Please note that an absence of records cannot be taken as a confirmation that a species is absent from the search area.

4.1.2.1 Amphibians

A number of common toad (*Bufo bufo*) breeding ponds have been identified in the area surrounding the Samares Nurseries site, the closest one is 65m west of the site (refer to Figure 4, Appendix C). There are no records of common toads or any other amphibian species within the site.

The common toad together with agile frog (*Rana dalmatina*) and palmate newt (*Lissotriton helveticus*) are fully protected under the Conservation of Wildlife (Jersey) Law 2000.

4.1.2.2 Bats

The Jersey Bat Group has identified a number of confirmed and potential bat roosts in the vicinity of the site; the closest ones are located approximately 0.8km to the north and east of the site. These are listed in Table 4 below.

Table 4: Bat roosts Records Provided by Jersey Bat Group

Ref.	Site Location and Distance to Site	Species Roosting	Bats Last Confirmed
1	Le Bourg House, Grouville, JE3 9UY (approximately 2.7km north-east from the site).	Grey Long Eared Bat (*Plecotus austriacus*)	2007
2	Le Bâs Fôssé, La Route des Côtils, Grouville, JE3 9AP (approximately 2.5km east from the site).	45 Khz Pipistrelle	2007
3	Bradstowe, 28 Sydney Crill Park, La Grande Route de la Cote, St Clement, JE2 6SY (approximately 2km south-east from the site).	45 Khz Pipistrelle	Suspected – not confirmed
4	14 Le Clos de Maitland, La Rue du Presbytere, St Clement, JE2 6RA (approximately 0.8km east from the site).	Pipistrelle (unconfirmed)	Suspected – not confirmed
5	3 Santai, Clos Marguerite, Rue des Pres, St. Saviour, JE2 7RF (approximately 0.8km north from the site).	45 Khz Pipistrelle	Suspected – not confirmed

Records 4 and 5 above were also provided by the States of Jersey's Department of Environment (refer to Figure 4, Appendix C).

The Jersey Bat Survey, published in October 2003, reported the presence of common pipistrelle *Pipistrellus pipistrellus* in the general area around the site. All other records of bat species were identified in other locations of the Island All species of bats are fully protected in Jersey under the Conservation of Wildlife (Jersey) Law 2000. Because all the bat species are considered so vulnerable, the Wildlife Law asks that anyone doing anything in relation to a bat notifies the Planning and Environment Department of any proposed actions or operations.

4.1.2.3 Birds

Data received from the Department of Environment identify a number of barn owl (*Tyto alba*) records outside the site, to the north-east (refer to Figure 4, Appendix C).

Under the Conservation of Wildlife (Jersey) Law, 2000, all species of birds their nests and eggs are fully protected, except for the carrion crow (*Corvus corone*), feral pigeon (*Columba livia*), wood pigeon (*Columba palumbus*), magpie (*Pica pica*)) and starling (*Turdus turdus*). It is an offence under the Law to disturb, damage or destroy the active nest of a protected bird species or to prevent parent birds accessing their nests.

4.1.2.4 Reptiles

A grass snake (*Natrix natrix*) record has been identified 150m south of the site boundary (refer to Figure 4, Appendix C). No other reptile records have been received through consultation.

All native reptile species found in Jersey, namely grass snake, slow worm, green lizard and wall lizard are fully protected under the Conservation of Wildlife (Jersey) Law 2000.

4.1.2.5 Mammals (other than bats)

Red squirrels (*Sciurus vulgaris*) have been recorded in various locations around the site, the closest one 300 m north-east from the site, along La Rue de la Binerie (refer to Figure 4, Appendix C).

Red squirrels are fully protected under the Conservation of Wildlife (Jersey) Law 2000.

4.1.2.6 Plants

The following protected plant species have been recorded in the vicinity of the site (refer to Figure 4, Appendix C):

- Thread-leaved water-crowfoot (*Rannunculus trichophyllus*);
- Loose-flowered orchid (*Anacamptis laxiflora*);
- Southern marsh-orchid (*Dactylorhiza praetermissa*);

- Common spotted-orchid (*Dactylorhiza fuchsia*); and
- Autumn lady's-tresses (*Spiranthes spiralis*).

Under the Conservation of Wildlife (Jersey) Law 2000, it is an offence for any person to knowingly pick, uproot, collect the seed of or destroy any protected plant.

4.1.2.7 Invasive Species

The desktop study has identified a number of records of the invasive gypsy moth (*Lymantria dispar*) in the area around the Samares Nurseries site (refer to Figure 4, Appendix C).

Gypsy moth is a serious pest of trees and shrubs with a preference for oaks (*Quecus* spp.). Other hosts include hornbeam (*Carpinus betulus)*, beech (*Fagus sylvatica*), chestnut (*Castanea sativa*), birch (*Betula* sp.) and poplar (*Populus* sp.). Gypsy moth numbers are monitored by States of Jersey Environment Department.

4.1.2.8 Other Species

No other protected / notable species records (e.g. invertebrates) have been identified in the vicinity of the site during the desktop study.

4.2 Phase 1 Habitat Survey and Protected Species Walkover Survey Results

A Phase 1 Habitat Survey and a Protected Species Walkover survey were undertaken on 20th November 2009 by AECOM ecologists at the Samares Nurseries site. The survey results will be described separately below, in terms of the habitats present and the suitability of this habitat for protected/notable species. Target notes and a botanical species list can be found in Appendix A and the Phase 1 Habitat Survey map can be found in Appendix C (Figure 5) at the of this document. Photographs of the site can be found in Appendix B.

4.2.1 Phase 1 Habitat Survey

The survey area was found to support the following habitat types as detailed in the Handbook for Phase 1 Habitat Survey:

- Standing Open Water
- Poor Semi-improved Grassland
- Improved Grassland
- Scattered scrub
- Trees
- Boundaries
- Hard standing, buildings and other structures.

4.2.1.1 Standing Open Water

There are two open water bodies within the Samares Nurseries site. The first (Pond A) is located along the northern boundary of the site. The pond area covers approximately 1,134m^2 and is bordered by a dense bramble (*Rubus sp.)* dominated hedge of approximately 1.5 – 2m height. The pond is lined up to the edge, with no marginal, emergent or sub-merged vegetation observed at the time of survey (please refer to photographs 1 and 2 in Appendix B).

The second water body (Pond B) is located along on the eastern part of the site and covers approximately 1,628m^2. The pond is lined although much of the liner has been damaged. Consequently the pond was not full of water... One small stand of yellow iris (*Iris pseudacorus) was observed on the western side of the pond at the water level and a number of rush (Juncus* spp*)* were recorded on the eastern bank above the water level, mid-way up the pond side. The banks of the pond comprised a number of stands of pampas grass (*Cortaderia selloana*), bulrush (*Typha latifolia*) and young willow trees (*Salix* sp.) There was no submerged vegetation observed at the time of survey and very little marginal vegetation was recorded. The pond is surrounding by a wired fence (please refer to photographs 3 and 4 in Appendix B).

4.2.1.2 Poor Semi-improved Grass

Most of the site has been being classified as poor semi-improved grass vegetation, including within the former glass house nursery areas where now only the metal framework remains in place. Species recorded in these areas include perennial ryegrass (*Lolium perenne*), cock's-foot (*Dactylis glomerata*), dock (*Rumex* spp.), nettle (*Urtica dioica*), ribwort plantain (*Plantago lanceolata*), greater plantain (*Plantago major*), a number of vetch species (*Vicia* spp.), thistle (*Cirsium* sp.), yarrow (*Achillea millefolium*), dandelion (*Taraxacum officinale*), cleavers (*Galium aparine*), teasel (*Dipsacus* sp.), fescue grass (*Festuca* sp.), ivy (*Hedera helix*), and hogweed (*Heracleum* sp.).

In addition, stands of pampas grass, rosebay willow-herb (*Chamaenerion angustifolium*) and bramble are also widespread within these areas (please refer to photographs 5 and 6 in Appendix B).

4.2.1.3 Improved Grassland

This is an area of short grass located along the west side of the site, between the trees marking the site boundary and the old nursery area. Species recorded along this area include ryegrass, clover (*Trifolium* sp.), ground elder (*Aegopodium podagraria*), lords and ladies (*Arum maculatum)*, and stinking iris (*Iris foetidissima*) (please refer to photograph 7 in Appendix B).

4.2.1.4 Scrub

Areas of scattered scrub were found across the site as shown in Figure 5 (Appendix C). Species recorded include bramble, broom (*Cytisus scoparius ssp scparius*) and young willow (*Salix* sp.) (refer to photographs 8 and 9 in Appendix B).

Dense scrub (bramble) surrounding the water body at the north of the site (Pond A) (refer to photograph 1 in Appendix B).

4.2.1.5 Boundaries

These comprised mainly: (a) a species-poor intact hedge dominated by bramble along the east of the site (refer to photograph 10 in Appendix B); and (b) a species-poor defunct (gappy) hedge with trees along the southern and south-eastern boundaries. Tree species recorded along this boundary included poplar (*Populus* sp.), willow oak (*Quercus* sp.) and birch (*Betula* sp.) (please refer to photograph 11 in Appendix B).

4.2.1.6 Trees

A number of individual trees were recorded across the site, including those along the south and east boundaries as mentioned above. Mature poplar trees, some of which were covered in ivy (*Hedera helix*), were recorded along the west boundary of the site. Hornbeam trees (*Carpinus betulus*) are present along a concrete path running between the two old nursery areas and also along the path at the entrance of the site (please refer photograph 12 in Appendix B).

4.2.2 Protected Species Walkover Survey (including controlled species)

4.2.2.1 Amphibians

Of the two bodies of standing water within the site, Pond A is a large water body with plastic lining, the sides of which are near vertical. The top of the pond is bordered by a dense bramble (*Rubus sp.)* dominated hedge of approximately 1.5 – 2m height. But the water body did not support any marginal or sub-merged vegetation. The potential for Pond A to support reproduction of amphibian species is considered to be low, although some suitable foraging and refuge opportunities for amphibians may exist. However, the timing of the survey to assess for amphibian suitability was sub-optimal.

Pond B is also lined although some the lining is damaged towards the tops of the banks resulting in low water levels. There is some vegetation present along the banks and sides of the pond, but no submerged vegetation was observed at the time of survey and very little marginal vegetation was recorded. This pond is surrounded by species poor semi-improved grassland, scattered scrub and hedges, which may provide suitable foraging and refuge opportunities for amphibians. The potential for Pond B to support breeding of populations of common toad and / or palmate newts is considered to be low to medium. However, the timing of the survey to assess for amphibian suitability was sub-optimal.

4.2.2.2 Reptiles

The site contains suitable reptile habitat, including some areas of tussocky semi-improved grassland and scattered scrub which may provide foraging and hibernacula (overwintering areas) opportunities (see target notes 1, 2 and 3). Additional hibernacula opportunities are provided by an area of broken tiles and rubble mounds (please refer to photograph 13 in Appendix B and target note 4 in Appendix A) and a number of abandoned concrete pipes (see photograph 14 and target note 5).

4.2.2.3 Birds

A number of bird species were observed on the site during the survey, including grey heron (*Ardea cinerea*), wren (*Troglodytes troglodytes*), sparrow (*Passer sp*), long-tailed tit (*Aegithalos caudatus*), magpie (*Pica pica*) and gulls (*Larus canus*). The areas of dense and scatter scrub, the hedges and individual trees across the site (please refer to photographs 1, 8, 9, 10 and 11in Appendix B, and target notes 6, 7 and 8 in Appendix A) as well as one of the remaining buildings (please refer to photograph 15 in Appendix B and target note 9 in Appendix A), were all considered to provide suitable habitat for breeding / nesting birds.

4.2.2.4 Bats

Some of the mature poplar trees present along the west boundary of the site were assessed as having the potential to support bat roosts (please refer to photographs 16 and 17 in Appendix B, and target note 10 in Appendix A), while the hedges and tree lines across the site would provide suitable commuting routes for bats. The built structures present on site were also inspected for bats and found to have low bat roost potential (refer to photographs 15 and 18 in Appendix B, and target notes 9 and 11 in Appendix A).

4.2.2.5 Mammals (other than bats)

In addition to having breeding / nesting birds potential, the hedges along the south and east boundaries of the site also provide suitable habitat for small mammals such as the millet's shrew (*Sorex coronatus)*, the lesser white-toothed shrew (*Crocidura suaveolens*), the Jersey bank vole (*Clethrionomys glareolus caesarius*) and hedgehog (*Erinaceus europaeus*).

Although the hedgerows along the site boundary are not directly linked to the woody area north-east of the site where red squirrels (*Sciurus vulgaris*) have been recorded; La Grande Rue de Saint Clement, which separates these two areas, does not represent a physical barrier for red squirrels and therefore the hedgerows along the site boundary would have the potential to be used by the species, for example as dispersal corridors.

4.2.2.6 Controlled Species

No controlled plant species, such as Japanese knotweed, were recorded on site during the survey.

5 Implications for Development

5.1 Implications for Development

5.1.1 Designated Sites for Nature Conservation

There are three designated sites within 2km of the study area, namely: South East Coast of Jersey Ramsar site (approximately 350m south), Rue des Pres Site of Special Interest (SSI) (approximately 500m north) and La Motte (Green Island) Le Croc and Le Nez Site of Special Interest (SSI) (approximately 1.2km south).

None of the sites are physically directly linked to the Samares Nurseries site. In addition, the study area does not support the same type of habitats found within the designated sites (e.g. marine and wet meadow habitat). It is therefore considered unlikely that the potential development of the Samares Nurseries site would have a significant negative effect upon these designated sites.

5.1.2 Protected Species

The results of the extended Phase 1 Survey show that the site contains a range of habitats (e.g. mature trees, hedgerows, semi-improved grassland, standing water) with the potential to support a number of protected species under Jersey law, including amphibians (e.g. common toad and palmate newt), reptiles (e.g. grass snake, slow worm), breeding birds, bats, red squirrel and small mammals (e.g. millet's shrew, lesser white-toothed shrew, Jersey bank vole, hedgehog).

In order to confirm the presence / absence of protected species within the site and therefore support any development proposals, it is recommended that further detailed species surveys are undertaken at the right time of year and following consultation with the Planning and Environment Department. The following paragraphs describe in summary the reasons for the recommended surveys.

5.1.3 Amphibians

The study area contains potential suitable breeding and foraging / hibernation habitat for protected amphibian species such as common toad and palmate newt. Historic records of common toad breeding ponds exist in the general area, the closets one just 65m from the site. No records of palmate newt in the vicinity of the site have been identified to date.

Common toads and palmate newts are fully protected under the Conservation of Wildlife (Jersey) Law 2000. It is recommended that an amphibian survey is undertaken in the right time of year (early spring to summer) of at least Pond B prior to any works taking place on site. The amphibian survey methodology should be discussed and agreed in advance with the Planning and Environment Department.

5.1.4 Reptiles

Reptile records (grass snake) have been received from the area within 1km from the site. The site supports habitat suitable for basking and foraging reptiles.

All native reptile species found in Jersey, including grass snake, slow worm, green lizard and wall lizard are fully protected under the Conservation of Wildlife (Jersey) Law 2000.

Due to the presence of suitable habitat and as historical records of reptiles exists within the wider area, it is recommended that reptile presence / absence survey is undertaken for at least those areas identified as suitable during the Phase 1 habitat survey.

Reptile surveys may only be conducted between March and June and September and October during suitable weather conditions. If reptiles are found to be using the site, an appropriate mitigation strategy would need to be agreed with the Planning and Environment Department prior to any works taking place. The latter may include: translocation of reptiles from working area to suitable receptor sites, destructive search to remove any reptiles from the habitat while this is being cleared (for preparation of the site for construction).

5.1.5 Breeding Birds

A number of birds were recorded on site during the Phase 1 habitat survey including heron, wren, sparrow and long-tailed tit. Barn owl records exist for the north of the Samares Nurseries site. The areas of scrub and the trees recorded on site provide suitable habitat for breeding birds/nesting birds, all of which are protected under Jersey law. In order to avoid impacts upon breeding / nesting birds, it is recommended that any removal of trees or vegetation within the site is undertaken outside the bird breeding season (typically, but not always, February to August inclusive). If vegetation is to be removed during the bird breeding season, it is recommended that a suitably qualified ecologist/arboriculturalist checks for the presence of any nests or other signs of breeding prior to any works taking place.

Equally the management of trees or vegetation during the bird breeding season (typically, but not always, February to August inclusive) must not be carried out until the vegetation has been checked by a suitably qualified ecologist/arboriculturalist for the presence of any nests or other signs of breeding.

If nesting or breeding birds are present then the vegetation removal on a particular tree or area of scrub cannot take place until the nests are no longer used and the recently fledged young have dispersed, or until any other bird behaviours strongly indicative of breeding have ceased

5.1.6 Bats

Trees with the potential to support bat roosts have been recorded during the extended Phase 1 survey within the site. The site also contains a number of ecological features such as hedgerows, ponds and lines of trees that could be used by bats for foraging and / or commuting. In addition, bat roosts (grey long-eared and pipistrelle) have been recorded in the vicinity of the site.

All species of bats are fully protected in Jersey under the Conservation of Wildlife (Jersey) Law 2000 and anyone planning to undertake any actions that may affect bats should notify the Planning and Environment Department.

It is recommended that a bat activity and exist survey is undertaken of those trees identified as having potential to support a bat roost. The proposed survey will help understand the use of the site by bats and confirm the presence of bat roosts.

5.1.7 Mammals (other than bats)

The hedgerows along the south and east boundaries of the site have been identified as providing suitable habitat for small mammals such as the millet's shrew, the lesser white-toothed shrew, the Jersey bank vole and hedgehog.

In addition, red squirrel records have been received from the area within 1km from the site. Hedgerows and field boundaries are important ecological features because they act, or have the potential to act, as corridors for squirrels connecting woodland fragments.

Red squirrel, millet's shrew, lesser white-toothed shrew, Jersey bank vole and hedgerows are all fully protected under the Conservation of Wildlife (Jersey) Law 2000. The red squirrel's Biodiversity Action Plans (BAP) seeks to ensure that the needs of red squirrels are taken into account as part of the development process.

It is recommended that further consultation is undertaken with the Planning and Environment Department in order to establish the need for a mammal survey (and if so the requirement for a licence), and any mitigation / enhancement measures that may be required in order to ensure that no protected mammal species are affected by the development of the site.

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Appendices

Appendix A: Target Notes and Botanical Species List

Phase 1 Habitat Survey Target Notes

Target Note Number	Comment
1	Area of long grass and scattered scrub which may provide suitable foraging reptile habitat.
2	Area of semi-improved grassland and scattered scrub which may provide suitable foraging and basking reptile habitat.
3	Area of long grass which may provide suitable foraging reptile habitat.
4	Area of broken tiles and rubble which may provide suitable hibernacula for reptiles.
5	Abandoned concrete pipes which may provide suitable hibernacula for reptiles.
6	Hedgerow and scattered scrub considered suitable for breeding birds, small mammals and red squirrels.
7	Hedgerow with trees and scattered scrub considered suitable for breeding birds, small mammals and red squirrels.
8	Hedgerow with trees and scattered scrub considered suitable for breeding birds, small mammals and red squirrels.
9	Building with open windows / door and gaps on the ceiling may provide suitable habitat for breeding / nesting birds. The building is considered to have low bat potential.
10	Mature poplar trees present along the west boundary of the site have the potential to support bat roosts.
11	Building with sealed windows and no crevices / gaps observed in the ceiling (asbestos). Main door was broken and present and gap. The building assessed as having low bat roost potential.

Botanical Species List

Common Name	Scientific Name
Birch	*Betula* sp.
Bramble	*Rubus* sp.
Broom	*Cytisus scoparius ssp scparius*
Bulrush	*Typha latifolia*
Cleaver	*Galium aparine*
Clover	*Trifolium* sp.
Cock's-foot	*Dactylis glomerata*
Dandelion	*Taraxacum officinale* agg
Dock	*Rumex* sp.
Fescue	*Festuca* sp.
Greater plantain	*Plantago major*
Ground elder	*Aegopodium podagraria*
Hogweed	*Heracleum* sp
Hornbeam	*Carpinus betulus*
Ivy	*Hedera helix*
Lords and Ladies	*Arum maculatum*
Nettle	*Urtica dioica*
Oak	*Quecus* sp.
Pampas grass	*Cortaderia selloana*
Perennial ryegrass	*Lolium perenne*
Poplar	*Populus* sp.
Ribwort plantain	*Plantago lanceolata*
Rosebay willow-herb	*Chamaenerion angustifolium*
Stinking iris	*Iris foetidissima*

Common Name	Scientific Name
Teasel	*Dipsacus* sp.
Thistle	*Cirsium* sp.
Vetch	*Vicia* spp.
Willow	*Salix* sp.
Yarrow	*Achillea millefolium*
yellow iris	*Iris pseudacorus)*
Rush	*Juncus* spp

Appendix B: Site Photographs

Photograph 1: Brambles Surrounding Pond A

Photograph 2: Pond A

Photograph 3: Pond B

Photograph 4: Pond B

Photograph 5: Area of Poor Semi-improved Grassland

Photograph 6: Poor Semi-improved Grassland and Tussocks of Pampas Grass

Photograph 7: Area of Improved Grassland

Photograph 8: Bramble and Willow Scrub

Photograph 9: Bramble Scrub

Photograph 10: Species-poor intact Hedge Along East Boundary

Photograph 11: Species-poor Defunct Hedge with Trees Along South Boundary

Photograph 12: Line of Hornbeams Along Path

Photograph 13: Potential Reptile Hibernacula

Photograph 14: Potential Reptile Hibernacula

Photograph 15: Machinery Shed

Photograph 16: Mature Poplar Tree

Photograph 17: Poplar Tree Covered with Ivy

Photograph 18: Abandoned Shed

Appendix C: Figures

Figure 1: South East Coast of Jersey Ramsar Site

UK23001 South East Coast of Jersey, Channel Islands

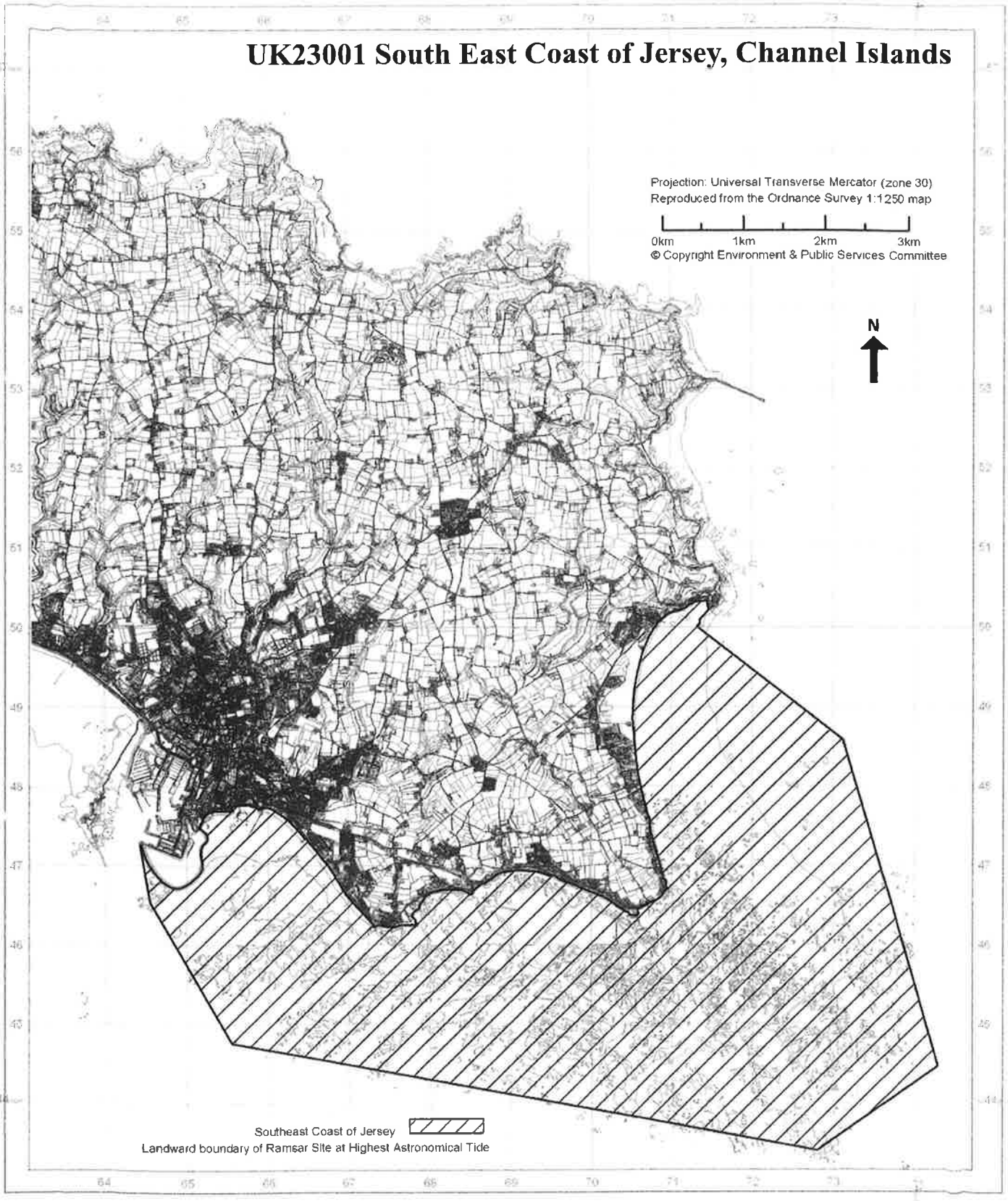
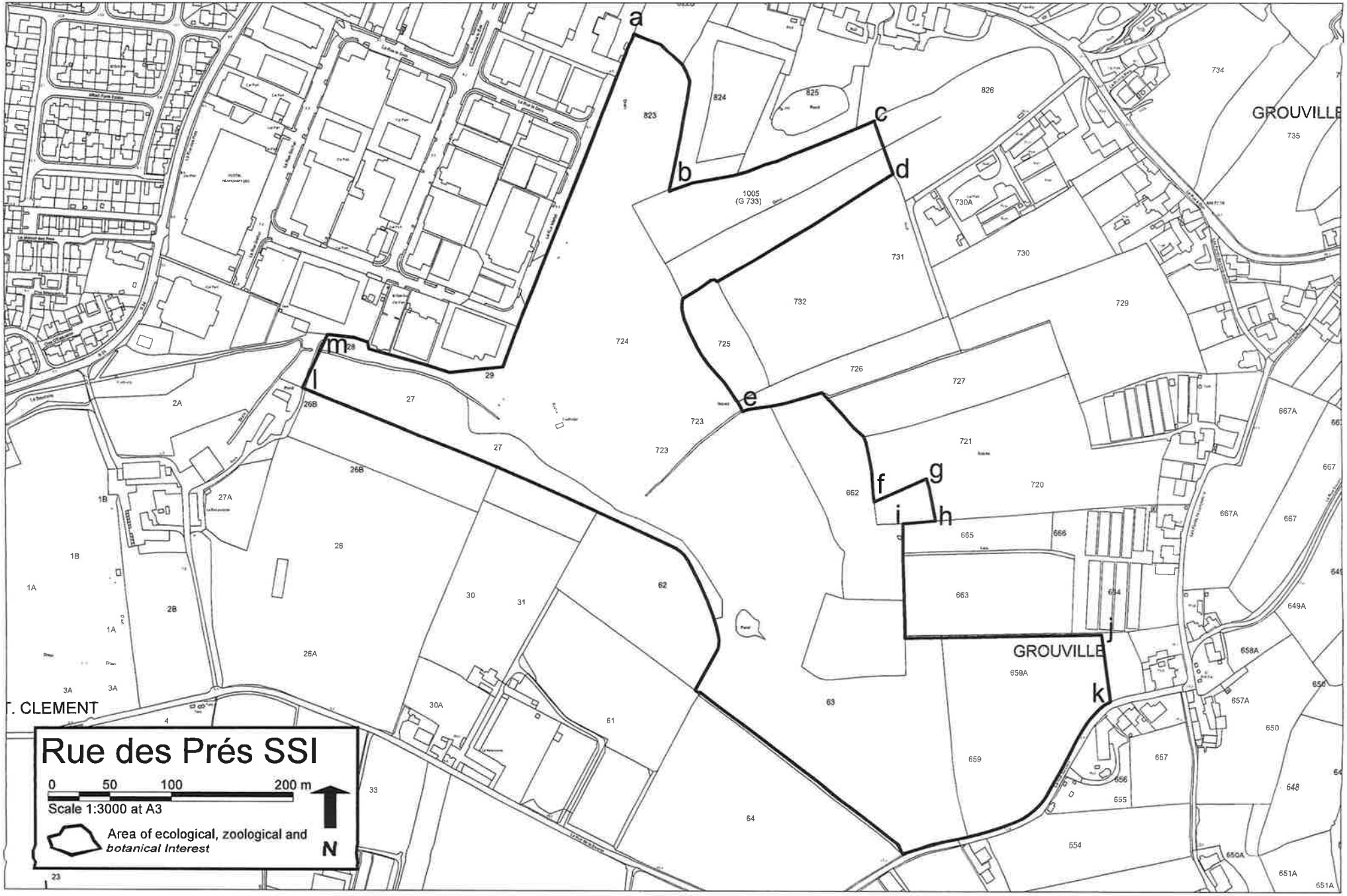


Figure 2: Rue des Pres Site of Special Interest (SSI)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GROUVILLE
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T. CLEMENT
Rue des Prés SSI
0 50 100 200 m
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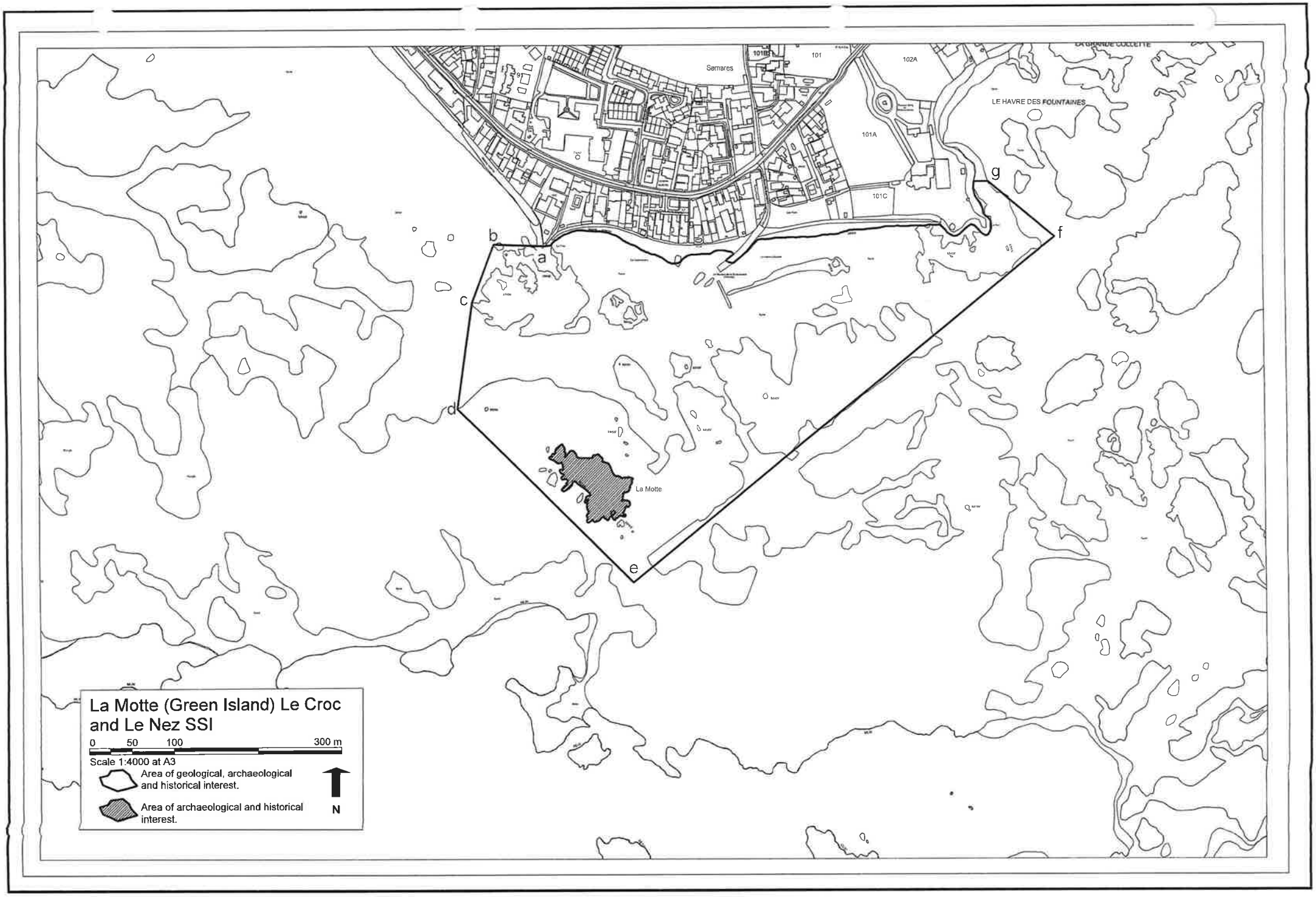
Area of ecological, zoological and botanical Interest
N

Figure 3: La Motte (Green Island) Le Croc & Le Nez Site of Special Interest (SSI)


Samares
101
102A
101A
101C
LE HAVRE DES FOUNTAINES
La Motte
a
b
c
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La Motte (Green Island) Le Croc and Le Nez SSI
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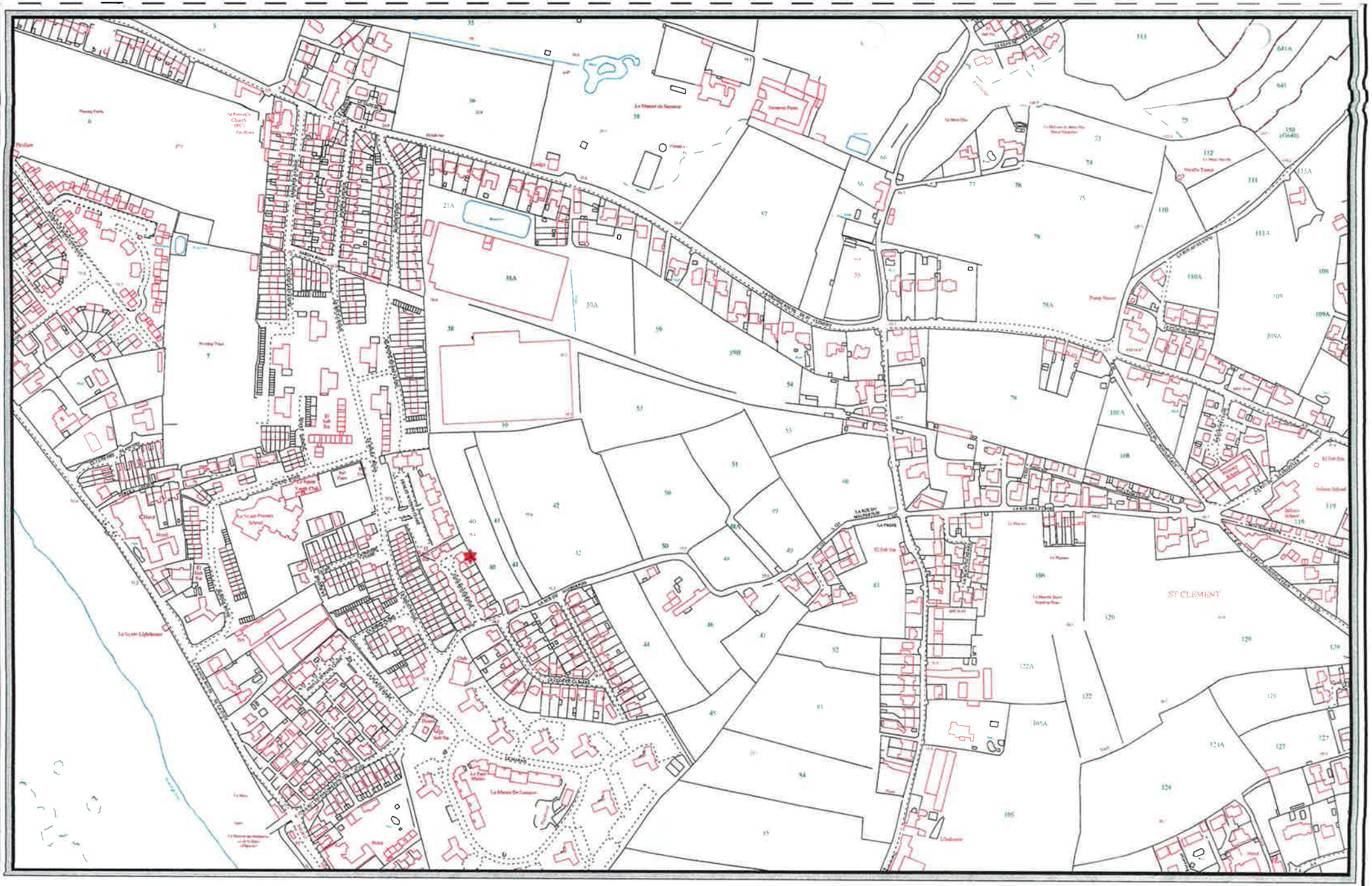
Scale 1:4000 at A3
Area of geological, archaeological and historical interest.
Area of archaeological and historical interest.
N

Figure 4: Species Records



States of Jersey

Location Plan

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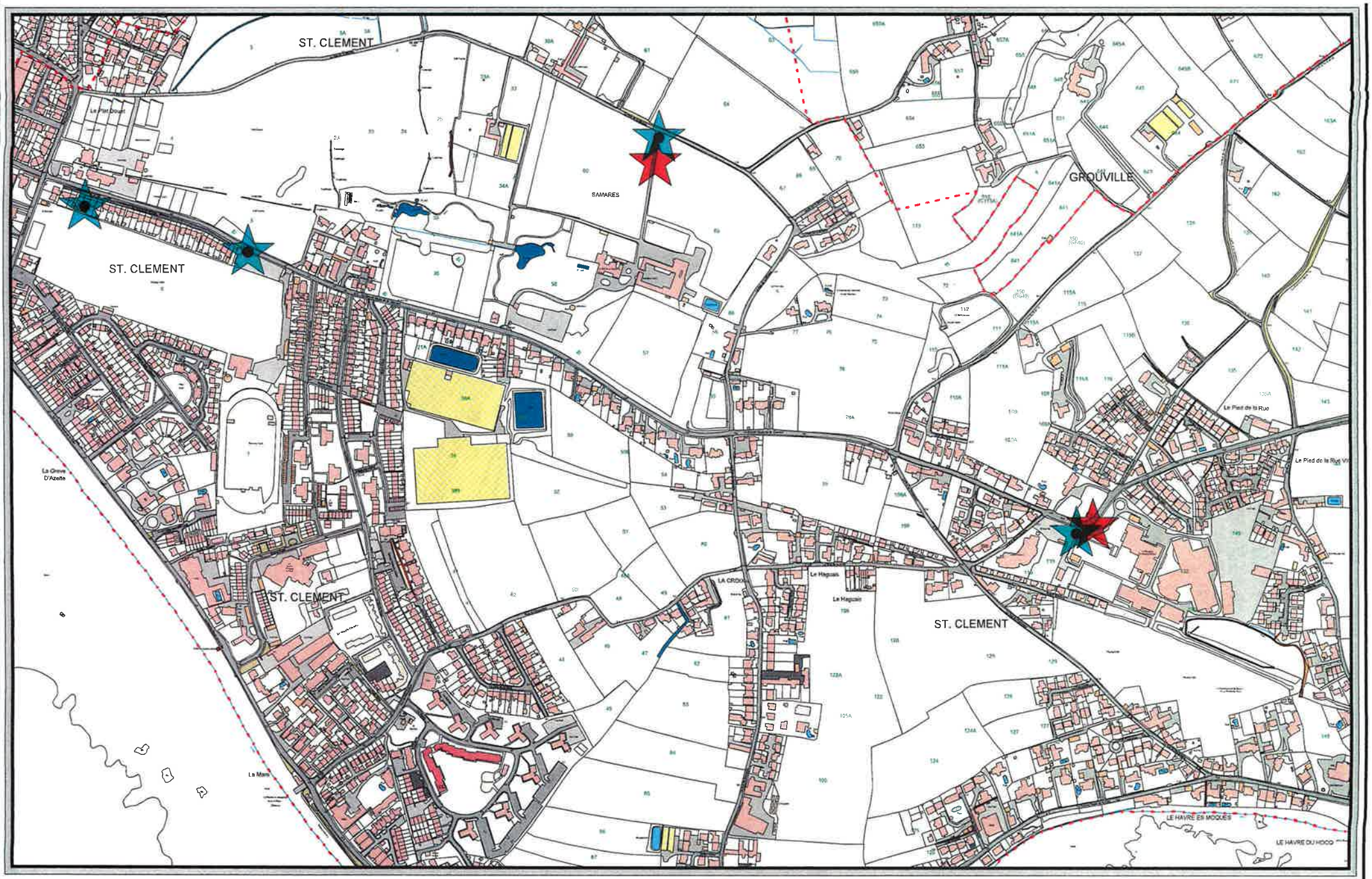

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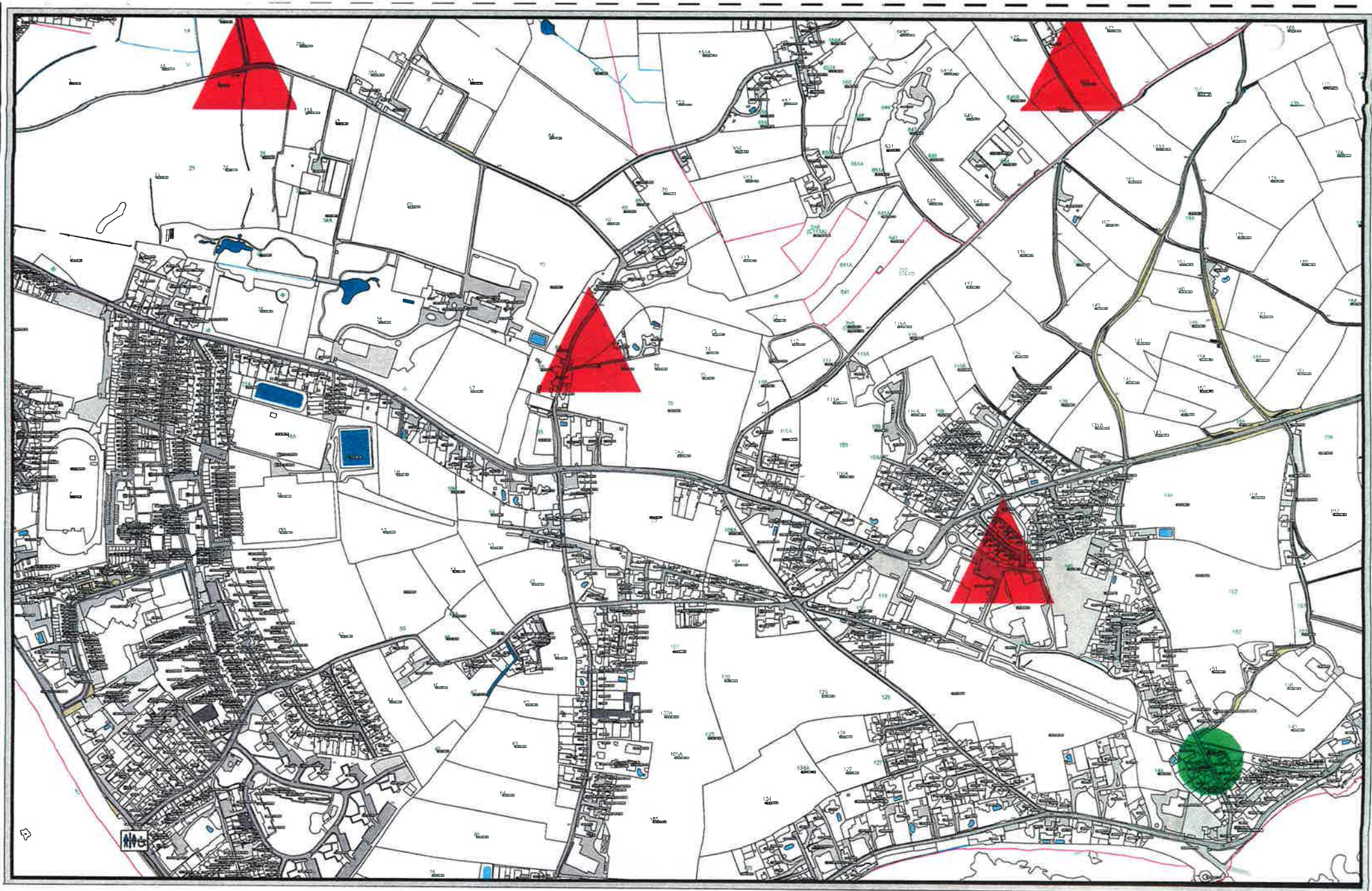

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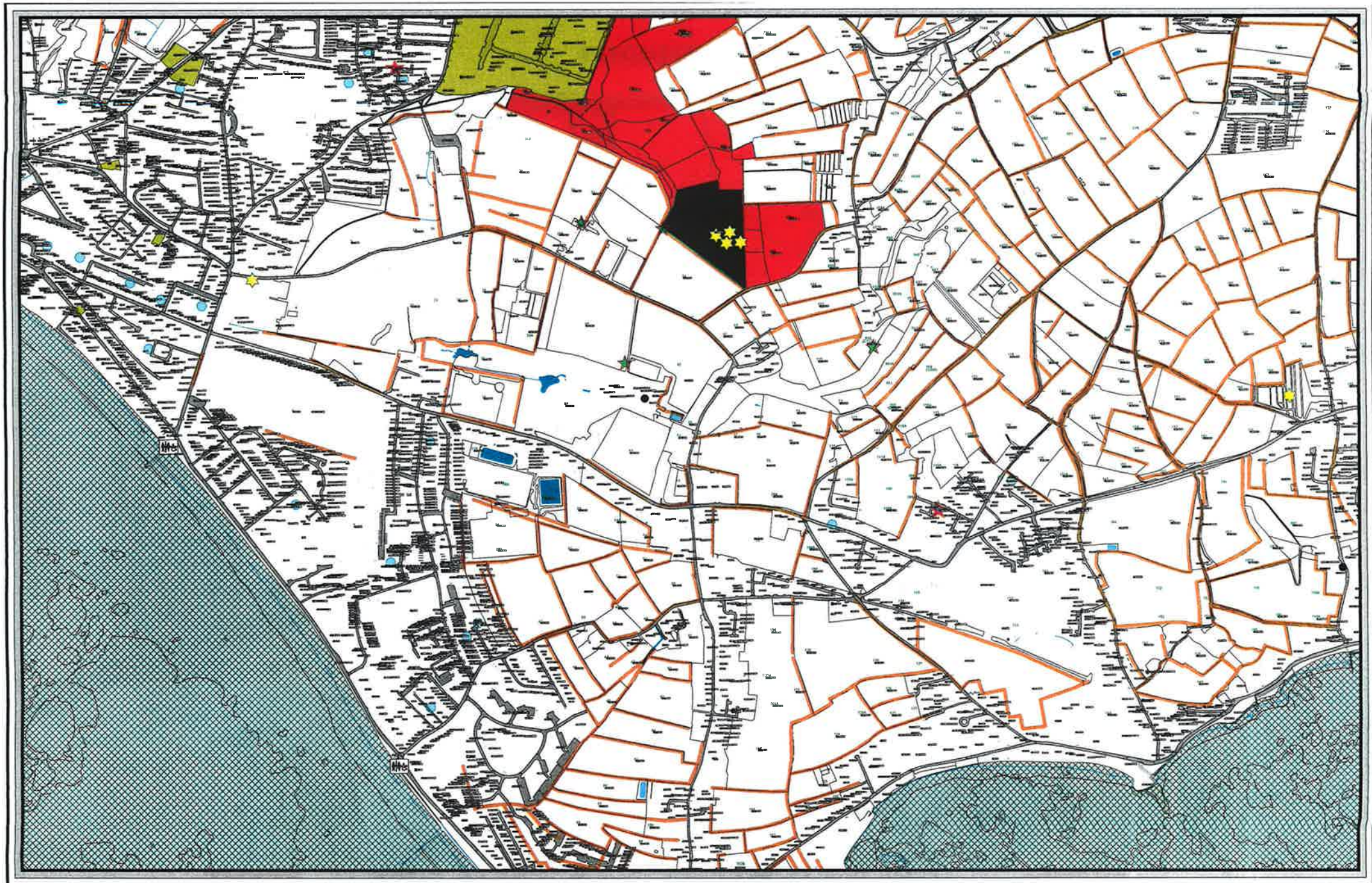

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