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Ecological Management Plan (EMP)

Project: Former Scrap Yard, Esclusham Mill, Llwyneinion, Rhosllanerchrugog, Wrexham,
LL14 4ET

On behalf of: Mr G Paletta

Date: August 2017

Report reference: 280717



N.B. The contents of this report contains information regarding protected species of a sensitive nature.

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Contents

Section 1	Introduction	1
Section 2	Ecological Background.....	3
Section 3	Habitat Creation and Management.....	5
Section 4	Great Crested Newt Exclusion.....	10
Section 5	Habitat Creation, Maintenance and Monitoring Schedule.....	12

Appendices

Appendix 1	Proposed site plans
Appendix 2	Email Correspondence with NRW Ecologist Regarding GCN
Appendix 3	Hibernacula Design Specification
Appendix 4	Pond Design Specification
Appendix 5	Newt Fencing Specification
Appendix 6	Newt 'I-Beam' Crossing Specification

Plans

Plan 1	Indicative Newt Fencing Plan
Plan 2	Indicative Mitigation Area Plan

Section 1

Introduction

- 1.1 Pearce Environment Ltd were commissioned by Mr G Paletta to prepare an Ecological Management Plan (EMP) for the former Scrap Yard, Esclusham Mill, Llwyneinion, Rhosllanerchrugog, Wrexham, LL14 4ET (hereafter referred to as 'the site'). The site is centred on approximate Ordnance Survey Grid Reference (OSGR) SJ 28922 47638.
- 1.2 The EMP detailed in this report supports the application for a great crested newt (*Triturus cristatus*) mitigation licence required for the planning application for the proposed *removal of scrap yard use and demolition of associated building erection of 7 no. detached dwellings, access, garages and gardens, creation of wildlife meadow and newt mitigation habitat areas* (P/2016/0611; **Appendix 1**).
- 1.3 The aims of this report are to:
- Detail the methods for amphibian capture, exclusion and re-location on the site;
 - Produce a habitat management and enhancement plan for great crested newts within the proposed receptor/ mitigation area adjacent to the site;
 - Design a 5 year management and monitoring scheme for the site and proposed mitigation/ receptor area;
 - Ensure the long-term, favourable conservation status of great crested newts on the site.

Funding Mechanism and Responsibilities

- 1.4 The developer and site owner are responsible for the implementation of this EMP and will form a management company to which all residents on the site will be members and hence legally bound to pay a contribution to the delivery of its functions, including the provisions of this EMP. The management company will be set up by the developer's legal team and will include a legal obligation to maintain the GCN habitat in accordance with the management detailed within this EMP. The management company will appoint an agent to ensure the works are carried out by a competent contractor.
- 1.5 This EMP will be reviewed by the developer and the appointed management contractor and revised accordingly at the end of the 5 year management period.

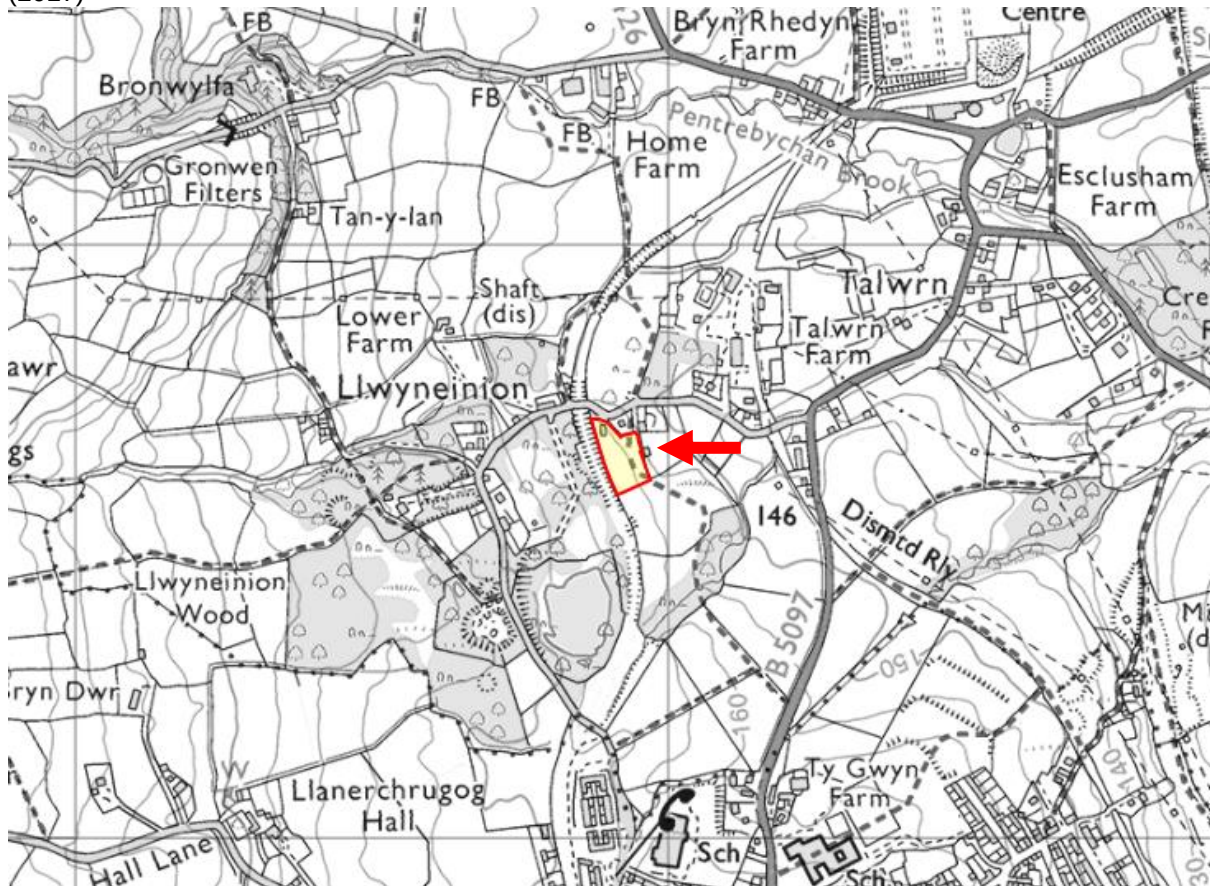
Section 2

Ecological Background

Site Description

- 2.1 The site is located in a rural environment, situated approximately 1.5km northeast of Johnstown, Wrexham (**Figure 2.1**). The site itself (~0.7 hectares) is dominated by hardstanding and previously-disturbed land, with significant encroachment from ruderal vegetation.

Figure 2.1 Site location (outlined in red) reproduced using freely available online mapping resources (2017)



Previous Surveys

- 2.2 A Preliminary Ecological Appraisal (PEA) has previously been undertaken by Pearce Environment Ltd. (*Ecological Appraisal*, June 2016). This identified the presence of a medium population of great crested newts within an 'acid tar lagoon' in 2010, located 140m southwest of the site (*Email Comms.*, Wrexham Borough Council Planning Ecologist; **Appendix 2**).
- 2.3 The PEA report (*Ecological Appraisal*, June 2016) recommended that a mitigation licence is required in order for the development to proceed without the risk of injuring/killing great crested newts during works, given proximity of a breeding pond to the site. The report also outlines a GCN mitigation strategy which includes details regarding newt fencing/ exclusion and pond/ habitat creation.

Site Visit (28th July 2017)

- 2.4 A follow-up site visit was undertaken on the 28th July 2017 to update the status of habitats and protected species on the site.
- 2.5 During this visit, two (2) male GCN were found underneath a plywood board located amongst ruderal vegetation in the northern portion of the site (**Image 2.1**).
- 2.6 This confirms the current presence of GCN on the site itself and further highlights the importance of forming a comprehensive EMP.

Image 2.1 Two GCN (indicated) found during a site visit on 28th July 2017



- 2.7 Two stands of Japanese knotweed (*Fallopia japonica*) of approximately 3m X 3m and 8m X 8m, respectively, were located along the western site edge (SJ 28889 47650; **Image 2.2**).
- 2.8 It was also noted that, since the initial PEA in 2016, the main body of the site has become overgrown with tall ruderal vegetation including oxeye daisy (*Leucanthemum vulgare*), buttercup (*Ranunculus spp.*), teasel (*Dipsacus fullonum*), rosebay willowherb (*Chamerion angustifolium*), white clover (*Trifolium repens*), greater plantain (*Plantago major*), pineapple weed (*Matricaria discoidea*) and several grasses (**Image 2.3**).
- 2.9 The main body of the site therefore currently provides terrestrial habitat for GCN greater than that which it offered in 2016.
- 2.10 No further ecological constraints have been identified on this site.

Image 2.2 One of two stands of Japanese knotweed along the western site edge



Image 2.3 Domination of the site by ruderal vegetation since the initial PEA in 2016



Section 3

Habitat Creation and Management

- 3.1 It is proposed that a large paddock area (equating to at least the equivalent size of the development area) is created immediately south of the site, enhanced and managed for GCN. A proposed plan of this area is illustrated in **Plan 1**.
- 3.2 A 1.2m high post and wire or post and rail fence is to be erected along the southern edge of the development footprint as soon as possible, to mark a permanent boundary between the site and the proposed mitigation area.

Grassland Sowing and Management

- 3.3 Due to the presence of hardstanding within the proposed mitigation area (**Image 3.1**), soils will be imported into this area and it will be managed as 'base rich' calcareous grassland¹. Sowing of the grassland will be as per the supplier's recommendations.
- 3.4 The same seed mix shall be sow atop of newly-created hibernaculas.

Image 3.1 Area of hardstanding proposed for topsoil laying



- 3.5 Re-seeding will be undertaken in either autumn 2018 or spring 2019.

¹ We recommend EM6 seed mix from Emorsgate (Meadow Mixture for Chalk and Limestone Soils)

- 3.6 Once established, the grassland will be mown once a year in June/ July to a short sward height (~100mm). The arisings/ 'hay' will remain for seven (7) days to dry before being formed into piles around the mitigation area to provide foraging/ refuge opportunities for GCN. Any scrub or perennial weeds which develop in the grassland area will be removed.
- 3.7 Light grazing of the grassland on site (excluding that on the hibernaculas) during the autumn may be once the grassland is established after three (3) years as an alternative to mowing, to retain a short sward height (~100mm).

Scrub Planting and Management

- 3.8 An array of mixed scrub will be planted within peripheral areas of the mitigation area in winter 2017, which will increase the overall ecological value of the site to improve its invertebrate fauna on which GCN feed. The species mix will include Guelder rose (*viburnum opulus*), blackthorn (*Prunus spinosa*) and hawthorn (*Crataegus monogyna*).
- 3.9 Areas of scrub will be cut back by 25% on an annual, rotational basis, during the winter months (November – February inclusive), following a check for amphibians. The arisings are to remain on site as habitat piles to provide valuable GCN foraging habitat.
- 3.10 Areas of newly planted scrub will not be cut in the first 3 years to allow it to become established. Where plants have failed to establish they will be replaced with new stock.

Hedgerow Planting

- 3.11 The planting of a new hedgerow along the southern boundary of the development site (along the proposed fence) will denote the boundary between the site and the mitigation area and ensure connectivity with the surrounding habitats is strengthened.
- 3.12 New hedgerows should be species-rich and utilise native species of local provenance which will include the following:
- Blackthorn
 - Hawthorn
 - Field maple (*Acer campestre*)
 - Field rose (*Rosa arvensis*)
 - Guelder rose
 - Elder (*Sambucus nigra*)
 - Hazel (*Corylus avellana*)
 - Spindle (*Euonymus europaea*)
 - Crab apple (*Malus sylvestris*)
- 3.13 Native hedgerow planting will be provided by installing bare rooted stock spaced approximately 30cm apart in two staggered rows to allow six whips per metre, and using supportive canes and plastic spiral guards.

- 3.14 New hedgerows are to be subject to an annual inspection during the winter months (November – February inclusive) and any dead or missing stock is to be replaced.
- 3.15 Spiral guards may be removed after three (3) years and a three-year cutting rotation is to begin in the fourth year, to maintain the hedgerow at approximately 2m in height.

Hibernacula Retention/ Creation and Management

- 3.16 Existing, potential refugia within the proposed mitigation area, such as rubble/ brash piles (**Image 3.2**) and a vegetated earth bund (**Image 3.3**), will be retained to provide refuge opportunities for GCN.
- 3.17 Additional terrestrial opportunities will be incorporated into the design by including two (2) hibernaculas, a minimum of 2m in length and 1m in height, comprising a base of hard-core, brick, rubble and logs (utilising materials pre-existent on the site) covered with topsoil and a turf covering. Hibernaculas will be constructed in accordance with current guidelines² (**Appendix 3**).
- 3.18 The wildflower grassland sown on top of any hibernaculas will be subject to an annual cut, as per the grassland management regime. During this cut the hibernacula will be checked and if there has been any loss of soil/subsidence, then this will be re-instated at an appropriate time of year and in agreement with an appointed ecologist.

Pond Creation/ Management

- 3.19 It is recommended that a wildlife pond is incorporated into the mitigation area in order to provide aquatic habitat, which is currently absent from site. The pond will be constructed in accordance with current guidelines³ (**Appendix 4**).
- 3.20 The surface area of the pond should be a minimum of 100m², with gently-sloping sides and a maximum depth of 1m. Lining or 'clay puddling' of the pond may be required owing to ground conditions, to help retain water within the pond.
- 3.21 The pond will be filled by water collected from a suitable source as to be determined by the developer at the time of pond creation. Water will not be sourced from any other pond owing to the risk of killing and injuring any GCN present within this pond.
- 3.22 The intention is to create the pond in summer 2017 or 2018 when GCN are active and not likely to be hibernating underground.
- 3.23 The pond should include a diverse planting scheme of aquatic flora and marginal vegetation to promote opportunities for egg laying. Submerged aquatic species to be planted will include spiked water-milfoil (*Myriophyllum spicatum*) and broadleaved pondweed (*Potamogeton natans*). Emergent species will include floating sweet grass (*Glyceria fluitans*) and yellow flag iris (*Iris pseudacorus*). Marginal species will include

2 Great Crested Newt Mitigation Guidelines (2001). English Nature.

3 Great Crested Newt Mitigation Guidelines (2001). English Nature.

creeping Jenny (*Lysimachia nummularia*), water forget-me-not (*Myosotis scorpioide*) and arrowhead (*Sagittaria sagittifolia*).

Image 3.2 Typical view of the area of land adjacent to the southern edge of the development footprint



Image 3.3 Brash pile located within the proposed newt mitigation area



- 3.24 Submerged plants will be totally submerged or floating in the water column and will be planted at a density of four plants per metre squared. Emergent plants will be planted in the water column to a planting depth of 0-500mm. A planting density of eight (8) plants per m² is recommended. Marginal plants will be planted at or just above the water's edge at a maximum planting depth of 350mm. A planting density of eight (8) plants per m², with 7cm plugs, is recommended.
- 3.25 Planting should take place in mid-spring to early summer, when the water has warmed and plants have commenced growth.
- 3.26 The wildlife pond will be subject to annual monitoring in August/ September. Aquatic vegetation will be maintained at approximately 40% cover. During the annual inspection any plant cover exceeding 40% will be removed, placed on the bank and left for 24 hours prior to disposal. This will allow any aquatic invertebrates and larval stages of amphibians to return to the pond.
- 3.27 During the annual check, leaf litter and any other debris will be removed and a visual check for the presence of any fish will be undertaken. If fish are recorded, appropriate action to remove these fish will be undertaken.
- 3.28 If during each annual check the pond appears to not be holding water or is subject to disturbance, remedial action including re-statement of the pond will be undertaken. If aquatic vegetation fails to become established, this will be replaced.
- 3.29 This pond will also aid GCN monitoring requirements, as specified within the NRW licence obtained.

Japanese Knotweed

- 3.30 Two stands of Japanese knotweed were identified on site during the visit on 28th July 2017. These lie along the proposed route for newt fencing.
- 3.31 Japanese knotweed is one of several invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) making it an offence to release such species into the wild or aid their spread. Therefore, all Japanese knotweed will need to be removed by licensed operator and transferred to a licenced landfill.
- 3.32 This must be undertaken before the installation of newt fencing on the site.
- 3.33 An annual check for invasive plants within the mitigation area or on the development site itself shall be undertaken during the summer months (May – August inclusive) to ensure any such species are prevented from becoming established.

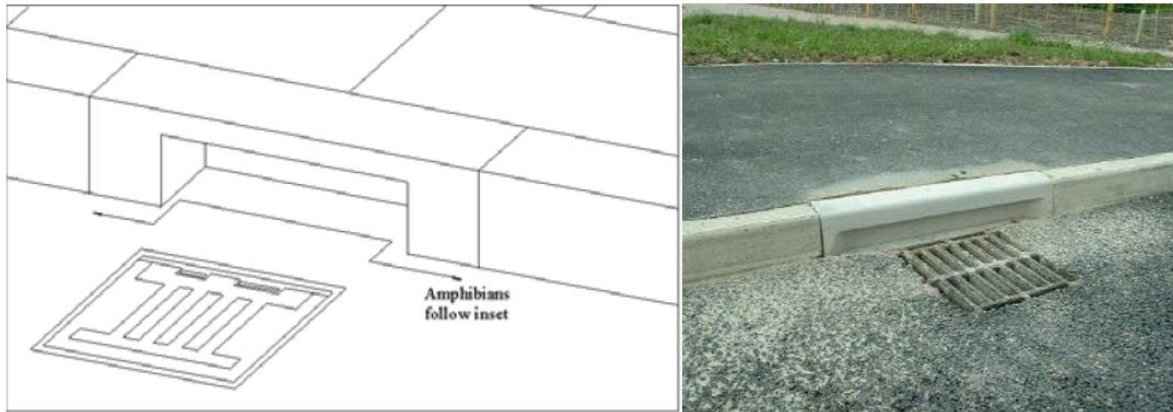
Drainage

- 3.34 The road drainage will incorporate measures to ensure the risk of newts falling into gully pots (roadside drains) is minimised.

3.35 This shall include using permeable surfaces and/ or soakaways rather than gully pots, where possible, or providing a dropped kerb or inset kerb stone immediately adjacent to any gully pots (**Figure 3.4**).

3.36 A distance of ~100mm between the kerb and any gully pots is required.

Figure 3.4 Suggested kerb/ gully pot layout



Section 4

Great Crested Newt Exclusion

- 4.1 A European Protected Species Licence (EPSL) will be applied for by an appropriately experienced ecologist at the expense of the client. This can only be applied for once planning permission has been granted.
- 4.2 Once the licence is granted from Natural Resource Wales (NRW), works will follow to install exclusion and drift fencing as per English Nature guidelines⁴ (**Appendix 5**). A plan detailing the placement of fencing is illustrated in **Plan 2**.
- 4.3 An appropriately licensed Ecological clerk of Works (ECW) will be employed at the expense of the client to oversee the mitigation strategy and newt exclusion (this must be the ecologist named on the licence or an accredited agent).
- 4.4 Prior to installation of temporary exclusion/ drift fencing a toolbox talk will be given by the ECW with respect to great crested newts and notable species present on site.
- 4.5 All fencing/ pitfall traps will be installed at a time when newts are active (when night-time temperatures remain consistently above 5°C).
- 4.6 The exclusion fence will be installed and be off set from application site boundaries by a minimum of 1m. The fence will be installed by an experienced amphibian fencing contractor, or under the supervision of the ECW.
- 4.7 Drift fencing will also be installed across the site to increase GCN capture rates.
- 4.8 Pitfall traps will be installed along the length of the boundary exclusion fence (on the internal aspect only) and on both sides of the drift fencing at a minimum density of 80/ha (based on a medium population of GCN) with artificial refugia (0.5m² carpet tiles) placed at regular intervals between pitfall traps as per English Nature guidelines³.
- 4.9 The buckets used for pitfall traps will have holes drilled into the base to allow any water to drain away to prevent the entrapment/ drowning of small mammals.
- 4.10 Pitfall trapping shall only be undertaken when weather conditions allow (when night-time temperatures remain consistently above 5°C and no frosts are anticipated).
- 4.11 Pitfall traps/ artificial refugia will be checked by appropriately licensed personnel (the ecologist named on the licence or an accredited agent) on a daily basis for a period of up to 60 days.
- 4.12 Traps are to be closed (lids replaced onto the buckets) should weather conditions become unsuitable.

⁴ English Nature (2001) *Great Crested Newt Mitigation Guidelines*. English Nature

- 4.13 This capture effort may be reduced if, after 60 days, capture rates have remained at zero for a minimum of five consecutive nights. Traps will be closed or removed once the trapping effort has been attained.
- 4.14 If GCN are still being captured towards the end of the trapping period, Natural Resources Wales are to be contacted to request an extension to the licence and trapping will resume until capture rates have remained at zero for a minimum of five consecutive nights.
- 4.15 All captured amphibians will be released at a suitable release site into the proposed mitigation area immediately south of the development site.
- 4.16 Once the trapping regime is complete, a destructive search of the site will be carried out under the supervision of the named ecologist or accredited agent(s). The drift fencing, refugia and pitfall trap buckets will be removed during this process but the exclusion fence will remain in-situ throughout the development of the site to prevent great crested newts from moving back into the working area.
- 4.17 The exclusion fencing will be removed under the supervision of the ECW once the development is complete.

Vehicular Access

- 4.18 A bespoke, newt-proof vehicular access point will be provided on the northern boundary to allow passage to and from the site by contractors. This will consist of 'I-beam' construction (**Appendix 6**). The design is to be approved by the ECW.

Section 5

Habitat Creation, Maintenance and Monitoring Schedule

Year	Date (s)	Action
Year 1	August 2017	- Erect fence along southern site boundary (boundary with mitigation area) - Import topsoil into mitigation area - Create wildlife pond - Create hibernaculas - Undertake Japanese knotweed removal scheme on the development site
	September 2017	Sow grassland wildflower seed mix
	November 2017 – February 2018	- New hedgerow planting - New scrub planting
Year 2	April 2018	- Sow grassland wildflower seed mix (if not done so in 2017) - Re-sow grassland seeds if necessary (if sown in 2017) - Strim any tall perennial weeds within grassland area(s) to 100mm *
	June – July 2018	- Cut any grassland sown in 2017 to 100mm, if required * - Hibernacula check - Plant aquatic vegetation in pond (if created in 2017)
	August 2018	- Create wildlife pond (if not done so in 2017) - Create hibernaculas (if not done so in 2017) - Japanese knotweed inspection on site/ in mitigation area
	September 2018	Re-sowing of grassland seeds where necessary
	November 2018 – February 2019	25% reduction of existing scrub * - Removal of scrub within grassland area(s) * - Check of hedgerow and replace stock where necessary
	March – mid June 2019	Undertake GCN monitoring survey of wildlife pond
Year 3	April 2019	Strim any tall perennial weeds within grassland area(s) *
	June – July 2019	- Cut grassland area(s) to 100mm * - Hibernacula check - Plant aquatic vegetation in pond (if created in 2018)
	August 2019	Japanese knotweed inspection on site/ in mitigation area
	September 2019	Check condition of pond, remove any debris and aquatic vegetation as appropriate
	November 2019 – February 2020	25% reduction of existing scrub * - Removal of scrub within grassland area(s) * - Light grazing of grassland (excluding hibernaculas) to retain short sward height, if necessary
	March – mid June 2020	Undertake GCN monitoring survey of wildlife pond
Year 4	April 2020	- Strim any tall perennial weeds within grassland area(s) to 150mm * - Remove spiral guards from new hedgerow
	June – July 2020	- Cut grassland area(s) to 100mm * - Hibernacula check
	August 2020	Japanese knotweed inspection on site/ in mitigation area
	September 2020	Check condition of pond, remove any debris and aquatic vegetation as appropriate
	November 2020 – February 2021	25% reduction of all scrub * - Removal of scrub within grassland area(s) *
	Year 5	

		• Light grazing of grassland (excluding hibernaculas) to retain short sward height, if necessary
	March – mid June 2021	• Undertake GCN monitoring survey of wildlife pond
	April 2021	• Strim any tall perennial weeds within grassland area(s) to 100mm *
	June – July 2021	• Cut grassland area(s) to 100mm * • Hibernacula check
	August 2021	• Japanese knotweed inspection on site/ in mitigation area
	September 2021	• Check condition of pond, remove any debris and aquatic vegetation as appropriate
	November 2021 – February 2022	• 25% reduction of all scrub * • Removal of scrub within grassland area(s) * • First hedgerow cutting rotation * • Light grazing of grassland (excluding hibernaculas) to retain short sward height, if necessary
Year 6		

* Arisings to be retained within the mitigation area and piled up to form GCN feeding/ refuge habitat

The site plan illustrates a proposed residential development on a former scrap yard. The plan is bounded by Lliwneinion Road to the west and a dismantled railway embankment to the south. Key features include:

- Plots:** Seven numbered plots (1-7) are shown, with plots 1, 2, and 3 located near the 'Bush House' and 'New Rear Gardens'. Plots 4, 5, and 6 are located near the 'New Garden Area to Bush House' and 'New Rear Gardens'. Plot 7 is located near the 'New Paddock Areas'.
- Buildings:** The 'Bush House' is shown with its 'garden' and 'drive'. A 'New Garage' is located near plot 3. A '3000 FT² OUT-BUILDING' is located near plot 7.
- Infrastructure:** A '4.8 adoptable access road 1' runs along the bottom of the site. A 'private drive' is shown near plot 5. A 'future access road' is shown near plot 7. A 'public footpath' is shown near plot 3.
- Other Features:** A 'depot' is located near the top center. 'Works' are located near the top left. A 'dismantled railway embankment' is shown along the bottom. 'Woodland' is shown on the right side.
- Orientation:** A north arrow is located in the top right corner.
- Scale:** A scale bar is located in the bottom right corner, showing distances from 0 to 50 meters.

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 Job/Project:
 Proposed Residential Development.
 Client:
 Mr. G. Paletta
 Drawing Title:
 Indicative Concept/Feasibility Sketch Scheme
 Site Plan Proposal - Option No: 4.
 Scale: Drawing No: Revision: Date:
 1:500(A.3.) CGP1/TMJ-05 March 201

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Location:

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Job/Project:

Proposed Residential Development.

Client:

Mr. G. Paletta

Drawing Title:

Indicative Concept/Feasibility Sketch Scheme

Site Plan Proposal - Option No: ~~3~~ 4.

Scale: Drawing.Nº: Revision: Date:

1:500(A.3.) CGP1/TMJ-05

Appendix 2 Email correspondence received from WBC planning ecologist regarding great crested newt surveys within the 'acid tar lagoon'

C098 Llwynenion

Torch survey of acid-tar lagoon 06/05/10

Survey weather: 8.5°C, cloud, B0-1, dry for 95% of survey (heavy rain shower at end)

Surveyors: ME and TK

Time: 9.20 pm to 10.45 pm

Results:

Great Crested Newt (*Triturus cristatus*): ♂ 47, ♀ 37; total: 84

Palmate Newt (*Lissotriton helveticus*): ♂ 203, ♀ 298, unidentified 11; total: 512

Common Frog (*Rana temporaria*): 1

Common Toad (*Bufo bufo*): 2

Notes:

- Water mostly clear, good visibility especially in margins (turbidity mostly 1 on scale of 0 = clear, 5 = turbid).
- Vegetation Cover – occasional marginal *Agrostis* but effectively 0 on scale of 0 = none, 5 = lots.
- Due to dense scrub/ trees and/ or steepness of shoreline, estimated that survey limited to approximately 50% of lagoon margin.
- Thick scum on surface of water prevented effective torching at small areas.

Discussion:

84 Great Crested Newts equates to a medium population (*i.e.* between 11-100 individuals) as defined by the Great Crested Newt mitigation guidelines. It is however arguable that due to the limited access the results could be quite justifiably extrapolated to indicate that a large population is present (*i.e.* over 100 individuals). 512 Palmate Newts equates to a large population of this species. Both GCN and Palmate appear to be egg-laying on algae. The lagoon is thought to be shallow (under 1 m) across its entire area. Should the number of newts at the margins be replicated across the entire lagoon then the numbers that could possibly be present would be substantially larger than the torch survey indicates.

The GCN mitigation guidelines provide a very rough, method of estimating population size from torch counts. It outlines that a torch count may detect between 2 and 30% of the population. If this was extrapolated the lagoon could support between 280 and 4200 Great Crested Newts and between 1700 and 25600 Palmate Newts. A conservative estimate figure might be approx. 2000 GCN and 10000 Palmate.

Way ahead:

Open dialogue with CCW *re*

- Would further torch survey visits be required for a population estimate or is this single visit considered satisfactory (especially if a licence is applied for in the future).
- Would a licence be required for SI works at the end of this year? (presuming yes).
- Likely provision of a licence for SI works (would it satisfy tests?)
- Likely provision of licence for remediation (would it satisfy tests?, what mitigation required?, Likely minimum length of any translocation programme considering a breeding water body present???)

C098 Llwynenion

Torch survey of acid-tar lagoon 18/05/10

Survey weather: 11.5°C, clear, B0-1, dry

Surveyors: ME and TK (with SE)

Time: 9.50 pm to 11.15 pm

Results:

Great Crested Newt (*Triturus cristatus*): ♂ 35, ♀ 16, unidentified 1; total: 52

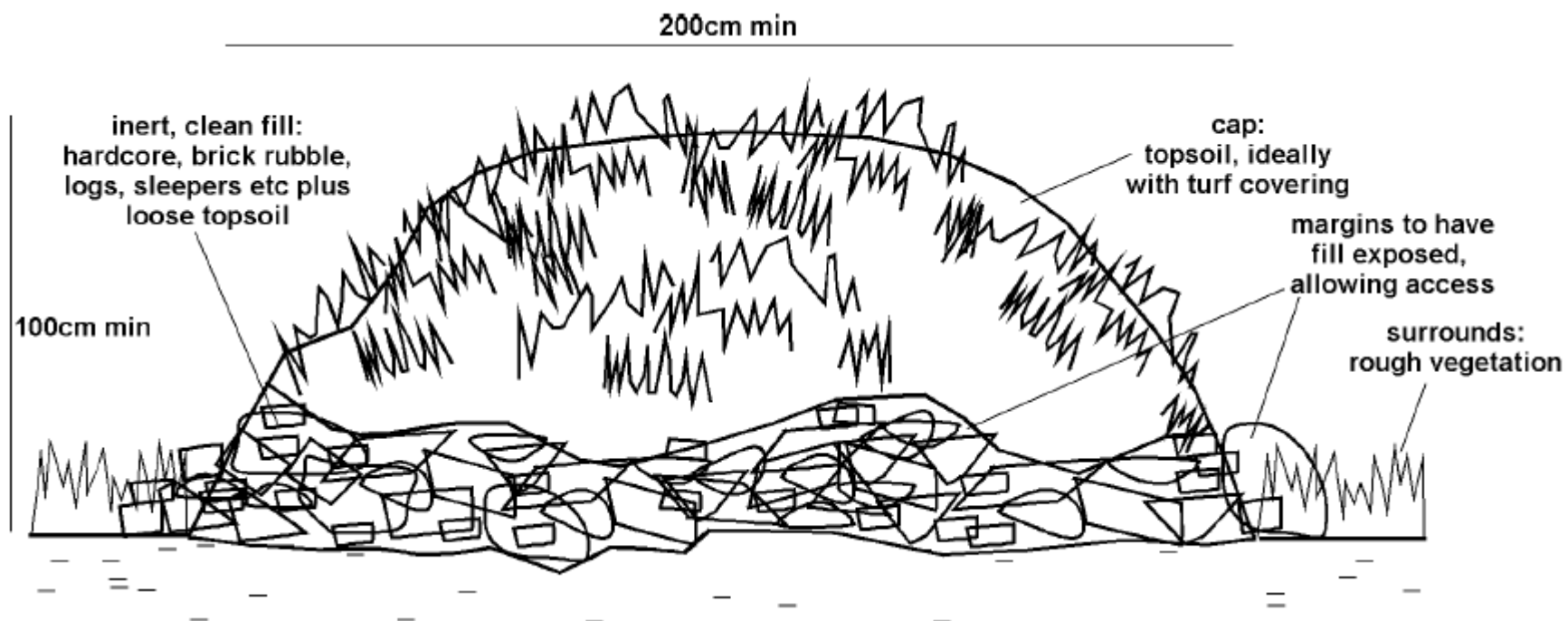
Palmate Newt (*Lissotriton helveticus*): ♂ 162, ♀ 164, unidentified 10; total: 336

Common Toad (*Bufo bufo*): 1

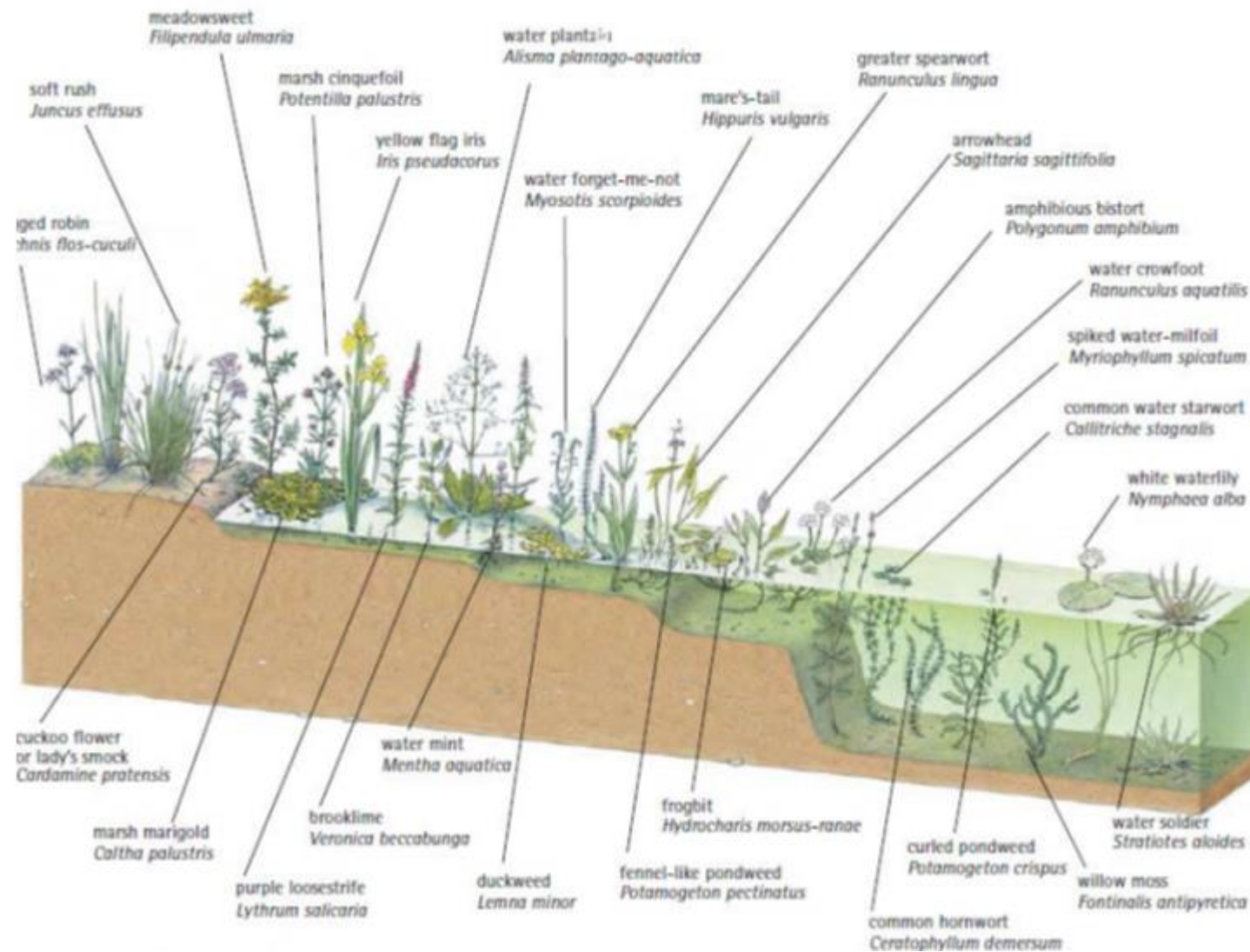
Notes:

- Water turbid, visibility poor in 50% of margins surveyed due to scrub on surface, elsewhere visibility ok.
- Due to dense scrub/ trees and/ or steepness of shoreline, estimated that survey limited to approximately 50% of lagoon margin.

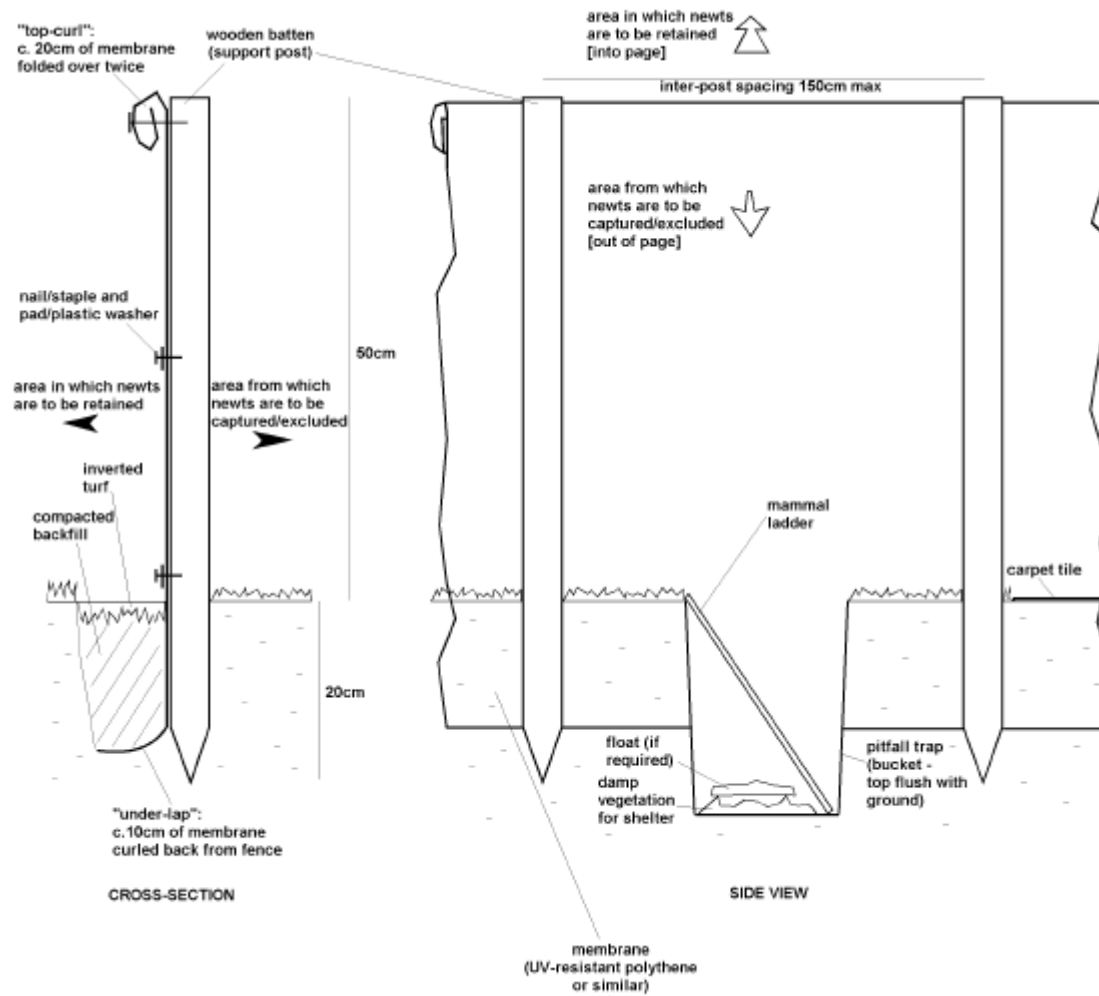
Appendix 3 Hibernacula design specification



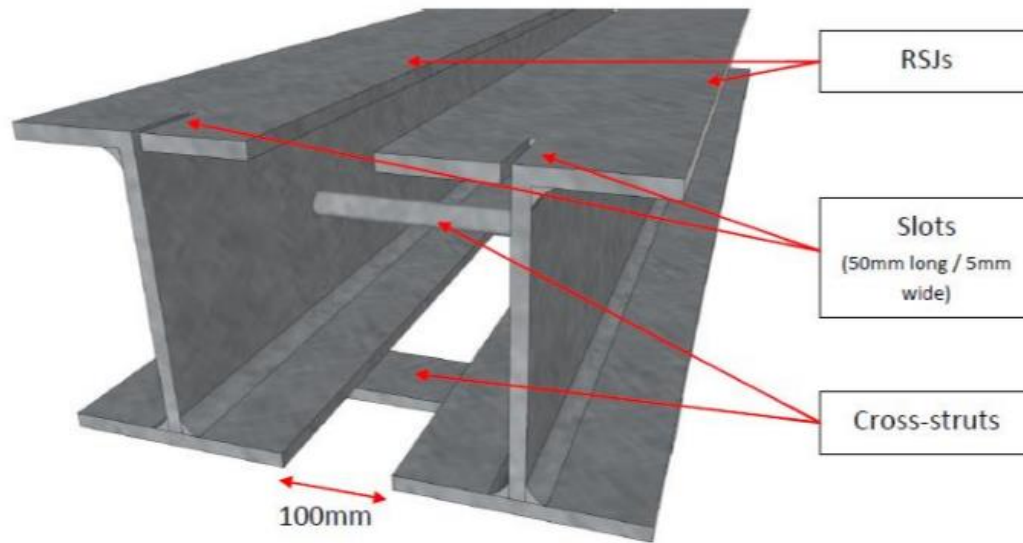
Appendix 4 Pond design specification



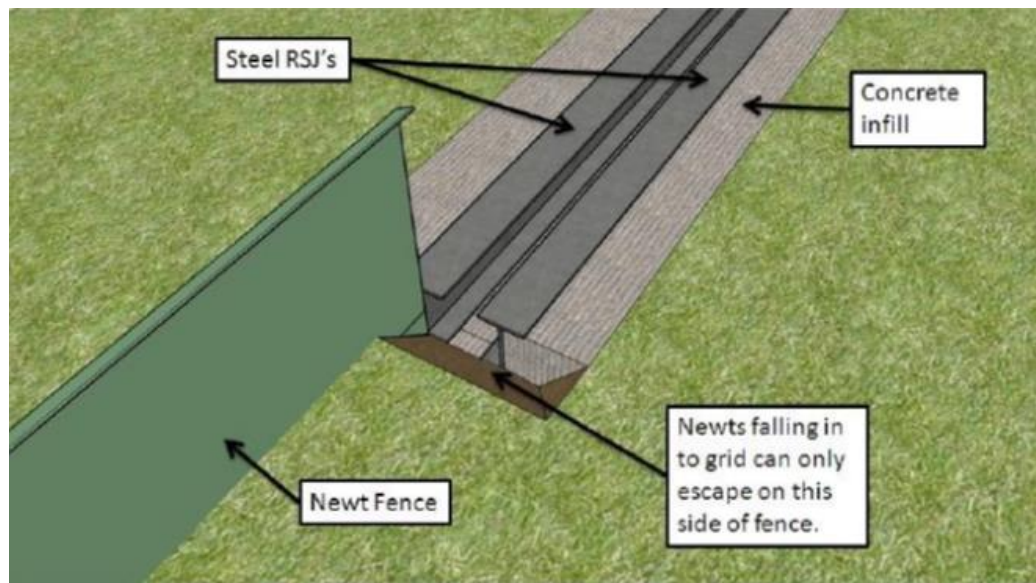
Appendix 5 Newt fencing specification



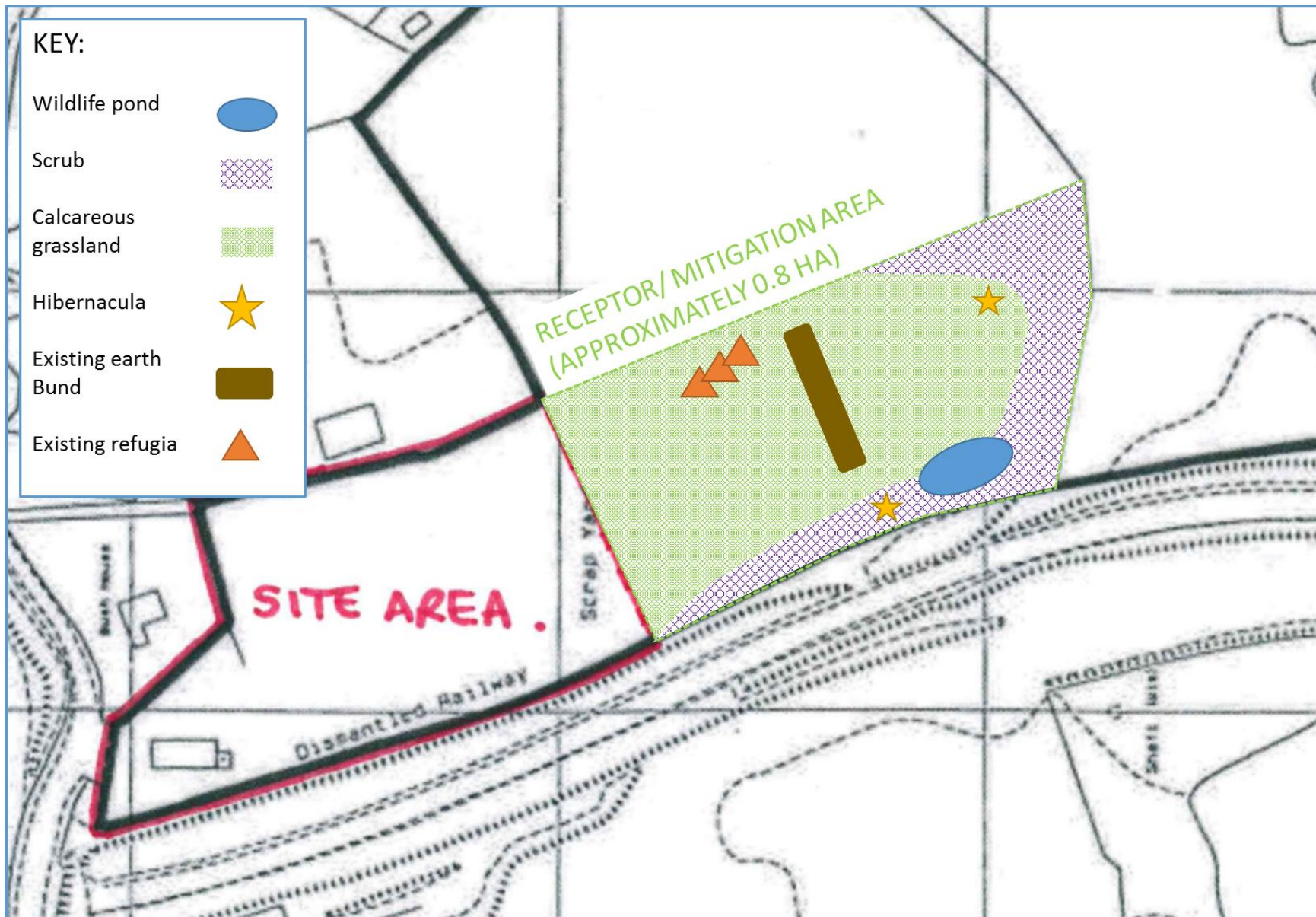
Appendix 6 Newt 'I-Beam' crossing specification



- Two steel RSJ's are bedded onto a concrete base in an excavated trench where access onto the site is proposed, set 100mm apart and position flush with ground level.
- RSJ's are welded together by cross-members and held into place with concrete infill.
- The open ends of the channel by the RSJ's are such that they only allow newts to exit on the inside of the exclusion fence.
- Slots in the end of the top face of each RSJ can be secured to newt fencing panels.
- Newt grids require occasional maintenance to ensure that the channel is kept clear



Plan 1 Indicative mitigation area plan



Plan 2 Indicative newt fencing plan

