Preliminary Ecological Appraisal

Police Station, 133 Windmill Street, Gravesend, Kent

13th April 2022

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Summary

S.1. This report has been prepared by Tyler Grange Group Limited on behalf of Planning Issues Ltd. It sets out the findings of an 'extended' Phase 1 Habitat survey at 133 Windmill Street, Gravesend, Kent, DA12 1DB, (OS grid reference TQ 64709 73804) hereinafter referred to as 'the site'.

S.2. An initial extended Phase 1 Habitat survey was undertaken on the 16th February 2022. A summary of the results is as follows:

- The site comprises hardstanding, walls, a row of broadleaved trees, and scattered scrub; and
- The site does not contain any habitats that could support protected species. No protected species are considered likely to be within the site or likely to be affected by the development.

S.3. The data search returned three internationally designated sites within 10 km of the site: Thames Estuary & Marshes RAMSAR Site, Thames Estuary & Marshes Special Protected Area (SPA), and North Downs Woodlands Special Area of Conservation (SAC). No national statutory designated sites and one non-statutory site was returned within 2 km of the site. It is considered that the proposed development will have no significant impact on these sites.

S.4. The habitats that are being lost to the development of negligible ecological importance require no specific mitigation. The row of broadleaved trees to be lost is of local ecological importance, and replacement planting is considered to be more than sufficient to compensate for the loss of this habitat.

S.5. Protected or priority species are considered likely absent from site, and no further species surveys are recommended.

S.6. A biodiversity net gain calculation showed a net gain in habitat units of 2201.22% and a net gain in hedgerow units of 430.79%.

S.7. It is considered that the development of the site will accord with relevant legislation and planning policy, including policy CS12 of the Gravesham Local Plan Core Strategy, policies EN6, EN7, and EN8 of the Kent and Medway Structure Plan, and the NPPF, that seek to protect and enhance ecological features.

Section 1: Introduction, Context, and Purpose

Introduction

1.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Planning Issues Ltd and sets out the findings of an 'extended' Phase 1 Habitat survey at 133 Windmill Street, Gravesend, Kent, DA12 1DB, (OS grid reference TQ 64709 73804) hereinafter referred to as 'the site'. See **Figure 1.1** for the indicative boundary.

Figure 1.1: Indicative red line boundary (aerial imagery © Google)

Site Context

1.2. The site comprises only of hardstanding, walls, and scattered scrub. The site is bordered on all four sites by roads: Windmill Street, Wrotham Road, Zion Place, and Woodville Place. The wider landscape consists of the urban area of the town of Gravesend.

1.3. The site is a former police station. The police station building previously on site has been demolished, leaving only the outer walls. The site has been brought forward to be developed into a retirement home.

Purpose

1.4. This report:

- Uses available background data and results of the field surveys to describe and evaluate the ecological features present within the likely "Zone of Influence"[1] (ZoI) of the proposed development;
- Describes the actual or potential ecological issues and opportunities that might arise as a result of the site's development.
- Where appropriate, makes recommendations for mitigation measures for adverse effects on ecological features as well as ecological enhancements, to ensure conformity with policy and legislation listed in **Appendix 1**; and
- Can be used to inform a planning application for the sites development.

1.5. This assessment and the terminology used are consistent with the Guidelines for Preliminary Ecological Appraisal[2] and the Guidelines for Ecological Impact Assessment[3]. A full methodology is set out in **Appendix 2**.

Quality Control

1.6. All ecologists at Tyler Grange Group Limited are members or qualifying members of the Chartered Institute of Ecology and Environmental Management (CIEEM) and abide by the Institute's Code of Professional Conduct.

[1] Defined as the area over which ecological features may be subject to significant effects as a result of activities associated with a project.
[2] CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
[3] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland, version 1.1, CIEEM, Winchester.

Section 2: Ecological Features and Evaluation

Designated Sites

2.1 The data search was based on records purchased from Kent and Medway Biological Records Centre (KMBRC), as well as data from MAGIC[4]. See **Appendix 2** for full methodology.

Statutory Sites

2.2 There are three internationally designated sites located within the 10km of the site:

- Thames Estuary & Marshes RAMSAR Site, located 2.5 km east of the site, designated for its internationally important bird assemblage and wetland habitat. The qualifying species are ringed plover *Charadrius hiaticula*, black-tailed godwit *Limosa limosa islandica*, grey plover *Pluvialis squatarola*, red knot *Calidris canutus islandica*, dunlin *Calidris alpina alpina*, and common redshank *Tringa totanus tetanus*. This site also supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats.[5]

- Thames Estuary & Marshes Special Protected Area (SPA), located 3.4 km east of the site, designated for its internationally important bird assemblage including avocet *Recurvirostra avosetta* and hen harrier *Circus cyaneus*.[6]

- North Downs Woodlands Special Area of Conservation (SAC) located 8.5km south of the site and designated for its yew *Taxus baccata* woodland and beech *Fagus sylvatica* woodland.[7]

2.3 The designated sites listed above are considered to be of **international ecological importance**.

2.4 There were no national statutory designated sites (Sites of Special Scientific Interest (SSSIs), National Nature Reserves, or Local Nature Reserves) within 2 km of the site boundary.

2.5 The site falls within a SSSI Impact Risk Zone (IRZ) for South Thames Estuary and Marshes SSSI. However, the development does not meet the criteria for potential effects on the SSSI, such as a residential development of 500 units of more, or discharge of liquid waste of more than 5m^3 per day to ground. Therefore consultation with Natural England is not required.

Non-statutory Sites

2.6 One non-statutory designated site was returned by KMBRC within 2km of the site, namely Canal and grazing marsh, Higham, located 1.7 km east of the site. Canal and grazing marsh, Higham is considered to be of **county ecological importance**.

[4] DEFRA (2022) Multi-Agency Geographic Information for the Countryside mapping, [Online] Available at: https://magic.defra.gov.uk/MagicMap.aspx [Accessed: 23/02/2022].
[5] https://jncc.gov.uk/jncc-assets/RIS/UK11069.pdf [Accessed 22/02/2022]
[6] http://publications.naturalengland.org.uk/publication/3227002 [Accessed 22/02/2022]
[7] https://sac.jncc.gov.uk/site/UK0030225 [Accessed 22/02/2022]

Habitats

2.7 The habitats present on and adjacent to the site are summarised below, along with a description of the composition of the main plant species present and an assessment of their ecological importance. The location of habitats are shown on the Habitats Features Plan (see **14480/P01**).

Hardstanding

2.8 The majority of the site is comprised of hardstanding. This includes pavement outside the walls of the former building and areas of damaged hardstanding where the police station building stood before its demolition.

2.9 Due to its lack of inherent value to wildlife, hardstanding is considered to be of **negligible ecological importance**.

Figure 2.1: Hardstanding

Brick walls

2.10 The outer walls of the former police station building remain standing.

2.11 Due to its lack of inherent value to wildlife, this habitat is of **negligible ecological importance**.

Figure 2.2: Brick wall

Ephemeral/ruderal vegetation

2.12 Patches of ephemeral vegetation, dominated by buddlja *Buddleja davidii*, an introduced species, were found growing through areas of damaged hardstanding on the site.

2.13 This habitat is dominated by introduced species, is of limited extent, and is very common in the wider landscape. As such this habitat is considered to be of negligible ecological importance.

Figure 2.3: Ephemeral vegetation, in this case a buddleja.

Scattered trees and row of trees

2.14 A row of broadleaved trees lies along the western boundary of the site. Outside of the red line boundary, there are three street trees to the east of site. These species were broadleaved, including London plane *Platanus × acerifolia*.

2.15 This habitat is relatively common in the wider landscape, but is of value given the urban area. It is therefore considered to be of **local ecological importance**.

Figure 2.4: Scattered trees. These are London plane trees to the east of site.

Fauna

2.16 The below sets out the potential for protected species on site. Species which are considered likely absent from the site based on professional judgement, following consideration the of habitats within the site, signs of species presence at the time of survey and data search records, are either not discussed or scoped out in the text below.

2.17 No European Protected Species licences were returned within 2 km of the site.

Bats

2.18 A total of 172 records for ten species of bat were returned by the data search within 5 km of the site. When this data was narrowed down to records within the last ten years, within 2 km of the site, the following records were returned:

- Four records of pipistrelle bat *Pipistrellus sp.*, of which the nearest was 0.5 km from the site and the most recent record was in 2019.
- One record of Kuhl's pipistrelle *Pipistrellus kuhlii*, 0.8 km from the site in 2013.

2.19 A Preliminary Bat Roost Assessment (PBRA) was undertaken concurrently with the 'extended' Phase 1 habitat survey. No Preliminary Roosting Features (PRFs) were found on or directly

adjacent to site. Bat roosts are therefore considered likely absent from site and are not discussed further within this report.

2.20 Habitats on and adjacent to the site are highly unlikely to support foraging and commuting bats.

Other Protected and Notable Species

2.21 None of the habitats on site are considered suitable to support protected or notable species. As such, protected and notable species are considered likely absent from site.

Section 3: Potential Impacts, Mitigation, and Enhancements

3.1. The proposed development is for the construction of a retirement living complex, with associated infrastructure and soft landscaping.

3.2. The potential impacts at this site as a result of the proposed development are set out below, with reference to relevant legislation and planning policy, which is summarised in Appendix 1.

Potential Impacts and Requirement for Mitigation

3.3. Both the Countryside and Rights of Way (CRoW) Act 2000 and the Natural Environment and Rural Communities (NERC) Act 2006 give the importance of conserving biodiversity a statutory basis, requiring government departments (which includes Local Planning Authorities) to have regard for biodiversity in carrying out their obligations (which includes determination of planning applications) and to take positive steps to further the conservation of listed species and habitats. These articles of legislation require Gravesham Borough Council to take measures to protect species or habitats from the adverse effects of development, where appropriate, by using planning conditions or obligations. Planning authorities should refuse permission where harm to the species or their habitats would result, unless the need for, and benefits of, the development clearly outweigh the harm.

3.4. The National Planning Policy Framework (NPPF) 2021 requires that the planning system should contribute to and enhance the natural and local environment, minimising impacts on biodiversity and providing net gains, as well as local planning policy, a summary of which is provided in **Appendix 1**.

Designated Sites

3.5. There are three European statutory designated sites within 10 km of the site boundary, and no other statutory designated sites within 2 km of the site boundary.

3.6. As the site is located within 6 km of the Thames Estuary & Marshes RAMSAR and SPA, there is potential for the designated sites to be adversely, indirectly, impacted as a result of the development, due to increases in recreational use. Therefore a Strategic Access Management and Monitoring Strategy (SAMMS)[8] mitigation contribution would be required to offset any potential recreational impacts. The payment required at the time of writing is £253.83 per dwelling.

3.7. It should be noted that RAMSAR sites within the UK are at risk from nutrient pollution and are often buffered by 'vulnerable zones'. Although the site lies outside of the Thames Estuary & Marshes RAMSAR risk zone, this may change as protection of RAMSAR increases, particularly with the implementation of The Environment Act 2021. However this is not expected to affect the principle of development of the site.

[8] Thames Estuary and Marshes, Gravesham Borough Council website https://www.gravesham.gov.uk/home/planning-and-building/nature-conservation-and-landscape/thames-estuary-and-marshes Accessed November 2021.

3.8. Due to the large distance from the site, the nature of the development, and the lack of impact pathways such as an increase in recreational disturbance (due to the development being a retirement home), no impacts are expected to arise as a result of the site's development on North Downs Woodlands SAC.

3.9. One non-statutory designated site was returned within 2 km of the site boundary; Canals and grazing marsh, Higham. No impacts on the non-statutory designated site are expected to arise as a result of the site's development. This is due to the large distance from the site, the nature of the development, and the lack of impact pathways.

Habitats

3.10. The habitats within the site, namely hardstanding and brick walls, are of negligible ecological importance, and therefore no specific mitigation is required for their loss.

3.11. The row of broadleaved trees along the western boundary is to be lost as part of development, however the replacement planting, detailed in the landscaping plan (**Appendix 3**) is considered to be more that sufficient to compensate for the loss of this row of trees.

3.12. The scattered trees to the east are outside of the red line boundary and are not to be removed or otherwise impacted as part of the development.

3.13. The creation of habitats of benefit to biodiversity, such as tree planting, will enhance the habitat provision of the site, which would align with policy CS12 of the Gravesham Local Plan Core Strategy, policy EN8 of the Kent and Medway Structure Plan, as well as the NPPF (see **Appendix 1**). It is considered that habitat enhancements outweigh the loss of areas of ephemeral/vegetation habitat and will lead to an overall enhancement of the habitat resource at the site.

Species

3.14. No protected species are considered likely to be within the site or likely to be affected by the development.

3.15. The data search returned records of pipistrelle bat in the wider area. As such enhancements such as the inclusion of bat boxes are recommended in line with policy CS12 of the Gravesham Local Plan Core Strategy, and policy EN8 of the Kent and Medway Structure Plan.

Section 4: Biodiversity Net Gain Assessment

4.1 A development achieves biodiversity net gain when the total biodiversity units present post development is higher than that of the biodiversity units present on site prior to development. DEFRAs Small Sites Metric has been used to calculate the biodiversity value of the site before development.

4.2 The Small Sites Metric has been used as the site satisfies the two following criteria:[9]

- The site is smaller than 0.5 hectares.
- There are no priority habitats within the site.

Existing Habitats

4.3 The following habitats are present within the red line boundary of the site and are shown on Habitat Features Plan (**14480/P01**). A summary of each habitat is provided below along with the category it is assigned within the biodiversity net gain metric. The rationale for condition assessments, where applicable, are detailed within the metric (**14480/BNG**).

Baseline habitat area

- **Developed land; sealed surface (3605m²):** This category includes pavement as well as damaged hardstanding due to the demolition of the building on site.
- **Ruderal/ephemeral (55m²):** This category is comprised of ephemeral and introduced species such as buddleia, which were growing through cracks in the hardstanding.

Baseline habitat length

- **Line of trees (35m):** This category is the row of trees along the western boundary of the site.

Proposed Habitats

4.4 The following habitats are shown on the Post-development Habitat Features Plan (**14480/P02**) and were based on the landscaping plan shown in **Appendix 3**. A summary of each habitat is provided below along with the habitat condition and category it is assigned within the biodiversity net gain metric. The rationale for condition assessments is detailed within the metric (**14480/BNG**).

Post-development habitat area and condition

- **Modified grassland (911m²):** This is the amenity grass which forms the soft landscaping of the garden area of the development, anticipated to be of moderate condition.

[9] http://publications.naturalengland.org.uk/publication/6047259574927360 [Accessed 23/02/2022]

- **Other neutral grassland (57m²):** This category is the small area of wildflower turf in the southwest of the garden. This habitat is anticipated to be of moderate condition.

- **Developed land; sealed surface (2262m²):** This category is comprised of the building and areas of hardstanding, including the car park, patio areas, and paths.

- **Introduced shrub (430m²):** This category includes the shrub planting in the garden areas, and buffer planting.

- **Urban trees (226m²):** 32 small trees and 2 medium trees are to be planted as part of the proposals, which was returned by the urban tree area calculator at 226m².

Post-development habitat length and condition

- **Native hedgerow (222m):** This category is the hedgerow of evergreen native species. This habitat is anticipated to be of moderate condition.

Results Summary

4.5 As described within the Small Sites Metric (14480/BNG) and summarised below in Figure 4.1, based on the habitats present on site that will be lost and those to be created, the development would achieve a net gain of 0.4843 habitat units and 0.6031 hedgerow units. This is a 2201.22% gain in habitat units and a 430.79% gain in hedgerow units.

Headline Results

Headline		BNG Targets Met
Next steps		Submit metric to LPA
Total net unit change	*Habitat units*	0.4843
	Hedgerow units	0.6031
	River units	0.0000
Total net % change	*Habitat units*	2201.22%
	Hedgerow units	430.79%
	River units	% target not appropriate

Figure 4.1: Biodiversity Net Gain Assessment Results Summary, taken from the Small Sites Metric.

Management

4.6 The results of the DEFRA 3.0 metric are based on the habitats within the site being maintained at a certain condition, as prescribed by the condition assessment sheets published by DEFRA.

4.7 Details of habitat establishment and long-term management should be provided through the production of a Landscape and Ecological Management Plan (LEMP). The LEMP would set out the prescriptions for the establishment and maintenance of the habitats on site for 30 years and can be secured by a suitably worded planning condition.

Section 5: Conclusions

5.1 Three European statutory designated sites Thames Estuary & Marshes RAMSAR Site, Thames Estuary & Marshes SPA, and North Downs Woodlands SAC are located within 10 km of the site. No national statutory designated sites and one non-statutory site was returned within 2 km of the site.

5.2 As the site is located within 6 km of the Thames Estuary & Marshes RAMSAR and SPA, there is potential for the designated sites to be adversely, indirectly, impacted as a result of the development, due to increases in recreational use. Therefore a Strategic Access Management and Monitoring Strategy (SAMMS) mitigation contribution would be required to offset any potential recreational impacts. With the adoption of this payment then the scheme will prevent any likely significant impact occurring. Further adverse impacts from the proposed development on designated sites are not anticipated.

5.3 No protected species are considered likely to be within the site or likely to be affected by the development. Enhancements such as tree planting would increase the invertebrate provision of foraging bats, and the inclusion of bat boxes on site would enhance the site for roosting bats. It is considered that the proposed development would enhance the site for bats, in line with policy CS12 of the Gravesham Local Plan Core Strategy, policies EN6, EN7, and EN8 of the Kent and Medway Structure Plan, and the NPPF.

5.4 The habitats of hardstanding, walls, and ephemeral/ruderal vegetation are of negligible ecological importance, and no specific mitigation is required. Habitat creation will compensate for the loss of the row of trees, and enhance the site overall for biodiversity. The development will therefore result in a net gain of 4843 habitat units and 0.6031 hedgerow units. This is a 2201.22% gain in habitat units and a 430.79% gain in hedgerow units. Habitats should be managed under a LEMP for a minimum of a 30 year period to ensure that the conditions are met.

5.5 As such the proposed development will be compliant with the policy CS12 of the Gravesham Local Plan Core Strategy, requiring developments to demonstrate a net gain in biodiversity. In summary, the proposed development is compliant with the relevant planning policy and legislation that seeks to protect and enhance biodiversity.

Appendix 1: Policy and Legislation

Legislation

A1.1 Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:

- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Conservation of Habitats and Species Regulations 2017 (as amended);
- The Countryside and Rights of Way (CRoW) Act 2000;
- The Natural Environment and Rural Communities Act (NERC) 2006;
- The Hedgerows Regulations 1997; and
- The Protection of Badgers Act 1992.

A1.2 The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2018 (as amended).

A1.3 In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.

A1.4 The CRoW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

Office of the Deputy Prime Minister (ODPM) Circular 06/2005: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System

A1.5 ODPM Circular 06/05 was prepared to accompany PPS9, however continues to be valid, and material in the consideration of planning applications since PPS9's replacement by the NPPF.

A1.6 ODPM Circular 06/05 provides guidance on applying legislation in relation to nature conservation and planning in England. Part I considers the legal protection and conservation of internationally designated sites (namely candidate Special Areas of Conservation (cSACs), SACs, potential Special Protection Areas (pSPAs), SPAs and Ramsar sites) and Part II considers the legal protection and conservation of nationally designated sites, namely Sites of Special Scientific Interest (SSSIs).

A1.7 Part III considers the protection of habitats and species outside of designated areas (particularly UK Biodiversity Action Plan species and habitats, which it states are capable of being a material

consideration in the preparation of local development documents and the making of planning decisions.

A1.8 Part IV considers species protected by law and states that the presence of a protected species is a material consideration in the consideration of a development proposal that, if carried out, would be likely to result in harm to the species or its habitat and that it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted.

National Planning Policy

National Planning Policy Framework (NPPF), July 2021

A1.9 The National Planning Policy Framework (NPPF) was updated in July 2021 and sets out the Government's planning policies for England and how these should be applied. It replaces the National Planning Policy Framework published in July 2019.

A1.10 *Paragraph 11 states that:*

A1.11 *"Plans and decisions should apply a presumption in favour of sustainable development."*

A1.12 *Section 15 of the NPPF (paragraphs 174 to 182) considers the conservation and enhancement of the natural environment including habitats and biodiversity (paragraphs 179-182)*

A1.13 *Paragraph 174 states that planning and decisions should contribute to and enhance the natural and local environment by:*

- *"protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; and*
- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"*

A1.14 *Paragraph 175 states that plans should distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.*

A1.15 *Paragraph 179 states that in order to protect and enhance biodiversity and geodiversity, plans should:*

- *"Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and*

areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and

- *promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."*

A1.16 *When determining planning applications, Paragraph 180 states that local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:*

- *"if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

- *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*

- *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*

- *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate."*

A1.17 *As stated in paragraph 181 the following should be given the same protection as habitats sites:*

- *"potential Special Protection Areas and possible Special Areas of Conservation;*

- *listed or proposed Ramsar sites; and*

- *sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites."*

A1.18 *Paragraph 182 states that the presumption in favour of sustainable development does not apply where the planned project is likely to have a significant effect on a habitat site (alone or in combination with other plans or projects) unless an appropriate assessment has concluded the plan or project will not adversely affect the integrity of the habitats site.*

Local Planning Policy

Gravesham Local Plan Core Strategy September 2014[10]

A1.19 *Policy CS12: Green Infrastructure*

5.7.22 A multifunctional linked network of green spaces, footpaths, cycle routes and wildlife stepping stones and corridors will be created, protected, enhanced and maintained. The network will improve access within the urban area, from the urban area to the rural area and along the River Thames. The key parts of the network are identified on Figure 19: Strategic Green Infrastructure Network.

5.7.23 Sites designated for their biodiversity value will be protected, with the highest level of protection given to internationally designated Special Protection Areas, Special Areas of Conservation and Ramsar sites, followed by nationally designated Sites of Special Scientific Interest, followed by Local Wildlife Sites and then by other areas of more local importance for biodiversity.

5.7.24 There will be no net loss of biodiversity in the Borough, and opportunities to enhance, restore, re-create and maintain habitats will be sought, in particular within the Biodiversity Opportunity Areas shown on the Strategic Green Infrastructure Network map and within new development.

5.7.25 Where a negative impact on protected or priority habitats/species cannot be avoided on development sites and where the importance of the development is considered to outweigh the biodiversity impact, compensatory provision will be required either elsewhere on the site or off-site, including measures for ongoing maintenance.

5.7.26 The overall landscape character and valued landscapes will be conserved, restored and enhanced. The greatest weight will be given to the conservation and enhancement of the landscape and natural beauty of the Kent Downs Area of Outstanding Natural Beauty and its setting. Proposals will take account of the Kent Downs Area of Outstanding Natural Beauty Management Plan, the Gravesham Landscape Character Assessment, and the Cluster Studies where relevant.

Kent and Medway Structure Plan: Supplementary Planning Guidance; SPG2 Biodiversity Conservation July 2006[11]

A1.20 *Principle 1 - Planning and Biodiversity*

Planning proposals which have the potential to impact on wildlife should:

- *Be accompanied by adequate information to allow an informed decision to be made.*
- *Seek to avoid and reduce species and habitat loss and fragmentation.*
- *Recognise direct, indirect and cumulative impacts of development.*
- *Provide adequate mitigation and compensation for adverse impacts.*
- *Deliver positive benefits including reversing the effects of historic loss and fragmentation of habitats and populations of wild species.*

[10] https://drive.google.com/file/d/1bJTgQLmhbzjqZFibl-5WFb2tbvixXpLk/view [Accessed 23/02/2022]
[11] https://www.gravesham.gov.uk/__data/assets/pdf_file/0010/99298/SPG2-Biodiversity-Conservation-July-2006.pdf [Accessed 23/02/2022]

- *Enhance the ecological value of existing sites and habitats and the links between them according to what is appropriate, by reference to the site's physical context.*
- *Where practicable, create wildlife habitats within developments and linkages with existing established sites and corridors of biodiversity value.*
- *Have regard to adopted biodiversity action plans and local landscape strategies.*

A1.21 *Kent and Medway Structure Plan 2006 Policy EN6: International and National Wildlife Designations*

Development will not be permitted where it would directly, indirectly or cumulatively, materially harm the scientific or nature conservation interests of any of the following categories of sites:

- *a European site;*
- *a proposed European site;*
- *a Ramsar site;*
- *a Site of Special Scientific Interest;*
- *a National Nature Reserve*

A1.22 *Kent and Medway Structure Plan 2006 Policy EN7: County and Local Wildlife Designations*

Development which would materially harm the scientific or nature conservation interests, either directly, indirectly or cumulatively, of:

- *Local Nature Reserves*
- *County Wildlife Sites identified in Local Development Documents*
- *Regionally Important Geological/Geomorphological Sites will not be permitted unless there is a need which outweighs the local nature conservation or geological/geomorphological interest and adverse impacts can be adequately compensated.*

A1.23 *Kent and Medway Structure Plan 2006 Policy EN8: Protecting, Conserving and Enhancing Biodiversity*

Important wildlife habitats and species will be protected, maintained and enhanced, especially through long term management and habitat creation schemes, where they have been identified as national and county priorities in the UK and Kent Biodiversity Action Plan(s), or where they are protected under wildlife legislation. This will be secured by:

a) ensuring that site evaluation is undertaken to establish the nature conservation value of proposed development sites;
b) identifying, safeguarding and managing existing and potential land for nature conservation as part of development proposals, particularly where a connected series of sites can be achieved;
c) local planning authorities identifying locations and proposals for habitat and species management, restoration and creation.

Development likely to have an adverse effect, directly, indirectly or cumulatively, on important habitats or species will not be permitted unless:

• there is an overriding need for the development that outweighs adverse impact on nature conservation; and
• adverse impact on an important nature conservation resource can be adequately mitigated and/or compensated.

A1.24 *Kent and Medway Structure Plan 2006 Policy EN9: Trees, Woodland and Hedgerows*

Provision should be made for the creation of new woodland, especially indigenous broad-leaved species at appropriate locations in Kent, including provision of new habitats as part of development proposals.

Tree cover and the hedgerow network should be maintained. Additionally, they should be enhanced where this would improve the landscape, biodiversity, or link existing woodland habitats. Ancient and semi-natural woodland will be protected and, where possible, enhanced.

A1.25 *Principle 2 – Development Proposals and Biodiversity Conservation*

Development Proposals should clearly show that:

- *All relevant aspects of the natural environment have been properly taken into account in the design of the development and its associated works.*
- *An appropriate assessment of the development's potential impact and the role it can play in positively contributing to biodiversity conservation has been undertaken.*

A1.26 *Principle 3 – Ecological Survey*

- *A survey of the natural environment and biodiversity interest of a site should be seen as an essential precursor to any development.*
- *An adequate site survey should provide a means of establishing the baseline occurrence, distribution and extent of nature conservation features on site and in the surrounding area.*
- *An ecological appraisal must be properly informed by an appropriate survey and/or other data gathering exercise.*
- *Surveys should be appropriate in their level of detail according to the scale of the development proposal. They should examine the development site in its wider context and should consider the development's potential impact upon biodiversity and the natural environment beyond the site boundaries, in the same way that the impact of a development upon traffic is considered.*
- *Ecological surveys provided by developers should be recorded and stored centrally.*

A1.27 *Principle 4 – Ecological Enhancement, Mitigation and Compensation*

The following should be considered to be the order of priority in the treatment of biodiversity as part of any new development:

- *To maintain and secure benefits for the site's current biodiversity interest.*
- *To avoid any negative impact on biodiversity.*
- *To enhance the site's potential for biodiversity interest*
- *To mitigate any negative impact through habitat enhancement, restoration, and/or recreation on site.*
- *To compensate for any negative impact through provision of other habitat or biodiversity features on site.*
- *To assess the scope for integrating developments with existing networks of areas and corridors of high biodiversity value.*

Proposals for mitigation or compensation must:

- *Be practical and achievable; in particular, developers must be certain that any mitigation to be dealt with as a reserved matter can actually be implemented.*
- *Follow current good practice, and be drawn up by suitably qualified and experienced ecologists.*
- *Ensure that the various elements of the scheme are considered in relation to each other so that there is no conflict, for example between providing scrub for birds and providing grassland for invertebrates.*
- *Ensure that long-term management is secured, and that suitable monitoring procedures are put in place.*
- *Consider the procedure to be followed, should monitoring show that the ecological activities are not producing the desired outcome. It is not enough to accept the failure of a mitigation, compensation or enhancement scheme, particularly where such a scheme is a condition of planning consent.*
- *Wherever appropriate, make reference to and/ or draw on resources being developed as part of the Kent Landscape Information System, and on other tools and resources identified in section 5.0 of this guidance.*
- *Consider the natural character of the landscape, the natural area and the capability of the land to meet measures of mitigation and compensation.*

The Kent Biodiversity Action Plan[12]

A1.28 *Habitats*

- *Woodland & Scrub*
- *Wood-pasture & Historic Parkland*
- *Old Orchards*
- *Hedgerows*
- *Lowland Farmland*
- *Urban Habitats*
- *Acid Grassland*
- *Neutral & Marshy Grassland*
- *Chalk Grassland*
- *Heathland & Mire*
- *Grazing Marsh*
- *Reedbeds*
- *Rivers & Streams*
- *Standing Water (Ponds, ditches & dykes, saline lagoons, lakes & reservoirs)*
- *Intertidal Mud & Sand*
- *Saltmarsh*
- *Sand Dunes*
- *Vegetated Shingle*
- *Maritime Cliffs*
- *Marine Habitats*

[12] https://www.medway.gov.uk/download/downloads/id/279/kent_biodiversity_action_plan.pdf [Accessed 23/02/22]

A1.29 *Species*

- *Water Vole Arvicola amphibius*
- *Otter Lutra lutra*
- *Dormouse Muscardinus avellanarius*
- *Serotine Bat Eptesicus serotinus*
- *Nightingale Luscinia megarhynchos*
- *Great-crested Newt Triturus cristatus*
- *Allis and Twaite Shad Alosa alosa, A. fallax*
- *White-clawed Crayfish Austropotamobius pallipes*
- *Heath Fritillary Melitaea athalia*
- *Pearl-bordered Fritillary Boloria euphrosyne*
- *Silver Spotted Skipper Hesperia comma*
- *Early Gentian Gentianella anglica*
- *Late Spider-orchid Ophrys fuciflora*

Appendix 2: Survey Methodology

Desk Study

A2.1. A desk-based study was conducted whereby records of designated sites and records of protected and priority species were purchased and . The following resources were consulted / contacted:

- Multi-Agency Geographic Information for the countryside (MAGIC) website[13];
- Kent and Medway Environmental Records Centre (KMERC)[14] (Data ordered 9th February 2022 and received 10th February 2022);
- Gravesham Council Website[15];
- Joint Nature Conservation Committee (JNCC) website[16];
- Natural England (NE) designated sites website[17];
- Ordnance Survey mapping; and
- Google Maps, including aerial photography.

A2.2. The following areas of search around the boundary of the site boundary were applied:

- 2 km for protected and priority species, non-statutory and nationally important statutory designated sites; and
- 10 km for European statutory sites.

Extended Phase 1 Habitat survey

A2.3. A site walkover survey was conducted on the 16th February 2022 by Mari Jones, an experienced ecologist and qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM). The methods used during the walkover survey broadly followed methods used in an 'extended' Phase I habitat survey[18]. This technique provides an inventory of the habitat types present and dominant species. Note was taken of the more conspicuous fauna and any evidence of, or the potential for, the presence of protected notable flora and fauna.

A2.4. The weather conditions for the survey were dry, with 100% cloud cover and a temperature of approximately 13°C.

A2.5. Additionally, the habitats identified were evaluated for their potential to support legally protected and notable fauna species.

[13] https://magic.defra.gov.uk/ [Accessed 21/02/2022]
[14] https://my.lerc.online/Default.aspx?src=bm [Accessed: 21/02/2022]
[15] https://www.gravesham.gov.uk/ [Accessed 21/02/2022]
[16] http://jncc.defra.gov.uk/ProtectedSites/ [Accessed 21/02/2022]
[17] https://designatedsites.naturalengland.org.uk/ [Accessed 21/02/2022]
[18] Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. JNCC, Peterborough.

Biodiversity Net Gain

A2.6. The Biodiversity Metric 3.0 metric operates by calculating the number of biodiversity units associated with a particular habitat type (both pre-and post-development) – the 'unit' value associated with each habitat type is calculated based on the following parameters:

- Size (in hectares)/Length (in km);
- Distinctiveness (i.e. how rare/valuable a given habitat is);
- Condition (i.e. how well the recorded habitat fits [or will fit] the standardised description of that habitat); and
- Strategic significance (i.e. if the existing or proposed habitat is within an area formally adopted in the local plan for green infrastructure or biodiversity improvements).

A2.7. When considering the creation of new habitats in the post-development site, other factors are also considered when calculating the 'unit' value of a given habitat and these are:

- Time to reach the target condition of each habitat; and
- Difficulty category for the creation of a given habitat.

A2.8. A calculation has been undertaken using the baseline habitats identified during the 'extended' Phase I habitat survey and created/enhanced habitats taken from the Soft Landscaping Plan (14480/P01). The UK Habitat Classification[19] was used to identify habitat types based on the results of the 'extended' Phase I habitat Survey. A number of assumptions were made which are detailed within Section 4 of this report, and the BNG Metric (ref: 14480/BNG).

A2.9. Note that the calculation is completed separately for non-linear and linear habitats.

A2.10. Habitat areas are entered into the Defra 3.0 metric in hectares and are rounded to two decimal places. Therefore, habitats smaller than 0.005 hectares are entered into the metric but appear as "0".

Limitations

A2.11. The 'extended' Phase 1 habitat survey was undertaken at a suboptimal time of year for botanical surveys, however given the nature of the habitats present this is not considered to be a notable limitation.

Evaluation

A2.12. The evaluation of habitats and species is defined in accordance with published guidance[20]. The level of importance of specific ecological features is assigned using a geographic frame of

[19] Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020) The UK Habitat Classification User Manual Version 1.1, [Online] Available at: http://www.ukhab.org/ [Accessed 21/02/2022]
[20] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland, version 1.1, CIEEM, Winchester.

reference, with international being most important, then national, regional, county, borough and local.

A2.13. Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as Sites of Species Scientific Interest (SSSIs), or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

Appendix 3: JBA -22 022 Strategy Plan

LANDSCAPE STRATEGY MASTERPLAN

KEY

Red line boundary

HARD LANDSCAPE

- Parking court. Tarmac.
- Paths and patios. 450mm x 450mm flag or similar and approved. Colour: 'Buff'
- Gravel over geotextile
- Balcony - material to be specified by client
- Patio furniture
- 1.2m High railings

SOFT LANDSCAPE

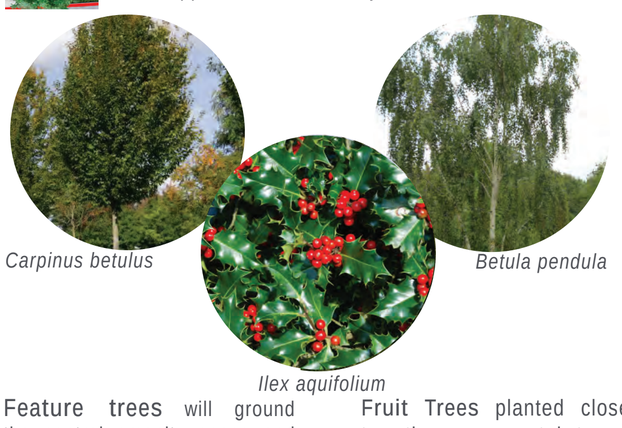
- Existing Trees
- Proposed boundary native tree
- Proposed street tree
- Proposed fruit tree
- Proposed small ornamental tree
- Proposed feature tree
- Proposed pleached tree
- Topiary specimens. *Ilex crenata* or *Laurus nobilis* cones
- Large specimen shrubs. Thuja 'Smaragd', Phormium 'Jester', Hydrangea of various varieties
- Ornamental shrub and herbaceous planting
- Low maintenance ground cover planting
- Formal low clipped evergreen hedging - e.g. *Ilex crenata*
- Amenity grass areas
- Native shrub buffer planting
- Wildflower grass and ecological area
- Drift of spring flowering bulbs.
- 1.2m proposed native evergreen hedging

TREE PLANTING STRATEGY

Entrance Trees are planted on the entrance of the site, chosen for their compact canopy and seasonal leaf colour.

Acer campestre 'Streetwise'

Native boundary trees will provide visual mitigation and support local biodiversity



Carpinus betulus *Ilex aquifolium* *Betula pendula*

Feature trees will ground the central amenity space and provide a strong focal point along the north boundary of the site.

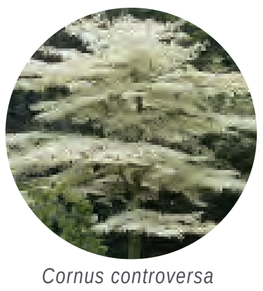
Fruit Trees planted close to other ornamental trees. Sourced from local nurseries of local variety.

Tilia cordata "Green Spire"

Locally sourced varieties of fruit trees suitable for residential schemes

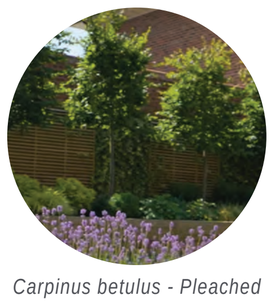
Ornamental trees within the amenity areas will add vertical seasonal interest to the shrub beds throughout the development.

Magnolia stellata 'Royal Star'



Cornus controversa Variegata'

Pleached/screening trees Proposed on the western boundary close to the owners lounge patio and around the secondary patio to provide visual screening.



Carpinus betulus - Pleached

DESIGN PARAMETERS

The site was formerly a police station which has recently been demolished. It is proposed to be redeveloped into retirement living apartments. The access into the development is to be retained and enhanced. The main entrance to the building is from the parking courtyard to the north with a pedestrian path coming into the site from Woodville place. The Owners' Lounge and associated patio is on the west elevation of the proposed building where an outdoor seating area with garden furniture will be provided. Constraints including views looking in from neighbouring buildings and screening views looking out from the development have been considered. Visual mitigation has been included along the majority of site boundary using a native evergreen hedge, a selection of native and ornamental boundary street trees to further extend the visual mitigation. Overall, the proposed landscape design is at a domestic scale, creating homely spaces which allow for small social gatherings and quieter contemplative resting places. Elements of herbaceous planting will be proposed throughout the scheme for seasonal interest

PLANTING PALETTE - PLANTING PHILOSOPHY

Around the northern and eastern boundaries of the development, compact canopy street trees such as *Acer campestre* 'Streetwise' provide visual mitigation screening, supplemented by evergreen native hedging and shrub planting which encloses the site and softens the defensible boundary between the private and public realm beyond the sites boundary. A selection of native tress along on the south/west corner of the site as this increases greater biodiversity to the proposed native buffer which screen views towards the substation on site. Underplanted by native buffer planting and wilflower turf, a ecological area is created which will provide refuge for local urban fauna. Large feature trees, *Tilia cordata "Green Spire",* form strong focal points which frame the ornamental landscaping in the amenity space in the south of the site and along the development frontage. The planting style for the amenity spaces will be more formal with seasonal interest and a strong year round evergreen presence. Use of ornamental hedging and topiary specimens will offer instant impact and cohesive structure to the planting beds. Large specimen shrubs chosen for their tone and texture will give an established appearance upon implementation. Flowering shrubs including fragrant perpetual flowering roses, grasses and topiary planting. Proposed planting on the northern elevation of the building will be chosen for their shade tolerance and shadow cast by the building. Smaller local variety and locally sourced fruit trees provide focal points at a small domestic scale whilst boundary tree planting provides screening and enclosure for the residents. Bulbs and herbaceous planting will provide seasonal interest to the site including bee friendly flowering species. Proposed small ornamental trees aim to improve connectivity and biodiversity across the site. A diverse selection of proposed plant species will provide an overall enhancement to biodiversity with the site having the potential to attract a greater range of invertebrates and therefore providing foraging/nesting habitat for notable urban species.

Bergenia cordifolia 'Purpurea'

Hemerocallis 'Stella d'Oro'

Anemone x hybrida 'Honorine Jobert'

Aucuba japonica 'Variegata'

Erica carnea Springwood white

Cornus sanguinea Dogwood

Phormium varieties

Hebe 'Mette'

Cistus 'Sunset'

Hydrangea arborescens 'Annabelle'

Ilex crenata or *Laurus nobilis* topiary cone

1.2m high native evergreen *hedge to boundary/parking court*

Narcissus 'February Gold'

Digitalis purpurea

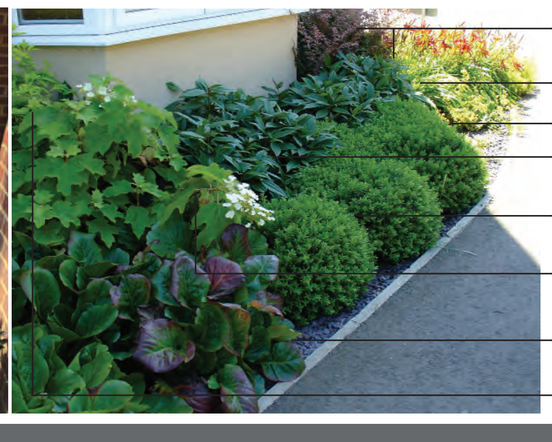
Primula vulgaris Wild primrose

Wildflower Turf Mix

Rosemarinus officinalis

Native Buffer Viburnum opulus 'Compactum'

Sample ornamental shrub bed.



Rev	Initials	Date	Comments

JBA 22 022 - SK02 Landscape Strategy

Churchill Retirement Living

Site
Former police station, Windmill Street, Gravesend

Drawn by	Date	Scale	Rev
HNG/AJW	MAR 2022	1:200 @ A1	-

James Blake Associates Ltd.
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JAMES BLAKE ASSOCIATES

Former police station, Windmill Street, Gravesend.

Plans:

Plan 1: 14480/P01 Habitat Features Plan

Plan 2: 14480/P02 Post-development Habitat Features Plan

Legend

Red line boundary

Habitats

- Ephemeral/ruderal vegetation
- Hardstanding
- Row of broadleaved trees
- Walls
- Scattered broadleaved trees

N

0 50 100 150 200 250 m

Project	Police Station, 133 Windmill Street, Gravesend, Kent
Drawing Title	Habitat Features Plan
Scale	As Shown (Approximate)
Drawing No.	14480/P01
Date	February 2022
Checked	MJ/JP

Tyler Grange

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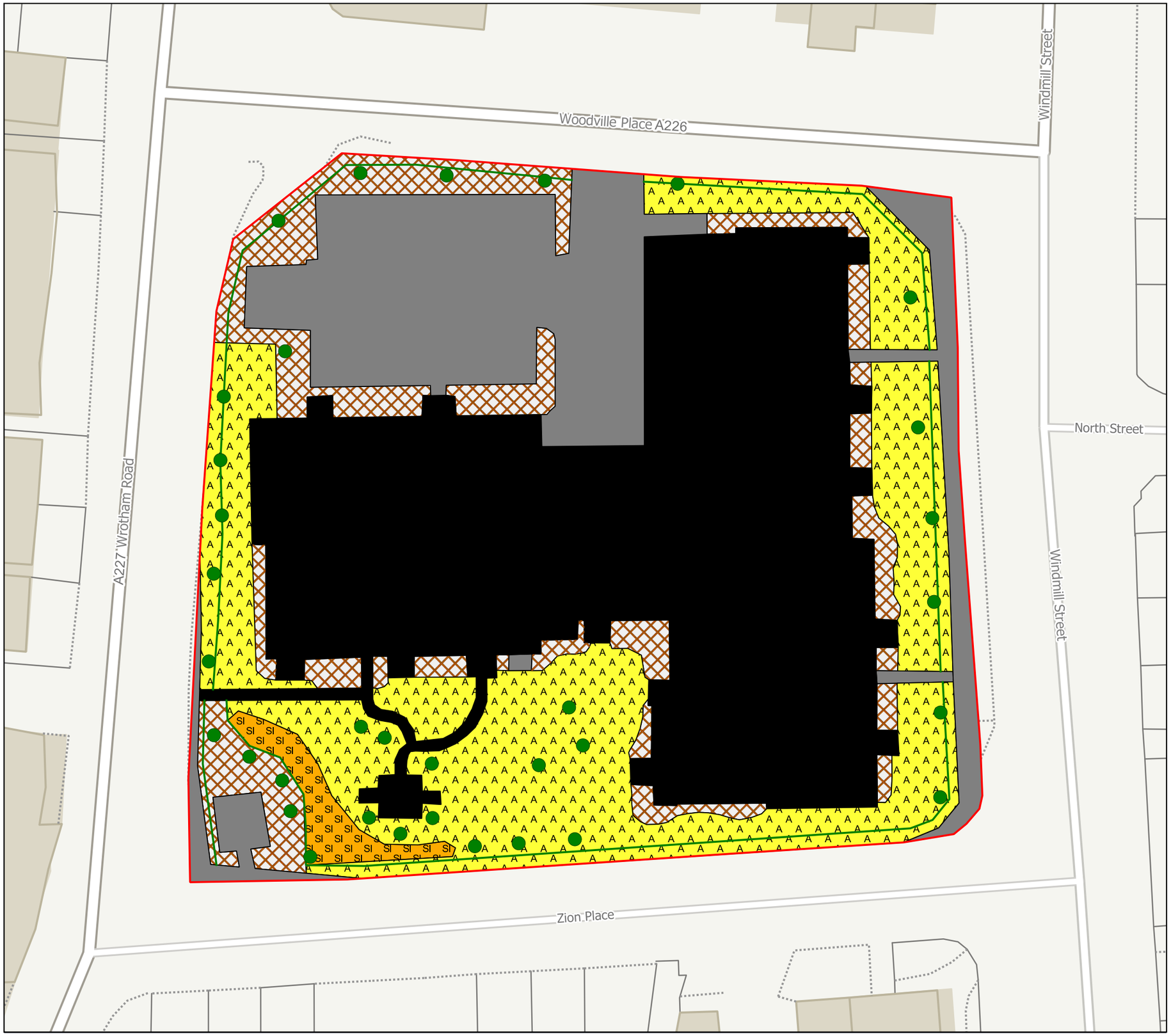

Legend

Red line boundary

Post-development Habitats

- Buildings
- Introduced shrub
- Amenity grassland
- Hardstanding
- Neutral grassland - semi-improved
- Native hedgerow
- Scattered trees

N

0 50 100 150 200 250 m

Project	Police Station, 133 Windmill Street, Gravesend, Kent
Drawing Title	Post-development Habitat Features Plan
Scale	As Shown (Approximate)
Drawing No.	14480/P02
Date	April 2022
Checked	MJ/HM

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