate to impose a condition requiring the applicant to demonstrate that topsoil would be utilised in a sustainable manner in the GBP development such that they are protected for future use, should planning permission be granted.

It is considered subject to the above suggested conditions that there would not be a significant adverse effect on agricultural soils and the proposals would be in accordance with policies MLP13, W10E, ENV6 and the NPPF supporting sustainable development achieving the environment role through protecting rural resources.

J PUBLIC RIGHTS OF WAY

Footpath Springfield 4 (part of the Chelmsford Centenary Circle trail) runs along the southern boundary outside of the application site, such that it would only impact on users of the footpath rather than its actual route.

The ES considered the visual impact of users of the footpath is was acknowledged that there would be some adverse impact, but that existing hedges and a copse on the southern boundary when combined with proposed soil and overburden storage bunds would screen the majority of the operations from users of the path. It also has to be acknowledged that the impact of the mineral working is relative in the context of the development of the GBP development. The footpath is proposed to be incorporated into the GBP development within areas of public open space.

Policies MLP13, W10E, W10G and DC41 seek to protect and enhance public rights of way. It is considered that with the proposed screening bunds that would not be a significant adverse impact on users of the public right of way and would not be contrary to the planning policies.

K PHASING, REINSTATEMENT/RESTORATION & TIMESCALE

The site is proposed to be worked in a phased manner establishing the processing plant at low level in the east of the site, the initial stripped material to be used to form soil storage and overburden bunds. The site would then be worked in 14 phases working in a west to east direction across the site with infilling following extraction. It is anticipated that sufficient material would have been generated by the GBP development in 2016 complete the restoration. The application site is phased to be the last area for development as part of the GBP development anticipated to be developed in 2020. As there is likely to be a potential delay between completion of infilling and redevelopment for mixed use it would be appropriate to require an interim restoration scheme that would require phased interim restoration scheme for the site, such that the land is restored to rough grassland in order to minimise its impact upon the countryside and subject to such

conditions would be in accordance with MLP9 and W10C.

On the northern boundary, the site abuts the land still in the control of Bull Lodge Quarry operator which will be worked under the existing permission, but not planned currently to be worked for a number of years. This land is also within of the Chelmsford North Area Action Plan, and it is understood Bull Lodge Quarry operator do intend to come forward with an application to work this land at an earlier stage than currently planned. It would be necessary to leave a face/slope on the northern boundary of the current application site such that the operators of Bulls Lodge Quarry can work through this face when working mineral to the north. The restoration scheme for the land to the north is permitted to be restored at low level; the levels within the current application and within the Bull Lodge Quarry operator would have to be reconciled in the future to provide an acceptable landform which enables mixed use development. As the restoration levels to merge the two sites are not known at this time it is considered that the final restoration levels along this northern boundary could by condition to be submitted prior to completion of mineral extraction in the control of Bulls Lodge Quarry's operator. Subject to such conditions the proposals would be in accordance with policies MLP8 and W10C and ensure the landform is suitable for built development as part of the NCAAP.

The application anticipates a timescale of 4 years for mineral extraction and restoration, but requests that the planning permission be granted for 8 years to allow greater flexibility as progress of the extraction and infilling is dependent on the rate of progress within the GBP development. The ES has been based on the proposals being implemented over a 4 year period many of the impacts would remain the same but occur over a longer period, however there is potential of adverse impact with respect to ecology and hydrogeology if the extraction/infilling were to be undertaken for a longer period. Therefore if extraction and or infilling is not completed within 4 years of commencement it is considered appropriate to require review of the impact of the proposals on the ecology and water environment and require any necessary mitigation prior to further working, this could be achieved by condition.

It is acknowledged that reinstatement/restoration on the northern boundary is dependent on Bull Lodge Quarry operators completing their extraction, over which the applicant has no control and therefore it is considered reasonable that details with respect to restoration of this area could be required over a longer period.

All of the above factors meet the NPPF objectives for planning achieving the economic role supporting growth through co-ordinating development including infrastructure, social role facilitating delivery of housing and environmental role ensuring prudent use of resources in this case minerals.

9. CONCLUSION

The principle of mineral extraction had already been established through the grant of planning for Bulls Lodge Quarry in 1990 and therefore in conformity with policy MLP1. The need for its early extraction ensures the mineral is not sterilised by the GBP development and therefore meets the requirements of both policy MIN4, while

enabling the implementation of the North Chelmsford Area Action Plan.

With respect to environmental and other considerations, subject to legal obligations and conditions to control the environmental impacts and other materials matters it is considered there would be no adverse impact, in particular:

- restructuring or alteration of obligations within the existing s52 that relate to the application land;
- conditions to control screening of the development and protection of existing vegetation to minimise visual and landscape impact, in particular New Hall Tudor Palace, in accordance with policies MLP13, W10E, DC18, DC20;
- conditions to control noise and dust impact to minimise impact on residential and local amenity in accordance with policies MLP13, W10E, W10G, DC8, DC29 and DC41;
- conditions and legal obligations are required to minimise the impact of the development on the water environment, in particular with respect to monitoring of groundwater and mitigation if adverse impact results on existing water abstraction licence holders or ecologically sensitive areas and an obligation to ensure the off site water management mitigation provided within the GBP development is secured in accordance with policies WAT1, WAT3, WAT4, MLP13, W10E, W4A, W4B, CP13 and DC29;
- obligations to ensure delivery of ecological mitigation provided for through the GBP development and conditions to ensure protection of habitats and species including stand offs to hedgerows, timing of operations and removal of the hedgerow, in accordance with policies ENV3, MLP13, W10E, DC13;
- conditions to ensure recording of archaeological remains and an obligation for early planting north of New Hall School the proposals would be in accordance with policies ENV6, MLP13, W10E, CP9, DC13, DC20 and DC 21;
- conditions to ensure protection soils and an obligation to utilise topsoils sustainably within the GBP development, the proposals would be in accordance with policies MLP13, W10E, ENV6; and
- conditions to ensure logical phasing and timely working and restoration within 4 to 8 years, the re view of impacts on ecology and water environment in year 4 and a longer period for restoration of the northern boundary which will dependant of the adjacent area being worked by Bulls Lodge Quarry operators.

By requiring the above conditions and obligations it is considered the development could be properly controlled and would achieve the social and environmental roles as set out in the NPPF by protecting the health, social and cultural well-being, protecting and enhancing the natural, built and historic environment, enabling growth and co-ordinating developments, the economic role.

It is considered in conclusion the proposals including the mitigation proposed which could be secured through conditions and obligations would achieve sustainable development in accordance with the NPPF.

10. RECOMMENDED

That planning permission be **granted** subject to

i) The prior completion, within 12 months, of Legal Agreements under the Planning Acts to secure obligations covering the following matters:

- The scheme of obligations relating to the application site as currently set out within the existing s52 legal agreement associated with planning permissions CHL/1890/87 and CHL/1019/87 will require to be altered and/or restructured or a new legal agreement agreed to take account of the proposals.
- Not to commence implementation of the mineral/backfill development until lawful commencement of GBP development (CCC application ref: 09/01314/EIA).
- Prior to commencement of the mineral/backfill development to obtain approval from ECC of the habitat management plan as required by CCC application reference ref: 09/01314/EIA, subject to Chelmsford City Council confirming they intend to approve the same habitat management plan.
- Prior to commencement of the mineral development to obtain approval from ECC of the construction and environmental management plan as required by CCC application ref: 09/01314/EIA, subject to Chelmsford City Council being in a position confirming they intend to approve the same construction and environmental management plan.
- Prior to commencement of dewatering of the application site to obtain approval from ECC of the drainage management system (in particular with respect to the settlement pond and discharge of water resulting from dewatering and surface water from the application site) as required by CCC application Ref. 09/01314/EIA, subject to Chelmsford City Council confirming they intend to approve the same drainage management system.
- Groundwater monitoring outside the application site as described within the application and Environmental Statement
- Scheme of mitigation to be submitted should the water level in ponds outside the site drop significantly due to activities associated with the mineral/backfill development.
- Requirement for applicant to serve Unilateral Undertakings (UU) (the wording of which to be agreed in advance with MPA) on licensed abstractors. The UUs obligating to put licensed abstractors on mains water supply should there be significant detrimental impact upon water abstractions resulting from the mineral/backfill development.
- Early implementation of planting on the north and west boundary of New Hall School, as proposed by planning application CCC Ref:

09/01314/EIA.

- Access/egress to and from the public highway for vehicles associated with the mineral/backfill development only at locations as approved under planning application CCC Ref: 09/01314/EIA

ii) And conditions relating to the following matters;

- COMM1 Commencement within 5 years
- COM3 Compliance with Submitted Details
- PROD 1 Export restriction - no greater rate than 325,000 tonnes per annum
- CESS5 Cessation of Mineral Development within 4 years, cessation of landfilling and restoration within 8 years except for restoration of boundary with Bulls Lodge Quarry extraction
- CESS3 Removal of Ancillary Development
- CESS7 Revised Restoration in Event of Suspension of Operations
- HOUR2 Hours of working (Mineral Specific)
07:00 to 18:30 hours Monday to Friday
07:00 to 13:00 hours Saturdays
and at no other times or on Sundays, Bank or Public Holidays.
- The schedule of work and timescales shall be carried out to accommodate the infrastructure delivery plan set out in the proposal of application ref. 09/01314/EIA
- South and east facing slopes of stores of overburden and subsoil shall be no greater than 1:3 and shall be topsoiled and seeded in first available planting season and subject to a programme of maintenance
- LGHT1 Fixed Lighting Restriction
- ECO3 Protection of Breeding Birds
- Submission of method statement with respect to removal of hedgerow
- Scheme of mitigation should ponds within the site dry due to mineral operations
- 10m standoff to all retained hedgerow and hedgerow trees
- NSE1 Noise Limits
- NSE2 Temporary Noisy Operations
- NSE3 Monitoring Noise Levels
- NSE5 White Noise Alarms
- NSE6 Silencing of Plant and Machinery
- HIGH3 Surfacing/Maintenance of Haul Road
- HIGH2 Vehicular Access
- DUST1 Dust Suppression Scheme – including source of water for dust suppression
- POLL6 Groundwater Monitoring
- Flood risk mitigation in accordance with FRA Dec 2011
- Details of method of soil stripping and placement
- LS4 Stripping of Top and Subsoil
- LS5 Maintenance of Bunds
- LS8 Soil Handled in a Dry and Friable Condition
- LS10 Notification of Commencement of Soil Stripping

- LS12 Topsoil and Subsoil Storage
- ARC1 Advance Archaeological Investigation
- No material other than overburden, subsoils and excavation waste (except topsoils) shall be disposed in the void
- POLL 4 Fuel/Chemical Storage
- POLL 8 Prevention of Plant and Machinery Pollution
- Scheme for removal of suspended solids from surface water run-off
- RES4 Final Landform
- Interim restoration scheme to rough grassland for phases where infilling complete, but redevelopment under GBP development not planned within 6 months
- Submission of restoration details for northern boundary area as indicated hatched on ES4.16 ensuring levels tie in with those permitted as part of CHL/1890/87 or any subsequent amendment
- Nature and use of infilling materials in accordance with report by URS Mineral Extraction and Backfill dated May 2012 and ensure the made up ground over which the Radial Distributor Road associated with application Ref 09/01314/EIA being dealt with by CCC is backfilled with appropriate material and compacted to finished levels to support the new RDR design requirements.
- MIN1 No Importation
- WAST6 No Crushing of Stone
- GPDO2 Removal of PD Rights
- Scheme of mitigation should ponds inside the site dry due to mineral operations
- No extraction or infilling at the site 4 years after commencement until the submission and approval of a reassessment of the impact of the proposals on ecology and the water environment.
- Submission of details of use of surplus topsoils

BACKGROUND PAPERS

Consultation replies

Ref: P/DC/Claire Tomalin/ESS/21/12/CHL

EQUALITIES IMPACT ASSESSMENT: The report only concerns the determination of an application for planning permission and takes into account any equalities implications. The recommendation has been made after consideration of the application and supporting documents, the development plan, government policy and guidance, representations and all other material planning considerations as detailed in the body of the report.

THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010

The proposed development would not be located within the screening distance for SACs/SPAs and the nature of the development is such that it would not adversely affect the integrity of such sites, either individually or in combination with other plans or projects. Therefore, it is considered that an Appropriate Assessment under Regulation 61 of The Conservation of Habitats and Species Regulations

2010 is not required.

STATEMENT OF HOW THE LOCAL AUTHORITY HAS WORKED WITH THE APPLICANT IN A POSITIVE AND PROACTIVE MANNER

Essex County Council has worked with Chelmsford City Council, the applicant and other interested parties, during the preparation and adoption of the Chelmsford North Area Action Plan, to ensure that permitted minerals resources were protected from sterilisation by facilitating its early extraction so as to assist in the delivery of the development of this area for mixed uses. Subsequent to this ECC has been engaged in pre-application discussions with the applicant, including the issue of EIA Screening and Scoping Opinions to ensure all issues were appropriately addressed within the application and Environmental Statement to minimise delays in its determination.

During determination of the application ECC forwarded on all statutory consultation responses received in a timely manner to the applicant. This provided the applicant with the opportunity to see and comment on any and all issues which were raised and provided additional information where necessary. ECC has continued to liaise with CCC with respect to the interrelationship between the mineral application and the GBP application.

LOCAL MEMBER NOTIFICATION

CHELMSFORD Broomfield & Writtle
CHELMSFORD – Boreham
CHELMSFORD - Springfield

Consideration of Consistency of Policies

Essex & Southend-On-Sea Replacement Structure Plan adopted April 2001		
Ref:	Policy	Consistency with NPPF and PPS10
MIN4	Wherever possible, potentially workable mineral deposits will be safeguarded from surface development that would sterilise the minerals or prejudice their working. If, in the opinion of the Mineral Planning Authority, surface development should be permitted, consideration will be given to the prior extraction of the minerals to the extent that such extraction would not be likely to render the site unsuitable for the development proposed, and that the deposit is, or may become, economically significant.	<p>Paragraph 142 of the NPPF requires MPAs to set out policies to encourage the prior extraction of minerals, where practicable and environmentally feasible, if it is necessary for non-mineral development to take place.</p> <p>Paragraph 142 of the NPPF places an obligation on MPAs to define Minerals Safeguarding Areas to prevent needless sterilisation of known locations of specific mineral resources.</p> <p>In addition Paragraph 144 of the NPPF requires MPAs in determining applications to not normally permit non-mineral development where this would constrain future working of the minerals.</p> <p>Policy MIN4 is therefore considered to be in conformity with the NPPF.</p>
Minerals Local Plan Adopted January 1997		
Ref:	Policy	Consistency with NPPF
MLP1	The Mineral Planning Authority will endeavour to ensure that reserves of land won sand and gravel are always available, with planning permission, sufficient for at least seven years' extraction or such other period agreed as National Policy based on the production level that may be periodically agreed by them as part of the Regional apportionment exercise.	<p>Paragraph 145 of the NPPF places an obligation on the MPA to plan for a steady and adequate supply of aggregates using landbanks as an indicator of the security of aggregates supply and making provision for maintenance of at 7 years for sand and gravel.</p> <p>Policy MLP1 is therefore considered to be in conformity with the NPPF</p>
MLP2	Mineral working will be permitted only where there is an identified national, regional or local need for the mineral	Paragraph 145 of the NPPF places an obligation on MPAs to take account of National and Sub

	<p>concerned.</p> <p>In the case of preferred sites the principle of extraction has been accepted and the need for the release of the mineral proven. Applications would be allowed unless the proposal fails to meet a pre-condition or requirement in Schedule 1 or there are unforeseen unacceptable environmental or other problems.</p>	<p>National guidelines when planning for the future demand for and supply of aggregates.</p> <p>Landbanks are stated as being “principally an indicator of the security of supply” in paragraph 145 of the Framework, whereas policy MLP2 treats it as the only indicator.</p> <p>At paragraph 11 & 12 the NPPF states that “the development plan as the starting point for decision making...unless other material considerations indicate otherwise.</p> <p>The NPPF leaves the MPA to identify sites.</p> <p>It is considered that MLP2 is in conformity with the NPPF</p>
MLP3	<ol style="list-style-type: none"> 1. Access from a mineral working will preferably be by a short length of existing road to the main highway network, defined in Structure Plan policy T2, via a suitable existing junction, improved if required, in accordance with Structure Plan policies T4 and T14. 2. Proposals for new access direct to the main highway network may exceptionally be accepted where no opportunity exists for using a suitable existing access or junction, and where it can be constructed in accordance with the County Council’s Highway standards. There is a presumption against new access onto motorways or strategic trunk roads. 3. Where access to the main highway network is not feasible, access onto a secondary road before gaining access onto the network may exceptionally be accepted if in the opinion of MPA the capacity of the road is adequate and there will be no undue impact on 	<p>Paragraph 32 of the NPPF requires LPAs decisions to take account inter alia that “...safe and suitable access to the site can be achieved for all people...” and in Paragraph 35 developments should be located and designed where practical to...” inter alia “...create safe and secure layouts”</p> <p>It is therefore considered that MLP3 is in conformity with NPPF has it seeks to provide safe and suitable accesses.</p>
MLP8	<p>Planning permission will not normally be given for the working of minerals unless the land concerned is capable of being</p>	<p>Paragraph 144 of the NPPF requires LPAs when determining planning application inter alia</p>

	<p>restored within a reasonable time to a condition such as to make possible an appropriate and beneficial afteruse. Where planning permission for mineral working is given on Grade 1, 2 and 3A of the Ministry of Agriculture's Land Classification, the land will be required to be restored within a reasonable time and as nearly as possible to its former agricultural quality. Where filling material is necessary, permission will not be given until it is shown that suitable material will be available and that the compatibility of the landfill gas and leachate monitoring and control structures and processes with the afteruse is demonstrated. Wherever possible land permitted for mineral working will be restored to agricultural use, but due regard will also be had to the need for areas for nature conservation, water based recreation, afforestation and leisure activities. Where permission is given, conditions will be imposed to secure:</p> <ul style="list-style-type: none"> i) progressive working and restoration; and ii) aftercare and maintenance of the restored land for not less than 5 years, and iii) a beneficial afteruse of the restored land including the use of areas that remain waterfilled. 	<p>"provide for restoration and aftercare at the earliest opportunity to be carried out to high environmental standards.</p> <p>Paragraph 109 of the NPPF requires protection of soils.</p> <p>The NPPF does not place such weight as the MLP on the need for restoration to agriculture for land that is best and most versatile, however it is recognised in paragraph 112 that the economic and other benefits of the best and most versatile land should be taken account of. In addition at Paragraph 109 it does require protection of soils. MLP8 recognises and does not preclude restoration to alternative afteruses.</p> <p>It is therefore considered that MLP8 is largely in conformity with the NPPF</p>
MLP9	<p>In considering planning applications for mineral working or related development, the Mineral Planning Authority will permit only those proposals where the provisions for working and reclamation contained in the application are satisfactory and the implementation of the proposals is feasible.</p>	<p>The NPPF at Paragraph 144 requires when LPAs are determining planning applications to "...provide for restoration and aftercare at the earliest opportunity to be carried out to high environmental standards...". To ensure such restoration can be achieved applications need to demonstrate any restoration scheme is feasible.</p> <p>It is therefore considered that MLP9 is conformity with the NPPF</p>
MLP10	<p>The primary processing plant will normally be expected to be located within the limits of any mineral working at either a low</p>	<p>The NPPF at Paragraph 144 requires when LPAs are determining applications to ensure</p>

	<p>level or with the step being taken to mitigate its visual and aural impact. Sites with their own processing plant will be preferred to minimise movement of material on public roads and, by conditions imposed on permission, plant will not normally be available for material imported on to the site.</p>	<p>applications does cause inter alia "...unacceptable adverse impacts on the natural and historic environment, human health..." In addition Paragraph 4 requires "...decisions should ensure developments that generate significant movement are located where the need to travel will be minimised..."</p> <p>MLP10 seeks to reduce the environmental impact of mineral processing plant, by locating it at low level.</p> <p>MLP10 also seeks to co-locate mineral extraction with the primary processing plant, reducing unnecessary traffic movements.</p> <p>It is therefore considered that MLP10 is in conformity with the NPPF</p>
MLP13	<p>Planning applications for mineral extraction and related development will be refused where there would be an unacceptable effect on any of the following:</p> <p>The visual and aural environment; Local residents' (or others') amenity; Landscape and the countryside; The highway network; Water resources; Nature conservation.</p>	<p>The NPPF at Paragraph 144 requires when LPAs are determining applications to ensure applications does cause inter alia "...unacceptable adverse impacts on the natural and historic environment, human health..." and</p> <p>In addition in paragraph 144 "...that any unavoidable noise, dust and particle emissions and blasting vibrations are controlled...and establish appropriate noise limits..."</p> <p>The NPPF supports sustainable transport including requiring development to have safe and suitable access (Paragraph 32) and locating development to "...accommodate the efficient delivery of good and supplies..." (Paragraph 35)</p>
<p>Essex & Southend Waste Local Plan adopted 2001</p>		

Ref:	Policy	Consistency with NPPF and PPS10
W3A	<p>The WPAs will:</p> <p>In determining planning applications and in all consideration of waste management, proposals have regard to the following principles:</p> <ul style="list-style-type: none"> • Consistency with the goals and principles of sustainable development; • Whether the proposal represents the best practicable environmental option for the particular waste stream and at that location; • Whether the proposal would conflict with other options further up the waste hierarchy; • Conformity with the proximity principle. <p>In considering proposals for managing waste and in working with the WDAs, WCAs and industrial and commercial organisations, promote waste reduction, re-use of waste, waste recycling/composting, energy recovery from waste and waste disposal in that order of priority.</p> <p>Identify specific locations and areas of search for waste management facilities, planning criteria for the location of additional facilities, and existing and potential landfill sites, which together enable adequate provision to be made for Essex, Southend and regional waste management needs as defined in policies W3B and W3C.</p>	<p>Paragraph 6 of the NPPF sets out that the purpose of the planning system is to contribute to the achievement of sustainable development.</p> <p>PPS10 supersedes 'BPEO'.</p> <p>PPS10 advocates the movement of the management of waste up the waste hierarchy in order to break the link between economic growth and the environmental impact of waste.</p> <p>One of the key planning objectives is also to help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations.</p> <p>See reasoning for Policy W8A.</p> <p>Therefore, Policy W3A is considered to be consistent with the NPPF and PPS10.</p>
W3C	<p>Subject to policy W3B, in the case of landfill and to policy W5A in the case of special wastes, significant waste management developments (with a capacity over 25,000 tonnes per annum) will only be permitted when a need for the facility (in accordance with the principles established in policy W3A) has been</p>	<p>Paragraph 3 of PPS 10 highlights the key planning objectives for all waste planning authorities (WPA). WPA's should, to the extent appropriate to their responsibilities, prepare and deliver planning strategies one of which is to help implement the</p>

	<p>demonstrated for waste arising in Essex and Southend. In the case of non-landfill proposal with an annual capacity over 50,000 tonnes per annum, restrictions will be imposed, as part of any planning permission granted, to restrict the source of waste to that arising in the Plan area. Exceptions may be made in the following circumstances:</p> <ul style="list-style-type: none"> • Where the proposal would achieve other benefits that would outweigh any harm caused; • Where meeting a cross-boundary need would satisfy the proximity principle and be mutually acceptable to both WPA5; • In the case of landfill, where it is shown to be necessary to achieve satisfactory restoration. 	<p>national waste strategy, and supporting targets, are consistent with obligations required under European legislation and support and complement other guidance and legal controls such as those set out in the Waste Management Licensing Regulations 1994.</p> <p>The concept of the proximity principle has been superseded by the objective of PPS10 to enable waste to be disposed of in one of the nearest appropriate installations.</p> <p>Therefore, as Policy W3C is concerned with identifying the amount of waste treated and its source the policy is considered consistent with the requirements of PPS10.</p>
W4A	<p>Waste management development will only be permitted where:</p> <ul style="list-style-type: none"> • There would not be an unacceptable risk of flooding on site or elsewhere as a result of impediment to the flow or storage of surface water; • There would not be an adverse effect on the water environment as a result of surface water run-off; • Existing and proposed flood defences are protected and there is no interference with the ability of responsible bodies to carry out flood defence works and maintenance. 	<p>Paragraph 99 of the NPPF states that 'Local Plans should take account of climate change over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape. New development should be planned to avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure'. In addition Annex E of PPS10 highlights at section <i>a. protection of water resources</i> that 'Considerations will include the proximity of vulnerable surface and groundwater. For landfill or land-raising, geological conditions and the behaviour of surface water and groundwater should be assessed both for the</p>

		<p>site under consideration and the surrounding area. The suitability of locations subject to flooding will also need particular care’.</p> <p>Therefore, as policy W4A seeks to only permit development that would not have an adverse impact upon the local environment through flooding and seeks developments to make adequate provision for surface water run-off the policy is in conformity with PPS10 and the NPPF.</p>
W4B	Waste management development will only be permitted where there would not be an unacceptable risk to the quality of surface and groundwaters or of impediment to groundwater flow.	See above.
W4C	<ol style="list-style-type: none"> 1. Access for waste management sites will normally be by a short length of existing road to the main highway network consisting of regional routes and county/urban distributors identified in the Structure Plan, via a suitable existing junction, improved if required, to the satisfaction of the highway authority. 2. Exceptionally, proposals for new access direct to the main highway network may be accepted where no opportunity exists for using a suitable existing access or junction, and where it can be constructed in accordance with the County Council’s highway standards. 3. Where access to the main highway network is not feasible, access onto another road before gaining access onto the network may be accepted if, in the opinion of the WPA having regard to the scale of development, the capacity of the road is adequate and there would be no undue impact on road safety or the environment. 4. Proposals for rail or water transport of waste will be encouraged, subject to compliance with other policies of this 	<p>Paragraph 21 (i) of PPS10 highlights that when assessing the suitability of development the capacity of existing and potential transport infrastructure to support the sustainable movement of waste, and products arising from resource recovery, seeking when practicable and beneficial to use modes other than road transport.</p> <p>Furthermore, Paragraph 34 of the NPPF states that ‘Decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised’.</p> <p>Policy W4C is in conformity with paragraph 34 in that it seeks to locate development within areas that can accommodate the level of traffic proposed. In addition the policy seeks to assess the existing road networks therefore, being in accordance with the NPPF and PPS10.</p>

	plan.	
W9B	<p>Landfill, or landraising, for its own sake, without being necessary for restoration, will not be permitted. Landfill outside the boundaries of the preferred sites will not be permitted unless it can be demonstrated that satisfactory restoration cannot otherwise be achieved. Landfill will not be permitted when at a scale beyond that which is essential for restoration of the site.</p>	<p>PPS10 sets out the key objectives to achieve sustainable waste management including Paragraph 3 "...driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option, but one which must be catered for..."</p> <p>Policy W9B seeks to minimise landfill and landraising to that essential to achieve restoration, thereby minimising the amount of waste going to landfilling pushing waste management up the waste hierarchy.</p> <p>This is supported by Paragraph 144 of the NPPF which states that when determining planning applications, LPAs should amongst other consideration "... Provide for restoration and aftercare at the earliest opportunity to be carried out to high environmental standards..." By minimising the amount of landfill, the delivery or restoration would not be unnecessarily delayed.</p>
W10A	<p>When granting planning permission for waste management facilities, the WPA will impose conditions and/or enter into legal agreements as appropriate to ensure that the site is operated in a manner acceptable to the WPA and that the development is undertaken in accordance with the approved details.</p>	<p>PPS10 states that 'It should not be necessary to use planning conditions to control the pollution aspects of a waste management facility where the facility requires a permit from the pollution control authority. In some cases, however, it may be appropriate to use planning conditions to control other aspects of the development. For example, planning conditions could be used in respect of transport modes, the hours of operation where these may have an impact on neighbouring land use, landscaping, plant and buildings, the timescale of the</p>

		<p>operations, and impacts such as noise, vibrations, odour, and dust from certain phases of the development such as demolition and construction’.</p> <p>Furthermore, paragraph 203 of the NPPF states that ‘Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition’.</p> <p>Policy W10A inter alia only seeks to impose conditions and/or enter into legal agreements when appropriate to ensure that the site is operated in an acceptable manner. Therefore, the policy is in accordance with the requirements of the NPPF and PPS10.</p>
W10E	<p>Waste management development, including landfill, will be permitted where satisfactory provision is made in respect of the following criteria, provided the development complies with other policies of this plan:</p> <ol style="list-style-type: none"> 1. The effect of the development on the amenity of neighbouring occupiers, particularly from noise, smell, dust and other potential pollutants (the factors listed in paragraph 10.12 will be taken into account); 2. The effect of the development on the landscape and the countryside, particularly in the AONB, the community forest and areas with special landscape designations; 3. The impact of road traffic generated by the development on the highway network (see also 	<p>Policy W10E is in conformity with the NPPF in that the policy is concerned with the protection of the environment and plays a pivotal role for the County Council in ensuring the protection and enhancement of the natural, built and historic environment.</p> <p>However, with respect to loss of agricultural land it should be noted that the NPPF places both a requirement to protected soils paragraph 109 as well taking account of the economic and other benefits of the best and most versatile agricultural land paragraph 112 when considering non agricultural land uses.</p> <p>The policy overall therefore is linked to the third dimension of</p>

	<p>policy W4C);</p> <ol style="list-style-type: none"> 4. The availability of different transport modes; 5. The loss of land of agricultural grades 1, 2 or 3a; 6. The effect of the development on historic and archaeological sites; 7. The availability of adequate water supplies and the effect of the development on land drainage; 8. The effect of the development on nature conservation, particularly on or near SSSI or land with other ecological or wildlife designations; and 9. In the Metropolitan Green Belt, the effect of the development on the purposes of the Green Belt. 	<p>sustainable development in the meaning of the NPPF.</p>
W10F	<p>Where appropriate the WPA will impose a condition restricting hours of operation on waste management facilities having regard to local amenity and the nature of the operation.</p>	<p>In addition Paragraph 123 of the NPPF states that planning decisions should aim to mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new developments, including through the use of conditions. Furthermore, paragraph 203 states that local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations.</p> <p>It is considered that as policy W10F is concerned with the protection of amenity and seeks to impose conditions to minimise this policy W10F is in conformity with the requirements of the NPPF.</p> <p>Also see above regarding PPS10 and conditions.</p>

APPRAISAL OF ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR:

The winning and working of sand and gravel and associated dry screen processing plant, temporary storage of minerals and soils and associated infrastructure. In addition backfilling of the void with soils and overburden arising from the development of mixed uses (Ref. 09/01314/EIA) on land adjacent to the mineral working.

At Land to the South of Park Farm ESS/21/12/CHL

An Environmental Statement (ES) dated February 2012 has been submitted with the application.

The nine key subject areas identified in the ES are:

- Landscape and Visual effects
- Biodiversity (ecology)
- Noise and Vibration
- Historic Environment
- Air Quality (Dust)
- Groundwater
- Surface Water
- Other Issues
- Cumulative Impacts

The Environmental impacts of the proposed scheme have been considered by reference to baseline conditions at the time of the preparation of the ES (2011) based on the requirements of the current planning consents for the site.

The severity or magnitude of environmental impacts are categorised in the ES as “Major/High/Substantial/Severe”, “Moderate/Medium”, “Minor/Low/Slight” or “Negligible”, dependent upon criteria set out in the individual topic chapters. The significance of the potential effect of an environmental impact has then been assessed on the basis of the magnitude of the impact and the sensitivity, importance or value of a resource, receptor or group of receptors. Where impacts have been identified which may give rise to significant effects, mitigation measures are presented as a means of avoiding or reducing or compensating any adverse effects on the environment.

The key environmental issues identified throughout the ES have been presented. This includes those impacts of the proposed scheme that may give rise to significant direct and indirect environmental effects, and identifies whether any residual effects are anticipated once mitigation measures have been taken into account

The residual effects have been presented as well as consideration of whether those effects are direct or indirect; national, regional or local; short or long term; temporary or permanent. Mitigation measures have also been proposed where applicable.

Appraisal of EIA

The following seeks to consider whether the EIA process has adequately addressed all the relevant environmental impacts, particularly those identified in the Scoping Opinion issued by ECC on the 20 Sept 2011, whether the degree of environmental impacts has been appropriately assessed and the proposed mitigation considered adequate.

Landscape & Visual Effects

Landscape Effects

The ES appropriately assess the baseline landscape character in the context of any relevant landscape designations and National and Local landscape character assessments. There are no national or local landscape designations affecting the site. The site lies within the National Character Area (Natural England) of NCA 86 "South Suffolk and North Essex Claylands" and the application area demonstrates some of the key characteristics. The site lies within the Central Essex Farmlands (B1) of the Glacial Till Plateau character area as set out in the Essex Landscape Character Assessment (2002), this highlights historical features such as New Hall and Boreham Airfield and sand and gravel pits. It notes that these mineral workings have resulted in an erosion of the character of the area due to loss of hedgerows and as a result landscape quality/condition is described as moderate. The site lies within the Boreham Farmland Plateau as described in the "Brentwood, Chelmsford, Maldon, Uttlesford Landscape Character Assessment" 2006. The application site was considered to exhibit the key characteristics of this character area, including medium fields with hedgerows, small copses and concentration of isolated farmsteads.

A site specific landscape character assessment was also undertaken and looked at the key landscape characteristics of the site, the landscape quality, and the sensitivity and capacity to absorb change or development. It is noted that the surrounding land consists mainly of urban fringe and rural land use and the grade 1 listed New Hall and associated registered park and garden also contribute to the value placed on the relatively undisturbed arable fields and are considered to be a local landmark. It was considered that previous sand and gravel operations and construction of the airfield had had a detrimental impact on the overall quality of the landscape, through the removal of characteristic elements and introduction of new land uses. The landscape quality of the development site was assessed as being of medium quality and value.

The application site was assessed as being of low sensitivity to the proposed development and included the following reasons, landscape has accommodate large similar operations, part of a pre-existing planning permission, vegetation loss would be kept to a minimum, development would not be visible due to existing hedgerows.

The site was assessed as having high capacity to accommodate the proposed development within the landscape, due the fact the landscape has historically accommodated similar larger operations and therefore would not introduce an uncharacteristic land use in the area and would only result in the loss of a few characteristics and elements such as hedgerows and therefore was assessed as having high capacity to accommodate the proposed development.

The site was assessed to have medium Tranquillity, the site is in a largely rural landscape but noise from the A130 impacts on the tranquillity.

The potential landscape impacts were assessed based on the storage bunds, plant and equipment required to extract the mineral over a 3 to 4 year period.

The assessment considered both direct (bunds, new permanent landform) and indirect (dust and water) impacts

The proposal includes mitigation to minimise views from the PROW to the south and from New Hall Grade 1 Listed building and registered park and garden. The proposals also include phased working and restoration to limit the extent of working at any one time. The proposals do not include any on or off site planting, justified by the applicant due to the short-timescale of the proposals.

Residual landscape effects the proposals would not result in any landscape elements of value or that cannot be replaced. Overall the impacts of the proposed development during extraction are considered to be low adverse and upon completion very low, due to the short-term nature, that the development does not introduce a new land use. The residual landscape impacts are assessed as being negligible to adverse effect on the baseline landscape character.

Appraisal of Landscape Assessment

The assessment of the baseline landscape character was considered to be sound and the assessment of the landscape quality, landscape sensitivity of the site and landscape capacity to accommodate the proposed development to be fair.

In considering the potential effects, the elements of the proposed development were considered appropriate except the assessment was based on 4 years as opposed to the proposed potential of 8 years and the timescale for working would ultimately depend on the progress of the adjacent mixed use development.

Visual Effects

Visual impact was firstly assessed from a desk top study to identify potential viewpoints and the potential theoretical zone of visibility. Photos were taken from publicly accessible view points.

Views were assessed from north south, east and west.

The Zone Of Theoretical Visibility of the proposed development was assessed by a 3D modelling package, but takes no account of existing intervening vegetation.

The combination of the above assessments identified that there were only very localised views into the site.

The nature and sensitivity of the viewpoints was assessed on the functions receptor, degree of exposure to view and period of exposure, the magnitude of the visual impact was assessed based on value of existing view, degree of change, availability and amenity of the alternative views and distance.

11 view points were assessed intended to be representative of likely views from properties, although it was acknowledged that views from the north, Park Farm & Park

Farm Cottages and Belstead Farms were unobtainable from publicly accessible locations.

Views from the PROW were considered to be the most significant, particularly Springfield FP4 (Centenary Circle National Trail). Assessment of views of the site from public roads Belstead Farm Lane, Domsey Lane, Cranham Road, Boreham Road or Main Road were not possible due to intervening existing vegetation. Some views were possible from the A130 and Mill Lane.

Existing screening is identified as established field boundaries along the western & southern boundaries, which provide screening of the site. To the north views are identified as screened by hedgerows and small plots of woodland around Park Farm & Boreham airfield. Views from east & west, apart from those close to the locality are noted as partially or fully obstructed by a combination of landform and vegetation. As a result the development site is assessed as not being well defined in the landscape.

The southern east edge of the site does not benefit from existing vegetation and mitigation is proposed in the form of storage mounds to screen views from the PROW and New Hall.

Overall it was assessed the site was identifiable in the landscape by the pylon features located in the vicinity of the development site. Distant views from west, east & south fringe of the area, such as Broomfield & Springfield were not possible. However, a combination of landform and existing vegetation largely screen contributed to providing screening the site from most directions. Views of the development were noted in close proximity to a very few residences and the PROW.

The potential factors that were likely to give rise to visual effects were, change in view, increased visibility of arable fields particularly from the south, impact of temporary use of plant, upon restoration arising from change in topography, particularly for close receptors.

Mitigation is proposed for views from the east in terms of grassed soil storage bunds. Planting is not proposed.

Appraisal of Visual Impact Assessment

Potential viewpoints were established via a desk top study and the photos taken from publicly accessible view points. It is considered that while this gave a broad indication of the visual impact from visual receptors, attempt should have been made to assess impacts from private property, particularly within the grounds of New Hall School, which was particularly identified within the Scoping Opinion. While screening mounds are located along most of the southern edge there are sections from the south west where there would not be bunding and the visual impact of the 5m high bunding itself has not be considered.

Overall Appraisal of Landscape & Visual Assessment

While screening bunds have been proposed on the eastern area of the development, no screening mounds have been proposed around parts the western half of the site despite this being highlighted in the Scoping Opinion.

It is considered that overall the landscape and visual assessment were adequate.

Biodiversity (ecology)

An ecological Impact Assessment was carried out and formed part of the ES. The assessment included a desk study and consultation and an extended Phase 1 habitat survey was undertaken in 2011, this updated surveys that have been previously undertaken in relation to the Neighbourhood Scheme development which have been undertaken since 2006. Additional surveys were undertaken in 2011 for Great Crested Newts (GCN) and reptiles.

The assessment describes the potential ecological receptors. There are no statutory designations for nature conservation, there is a non-statutory Local Wildlife Site (LWS) adjacent to the western boundary Ch83 (channels Golf Course and 2 other LWS within 2km radius

It was identified that there were the following protected and notable habitats hedgerows and standing water, with potential for protected and notable species as follows: bats, breeding birds, GCN, reptiles and badgers.

The site survey identified that the site consisted of arable fields surrounded by small 1-2m of semi-improved grassland margins and hedgerows. Mature trees were recorded within the hedgerows. Two ponds were recorded, in the site and one approximately 100m north of the northern boundary. Within the site there are areas of newly planted trees (3 to 5 years old).

Protected and notable habitat and species were identified on site as follows: ponds could support GCN; and species rich hedgerows with hedgerow trees with a number of mature and semi mature broadleaf standard trees which could support bats and breeding bird. With respect to bats due to numerous hedges and ponds in the Channels LWS commuting and foraging bats on site was likely. Birds were assessed as being garden, hedgerow and woodland edge with potential for white throat and grey pigeon. The ponds on and off site were found populated with GCN. The fenced off area around new planting had potential for foraging reptiles such as common lizard, slow worm and grass snake, one juvenile grass snake was found during the survey. A known badger sett was identified to be active, while another sett was no longer in use, no other setts were found.

Temporary impacts during extraction, significance & proposed mitigation were assessed as follows

Receptor & effects	Significance	Mitigation proposed
<u>Temporary disturbance/damage</u>		
Disturbance to arable field margins	Certain effect significant at Site level	Working corridors demarcated to prevent disturbance
Compaction of soils adjacent to trees and hedgerows	Probable effect could be significant at district level	Fencing to protect tree and hedge roots for all retained
Light disturbance to bats at dusk impacting upon	uncertain effect of significance at site level	No night-time working and where lighting required for

commuting and foraging		H & S shall be directional
Breeding birds – 3 to 4 breeding seasons disturbed	Probable effect of significance at site level	As above, and no soil stripping hedgerow removal between Mar & Aug unless supervised by ecologist
GCN – disturbance to foraging and commuting	Likely effect unlikely significance above local level	AS above
<u>Direct & Indirect Mortality</u>		
Bats – no trees to be removed	No significant impact predicted	
Badgers – sett not to be directly impacted & no machinery within 30m. Potential for badgers to move into soil mounds. Badgers falling into excavation	No impact Likely significant effect Unlikely, but would be infringement of WCA 1981	Fencing described above would deter badgers, mammal ramps out of excavation, badger fencing if necessary site monitoring required prior to & during development for badger activity
GCN – no ponds to be lost, but potential mortality during hedgerow removal and if hibernate in soils mounds which are subsequently removed	Probable impact significant at site level	Fencing to protect terrestrial habitat required, removal of hedgerow to be undertaken under Method Statement. Also enhancements to existing GCN/reptile habitat through management plan. Translocation programme not anticipated, but would be undertaken in necessary,
Reptiles – most habitat to be maintained, but some potential during hedgerow removal and as a result of plant movement	Probable impact significant at site level	See above
<u>Hydrological Impacts (Siltation & dewatering)</u>		
Channels LWS	No likely impact	
Ponds & ditches – potential for surface water runoff to bring silt from disturbed ground, also loss of water to due to dewatering affecting groundwater levels	Probable impacts of significance at local level	Works compound away from water courses, soil storage covered to prevent runoff. Replaced soil grassed prior to Neighbourhood scheme.
GCN – siltation could effect breeding habitat on and off site	Probable impact significant at local level	See above

The residual temporary effects of the development were considered with respect to temporary effects as relating mainly to be breeding birds, with disturbance insignificant due to habituation to shrub nesting birds, but may be significant for ground nesting birds.

The residual permanent effects related to the loss of 50m of hedge causing loss of commuting routes for bats, loss of nesting sites for birds and commuting and sheltering habitats for GCN/reptiles, but this would be compensated for as part of the proposals within the neighbourhood scheme.

Cumulative effects

The cumulative effects were also assessed as potentially the proposed development would be happening at the same time as the Neighbourhood scheme, both at the Channels Golf Club and GBP development. The developments would mainly affect areas of open arable field, improved grassland and golf course, few habitats of high conservation value would be directly affected. However, loss of sections of linear features such as hedges and stream channels and as such losses to and fragmentation of habitats and corridors is likely assessed as potentially significant at district level and if all developments take place at once significant at county level.

Mitigation is proposed through the master plan process for the developments, which retains intact the majority of ponds, key wildlife corridors within broad areas of open space, to be managed for public amenity and nature conservation. It also includes utilising surface water drainage schemes to feed existing ponds and recharge groundwater. An ecological Management Plan is to be required as part of the neighbourhood scheme.

Appraisal of ecological impact assessment

The assessment has appropriately assessed the potential notable and protected habitats and species and proposed mitigation. It is noted that the assessment was based on 4 years of disruption while in fact the application is seeking 8 years. ECC ecologist did find the presentation of the assessment fragmented. The assessment also relies on mitigation to be provided through the Neighbourhood scheme for residual permanent and cumulative effects, which cannot be controlled by condition through this planning application. The assessment was considered adequate.

Noise and Vibration

A noise assessment was carried out for the development. Due to the distance between the site and residential receptors a vibration assessment it was considered highly unlikely that increased vibration would be experienced and was scoped out.

The noise assessment established receptor locations in consultation with CBC and surveys undertaken to establish background noise levels at

Park Farm – north of site	LA90 dB - 41
Blue Post Cottages – north west of site	LA90 db – 41
Nine Acres/Belstead Hall Farm – south west of site	LA90 dB - 43
Walter Hall, Generals Lane – east of site.	LA90 dB - 38
New Hall School – south east of site (shorter period of monitoring)	LA90 dB - 46

Noise modelling software was then used to predict noise from mineral extraction activities and maximum noise limits set for temporary activities and non-temporary activities based on MPS2. While MPS2 has been superseded by the NPPF since preparation of the noise assessment, the acceptable limits have not changed.

The predicted noise levels were modelled for 4 locations within the site, SW corner, NW corner, NE corner mid N area and far E area of the site, both for temporary activities (soil stripping bund formation) and extraction operations (including haulage and operation of processing plant and for simultaneous operations (i.e. temporary operations with extraction operations).

Mitigation measures include the creation of soil storage bunds which were taken account of in the noise modelling. In addition best practice measures would be employed including quieter reserving alarm, maintaining plant and haul roads and minimising drop of materials.

Modelling demonstrated that temporary operations and simultaneous operations were predicted not to exceed 70 dB LAeq, 1h at all noise sensitive receptors and not exceed the maximum noise limits set at the noise sensitive receptors.

Noise impact of proposed operations was concluded to be negligible.

Appraisal of Noise & Vibration Assessment

It is considered acceptable that due to distances involved no vibration assessment was required. It is disappointing that only limited background noise assessment was undertaken and not at the closest location of school buildings to the development, particularly as the background plus 10dB would exceed the maximum noise limit of 55dB, however, the applicant is willing to except a 55 maximum and predictions have shown this limit would not be exceeded.

Historic Environment

The historic assessment included archaeological assessment and assessment of built and landscape heritage. The assessment sought to

- Identify known archaeological remains, built heritage receptors and historic landscape character
- Assess likely survival significance of archaeological deposits within the site
- Assess the potential impact of the development upon archaeological deposits, cultural heritage assets and their setting
- Propose mitigation

Archaeology

Baseline conditions were established with reference to appropriate national and local data and an updated walkover. Also reference was made to previous studies both intrusive and non-intrusive archaeological surveys undertaken for Neighbourhood scheme. An archaeological trench survey was undertaken in 2011.

The data sets were evaluated utilising a GIS system to enable the character, extent, date and significance of any heritage assets and their settings established and the archaeological potential of the site determined.

The significance of Heritage assets was assessed in line with PPS5, now superseded by the NPPF, but has not changed the overall approach, and the following factors were considered: significance of the heritage asset, magnitude of impact and significance of effect.

No assets of Very High or High or Unknown significance have been identified within the site. Iron Age and Romano–British rural settlement site have been assessed as being of Medium significance and extent defined by the 2011 trial trenching.

Five archaeological assets identified within the site were assessed as being of Low significance, including

- the pond located in the southeast corner possible a feature of the early post-medieval deer park or agricultural feature for watering deer or livestock
- hedge bank forming a surviving section of the later 18th century parks pales
- dense and well established hedgerow with several mature oaks thought to be post-medieval park pales dating from 17th century
- broad, shallow curvilinear crop mark representing course of the former park pale
- two narrow linear features containing bricks (16th to 18th century) and large infilled hollow.

Five archaeological assets were identified as being of negligible significance having no research potential.

The excavation of soils, overburden and sand and gravel would result in direct impacts with total loss or disturbance of known archaeological remains. Mitigation is proposed comprising preservation by record.

The impact upon archaeological of medium significance is assessed with mitigation as Moderate adverse effect. The impact on archaeological assets of low significance would result in slight adverse effects. The impact on archaeological assets of negligible significance would result in slight adverse impact. Overall the proposed development would have a moderate adverse impact.

Built Heritage

There are no designated or undesignated built heritage assets in the site. Within the Study area 11 designated and 8 non-designated heritage assets were identified.

Very High Significance

- New Hall Grade I Listed building
- New Hall Grade II registered park and garden

High Significance -

- Belsteads Farmhouse Grade II Listed building
- Channels Farmhouse Grade II Listed Building
- Mount Maskells Grade II Listed Building
- Old Farm Lodge a collection of Grade II Listed buildings

Four undesignated assets of medium, significance were identified and 3 non-designated assets of low significance

The assessment of impact was restricted to their settings only.

New Hall, Tudor in origin has been substantially altered by truncation and addition, but does retain considerable architectural and historical values. The registered park includes the gardens areas which surround the buildings particularly significant is the avenue that extends south. The landscape beyond the registered park is assessed of little significance and is considered to contribute little historical value to the asses. The outlook to the north is considered not contribute to the asset as there are modern school developments. The mature trees on the north aspect provide a screen to views from the listed building north to the application site. The proposed screening bunds would assist in further screening the development. It is assessed the development would have a minor to negligible impact on the asset.

With respect to all other built heritage assets the impact on setting is assessed as being minor to neutral, mainly due the screening/filtering effect of vegetation.

Historic Landscape Character-

One HLC is defined as 18th century rectilinear enclosure (the field pattern survives with a degree of time depth with relict features from New Hall's historic parkland landscape incorporated into the late 18th century agricultural landscape) assessed as being of low significance.

The developed is assessed to have a number of direct but short-term impacts on the historic landscape namely soil removal, storage of soils/overburden, extraction and processing of minerals, water management and movement and operation of plant. These would temporarily change the historic land-use pattern and introduce noise & visual disturbance.

The HLC has a moderate sensitivity and capacity to absorb change. The development would preserve the extant relic elements of the historic landscape largely unaltered.

No specific mitigation is proposed but the proposed screening bunds would assist to screen the temporary effects of the development. The magnitude of impact was assessed as being moderate negative resulting in a slight adverse effect following mitigation.

Overall the Heritage Assessment concluded that the highest significance of impact was on New Hall and New Hall Registered Park & Garden with moderate to minor impact, while all other assets were assessed as the impact would be minor to neutral.

Appraisal of Historic Assessment

The appraisal was considered adequate.

Air Quality

The air quality assessment considered dust and vehicle emissions.

Emissions

The need to assess vehicle emissions was not undertaken on the basis that levels of nitrogen dioxide are currently low as the site is edge of urban fringe and additional plant traffic would be unlikely to exceed national air quality levels.

Dust

The dust assessment included consideration of those uses/properties closest to the site, namely Belsteads Farm 240m, New Hall School (270m) and Channels golf course (10m at its closest). The assessment looked at the nature of the activities likely to be undertaken at the, namely soils stripping, mineral extraction and processing movement of plant and vehicles and qualitative estimates based on dust emissions from large construction projects and road building schemes was used. Potentially significant effects from large projects are considered likely in terms of soiling at 100m and impact on vegetation 25m.

The aim of any scheme with mitigation was considered to be to ensure the impacts would give rise to negligible or minor effects.

Metrological data from Luton airport showed prevailing winds are from the west, and southwest and south sector and occasionally from the north.

Mineral operations at any one time would be 100m from residential properties. It was concluded that if standard dust suppressions measures were employed under normal meteorological conditions would be low giving a negligible effect. Subject to best practice control measures being undertaken even during periods of adverse metrological conditions it is unlikely there would be significant impacts from dust.

Mineral operations are likely to be in close proximity to vegetation; although a 10m unworked margin would be retained around all boundaries

Appraisal of dust and noise

The dust assessment was carried out prior to publication of the NPPF; however, the principles of assessment are very similar in the Technical appendix to NPPF as that set out in MPG2. The assessment utilises metrological data from Luton airport, which while not considered unrepresentative is less representative than Stansted Airport for which there is also metrological data and only 22km away. The assessment did not acknowledge that sometime winds are from the north (7%) of the time. New Hall School is categorised as school buildings, but in fact does include residential both staff and boarding pupils, however the closest residential property is 240 away while residential buildings within the school are 300m away. The mitigation relies on best practice measures being undertaken, the proposed method of working does not include screening bunds around all the working areas, such that dust generated could impact upon the playing fields, athletics track and all weather pitch located from within 100m from the extraction site.

Groundwater

The EIA includes a Hydrological Impact Appraisal in accordance with EA guidance and also seeks to address specific issues raised by the EA at Scoping Opinion Stage.

The assessment methodology used a tiered approach as recommended by the EA and based on certain factors namely, aquifer characteristics, water-dependent conservation sites, water-resource availability status and dewatering quantity, a level 2 tier (intermediate) of assessment was undertaken. A tier 2 assessment includes fieldworks to confirm the aquifer conditions via groundwater level monitoring and pump testing, production of cross-sections and hydrogeological conceptual model and modelling.

The hydrogeology of the area was summarised as the sand and gravel within the site are partially saturated along the northern parts and fully saturated in the central and southern sections. In addition there is a hydraulic barrier (groundwater shed boundary) that appears to cross the site in a general south west to north east direction.

The site is not situated within any Source Protection Zones. There are five licensed abstractions the closest located 570m from the site, three are located within New Hall School, one at New Hall Farm and one at Walter Hall Farm, these are understood to be for domestic or agricultural uses.

The groundwater level was found to be lie at approximately 45.5mAOD. The groundwater flow direction was found to be unclear, with investigations over the years indicating slightly different directions. Flows have been described as to the north/north west, while other investigations would indicate the flow is south east. It has been concluded that there is no overriding regional flow pattern and that local factors play a large part in determining the groundwater flow regime in the sand and gravels.

Surface water features have been investigated. The site has been concluded to straddle a watershed boundary, with surface water to the south and west draining to the south west towards the River Chelmer and the remainder of the site draining to the northeast towards Boreham Brook (Park Farm Brook) which in turn feeds into the Chelmer. Ponds are located on the southern edge of the site and to the north-east within Channels Golf Course. Due to the thickness of the overlying Boulder Clay it was concluded the ponds within the golf course were unlikely to have hydraulic connection with groundwater. Based on the groundwater elevation the southern pond may be a source of recharge to the sand and gravel aquifer.

The closest water that was concluded to hydraulic connection to the sand and gravel is the tributary of Boreham Brook 500m from the site. To the SW (850m) there are a series of drains and springs.

Other water features in the vicinity of the site are a fishing pond in New Hall School, feed from surface water drains from New Hall School and the Neighbourhood Scheme area and ponds around Bulls Lodge Quarry although these are beyond the Boreham Brook and unlikely to have hydraulic connectivity to the site.

Impact on Surface Water Features

Two surface water features are susceptible to flow impacts the tributary of the Boreham Brook (500m NE) and the drain/springs to the SW. Water dewatered from the site would be discharged to the new improved surface water management system. The flow out from surface water management would be slightly less than the abstraction rate due to evaporation and leakage into ground water from the settlement pond and surface water drains, but this is not considered to be significant. But in general the surface

water flow would be greater than the contribution from groundwater flow as it would not only include the base flow but the water extracted from the aquifer. However, the base flow would be reduced upon completion as the base flow recharges the aquifer.

Impact on groundwater

The drawn down effects have been assessed based on natural and man features. Outcrops of clay are noted on the north-east, east and south of the site. To the north-west sand and gravel has been extracted and the land infilled. The licensed groundwater and domestic abstractions are identified as being potentially impacted upon. The impact of draw down effects was assessed using modelling and potentially indicated there could be a draw down effect on the water table of up to 0.5m.

The proposed mitigation should serious detrimental effect on the local abstractions occur would be to provide an alternative water supply.

Subsidence & Desiccation

Due to the nature of the overlying Boulder Clay it is not considered that dewatering would result in desiccation and therefore subsidence.

Ground water quality

Groundwater analysis indicates the existing groundwater quality across the site is relatively good and therefore no adverse effects are anticipated from discharging the groundwater to surface water courses. Dewatered water is proposed to be discharged to a settlement pond before discharge to surface water, to reduce suspended solids entering the water courses. To minimise risk from spills during operations a minimum of 1m is proposed to be maintained above the groundwater in any quarry operations areas.

Monitoring programme

A programme of monitoring is proposed, including operational monitoring (recording abstraction rates, water quality and monitoring groundwater levels within the site) and impact monitoring (monitoring of groundwater levels and quality at specified locations outside the mineral extraction site boundary.)

Appraisal of Groundwater

The assessment is adequate but relies upon management of water from dewatering to be managed outside the application site.

Surface Water (& Flooding)

The ES assessed the impact upon surface water features. The main features being the Boreham Brook east of the site. The River Chelmer is 1.2km to the west and as it flows into the Blackwater which is classified as Special Area of Conservation the river is considered of high importance. The site is located within Flood Zone 1. There are seven ponds in the vicinity of the site considered to be of high importance due to potential to support Great Crested Newts. There are a network of drainage ditches in the vicinity of the site that are also considered to be of high importance due to their potential to support GCN.

The potential impacts during the development were considered to be suspended solids from dewatering operation; agricultural chemicals mobilised through discharge of water from dewatering into surface waters, discharge from dewatering operation contamination from plant and suspended solids in water runoff.

Mitigation proposed includes a settlement pond to prevent suspended solids entering the water courses. Previous assessments of agricultural chemicals level has shown low levels such that this impact is considered to be negligible

Other Issues

Traffic

No significant traffic generation onto the public highway would result from the proposals and the majority of movements being on internal haul roads within the Neighbourhood Scheme and have been assessed as part of that proposal

Socio-Economic

Socio-economic affects including, impact on residential amenity caused by noise, air quality and visual and landscape impacts have been assessed under the appropriate sections.

Ground contamination

Assessment of contaminants within the soils and overburden on the site showed no evidence of contaminants at levels that would pose a risk when deposited in the void.

Lighting

No working is proposed which would require illumination. If lighting were required details would be submitted for approval.

Cumulative Impacts

Cumulative impacts were considered with respect to the combination of the following development occurring at the same time.

Greater Beaulieu Park Neighbourhood & Railway Station Scheme

Bulls Lodge Quarry – extraction of sand and gravel

Mid Essex Gravels/Channels Area – expansion of existing uses, employment uses, possible indoor recreation uses and extension of existing Channels Golf course

Land at Belsteads Farm Lane – residential lead development as set out in NCAAP site allocation no. 6 and outline application

Boreham Airfield – continued promotion by owners of the site as a strategic location, inter alia residential development.

The cumulative assessment looked at the impact on residential amenity of existing properties, PROW, Landscape Character, setting of New Hall, archaeology, protected species, water resources and quality.

It was concluded that the main sensitive receptors were those affecting habitats, those affecting landscape character particularly setting of New Hall, those affecting PROW and archaeological remains. A Construction Environmental Management Plan, programme of archaeological mitigation and other impacts are addressed through the ES for the GBP development.

Appraisal of Cumulative Impacts

Adequate but relies on mitigation within the ES of the GBP development, rather than set out within the ES in relation to this application. However as the mineral development would not commence without the GBP development this is considered acceptable.