South Gillingham Consortium

South Gillingham, Dorset

Great Crested Newt Presence / Likely Absence Survey

November 2017

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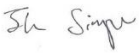
Checked By:		John Simper MCIEEM **Senior Ecologist**
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Executive Summary

Contents	Summary
Site location	The site is located to the south of the town of Gillingham in Dorset, centred on OS grid reference ST819488. It covers an area of approximately 91.8 ha and is divided into three areas. Park Farm, the eastern area is located to the east of Shaftesbury Road. West of Shaftesbury Road lies Ham Farm, the central area. West of Ham Farm lies Newhouse Farm, the western area.
Previous reports/surveys	The Ecology Solutions and SLR surveys carried out at the Site in 2011 identified small populations of GCN in Ponds P6, P7, P10, P11 and P16.
WYG Survey	A GCN presence/likely absence and population survey was carried out over six visits in May and June 2015 of eight waterbodies considered suitable to breeding GCN on and within 500m of the Site.
Results	Small populations of GCN were confirmed in P3, P9, P10, P11, P14, P15 and P16. Small populations were also recorded in P6 and P7 in 2011 however these were considered to be disconnected from the Site by Fern Brook and therefore considered to be independent of each other and not part of the same metapopulation.
Constraints and Recommendations	Existing waterbodies used by great crested newts will be retained and supplemented by additional terrestrial habitat creation. A translocation will be completed for each stage of development involving the installation of amphibian fencing around ponds, followed by pitfall trapping to capture great crested newts which will be released within the fenced area. A supervised destructive search will be completed post-translocation to make sure no reptiles remain. A post-development management and monitoring regime will be carried out to measure the success of the mitigation and, if necessary, guide corrective action or changes to management. Mitigation works will require an EPSL licence from Natural England in order for them to proceed lawfully.

1.0 Introduction

1.1 Background

WYG was commissioned by South Gillingham Consortium in April 2015 to complete a great crested newt presence / likely absence survey a at a site in South Gillingham (hereafter referred to as 'the site'). Following the completion of an extended Phase 1 habitat survey in March 2015 great crested newt surveys were recommended due to the presence of suitable waterbodies and previous records of great crested newt presence.

1.2 Site Location and Description

The site is located to the south of the town of Gillingham in Dorset, centred on OS grid reference ST819488. It covers an area of approximately 91.8 ha and is divided into three areas. Park Farm, the eastern area is located to the east of Shaftesbury Road. West of Shaftesbury Road lies Ham Farm, the central area. West of Ham Farm lies Newhouse Farm, the western area. To the north of Ham Farm lies the residential area of Ham Common. West of Ham Common runs the River Lodden, with the Lodden Lakes beyond, which forms the northern boundary of Newhouse Farm. To the south and west of the site lie agricultural areas including both pasture and arable fields, with hedgerow networks. The northern and eastern boundary of Park Farm comprises Fern Brook, with further agricultural areas beyond.

Park Farm comprises a matrix of habitats including improved grassland pasture grazed by horses, sheep and cattle, species-poor hedgerows with mature trees, broadleaved plantation woodland, neutral semi-improved grassland, bare ground and buildings. Ham Farm comprises a matrix of improved grassland pasture grazed by cattle, neutral semi-improved grassland, broadleaved plantation woodland, species-poor and species-rich hedgerows with mature trees and bare ground. Newhouse Farm comprises a matrix of improved grassland pasture grazed by cattle, species-poor hedgerows with mature trees and bare ground. There are six ponds located on site, a running ditch within Newhouse Farm and two watercourses flowing along the northern boundary of Newhouse Farm and the north and east boundaries of Park Farm.

1.3 Development Proposals

The site has been identified within Policy 17 of the emerging North Dorset Local Plan 2011-2026. Development proposals are for up to 1800 residential dwellings with associated schools, new access roads

open space and sustainable urban drainage. The masterplan framework for the site includes a significant buffer of approximately 100m from the River Lodden and Fern Brook as well as numerous other features of ecological interest.

1.4 Survey Objectives

The aims of the survey work and the subsequent report presented herein were to:

- Determine the presence or likely absence of great crested newts at the site;
- Determine the population size class of great crested newts if confirmed to be present;
- Provide an appraisal of the implications created by the potential presence of great crested newts at the site;
- Establish if any potential affects on great crested newts caused by the development are permissible;
- Ensure that the required level of survey work is conducted to apply for a licence, should one be necessary; and
- Provide preliminary advice on mitigation strategies against any adverse affects on local great crested newt population(s) which may arise as a result of the proposed development.

2.0 Planning Policy & Legislation

2.1 National Planning Policy

The National Planning Policy Framework was adopted in March 2012. Section 11 of the NPPF, Conserving and Enhancing the Natural Environment replaces Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation. However, government Circular 06/2005, Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System, which relates to PPS9 remains valid and is referenced within Paragraph 113 of the NPPF.

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. The NPPF also states that 'planning policies should promote the protection of priority species populations linked to national and local targets'.

2.2 Local Planning Policy

Policy 1.37 of the North Dorset District-Wide Local Plan 2011 includes a requirement to **protect and** enhance the continuity and integrity of landscape features which are of major importance for wildlife. Development will be expected to fully consider nature conservation. Where development is permitted, the following should be taken into account:

(i) Important woodland, wetlands, trees, hedgerows, watercourses, ponds, geological features and other major natural features and habitats are retained;

(ii) Compensatory provision is made for replacement habitats/features of quality where the loss of existing habitats and/or features is unavoidable;

(iii) Habitat features, attractive to wildlife including those which meet the needs of particular species, are, where appropriate, incorporated in the development;

(iv) Full provision is made for the future management of retained and newly created wildlife features.

Under 1.137 of Policy 1.37 it states; 1.137 when considering relevant development proposals the Council will seek and act on the advice of wildlife conservation bodies, in order to safeguard the habitats of

protected species or determine appropriate mitigatory works such as the provision of alternative nesting and roosting boxes.

2.3 Legislation

The great crested newt is afforded protection under the Conservation of Habitats & Species Regulations 2010 (as amended) which applies to all of its life stages.

The great crested newt is also listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is an offence to:

- Deliberately, intentionally or recklessly kill, injure or take a great crested newt;
- Deliberately, intentionally or recklessly takes or destroys the eggs;
- Posses or control any live or dead specimen or anything derived from a great crested newt;
- Deliberately, intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- Deliberately, intentionally or recklessly disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.

This species is also protected by the Protection of Animals Act 1911, which prohibits any acts of cruelty or mistreatment.

3.0 Methods

3.1 Data Search

Information was gathered from the Dorset Environmental Records Centre, the ecological records centre for Dorset, regarding the presence of nature conservation designations and protected and notable species within 2 km of the boundary of the proposed development site. In addition, a search for designations was made using the Multi Agency Geographic Information for the Countryside database (MAGIC).

3.1.1 Previous reports

The Ecology Solutions and SLR surveys carried out at the Site in 2011 identified small populations of GCN in Ponds P6, P7, P10, P11 and P16.

3.2 Habitat Surveys

During the extended Phase 1 habitat survey in March 2015, in accordance with English Nature's *Great Crested Newt Mitigation Guidelines* (2001), waterbodies within the proposed development site and within 500m of the proposed development site where access allowed were identified and assessed for their potential to support great crested newts, including the completion of a Habitat Suitability Index (HSI).

2.3 Presence / Likely Absence Surveys

The aim of the initial surveys was to determine the presence or likely absence of great crested newts at the identified waterbodies.

Great crested newt presence / likely absence surveys were completed on six occasions between March and June 2015. All surveys were undertaken in teams of two, at least one of which held a Natural England Level 1 Class Licence. These included Ben Cooke (Licence Number - 2015-17214-CLS-CLS), Max Ward (Licence Number – 2015-17518-CLS-CLS), David West (Licence Number - 2015-9315-CLS-CLS) and Liz Spedding (Licence Number -2015-18460-CLS-CLS).

All waterbodies were visited six times, in accordance with the *Great Crested Newt Mitigation Guidelines* (English Nature, 2001) requirements for population estimation. At least three survey methods were performed on each survey in accordance with guidelines given in the *Great Crested Newt Mitigation*

Guidelines and the *National Amphibian and Reptile Recording Scheme* (The Herpetological Conservation Trust, 2008) as described below prior to the waterbodies becoming too dry for surveys. Two of the surveys were completed within the optimal survey window which runs from mid-April to mid-May.

Limitations affecting this survey are discussed in section 2.5.

2.3.1 Torchlight Survey

This technique involves a visual search for individual newts inhabiting the edges of the particular waterbody after dark. Torches rated at 1,000,000 candle-power were shone into the water during a search and the perimeter of the waterbody was walked once; care was taken to count individuals once only. To maximise the reliability of this technique, all torch surveys were conducted in the evening while air temperature exceeded 5ºC, when newts are generally considered being most active.

2.3.2 Egg Search

Great crested newt eggs were searched for among submerged, floating and other aquatic vegetation. When laying their eggs, this species folds leaves of aquatic plants around the egg. The identification of great crested newt eggs is exploited as evidence indicative of the presence of great crested newts in a particular waterbody; eggs of great crested and smooth newts (*Lissotriton vulgaris*) are easily discerned. However, egg numbers cannot be used to estimate population size due to predation and high mortality rates. Therefore, to limit disturbance, this unfolding of leaves or artificial substrate is ceased as soon as the first egg has been positively identified.

2.3.3 Netting

A long handled dip net was used to sample the area around the pond edge and along the ditches. The netting was conducted during the evening as better results are obtained at night when adult newts are more likely to be active. The perimeter of the pond was walked where access was possible and 15 minutes of netting was undertaken per 50 metres of shoreline as recommended in the Great Crested Newt Mitigation Guidelines (2001). Netting is a good technique for augmenting other surveys and gauging presence / likely absence.

2.3.4 Bottle trapping

Traps were constructed from two-litre plastic bottles and were set around the margins of waterbodies approximately every 2-3m where access allowed, shortly before dusk. The traps were checked and removed the following morning between 06:00 and 10:00. All surveys were undertaken when the predicted night time air temperature exceeded 5ºC, when great crested newts are most active. Traps were placed in ditch 2 and pond 5 as these were the only waterbodies where enough water was present to submerge the traps.

2.4 Population Size Class Assessment

In accordance with guidance from Natural England, a further two targeted visits are made where positive results were obtained during the presence / likely absence surveys to gather information regarding the size class of the great crested newt population. Size classes are based on maximum count of great crested newts achieved during any single survey at a particular waterbody – i.e. the highest count obtained from bottle trapping or torchlight survey on a single visit. Maximum counts are classed as 'small', 'medium' or 'large'. The population size classes are defined as follows:

- 'small' is for maximum counts of up to 10 adult great crested newts;
- 'medium' for maximum counts of between 11 and 100 adults;
- 'large' for maximum counts of over 100 adults.

2.5 Limitations

All ponds were surveyed during the same night. All surveys were conducted in optimum survey conditions, therefore there are no limitations on the validity of the data collected.

An update site assessment was completed in March 2017 which confirmed that there had been no significant change in conditions on site. Therefore, the results of this survey are considered to remain valid until the commencement of 2019 survey season (March/April 2019). If works have not commenced by this time, an update site assessment should be completed to determine if an update survey is required. An update site assessment should also be completed if there is any change in site conditions or operation, and update surveys are likely to be required to support an EPSL application.

4.0 Baseline Conditions

4.1 Data Search Results

The data provided by DERC included 36 records of GCN within 2 km of the Site. Five of these records were relating to ponds within 500m of the Site, ponds P4, P11, P14, P15 and P16 (see Figure 1).

4.2 Survey Results

4.2.1 Description of Waterbodies

Detailed descriptions of each waterbody surveyed and identified in the application area or within 500m of the boundary are given below in **Table 2**. The purpose of these descriptions is to determine the waterbodies' suitability as breeding habitat for great crested newts. Therefore, information on water depth, water quality, bank profile, presence of aquatic, emergent and surrounding vegetation, as well as suitability of the surrounding terrestrial habitat has been provided. A grid reference is provided for each waterbody; refer to Figure 1, Appendix A for an indication of their positions in relation to the proposed development.

Table 2. Pond Descriptions

Pond/ Ditch Ref	Location	Description	Photograph
P1	North east corner of Park Farm area.	Potential attenuation pond for adjacent development. Heavily shaded and vegetated by dense willow scrub. Very little water.	

Pond/ Ditch Ref	Location	Description	Photograph
P2	West of P1, just outside site.	Large, deep pond. Much of bank overgrown with dense willow and bramble. Little vegetation. Possible waterfowl.	
P3	North of Park Farm area in plantation woodland.	Small pond within glade. Relatively unshaded with emergent macrophytes and good terrestrial habitat.	
P4	90m north of Park Farm area.	Heavily shaded pond within field surrounded by mature trees and scrub. Heavily shaded with no aquatic floating or emergent vegetation.	
P5	50m north of Park Farm area.	Heavily shaded pond within field lined by mature trees and scrub. Heavily shaded with no aquatic floating or emergent vegetation.	

Pond/ Ditch Ref	Location	Description	Photograph
P6	450m north of Park Farm area.	Heavily shaded pond within field lined by mature trees and scrub. Heavily shaded with no aquatic floating or emergent vegetation.	
P7	450m north of Park Farm area.	Heavily shaded pond within field lined by mature trees and scrub. Heavily shaded with no aquatic floating or emergent vegetation.	
P8	260m north of Park Farm area.	Heavily shaded pond within field lined by mature trees and scrub. Heavily shaded with no vegetation.	
P9	25m south west of Park Farm area.	Rectangular balancing pond, likely associated with nearby commercial park. Abundant vegetation including rushes and sedges.	

Pond/ Ditch Ref	Location	Description	Photograph
P10	Eastern extent of Ham Farm area.	Surrounded by blackthorn and willow scrub with emergent macrophytes including rushes.	
P11	Western extent of Ham Farm area.	Surrounded by willows. Shaded with no macrophtes.	
P12	East of Newhouse Farm area.	Macropytes including rushes, some wildfowl and good terrestrial habitat.	

Pond/ Ditch Ref	Location	Description	Photograph
P13	160m south west of Newhouse Farm area.	Farm effluent pond, bad water quality, no vegetation.	
P14	290m south of Newhouse Farm area.	Heavily shaded pond within field lined by mature trees and scrub. Heavily shaded with no aquatic floating or emergent vegetation.	
P15	180m south of Ham Farm area.	Heavily shaded pond within field lined by mature trees and scrub. Heavily shaded with no aquatic floating or emergent vegetation.	
P16	140m of Ham Farm area.	Heavily shaded pond within field lined by mature trees and scrub. Heavily shaded with little emergent vegetation. Much of surface covered with duckweed (*Lemna minor*).	
P17	50m north of Ham Farm area.	Attenuation pond associated with development at Ham Common. Heavily vegetated with rushes, low water level.	

Pond/ Ditch Ref	Location	Description	Photograph
P18	220m north of Ham Farm area.	Attenuation pond associated with development at Ham Common. Heavily vegetated with rushes, low water level.	

For full HSI details see WYG, 2017.

4.2.2 Presence / Likely Absence Survey Results

Weather Conditions

An overview of the weather conditions during surveys are given in **Table 3** below. Bottle traps were set on the evening before sunset, whilst torchlight surveys were conducted after sunset. Bottle traps were then checked the following morning, when egg searches were also conducted. Netting of waterbodies was completed either in the evening prior to setting the bottle traps or in the morning once bottle traps had been collected.

Table 3. Weather Conditions

Survey	Date	Water temp (PM) (°C)	Water temp (AM) (°C)	Air temp (PM) (°C)	Air temp (AM) (°C)	Rain (Yes / No)
1	29/04/2015	13.0	10.0	11.0	7.0	No
2	06/05/2015	14.7	12.0	12.0	8.0	No
3	12/05/2015	15.7	9.7	16.5	5.0	No
4	20/05/2015	11.4	9.9	12.6	9.6	No
5	11/06/2015	18.0	13.8	20.0	13.7	No
6	16/06/2015	17.7	13.2	19.4	12.8	No

Table 4 shows the results from the netting and torchlight surveys; **Table 5** shows the results of the bottle trapping surveys and **Table 6** shows the results of the egg searching. Results for palmate newts (*Lissotriton helveticus*) and smooth newt (*Lissotriton vulgaris*) are included.

The following abbreviations have been shown within Tables 3 and 4.

- FPM – Female palmate newt
- MPN – Male palmate newt
- FSN – Female smooth newt
- MSN – Male smooth newt

Table 4. Torchlight Survey Results

Waterbody	Date: 29/04/17	Date: 06/05/2015	Date: 12/05/2015	Date: 20/05/2015	Date: 11/06/2015	Date: 16/06/2015
3	0	X1FSM	0	0	0	0
9	0	0	X1MSN	0	X1IMGCN X2MSN X4FSN	0
10	0	X1FSN	0		0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0
14	0	0	0	0	0	0
15	0	0	X1MSN	0	0	0
16	0	X2FGCN X2MGCN	X1MGCN X1FGCN	0	0	0

Table 5. Bottle Trapping Results

Waterbody	Date: 29/04/17	Date: 06/05/2015	Date: 12/05/2015	Date: 20/05/2015	Date: 11/06/2015	Date: 16/06/2015
3	0	X1 MGCN X2FSN	X1MSN X5FSN	0	X3MSN X4FSN	0
9	0	0	X1MSN X6FSN	0	0	0
10	0	0	0	0	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0
14	0	X2FSN	X2FSN	0	0	0
15	0	X1MSN X1FSN	X1FGCN	0	X3MSN X2FSN	0
16	0	X1MGCN X2FGCN	0	0	0	0

Table 6. Egg Searching Results

Waterbody	Date: 29/04/17	Date: 06/05/2015	Date: 12/05/2015	Date: 20/05/2015	Date: 11/06/2015	Date: 16/06/2015
3	0	0	0	0		0
9	0	0	0	0	0	0
10	0	0	0	X1GCN	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0
14	0	0	0	0	0	0
15	0	0	0	0	0	0
16	0	0	0	0	0	0

5.0 Constraints & Opportunities

5.1 Constraints

Small populations of GCN were confirmed in P3, P9, P10, P11, P14, P15 and P16. Small populations were also recorded in P6 and P7 in 2011 however these were considered to be disconnected from the Site by Fern Brook and therefore considered to be independent of each other and not part of the same metapopulation.

5.2 Impacts

Given the confirmed presence of great crested newts on site, there is potential for adverse effects in the absence of suitable mitigation.

5.2.1 Habitat Loss

Although a long-term loss of habitat is not anticipated due to the designed-in mitigation, the construction phase will result in the temporary loss of habitat used by predominately by commuting, but also foraging and hibernating GCN.

5.2.2 Killing/Injury

There is the potential for individuals to be killed or injured during construction should they enter this area. There is also potential for killing or injury during the clearance of those areas of suitable habitat to be lost (such as hedgerow crossings) or by construction traffic or materials storage encroaching on areas of suitable habitat to be retained.

Given that great crested newts have been recorded on the site, mitigation will need to be implemented at the site to meet the requirements of the NPPF and prevent a breach of the Conservation of Habitats and Species Regulations 2010 (as amended). Furthermore, any mitigation will require an EPSL licence to be granted by Natural England in order to avoid an offence. The proposed options regarding a mitigation programme are explained below.

5.3 Recommendations

5.3.1 Habitat Loss

The waterbodies and surrounding habitat will be retained. In addition, areas of grassland to the north of the site will be enhanced for biodiversity as part of the proposed development. Part of this enhancement will benefit great crested newts in the form of additional scrub and hedgerow planting to provide refuge and hibernation opportunities, and management of grassland to create rough, tussocky grassland. Open spaces will also be located to allow continued migration of great crested newts to and from retained waterbodies.

5.3.2 Killing/Injury

To avoid killing or injuring GCN and therefore breaching the Habitat Regulations, GCN will be captured and translocated to prepared receptor areas that have been incorporated into the Site to allow GCN to be moved from working areas to a safe refuge. The implementation of this strategy will be dependent on the phasing of the site.

GCN will be translocated out of the working area to receptor areas which will be located around each of the retained ponds. This will ensure that receptor sites include both suitable terrestrial and aquatic (breeding) habitats. These areas currently comprise suitable GCN habitat in the form of standing water with semi-improved grassland, hedgerow and plantation woodland. A minimum of one hibernacula will be installed in each receptor area.

The translocation will require a European Protected Species Licence (EPSL) from Natural England and will follow measures in the Great Crested Newt Conservation Handbook. It will involve the installation of amphibian fencing and pitfall traps around each receptor area, trapping GCN and moving them to the receptor areas. Installation of amphibian fencing and pitfall traps will be completed under the supervision of an Ecological Clerk of Works (ECoW) during the amphibian active season, which runs from March to October inclusive. The translocation exercise will then also be completed during this period. The translocation for each phase is likely to involve 30 days translocation due to the presence of a low population. A judgement on the conclusion of the capture stage of the translocation will be made by the ecologist; this is usually accepted after five consecutive visits to a site in suitable conditions without encountering any target species.

Following this, areas to be developed will be subject to a destructive search under the supervision of an ECoW in suitable weather conditions. In the event that any GCN are found, they will be translocated to the receptor areas.

The translocation will be followed by long-term management of retained habitat and a period of post-development monitoring to measure the success of the mitigation and, if necessary, guide corrective action or changes to management.

6.0 References

- Ecology Solutions (2012). Ham Farm, Gillingham, Dorset: Ecological Assessment.
- English Nature (2001) Great Crested Newt Mitigation Guidelines, Peterborough.
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- SLR (2012). Park Farm, Gillingham: Protected Species Surveys Report.
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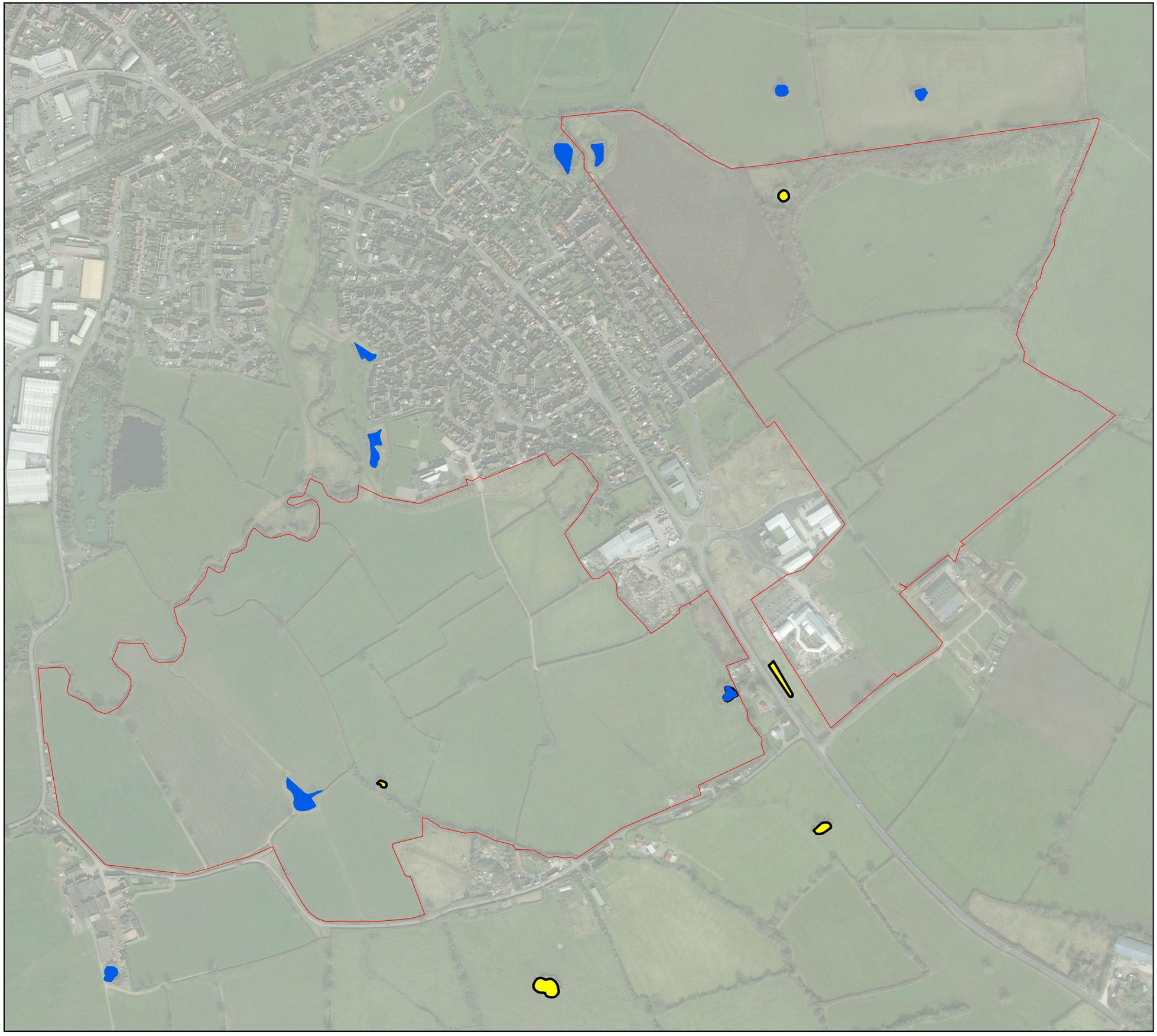
Appendix A – Figures



Rev	Date	Notes
A	14/11/17	Initial map production

Legend

- Site boundary
- Pond
- Ponds with Confirmed GCN Population

0 50 100 200 Metres

N

Pond Location Plan

Gillingham

Scale at A3:	Project No:	Drawing No:	Revision:
1:5,750	A106314	Figure 1	A

Drawn by:	Drawn date:	Approved by:
Ben Blowers	17/11/2017	David West