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York's Bridge Habitat Regulations Assessment

York's Bridge Habitat Regulations
Assessment: Stage 1 & Stage 2

Walsall Council

November 2018



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This document has 30 pages including the cover.

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 1.0	Draft for Client Review	MC-G	SC	AW	N/A	05/11/2018
Rev 2.0	Final for Issue	MC-G	KV	AW	DD	23/11/2018

Client signoff

Client	Walsall Council
Project	York's Bridge Habitat Regulations Assessment
Job number	5165963
Client signature / date	

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1. Introduction

1.1. Terms of Reference

Atkins Limited (Atkins) was commissioned by Walsall Council to undertake a Habitat Regulation Assessment (HRA) in connection with a planning application for the construction of a new road bridge and the realignment of an existing road (hereafter referred to as the Scheme). The Scheme see **Appendix A**, is located to the north of the village of Pelsall in Walsall.

1.2. Scheme Background

York's Bridge which carries the B4154 over the Wyrley and Essington Canal is a narrow humpback bridge of a traditional brick design. The bridge only accommodates one vehicle at a time causing a pinch point and an accident 'black spot'. A new single span concrete bridge and road alignment will be constructed immediately to the east of the existing bridge. The existing bridge will be retained as an access route to the cottages on Pelsall Common Local Nature Reserve (LNR).

1.3. Previous 2013 Habitats Regulations Assessment

In 2013, a Habitat Regulations Assessment (HRA) Stage 1 Screening was undertaken to assess whether the York's Bridge Scheme was likely to lead to significant effects on the Cannock Extension Canal Special Area of Conservation (SAC) with reference to the conservation objectives of the qualifying feature of the site.

In combination effects were at the time considered as part of the assessment. None of the other projects and plans identified at the time were found to lead to likely significant effects on the Cannock Extension Canal SAC in combination with the York's Bridge Scheme.

In conclusion, it was considered that the Scheme in 2013 would have no likely significant effects on the Cannock Extension Canal SAC.

However, due to changes to the Scheme, an updated HRA is now required.

1.4. Habitats Regulations Assessment Process

Habitats Regulation Assessment (HRA) is required by Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations) for all plans and projects which may have likely significant effects on European sites and are not directly connected with or necessary to the management of the European site.

The Habitats Regulations state that projects and/ or plans must be assessed in-combination with other projects and plans. Although impacts from an individual project or plan may have no likely significant effect on an European site, cumulative impacts from other plans and projects may result in an in-combination effect on one or more interest features of the international site¹.

European sites include Special Areas of Conservation (SAC), candidate SACs (cSAC) and Special Protection Areas (SPA). HRA is also required, as a matter of UK Government policy, for potential SPAs (pSPA), possible SACs (pSAC) and proposed and listed Wetlands of International Importance (Ramsar sites) for the purposes of considering plans and projects which may affect them². Hereafter all of the above designated nature conservation sites are referred to as 'international sites'.

The stages of HRA process are:

- **Stage 1 – Screening:** To test whether a plan or project either alone or in-combination with other plans and projects is likely to have a significant effect on an international site;
- **Stage 2 – Appropriate Assessment:** To determine whether, in view of an international site's conservation objectives, the plan (either alone or in-combination with other projects and plans) would have an adverse effect (or risk of this) on the integrity of the site with respect to the structure, function and conservation objectives of the international site. If adverse impacts are anticipated, potential mitigation measures to alleviate impacts should be proposed and assessed;

¹ Habitat Regulations Guidance Note 4: Alone or In-combination, English Nature, May 2001.

² Paragraph 18 of National Planning Policy Framework (March 2012)

- **Stage 3 – Assessment of alternative solutions:** Where a plan is assessed as having an adverse impact (or risk of this) on the integrity of an international site, there should be an examination of alternatives (e.g. alternative locations and designs of development); and,
- **Stage 4 – Assessment where no alternative solutions remain and where adverse impacts remain:** In exceptional circumstance (e.g. where there are imperative reasons of overriding public interest), compensatory measures to be put in place to offset negative impacts.

This report comprises both the Stage 1 – Screening of the project and Stage 2 – Appropriate Assessment of the Project.

1.5. Outline of this HRA Screening Report

Following this introduction:

- Section 2 of this report sets out the methodology used for the Stage 1 – Screening and Stage 2 Appropriate Assessment;
- Section 3 provides details relating to the international site (i.e. the Cannock Extension Canal SAC) (including the Conservation Objectives and Site Sensitivities);
- Section 4 provides details of the York's Bridge Scheme;
- Section 5 details the other plans and projects identified which may lead to in combination effects on the international site;
- Section 6 details justification of the Stage 1 – Screening for the international site;
- Section 7 provides the conclusions and results of the Stage 1 – Screening; and,
- Section 8 of this report details the justification and conclusion of the Stage 2 Appropriate Assessment.

2. Methodology

2.1. The Scheme

The first step of the HRA process is to gather all available information regarding the Scheme. This information is pivotal for the analysis of the likely significant effects of the proposed works on the international sites.

This includes a review to determine if the Scheme is directly connected with, or necessary to, the nature conservation management of the international site(s) included in the HRA process.

A summary of the Scheme is given in Section 4.

2.2. Determination of the International Sites included in the HRA

The international sites that should be included in the HRA must first be determined. An initial review of the Scheme in light of the Habitats Regulations has been undertaken as part of the HRA process. This initial review looked at the geographic extent or zone of influence of any impacts which could arise as a result of the Scheme and considered which international sites should be included within the assessment.

All International sites within 2 km of York's Bridge were identified. A search distance of 2 km was used because the Scheme Application is relatively small in scale and comprised predominantly of hardstanding and dense scrub and therefore impacts are only likely to occur through the Schemes proximity to the Wyrley and Essington Canal, which has a hydrological connection to the Cannock Extension Canal SAC.

The only international site within 2 km of York's Bridge is the Cannock Extension Canal SAC which is located approximately 300 m to the west of York's Bridge.

There are no cSACs, pSPAs or pRamsar sites present within 2 km of York's Bridge.

The 2 km search radius was used in 2013, following consultation with Natural England³, as the only change to the original Scheme is the inclusion of the mitigation site (Area B) it is not considered necessary to increase the search area.

Therefore, this Stage 1 – Screening focuses solely on possible likely significant effects of the Scheme on the Cannock Extension Canal SAC which is the only internationally designated site within 2 km. Further information on the reasons for the designation of this site are included in Section 3 below.

2.3. Obtaining Information on International Sites with the Potential to be Affected

The Conservation Objectives and Favourable Conditions Tables for Cannock Extension Canal SAC have been obtained from Natural England for the purpose of this assessment⁴ (see Section 3).

2.4. Obtaining Information on Other Projects and Plans

The Habitats Regulations require assessment of the potential for likely significant effects of the Scheme 'in combination' with other projects and plans.

The following relevant statutory bodies organisations were contacted for details of other plans and projects which could adversely affect the Cannock Extension Canal:

- Walsall Council;
- Cannock Chase District Council;
- Staffordshire County Council;

³ Pers Comm.: 8th June 2011, Keith Wilson, Atkins and Antony Muller, Natural England

⁴ Information taken from Information on Natura 2000 Sites in the West Midlands prepared for Natural England by Treweek Environmental Consultants (Version 2, dated 14/07/09)

- Canal and River Trust;
- Staffordshire Wildlife Trust
- Environment Agency;
- Severn Trent Water;
- Natural England; and,
- South Staffordshire Water.

2.5. Stage 1 Screening Assessing the Impacts of the Scheme ‘Alone’ and ‘In Combination’

Following the gathering of information on the Scheme and the international sites, an assessment was undertaken to predict the likely significant effects of the Scheme on the Cannock Extension Canal SAC ‘alone’. In order to inform this process, all aspects of the Scheme were assessed to see if they could result in likely significant effects on Cannock Extension Canal SAC. This HRA takes into account both the construction and operational phases of the Scheme.

Table 3-1 examines the qualifying features and sensitivities of the Cannock Extension Canal SAC and assesses what aspects of the Scheme may have the potential to affect the SAC and whether there will be any likely significant effects. Potential significant effects are assessed by reference to the conservation objectives of the qualifying feature for the Cannock Extension Canal SAC.

The potential for likely significant effects of the Scheme on the Cannock Extension Canal SAC ‘in combination’ with other projects and plans has also been considered in this HRA. Although impacts from an individual project or plan may have no likely significant effect on an international site, cumulative and in-combination impacts from other plans and projects may result in an effect on one or more interest features of the international site. Likely significant effects by these means must also be considered. Details of plans and projects that have had HRAs completed due to potential to impact upon the Cannock Extension Canal SAC were reviewed in order to determine whether there is potential for in combination effects (see Section 5).

Likely significant effects are assessed by reference to the conservation objectives of the qualifying feature (interest feature) of the Cannock Extension Canal SAC. Any plan or project that causes the cited interest features of a site to fall into unfavourable condition can be considered to have a likely significant effect on the site. Stage 1 of the HRA process does not assess effects on the integrity of international sites (this forms Stage 2 of the HRA process). However, the definition of integrity provided below has been taken into account during the assessment of likely significant effects:

“...the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.”⁵

Plans or projects can lead to significant effects on an international site by:

- Causing delays in progress towards achieving the conservation objectives of the site;
- Interrupting progress towards achieving the conservation objectives of the site;
- Disrupting those factors that help to maintain the favourable conditions of the site; and,
- Interfering with the balance, distribution and density of key species that are the indicators of the favourable condition of the site.

HRA is an iterative process, where necessary, suggestions can be made of how to amend the project to avoid likely significant effects on an international site. This iterative approach has been adopted as part of this assessment and recommendations for the project during design meetings have been incorporated into the project. This Stage 1 - Screening assesses the project after these recommendations have been included.

The precautionary principle (as enshrined in the Habitats Regulations) has been taken into account during this HRA. The precautionary principle is used when an HRA cannot objectively demonstrate that there will be no likely significant effects on the international sites. If this occurs, the subsequent stages of HRA must be completed for the project.

⁵ Part I, Section B, Paragraph 20 of ODPM Circular 06/2005 accompanying Planning Policy Statement 9: Biodiversity and Geological Conservation

2.6. Stage 2 – Appropriate Assessment

The purpose of this assessment is to establish whether there are elements of the Scheme which could have an adverse effect on the integrity of these sites.

The assessment of integrity is based on the site features and conservation objectives of the Cannock Extension Canal SAC.

For the Appropriate Assessment, English Nature (now Natural England) guidance on 'site integrity' has been used⁶ to identify suitable criteria for deciding whether impacts would be likely to be deemed 'adverse effects on integrity'.

The potential for adverse effects on the integrity of the International site from the Scheme 'in combination' with other projects and plans has also been considered in this HRA. Although impacts from an individual project or plan may have no adverse effects on the integrity of an International site, cumulative impacts from other plans and projects may result in an in-combination effect on one or more interest features of the International site. Adverse effects on integrity by these means must also be considered. Details of plans and projects that have had HRAs completed due to the potential for impacts upon the Cannock Extension Canal SAC were reviewed in order to determine whether there is potential for in combination effects (see Section 5).

⁶ English Nature, May 2004. European Sites Guidance - Internal Guidance to Decisions on 'Site Integrity': A Framework for Provision of Advice to Competent Authorities

3. Cannock Extension Canal SAC

This section includes information about Cannock Extension Canal SAC, its designation status, location in relation to the Scheme boundary, a brief description, its conservation objective and its sensitivities⁷.

Table 3-1 - Information about Cannock Extension Canal SAC⁸

Site Designation Status	Cannock Extension Canal SAC
Location of International Site	The SAC is located near Wyrley Common in Cannock. It is located approximately 300 m to the west of York's Bridge. There is direct connectivity between York's Bridge and Cannock Extension Canal SAC via the Wyrley and Essington Canal.
Brief Description of the International Site	<p>34 aquatic plant species have been recorded within the water course making it a botanically diverse canal. Cannock Extension Canal SAC is designated for the Annex II species that it supports: floating water plantain.</p> <p>Cannock Extension Canal is an example of anthropogenic, lowland habitat supporting floating water-plantain at the eastern limit of the plant's natural distribution in England.</p> <p>A very large population of the species occurs in the Canal, which has a diverse aquatic flora and rich dragonfly fauna, indicative of good water quality.</p> <p>The low volume of boat traffic on this terminal branch of the Wyrley and Essington Canal has allowed open-water plants, including floating water-plantain, to flourish, while depressing the growth of emergent (aquatic) vegetation.</p>
Conservation Objectives	Maintain habitat for floating water-plantain, with particular reference to open standing water habitats in which it occurs.
Sensitivities of the International Site	<p>The site is vulnerable for a number of reasons, including the threat of:</p> <ul style="list-style-type: none"> • Recreational pressure and disturbance: Floating water plantain requires a low level of habitat disturbance to maintain its population. Limited knowledge and research about the particular habitat requirements of this species indicate that any change (increase or reduction) maybe a threat to its abundance⁹. • Change in water quality leading to eutrophication: Polluted runoff is likely to affect the quality of the water where floating water plantain is found. This increases biological oxygen demand, reducing the levels of dissolved oxygen in water and increasing mortality of aquatic flora and fauna; • Changes in water quality leading to increase sediment load: Discharge of water carrying a high sediment load can affect water clarity; • Changes in water quality leading to toxic contamination: Road drains discharge to the site and could carry pollutant in the event of a spillage from, for example, a road tanker; • New supply affecting water quality: Any changes, for example canal restoration, that require a new water source could affect the chemical composition of the water; • Changes in air quality leading to eutrophication and acidification: Increased levels of nitrogen, and perhaps sulphur

⁷ Conservation Objectives and Sensitivities have been taken from Information on Natura 2000 Sites in the West Midlands prepared for Natural England by Treweek Environmental Consultants (Version 2, dated 14/07/09).

⁸ Information gathered from the citation provided with the designation.

⁹ Following consultation with Inlands Waterways Association, pers.comm; Philip G Sharpe 26/08/16

	<p>will have detrimental effects on water quality (and an increased effect in-combination with impacts of runoff, see above);</p> <ul style="list-style-type: none">• Invasive species: Introductions of species such as American pondweed may out-compete floating water plantain; and,• Physical disturbance: Restoration to provide an additional connection to the canal network could result in a flow through the canal which could have a damaging effect on the plant communities present.
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4. Scheme Details

4.1. Brief Description of Scheme

The existing York's Bridge which carries the B4154 over the Wyrley and Essington Canal is a narrow humpback bridge of a traditional brick design. The bridge only accommodates one vehicle at a time causing a pinch point and an accident 'black spot'. A new single span concrete bridge and road alignment will be constructed immediately to the east of the existing bridge. The existing bridge will be retained as an access route to the Pelsall Common Local Nature Reserve (LNR). The new bridge will be constructed as shown on the General Arrangement plan within Appendix A). Due to the loss of Common land within the Pelsall North Common, replacement land and subsequent habitat will be created within Site B.

4.2. Scheme Location

York's Bridge is located to the north of the village of Pelsall in Walsall at Ordnance Survey national grid reference (NGR) SK 0224 0461. The Scheme comprises of two Areas, Area A is the existing York's Bridge and its associated road alignment approaches from the north and south, Area B is an area of woodland, scrub and grassland vegetation.

- **Area A** is located approximately 300 m to the east of the Cannock Extension Canal SAC. The Wyrley and Essington Canal connects directly to the Cannock Extension Canal approximately 300 m to the west of the Scheme forming a direct link between the Scheme site and the Cannock Extension Canal SAC. There are no locks and little discernible flow of water along this section of the Wyrley and Essington Canal.
- **Area B** is located along the northern border of the village of Pelsall, Walsall at Ordnance Survey national grid reference SK 0284 0461 and is bounded to the south by a canal, and the village of Pelsall, primarily urban with amenity grassland and waterbodies. To the north, east and west bounded by roads, arable farmland and waterbodies.

The Scheme boundary is shown on the Phase 1 Habitat Plan in Appendix C.

4.3. Scheme Description

Briefly the works will comprise:

New Bridge Construction

- Construction of a new single span semi-integral concrete bridge supported on reinforced concrete cantilever retaining wall abutments with wing walls. The abutments will be supported by reinforced in situ cast concrete pile foundations. The walls of the abutments on either side of the bridge will be set back approximately 2 m from the edge of the canal and construction of the bridge foundations will not require any works within the channel of the Wyrley and Essington Canal.
- The existing York's Bridge will be retained in situ. The north east wing wall of the existing bridge will be removed and rebuilt with a new brick retaining wall to allow construction of the new bridge.
- The canal channel will not be altered. The existing walls of the canal channel will be retained at the bridge location.

Highway Realignment

- The B4154 will be realigned to approach the new bridge. The road will be altered from approximately 250 m to the north and 250 m to the south of York's Bridge.
- New road drainage will be installed along the B4154 to the north of the Wyrley and Essington Canal. Road drainage from the B4154 on the north side of the Wyrley and Essington Canal currently flows into two drainage ditches on either side of the road. The drain on the east of the road flows directly towards the Wyrley and Essington Canal and the drain to the west discharges towards the Pelsall North Common Local Nature Reserve (LNR) and Site of Importance for Nature Conservation (SINC) and from there towards the Wyrley and Essington Canal.
- All road drainage on the north side of the Wyrley and Essington Canal will flow into a 60 m² reedbed settlement pond on the east side of the B4154 which will attenuate and treat the road run off. The settlement pond will discharge into the existing drain which flows

towards the Wyrley and Essington Canal. This is currently blocked in places and causes local flooding during rainfall. The drain will be re-profiled to remove the blockages. Only the minimum amount of re-profiling necessary to remove the blockages will be undertaken in order to reduce the risk of the re-mobilisation of silt or contaminants from road run-off which are currently being held in the ditch. The new reedbed settlement pond will attenuate and treat all of the surface water runoff from the new road alignment and once operational will improve the quality of the water currently discharging via the drain into the Wyrley and Essington Canal.

- The existing drain on the west side of the B4154 will only take drainage from the embankment slope. This will reduce flows from the road towards the Pelsall North Common LNR and SINC and the Wyrley and Essington Canal. The water quality will also improve as road run off will no longer enter this drain.
- South of the Wyrley and Essington Canal road drainage will flow into the existing foul water drain. A new french drain/ soakaway will be installed along the toe of the embankment to the east of the new road alignment and will drain into the Wyrley and Essington Canal. This will only accept embankment drainage. These works are shown on the General Arrangement plan (in Appendix B).

The works are scheduled to begin in November 2019 and would take approximately 18 months.

5. Stage 1 Screening Assessment

5.1. Stage 1 – Screening Results

Table 5-1 below outlines the justification of the Stage 1 – Screening results for the Cannock Extension Canal SAC.

Table 5-1 - Results of the Stage 1 Screening

Sensitivity of the Cannock Extension Canal SAC ¹⁰	Aspect of Scheme which May Cause an Effect	Will the Scheme Lead to Likely Significant Effects on the International Site without Mitigation?	Justification of Finding
Recreational pressure and disturbance Floating water plantain requires relatively undisturbed water. Excessive quantities or higher speed boat traffic may cause physical damage and destruction.	None	No	The Scheme will not result in any change to the levels of boat traffic using the Cannock Extension Canal and there will be no significant effects on the qualifying features of the SAC.
Changes in water quality leading to increased sediment load. Discharge of water carrying a high sediment load can affect water clarity	Construction Phase: Excavations for the bridge foundations adjacent to the Wyrley and Essington Canal could cause silt run off into the canal and may increase sediment loading within the Wyrley and Essington Canal and hence the connected Cannock Extension Canal SAC. Reprofilng of the existing drainage on the east side of the B4154 may mobilise silt and increase sediment loading within the Wyrley and Essington Canal and hence the connected Cannock Extension Canal SAC.	Yes	Silt run off during construction caused by excavations adjacent to the Wyrley and Essington Canal and reprofiling of the existing road drainage could cause a temporary increase in sediment loading without mitigation.
	Operational Phase Increased volume of road drainage from the B4154 to the north of York's Bridge discharges into the Wyrley and Essington Canal		Reprofiling of the drain on the east side of the B4154 may mobilise nutrient rich silt already within the drain.

¹⁰ Conservation Objectives and Sensitivities have been taken from Information on Natura 2000 Sites in the West Midlands prepared for Natural England by Treweek Environmental Consultants (Version 2, dated 14/07/09)

	forming a potential pollution pathway to the Cannock Extension Canal SAC		
Change in water quality leading to eutrophication Polluted runoff is likely to affect the quality of the water where floating water plantain is found. This increases biological oxygen demand, reducing the levels of dissolved oxygen in water and increasing mortality of aquatic flora and fauna.	Construction Phase: Reprofilng of the drain on the east side of the B4154 may mobilise nutrient rich silt already within the drain.	Yes	Reprofilng of the drain on the east side of the B4154 may mobilise nutrient rich silt already within the drain.
	Operation Phase: Increased volume of road drainage from the B4154 to the north of York's Bridge discharges into the Wyrley and Essington Canal forming a potential pollution pathway to the Cannock Extension Canal SAC		
Changes in water quality leading to toxic contamination Road drains discharge to the site and could carry pollutant in the event of a spillage from, for example, a road tanker	Construction Phase: Reprofilng of the drain on the east side of the B4154 may mobilise potentially contaminated silt already within the drain	Yes	Reprofilng of the drain on the east side of the B4154 may mobilise potentially contaminated silt already within the drain.
	Operation Phase: Road drainage from the B4154 to the north of York's Bridge discharges into the Wyrley and Essington Canal forming a potential pollution pathway to the Cannock Extension Canal SAC.		
Changes in air quality leading to eutrophication and acidification: Increased levels of nitrogen and perhaps sulphur will have detrimental effects on water quality (and an increased effect in combination with impacts of runoff, see above).	None	No	It is not anticipated that the improvement of York's Bridge will result in any changes to the levels of traffic using the B4154 and therefore there will be no change to air quality as a result of the Scheme. The Scheme will not lead to significant effects on the qualifying features of the Cannock Extension Canal SAC
Invasive species Introductions of species such as American pondweed may outcompete floating water-plantain.	Construction Phase: Construction works may spread invasive species through poor construction practice such as contaminated equipment or construction materials.	Yes	Construction works has the potential to introduce invasive species into the Cannock Extension Canal SAC via the Wyrley and Essington Canal.
	Operational Phase None	No	As the Operational Phase will not change the current usage of the existing road, no further impact is considered.

<p>Physical disturbance Restoration to provide an additional connection to the canal network could result in a flow through the canal which could have a damaging effect to the plant communities present.</p>	<p>None</p>	<p>No</p>	<p>No works will take place within the SAC and as such there will be no physical disturbance to the SAC. The Scheme will not lead to significant effects on the qualifying features of the Cannock Extension Canal SAC.</p>
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5.2. Other Projects and Plans

The consultation with the relevant authorities identified other projects or plans which have undergone the HRA process and which were considered to have the potential to cause likely significant effects (Stage 1 Screening) or adverse effects on integrity (Stage 2 – Appropriate Assessment) on the Cannock Extension Canal SAC.

Every reasonable effort has been made to obtain information on potentially relevant other plans and projects, and to find out further details of named projects where possible. Based on the consultation, Table 5.2 below provides information about plans and projects that could act in combination with the Scheme to create likely significant effects on the SAC.

Table 5.2 - Findings of in-combination assessment

Organisation	HRA Details	Result of HRAs	Potential for In Combination effects with the project
Black Country Local Authorities and Walsall Council	Walsall Council Site Allocation Document and Town Centre Area Action Plan Habitats Regulations Assessment. October 2016	The Stage 1 - Screening for likely significant effects of this Plan determined that there is potential for visitor impacts as a result of housing (& possibly tourism) development in the surrounding area which may have a significant impact upon the Cannock Extension Canal SAC. There is no significant effect on water quality upon the SAC.	None: The potential effect of the Black Country and Walsall Council Site Allocation Document and Town Centre Area Action Plan is an increase in recreational pressure upon the Cannock Extension Canal SAC. However, water quality was not identified as a potential impact upon the SAC. Therefore, there is no potential for an in-combination This screening does not need to go to Stage 2.
North Warwickshire Borough Council	Habitat Regulations Assessment Regulation 19 Local Plan 2017	The stage 1 - screening assessment concluded that the Plan (Recreational pressure and disturbance, loss or damage of habitat and pollution) would have no likely significant effects upon the Cannock Chase SAC. Impacts on the Cannock Extension Canal SAC in relation to air pollution cannot be screened out from further assessment.	None: The potential effect of the North Warwickshire Borough Council Local Plan is an increase in recreational pressure, habitat loss/ damage and increase in air pollution upon the Cannock Chase SAC and Cannock Extension Canal SAC. However, water quality was not identified as a potential effect and accordingly, there is no potential for an in-combination effect, this screening does not need to go to Stage 2.
Cannock Chase District Council	Habitats Regulations Assessment – Local plan Addendum	The Stage 1 - Screening determined that none of the policies in the Plan (Recreational pressure and disturbance) as it currently stands will	None: The potential effect of the Cannock Chase District Council Local Plan Addendum is an increase in recreational pressure upon the Cannock Extension Canal SAC. However, water quality was not identified as a

		lead to likely significant effects on the Cannock Extension Canal SAC.	potential effect and accordingly, there is no potential for an in-combination effect, this screening does not need to go to Stage 2.
South Staffordshire District Council	South Staffordshire Allocation Sites for Housing, Employment and Gypsy, Traveller and travelling Showpeople HRA: Stage 1 and Stage 2. August 2018	The Stage 1 - Screening determined that none of the policies in the Plan (Recreational pressure and disturbance) as it currently stands will lead to likely significant effects on the Cannock Extension Canal SAC.	None: The potential effect of the South Staffordshire Allocation Sites for Housing, Employment and Gypsy, Traveller and travelling Showpeople is an increase in recreational, housing/employment pressures upon the Cannock Extension Canal SAC. However, water quality was not identified as a potential effect and accordingly, there is no potential for an in-combination effect, this screening does not need to go to Stage 2.
Natural England	West Midlands Interchange. Habitats Regulations Statement – no Significant Effects Report. July 2018	The Stage 1 - Screening determined that none of the policies in the Plan (Recreational pressure and pollution (noise and air-quality) as it currently stands will lead to likely significant effects on the Cannock Extension Canal SAC.	None: The potential effect of the West Midlands Interchange is an increase in recreational pressure, noise and air quality upon the Cannock Extension Canal SAC. However, water quality was not identified as a potential effect and accordingly, there is no potential for an in-combination effect, this screening does not need to go to Stage 2.
Natural England	Cannock Chase District Council planning application: CH.17.425	No HRA was produced for this Scheme.	None: No HRA was undertaken for this project, additionally, the proposed works within this planning application will not effect the Cannock Extension Canal SAC There is no potential for in combination effect and therefore does not need to go to Stage 2.
Natural England	Cannock Chase District Council planning application: CH/16/267	No HRA was produced for this Scheme.	None: No HRA was undertaken for this project, additionally, the proposed works within this planning application will not effect the water quality of the Cannock Extension Canal SAC There is no potential for in combination effect and does not need to go to Stage 2.

Natural England	Cannock Chase District Council planning application: CH/13/0015	No HRA was produced for this Scheme.	None: No HRA was undertaken for this project, additionally, the proposed works within this planning application will not effect the water quality of the Cannock Extension Canal SAC There is no potential for in combination effect and This does not need to go to Stage 2.
Natural England	Kier - 'No significant effects report' - 914576 Brownhills cycling scheme	No HRA screening has been found for this Scheme.	None: The HRA for this project could not be found to feed into this assessment. Therefore, due to the type of works, distance between the project and Cannock Extension Canal SAC and limited hydraulic connection. An in-combination effect upon the water quality of the Cannock Extension Canal SAC is not predicted to occur. This screening does not need to go to Stage 2.
Natural England	Kier - AIES screening consultation Resurfacing of A5	No HRA screening has been found for this Scheme.	None: The HRA for this project could not be found to feed into this assessment. Therefore, due to the type of works, distance between the project and Cannock Extension Canal SAC and limited hydraulic connection. An in-combination effect upon the water quality of the Cannock Extension Canal SAC is not predicted to occur. This screening does not need to go to Stage 2.
Natural England	Amey – AIES Screening Matrix - A5 carriageway re-surfacing	No HRA screening has been found for this Scheme.	None: The HRA for this project could not be found to feed into this assessment. Therefore, due to the type of works, distance between the project and Cannock Extension Canal SAC and limited hydraulic connection. An in-combination effect upon the water quality of the Cannock Extension Canal SAC is not predicted to occur. This screening does not need to go to Stage 2.
Staffordshire County Council	No response received.		

Canal and River Trust	No response received.
Environment Agency	The Environment Agency are not aware of any relevant plans or projects that have undergone a Habitats Regulation Assessment screening exercise.
Severn Trent Water	No response received.

5.3. Results of the Stage 1 – Screening Assessment

Following the Stage 1 – Screening, it is considered that the Scheme as it currently stands on its own, requires mitigation to reduce or remove any potential impact upon the Cannock Extension Canal SAC (see Table 5-1 above), consequently this HRA is to be taken through to Stage 2 Appropriate Assessment.

In combination effects have been considered as part of this assessment (see Table 5-2 above) and has concluded that the in combination effects of the HRA does not require to undergo a Stage 2 Appropriate Assessment.

6. Stage 2 – Appropriate Assessment

6.1. Introduction

Following completion of the HRA Stage 1 Screening assessment it was concluded that proposed Scheme may result in a likely significant effects on the Cannock Extension Canal SAC via the following:

- **Changes in water quality leading to increased sediment load.** Discharge of water carrying a high sediment load can affect water clarity
- **Change in water quality leading to eutrophication** Polluted runoff is likely to affect the quality of the water where floating water plantain is found. This increases biological oxygen demand, reducing the levels of dissolved oxygen in water and increasing mortality of aquatic flora and fauna.
- **Changes in water quality leading to toxic contamination** Road drains discharge to the site and could carry pollutant in the event of a spillage from, for example, a road tanker
- **Invasive species** Introductions of species such as American pondweed may outcompete floating water-plantain.

As such these potential effects would require a Stage 2 Appropriate Assessment.

6.2. Stage 2 Appropriate Assessment of the Plan Alone

6.2.1. Changes in water quality leading to increased sediment load

The proposed construction and operation phases of the scheme, without mitigation would result in silt run off during construction caused by excavations adjacent to the Wyrley and Essington Canal and reprofiling of the existing road drainage could cause a temporary increase in sediment loading without mitigation.

The minimum amount of reprofiling necessary to unblock the existing road drainage will be undertaken to reduce the volume of silt which may be disturbed. The reed bed where the existing drainage joins the Wyrley and Essington Canal will also be left in situ and not be affected during construction, this should help to trap and attenuate any silt run off from the drain during construction.

A semi-porous geo-textile membrane will be temporarily installed within the existing drainage downstream of any excavation to trap any silt run off stirred up during the existing drainage reprofiling. The new drainage system will be developed prior to construction of the bridge in order to capture and treat any additional run off during the works.

Construction effects will also be minimised by following construction best practice and adherence to the Pollution Prevention Guidelines (PPGs)/ Guidance on Pollution Prevention (GPPs)¹¹ and the Construction Industry Research and Information Association (CIRIA) C715 Environmental good practice on site handbook¹².

Due to the distance between York's Bridge and the Cannock Extension Canal SAC and the lack of discernible flow between the two it is considered unlikely that suspended sediment would reach the Cannock Extension Canal SAC in levels that would have any effect upon the SAC.

6.2.2. Change in water quality leading to eutrophication and Changes in water quality leading to toxic contamination

The reprofiling of the drain on the east side of the B4154 may mobilise nutrient rich silt already within the drain.

The minimum amount of reprofiling necessary to unblock the drain will be undertaken to reduce the volume of silt which may be disturbed. The reed bed where the drain joins the Wyrley and Essington Canal will also be left in situ and not be affected during construction. This should help to trap and attenuate any silt run off from the drain during construction. There is also potential for a small amount of run-off of soil from the construction works at York's Bridge on the Wyrley and Essington Canal spreading along the canal to the Cannock Extension Canal. This run-off may have the potential to raise nutrient levels and lead to eutrophication or introduce toxic contaminants to the canals.

¹¹ Pollution Prevention Guidelines (PPGs) are out of date and a review process is currently underway to replace them with Guidance for Pollution Prevention (GPPs). These documents are available at <http://www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-ppgs-and-replacement-series/guidance-for-pollution-prevention-gpps-full-list/>. GPPs provide environmental good practice guidance for the whole UK, and environmental regulatory guidance directly to Northern Ireland, Scotland and Wales only. For businesses in England, regulatory guidance is available from GOV.UK instead.

¹² Environmental Good Practice on Site Guide, CIRIA, Jan 2015, Edition 4.

A semi-porous geo-textile membrane will be temporarily installed within the drain downstream of any excavation to trap any silt run off stirred up during the drain reprofiling. The new drainage system will be developed prior to construction of the bridge in order to capture and treat any additional run off during the works. Monitoring of the water quality within the canal will also be undertaken on a weekly basis throughout the construction period.

Construction effects will also be minimised by following construction best practice and adherence to the Pollution Prevention Guidelines (PPGs)/ Guidance on Pollution Prevention (GPPs) and the Construction Industry Research and Information Association (CIRIA) C715 Environmental good practice on site handbook .

Due to the distance between York's Bridge and the Cannock Extension Canal SAC and the lack of discernible flow between the two it is considered unlikely that run off and nutrients and toxins would reach the Cannock Extension Canal SAC in levels that would have any effect upon the SAC.

Road drainage from the B4154 on the north side of the Wyrley and Essington Canal currently flows into two drainage ditches on either side of the road. The drain to the east of the road flows directly towards the Wyrley and Essington Canal and the drain to the west discharges towards the Pelsall North Common LNR and SINC and from there towards the Wyrley and Essington Canal. As such the Wyrley and Essington Canal, and therefore the connecting Cannock Extension Canal SAC, currently receives untreated road run off although as noted in the Surface Water Quality assessment¹³ the existing wetland may be limiting the movement of run off within the drains by intercepting the run off flow and allowing for the retention and settlement of pollutants. The new road alignment will increase the area of impermeable ground by approximately 750 m² which will increase the volume of road run off. The provision of a reed bed settlement pond to the east of the B4154 will attenuate and treat the entire road run off from the north side of York's Bridge. The existing drain to the west of the B4154 will no longer take road drainage and will only accept drainage from the embankment to the west of the new road alignment. This will improve water quality flowing from this drain towards the Pelsall Common Local Nature Reserve and SINC and onwards towards the Cannock Extension Canal SAC.

6.2.3. Introduction of Invasive species

Due to the possibility that construction works may introduce invasive species into the Wyrley and Essington Canal, which through its hydrological connection risks the Cannock Extension Canal SAC, the works will follow construction best practice and an invasive species Precautionary Method of Working (PMW). This will minimise the possibility of introducing invasive species to the construction site and/ or from the construction site to the Cannock Extension Canal SAC. The potential for the spread of invasive species from the construction site to the SAC is further reduced by the distance between the construction site and the Cannock Extension Canal SAC.

6.3. Stage 2 – Appropriate Assessment: Alone Conclusion

Through the application of suitable mitigation measures detailed above, it is not considered, that at this stage, that the Scheme will have an adverse effect on the integrity of the Cannock Extension Canal SAC.

6.4. Stage 2 – Appropriate Assessment: In-combination Conclusion

The Stage 1 Screening found there were no potential in-combination effects with the other projects and plans for which HRA has been undertaken. Therefore, in-combination effects were not taken forward for Stage 2 Appropriate Assessment.

¹³ Surface Water Quality Assessment – Technical Note. Atkins, December 2012

7. Summary Conclusion

York's Bridge which carries the B4154 over the Wyrley and Essington Canal is a narrow humpback bridge of a traditional brick design. The bridge only accommodates one vehicle at a time causing a pinch point and an accident 'black spot'. A new single span concrete bridge and road alignment will be constructed immediately to the east of the existing bridge. The existing bridge will be retained as an access route to the Pelsall Common Local Nature Reserve (LNR). Due to minor changes in the Scheme, the 2013 HRA assessment, required updating to include the mitigation site (Area B).

All International sites within 2 km of York's Bridge were identified. A search distance of 2 km was used because the Scheme Application is relatively small in scale and comprised predominantly of hardstanding and dense scrub and therefore impacts are only likely to occur through the Schemes proximity to the Wyrley and Essington Canal, which has a hydrological connection to the Cannock Extension Canal SAC.

The only international site within 2 km of York's Bridge is the Cannock Extension Canal SAC which is located approximately 300 m to the west of York's Bridge.

The SAC is designated as it supports an Annex II species: floating water plantain. It is also described as a botanically diverse canal supporting a matrix of aquatic and emergent plant species.

Following the Stage 1 – Screening, it is considered that the Scheme as it currently stands on its own, requires mitigation to reduce or remove any potential impact upon the Cannock Extension Canal SAC, this HRA is to be taken through to Stage 2 Appropriate Assessment. In addition, the Stage 1 Screening found there were no potential in-combination effects with the other projects and plans for which HRA has been undertaken. Therefore, in-combination effects were not taken forward for Stage 2 Appropriate Assessment.

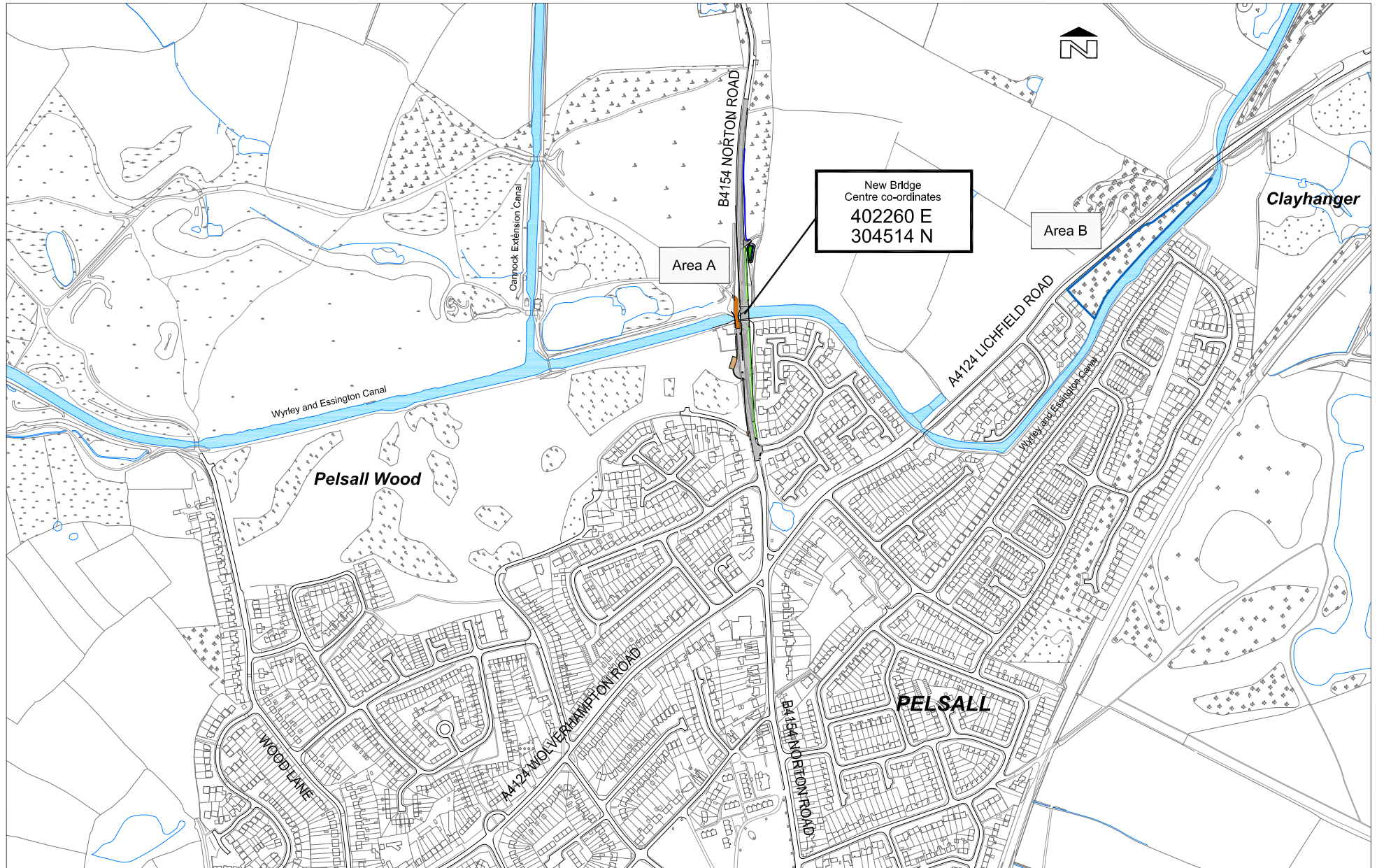
Through the use of the Environment Agency pollution prevention guidelines, biosecurity and the proposed attenuation pond, reed bed and new drainage design as part of the Scheme, the potential increase in siltation, introduction of pollutants and toxins will be greatly reduced.

Following the Stage 2 – Appropriate Assessment, through the application of suitable mitigation measures, it is not considered, that at this stage, the Scheme will have an adverse effect on the integrity of the Cannock Extension Canal SAC.

Appendices



Appendix A. General Location Plan. Drawing Reference MP/YB/00-09/A



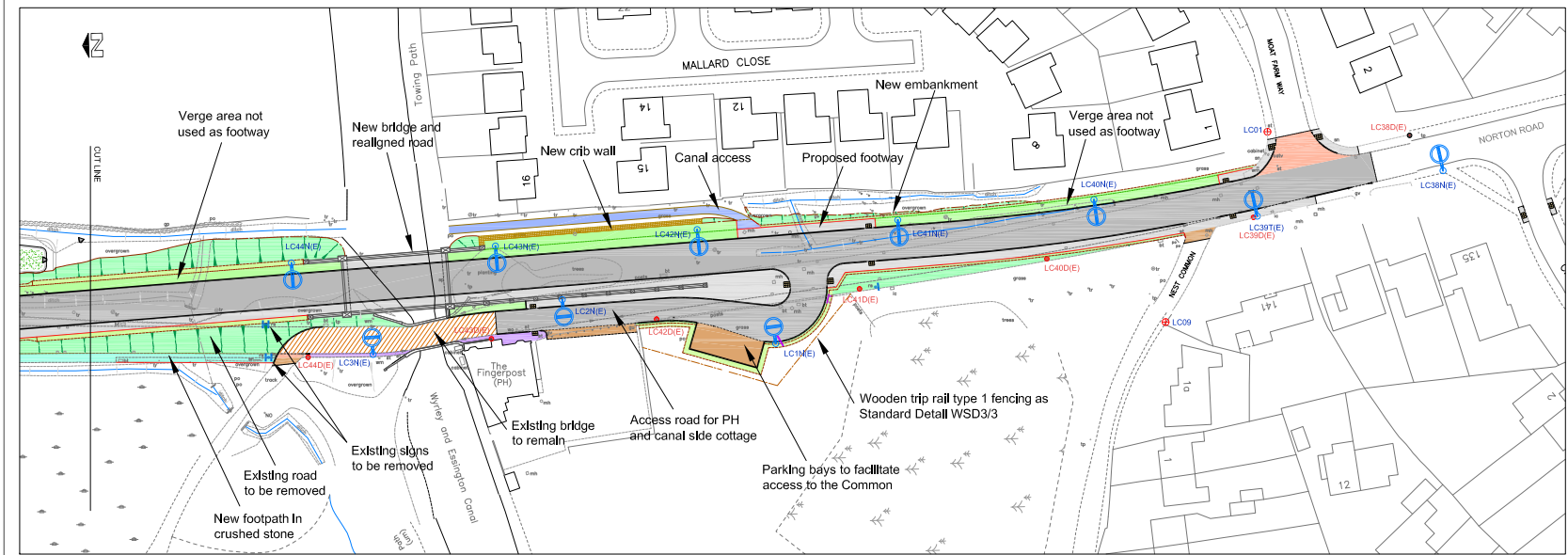
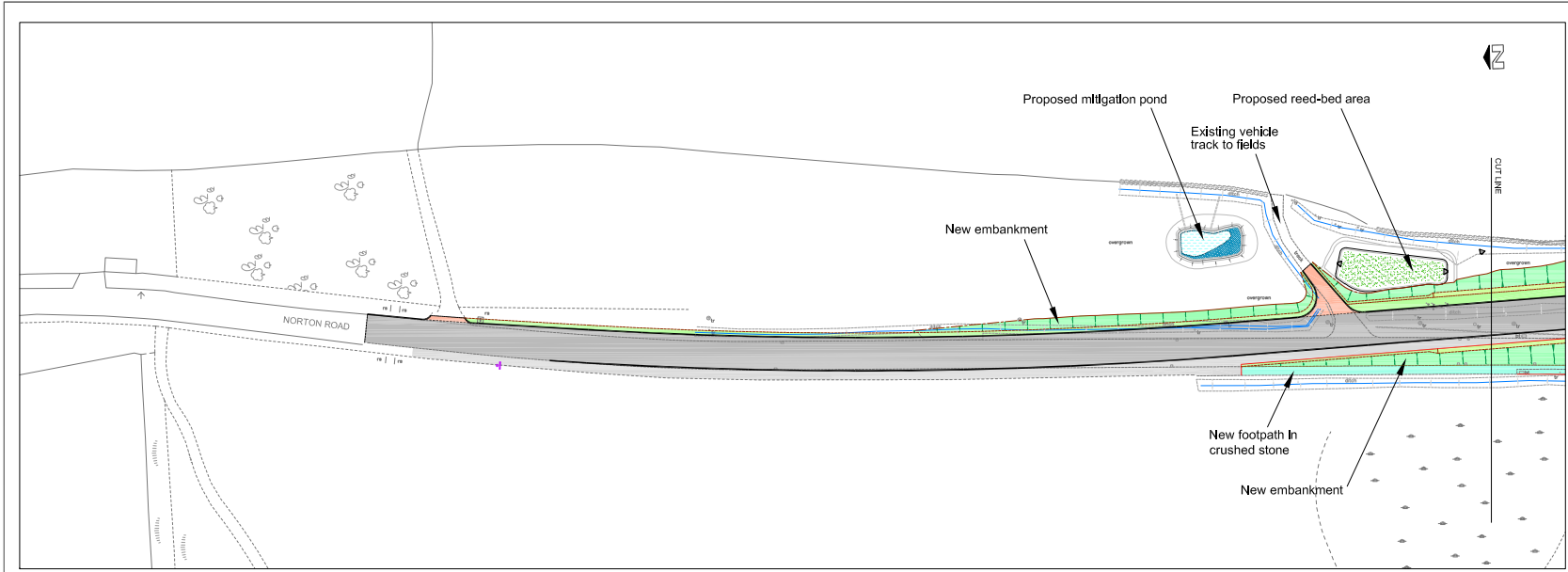
No	Revisions	By	Ch'd	Date	Purpose of Issue	Rev.	Auth	Date
A	Area B added to plan	GP	DS	11/18				

YORK'S BRIDGE, NORTON ROAD, PELSALL
GENERAL LOCATION PLAN

Drawn: GKP
 Checked: PS
 Date: OCT 2013
 Scale: 1: 5000
 Original drawing size A3
 If this drawing is at any other size, then scale shown does not apply.


Walsall Council
 ENGINEERING DESIGN & CONSTRUCTION SERVICES
 MAJOR PROJECTS & MINOR IMPROVEMENTS
 Drawing No. **MP/YB/00-09**

Appendix B. General Arrangement Drawing Reference MP/YB/00-01



- NOTES**
1. THE CONTRACTOR IS TO DETERMINE THE LOCATION AND STATUS OF ANY STATUTORY UTILITY APPARATUS PRIOR TO THE COMMENCEMENT OF ANY WORKS.
 2. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CONTRACT SPECIFICATION AND THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS INCLUDING REVISIONS, AMENDMENTS AND ANY CLIENT SPECIFIC ADDITIONAL OR SUBSTITUTE CLAUSES.
 3. ALL SETTING OUT SHALL BE AGREED ON SITE WITH WALSALL MBC ENGINEER PRIOR TO COMMENCEMENT OF THE WORKS.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER DRAWINGS IN THE DRAWING SERIES.
 5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
 6. ALL CO-ORDINATES AND LEVELS SHOWN ARE BASED ON A LOCAL GRID.

- KEY**
- Proposed Carriageway Construction
 - Proposed Footway Construction
 - Proposed Parking bay Construction
 - Proposed Embankment Construction
 - Proposed Verge
 - Proposed Tactile Paving
 - Proposed Canal Access footpath
 - Proposed crushed stone footpath
 - Existing Carriageway to be resurfaced
 - Existing Carriageway to remain
 - Existing Footway to remain
 - Proposed kerb type HB2
 - Proposed kerb type BNS
 - Proposed kerb type DL1 / DR1
 - Proposed PC edging
 - Proposed 6 m Steel column
 - Proposed 10 m Steel column
 - Existing 6 m Steel column
 - Existing 10 m Steel column
 - Existing double lit sign to be relocated
 - Existing lit sign and post to be removed
 - Proposed new sign and post

No	Revisions	By	Ch'd	Date	Purpose of Issue	Rev	Auth	Date
0	Issued for tender	GKP	JR	12/16				

**YORK'S BRIDGE, NORTON ROAD, PELSALL
GENERAL ARRANGEMENT**

Drawn GKP
 Checked: PS
 Date: NOV 2012
 Scale: 1:500
 Original drawing size A1
 If this drawing is at any other size, then scale shown does not apply.

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Walsall Council
 ENGINEERING & TRANSPORTATION SERVICES
 MAJOR PROJECTS & MINOR IMPROVEMENTS

Drawing No. **MP/YB/00-01** Rev **0**




















Appendix C. Phase 1 Habitat Survey



SNC • LAVALIN

ATKINS

Member of the SNC-Lavalin Group

-  250m redline buffer
-  Redline boundary
-  Tree
-  Target notes
-  Running water
-  Hardstanding
-  J1.1 - Cultivated/disturbed land - arable
-  Buildings
-  B2.2 - Neutral grassland - semi-improved
-  B5 - Marsh/marshy grassland
-  SI B6 - Poor semi-improved grassland
-  Broadleaved woodland
-  Broadleaved plantation
-  Dense scrub
-  A2.2 - Scrub - scattered
-  A3.1 - Broadleaved woodland - scattered trees
-  Standing water
-  Buildings
-  No Access Available

Client: Walsall Council

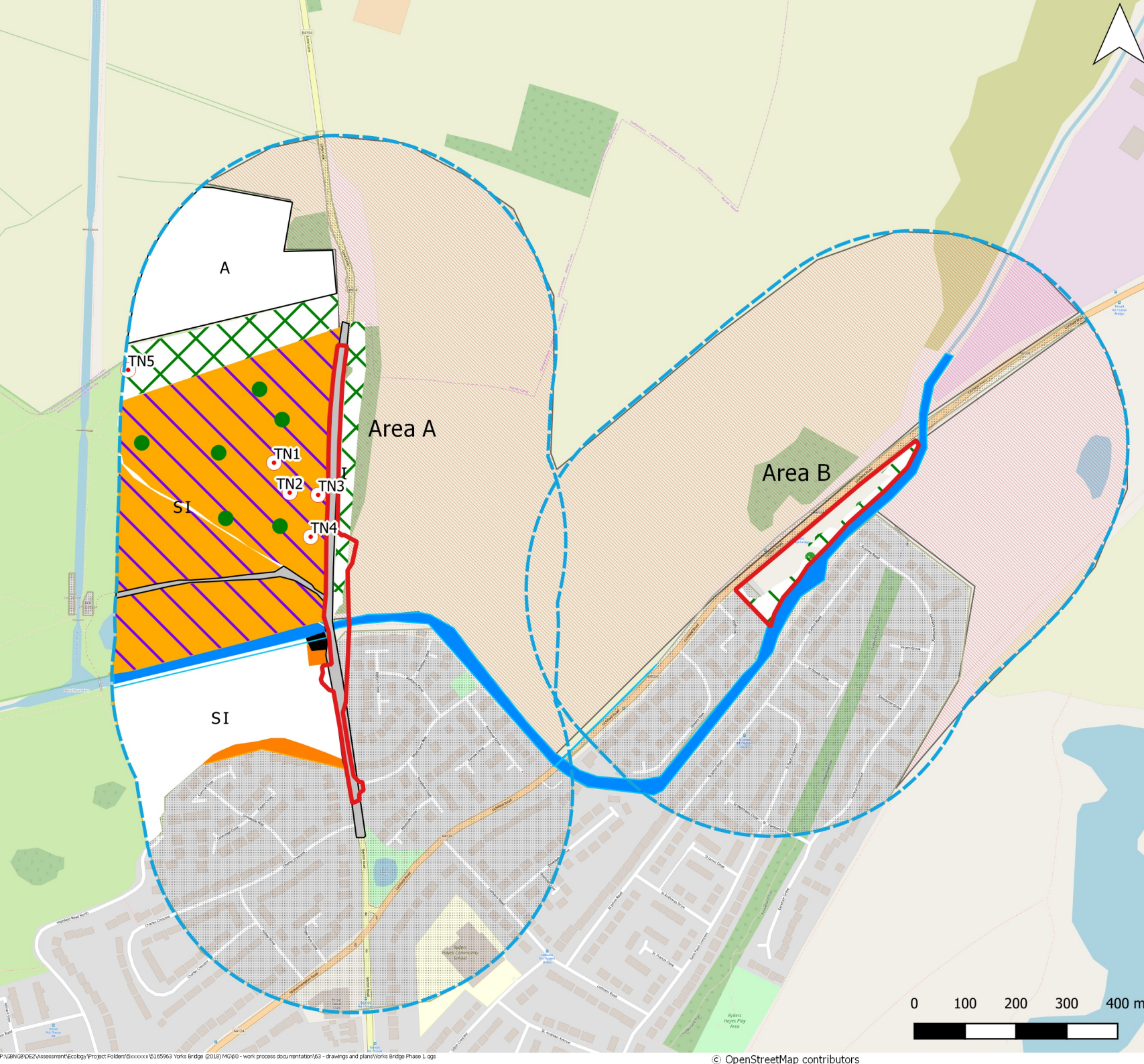
Project: Yorks Bridge

Title: Phase 1 Habitat Survey Plan

Drawing number: 5165963_PH1_01

Original scale	1:10000
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Drawn	Checked	Authorised
SS	MCG	CW
5/11/18	5/11/18	15/11/18



SNC Lavalin

Derwent House, RTC Business Park, London Road, Derby, DE24 8UP