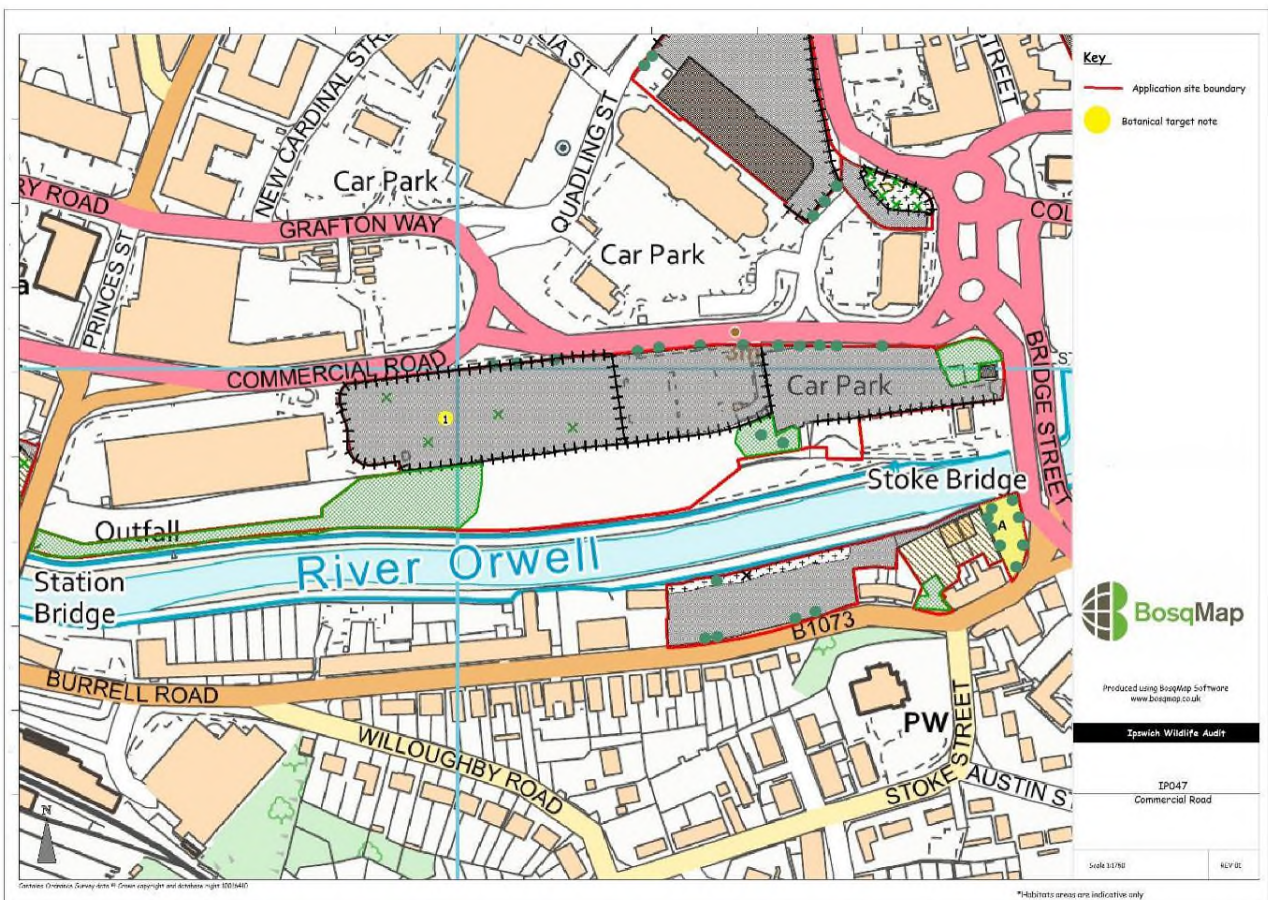


Site name: Commercial Road

Site ref: IP047
Site status: No wildlife designation
Grid ref: TM 16033 23955
Area: 3.11 hectares
Date: 25th July 2019
Recorder: J Crighton
Weather conditions: Clear sky, no wind, *ca.* 30°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



Inaccessible area of car park



Scrub belt along the south of the site

Habitat type(s):

Dense continuous scrub, hard standing, scattered trees, scattered scrub, introduced shrub

Subsidiary habitats:

Bare ground with vegetation typical of brownfield sites (Target Note 1)

Site description:

This site comprises three car parks to the south of Grafton Way, between the Cardinal Park Leisure and Entertainment Park and the River Orwell (County Wildlife Site). The site lies adjacent to an Area of Archaeological Importance and contains remnants of the old railway. The old railway is located to the south of the car parks, adjacent the River Path, and is a relatively undisturbed area with dense scrub. This represents an area of biodiversity interest in an otherwise low ecological value site and provides a good wildlife corridor.

Of the three car parks, only two are operational, with a large area in the west which is currently closed-boarded fenced and inaccessible. This section was viewed from the perimeter only but has been left unmanaged and contains typical brownfield species such as buddleia. The two operational car parks have a boundary of introduced shrub with trees along the roadside. There are also a number of trees planted throughout the car parks. Some of the trees within the site are protected by Tree Preservation Orders (TPOs).

Protected species seen or known:

Records in the surrounding area include:

- Otter
- Water vole
- Badger

Slow worm
Grass snake
Great crested newt
Daubenton's bat
Natterer's bat
Noctule bat
Common pipistrelle bat
Soprano pipistrelle bat

Protected species potential:

Common lizard

Priority habitats present:

-

Priority species seen or known:

House sparrow (seen)
Records in the surrounding area include:
Hedgehog
Stag beetle
Swift (Suffolk Character Species)

Associated with the river corridor, BoCC Red List birds include herring gull, curlew, common scoter, white-fronted goose and yellow wagtail, and BoCC Amber List include black-tailed godwit, black-throated diver, dark-bellied Brent goose and little tern.

Associated with the scrub, Red List birds include house sparrow, starling, linnets and song thrush, and Amber List birds include dunnock.

Priority species potential:

-

Connectivity:

The site borders the River Orwell and consequently has good ecological connectivity. This river and the associated River Gipping form a continuous wildlife corridor through Ipswich, with semi-natural vegetation along its banks.

Structural diversity:

The south of the site with the dense scrub has good structural diversity and offers a range of habitats for several taxonomic groups. However, the car parks have very sparse vegetation and limited structural diversity.

Flora:

The main ecological interest of this site is the scrub along the southern boundary, adjacent to the River Orwell. This scrub is largely buddleia and silver birch but other species such as sycamore, cherry, dog rose, clematis, bramble and hop are scattered throughout. There are some areas where the scrub thins and there are grassy patches with false oat, Yorkshire fog, cock's foot and wall barley and the occasional forb such as common mallow and nettle.

The fenced area of disused carpark contains species typical of brownfield sites including weld, smooth hawk's-beard, great mullein, St John's wort, groundsel and spear thistle. These plants were noted growing from cracks in the hard-standing exposing small areas of bare ground (Target Note 1). Sapling sycamore and buddleia are scattered throughout the site with some mature trees around the perimeter including sycamore, Italian alder, whitebeam and ash.

On the northern boundary of the operational car parks there are raised beds planted with introduced shrub such as the Japanese rose and cotoneaster (both are invasive species) with a non-native dogwood species. Bramble has started to encroach on unmanaged areas along with some ruderal vegetation such as wild mignonette, mugwort, wild parsnip and ribwort plantain. Mature trees have also been planted along this stretch including rowan, crab apple, cherry and false acacia. Notably some locally common dittander (Nationally scarce) is present within the scrub margins along with feverfew. Some silver birch trees are also planted throughout the car parks.

A patch of scrub is present at the easternmost end of the site with sycamore, broom, buddleia and bramble scrub with hedge bindweed and a ground flora of common mallow, bristly ox tongue, yarrow, black horehound, ragwort, nettle and spear thistle with cock's foot, perennial rye, wall barley and Yorkshire fog grasses.

Avifauna:

It was a sub-optimal time of year for recording this group. House sparrow was the only notable bird species recorded. The areas of dense scrub provide good foraging, nesting and roosting opportunities for a range of common bird species and could attract summer migrants such as whitethroat and the River Orwell is notable for its over-wintering waders and wildfowl and is designated as SSSI, SPA and Ramsar site further down the estuary.

Invertebrates:

The fenced off area has potential to support a wide range of invertebrates, with a patchy mosaic of flowering vegetation and habitat types including bare ground. The tall buffering strip of scrub along the adjacent southern boundary also provides shelter and a range of microclimates.

Herpetofauna:

Grass snake and slow worm are likely to be present within the scrub mosaic corridor on the southern boundary and there are records of both these species in the local area. The disused, fenced area could provide habitat which supports common lizard.

Mammals:

The river corridor and associated scrub belt provide good commuting and foraging habitat for bats.

There are records of otter along the River Orwell. Otters are highly mobile species, so the river corridor is likely to be regularly used for commuting and foraging. The undisturbed scrub in the south of the site, directly adjacent the river is capable of supporting an otter holt or resting place. However, there was no evidence that otters were using this area at the time of the survey, so any activity is likely to be transient.

There are a number of hedgehog records in the immediate area and the scrub mosaic provides excellent foraging, refuge and hibernation opportunities for them.

Common species of mammal such as fox and rabbit are likely to be present on this site. Mice, voles and shrews are also likely to be present in the scrub mosaic in the south. Although no evidence of badger movement was noted on site (raised gaps in boundary fencing), and there are no records of this species near to the site, the scrub could provide potential foraging and sett building habitat.

Comments and recommendations:

This site has been allocated for primary use as residential on 80% of the site, with 173 dwellings at medium density (55dph). Its secondary function will be that of hotel, leisure and retail with public open space and enhanced river path on 20% of the site.

A survey for reptiles is recommended prior to any vegetation clearance and if present they should ideally be retained within existing habitat on site, or on enhanced habitat adjacent to the site. Such measures include a well secured log pile for basking reptiles over the top of a below-ground hibernacula incorporated into an undisturbed area of greenspace.

Any clearance of woody vegetation should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check.

Cotoneaster species and Japanese Rose are present on site and these species are listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), because they can become dominant to the detriment of other species. As such, it is an offence to plant or otherwise cause these species to grow in the wild. When such plants are removed as part of a vegetation clearance programme then they should be disposed of in a way as not to contravene the legislation. Another highly invasive species, Japanese knotweed, has been recorded associated with the train station on the opposite side of the River Orwell so further investigation is required to ensure this has not colonised the site. This site assessment does not constitute an invasive species survey.

This site is located next to the River Orwell, so the lighting scheme should be designed to prevent light spillage into this area, or the scrub habitat above the banks. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

As this proposal includes public open space provision this should be sited on the southern boundary to enhance the existing wildlife corridor. Providing a habitat mosaic would help maximize biodiversity opportunities in conjunction with public access. Ideally patches of the existing scrub should be retained or supplemented by new planting using native species. If feasible, a wildflower area could also be sown along the southern boundary of the site, but this would require a higher level of maintenance to retain its ecological interest. Wildflower areas are left uncut until mid-July/August and then cut, with a second cut in September. An interpretation panel could be considered to showcase the presence of on-site habitats and species.

Sustainable drainage proposals to dispose of surface water are recommended. Rain gardens associated with the housing provision can slow down run-off from downpiped or paved areas. They

require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

At this location there is also an opportunity for off-site enhancement to benefit eels, as since the mid-1980s there has been a significant decline in their populations. An important contributing factor to this decline is thought to be the addition of water control structures such as weirs and gauging stations, which present a barrier to the natural migration of eels and elvers. A potential solution to the problem is the installation of a suitable 'eel pass' to the obstruction. Detailed information can be found in the "Elver and eel passes; A guide to the design and implementation of passage solutions at weirs, tidal gates and sluices" (Gregory *et al*, 2017).

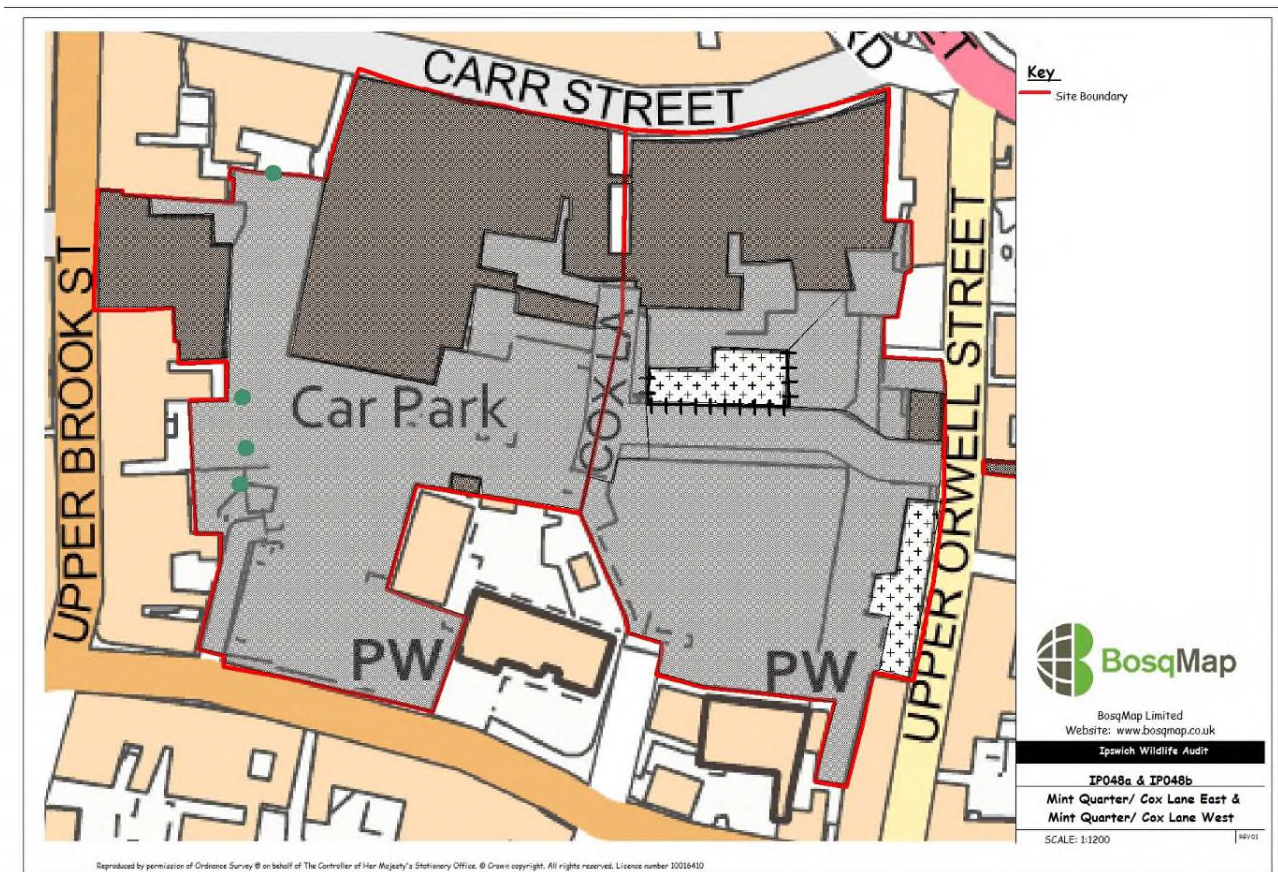
References:

Gregory, J. *et al* (2017). *Elver and eel passes; A guide to the design and implantation of passage solutions at weirs, tidal gates and sluices. The Eel Manual – GEHO0211BTMV-E-E*. Bristol, Environment Agency

Site name: Mint Quarter/Cox Lane West Regeneration Area

Site ref: IP048a/IP048b
Site status: No wildlife designation
Grid ref: TM16667 44501/TM 16556 44514
Area: 1.33 hectares/1.34 hectares
Date: 29th July 2019
Recorder: J Crighton
Weather conditions: Warm, clear skies with moderate breeze, *ca.* 24°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



Mature whitebeams within IP028b



Bank of IP028a, adjacent to Upper Orwell Street

Habitat type(s):

Hard standing, scattered trees, scattered scrub, ephemeral short perennial

Subsidiary habitats:

Bare ground

Site description:

These two sites are currently used as car parks. IP048a lies west of Upper Orwell Street, with locally listed buildings fronting Carr Street in the north and the grade II Listed St Pancras church is directly south of the southern boundary. IP048b is west of IP048a and accessed via Eagle Street in the south. Similarly, it has a northern boundary with Carr Street with locally listed buildings, and a grade II Listed church to the south-east (Christ Church). The eastern boundary includes one building which fronts Upper Brook Street, but the neighbouring buildings are not included. The sites are within an Area of Archaeological Importance adjacent to the Central Conservation Area. Below the car parks is a large scheduled monument related to the Middle and Late Saxon town.

The sites are currently split into three car parks, two of which are NCP run and the third run by Ipswich Borough Council. The Council car park has an area sloping down to Upper Orwell Street which appears to have been planted with ornamental plants. However, it has not been maintained and now is mostly ephemeral short perennial vegetation and bare ground. There are Tree Preservation Orders (TPOs) on site or nearby.

There is a fenced area in the north which is mainly hard standing with an area containing vegetation typical of brownfield sites; access to this area was limited due to high fencing.

Protected species seen or known:

Records in the surrounding area include:

- Brown long-eared bat
- Common pipistrelle bat

Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)
Starling
Song thrush
House sparrow

Priority species potential:

-

Connectivity:

This site is isolated being surrounded by busy roads within a heavily built-up area.

Structural diversity:

Structural diversity is limited being mostly buildings and hard standing.

Flora:

The majority of this site is hard standing but some mature whitebeam has been planted throughout the car park in IP048b and some buddleia and oak are present in IP048a.

The area within the fencing has mainly Canadian fleabane and prickly lettuce and the area set aside for planting alongside Upper Orwell Street contains fat hen, ribwort plantain, common mallow, scentless mayweed, common stork's-bill and hedge mustard amongst the ornamental plants.

Avifauna:

It was a sub-optimal time of year for recording this group. Gulls were heard flying overhead and the mature trees throughout the site offer some nesting opportunities for common birds.

Invertebrates:

Due to the majority of this site being laid to concrete hard standing, there is limited potential for this group. However, the planted area with ephemeral short perennial vegetation could offer some limited habitat for common invertebrates.

Herpetofauna:

There is no suitable habitat for this group.

Mammals:

The presence of several listed buildings adjacent to the site provides potential for roosting bats in the locality.

Comments and recommendations:

Site IP048a has been allocated as siting for a primary school, amenity greenspace and short stay multi-storey car parking on 40% of the site. Its secondary use is for 53 dwellings at high density (1000dph) on 40% of the site.

IP048b will primarily be used for retail, a short stay car park and open space, with a secondary use for 36 dwellings at high density (90dph) on 30% of the site.

As this area will remain highly built-up the options for net gain are limited, but should include utilising some available space, i.e. on the retail, multi-storey car park and primary school areas, green roofs and living walls are recommended, which can provide important stepping-stone habitats in urban areas. Green roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds. Living walls can be created as part of schemes that harvest rainwater or can utilise grey water sources. Aspect is important as shaded walls usually establish quickest. A simple solution could include climbers, such as ivy, which can be trained on wires or trellis, or for more complex schemes, adapted planters can be used for other species to create diverse green walls. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates.

Additionally, sustainable drainage proposals to dispose of surface water are recommended. Rain gardens are most effective when larger in size and slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

Special consideration should be given to the primary school grounds; a 'wild garden' would not only provide added biodiversity value but could also benefit the education, health and wellbeing of the pupils and staff.

In addition, action can be taken for individual species such as swifts and bats.

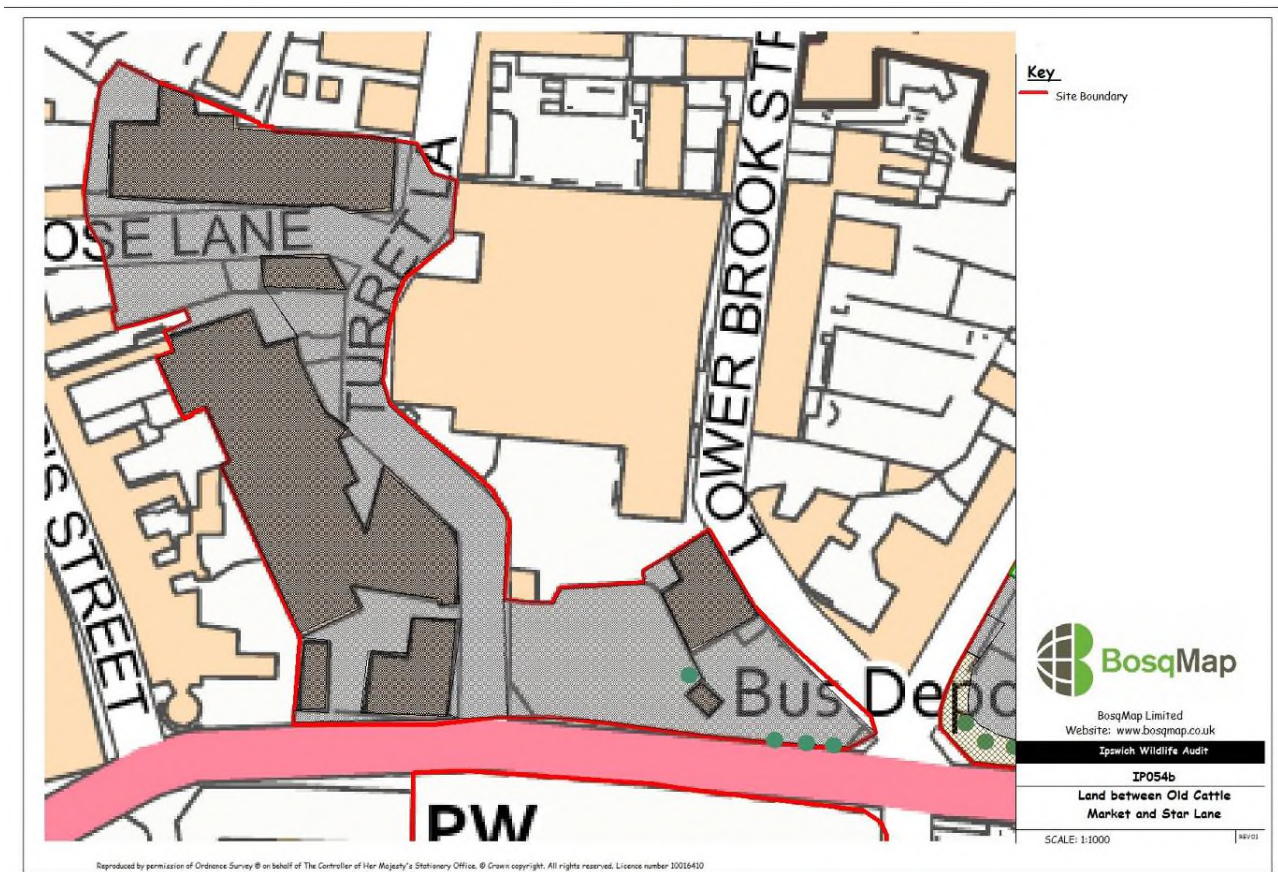
Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Bat boxes should also be integrated into new buildings, or durable boxes can be placed on trees where there is a low risk of interference.

Site name: Land between Old Cattle Market and Star Lane

Site ref: IP054b
Site status: No wildlife designation
Grid ref: TM 61350 44221
Area: 1.08 hectares
Date: 2nd August 2019
Recorder: J Crighton
Weather conditions: Bright with moderate wind, ca. 80% cloud cover, 21°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



Soft substrate car park in the south eastern corner



Typical industrial building with the site

Habitat type(s):

Buildings, hard standing, dense continuous scrub, scattered broad-leaved trees

Subsidiary habitats:

Wall surfaces

Site description:

This site covers several industrial buildings and associated car parks. It encompasses sections of Turret Lane in the east and Rose Lane in the north. The retail facilities on St Peter's Street lie to the west and beyond Turret Lane to the east there is a large area currently under development with evidence of recently demolished buildings. The site lies within an Area of Archaeological Importance, partly within the Central Conservation Area and contains a scheduled monument and two grade II Listed buildings.

The large car park in the south extends to Lower Orwell Street and contains several mature trees along the southern boundary, some of which may be protected by Tree Preservation Orders.

Protected species seen or known:

Records in the surrounding area include:

- Brown long-eared bat
- Common pipistrelle bat
- Soprano pipistrelle bat
- Daubenton's bat

Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

Swift (Suffolk Character Species)

Starling

Song thrush

House sparrow

Priority species potential:

-

Connectivity:

This site is fairly isolated being surrounded by busy roads within a heavily built-up area.

Structural diversity:

Structural diversity is limited being mostly buildings and hard standing. The mature trees offer some natural height differentiation and the walls and roofs could offer an additional substrate for growth, however, nothing has currently colonised this niche habitat.

Flora:

This site contains very little in the way of botanical interest. The only features are beech and London plane trees lining the southern boundary of the car park along Star Lane.

Avifauna:

It was a sub-optimal time of year for recording this group. However, it is likely that feral pigeons, often associated with industrial buildings and town centres, will nest in the buildings. Gulls may also use the roofs of the buildings for perching and nesting. The trees could also provide some nesting opportunities.

Invertebrates:

The site is currently sub-optimal for this group.

Herpetofauna:

There are no opportunities for this group within this site.

Mammals:

The presence of several listed buildings within the site and the surrounding area, and mature trees on the southern boundary could indicate the potential for roosting bats.

Comments and recommendations:

It is proposed that 40 dwellings will be sited on 60% of this site at medium density (60dph). Additionally, there are areas allocated for small scale retail opportunities and an electricity sub-station.

Although this site is currently of low wildlife value, there is a potential risk that buildings could support bats and consequently an internal inspection by a suitably qualified ecologist is recommended, which will also encompass nesting birds.

This site is relatively small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

Careful planning and design should integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. In the residential area this should include the provision of a rain garden, which are most effective when larger in size and slow down run-off from down-piped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

There is also the opportunity to provide enhancement for individual species:

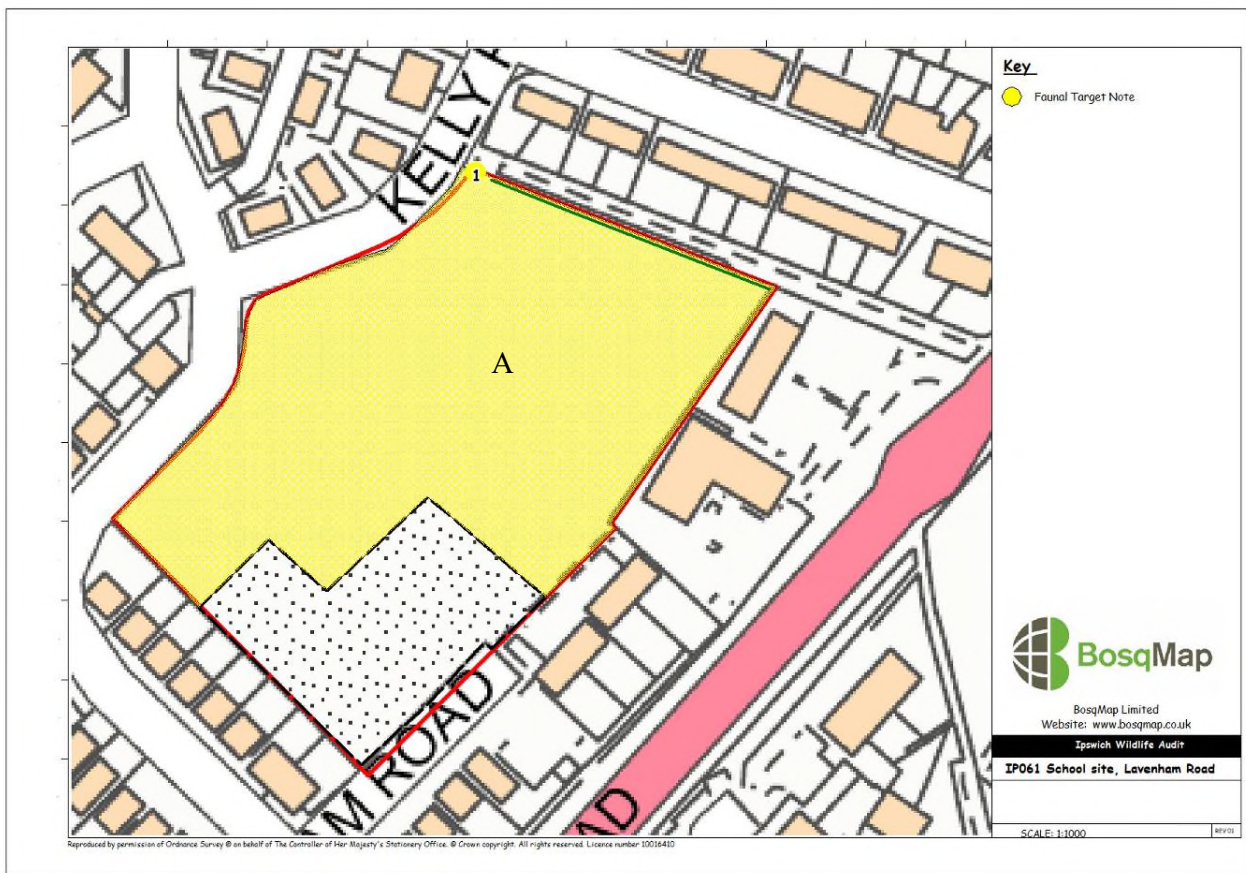
Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: School Site, Lavenham Road

Site ref: IP061
Site status: No wildlife designation
Grid ref: TM 14340 44160
Area: 0.90 hectares
Date: 22nd July 2019
Recorder: A Looser
Weather conditions: Warm and Sunny, 23^oC
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View south-west across site from Kelly Road



Mature ash tree in north-eastern corner (Target Note 1)

Habitat type(s):

Amenity grassland

Subsidiary habitats:

Species poor hedgerow, broadleaved tree

Site description:

This is an area of short mown amenity grassland bordering Lavenham Road and Kelly Road. A hedge defines the north-eastern boundary, with all other boundaries being open or garden fences. There is a mature ash tree in the north-eastern corner. Along the road edge is a low bank. The south-western corner of the site is currently fenced off and under construction. The remaining area of the site is used for dog exercising as well as other local recreational activities.

Protected species seen or known:

Species recorded in the area includes:

Common pipistrelle bat

Soprano pipistrelle bat

Daubenton's bat

Natterer's bat

Noctule bat

Grass snake

Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species recorded in the area include:

Hedgehog

Stag Beetle

Common toad

BoCC Red List birds including house sparrow and starling

BoCC Amber List birds including dunnock and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The site is surrounded by roads and residential housing. Although Chantry Park lies 125m to the west, there is no direct connectivity between the two sites. However, it does provide a stepping stone habitat between Chantry Park and Gippeswyk Park in combination with the London Road Allotments.

Structural diversity:

Structural diversity is poor due to the close mown sward and very few trees or shrubs.

Flora:

Perennial rye grass is the predominant grass with occasional wall barley. Within the sward are common herbs typical of mown grassland including ribwort plantain, greater plantain, yarrow, daisy, white clover, red clover, dandelion, smooth hawk's-beard, creeping cinquefoil, dove's foot cranesbill, mallow, field bindweed and comfrey.

The hedge comprises elder and ivy in the western section, with some hawthorn and Prunus species in the centre and a dense stand of elm at the eastern end. Some bramble and hedge bindweed is also associated with the hedge. A large ash tree is situated at the northern corner, adjacent to the hedge. The tree displays signs of damage on one side of the trunk and limbs.

Avifauna:

This site has limited opportunities for nesting and foraging. Common species including carrion crow, wood pigeon, collared dove and magpie were seen during the visit.

Invertebrates:

There are limited opportunities for this group. Small white butterflies were seen, and other common species are likely to utilize the site during the year. The bank along the road had small patches of bare ground which could be important for ground nesting bees and wasps. Ants were also noted on the bank.

The ash tree and hedgerow associated with the north-eastern boundary could provide habitat for stag beetles (priority species) whose larvae feed on subterranean dead wood.

Herpetofauna:

The habitat is not suitable for this group.

Mammals:

The mature ash tree on the north-eastern corner has some cracks and crevices which could support a bat roost. However, it is likely that the roosting opportunities are limited, so the suitability of these features for bats are thought to be 'Low'. Although further surveys for bats are not recommended, if this tree is to be cut down then a precautionary method of felling should be adopted and if any evidence of bats is found, then work must stop immediately and a suitably qualified ecologist consulted.

There are numerous records of hedgehog in the area and the short grassland provides good foraging opportunities for them, although there are limited nesting opportunities.

Comments and recommendations for net gain:

This site is proposed for a housing development on 60% of the site, with 40% left as open space. Part of the site is currently being developed.

Although the site is small and currently of relatively low ecological value it does provide valuable stepping-stone habitat between Chantry Park County Wildlife Site and Gippeswyk Park in combination with the London Road Allotments. With sensitive landscaping there is the opportunity to improve the quality of this stepping-stone habitat through enhancement of the remaining on-site habitat.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, particularly the hedgerow and mature tree along the northern boundary. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices.

New planting should seek to use native species typical of the local area such as hawthorn, blackthorn, oak, dogwood, hazel and field maple. If possible, it is the northern part of the site which should be retained as this currently contains the greatest biodiversity interest.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

A stag beetle habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed within a corner of the allocated greenspace.