Whitcher Wildlife Ltd.
Ecological Consultants.

CHEPSTOW BRIDGE

OS REF: ST 539 941.

HABITAT REGULATIONS ASSESSMENT.

Ref No: **220421.**

Date: **29th April 2022.**

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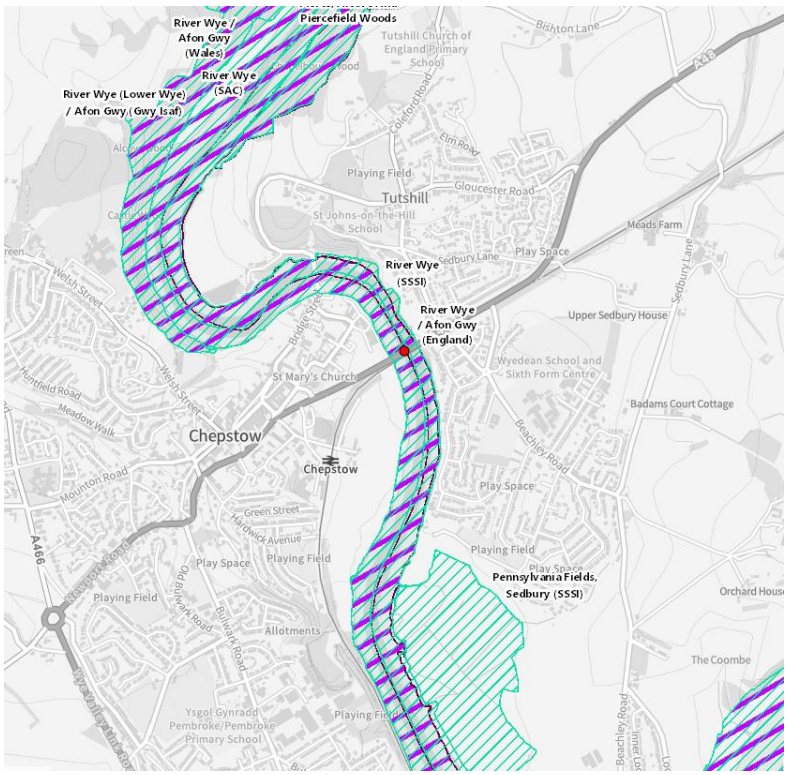
1. INTRODUCTION.

1.1. Amco have been awarded a contract to undertake extensive repair works to Chepstow Bridge at 141m 05.5ch on the SWM2 line, in Chepstow, South Wales.

1.2. Whitcher Wildlife Ltd has been commissioned to prepare an HRA of the impact of the works on the River Wye SAC, which passes directly underneath the railway bridge and lies adjacent to the proposed compound areas.

1.3. The location of the site is shown in red. The SAC is highlighted with purple crosshatching.



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2. ECOLOGICAL IMPLICATIONS WITH RESPECT TO THE HABITAT REGULATIONS ASSESSMENT.

2.1. The Habitats Directive applies the precautionary principle to relevant designated areas, in so much as plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of Natura 2000 sites.

2.2. It is Government policy (as outlined in the National Policy Planning Framework for sites designated under the Convention on Wetlands of International Importance (RAMSAR sites)) to be treated as having equivalent status to the Natura 2000 sites.

2.3. In undertaking an assessment, competent authorities must have regard to both direct and indirect effects on an interest feature of the Natura site, as well as cumulative effects. This may include consideration of features and issues outside the boundary of the Natura site.

2.4. Department for Communities and Local Government guidance states that an assessment should be proportionate to the geographic scope of the plan or project and that it need not be done in any more detail, or using more resources, than is useful for its purpose.

2.5. Whilst it is the responsibility of the competent authority to determine whether it can be concluded there is no adverse effect, it is the responsibility of the applicants to submit sufficient information to enable such a determination to be made.

2.6. The key principles to be adopted during the collation and analysis of information are:

- **Use of best available information.** Best available information has been used to inform this assessment. This includes information gathered by Whitcher Wildlife Ltd on behalf of Amco, information made available by Amco on the proposed works and how they will be undertaken and information from other sources, including Natural England and Natural Resources Wales.
- **Proportionality.** It has been ensured that the level of detail provided in this assessment reflects the level of detail in the proposed working methodology, i.e. that the assessment is proportionate.
- **Consultation.** There has been consultation with relevant stakeholders during production of the assessment and their comments have been duly considered.

- **Transparency in the Assessment Process.** We have endeavoured to keep the process as open, transparent and as simple as possible while ensuring an objective and rigorous assessment in compliance with the Habitats Directive, Habitats Regulations and emerging best practice.
- **Audit Trail.** We have ensured that the process followed and the conclusions reached are clearly documented to ensure there is a clear audit trail.

2.7. The assessment process also needs to take into account the consideration of alternative approaches, in this case, alternative methods of undertaking the works and any in-combination effects that may occur when the effects of other plans and projects are considered.

2.8. A search has been undertaken through Monmouthshire County Council and Gloucestershire County Council of any other plans and projects that might act in combination with the effect of the proposed works to bring about a likely significant effect. None were found.

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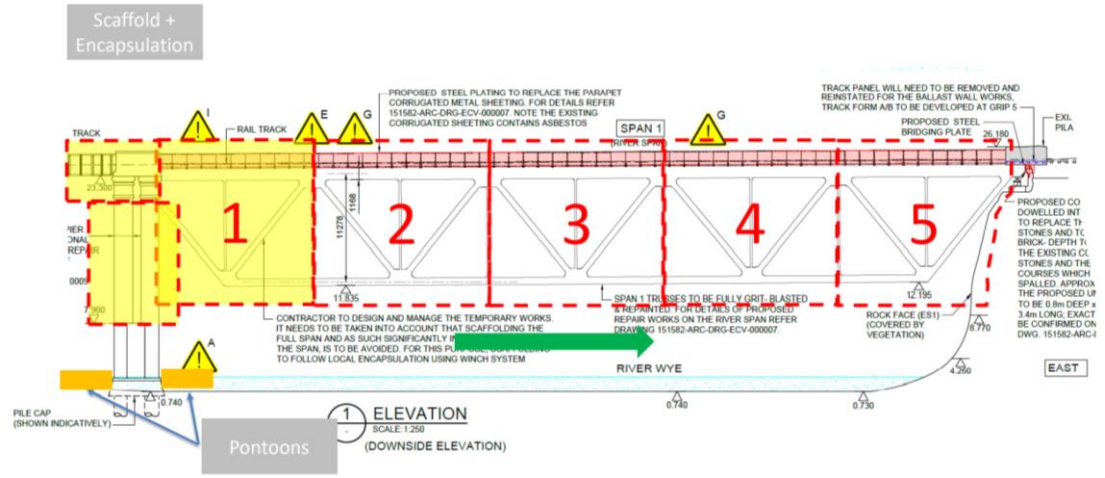
3. PROPOSED WORKS.

Specified operations:
Repairs to Chepstow Bridge.

Details of proposed operations:
The proposed works consist of:
• Steelwork repairs to RA8 (at 80mph) and heavy axle rating RA10 (at 40mph)
• Steelwork repairs to handrails, parapets and walkway panels on Span 1
• Re-painting of the steel superstructure steelwork
• Grit blasting/Mechanically preparation and paint of Spans 1 – 4 including caissons
• Localised Waterproof injection of land spans (Spans 2-4)
• Masonry repairs to west abutment and wingwalls
• Strengthening of west abutment
• Reconstruction of the east abutment ballast wall
• Replace downpipes/gutters on land spans
• Deveg within 3m of the structure



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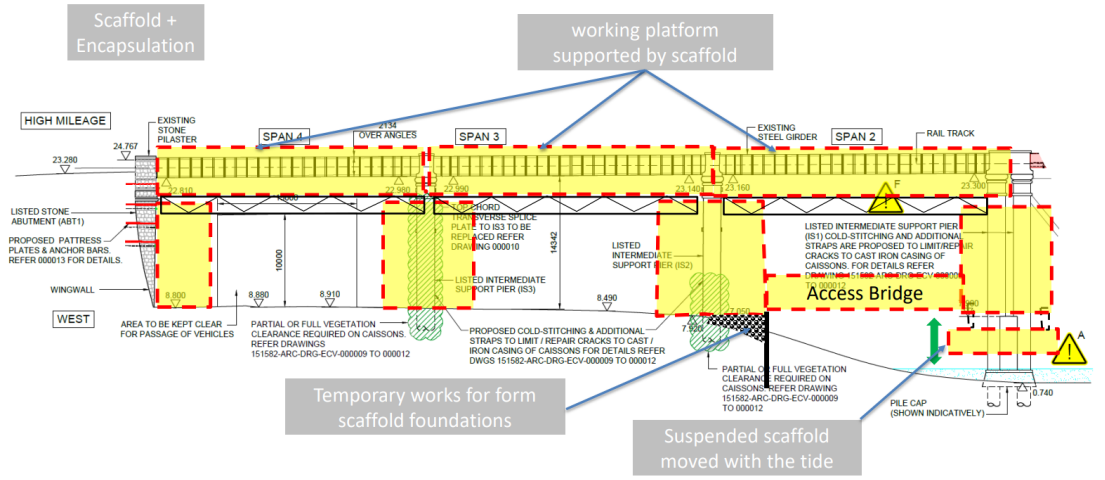

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Land on which operations are to be carried out
See maps

Storage and disposal of materials:
All waste to be kept secure on site to prevent loss, pollution or theft and transferred off site by a registered waste carrier to a permitted/licensed waste management facility or registered exempt site.

Precise routing of operations and vehicles:
See maps

Frequency of access:
Daily access/egress

Plant/materials on-site:
Scaffolding/encapsulation
MEWPs
Telehandlers
Pontoons/Lifeboat
Blasting Kit
Crane (temporary scaffold foundations)
RRV on top (for abutment works)

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4. DESIGNATIONS.

4.1. Consideration was given in the appraisal of the possible implications relative to a Habitats Regulations Assessment to the following site.

- All Natura sites within the authority's boundary, and
- Other sites shown to be linked to the proposed works through a known pathway.

4.2. The proposed works will be along the boundaries of the River Wye SAC, as well as the bridge crossing the SAC.

4.3. Therefore, as a Natura 2000 site, the River Wye SAC requires consideration as to whether it could be adversely affected by the proposed works.

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5. FEATURES OF THE RIVER WYE SAC.

5.1. The conservation objectives for the River Wye SAC provide the basis for determining what is currently, or may cause, a significant effect and for informing the scope of an Appropriate Assessment.

5.2. Natural England explains that whilst the assessment should focus on the conservation objectives, due regard should be shown to subsequent reviews of qualifying features available from the Joint Nature Conservation Committee (JNCC). In addition to qualifying interest features, it is necessary to explore the environmental features and conditions required to maintain the integrity of the River Wye SAC as well as both current conditions and trends in environmental processes.

NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE **UK0012642**

SITENAME **River Wye/ Afon Gwy**

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1. SITE IDENTIFICATION

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1.1 Type	1.2 Site code
B	UK0012642

1.3 Site name

River Wye/ Afon Gwy

1.4 First Compilation date	1.5 Update date
1998-06	2015-12

1.6 Respondent:

Name/Organisation:	Joint Nature Conservation Committee
Address:	Joint Nature Conservation Committee Monkstone House City Road Peterborough PE1 1JY
Email:	

Date site proposed as SCI:	1998-06
Date site confirmed as SCI:	2004-12
Date site designated as SAC:	2005-04
National legal reference of SAC designation:	Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010 (http://www.legislation.gov.uk/uksi/2010/490/contents/made).

2. SITE LOCATION

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2.1 Site-centre location [decimal degrees]:

Longitude	Latitude
-3.299722222	52.02333333

2.2 Area [ha]:

2147.64

2.3 Marine area [%]

0.0

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code	Region Name
UKG1	Herefordshire, Worcestershire and Warwickshire
UKL2	East Wales
UKL1	West Wales and The Valleys
UKK1	Gloucestershire, Wiltshire and Bristol/Bath area

2.6 Biogeographical Region(s)

Atlantic (100.0 %)

3. ECOLOGICAL INFORMATION

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3.1 Habitat types present on the site and assessment for them

Annex I Habitat types						Site assessment			
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A|B|C|D	A|B|C		
						Representativity	Relative Surface	Conservation	Global
1130			92.35	0	G	D			
1140			64.43	0	M	D			
1330			17.18	0	G	D			
3260			113.82	0	G	A	B	B	A
4030				0		D			
7140			2.15	0	G	C	C	A	C
8310				0		D			

9180	X		60.13	0	G	D			
91A0			15.03	0	G	D			
91D0	X		8.59	0	G	D			
91E0	X		131.01	0	G	D			

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A|B|C|D	A|B|C		
						Min	Max				Pop.	Con.	Iso.	
F	1102	Alosa alosa			p				P	DD	C	C	C	C
F	1103	Alosa fallax			p				P	DD	A	B	C	A
I	1092	Austropotamobius pallipes			p				P	DD	C	C	C	B
F	1163	Cottus gobio			p				P	DD	B	B	C	B
F	1099	Lampetra fluviatilis			p				P	DD	C	A	C	B
F	1096	Lampetra planeri			p				P	DD	C	B	C	B
M	1355	Lutra lutra			p				P	DD	C	A	C	B
I	1029	Margaritifera margaritifera			p				P	DD	D			
F	1095	Petromyzon marinus			p				P	DD	C	A	C	B
M	1304	Rhinolophus ferrumequinum			p				P	DD	D			
M	1303	Rhinolophus hipposideros			p				P	DD	D			
F	1106	Salmo salar			p	1001	10000	i		M	C	C	C	B

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see reference portal)

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6. APPRAISAL OF THE LIKELY SIGNIFICANT EFFECT.

6.1. Based on the conservation objectives of a SAC and other available information, including citations, the following is a useful generic list of impacts that could lead to a likely significant effect.

- Direct loss or damage of habitats within a designated site or of nearby areas used by interest species.
- Change in management regimes (e.g. grazing/mowing of marshland) of habitats within a designated site or of nearby places used by interest species.
- Urbanisation that results in reduction of sight lines or which hinders flight paths for birds.
- Air quality (construction dust and construction and operational traffic).
- Water quality.
- Hydrology.
- Disturbance (activity, recreation, noise and lighting), and
- Introduction or spread of non-native invasive species.

6.2. Direct loss or damage of habitats

6.2.1. The works will be localised to the bridge structure and 2m of adjacent vegetation. There will be a temporary loss of vegetation through the proposed works, but this will regrow. There will be no loss of habitat within the bridge structure.

6.2. Through the implementation of such appropriate measures, this effect can be screened out on the grounds of not likely to have a significant effect.

6.3. Change in management regimes.

There will be no change in management regimes once the works are complete. This can be screened out on the grounds of not likely to have a significant effect.

6.4. Urbanisation.

6.4.1. There will be no urbanisation as the works are for repairs to the existing bridge structure only. No additional capacity will be provided by the repaired bridge, and no additional railway lines or roads are being installed.

6.4.2. This can be screened out on the grounds of not likely to have a significant effect.

6.5. Air quality.

6.5.1. Grit-blasting the structure has the potential to create dust which, could potentially have a temporary effect on air quality in a localised area around the structure. However, the works include for the encapsulation of the structure before work commences, preventing dust from spreading.

6.5.2. Through the implementation of such appropriate measures, this effect can be screened out on the grounds of not likely to have a significant effect.

6.6. Water quality.

6.6.1. Although the bridge crosses directly over the watercourse, the structure is to be encapsulated before work commences, which will prevent any potential pollutants from entering the watercourse.

6.6.2. This effect can be screened out on the grounds of not likely to have a significant effect.

6.7. Hydrology.

6.7.1. The works will not cause any changes to the hydrology of the site.

6.7.2. Through the implementation of such appropriate measures, this effect can be screened out on the grounds of not likely to have a significant effect.

6.8. Disturbance.

6.8.1. The primary reasons for designation of this site are for its habitats, as well as otter, white-clawed crayfish, and fish species.

6.8.2. The work will take place on the rail or from scaffolding/encapsulation around the structure, telehandlers, and MEWPs, and therefore there will be no direct contact with the watercourse. Therefore, there will be no disturbance to the watercourse.

6.8.3. This effect can therefore be screened out on the grounds of not likely to have a significant effect.

6.9. Introduction or spread of non-native invasive species.

6.9.1. The movement of people, plant and traffic, as well as the importation of materials can result in the introduction of non-native species. Any plant etc. brought onto site will be specified as clean from weeds and pests and will be checked. The issue of introduction and spread of non-native species is therefore screened out on the grounds of not likely to have a significant effect.

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7. CONCLUSIONS.

7.1. The conclusions are summarised in the table below.

Potential Impact.	**Screening Outcome.**
Direct loss or damage of habitats.	No likely significant effect.
Change in management regimes.	No likely significant effect.
Urbanisation.	No likely significant effect.
Air quality.	No likely significant effect.
Water quality.	No likely significant effect.
Hydrology.	No likely significant effect.
Disturbance.	No likely significant effect.
Introduction or spread of non-native invasive species.	No likely significant effect.

7.2. Overall, it is concluded that the proposed works to carry out repair works to the existing bridge can be screened out on the grounds of not having any impacts that could result in significant effects on the River Wye SAC.

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Prepared by:	
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Checked by:	
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