

1 February 2023

Infill schemes carried out under 'Class Q'

Schedule 2 Part 19 Class Q of the Town & Country Planning (General Permitted Development) (England) Order 2015 - known hereafter as 'Class Q' - allows for development on Crown land in order to prevent an emergency or reduce/control/mitigate the impacts of an emergency. For the purposes of these rights, "emergency" is fundamentally defined as being "an event or situation which threatens serious damage to...human welfare" or "the environment".

In the context of the Historical Railways Estate (HRE), 'Class Q' would, for example, allow National Highways (NH) to undertake immediate works if a bridge was found to be on the brink of failure/collapse, without the need for prior engagement with the local planning authority (LPA) which would be unsustainable in a time-critical situation.

There is no provision within Class Q for the LPA to authorise or otherwise agree to any works; it is for NH to determine whether or not the circumstances meet the conditions for Class Q. NH's only obligation is to *notify* the LPA of the action it has taken as soon as practicable *after* starting the works.

By default, NH is obliged to remove any buildings, plant or structures etc and restore the land to its original state *within 12 months* of the works starting. If NH wishes to retain the works beyond this maximum permitted period, written permission is required from the LPA.

Rudgate bridge

At Newton Kyme near Tadcaster, North Yorkshire, the masonry arch bridge carrying Rudgate over the former Church Fenton-Harrogate railway is thought to have been built in 1846.



1957 view of Rudgate bridge (The Transport Treasury Ltd (MM292)) and the same scene in 2022.

In January 2018, Jacobs carried out a BD21 assessment on behalf of NH/HRE, calculating that the structure had a live load capacity of 32 tonnes, using factors described as "conservative".

It is worth nothing that there is only 0.5t difference between the allowable axle loads for double-axle bogies for 32t and 40/44t capacities, although the latter also allows for three-axle bogies (8t per axle) on vehicles with a longer wheel base.

Allowable axle load per axle (tonnes)			Max gross	Weight restriction
Single axle	Double axle bogie	Triple axle bogie	(tonnes)	(tonnes)
11.5	10	8[1]	40/44	N/A
11.5	9.5	-	32	33
11.5	9.5	-	26	26
11.5 9 7	- -	- -	18 12.5 10	18 13 10
5.5 2	-	-	7.5 3	7.5 3
Note 1: An assessment for the 24 tonne 3 axle bogie (8 tonnes axle) is only necessary for arches where "no axle lift-off" conditions prevail.				

The assessment was undertaken using the modified MEXE method which is specifically prohibited under the replacement standard CS454 in relation to masonry arch bridges with a skew of more than 35 degrees. Rudgate bridge has a skew of 50 degrees.

The bridge would likely have passed an assessment under standard BE4.

Rudgate is a narrow lane with overhanging trees and a bend at the southern end of the bridge. The area is rural and traffic levels on Rudgate are light, although wagons and agricultural machinery do use local roads to travel to/from nearby farms and a quarry.

At the junction with the A659, 100m from the bridge, a sign indicates that Rudgate is prohibited to motor vehicles of "over 3 tons unladen". There is some doubt as to the legal status of this restriction; however, the sign is the means of communicating it, upon which the driver acts. It is unlikely that a driver would choose to disregard the sign on the basis that, in their view, the restriction was non-compliant or unenforceable.



Google Streetview photos showing the entrance to Rudgate and the bend at the south end of the bridge.

Any vehicle of 32 tonnes or less would be within the assessed capacity of Rudgate bridge. Use of the lane by vehicles *exceeding* 32 tonnes is unlikely due to the physical constraints. It must be recognised that *likelihood* forms an integral part of proportionate risk assessment.

Contrary to its obligations under the company's Protocol Agreement with the Department for Transport, NH did not inspect Rudgate bridge in either 2019 or 2020.

An inspection *was* carried out in 2018 and, in relation to existing defects, states "*Possible* further deterioration to the spalling brickwork areas, *possible* further deterioration to the eroded stonework areas also the vegetation is progressively getting worse. P2 to P4."

These defects are typical of those often recorded on 19th Century masonry arch bridges and are likely to be a function of water ingress, freeze/thaw or weathering, rather than overloading.

P2 indicates that action is required within five years; P4 indicates that no action is required.

The only close-up photograph showing the arch barrel is so poor that individual bricks cannot be discerned. It is not possible to see any spalling to the brickwork.

The examiner's only recommendation was to spend £1K repairing or renewing approach fencing to the south-east. However, on the appended risk matrix, National Highways' engineer states "infilling preferable to repairs" and, under Action/Notes, states that "Case to be made for infilling". A similar comment was appended to the 2017 inspection report.

On 23 April 2020, Jacobs informed Selby District Council (SDC) of "planned" infill works to "prevent further deterioration [of the bridge] and remove the risk of future collapse". Neither the District nor Parish councils expressed any objection to the proposal.

On 6 October 2020, Jacobs wrote again to SDC, informing them that "A BD21 assessment undertaken in 2018 found [Rudgate bridge] suitable only for 32 tonnes GVW." Although no defects were specified, the letter states that "the structure represents an ongoing and increasing risk to public safety" and would be infilled under Class Q. "Specifically, and for the avoidance of any ambiguity, the works are being undertaken *in order to prevent an emergency arising*", it states.

By applying Class Q, a specific statutory framework was established for the infilling scheme under which it had not previously been considered by the council.

Infilling works began on 8 March 2021, five months later. The work cost £133K.

Congham bridge

At Congham near King's Lynn, Norfolk, the original timber bridge carrying St Andrew's Lane over the King's Lynn-Fakenham railway is thought to have been built in 1878. However it was replaced with an innovative modular reinforced-concrete structure in 1926.

In 1916, pioneering engineer William Marriott brought together his previous work on block casting and concrete reinforcement to create a system of bridge building for the Midland & Great Northern Joint Railway.



Early view of the 1926 Congham bridge (M&GN Trust) and the same scene in 2022.

By 1926, six bridges had been partly or completely rebuilt using the Marriott system, with Congham being the most elaborate and extensive, with its curved wingwalls. The superstructure comprised concrete-encased girders and precast jack arches, whilst the substructure was built in concrete brick and dressed concrete blocks.

Marriott's use of concrete products pre-dated similar developments by the Southern, Great Western and London Midland Scottish railways. As such, Congham bridge was an early example of its kind.

Prior to 2021, only three of the six bridges remained.

St Andrew's Lane is narrow, with overhanging trees and a bend to the west side of the bridge. The area is rural and traffic levels are light. During an hour-long visit to the bridge on the afternoon of Friday 25 November 2022, two vehicles were observed passing over it.



Google Streetview photos looking west and east off the bridge.

In December 2003, Norfolk County Council carried out a BD21 assessment on behalf of the British Rail Property Board, calculating that the structure had a live load capacity of only 7.5 tonnes due to the edge girders having to carry the weight of the parapets. The five girders supporting the highway and part of the verge were assessed as having a capacity of 40 tonnes, as were the substructure and foundations.

In 2019, it is understood that Jacobs carried out a new assessment on behalf of NH/HRE. Unlike the 2003 assessment, this document has not been published on National Highways' website. The HRE Group is currently unable to obtain the assessment or relevant inspection records due to National Highways' refusal to accept any requests for information submitted by our Group under the Freedom of Information Act. This matter is the subject of an appeal to the Information Commissioner.

The 2003 assessment describes Congham bridge as being in "generally fair condition". In media statements, National Highways has recently claimed that the bridge was in "very poor condition" when, as the Highways Agency, it took over responsibility for managing the Historical Railways Estate in 2013.

In letters to both Norfolk County Council (NCC) and the Borough Council of King's Lynn & West Norfolk (BCWN) on 14 October 2019, Jacobs explained that "the edge girders are restricted to a 7.5 [sic] Gross Vehicle Weight (GVW)." The focus on the *edge* girders might suggest that, as in 2003, the five *inner* girders - supporting the highway - still had a capacity of 40 tonnes.

The letter went on to state that "the eastern abutment is exhibiting indications of movement, resulting in numerous cracks appearing beneath the edge girders and along the abutment faces. The faces of the longitudinal girders are also showing defects with some beam exposure in some instances. The wingwall coping courses and the south west newel are demonstrating minor failure and collapse, which could be caused by the dense vegetation present on all embankments."

As a result of the Fol issue and consequential lack of documentary evidence, we cannot currently establish whether this summary accurately reflects the observations of examiners during annual inspections. However, the defects described are typical of those recorded at many legacy structures due to a lack of maintenance and vegetation control.

Jacobs informed the councils that "To prevent the further decline of the structure and to maintain future vehicular movements along the carriageway, the proposal is that the bridge is subject to structural infill." It went on to state that "As the structure represents an ongoing and increasing risk to public safety...we propose to (undertake repairs/demolish/infill) as 'permitted development' in line with the 'Town & Country Planning (General Permitted Development) (England) Order 2015, Schedule 2, Part 19, Class Q."

Neither NCC nor BCWN expressed any objection to the work. It should be noted that Jacobs' letter of 14 October 2019 did not make clear any intention for the infill to be permanent and did not seek permission for it to be retained beyond the maximum period permitted under Class Q.

Infilling works began on 22 March 2021, 17 months later. The work cost £127K.

There are now only two remaining Marriott reinforced concrete bridges, both forming part of the Historical Railways Estate.

Timeline of subsequent events

During March/April 2022, The HRE Group and NH/HRE engaged in an email exchange regarding four Class Q infill schemes - including Rudgate and Congham - and the need for written permission if the intention was to retain them beyond the maximum permitted period.

On 13 April 2022, NH/HRE indicated that once the 'pause' on its Major Works programme was lifted, it would be "contacting the appropriate Local Planning Authorities of the [four] structures to confirm written consent now that the works have been completed."

On 2 November 2022, a National Highways spokesperson told *New Civil Engineer* magazine that they believed there was "no requirement for a separate consent for retention".

In late 2022/early 2023, Selby District Council and the Borough Council of King's Lynn & West Norfolk asked NH/HRE *to submit retrospective planning applications* for the infilling of Rudgate and Congham bridges due to breaches of Class Q rights, resulting in the schemes now being unauthorised.

Key questions

It is a matter of concern to The HRE Group that a public body should seek to exploit rights intended for immediate, temporary works in emergency situations to carry out planned, permanent works for routine asset management purposes, and then fail to comply with the statutory obligations therein. Such action undermines trust and confidence in public bodies.

A failed capacity assessment does not, in itself, constitute an emergency.

With respect to the schemes covered by this paper, several questions are raised:

- What was the nature of the *emergencies* at Rudgate and Congham bridges?
- Why did National Highways not seek written permission to retain the infills beyond the maximum permitted period stipulated in Class Q?
- What action does National Highways propose to take to rectify its breaches of Class Q?
- Has National Highways asked either/both of the LPAs to provide written permission for retention of the infill *without* the need to submit planning applications?

Appendices Class Q Jacobs' letter of 6 October 2020 about Rudgate bridge Jacobs' letter of 14 October 2019 about Congham bridge Class Q – development by the Crown relating to an emergency

Permitted development

Q. Development by or on behalf of the Crown on Crown land for the purposes of-

(a) preventing an emergency;

(b) reducing, controlling or mitigating the effects of an emergency; or

(c) taking other action in connection with an emergency.

Conditions

Q.1 Development is permitted by Class Q subject to the following conditions-

(a)the developer must, as soon as practicable after commencing development, notify the local planning authority of that development; and

[F386(b)on or before the expiry of the period of 12 months beginning with the date on which the development began—

(i)any use of that land for a purpose of Class Q ceases and any buildings, plant, machinery, structures and erections permitted by Class Q is removed; and

(ii) the land is restored to its condition before the development took place, or to such other state as may be agreed in writing between the local planning authority and the developer,

unless permission for the development has been granted by virtue of any provision of this Schedule or on an application under Part 3 of the Act.

F386Sch. 2 Pt. 19 Class Q para. Q.1(b) substituted (3.12.2020) by The Town and Country Planning (General Permitted Development) (England) (Amendment) Regulations 2020 (S.I. 2020/1243), regs. 1(2), 9

Interpretation of Class Q

Q.2—(1) For the purposes of Class Q, "emergency" means an event or situation which threatens serious damage to—

(a)human welfare in a place in the United Kingdom;

(b)the environment of a place in the United Kingdom; or

(c)the security of the United Kingdom.

(2) For the purposes of sub-paragraph (1)(a), an event or situation threatens damage to human welfare only if it involves, causes or may cause—

(a)loss of human life;

(b)human illness or injury;

(c)homelessness;

(d)damage to property;

(e)disruption of a supply of money, food, water, energy or fuel;

(f)disruption of a system of communication;

(g)disruption of facilities for transport; or

(h)disruption of services relating to health.

(3) For the purposes of sub-paragraph (1)(b), an event or situation threatens damage to the environment only if it involves, causes or may cause—

(a)contamination of land, water or air with biological, chemical or radioactive matter; or

(b)disruption or destruction of plant life or animal life.

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6th October 2020

Selby District Council Civic Centre Doncaster Road Selby North Yorkshire YO8 9FT

Project Name: HRE Works Framework Project Number: B28280JA

Subject: Disused Railway Bridge CFH1/12 "Rudgate Road" – Infilling works

Dear Sir/Madam

I am writing to you on behalf of our Client, Highways England, Historical Railways Estate (HRE), formerly BRB (Residuary) Ltd to inform you of planned support works to the structure CFH1/12 via structural infill. HRE is responsible for the Historical Railways Estate following the abolishment of BRB (Residuary) Ltd. This responsibility is undertaken on behalf of the Department for Transport, who own the structure. Therefore, the structure is crown property.

CFH1/12, Rudgate Road, is a highly skewed, single span brick arch bridge constructed circa 1847. The former cutting to the west has been infilled up to the structure. A BD21 assessment undertaken in 2018 found the structure suitable only for 32 tonnes GVW. It carries an unclassified road over the trackbed of the former Church Fenton to Harrogate railway line. The nearest postcode is LS24 9LY. It is located at approximate OS grid reference SE 455 446. A location plan is enclosed for your information.

As the structure represents an ongoing and increasing risk to public safety and is owned by the Secretary of State for Transport, so is deemed 'Crown Property', Highways England HRE propose to undertake the support works as permitted development in line with the 'Town & Country Planning (General Permitted Development) (England) Order 2015, Schedule 2, Part 19 Class Q'. Specifically, and for the avoidance of any ambiguity, the works are being undertaken in order to prevent an emergency arising.

Can you please confirm receipt of this letter by return email: <u>hreprioritystructu@jacobs.com</u>. Please do not hesitate to contact me should you require any further information.

Yours faithfully



Civil Engineer

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3rd Floor 20 George Hudson Street York, UK YO1 6WR

Our Ref: 0450893-DA-EC-PMY2/76

Monday, 14 October 2019

Borough Council of King's Lynn & West Norfolk Kings Court Chapel Street King's Lynn Norfolk PE30 1EX

Historical Railways Estate on behalf of the DfT, Disused Railway Bridge, PMY2/76 Congham Railway Bridge– Strengthening works.

Dear Sir/Madam

I am writing to you on behalf of our client, Historical Railways Estate (HRE), formerly BRB (Residuary) Ltd, to inform you of planned strengthening works to the structure PMY2/76 via a structural infill. HRE is responsible for the historical railways estate following the abolishment of BRB (Residuary). This responsibility is undertaken on behalf of the Department for Transport, who own the structures. Therefore, the structures are classed as crown property.

PMY2/76 – 'Congham Railway Bridge' is located approximately 10km north east of King's Lynn, Norfolk and is a single span bridge which carries an unclassified public road (St. Andrew's Lane) over the former South Lynn to Yarmouth railway line at OS grid reference TF 703 238. A location map is enclosed for you information.

The single span square overbridge, believed to have been constructed in 1923, comprises of 7 longitudinal girders which consist of BSB 23 14" x 6" encased in concrete. The space between the longitudinal girders is infilled with concrete jack arches. There are a total of 6 jack arches. Wingwalls are located in each corner which extend approximately 5.5m from the bridge parapets. There is a soft verge on each side of the carriageway over the structure. The square span is 7490mm and the average clearance through the structure is 3.84m. The wingwalls, abutments and parapets are constructed from concrete blockwork.



Image 1 - View of south elevation access below structure

The bridge has been subject to a series of structural assessments. The most recent was in 2019 which was undertaken by Jacobs on behalf of HRE. The assessment concluded that the edge girders are restricted to a 7.5 Gross Vehicle Weight (GVW). Furthermore, the eastern abutment is exhibiting indications of movement, resulting in numerous cracks appearing beneath the edge girders and along the abutment faces. The faces of the longitudinal girders are also showing defects with some beam exposure in some instances. The wingwall coping courses and the



south west newel are demonstrating minor failure and collapse, which could be caused by the dense vegetation present on all embankments.

To prevent the further decline of the structure and to maintain future vehicular movements along the carriageway, the proposal is that the bridge is subject to structural infill.

Historical conveyance documents show that HRE retain development rights either side of the structure. The land directly under the bridge span was not included within the historical sale of the land and is therefore assumed to be owned by HRE. The proposed infill works are expected to be within the extents of the land to which HRE has development rights.

The Norfolk Council Walking and Cycling Strategy states an ambition to recycle disused railways and incorporate them in to the cycling and walking routes in the region. The figure provided in section 6.10 of the strategy and shown below would suggest that one of the possible routes is along the former Yarmouth to South Lynn railway line, and thus interfaces with the proposals for the structural infill of this structure.



Figure 1 - Extract from Norfolk County Council Publication - Norfolk Cycling and Walking Strategy

The land either side of the bridge has been raised to the surrounding ground levels, including to the south which now compromises a large agricultural field, with little or no evidence that it was formerly a railway line. A photograph of this land is shown below, which was taken during a site visit in August 2019. The current usage of the disused railway land to the south of the bridge means that it is considered unlikely to be appropriate for a section of cycle of walking route. Access to the existing restricted byway to the north of the structure will not be compromised by the proposed works.



Image 2 - Land to the south of the bridge, view from the structure looking south

As the structure represents an ongoing and increasing risk to public safety and is owned by the Secretary of State for Transport, so is deemed 'Crown property', we propose to (undertake repairs/demolish/infill) as 'permitted development' in line with the 'Town & Country Planning (General Permitted Development) (England) Order 2015, Schedule 2, Part 19, Class Q.

We trust that the above proposal is acceptable. We would like to obtain any general comments the council may have, or details of any constraints that may be imposed on the works by the local authority. I have also sent a copy of this letter to Norfolk County Council for any comments they may have.

Can you please confirm receipt of this letter either by return letter or email:

Please do not hesitate to contact me should you require any further information.

Yours faithfully,

