

**Application by Highways England for an Order
Granting Development Consent for the A428 Black Cat
to Caxton Gibbet Road Improvement scheme**

Local Impact Report

Prepared by

Central Bedfordshire Council

September 2021

1. Purpose of the Report

1.1 This report is prepared by Central Bedfordshire Council ('CBC') and provides an evaluation of the local impacts of the construction operation and maintenance of the A428 Black Cat to Caxton Gibbet Road Improvement Scheme. The report has been prepared in accordance with the Planning Inspectorate Advice Note (April 2012, Version 2) on Local Impact Reports and the published guidance of the Planning Officers Society.

2. Site Description and surroundings

2.1 The site is predominantly rural, consisting mainly of mixed agricultural land and scattered woodland.

2.2 The most immediate settlements to the proposed scheme with Central Bedfordshire are:

- Blunham (located approximately 4.0km to the south of the 'Black Cat' junction, between the A1 and A421);
- Tempsford (located to the immediate east of the A1, approximately 1.4km south of the 'Black Cat' junction);
- Church End (located immediately to the west of the A1, approximately 2.3km south of the 'Black Cat' junction); and
- Sandy (located immediately to the east of the A1, approximately 5.0km south of the 'Black Cat' junction).

2.3 To the south of the 'Black Cat' junction, the A1 forms a strategic route connecting to A1(M) and onwards to the M25. The section of the A1 falling within Central Bedfordshire is known to be congested, with the three junctions within Central Bedfordshire (the A603 Sandy, the B658 Biggleswade, and the London Road Biggleswade) being the only at-grade junctions on the route. As a result, the known pressures on the A1 was cited within the evidence informing Central Bedfordshire's recently adopted Local Plan as one of the reasons why additional growth was not currently being considered in the Tempsford/Sandy area.

2.4 To the west of the A1, the A603 has a recognised collision history, with 12 recorded injury collisions, including 4 serious accidents in the last 5 years on the 1.2km section between Hatch Road and the centre of Moggerhanger. There are also known issues with the right turn from Vinegar Hill onto the A603, to the immediate west of the A1/A603 roundabout junction.

2.5 Elsewhere on the network the highways are typical of a largely rural authority with sections of narrow carriageway, or where on street parking through local communities naturally limits available road space. A notable example being the route between the A1 and Blunham, where Tempsford Road narrows to a single lane for a distance of approximately 70m to pass over two weight restricted bridges crossing the River Ivel.

3. Details of the Proposal & Overall Council View

3.1 The proposed improvement scheme to is broadly supported by CBC, recognising the longer-term benefits that such a scheme will provide, however, CBC does have a number of concerns that it requests in its representations submitted in August 2021 responding to the Examining Authorities questions of 20 August 2021 are fully considered and dealt with in the mechanisms for mitigation of the project. Without adequate mitigations, the areas of concern are likely to result in significant impacts.

3.2 The forecast modelling for the scheme identifies scope to reduce the amount of traffic forecast to route through villages within the Central Bedfordshire Authority area on parallel east – west routes to the A428, as well as reducing the potential for ‘rat-running’ trips between the A428 and A1 south of the current ‘Black Cat’ roundabout junction (see the submitted Transport Assessment Annex (APP-243, Figure 1.2)).

3.3 The precise details are set out in the Introduction to the Application (APP/1.2). A more detailed and technical description is provided in Chapter 2 The Scheme of the Environmental Statement (APP/6.1) and the numbered works within the Development Consent Order.

4. Relevant Planning History and Proposals Under Consideration

4.1 The following planning applications are considered to be relevant material considerations:

4.2 **CB/20/04391/FULL** - Archaeological excavation and engineering works with associated temporary change of use. Formation of site compound comprising site offices, welfare facilities and off road parking facilities at Land West of 1 The Barns, Field 34, Little Barford Road, Little Barford, Sandy granted 4th March 2021.

4.3 **CB/20/04083/FULL** - Temporary change of use and formation of site compound comprising site offices, welfare facilities and off road parking with associated works at Land to the West of Hills Farm, Station Road, Tempsford granted 8th April 2021.

4.4 **CB/20/04185/FULL** - Archaeological excavation and associated engineering works at Land to the West of Hills Farm, Station Road, Tempsford granted 8th April 2021.

5. Relevant Planning Policy

5.1 The National Policy Statement (NPS) for National Networks contains the relevant policies, specifically paragraphs 3.2 –3.10 and 3.15–3.17.

5.2 The Examining Authority and the Secretary of State should give due consideration to impacts on local transport networks and policies set out in Local Plans, for example, policies on demand management being undertaken at a local level.

5.3 The Central Bedfordshire Local Plan was adopted on 22 July 2021. The following policies are relevant to this application:

- SP1: Growth Strategy
- SP2: National Planning Policy Framework – Presumption in Favour of Sustainable Development
- SE3: Holme Farm, Biggleswade
- T1: Mitigation of Transport Impacts on the Network
- T2: Highways Safety and Design
- T4: Public Transport Interchanges
- T6: Movement and Management of Freight
- EE1: Green Infrastructure
- EE2: Enhancing Biodiversity
- EE3: Nature Conservation
- EE4: Trees, Woodlands and Hedgerows
- EE5: Landscape Character and Value
- EE12: Public Rights of Way

- CC1: Climate Change and Sustainability
- CC3: Flood Risk Management
- CC4: Development Close to Watercourses
- CC5: Sustainable Drainage
- HQ1: High Quality Development
- HQ2: Developer Contributions
- HQ11: Modern Methods of Construction
- HE1: Archaeology and Scheduled Ancient Monuments
- DC5: Agricultural Land

6. Assessment of prospective impact of the project

6.1 Highways and Transportation – Impacts on the Local Highway Network

Whilst only a short section of the route falls directly within Central Bedfordshire, the scheme is predicted to result in wider impacts on the highway network within the Central Bedfordshire Area during both the construction and operational phases of development. These effects are predicted to predominantly be to the south of the proposed scheme and consist of two main elements (see Transport Assessment (APP-241) Section 9.4 Figures 9.2–9.8, and Transport Assessment Annex (APP-243) Figure 1.2):

1. Changes in traffic levels and patterns on the highway network to the south of the existing A428, in particular with regards to the predicted number of hourly and daily movements through the villages and towns located south of the A428 and A421.
2. Changes in traffic levels and patterns on the A1 (and parallel routes) to the south of the ‘Black Cat’ junction.

Further details with regards to these areas of impact were provided in the Council’s Written Representation, including within Sections 3 to 6.

6.2 Construction Phase Impacts

The scheme itself, due to the scale and complexity of works involved, is expected to take a considerable period of time to fully construct, with a works programme extending to 45 months. As such, whilst construction phase impacts will be temporary, the duration is such that they will have a considerable impact upon local roads, the travelling public and the local communities which they pass through, in their own right.

The information provided within the submitted Transport Assessment (APP-241 Section 9.4 and summarised in figures 9.2 to 9.8) and the subsequent and more detailed construction phase flow plots identifies significant daily increases in traffic on a number of east-west routes, as traffic is predicted to be displaced from the existing A428 during the proposed works. Whilst not exhaustive these impacts include 12 hour increases of circa 1,069 vehicles through Blunham (during Phase 1 of the works), increases of circa 934 through Moggerhanger (during Phase 4 of the works), and increases in the order of 800 additional 12-hour movements through parts of Sandy, Potton and Gamlingay (during Phase 4 of the works). Lower but still substantial increases are also forecast elsewhere within the CBC network (see APP-241 figures 9.2 to 9.8).

As identified above, several of the routes expected to experience the largest increases in traffic during the construction phase are naturally constrained in terms of the standard and alignment of

the roads in question and are subject to appropriate restrictions. In addition, sections of the A603 identified as a formal diversion have a recognised collision history, which could be exacerbated both by an increase in flow, including during the proposed overnight closures of the A1, by drivers unfamiliar with the route.

6.3 Operational Phase Impacts

Strategic modelling carried out as part of the evidence base to support the DCO, as summarised in the Transport Assessment Annex (APP-243), identifies predicted impacts within Central Bedfordshire following completion of the scheme, in both the 2025 and 2040 forecast years.

When considering links within the authority area, the operational phase impacts of the scheme are largely positive and welcomed, with predicted daily reduced levels of traffic (when compared to the 'Do-Nothing' scenario), on the majority of local roads, including those passing through Blunham, Moggerhanger, Biggleswade, Everton, Potton, Gamlingay, Sutton, and Wrestlingworth.

However, there are a number of exceptions to this, as detailed within the submitted Transport Assessment Annex (Sections 3.18 to 3.21, APP-243), largely related to expected increases in flow on the A1 and A421, south of the scheme.

The Annex identifies impacts at Sandy, Biggleswade and at Junction 13 of the M1, considered to be of sufficient scale to merit a proposed 'Monitor and Manage' approach to mitigation. In each instance these impacts are related to an increase in flow through junctions already recognised as being at, or over, reasonable levels of capacity.

As an example, based upon the traffic flow information provided by the A428 team it appears that two-way traffic flow on the A1 to the immediate north of Sandy could increase by approximately 12% (when considering 12-hour flows) and 17%, (when considering AM peak hour flows when comparing the 2040 with and without scheme scenarios. This is based upon a comparison of with and without scheme traffic flow plots provided by the applicant team, subsequent to the review of the flow changes summarised in the Transport Assessment Annex (APP-243). These levels of increase are not considered to be insignificant when considering the baseline levels of congestion already identified.

It is also noted within the Transport Assessment Annex (APP-243, pages 203-216) that the increase in potential delay at the Bedford Road / High Street junction in the centre of Sandy could result in a slight adverse impact upon public transport provision, with a minimal adverse impact on public transport at the A1 / Biggleswade North roundabout and a slight adverse impact upon public transport routing through Junction 13 of the M1 (and the associated adjacent junctions).

Again, these matters have been detailed within the Transport Assessment Annex (APP-243p 204) as to be monitored and managed following implementation of the scheme. It is noted however that the responsibility for this monitoring and managing is proposed to sit with the Local Highway Authority, where the impacted routes fall outside of the Trunk Road network, as is the case with the High Street / Bedford Road Junction within Sandy.

Whilst the scheme provides welcome relief for a number of more minor routes within Central Bedfordshire, the major road network, which provides key arterial routes through the authority area is expected to experience an increase in traffic levels, with the associated knock-on effects and local impacts. Whilst the Monitor and Manage proposal may have a role to play in addressing the short term impacts of the scheme, it is the view of CBC that a comprehensive solution to the treatment of the A1 in particular, whilst outside the immediate scope of this DCO, needs to be secured within

forthcoming Highways England Road Investment Strategies to identify and deliver appropriate mitigation.

As detailed within the Councils Written Representation, the Council also seeks further clarification as to how any Monitor and Manage proposal will operate, and the degree to which it can be tailored to address the areas of Local Impact identified.

6.4 Air Quality

6.4.1 The impacts of the construction phase of the proposed scheme are not considered likely to have a long-term significant detrimental effect air quality in our area. With regards to construction dust impacts the applicant has stated that dust control measures in accordance with IAQM guidance for controlling construction dust will be followed and those set out in Annex A of the Environmental Management Plan (First Iteration (APP-234)) appear to accord with this. CBC is generally satisfied with this in principle. However, our experience is that the failure in site dust controls that give rise to complaints tend to be because of poor implementation and management controls. Again Annex A and the associated tables set out a number of management measures that will be implemented to ensure dust controls are effective, and CBC is encouraged by this. Whilst the measures include a website where residents can report complaints, our experience is that residents prefer to complain to their Local Authority rather than the source of the problem. Therefore, close liaison and contact details for relevant Site Managers or other Senior Officials will need to be clearly established to deal with issues as and when they arise. Table A-3 of the First Iteration Environmental Management Plan (APP-234) states that “Regular liaison would be undertaken with the relevant local authorities, this would include discussing any complaints that had been received.” However regular is not defined and CBC requests greater clarity and confirmation of close liaison and contact involved in the document.

6.4.2 The applicant has predicted an adverse impact on our Sandy AQMA and are not proposing to undertake any mitigation to counteract or offset that. The applicants during their Air Quality Modelling (see Sensitivity Test using 2020 Uncertainty Log Data report (APP-160 to APP-162)) actually identified the potential for medium level impacts for the 7 properties that lie in the existing Sandy AQMA. However, because less than 30 properties are affected, they have simply classed this impact as “not significant”. The size or scale of the impact is not the material factor as far as CBC is concerned – anything that likely to result in an adverse impact on the health of CBC residents at this highly sensitive location and is likely to counteract our fundamental efforts to improve air quality in the AQMA is not acceptable, particularly without mitigation measures to offset those adverse impacts. CBC’s view is that mitigation must be incorporated and a requirement of the draft DCO.

6.4.3 CBC has significant concerns regarding the impact on air quality and on human receptors in the operational phases of the scheme: Currently there is regular congestion along the southbound A1 at the A603 roundabout, with queuing regularly stretching past the row of cottages fronting the A1, certainly during peak times (and sometimes beyond these periods), within the AQMA (declared for both the hourly and annual NO₂ Air Quality Objectives). The capacity of the A1 is already a concern, as my colleagues from CBC Highways have advised. It is already operating at capacity and there is a need for realignment or an alternative (but significant) solution to be found and funded. The proposed works would enable the A1 southbound traffic to be free flowing at the Black Cat roundabout, but this traffic would be held up at the next stopping point (the A1/A603 roundabout). The Transport Assessment concluded that there would be a “slight impact” but the document detailed delays at the junction; however, this is on the basis that local road traffic is predicted to reduce as a result of increased flows on the A1, with para. 10.5.3 of the Transport Assessment Annex (APP-243) acknowledging that ‘In the 2040 AM peak hour, the traffic flows are predicted to increase significantly

in the Do Something relative to the Do Minimum. Therefore, the free-flowing traffic would add to the existing congestion/delays at the A1/A603 and this in turn would increase the road transportation emissions from tailpipes and have a detrimental impact on the pollution concentrations within the AQMA. There is a legal obligation for Local Authorities and Highways England to work to reduce concentrations of air pollutants and therefore the conclusion of the Air Quality Assessment that although the level of impact was medium, the fact less than 30 properties were adversely affected the overall impact was “imperceptible” and therefore no mitigation was proposed, is unacceptable.

6.4.4 The Sandy AQMA was declared in respect of both the NO₂ annual and hourly Air Quality Objectives and diffusion tube monitoring has shown exceedances of both AQOs at the 7 receptors annually. In 2019, the diffusion tube monitoring results showed that the concentration of NO₂ had decreased to below 60µg/m³ (the level recognised to highlight breaches of the hourly objective) occurred for the first time at the location of the 7 identified receptors. The 2019 result (57.5 µg/m³) is close to the hourly objective figure (see **Appendix 6** of CBC’s written representation). However, the results do vary year on year and therefore it is too early to conclude that air quality has improved enough to revoke the AQMA relating to the hourly objective exceedance.

6.4.5 Covid 19 restrictions have had an impact on air quality during 2020 & 2021 – lockdowns significantly decreased traffic flow numbers, and this was reflected in the 2020 monitoring result of 43.6 µg/m³ at this location (see **Appendix 6** of CBC’s written representation). However, both 2020 & 2021 should be considered atypical as air pollution concentrations will increase as traffic flows return to a more “normal” level. Given the high concentrations of NO₂ monitored prior to the proposed scheme, the additional delays at the A603/A1 roundabout will result in more congestion and queuing which already often stretches past the 7 receptors during peak times (and often beyond these periods) and within the AQMA. The predicted increase of NO₂ concentrations at this location because of the proposed scheme is counter to legislation requiring improvements in air quality to meet the AQOs. Additionally, the impacts of air quality on human health is well documented and the AQOs have been set with those in mind, so monitoring results above the 40 µg/m³, show that impacts on the health of the receptors within the Sandy AQMA are a relevant concern and any scheme that will negatively impacting air quality, without offering any mitigation is unacceptable and this should be incorporated into the draft DCO requirements.

6.4.6 Central Bedfordshire Council have produced an Air Quality Action Plan (AQAP) in order to improve air quality in the AQMA. This document has been published to the Council’s website and Highways England were consulted and had input into the drafting and formulation of the document. CBC would contend that rather than offering no mitigation to offset the adverse impacts that they have identified as a result of this project, Highways England could use this as a starting point to identify a range of mitigation measures that could be reasonably implemented. Measures are either:

- Strategic (i.e. aimed at integrating air quality into all relevant areas of decision making within Central Bedfordshire Council); or
- Specific (i.e. aimed at promoting more sustainable travel choices and reducing traffic related emissions within the two AQMAs and the district as a whole).

Four ‘Package of Measures’ have been recommended for implementation at this time:

- Package 1: reducing emissions through strategic measures
- Package 2: optimising traffic flow through the AQMAs
- Package 3: reducing transport emissions

- Package 4: promoting sustainable transport options

6.4.7 Whilst more detail is available in the AQAP, CBC would suggest that the following measures may be most relevant to the current project:

Measure 1: Improve links with the Local Transport Plan (LTP)

Measure 2: Improve links with the Local Planning and Development Framework

Measure 4: Junction and Congestion Investigations

Measure 7: Research impact on use of average speed cameras / change to speed limit

Measure 10: reducing the emissions from goods vehicles within AQMAs

6.4.8 Whatever mitigation measures are identified, CBC is also acutely conscious how important it is that adequate measures are put in place to ensure that the A1 can operate effectively and cope with the volume of traffic at this location as a result of the project, otherwise traffic may be pushed onto local roads creating higher levels of pollution in those locations.

6.4.9 Of further concern to us is the fact that the applicant has not adequately factored in the cumulative impacts on AQ when combined with the East-West Rail Link (EWR) proposals, in particular regarding the proposed new station at Tempsford or St Neots and what that is likely to mean in terms of traffic generation on the A1 and consequent congestion etc. There appears to be an information disconnect with the EWR Project team (so we have been advised by the Black Cat Project Team), despite the EWR Project Team assuring me separately that they were liaising on the cumulative impacts for both projects. They need to resolve this to ensure an accurate assessment of cumulative impacts is reflected in their prediction of air quality impacts, and the impacts on the Sandy AQMA are paramount in this respect.

6.5 Noise & Vibration

6.5.1 Construction Noise: Paragraph 11.3.11 of APP-080 makes reference to further baseline monitoring that was due to be carried out but “postponed” due to the impacts of Covid 19. CBC has now been advised that this further monitoring will not be taking place but are unclear as to the justification for this, as there was clearly an identified need for the further monitoring in the first place. The justification is requested from HE. CBC is concerned about the level of construction noise impact given the duration of the construction project. The proposed hours of work are outside those that CBC allow for construction sites in Central Bedfordshire, i.e. starting before 8am. CBC would normally allow 8am to 6pm Monday to Fridays, 8am to 1pm on Saturdays and no working on Sundays or Bank Holidays. However, in view of the size and scale of the project, CBC would consider it would be appropriate to allow variation to these hours where particular circumstances required this and appropriate mitigation measures were in place and requests the draft DCO requirements to be updated in this respect. Central Bedfordshire is an area of considerable growth with a plethora of construction sites already operating across our district, and residents have therefore been subject to impacts from these construction site operations at a local level for some time. For such a major project, it will be essential to ensure that any noise impacts are robustly controlled in accordance with the provisions of BS5228:2009 Parts 1 & 2 at all times and that this is a requirement of the draft DCO.

6.5.2 Construction Noise: Most of the receptors identified in table 11-10 are outside of Central Bedfordshire. However, the small number of receptors identified in our district (R16,17 & 18) are predicted to experience noise levels above the LOAEL, with R16 expected to experience levels above the SOAEL for daytime, evening & weekends and night-times which is a significant concern (p 40, Document TR010044 Volume 6 6.1 Environmental Statement Chapter 11: Noise and Vibration (APP-080)). The assessment states that these works will be of very short duration (p 46-7, Document TR010044 Volume 6 6.1 Environmental Statement Chapter 11: Noise and Vibration (APP-080)), but this is not clarified and clarification from HE is requested. CBC would need to see further clarification (once details of the works are known, as referenced in paragraph 11.9.13) of this before CBC can comment on the assessment of significance, although the level of impact (i.e. daytime, evening & weekends and night-times) predicted for R16 above the SOAEL in itself is a concern even if this is of “very short duration”. CBC note the proposed use of localised noise barriers (p36 Paragraph 11.8.4, Document TR010044 Volume 6 6.1 Environmental Statement Chapter 11: Noise and Vibration (APP-080)) and encourage these to be deployed where necessary to reduce construction noise impacts on residential receptors and for this to be set out as forming part of the construction noise mitigation measures required under the First or Second Iteration of the Environmental Management Plan. CBC note the intention to undertake surveys to check compliance with BPM measures, but would want to know details as to frequency of these, and who would be carrying them out, reporting arrangements etc. The details are requested from HE.

6.5.3 Operational Noise: Our concerns for this phase of the project relate to the identification of significant adverse daytime and night-time noise impacts on a small number of receptors in our area (see Table 11-13 and paragraphs 11.9.54 & 11.9.56-60 on TR010044 Volume 6 6.1 Environmental Statement Chapter 11: Noise and Vibration (APP-080)), who will see noise levels as a result of the new road scheme increase by around 9dB. The project team are not proposing any further mitigation beyond the embedded mitigation measures already identified to try and address these significant adverse impacts i.e. therefore the +9dB increase will be present even with the embedded mitigation in place. The report states that noise bunds and barriers have been considered, but these have been discounted either because they are not considered to be effective or on cost grounds. CBC would contend that these are not the only mitigation measures that could or should be considered. Furthermore, CBC has not seen any cost-benefit calculations to justify their exclusion on cost grounds. In my opinion, they are failing in their primary objectives as set out in their Noise & Vibration chapter, reflecting the NPSE objectives (see 11.2.18). Our position at this point is that it is simply not acceptable to expect existing residents, no matter how small in number, to be subjected to such significant long-term adverse noise impacts as a result of the operation of the new road scheme and not identify and incorporate further noise mitigation measures into the draft DCO requirements that could be implemented to alleviate those impacts.

6.5.4 Operational Noise: The cumulative noise impact of both the EWR project and this project operating at the same time has again not been assessed and this is requested by CBC. In theory, CBC would anticipate noise from the A1 to dominate to such an extent that the contribution of the EWR operation overall will have little additional impact over and above that already identified. However, this still needs to be considered and demonstrated as both are major infrastructure projects that are likely to impact on the ambient noise environment in this area for the long-term. CBC appreciate there may be difficulties with communication and co-ordination between the two project teams, but that does not obviate the need for these impacts to be properly and robustly assessed, particularly for 2 schemes of such magnitude and significance and in such close proximity to each other.

6.6 Archaeology

6.6.1 The section of the proposed A428 Black Cat to Caxton Gibbet Road Improvement Scheme that passes through Central Bedfordshire lies within a known archaeological landscape and the Central Bedfordshire and Luton Historic Environment Record (CBHER) documents the presence of several multi-period sites both within the scheme's boundary and its immediate surroundings. The known sites affected by the route survive as sub-surface remains and largely manifest themselves as cropmark evidence (for example CBHER 1387, CBHER 16800 and CBHER 16802). The pre-DCO submission archaeological evaluation works undertaken by the applicant (geophysical survey and trial trenching) has also identified several areas of previously unknown sub-surface archaeological remains. Under the terms of section 5 of the *National Policy Statement for National Networks* (NPSNN), chapter 16 of the *National Planning Policy Framework* (NPPF) and chapter 18 of the *Central Bedfordshire Local Plan 2015-2035* (adopted July 2021), these sites are considered to be heritage assets with archaeological interest. There are however no designated heritage assets with archaeological interest within the section of the proposed scheme that passes through Central Bedfordshire.

6.6.2 In summary, the section of the proposed A428 Black Cat to Caxton Gibbet Road Improvement Scheme that passes through Central Bedfordshire will have an impact on sub-surface archaeological remains. Due to the evaluation works undertaken by the applicant, these sites are now known and range in date from the Late Bronze Age to the early Saxon period.

7. Conclusion

7.1 CBC remains supportive of the proposal in principle, but would welcome further discussion with HE to address the local concerns set out above and in its representations dated August 2021 and incorporation of requirements into the draft DCO (or incorporated documents) and any Development Consent Obligation to address its concerns and secure necessary mitigation.