

Cabinet
Thursday, 27 September 2018, 10.00 am, County Hall,
Worcester

Membership: Mr S E Geraghty (Chairman), Mr A T Amos, Mr A I Hardman,
Mr M J Hart, Mrs L C Hodgson, Ms K J May, Mr A P Miller,
Dr K A Pollock, Mr A C Roberts and Mr J H Smith

Agenda

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All the above reports and supporting information can be accessed via the Council's website.

Date of Issue: Wednesday 19 September 2018

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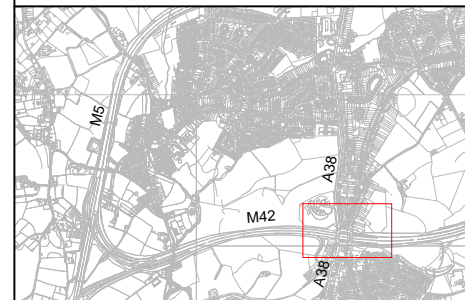
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KEY PLAN



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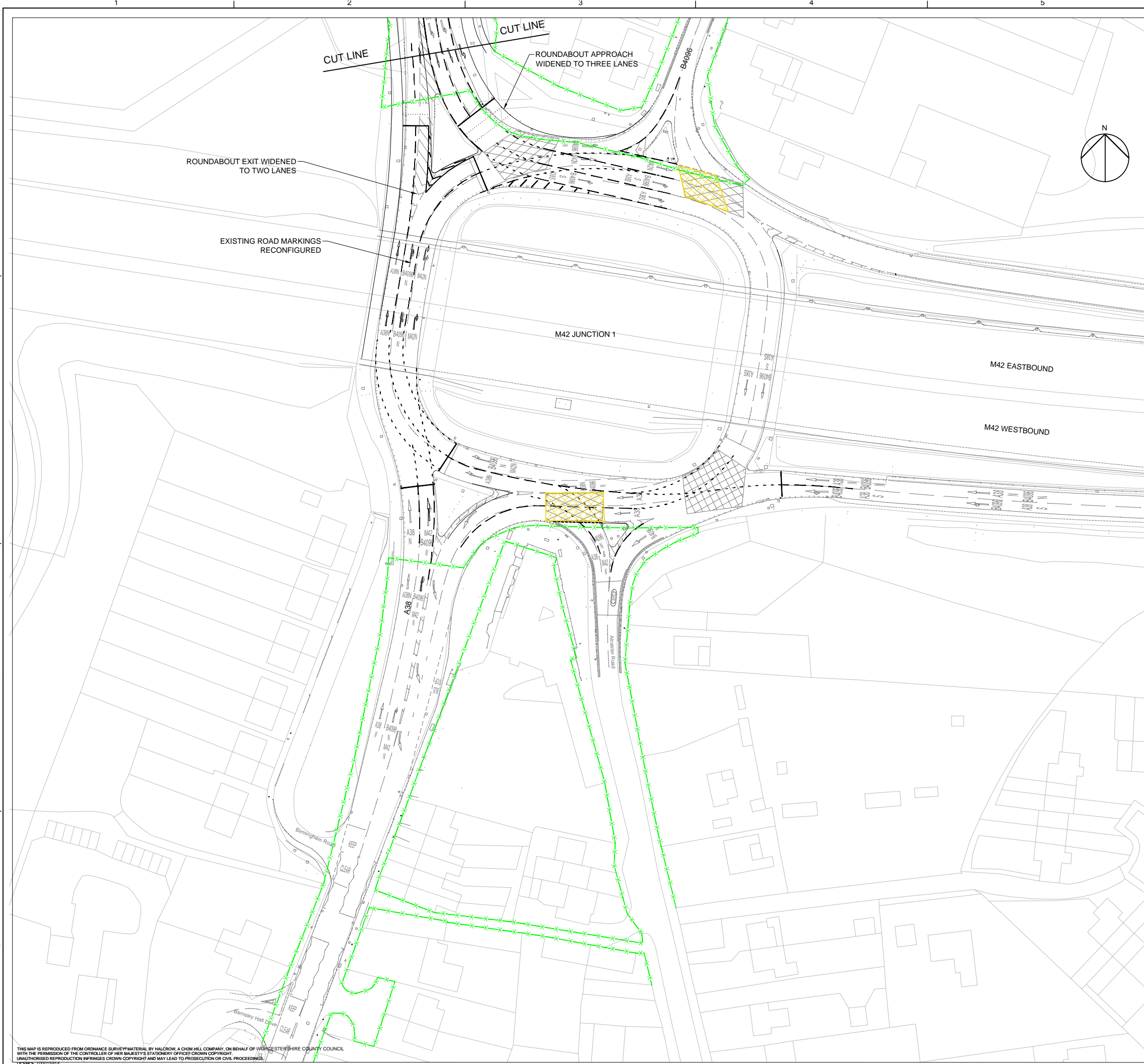
A38 BROMSGROVE TRANSPORT STRATEGY
A38/M42
PRELIMINARY DESIGN LAYOUT

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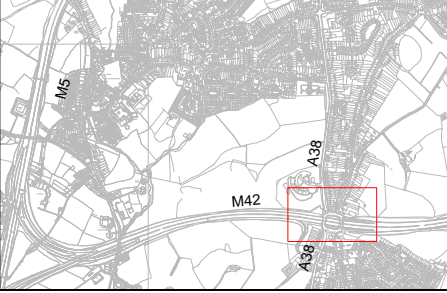
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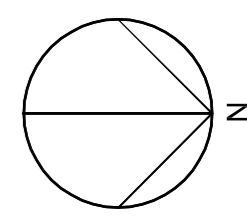
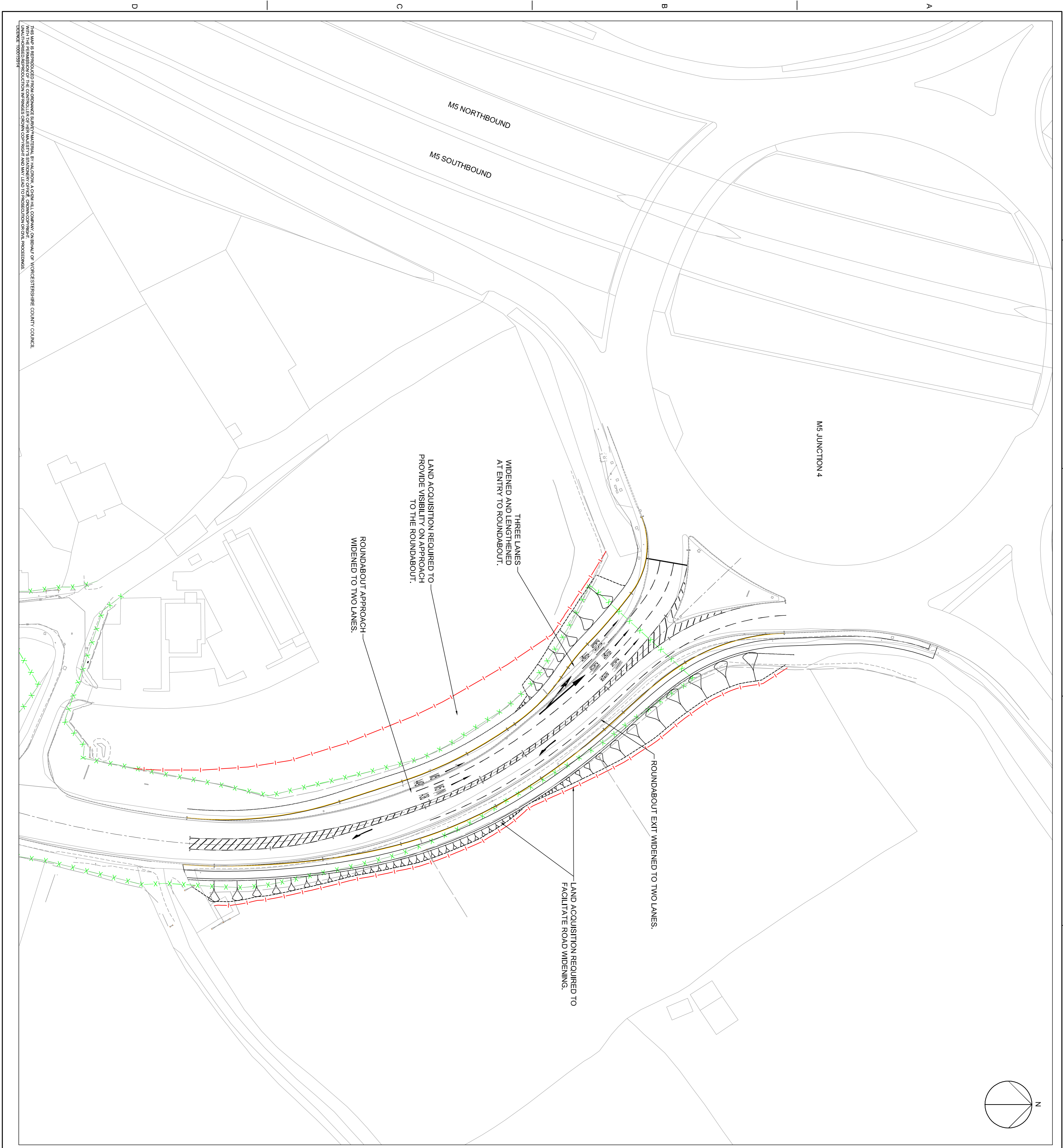
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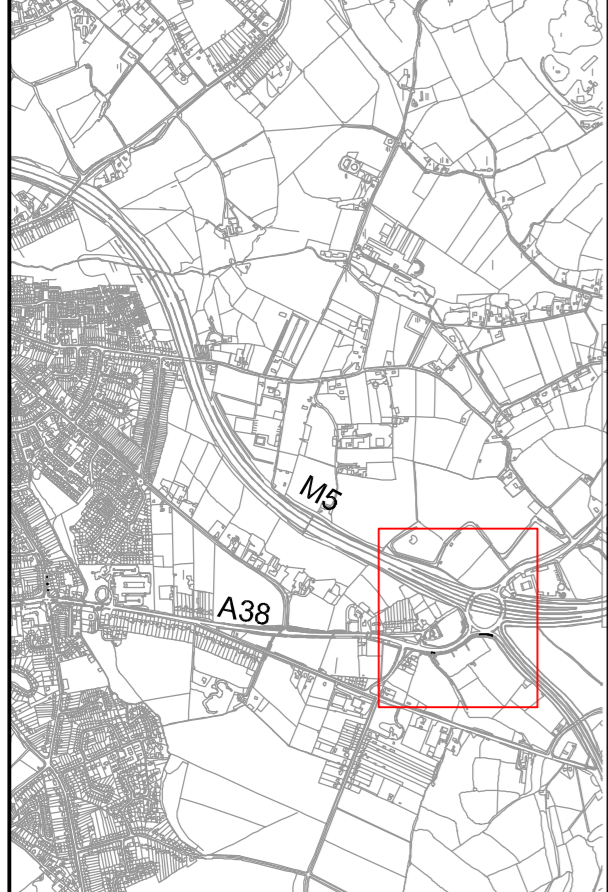
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KEY PLAN



A38 BROMSGROVE TRANSPORT STRATEGY
A38/M5
 PRELIMINARY DESIGN LAYOUT



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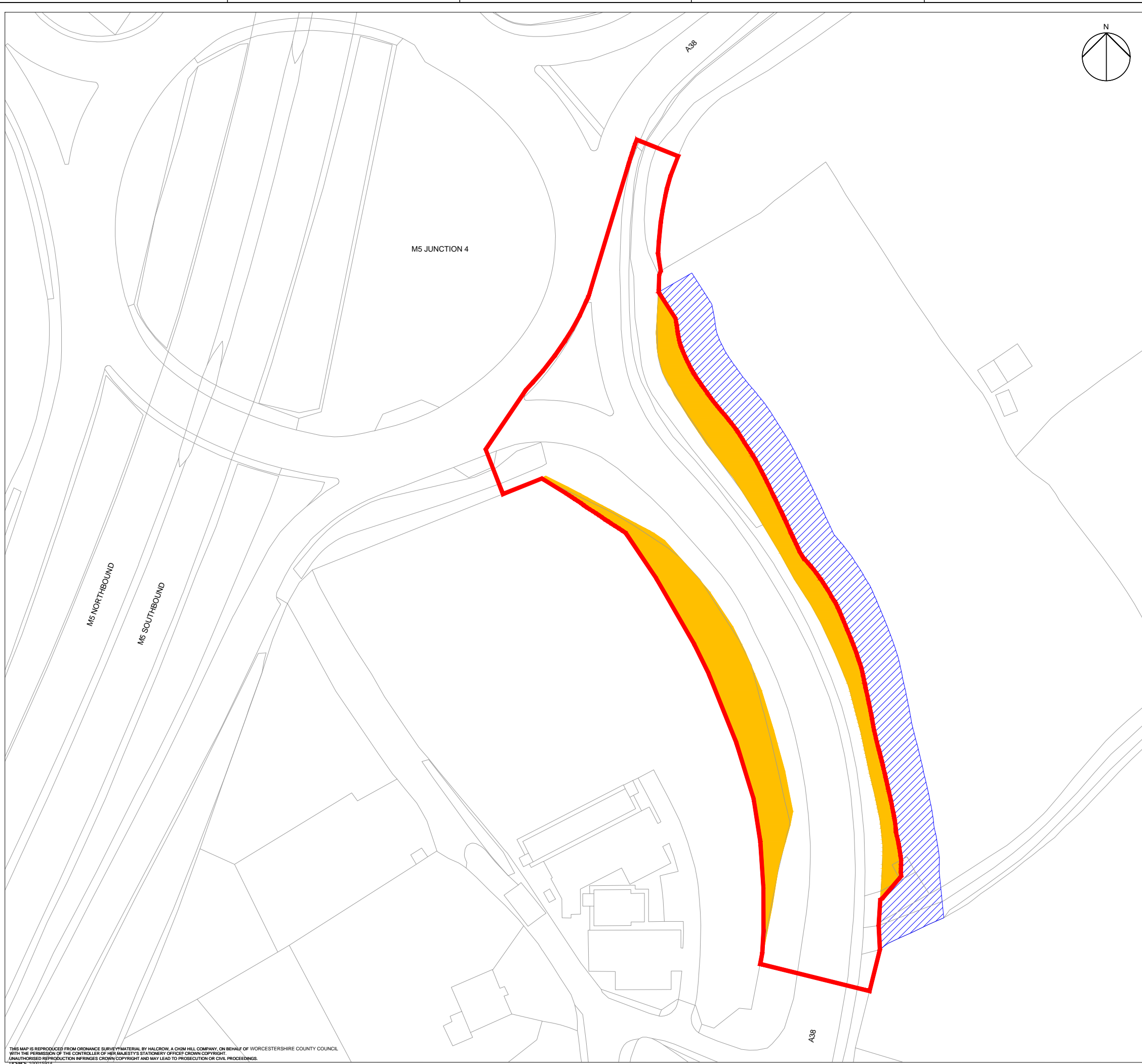
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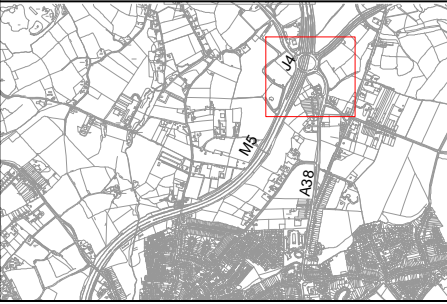
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A38 BROMSGROVE MAJOR SCHEME
PACKAGE 1 A38/M5 J4
PRELIMINARY LAND ACQUISITION

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Worcestershire County Council

**A review and response to the Code of Practice:
Well Managed Highway Infrastructure**

Version: 1.0

Date Issue: September 2018

Review date: September 2019

Team: Highways, Economy and Infrastructure Directorate

Executive Summary

Effective from October 2018, the Code of Practice called Well-Managed Highway Infrastructure (WMHI), encourages highway authorities to develop a locally determined risk-based approach to highway maintenance that is closely aligned with the asset management approach advocated by central Government's Department for Transport (DfT).

Whilst the Code of Practice is not statutory, it does provide Highway Authorities with guidance on highway management for good practice and has 36 key recommendations with the emphasis on authorities to take account of potential risks to all highway users using a risk based approach. The 36 recommendations cover a number of areas of highway maintenance that include inspections, recording defects, repairs and training of competent staff linked to risk assessment.

WCC has been operating a risk based approach to highway maintenance since 2005. By reviewing and adopting the recommendations of the new code, WCC will continue to operate a robust risk based approach that will ensure we meet DfT requirements, for keeping the highway network as safe as reasonably practicable and being effective in our management of third party claims.

This document sets out Worcestershire County Council's review and response to each of the 36 recommendations in more detail. As a summary, the table below lists the 36 recommendations with WCC compliance:

| | | |
|-------------------|--|-----------|
| Recommendation 1 | Use of the Code | compliant |
| Recommendation 2 | Asset Management Framework | compliant |
| Recommendation 3 | Asset Management Policy and Strategy | compliant |
| Recommendation 4 | Engaging and communicating with stakeholders | compliant |
| Recommendation 5 | Consistency with other authorities | compliant |
| Recommendation 6 | An integrated network | compliant |
| Recommendation 7 | Risk Based Approach | compliant |
| Recommendation 8 | Information Management | compliant |
| Recommendation 9 | Network Inventory | compliant |
| Recommendation 10 | Asset Data Management | compliant |
| Recommendation 11 | Asset Management Systems | compliant |
| Recommendation 12 | Network Hierarchy | compliant |
| Recommendation 13 | Whole Life/Design for Maintenance | compliant |
| Recommendation 14 | Risk Management | compliant |
| Recommendation 15 | Competencies and Training | compliant |
| Recommendation 16 | Inspections | compliant |
| Recommendation 17 | Condition Surveys | compliant |
| Recommendation 18 | Management Systems and Claims | compliant |
| Recommendation 19 | Defect Repair | compliant |
| Recommendation 20 | Resilient Network | compliant |
| Recommendation 21 | Climate Change Adaptation | compliant |
| Recommendation 22 | Drainage Maintenance | compliant |
| Recommendation 23 | Civil Emergencies and Severe Weather Emergency Plans | compliant |
| Recommendation 24 | Communications | compliant |
| Recommendation 25 | Learning from Events | compliant |
| Recommendation 26 | Performance Management Framework | compliant |

| | | |
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| Recommendation 27 | Performance Monitoring | compliant |
| Recommendation 28 | Financial Plans | compliant |
| Recommendation 29 | Lifecycle Plans | compliant |
| Recommendation 30 | Cross Asset Priorities | compliant |
| Recommendation 31 | Works Programming | compliant |
| Recommendation 32 | Carbon | Compliant |
| Recommendation 33 | Consistency with Character | compliant |
| Recommendation 34 | Heritage Assets | compliant |
| Recommendation 35 | Environmental Impact, Nature, Conservation & Biodiversity | compliant |
| Recommendation 36 | Minimising Clutter | Compliant |

The actions that have been taken to be fully compliant with the recommendations are shown below:

1. The Highway Maintenance Policy and Plan and the Highway Inspection Manual have been reviewed and amended to take into consideration the 36 recommendations with specific amendments relating to:
 - a. The risk matrix for assessing reported defects and defect repair has been reviewed to take account of minor changes detailed in the new code of practice.
 - b. The definitions of the carriageway, footway and cycleway hierarchies have been reviewed and slightly amended to provide greater clarity.
 - c. The inspection frequencies for carriageways, footways and cycleways have been reviewed and modified, with special attention given to section lengths of footways outside high footfall areas such as schools and shopping centres.
2. The current hierarchy is being reviewed to identify if amendments are required to take account of new residential or commercial developments that have taken place over the county in recent years.

1. Introduction and Background

The Department for Transport provides national guidance in relation to the management of the highway network in England. This is through a series of Codes of Practice called Well-maintained Highways, Well-lit Highways, and Management of Highway Structures. These will be superseded in October 2018 by a combined new Code of Practice called 'Well Managed Highway Infrastructure.'

The original Code of Practice called Well Maintained Highways has formed the basis of the Council's approach to its highway maintenance practice and delivery for the last 13 years, covering key areas such as safety inspections, management of trees and winter service provision, amongst many other areas of highway maintenance.

The new code contains 36 key recommendations covering, for example, asset management, network planning, structures, severe weather and resilience.

In many ways, the new combined Codes of Practice replicates the original guidance and the County Council, as the highways authority, is well placed to adopt the new Code of Practice with some minor amendments to existing practices.

2. A Risk Based Approach

Operating a risk-based approach to reactive maintenance means that the prioritisation of the defect will depend on the level of risk that it poses for the highway user. For example, a pothole on a busy and high speed A Road may represent a greater risk than that posed by a similar sized pothole in a residential cul-de-sac. Our risk based approach take account of this by making judged decisions based upon location, likelihood and severity of the defect identified. As such, identified defects are prioritised in accordance with the above risk based approach and repairs completed as necessary.

2.1 Methodology

A series of workshop sessions were held with WCC Officers drawn from the relevant areas of highways practice to review each of the recommendations detailed in the new code of practice. A gap analysis against current practices, policies and plans was completed. Many of the 36 recommendations are linked to specific areas of practice or are inter-related with other recommendations.

Appropriate steps were taken to address any gaps identified, with revisions to service delivery and suitable amendments have been made to operational policies and plans.

3. Compliance with the Well Managed Highway Infrastructure Code of Practice Recommendations

RECOMMENDATION 1 – USE OF THE CODE

This Code, in conjunction with the UKRLG Highway Infrastructure Asset Management Guidance, should be used as the starting point against which to develop, review and formally approve highway infrastructure maintenance policy and to identify and formally approve the nature and extent of any variations.

Compliant – Worcestershire County Council recognises the importance of applying the principles of asset management through the process of long term planning and whole life costing, to ensure best value and optimal future funding and programming decisions are taken where appropriate in line with available funds. Key elements of infrastructure asset management include adopting a life cycle approach, developing and deploying cost effective maintenance strategies for the medium and long term, identifying and providing appropriate levels of service, and adopting a sustainable approach to the use of resources and continuous improvement in the highway services practices and processes.

WCC has in place an updated current series of operational plans and policies. These include, the Highways Maintenance Policy, the Highways Maintenance/Inspection Plan, an Asset Management Framework comprising an Asset Management Policy and an Asset Management Strategy. This ensures we will meet the necessary requirements and provide for effective delivery of our Highways Asset in accordance with DfT requirements.

RECOMMENDATION 2 – ASSET MANAGEMENT FRAMEWORK

*An Asset Management Framework should be developed and endorsed by senior decision makers. All activities outlined in the Framework should be documented.
(HIAMG Recommendation 1)*

Compliant – see Recommendation 1.

RECOMMENDATION 3 – ASSET MANAGEMENT POLICY AND STRATEGY

An asset management policy and a strategy should be developed and published. These should align with the corporate vision and demonstrate the contribution asset management makes towards achieving this vision. (HIAMG Recommendation 3)

Compliant – see Recommendation 1.

RECOMMENDATION 4 – ENGAGING AND COMMUNICATING WITH STAKEHOLDERS

Relevant information should be actively communicated through engagement with relevant stakeholders in setting requirements, making decisions and reporting performance. (Taken from HIAMG Recommendation 2)

Compliant - Worcestershire County Council has a Highways Asset Management Communication Strategy that is available on our website. It details how we inform the public and key stakeholders about works taking place on the highway network and our performance therein.

RECOMMENDATION 5 – CONSISTENCY WITH OTHER AUTHORITIES

To ensure that users' reasonable expectations for consistency are taken into account, the approach of other local and strategic highway and transport authorities, especially those with integrated or adjoining networks, should be considered when developing highway infrastructure maintenance policies.

Compliant - Worcestershire has reviewed arrangements with neighbouring authorities for cross boundary co-ordination of highways maintenance programmes and winter service provision for appropriate consistency and ensuring effective cross boundary working.

Worcestershire County Council is the Chair and regional secretariat for the West Midlands Highway Alliance (WMHA) that has the aims and objectives to promote and share best practice in order to drive improvements and efficiencies in the discipline of highways maintenance for its members. The County Council has also worked via the WMHA to review and further develop its activity and that of other surrounding Local Highway Authorities in relation to recommendation 5.

Worcestershire County Council is also a member of the Highways related Midlands Service Improvement Group (MSIG) and the Highways Maintenance Efficiency Programme (HMEP) Connect and Share Steering Group to share good practice with other highway authorities locally, regionally and nationally.

RECOMMENDATION 6 – AN INTEGRATED NETWORK

The highway network should be considered as an integrated set of assets when developing highway infrastructure maintenance policies.

Compliant - Our approach to considering the highway network as an integrated set of assets is detailed in the Highways Asset Management Strategy and Policy. The Highways Maintenance Policy and Plan details the methodology that is used to achieve the Asset Management Strategy and Policy objectives.

RECOMMENDATION 7 – RISK BASED APPROACH

A risk based approach should be adopted for all aspects of highway infrastructure maintenance, including setting levels of service, inspections, responses, resilience, priorities and programmes.

Compliant – WCC already has in place a risk management approach to asset management. This includes a high level strategic risk register, with tactical and operational risk management methodology in relation to levels of service, inspections, response times, resilience (via a network approach) and prioritised programmes of work relating to its asset types, such as highways and structures.

RECOMMENDATION 8 – INFORMATION MANAGEMENT

Information to support a risk based approach to highway maintenance should be collected, managed and made available in ways that are sustainable, secure, meet any statutory obligations, and, where appropriate, facilitate transparency for network users.

Compliant – The 'Highways Information Strategy' outlines how the County Council collects and manages its information for highway maintenance. This includes information relating to its asset inventory and asset data relating to performance and condition. It also outlines how WCC systems and processes are in place to collect and store defect information such as the occurrence, type and response times. This enables performance monitoring and reporting to key decision makers and network users.

RECOMMENDATION 9 – NETWORK INVENTORY

A detailed inventory or register of highway assets, together with information on their scale, nature and use, should be maintained. The nature and extent of inventory collected should be fit for purpose and meet business needs. Where data or information held is considered sensitive, this should be managed in a security- minded way.

Compliant - A detailed inventory/register of key highway assets including roads, footways, street lighting,, traffic signals, gullies,, signs,, bridges and other key structures that form the overall highway network infrastructure is in place and managed appropriately. This information is available for the use of key officers to enable effective management of the Asset. Elements are available to provide information for key stakeholders.

RECOMMENDATION 10 – ASSET DATA MANAGEMENT

The quality, currency, appropriateness and completeness of all data supporting asset management should be regularly reviewed. An asset register should be maintained that stores, manages and reports all relevant asset data. (HIAMG Recommendation 5)

Compliant – see Recommendation 9

RECOMMENDATION 11 – ASSET MANAGEMENT SYSTEMS

Asset management systems should be sustainable and able to support the information required to enable asset management. Systems should be accessible to relevant staff and, where appropriate, support the provision of information for stakeholders. (HIAMG Recommendation 12)

Compliant – see Recommendation 9

RECOMMENDATION 12 – NETWORK HIERARCHY

A network hierarchy, or a series of related hierarchies, should be defined which include all elements of the highway network, including carriageways, footways, cycle routes, structures, lighting and rights of way. The hierarchy should take into account current and expected use, resilience, and local economic and social factors such as industry, schools, hospitals and similar, as well as the desirability of continuity and of a consistent approach for walking and cycling.

Compliant The Network Hierarchy in Worcestershire has been defined and developed to include all elements of the highway network including carriageways, footways, cycle routes, structures, lighting and rights of way. Some minor amendments have been made to take further account of existing and future developments, and locations such as schools as identified.

RECOMMENDATION 13 – WHOLE LIFE / DESIGNING FOR MAINTENANCE

Authorities should take whole life costs into consideration when assessing options for maintenance, new and improved highway schemes. The future maintenance costs of such new infrastructure are therefore a prime consideration.

Compliant - The County Council takes into account whole life costs when designing new schemes to maximise long term maintainability where practicable. In addition its highways design guide has been reviewed to further increase maintainability elements therein. We also look to provide for effective materials and techniques when undertaking highways works, to maximise and extend the life of the highway network within sound highways practices and methodology.

RECOMMENDATION 14 – RISK MANAGEMENT

The management of current and future risks associated with assets should be embedded within the approach to asset management. Strategic, tactical and operational risks should be included as should appropriate mitigation measures.

(HIAMG Recommendation 11)

Compliant – See Recommendation 7

RECOMMENDATION 15 – COMPETENCIES AND TRAINING

The appropriate competencies for all staff should be identified. Training should be provided where necessary for directly employed staff, and contractors should be required to provide evidence of the appropriate competencies of their staff.

A vital component of inspections is to ensure that inspectors are able to undertake Inspection and Assessment duties consistently, accurately and within current guidelines and standards. Inspectors will undertake training on a regular basis and we will ensure appropriate refresher courses are provided.

Compliant – All WCC Highways related Contracts are NEC based, either Engineering and Construction Contract (ECC) or Term Service Contract (TSC), including the Professional Services Provision Contract. The Council's Highways commissioning process ensures value for money and that its contracts are outcome based and measured against Key Performance Indicators. As part of the commissioning process, all contractors are required to demonstrate the appropriate competencies of their staff, with associated Quality Assurance measures.

For WCC staff in particular in relation to Inspections, we ensure that they receive appropriate and regular training and refresher courses and sessions in key necessary activities to provide for a consistent approach to meet current guidelines and standards.

RECOMMENDATION 16 – INSPECTIONS

A risk-based inspection regime, including regular safety inspections, should be developed and implemented for all highway assets.

Compliant - All inspections are carried out by Highway Inspectors in accordance with the Council's Highway Inspection Manual that has been reviewed and updated in accordance with the new Code of Practice. This adopts a risk based approach as outlined in the Highways Maintenance Policy and Plan.

RECOMMENDATION 17 – CONDITION SURVEYS

An asset condition survey regime, based on asset management needs and any

statutory reporting requirements, should be developed and implemented.

Compliant - To apportion a level of condition to the network, the County Council completes a number of surveys each year. The methodology and frequency is detailed in the Highway Asset Management Strategy and Policy.

RECOMMENDATION 18 – MANAGEMENT SYSTEMS AND CLAIMS

Records should be kept of all activities, particularly safety and other inspections, including the time and nature of any response, and procedures established to ensure efficient management of claims whilst protecting the authority from unjustified or fraudulent claims.

Compliant – All safety inspections and repairs are recorded using WCC asset management systems. Defects and enquiries reported by the public with corresponding maintenance activities are also retained electronically in the Public Enquiry Management (PEM) system and Customer Relationship Management (CRM) system. In addition, WCC records claims on an electronic database, this includes detailed highway data for each claim; road number, eastings and northings, type of defect, urban/rural identification and carriageway/footway categorisation. There is a diary management system to ensure the required response times are met. Within the overall claims management, systems exist for the prevention and detection of fraud

RECOMMENDATION 19 – DEFECT REPAIR

A risk-based defect repair regime should be developed and implemented for all highway assets.

Compliant – WCC's risk based approach to defect repair is documented in the Highway Inspection Manual.

RECOMMENDATION 20 – RESILIENT NETWORK

Within the highway network hierarchy a 'Resilient Network' should be identified to which priority is given through maintenance and other measures to maintain economic activity and access to key services during extreme weather. Climate Change and Adaptation.

Compliant - Worcestershire County Council has a Highway Emergency and Resilient Network Plan that details how the network in Worcestershire are managed in response to severe weather impacts, emergencies and other key resilience issues. The resilient network is reviewed, as a minimum every two years.

RECOMMENDATION 21 – CLIMATE CHANGE ADAPTATION

The effects of extreme weather events on highway infrastructure assets should be risk assessed and ways to mitigate the impacts of the highest risks identified.

Compliant – The Highway Emergency Resilient Network Plan is in place, this outlines the effects of extreme weather events and how these events are managed.

RECOMMENDATION 22 – DRAINAGE MAINTENANCE

Drainage assets should be maintained in good working order to reduce the threat and scale of flooding. Particular attention should be paid to locations known to be prone to problems, so that drainage systems operate close to their designed efficiency.

Compliant - WCC has a clear and robust drainage asset management system in place with over 5 years of data, enabling the effective review of optimising the asset and ensuring efficient emptying operational programmes in place. Using an asset management system and approach, our gullies, connections and culverts are managed by our Highway Maintenance Service Contractor (HMSC) Ringway. The service delivery is managed with defined outcomes which are reviewed as part of our Performance Management Framework.

In addition, WCC uses appropriate technology to monitor and manage its drainage assets; a comprehensive list of flooding hotspots are mapped into the County's Geographic Information System (GIS), together with ford crossings.

RECOMMENDATION 23 – CIVIL EMERGENCIES AND SEVERE WEATHER EMERGENCIES PLANS

The role and responsibilities of the Highway Authority in responding to civil emergencies should be defined in the authority's Civil Emergency Plan. A Severe Weather Emergencies Plan should also be established in consultation with others, including emergency services, relevant authorities and agencies. It should include operational, resource and contingency plans and procedures to enable timely and effective action by the Highway Authority to mitigate the effects of severe weather on the network and provide the best practicable service in the circumstances.

Compliant – To ensure that our approach to managing a resilient network is effective and cohesive, WCC has a framework in place for its delivery comprising the following partnership groups; the Local Resilience Forum, Worcestershire Emergency Planning Tactical Control group, Worcestershire Severe Weather group and the Highway Flood Adaptation Programme Board. The Highway Emergency Resilient Network Plan outlines this approach.

RECOMMENDATION 24 – COMMUNICATIONS

Severe Weather and Civil Emergencies Plans should incorporate a communications plan to ensure that information including weather and flood forecasts are received through agreed channels and that information is disseminated to highway users through a range of media.

Compliant – Severe Weather and Civil Emergencies Plans are regularly rehearsed and refined as necessary which incorporate communications and learning from events as vital elements. We have a clear and effective system in place with agreed media and communication channels to manage severe weather and civil emergencies in relation to highway matters.

RECOMMENDATION 25 – LEARNING FROM EVENTS

Severe Weather and Civil Emergencies Plans should be regularly rehearsed and refined as necessary. The effectiveness of the Plans should be reviewed after actual events and the learning used to develop them as necessary.

Compliant – see Recommendation 24.

RECOMMENDATION 26 – PERFORMANCE MANAGEMENT FRAMEWORK

A performance management framework should be developed that is clear and accessible to stakeholders as appropriate and supports the asset management strategy. (HIAMG Recommendation 4)

Compliant - Worcestershire County Council operates a Performance Management Framework that supports the Highways Asset Management Strategy and is used to measure its performance. It demonstrates the link between the corporate vision, asset management strategy, levels of service and maintenance operations and incorporates performance monitoring.

RECOMMENDATION 27 – PERFORMANCE MONITORING

The performance of the Asset Management Framework should be monitored and reported. It should be reviewed regularly by senior decision makers and when appropriate, improvement actions should be taken. (HIAMG Recommendation 13)

Compliant – See Recommendation 26.

RECOMMENDATION 28 – FINANCIAL PLANS

Financial plans should be prepared for all highway maintenance activities covering short, medium and long term time horizons.

Compliant – Financial planning is in place in relation to the short, medium and longer term horizons. Using a lifecycle approach (Recommendation 29), and Financial Impact Modelling Tool (FIMT), we ensure the effects of all strategic funding decisions are considered at an early stage to achieve the most efficient and effective outcome for the authority and our customers within the finance available.

RECOMMENDATION 29 – LIFECYCLE PLANS

Lifecycle planning principles should be used to review the level of funding, support investment decisions and substantiate the need for appropriate and sustainable long term investment. (HIAMG Recommendation 6)

Compliant - Worcestershire County Council uses lifecycle planning to develop investment strategies to deliver an agreed level of performance or, where funding becomes constrained, a prediction of the effect of particular funding scenarios on the

levels of service that can be delivered. This approach enables service delivery to be as effective as possible, allowing a cogent allocation of resources to those areas which will contribute most to the overall objectives and priorities of the County Council and allow an assessment to be made of the residual risk. The lifecycle planning approach also allows tracking of performance against investment for each asset group and, thereby, informs following future strategies to ensure the investment achieves the outcomes planned where practicable.

RECOMMENDATION 30 – CROSS ASSET PRIORITIES

In developing priorities and programmes, consideration should be given to prioritising across asset groups as well as within them.

Compliant – Different types of asset have their own asset management plans that reflect national codes of practice and the individual needs of each asset. Each group of assets have their own asset manager and are managed in different ways to reflect their need. We ensure, as part of the Contractor's Plan (the broad highways scheduling and programming plan), that prioritisation takes consideration of cross asset groups to ensure joined up delivery of works to improve efficient and effective working where practicable. See Recommendation 31.

RECOMMENDATION 31 – WORKS PROGRAMMING

A prioritised forward works programme for a rolling period of three to five years should be developed and updated regularly. (HIAMG Recommendation 7)

Compliant - By the use of robust evidence based decision making processes, Worcestershire County Council is able to optimise assets by the appropriate prioritisation of work within the available funding. One element of the decision making prioritisation process is the potential for schemes to be clustered and coordinated across asset groups, for example; resurfacing a road in conjunction with a road safety scheme. Such alignment of schemes within the Works Programmes is key to optimising available funding across our service delivery. These form part of the Contractor's Plan (a key component of the Term Service Contract) for highways maintenance.

We identify, three years in advance, those sections of carriageways which require consideration for maintenance. These sections feed into a prioritised forward facing annual programme of works on a rolling basis. This is managed and implemented via the Highways Maintenance Service Contract delivered by Ringway in the form of the Contractors' Plan. The Contractor's Plan provides for an integrated approach, bringing together all areas of work and delivery. This ensures that works programming, co-ordination and management is more effective and joined-up to increase efficient use of resources across the board.

RECOMMENDATION 32 – CARBON

The impact of highway infrastructure maintenance activities in terms of whole life carbon costs should be taken into account when determining appropriate interventions, materials and treatments.

Compliant - Worcestershire County Council through the West Midlands Highway Alliance, Worcestershire County Council signed up to a low carbon concordat (September 2013). This includes strong targets for recycling and use where appropriate, use of low temperature asphalt.

Over recent years, the Street Lighting contract has introduced Light Emitting Diode (LED) technology and variable lighting levels that is lower energy consuming. Over the life of this Strategy, Worcestershire County Council will continue to mitigate energy consumption against the planned growth of the street lighting asset.

RECOMMENDATION 33 – CONSISTENCY WITH CHARACTER

Determination of materials, products and treatments for the highway network should take into account the character of the area as well as factoring in whole life costing and sustainability. The materials, products and treatments used for highway maintenance should meet requirements for effectiveness and durability.

Compliant - In maintaining the highway network to meet the challenges of safety, serviceability and sustainability, in order to provide best value for the Council and local community, materials, products and treatments are considered using an asset management approach and taking into account;

- Complying with statutory obligation
- Meeting the users need for safety
- The character of the area
- The current and desired future usage of the area

To ensure the integrity and character of a location is preserved, the use of appropriate replacement materials and treatment types are carefully selected in consideration of their environmental impact, especially in designated conservation areas. For Public Realm schemes, the Local Transport Plan v4 includes a Public Realm Policy (14) that prescribes the materials, grades and specification to be used. For sustainability, 10% of natural materials is over ordered for contingency/future repairs and Worcestershire County Council have acquired a storage facility of natural materials for Public Realm schemes.

RECOMMENDATION 34 – HERITAGE ASSETS

Authorities should identify a schedule of listed structures, ancient monuments and other relevant assets and work with relevant organisations to ensure that maintenance reflects planning requirements.

Compliant - WCC maintains an inventory of its 'structures' with particular attention to bridges that are either national monuments or are Grade listed. Worcestershire County Council's Historic Environment Record also holds around 80,000 records of heritage assets and previous archaeological works. This comprises a list of designated and undesignated heritage assets in a SQL database linked to a Geographic Information

System. The data for Worcester City is separately owned and managed by Worcester City Council, but the data is held in on a joint software platform supported by the County Council.

RECOMMENDATION 35 – ENVIRONMENTAL IMPACT, NATURE CONSERVATION AND BIODIVERSITY

Materials, products and treatments for highway infrastructure maintenance should be appraised for environmental impact and for wider issues of sustainability. Highway verges, trees and landscaped areas should be managed with regard to their nature conservation value and biodiversity principles as well as whole-life costing, highway safety and serviceability.

Compliant - We pay careful consideration to the environmental impact of highway maintenance works with the aim to sustain the County's biodiversity, character and heritage by the adoption of good environmental management procedures. WCC have taken positive steps to promote biodiversity through its practices which are outlined in our Highways Maintenance Plan.

RECOMMENDATION 36 – MINIMISING CLUTTER

Opportunities to simplify signs and other street furniture and to remove redundant items should be taken into account when planning highway infrastructure maintenance activities.

Compliant - Worcestershire County Council's Traffic Management team, routinely take opportunities "to simplify signs" and "to remove redundant items" (mainly redundant posts) when undertaking new works at any given location.

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