

M5 Junction 10 Improvements Scheme

**Environmental Management Plans
Annex B16 Carbon Management Plan
TR010063 - APP 9.11**

Regulation 5 (2) (q)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Volume 9

March 2024

THIS PAGE IS LEFT INTENTIONALLY BLANK

Infrastructure Planning Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

M5 Junction 10 Improvements Scheme Development Consent Order 202[x]

Environmental Management Plan Annex B16 Carbon Management Plan

Regulation Number:	Regulation 5 (2) (q)
Planning Inspectorate Scheme Reference	TR010063
Application Document Reference	TR010063/APP/9.11
Author:	M5 Junction 10 Improvements Scheme Project Team

Version	Date	Status of Version
Rev 0	March 2024	Section 51

Contents

Chapter	Page
B.16. Carbon Management Plan	5
Introduction	5
Background	6
Roles and Responsibilities	6
Carbon reduction objectives	9
Carbon Management principles	11
Carbon Management process	12
Tables	
Table B 16-1 - Roles and Responsibilities	7
Figures	
Figure B 16-1 - Indicative Ideal Routemap for CMP	13
Figure B 16-2 - Method-led principles process	15

B.16. Carbon Management Plan

Introduction

Purpose

- B.16.1.1. This document forms Annex B16 of the Environmental Management Plan (EMP) (Application Document TR010063/APP/7.3). Annex B16 is a Carbon Management Plan (CMP) (1st iteration) for the M5 Junction 10 Improvements Scheme (the Scheme). This CMP (1st iteration) will be updated by the appointed Principal Contractor (PC) into a CMP (2nd iteration), as required by Requirement 3 of the DCO, prior to commencement of works.
- B.16.1.2. The purpose of this CMP (1st iteration) is to set out how whole life carbon emissions will be managed and reduced during the Detailed Design stage, to ensure that best practice is followed. Schedule 2 Part 1 para 3 requires the 1st iteration CMP to be developed into a 2nd iteration CMP to be approved in writing by the county planning authority before commencement. The Scheme must then be constructed in accordance with the 2nd iteration CMP. Upon completion of construction, the 2nd iteration EMP must then be converted to a 3rd iteration EMP and approved by the county planning authority to be implemented during the operation of the Scheme.
- B.16.1.3. The Scheme's carbon management approach is aligned with PAS 2080:2023 – Carbon Management in Buildings and Infrastructure technical standard¹ which seeks to ensure that carbon management and reduction is fully integrated into the project team's culture.
- B.16.1.4. This technical standard is applicable to all design development, construction planning, procurement, and value chain engagement for the Scheme, and is specified for use by:
- B.16.1.5. The appointed Principal Designer and PC.
- Sub-contractors, sub-consultants and material suppliers working on the Scheme, to guide their carbon management activities.
 - The Scheme's Gloucestershire County Council management team.
- B.16.1.6. It is designed to inform all relevant parties of:
- How the appointed Principal Designer and PC will implement carbon management and reduction for the Scheme.
 - The requirements to support implementation of the CMP.
- B.16.1.7. An Environment Impact Assessment (EIA) has been carried out for the Scheme and is reported in the Environmental Statement (ES) (Application Document TR010063/APP/6.1 – 6.13). The ES has been prepared in support of Gloucestershire County Council's (GCC) application for a Development Consent Order (DCO).
- B.16.1.8. This CMP (1st iteration) has been prepared using information reported in the ES (Chapters 2 (The Scheme), Chapter 5 (Air Quality) and Chapter 14 (Climate), Application documents TR010063/APP/6.2, 6.3 and 6.12)). If a decision is made to approve the Scheme, the appointed Contractor will use the information in this CMP (1st iteration) and to prepare the CMP (2nd iteration) for approval by the county planning authority prior to commencement of development.

¹ <https://knowledge.bsigroup.com/products/carbon-management-in-buildings-and-infrastructure?version=standard> (Accessed 31 May 2023)

Background

- B.16.1.9. As a requirement of the DCO, the PC will produce a CMP (2nd iteration) which is substantially in accordance with this CMP (1st iteration). The target of the CMP (2nd iteration) will be to support reduction in carbon emissions by adhering to the principles of the PAS 2080:2023 – Carbon Management in Buildings and Infrastructure. This will help the Scheme manage and reduce carbon emissions across the whole value chain through effective and innovative design, construction and use. It would also ensure that carbon is consistently and transparently quantified at the key stage of the design process.
- B.16.1.10. There are multiple technical requirements in the PAS 2080:2023 technical standard, key of which are:
- Implement a carbon management process to help an organisation meet the requirements of PAS 2080 when delivering assets and/or programmes of work.
 - Follow the PAS 2080 carbon reduction hierarchy.
 - Quantify, assess and report a scheme's carbon emissions to inform scheme development and overall asset management.
 - Engage with other value chain members, as early as possible, in a collaborative way to identify whole life low carbon solutions, including the selection of relevant low carbon materials and products, innovative design solutions and construction methods.
 - Define the specific carbon management actions to be undertaken, and the key strategies and approaches to implement the culture and behaviour changes necessary for delivering carbon reduction, specifically:
 - Collaborative working across the value chain.
 - Implementation of carbon reduction hierarchy when identifying potential opportunities to reduce carbon.
 - Raising major carbon challenges to design development and construction planning, where key carbon risks are identified.
- B.16.1.11. This would follow a data collection and analysis methodology which adheres to the requirements of the PAS 2080 standard. This would assess carbon use for the whole lifecycle of the project and promote embodied carbon management and commit to achieving carbon reductions.

Roles and Responsibilities

- B.16.1.12. Commitment from the whole project team and key stakeholders is an important aspect to successful implementation. Members of the project team and the value chain from GCC to specific materials suppliers and fabricators have the potential to influence low-carbon outcomes.
- B.16.1.13. However, some roles have key responsibilities in leading the efforts to implement low-carbon solutions during design and delivery. These are set out in Table B 16-1.

Table B 16-1 - Roles and Responsibilities

Role	Main Responsibilities
Appointed Principal Contractor Project Director	<p>The Project Director has overall responsibility for carbon reduction.</p> <p>The Project Director will hold responsibility for driving the carbon reduction agenda, leading by example by presenting progress internally and externally.</p> <p>Empower project staff to challenge design, specification, procurement, and construction processes.</p> <p>Ensure early engagement with the supply chain, holding workshops and events to upskill, knowledge share and unlock innovation for whole life cost and carbon.</p> <p>Attend the carbon reduction workshops, provide opening and closing statements to set their expectations and priorities for carbon reduction, and actively engage in the direction and decision making of the workshops.</p> <p>Lead by example by pro-actively discussing carbon reduction at all relevant opportunities, as part of their day-to-day role, in accordance with the expectations and priorities that they set.</p> <p>Ensure the project team has the skills and resource to deliver on the carbon objectives of the CMP, and the expectations and priorities that are set.</p> <p>Participate in all review activities and/ or ensure through delegation that carbon is correctly considered, and decision making progresses towards achieving the carbon reduction opportunities.</p> <p>Provide a level of challenge to make sure that focus is given to low carbon opportunities.</p> <p>Maintain an active relationship with GCC management team for the Scheme, ensuring they are aware of their responsibilities to support low carbon decision making, carbon reduction progress, and are prepared to discuss challenges that arise.</p>
Appointed Principal Designer Project Director	<p>Ensure the project team are clearly informed of the CMP, and the expectations, priorities, and challenges of the Project Director, and are empowered to undertake their roles.</p> <p>Ensure the carbon performance of options are considered and recorded in the Design Decision Log (DDL).</p> <p>Ensure that they are aware of the carbon performance of design options in order to enable effective participation in design development discussions and reviews.</p> <p>Ensure the design team has the skills and resource to deliver on the CMP, and the expectations and priorities that are set.</p>

Role	Main Responsibilities
Appointed Principal Designer Design Manager	<p>Through day-to-day running, ensure compliance with and directly support the design team with implementation of the CMP, in particular the carbon reduction hierarchy, and the expectations, priorities and challenges that are set.</p> <p>Ensure knowledge of the carbon performance of options is developed and recorded in the DDL.</p> <p>Ensure the carbon assessment of options is carried out to the required level of detail.</p> <p>Through on-going implicit monitoring, ensure the carbon knowledge or resource issues of the project team are sufficient to meet the objectives.</p>
Appointed Principal Contractor Engineering Manager	<p>Provide strategic engineering and design management, strong leadership and control of a multi-disciplinary team comprising engineering resources at all levels.</p> <p>Ensure full design integration between all design disciplines is achieved and assessed for all build ability aspects during both the development and construction stages of the Scheme.</p> <p>Lead, support and implement digital design and carbon integrated method-led construction.</p> <p>Support and advise the design manager throughout the hotspot review and carbon design optioneering stage.</p>
Appointed Principal Contractor Construction Manager	<p>Provide strategic operational management, strong leadership and control of a multi-disciplinary team comprising engineering and supervisory resources at all levels and facilitation of strong links with other teams within and external to the project.</p> <p>Support and advise the Engineering and Design Manager throughout the hotspot review and carbon design optioneering stage, to ensure effective consideration of carbon in construction.</p> <p>Implement the Low Carbon in Construction Plan in all works packages.</p> <p>Ensure the on-site workforce complete the relevant carbon training.</p>
Appointed Principal Contractor Supply Chain Manager	<p>Provide strategic operational and supply chain management, strong leadership and control of the supply chain data and operational performance.</p> <p>Collaborate with vendors and suppliers to ensure all operations meet carbon, quality, and safety standards.</p> <p>Support and advise the Sustainable Procurement Manager throughout the carbon integrated procurement.</p>
Appointed Principal Contractor Sustainable Procurement Manager	<p>Provide strategic operational management, strong leadership and control of a multi-disciplinary team comprising engineering and supervisory resources at all levels and facilitation of strong links with other teams within and external to the project.</p> <p>Lead, support and implement carbon integrated procurement throughout the Scheme design and preconstruction.</p>
Appointed Principal Contractor Programme Manager	<p>Ensure carbon management actions are included in the programme to ensure that they are undertaken at the required time, to enable the required design decision making, and performance reporting.</p>

Role	Main Responsibilities
Appointed Principal Design Carbon Manager	<p>Develop and document the CMP for the Scheme.</p> <p>Support the Directors and Managers with implementation of this plan, through day-to-day working to assist them with understanding:</p> <ul style="list-style-type: none"> – The actions required from the project team. – Pragmatic, but effective levels of options assessment. <p>Lead modelling of the carbon performance of the completed designs.</p>
All Project Team Staff	<p>As part of day-to-day activities and aligned with the objectives, expectations, priorities and challenges, minimise carbon through challenging design, buildability, planning and integration of activities, logistics and procurement.</p> <p>Ensure that the potential carbon reduction benefits of all innovations are voiced to relevant project leads, and suitably recorded, along with the other parallel benefits.</p>

Carbon reduction objectives

Plans, policies and requirements

B.16.1.14. This CMP (1st iteration) is underpinned by national policy as well as plans, policies and requirements of National Highways. These are detailed below.

The Government's Transport Decarbonisation Plan (TDP) 2021

B.16.1.15. In response to the UK's net zero emissions target by 2050, the Departments for Transport (DfT) published 'Decarbonising Transport: A Better, Greener Britain' – referred to as the Transport Decarbonisation Plan (TDP) on 14 July 2021. The TDP is framed by the Climate Change Act 2008, amended in June 2019 to commit to achieving Net Zero by 2050 for territorial (or 'domestic') Greenhouse Gas (GHG) emissions.

B.16.1.16. The TDP outlines a number of commitments by the Government to remove all emissions from road transport to achieve net zero target by 2050. It sets out this vision for decarbonised transport emissions through three strategic priorities:

- Accelerating modal shift to public and active transport.
- Decarbonisation of road vehicles.
- Decarbonising how we get our goods.

B.16.1.17. Commitments that will have a direct impact on road user emissions from the Scheme will include:

- An end to the sale of new petrol and diesel cars and vans by 2030.
- All new cars and vans to zero emissions at the tailpipe by 2030.
- All new L-category vehicles to be fully zero emissions at the tailpipe by 2035.

B.16.1.18. The Scheme supports the TDP through managing whole life carbon in transport infrastructure and reducing associated embodied emissions.

National Highways' Net Zero Plan

- B.16.1.19. National Highways published its 'Net Zero Highways Plan' ('the Plan')² in July 2021. The Plan, which is aligned with the TDP, sets out new aspirational GHG reduction targets. The Plan sets out a roadmap with targets to cut corporate emissions (100% of corporate emissions to be net zero without purchased offsetting by 2030), maintenance and construction emissions (40-50% reduction in emissions compared to 2020 by 2030, and 100% of schemes net zero by 2040), and road users (100% of the network will be net zero by 2050).
- B.16.1.20. The construction and maintenance emissions are of most relevance to the Scheme.
- B.16.1.21. The Plan sets out a wide range of objectives covering all of its activities. For construction the key objectives are:
- 0-10% reduction in emissions by 2025 compared to 2020, and 40-50% by 2030 compared to 2020.
 - Tier 1 and Tier 2 suppliers have certified carbon management systems by 2025.
 - By 2022 carbon reduction is a key metric within National Highways innovation and research programs.
 - By 2022 National Highways have a continually improved database of low carbon solutions by asset type in place.

DMRB GG 103 Introduction and general requirements for sustainable development and design

- B.16.1.22. The principles outlined in the Design Manual for Roads and Bridges (DMRB) GG103 *Introduction and general requirements for sustainable development and design*³ discuss how different engineering and environmental constraints identified throughout design development and assessments have influenced the design.
- B.16.1.23. The specific goals of sustainable development specified in DMRB GG 103 are:
- Carbon emissions (GHG or carbon dioxide equivalents) associated with the whole life of a project shall be minimised.
 - The minimisation of carbon emissions may be achieved by working in accordance with a recognised standard or specification agreed with National Highways, e.g. PAS 2080:2023, Carbon Management in buildings and infrastructure.

DMRB LA 114 Climate assessment

- B.16.1.24. DMRB LA 114 Climate states that: 'Projects shall seek to minimise carbon emissions in all cases to contribute to the UK's targets for net reduction in carbon emissions'. This requirement applies whether or not the Scheme is anticipated to generate a significant effect on climate.
- B.16.1.25. Emissions are mitigated by applying the carbon reduction hierarchy set out in DMRB LA 114: Avoid / Prevent, Reduce, Remediate. Items at the top of the hierarchy have a greater potential to reduce emissions and are prioritised.
- Avoid / prevent:

² <https://nationalhighways.co.uk/media/eispcjem/net-zero-highways-our-2030-2040-2050-plan.pdf> (Accessed 31 May 2023)

³ https://highwayssafetyhub.com/uploads/5/1/2/9/51294565/gg_103_introduction_and_general_requirements_for_sustainable_development_and_design-web.pdf (Accessed 31 May 2023)

- Maximise potential for re-using and / or refurbishing existing assets to reduce the extent of new construction required.
- Explore alternative lower carbon options to deliver the project objectives (i.e. shorter route options with small construction footprints).

Reduce:

- Apply low carbon solutions (including technologies, materials and products) to minimise resource consumption during the construction, operation, user's use of the project, and at end-of-life.
- It is recommended that as far as possible, materials are locally procured to minimise transportation emissions.
- Construct efficiently, using techniques (e.g. during construction and operation) that reduce resource consumption over the life cycle of the project.

Remediate:

- After addressing avoid/prevent and reduce measures projects will identify, assess and integrate measures to further reduce carbon through on or off-site offsetting or sequestration.

Carbon Management Objectives

B.16.1.26. The requirements of PAS 2080 and the plans, policies and requirements set out above in section 0, demonstrate a consistent requirement of carbon reduction for highways schemes.

B.16.1.27. In response to and aligned with these, the objectives of this CMP (1st iteration) are:

- To reduce the whole life carbon footprint of the Scheme as low as reasonably practicable by applying the carbon reduction hierarchy, to promote innovation and carbon reductions, through development of clever and collaborative design and construction planning proposals, with direct value chain engagement.
- For the appointed Principal Designer and Contractor will actively identify and pursue carbon reduction opportunities and mitigate carbon risks through all means as part of the integrated scheme development.
- To produce a baseline carbon model w, and the model will be used:
- To identify carbon hotspots to inform design development and construction planning.
 - As the basis for determining performance improvements achieved during the Detailed Design stage.
 - To compare against an output carbon model and produce a report to quantify and document the carbon reductions that have been achieved.

Carbon Management principles

Carbon reduction hierarchy

B.16.1.28. Cost and carbon reductions have been widely shown to be comparatively closely linked, i.e. the carbon reduction hierarchy set out in PAS 2080, which specifies:

- Avoid: evaluate what the existing assets in the development are that can be repurposed (buildings, energy, water, telecoms, transport infrastructure) by extending their life.

- Switch: review what materials could be recovered and re-used onsite. Are there technologies and/or materials that could be used, and are there opportunities to engage with product suppliers early to implement low-carbon solutions.
- Improve: is there an opportunity to set out a vision for Design for Manufacture Assembly (DfMA) for the development to lock low-carbon materials and leaner construction practices.

Project team engagement

Incorporating Low-Carbon ideas

- B.16.1.29. Commitment to the CMP from key project stakeholders is vital. The PC will run workshops, hosted by relevant specialists, to improve joined up thinking and generate opportunities to make GHG emissions savings during Detailed Design. These will be linked to targets set out in the CMP (2nd iteration).
- B.16.1.30. To initiate and embed the carbon management process into the project team's way of working the following need to be undertaken by the PC at an early stage of Detailed Design phase:
- Carbon briefing – a value chain meeting to initiate the carbon management process and secure buy in from all project stakeholders.
 - Engagement sessions – an initial workshop to help with the whole project team should follow afterwards to capture ideas to reduce carbon within the design. These ideas will be carried forward in the Carbon Management Process (see below0).
- B.16.1.31. Regular calls should be held with the design, construction, and environmental disciplines, as well as the supply chain, to discuss carbon savings possibilities. These should lead to a greater understanding of the environmental and engineering constraints across the team, and identify opportunities to introduce more carbon efficient options, leading to a better considered design. The discipline leads will attend online design meetings where design developments are communicated to the team and discussions around constraints and opportunities can be held. This allows the PC to draw on experienced team members, whilst contributing to driving efficiencies that would lead to carbon emissions savings.

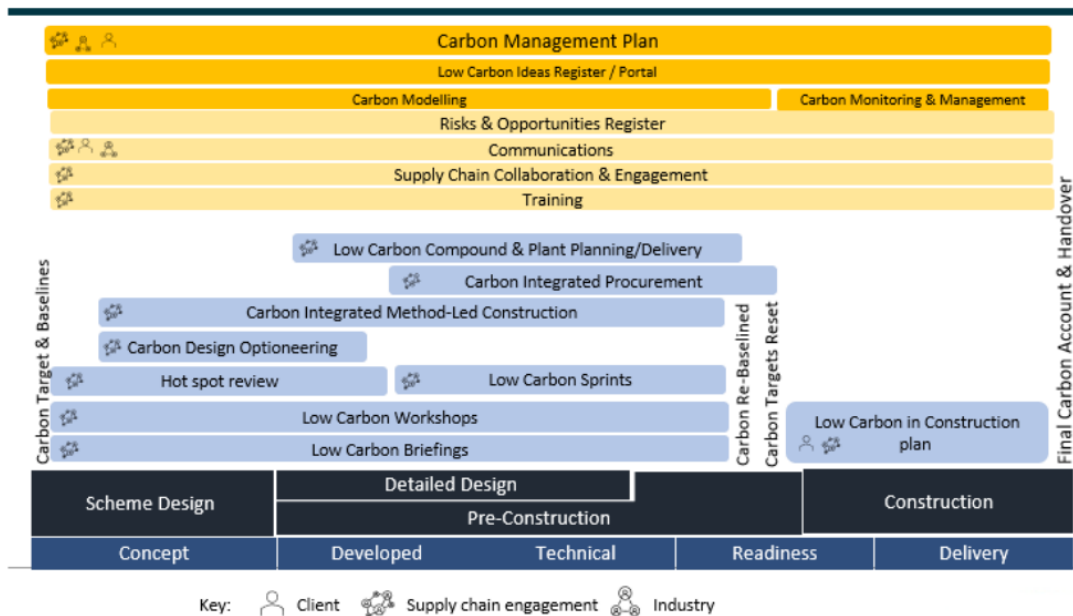
Carbon Management process

Whole life carbon management approach

- B.16.1.32. Taking a whole life carbon management approach to reducing GHG emissions identifies the best combination of opportunities across the project lifecycle using the PAS 2080 carbon reduction hierarchy shows the greatest opportunity to reduce whole life carbon emissions is at the early stages of the project.
- B.16.1.33. Typical CMP processes are shown in Figure B 16-2. The greatest opportunities to reduce carbon are those often identified earlier in the project life cycle. The project team will work collaboratively to ensure:
- Design options fully consider low carbon alternatives, utilising the strength of the supply chain. This will be undertaken through low carbon workshops and sprints.

- Carbon in construction is considered as early as possible through our method-led construction assessment (see B.16.1.40), e.g. enabling the selection of low carbon plant and low carbon locally sourced materials⁴.
- Carbon in construction is accurately calculated to ensure low carbon design and construction methods are selected.

Figure B 16-1 - Indicative Ideal Routemap for CMP



Carbon Modelling

B.16.1.34. The CMP (2nd iteration) will use a number of ways to assess carbon within the Scheme.

Carbon calculation tool

B.16.1.35. Carbon is quantified throughout the Scheme using the National Highways Carbon emissions calculation tool⁵⁶. Carbon models are produced for the whole Scheme covering all assets and operational activities within the Scheme boundary, over its design life. This data is used to identify:

- Carbon Hot Spots to allow low carbon sprints to focus on the areas of greatest carbon intensity.
- Monitor and track scheme carbon performance.

⁴ A short/accelerated multi-disciplinary process where design ideas for a key design features are validated, innovative ideas are explored and problems are solved to reduce risk.

⁵ <https://nationalhighways.co.uk/suppliers/design-standards-and-specifications/carbon-emissions-calculation-tool/> (Accessed 31 May 2023)

⁶ Whilst the scheme is not a National Highways promoter scheme, the National Highways carbon tool is used as best practice and to provide a consistent approach to calculating carbon emissions across highways schemes.

Procurement

- B.16.1.36. Carbon will be integrated into the procurement processes. The PC will be required to set out measures that they will implement to minimise carbon on the Scheme and also maximise wider sustainability benefits. These measures include:
- Identifying how carbon emissions during construction phase may be reduced further, if required.
 - How they will manage carbon information provided from the DCO submission.
- B.16.1.37. How they will promote sustainable infrastructure throughout PCF Stage 5 and 6 of the Scheme.

Communications

- B.16.1.38. The spotlight will be on carbon each and every day to drive real change and will include all members of the value chain. Requirements of the CMP will be integrated into all Project Plans and communicated with the project team through briefings, inductions, workshops and toolbox talks, so that low carbon is embedded throughout.

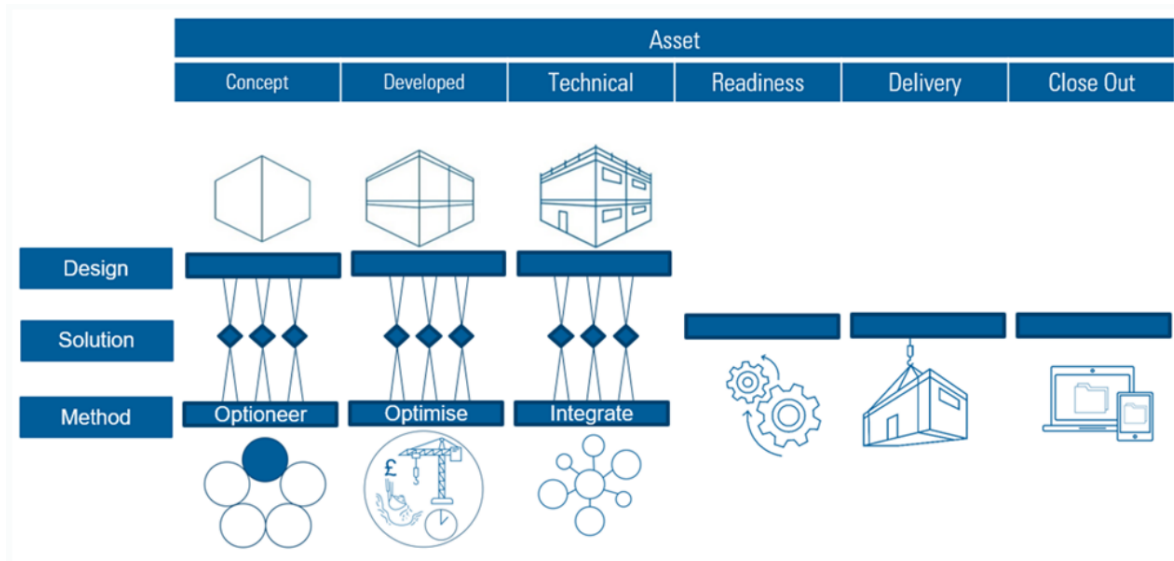
Carbon Management process

- B.16.1.39. Method-led construction is a framework developed by the Principal Designer and Contractor which is being used on the Scheme to align method and design to ensure the optimal solution is developed and delivered. Use of method-led construction to structure the project in pre-construction can ensure ideas for innovation and carbon reduction are considered as early as possible during the asset's lifecycle during solutions development. It also provides a platform to ensure constraints and constructability are considered in suitable detail before designs are finalised and construction begins.

Method-led principles

- B.16.1.40. The Scheme can be broken down into several key structures (for example River Chelt Bridge) as well as the asset types that make up the fundamental construction areas of the Scheme (drainage, earthworks, kerbing, etc.). Each of these key structures and asset types form a focus area. For each of these focus areas the design and method will follow a lifecycle to map the development of the design and method in parallel through pre-construction, construction, and close-out. This process will begin with a design sprint for each focus area during concept stage (see Figure B 16-3).

Figure B 16-2 - Method-led principles process



B.16.1.41. Following this structure allows peer reviews to be completed for each focus area, as required, and scheduled into the pre-construction programme.

Incorporating low-carbon ideas

B.16.1.42. Ideas from workshops held by the PC with the whole project team, to capture ideas to reduce carbon within the Scheme design, need to be captured, reviewed and categorised to align with the focus areas for each design sprint.

B.16.1.43. During each design sprint, these ideas are to be brought into discussion and agreed whether to be carried forward. All decisions will be recorded within the DDL to allow tracking of the decision from idea through to agreement and close.

B.16.1.44. The sprints will provide a platform where low carbon ideas can be considered in the early stages of solution development and built into the final solution.

Process actions

B.16.1.45. The following actions provide the specific details on how the low carbon design will be undertaken:

- Identify and pursue carbon reduction opportunities and risks through all means as part of the integrated Scheme development, specifically by ensuring carbon performance is:
- Proactively considered by all project staff during Method-led construction and detailed design development and construction planning, based on personal expertise and carbon reduction training.
- Logged in the DDL by all staff, as necessary.
- Consider during weekly DDL reviews.
- Raised as a metric for consideration with all value chain engagements, as part of design development and construction planning.
- Through an initial carbon reduction workshop:
- All project staff will be trained on the carbon reduction hierarchy, their role-specific means for applying it, and the key strategies and approaches to

implement the culture and behaviour changes necessary for delivering carbon reduction, as set out in the CMP.

- An initial set of carbon reduction opportunities will be identified.
- Update training to all staff will be continuous through review of the carbon management progress that has been made during the design development.
- Plans will be put in place to identify and manage any outstanding actions that remain.

B.16.1.46. A carbon model will be produced in the National Highways' Carbon tool using the baseline design, and the model will be used :

- To identify carbon hotspots to inform design development and construction planning.
- As the basis for determining performance improvement achieved during Detailed Design.
- During design development, materials and construction options will largely be assessed on a working basis using mental arithmetic, indicative materials and construction quantities and carbon factors; and as necessary, more complex options will be assessed using quantified assessment in the National Highways' Carbon tool.
- The CMP (2nd iteration) will identify the stages of the Scheme's lifecycle that carbon will be used.

Reporting

B.16.1.47. The output from the carbon model will be used to quantify the carbon reductions that have been achieved, and document how this has influenced decision making within this report.

B.16.1.48. In addition, the appointed PC has a contractual requirement to report on cost and carbon performance to GCC, which includes reporting on carbon emissions. This will be via an agreed method consistent with previous lifecycle carbon assessments, which will be populated on a frequent basis (exact frequency to be determined by GCC) through the construction process and during maintenance activities through the life of the Scheme.

Register or Environmental Actions and Commitments

B.16.1.49. The following are the Environmental Actions and Commitments that relate to the Carbon management Plan, as set out in the REAC (Application document TR010063/APP/7.4). Table B16-1 indicates where additional detail on their implementation is set out.

Table B 16-1 – Carbon Management Plan REAC

REAC	Commitment Text	Implementation mechanism
G4	Management plans.	EMP (1 st iteration) (Application document TR010063/APP/7.3) Annex B (All)
C2	Review and manage carbon emissions at construction stage.	EMP (2 nd iteration) Annex B16 Carbon Management Plan

AtkinsRéalis

5th Floor, Block 5
Shire Hall
Bearland
Gloucester
GL1 2TH

Tel: +44 (0) 8000 514 514