

Proposed Energy from Waste Combined Heat and Power Facility at Canford Resource Park

2026 ES Update: Ecology Addendum Note edp7095_r021

QA: GCr/TWi_MWI/GPa_140526

1 INTRODUCTION

- 1.1 This Ecology Addendum Note has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of MVV Environment Limited in relation to the proposed Carbon Capture Retrofit Ready (CCRR) Energy from Waste Combined Heat and Power (EfW CHP) Facility at Canford Resource Park, located off Magna Road, Poole (hereafter referred to as 'the Proposed Development').
- 1.2 The planning application was submitted in 2023 and subsequently refused in 2025, which is now subject to a planning appeal. As part of the appeal process, the Planning Inspectorate (PINS) have issued a Regulation 25 request for further information, which predominantly relates to the baseline information in the 2023 ES and 2024 ES Addendum. The 2026 ES Update was therefore submitted in early May 2026.
- 1.3 The 2026 ES Update is supported by the Update Ecological Baseline Report 2026, which provides the updated ecological baseline position for the Site. At the time of completion of the Update Ecological Baseline Report 2026 and Chapter 8 – Ecology and Nature Conservation of the 2026 ES Update, two final survey elements remained outstanding, namely:
- Great crested newt (*Triturus cristatus*) Habitat Suitability Index (HSI) assessment and environmental DNA (eDNA) surveys of waterbodies within the relevant survey area; and
 - The spring 2026 bat activity survey, comprising a night-time bat walkover survey and automated detector survey.
- 1.4 The 2026 ES Update noted that whilst there was enough data to make robust conclusions on the updated great crested newt and bat activity baselines, the results of these outstanding surveys would be reported within an Addendum Note, including any additional assessment or mitigation should the findings differ materially from those recorded to date. This Addendum Note therefore presents the methodology and results of the completed great crested newt and spring bat activity surveys and considers whether the findings alter the conclusions of the Update Ecological Baseline Report 2026 and Chapter 8 – Ecology and Nature Conservation of the 2026 ES Update.

1.5 The results of the completed surveys do not materially alter the update ecological baseline or impact assessment set out within the Update Ecological Baseline Report 2026 and Chapter 8 – Ecology and Nature Conservation of the 2026 ES Update. Accordingly, the conclusions of those documents remain accurate and valid, and no changes to, or further mitigation beyond, the measures already identified are required.

2 METHODOLOGY

Great Crested Newt Surveys

2.1 All waterbodies within the Site, and those within 250m of the Site boundary that are not separated from the Site by significant dispersal barriers and to which access was available, were subject to the following survey types:

- HSI assessment; and
- eDNA sampling.

2.2 The location of these waterbodies within and near to the Site is illustrated on **Plan EDP 1**.

2.3 Waterbodies more than 250m from the Site were not subject to survey, as the likelihood of great crested newts dispersing over this distance into the Site is much reduced, and the survey of nearer waterbodies is considered sufficient to identify the likelihood of presence on-site and to assess potential impacts on the local population.

HSI Assessment

2.4 A Habitat Suitability Index (HSI) assessment is a standardised method which uses a range of criteria, such as waterbody size, permanence, water quality, shading, waterfowl and fish presence, pond density, terrestrial habitat and macrophyte cover, to derive a suitability score or 'index'. Waterbodies with higher scores are generally more likely to support great crested newts than those with lower scores¹.

2.5 HSI scores and the associated suitability categories for great crested newts are set out in **Table EDP 2.1**.

Table EDP 2.1: HSI Scores and Waterbody Suitability Categories

HSI Score	Suitability of Waterbody to Support Great Crested Newts
<0.5	Poor suitability
0.5–0.59	Below average suitability
0.6–0.69	Average suitability
0.7–0.79	Good suitability
>0.8	Excellent suitability

¹ Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal* 10 (4), 143-155

2.6 The HSI assessment was undertaken by a great crested newt licenced ecologist on 29 April 2026. The assessment was undertaken during suitable weather conditions and in accordance with relevant best practice guidance.

eDNA Sampling

2.7 eDNA is DNA collected from the environment in which an organism lives. In aquatic environments, animals, including amphibians, shed cellular material into the water via saliva, urine, faeces, skin cells and other biological material. This eDNA can persist for several weeks and can be collected through a water sample and analysed to determine whether the target species is, or has recently been, present in the waterbody.

2.8 eDNA sampling of waterbodies between 15 April and 30 June inclusive provides a reliable indication of the presence or likely absence of great crested newt.

2.9 eDNA sampling was undertaken by a great crested newt licenced ecologist and assistant on 29 April 2026. Sampling was undertaken using eDNA sampling kits obtained from SureScreen Scientifics and following the standard protocol set out by the Freshwater Habitats Trust². In summary, the protocol comprised the following for each waterbody:

- Collection of 20 water samples from locations evenly distributed around the accessible perimeter of the waterbody, including open water and vegetated areas where present;
- Collection of a ladle of water at each sampling location, stirring the water column without disturbing sediment;
- Thorough shaking and inversion of the combined sample once all 20 ladles had been collected; and
- Extraction of 15ml of the mixed sample into six conical tubes, each containing preservative fluid, followed by thorough shaking to homogenise the sample.

2.10 The water samples were then sent back to SureScreen Scientifics for analysis for great crested newt eDNA using real-time Polymerase Chain Reaction (PCR).

Limitations

2.11 Where waterbodies were dry, inaccessible or otherwise unsuitable for assessment or sampling, this has been recorded in the results section. Any such limitations are not considered to represent a significant constraint to the overall assessment, given the data obtained for the surrounding waterbodies alongside previous and updated desk study data and eDNA results.

2.12 As such, the survey effort is considered robust and sufficient to determine the likely presence or absence of great crested newt within the Site and surrounding waterbodies.

²As approved by Natural England. <http://www.freshwaterhabitats.org.uk/wordpress/wp-content/uploads/2013/09/eDNA- water-sample-methods-FHT.pdf>

Spring Bat Activity Surveys

2.13 The Update Ecological Baseline Report 2026 reported the results of summer and autumn 2025 bat activity surveys and identified that further spring activity surveys would be undertaken in 2026. The spring surveys have now been completed and, similar to the summer and autumn surveys, these comprised:

- A night-time bat walkover (NBW) survey; and
- Automated detector monitoring.

Night-time Bat Walkover Survey

2.14 The spring NBW survey was undertaken on 28 April 2026 by an experienced bat surveyor and an assistant following good practice guidelines published by the Bat Conservation Trust³.

2.15 The survey was undertaken during suitable weather conditions, as summarised in **Table EDP 2.2**.

Table EDP 2.2: Date, Timing and Weather Conditions During NBW Survey

Survey Date	Sunset Time	Start - Finish Times	Weather Conditions			
			Temp (°C)	Cloud Cover (%)	Wind (Beaufort Scale)	Precipitation
28.04.26	20:23	20:23 – 22:30	14 – 12	0	4 – 3	Nil

2.16 The survey involved an initial stationary observation point starting at sunset and continuing for a minimum of 30 minutes, positioned along a potential flight line close to potential roost sources. Following this, a pre-determined route through accessible parts of the Site was walked by surveyors, with the route designed to provide coverage of all habitats within the Site to record the distribution and relative level of bat activity. The stationary observation point and transect route are illustrated on **Plan EDP 2**.

2.17 All bats' calls were recorded, time-stamped and location tagged using Elekon Batlogger M bat detectors, and any observed behaviour described on survey forms, in order to characterise the value of the Site and its component habitats for foraging and commuting bats.

2.18 Bats were identified on the basis of their characteristic echolocation calls, which analysed using computer sonogram analysis BatExplorer to confirm species identification. Species of Myotis bat and long-eared bat are difficult to tell apart solely from their echolocation calls and were therefore grouped as such.

³ Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London

Automated Detector Survey

2.19 Bat activity within the Site was also sampled using Song Meter Mini Bat 2 detectors (hereafter referred to as 'automated detectors'), which are deployed in fixed locations to automatically trigger, and record bat echolocation calls over multiple nights at a time. In this case, automated detectors were deployed at two locations within the Site, as shown on **Plan EDP 2**. The automated detectors were fixed in secure locations for a minimum of five consecutive nights, with the microphone directed away from the tree/branch to maximise detection sensitivity. Details of dates, sampling locations and weather conditions during the survey are given in **Table EDP 2.3**.

Table EDP 2.3: Automated Detector Survey Details

Sampling Period Dates	Location		Microphone		Weather (max, min temp/ rainfall/max, min wind speed)
	Reference Number	OS Grid Reference	Height	Direction	
20.04.26 – 28.04.26	L1	SZ 03346 96677	1.8m	East	Temp: 0-20°C Rain: Nil Wind: 0-26mph
	L2	SZ 03492 96690	1.7m	North	

2.20 The sound files recorded by the automated detectors were analysed using Kaleidoscope Pro's Auto ID for Bats software, which uses clustering technology and known bat species calls to classify each call to species level. Except for common and soprano pipistrelle, for which the classifiers are more accurate, all other species files, those classified as 'No ID', and 10% of the noise files were checked manually using sonogram analysis in accordance with published guides to confirm the species identification of each bat call.

Limitations

- 2.21 The identification of calls and species using call analysis software is dependent upon the quality of the recording made, which may limit levels of activity and species recorded. Quality of the recording can be influenced by weather conditions including rainfall and wind; distance of bat from detector, presence of obstructions through which the noise must pass, i.e. trees/leaves, and proximity of other noise sources such as roads.
- 2.22 Bat detectors are naturally biased to record bat species that produce louder echolocation calls and may not record some bat passes of quieter echolocating species, such as long eared bats (*Plecotus sp.*).
- 2.23 Sections of the NBW route within the Distribution Network Connection (DNC) corridor could not be surveyed due to dense scrub. Survey efforts focused on accessible adjacent habitat, with activity samples recorded where possible. This is not considered to present a constraint to the findings.
- 2.24 The spring NBW survey was undertaken in optimal weather conditions and is therefore not limited by climatic conditions.
- 2.25 Local weather data for the deployment period was taken from an online data source. Conditions were mostly optimal – whilst the temperature dropped low on a couple of the

nights and was windy on one date, this is not unusual for spring. The survey is therefore not limited by climatic conditions.

3 RESULTS

Great Crested Newt Surveys

3.1 The results of the HSI assessment and eDNA sampling are provided in **Table EDP 3.1**. Pond locations are shown on **Plan EDP 1**.

Table EDP 3.1: Great Crested Newt HSI and eDNA Results

Waterbody Reference	Description	HSI Score	HSI Suitability Category	eDNA Result
P1	Series of water treatment ponds with pipes and contaminated water, minimal vegetation other than some bulrush in places.	0.61	Average	Negative
P2	Series of water treatment ponds with pipes and contaminated water, minimal marginal vegetation other than some areas of bulrush.	0.57	Below Average	Negative
P3	Multiple sections connected by pipes and fed by a ditch, no access to northern sections due to dense scrub, southern ones filled with bulrush.	0.91	Excellent	Negative
P4	Ditch section dry, two northern sections steep sided with willow, bulrush and rushes.	0.70	Good	Negative
P5	Water treatment area comprising shipping containers filled with bulrush and water, overflow area in depression surrounding tanks covered with duckweed.	0.40	Poor	Negative
P6	Large Sustainable urban drainage system (SuDS) basin, entirely dry. Some rushes and grasses present.	n/a	n/a	n/a
P7	Woodland pond connected to a ditch with some marginal vegetation along one side.	0.70	Good	Negative

3.2 All waterbodies sampled for great crested newt eDNA returned negative results. The laboratory report is provided at **Appendix EDP 1**. On this basis, and taking into account the previous survey information, updated desk study and broadly similar habitat conditions, great crested newt is considered to remain absent from the Site.

3.3 This confirms the provisional conclusion set out within the Update Ecological Baseline Report 2026 and Chapter 8 – Ecology and Nature Conservation of the 2026 ES Update, namely that great crested newt is unlikely to be present within the Site.

Spring Bat Activity Surveys

- 3.4 The spring NBW survey recorded low levels of bat activity across the Site. Activity was concentrated primarily along the woodland tracks along and near the DNC corridor, with limited activity recorded across the more open and disturbed areas of hardstanding and grassland. The results are illustrated on **Plan EDP 2**.
- 3.5 The entirety of bat activity recorded during the NBW survey comprised the common and widespread species common pipistrelle and soprano pipistrelle. This is similar to the update summer and autumn surveys, although in both the summer and autumn surveys, two Myotis species passes were also recorded. Activity was largely associated with foraging and commuting along woodland/tree line edges, also similarly to the summer and autumn surveys. No behaviour indicative of a nearby roost, such as repeated early emergence, dawn swarming/re-entry behaviour or sustained activity focused on a specific tree or structure, was recorded during the survey.
- 3.6 During the automated detector survey, a total of 1,843 bat registrations were recorded across both detector locations during the eight-night deployment period. Activity was dominated by common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*), which together accounted for 92.3% of all registrations. Lower numbers of noctule (*Nyctalus noctula*), Myotis species (*Myotis* spp.), long-eared bat species (*Plecotus* spp.), Nathusius' pipistrelle (*Pipistrellus nathusii*), serotine (*Cnephaeus serotinus*) and Leisler's bat (*Nyctalus leisleri*) were also recorded. No barbastelle (*Barbastella barbastellus*) or horseshoe bat (*Rhinolophus* spp.) registrations were recorded during the April 2026 automated detector survey.
- 3.7 The results of the spring automated detector surveys are provided, in detailed and summary form, within **Tables EDP 3.2** and **3.3**.

Table EDP 3.2: Automated Detector Survey Results for Spring 2026

Location	Bat Species	Number of Bat Passes Recorded per Night								Total	Percentage
		20/04/26	21/04/26	22/04/26	23/04/26	24/04/26	25/04/26	26/04/26	27/04/26		
L1	Common pipistrelle	6	10	27	44	200	29	320	123	759	75.2%
	Soprano pipistrelle	10	5	14	11	26	8	40	15	129	12.8%
	Nathusius' pipistrelle	0	0	0	0	2	0	6	0	8	0.8%
	Noctule	8	4	7	5	6	6	11	10	57	5.6%
	Leisler's bat	0	1	1	1	0	0	0	2	5	0.5%
	Serotine	0	0	2	1	0	0	1	0	4	0.4%
	Myotis species	3	3	3	1	2	6	6	3	27	2.7%
	Long-eared bat sp.	3	0	4	2	2	3	3	3	20	2.0%
	Total	30	23	58	65	238	52	387	156	1009	100%
L2	Common pipistrelle	14	4	41	82	153	22	289	72	677	81.2%
	Soprano pipistrelle	8	2	12	31	21	6	48	9	137	16.4%
	Nathusius' pipistrelle	0	0	0	1	0	0	8	0	9	1.1%
	Noctule	0	0	0	1	1	1	3	1	7	0.8%
	Serotine	0	0	0	0	0	0	3	0	3	0.4%
	Long-eared bat sp.	0	0	0	0	0	0	1	0	1	0.1%
	Total	22	6	53	115	175	29	352	81	833	100%

Table EDP 3.3: Summary of Update Spring Automated Detector Survey

Survey Season	Species	Number of Passes	% of Total
Spring	Common pipistrelle	1,436	77.90%
	Soprano pipistrelle	266	14.40%
	Noctule	64	3.50%
	Myotis species	27	1.50%
	Long-eared bat sp.	21	1.10%
	Nathusius' pipistrelle	17	0.90%
	Serotine	7	0.40%
	Leisler's bat	5	0.30%
	Total	1,843	100.00%

- 3.8 Activity was recorded at both detector locations, with slightly higher overall activity at Location L1. The species assemblage was broadly similar between the two locations and was dominated by common and soprano pipistrelles. Location L1 recorded a slightly wider range of species, including low numbers of noctule, Myotis species, long-eared bat species and Leisler's bat, while Location L2 was more strongly dominated by pipistrelle activity.
- 3.9 Overall, the spring automated detector results are consistent with the previous survey results and the summer and autumn update survey findings, with activity largely comprising common and widespread species and no indication of a material change in the value of the Site for foraging or commuting bats.

4 REVIEW OF ASSESSMENT AND MITIGATION

Great Crested Newt

- 4.1 The completed HSI and eDNA surveys confirm the current status of waterbodies within the survey area. Although the waterbodies within and surrounding the Site are of varying suitability for great crested newt, all eDNA results were negative.
- 4.2 Great crested newts are therefore considered to remain absent from the Site. As such, no change to the assessment is required, and no great crested newt-specific mitigation or licensing is necessary.

Bats

- 4.3 The spring bat activity survey recorded low levels of activity, broadly consistent with the previous 2021–2022 and 2025 survey findings. Activity remained largely associated with boundary habitats, with limited use of the more open and disturbed parts of the Site.
- 4.4 The survey does not alter the previous assessment of the Site's value for bats. The bat assemblage remains of Local ecological importance, and the mitigation measures already identified remain appropriate. No additional bat mitigation is required.

5 CONCLUSIONS

- 5.1 The completed great crested newt surveys and spring bat activity survey provide the final outstanding ecological survey information identified in the Update Ecological Baseline Report 2026 and Chapter 8 – Ecology and Nature Conservation of the 2026 ES Update.
- 5.2 Overall, the completed surveys do not materially alter the update ecological baseline, Important Ecological Feature valuations, or impact assessment. The conclusions of the Update Ecological Baseline Report 2026 and Chapter 8 – Ecology and Nature Conservation of the 2026 ES Update remain accurate and valid. No changes to the assessment, and no further mitigation, are required.

Appendix EDP 1 Great Crested Newt eDNA Analysis Report

Folio No: 1106-2026
Purchase Order: edp 7095
Contact: EDP Ltd
Issue Date: 05.05.2026
Received Date: 01.05.2026

GCN Report

Technical Report



SureScreen Scientifics

Folio No: 1106-2026
Purchase Order: edp 7095
Contact: EDP Ltd
Issue Date: 05.05.2026
Received Date: 01.05.2026

GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN26 04313	edp 7095 - Pond 3	SZ 04077 96650	Pass	Pass	Negative	0/12
GCN26 04314	edp 7095 - Pond 4/5	SZ 03456 46771	Pass	Pass	Negative	0/12
GCN26 04315	edp 7095 - Pond 1/2		Pass	Pass	Negative	0/12
GCN26 04316	edp 7095 - Pond 4	SZ 04083 96551	Pass	Pass	Negative	0/12
GCN26 04317	edp 7095 - Pond 7	SZ 03702 97123	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Ruby Fielding

Approved by: Chelsea Warner

Methodology

The samples detailed above have been analyzed for the presence of GCN eDNA following the protocol stated in DEFRA WC1067 'Analytical and methodological development for improved surveillance of the Great Crested Newt, Appendix 5.' (Biggs et al. 2014). Each of the 6 sub-sample tubes are first centrifuged and pooled together into a single sample tube which then undergoes DNA extraction. The extracted sample is then analyzed using real-time PCR (qPCR), which uses species-specific molecular markers to amplify GCN DNA within a sample. These markers are unique to GCN DNA, meaning that there should be no detection of closely related species.

If GCN DNA is present, the DNA is amplified up to a detectable level, resulting in positive species detection. If GCN DNA is not present then amplification does not occur, and a negative result is recorded. Analysis of eDNA requires attention to detail to prevent the risk of contamination. True positive controls, negative controls, and spiked synthetic DNA are included in every analysis and these have to be correct before any result is declared and reported. Stages of the DNA analysis are also conducted in different buildings at our premises for added analytical security.

SureScreen Scientifics Ltd is ISO9001 accredited and participates in Natural England's proficiency testing scheme for GCN eDNA testing.

Interpretation of Results

Sample Integrity Check:

When samples are received in the laboratory, they are inspected for any tube leakage, suitability of sample (not too much mud or weed etc.) and absence of any factors that could potentially lead to inconclusive results. Any samples which fail this test are rejected and eliminated before analysis.

Degradation Check:

Pass/Fail. Analysis of the spiked DNA marker to see if there has been degradation of the kit or sample between the date it was made to the date of analysis. Degradation of the spiked DNA marker may lead indicate a risk of false negative results.

Inhibition Check:

Pass/Fail. The presence of inhibitors within a sample is assessed using a DNA marker. If inhibition is detected, samples are purified and re-analyzed. Inhibitors cannot always be removed, if the inhibition check fails, the sample should be re-collected.

Result:

Presence of GCN eDNA (Positive/Negative/Inconclusive)

Positive: GCN DNA was identified within the sample, indicative of GCN presence within the sampling location at the time the sample was taken or within the recent past at the sampling location.

Positive Replicates: Number of positive qPCR replicates out of a series of 12. If one or more of these are found to be positive the pond is declared positive for GCN presence. It may be assumed that small fractions of positive analyses suggest low level presence, but this cannot currently be used for population studies. In accordance with the WC1067 Natural England protocol, even a score of 1/12 is declared positive. 0/12 indicates negative GCN presence.

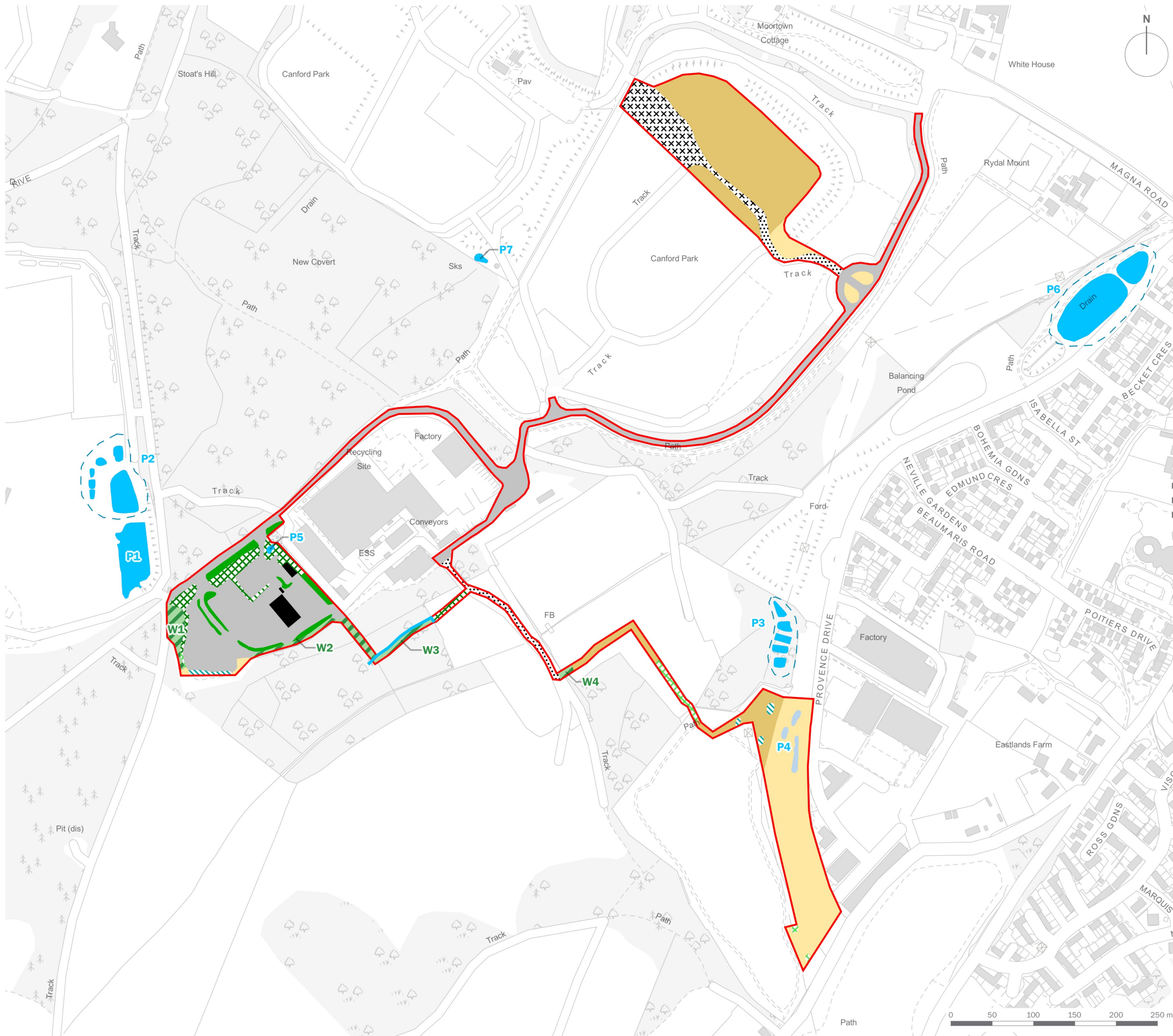
Negative: GCN eDNA was not detected or is below the threshold detection level and the test result should be considered as evidence of GCN absence, however, does not exclude the potential for GCN presence below the limit of detection.
















Inconclusive: Controls indicate inhibition or degradation of the sample, resulting in the inability to provide conclusive evidence for GCN presence or absence.

Plans

Plan EDP 1: Habitat Survey
(edp7095_d002e 28 April 2026 JGr/ESu)

Plan EDP 2: Night-time Bat Walkover Results – April
(edp7095_d052 06 May 2026 VMS/GCr)



-  Site Boundary
-  Lowland Mixed Deciduous Woodland
-  Other Neutral Grassland
-  Modified Grassland
-  Mixed Scrub
-  Bramble Scrub
-  Willow Scrub
-  Ruderal/Ephemeral
-  Tall Forbs
-  Waterbody
-  Sustainable Drainage System
-  Developed Land; Sealed Surface
-  Building
-  Bare Ground
-  Ditch

client
MVV Environment Limited

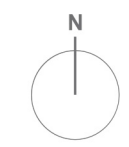
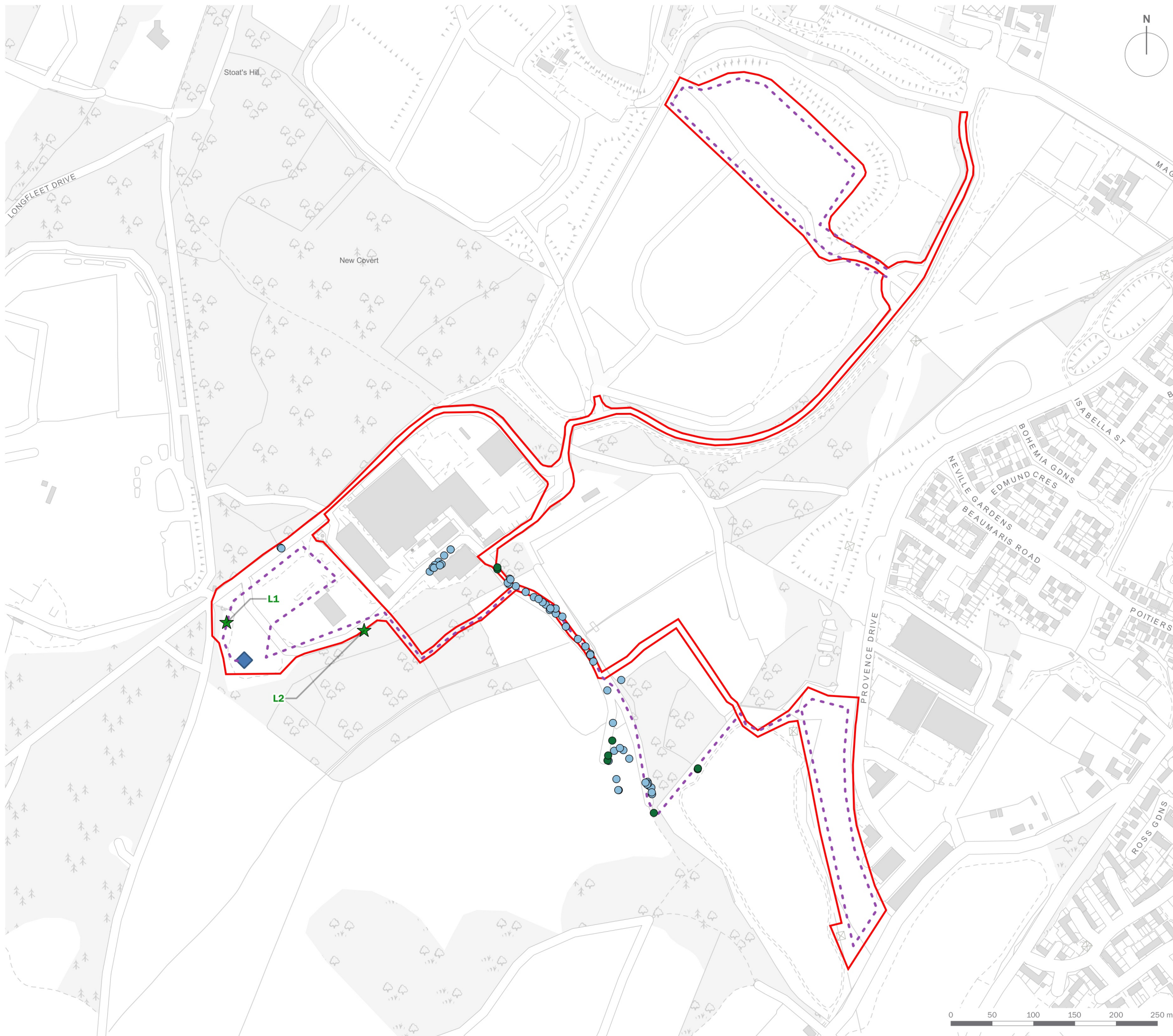
project title
Proposed Energy from Waste Combined Heat and Power Facility at Canford Resource Park

drawing title
Habitat Survey

date **28 APRIL 2026** drawn by **JGr**
drawing number **edp7095_d002e** checked **ESu**
scale **1:4,500 @ A3** QA **Gyo**



Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk



- Site Boundary
- ◆ Stationary Observation Point
- - - Transect Route
- ★ Static Detector Location
- Common Pipistrelle
- Soprano Pipistrelle

client		
MV Environment Ltd		
project title		
Proposed Energy from Waste Combined Heat and Power Facility at Canford Resource Park		
drawing title		
Night-time Bat Walkover Results – April		
date	06 MAY 2026	drawn by VMS
drawing number	edp7095_d052	checked GCr
scale	1:4,500 @ A3	QA DJo

