

**TRANSPORT AND WORKS ACT 1992
TRANSPORT AND WORKS (INQUIRIES PROCEDURES)
RULES 2004
THE NETWORK RAIL (OXFORD STATION PHASE 2
IMPROVEMENTS (LAND ONLY) ORDER)**

**ENGINEERING
PROOF OF EVIDENCE
Lawrence Walton MEng (Oxon) GMICE**

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Proof of Evidence – Engineering

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1. INTRODUCTION

- 1.1. I am Lawrence Walton, MEng (OXON) GMICE. I am a Designated Project Engineer at Network Rail having been employed in the railway industry since 2009, having worked on Reading Station, the Crossrail Stockley Flyover Project and Enhanced Stations West Drayton, Hayes and Harlington and Southall.
- 1.2. I am a graduate member of The Institution of Civil Engineers (ICE) having qualified in 2002 and am preparing for Chartered Professional Review. I have a Masters Degree in Engineering Science from University College, Oxford.
- 1.3. As a Designated Project Engineer at Network Rail my role involves Engineering Assurance for design and construction contracts, ensuring the railway is designed and built fit for the future in line with all relevant standards and helping shape the engineering solutions that are implemented.
- 1.4. I have been the lead Designated Project Engineer for the Oxford Station Phase 2 Improvements Project (hereinafter referred to as the 'OSP2 Project') since March 2021, having taken over from Andy Willson who developed the design from Option Selection stage through to the end of Approval in Principle.
- 1.5. The Oxford Station Phase 2 Improvements (Land Only) Order is required to facilitate the improved capacity and capability on the 'Oxford Corridor' (Didcot North Junction to Aynho Junction) to meet the Strategic Business Plan objectives for capacity enhancement and journey time improvements. The OSP2 Project forms part of a package of rail enhancement schemes which deliver significant economic and strategic benefits to the wider Oxford area and the country. The enhanced infrastructure in the Oxford area will provide benefits for both freight and passenger services, as well as enable further schemes in this strategically important rail corridor including the introduction of East West Rail services in 2024.
- 1.6. The works comprised in the OSP2 Project can be summarised as follows:
 - A new through platform on the west side of Oxford Station to form a second face to the existing Platform 4, including additional waiting facilities, toilets, retail units and construction of a new canopy along the platform length. This will be known as Platform 5.
 - New track connections to the line from Platform 5, which will allow trains to leave both Platform 4 and 5 at the same time, both northbound and southbound.
 - A new western station entrance from Cripsey Road, off Botley Road.

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- A new span over Botley Road to accommodate the additional downside platform line. This will incorporate highways improvements to provide dedicated cycleway and footpaths and improve the road gradient and clearances below the bridge to allow the use of normal height double decker buses, as well as passive provision for an additional rail span to the east.
- Re-routing of Roger Dudman Way, removing the junction where it joins Botley Road and creating a new access onto Cripsey Road, to make space for the western entrance
- A new rail span over Castle Mill Stream to facilitate the Platform 5 line.
- Replacement of road span of Sheepwash Bridge and adjoining footbridge structure on a new alignment.

2. STRUCTURE OF THE PROOF OF EVIDENCE

2.1 My Proof of Evidence will provide the technical background and engineering justification for the OSP2 Project and will cover the matters set out below:

2.1.1 The state of the railway system in Oxford prior to implementation of the OSP2 Project.

2.1.2 A statement of the technical improvements to the railway system delivered by the OSP2 Project.

2.1.3 Safety requirements and statement for how these are discharged.

2.1.4 Consideration of the relevant Objections with engineering justification showing how compulsory purchase under the Order has been minimised.

3. TECHNICAL CONSIDERATIONS

3.1 The state of the railway system in Oxford prior to implementation of the OSP2 Project

3.1.1 Oxford Railway Station sits on the Didcot Chester Line (DCL), about 850m west of Carfax Tower in Oxford city centre. It is bounded by Botley Road to the south, the Oxford University Said Business School to the east, Castle Mill Stream (also known as Sheepwash Cut) to the north, and Roger Dudman Way road to the west. It currently occupies a site of approximately 4.4 acres (18,000m²) excluding car parking and bus/taxi stands.

3.1.2 Oxford Railway station is on the confluence of several routes for passengers and freight, including services into London Paddington via Reading and the Thames Valley, or via

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Bicester into London Marylebone; services north to Birmingham, Manchester and south to Bournemouth; and north west to Hereford. There is a key freight route that runs through Oxford between Southampton Port and the Midlands, where the section between Didcot and Oxford carries the highest tonnage (overall weight of trains and goods) of any line in the Wales and Western NR Region. See Appendix A for current service plan.

3.1.3 All lines are currently unelectrified, therefore trains in regular service are powered by diesel fuel.

3.1.4 Oxford Station consists of four operational platforms. On the East side of the station, platform 1 and 2 are bay platforms for route to the north of Oxford, where trains turn back once arrived at Oxford. Platforms 3 and 4 are through platforms. In addition to the platforms there are two through lines where freight and other non-stopping trains can pass each other and other trains stopped in the platform.

3.1.5 The lines are currently named as follows, from West to East

<u>Infrastructure served</u>	<u>Line name</u>
Platform 1	Oxford Bay 1
Platform 2	Oxford Bay 2
Platform 3	Up Oxford Relief
(through line, usually southbound)	Up Oxford
(through line, usually northbound)	Down Oxford
Platform 4	Down Oxford Relief

3.2 A statement of the technical improvements to the railway system delivered by the OSP2 project

3.2.1 Feasibility Report 122151 CP5 Oxford Corridor Phase 2 from April 2014 looked at the options for the whole of Oxford Phase 2 (**C16**), including two track options for the Island Platform 4/5, focusing on the track alignment to the south.

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3.2.2 Option Selection Report “Oxford Corridor CP5 - Phase 2 Option Selection Report” by TSP, reference W1002B-TTS-REP-EMG-000002 (November 2014) **(C3)** undertook a more technical consideration of the options, alternatives and constraints specifically for Oxford Phase 2. This looked at:

- Track alignment. There are a multitude of track parameters that need to be met for safety, ride comfort, track and wheel wear and maintainability reasons, including space between tracks, curvature, vertical and horizontal alignment. Track alignment has been coordinated with signalling requirements in terms of the layout of signals to ensure the safe passage of trains. Options for the alignment of track and constraints over Sheepwash Bridge and Botley Road Bridge have been considered, including construction depth of the bridge and ballast depths.
- Sheepwash Bridge. Consideration has been made between two options:
 - Rebuilding the vehicle span further west to allow for the new platform 5 line “Down Oxford Passenger Loop” – which involves disruption and acquisition of some of the Co-op Nursery land.
 - Removing vehicle span and improving access from the north over Castle Mill Stream and the railway at Walton Well Road. This option was later discounted as the Co-op Nursery and Oxford University required the southern route to remain open.
- Geotechnical considerations – there is a high groundwater table in the Oxford area generally sitting in the river terrace gravels, creating complexity during construction as careful dewatering of any excavations below the water table will be required.
- Several options have been explored for highway geometry under Botley Road Bridge showing the trade off between vertical alignment curves and vertical clearance.
- Botley Road has had three options for form explored including constructability:
 - Single 19m Orthotropic Steel Deck;¹
 - 10m Orthotropic Steel Deck with RC Walkways;
 - Three Span Orthotropic Steel Deck.

¹ Efficient structural steel bridge deck with deck plate stiffened in one primary direction

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- Other options for platform capacity were explored as noted in the Sponsor Proof by Christopher Nash at section 3.5.12.
- Options for canopy position (to platform 4, or platform 4/5) and platform building construction.
- Options for the Western Entrance have been explored including road access to drop off areas and the alignment of Roger Dudman Way and Cripsey Road.

3.2.3 Following the option stages, a single option was decided on based on the evidence provided in the Feasibility Study and Option Selection Report and was developed, as summarised below.

3.2.4 There will be a new platform 5, 275m long. The provision of an additional ‘through’ platform 5 will allow more trains to run and improve reliability. One additional line will be added as detailed in the table below. The new track layout will allow for two trains to leave Platform 4 and 5 simultaneously, either northbound or southbound. The platforms will have the capability of splitting and joining trains (e.g. two class 80x 5 car Intercity Express Train at 130m each). These aspects yield greatly improved operational flexibility, both in normal running (day to day timetable), and in times of planned maintenance or unplanned disruption.

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<u>Infrastructure served</u>	<u>Line name</u>
Platform 1	Oxford Bay 1
Platform 2	Oxford Bay 2
Platform 3	Up Oxford Relief
(through line, usually southbound)	Up Oxford
(through line, usually northbound)	Down Oxford
Platform 4	Down Oxford Relief
Platform 5	Down Oxford Passenger Loop

3.2.5 The new Western Entrance building will provide a secondary entrance to the station, relieving passenger congestion in the existing station, particularly at paid gatelines and when waiting to cross the railway via the existing bridge, which enables faster platform clearance times for improved safety and comfort.

3.2.6 Cycle parking close to the new Western Entrance will be provided, for up to 360 cycles.

3.2.7 Future rail service provision of the station is for East West Rail train services to Milton Keynes, Bedford and Cambridge and for further train capacity improvements proposed in the longer term via the Oxfordshire County Oxford Rail Corridor Strategy, including new services to Cowley, potentially new services to the south west, additional trains to Birmingham and Worcester, and additional freight trains.

3.2.8 The provision of a new platform 5 triggers the need to provide a new rail bridge over Botley Road and Sheepwash Bridge, as there is no span currently on the new track alignment, and significant alterations to the west of the platform including Roger Dudman Way Road are required. A new line cannot use the existing spans on Sheepwash and Botley as the geometry would not permit it (the platform is 275m long and there is 295m between bridges; the 40mph rail turnouts at either end are at least 90m long, leaving less than 115m for a useable platform face which is shorter than any train using Oxford). According to Railway Group Standard GIRT7020 issue 1.1 the useable width for an island platform should be no less than 4m. The Botley Road Bridge option is configured as a three span multi deck as this is easier to install in stages and uses less material than the others in paragraph 3.2.2 above.

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3.2.9 Platform 4/5 is configured for step-free access from the Western Entrance, with lift facilities from the western subway to the platform level. Platform 4/5 also gains extended canopies for improved passenger comfort that are also designed to accommodate overhead line electrification.

3.2.10 Botley Road is the primary route from the centre of Oxford to the west of the city and is often heavily congested, with poor cycling/pedestrian provision at the bridge location. The opportunity is therefore being taken to provide significant highway improvements at the same time as the rail scheme, at this critical location.

3.2.11 The rail enhancements will include more trains running from Oxford (and from further south) towards Oxford Parkway/Bicester (OXD line), as part of the East West Rail service and associated freight routes.

3.2.12 The OSP2 Project is being designed with passive provision for overhead line electrification works to be completed by others in the future, in support of the Department for Transport's Decarbonisation Strategy for net zero CO₂ emissions for the Railway by 2050.

3.3 Safety Requirements of the Scheme

3.3.1 It will be necessary to go through the necessary regulatory process and obtain a safety authorisation before the scheme can be operated. These are standard requirements and there is no suggestion that there will be any issues in terms of achieving compliance. I briefly describe the process and authorisations as follows.

3.3.2 Network Rail complies with Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) (S.I. 2006/599) (**B22**). This was introduced to put the requirements of the 2004 European Railway Safety Directive (**B23**) into practice in Great Britain. The Directive aims to continue to remove barriers to providing international transport services by creating a common framework for railway safety across the European Union and Great Britain.

3.3.3 Under ROGS, Network Rail is required to apply the Common Safety Method for Risk Evaluation and Assessment (CSM-REA) so that a 'suitable and sufficient' risk assessment is undertaken on technical, operational or organisational changes made to the railway that could significantly affect safety. This safety authorisation needs to be undertaken for CSM RA as the OSP2 Project has been assessed as being "CSM Significant" due to the level of complexity of the system change. This instigates third party authorisation and checks throughout the lifecycle of the project, which will be undertaken by the National Certification Body, an independent company under the Network Rail Group.

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3.3.4 The principal deliverable for safety authorisation is a Hazard Register, recording hazards and mitigations that may arise out of the system change, which is created by the OSP2 Project by several experienced and competent persons from Network Rail, Designers, Contractors, Train and Freight Operating Companies.

3.3.5 The hazard register is then used to better inform the design and eliminate hazards wherever possible. If a hazard cannot be eliminated, it is either dealt with by an agreed code of practice (e.g. Eurocode, National Standard, Railway Standard), by an Explicit Risk Assessment, or it is accepted that the hazard is “Broadly Acceptable”.

3.3.6 The result of the above is a safer, more robust system design for the OSP2 Project, which considers a broad range of hazards and interoperable issues, and compatibility with electrification and the rolling stock that will use the new infrastructure.

4. ENGINEERING CONSIDERATION OF OUTSTANDING OBJECTIONS

4.1 Introduction

4.1.1 The following sections below identify each outstanding objection that requires an engineering response, as cross-referenced from John Dawe Lane's Property Proof of Evidence.

4.2 OBJ/3 – David Bradbury

4.2.1 Regarding the temporary closure of Sheepwash Bridge, Network Rail have explained that the intention is to use a temporary bridge over the Sheepwash Channel to maintain access throughout the works period. Appendix B illustrates the planned construction staging in order to achieve this. This is likely to be the viable option that is to proceed.

4.2.2 In respect of fallback access if Sheepwash Bridge is closed, there is an alternative means of access from Walton Well Road over a bridge over Castle Mill Stream, at the northern extent of Roger Dudman Way (see Figure 1 below). This bridge has a weight limit that can be temporarily propped to increase the weight limit of the bridge, or replaced temporarily with another bridge with a higher capacity (e.g. Mabey Quickbridge). The roadway leading to the bridge will also need to be remodelled (fill and tarmac to ease corners and minor fenceline modifications to facilitate).

4.2.3 Walton Well Road bridge over the railway may also need strengthening to facilitate enhanced temporary access. Having reviewed inspection reports for the bridge, it is likely this will involve painting of structural steel elements and repointing of brickwork, which is a practical solution in the timeframes of the project.

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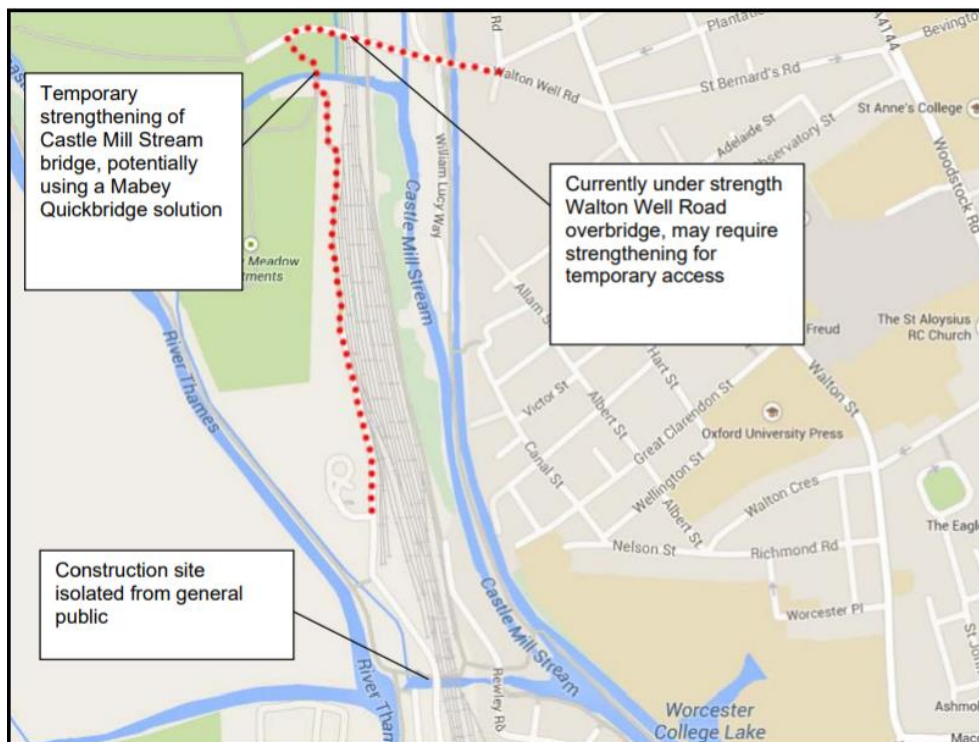


Figure 1: Alternative means of access from the north onto Roger Dudman Way if Sheepwash Bridge is to be temporarily closed to facilitate construction.

4.3 OBJ/4 – Select Service Partner Limited ('SSP')

4.3.1 The pumpkin café occupies a retail unit on platform 4, as shown in Figure 2. This sits in the new footprint of the new café and waiting room for the new Platform 4/5 island platform. The existing café and other operational units on the platform need to be demolished to allow construction of the new units and construction of the new platform canopy, platform 5 face and the new Down Oxford Passenger loop.

4.3.2 There is insufficient usable width (whilst allowing safe passenger usage) on platforms 1 – 3 to site the café. Whilst in theory the pumpkin café could be sited elsewhere on platform 4, the operational units (e.g. Train Dispatch Building) need to be maintained throughout the works for safety and operational reasons, so these will take priority as the first units to be installed.

4.3.3 Temporary toilet and waiting room facilities will also take priority as these will need to be installed for passengers on platform 4 ahead of the permanent building, which reduces the available capacity on platform 4. For “passenger train interface” safety reasons, RSSB industry standard GI/RT 7020 dictates the platform width must also not be less than 2.5m for linespeeds up to 100mph. As a result it has not been possible to relocate the pumpkin café on platform 4 during the construction period.

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4.3.4 The platform 4/5 requires an upgraded and extended canopy, for various reasons:

- Soffit raised for future electrification clearance
- To replace the existing life expired canopy
- Extending the canopy to reduce passenger congestion and increase passenger comfort during rainfall
- To match the upgraded canopy on P1/2/3

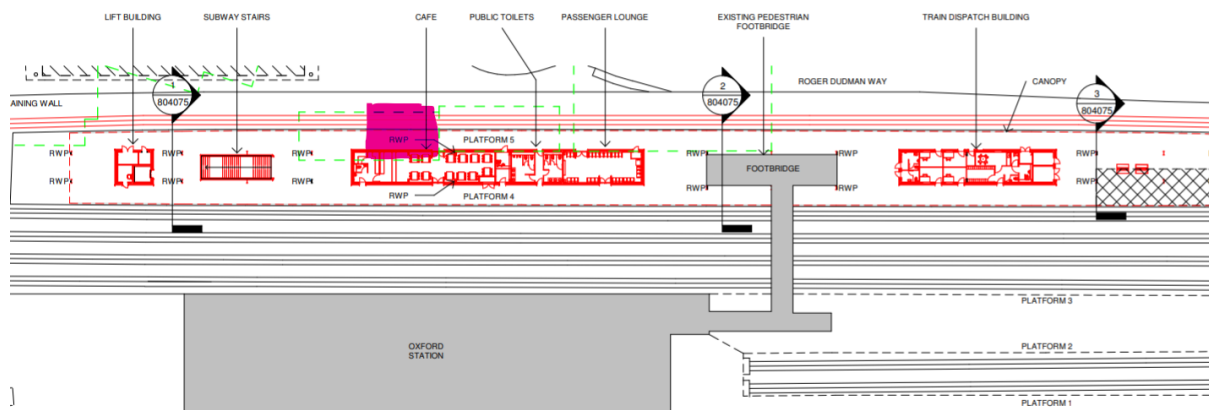


Figure 2 – Oxford Platform 4/5 - new platform buildings (red), existing (green dashed). Existing Pumpkin Café approx. position is shown in magenta.

4.4 OBJ/6 –The Chancellor Masters and Scholars of the University of Oxford ('Oxford University') & OBJ/7 Oxford University Fixed Assets Limited ('OUFAL')

4.4.1 As referenced in John Dawe Lane's Property Proof of Evidence, a site meeting was held on the 9 September 2021 between Gateley Hamer and myself to explain the design of the replacement bridge in more detail.

4.4.2 The condition of the existing road bridge was observed. While being in overall serviceable condition, it was clear that routine maintenance work was overdue, namely repainting the main girders running north – south between the abutments as the paint had flaked away and the steel was starting to corrode. I stated that Network Rail has a contract with Amey to provide inspection reports of the bridge annually and I forwarded these from 2009, 2010 and 2012 to Gateley Hamer on 14th September 2021.

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4.4.3 The replacement bridge will be built to modern standards, in accordance with 'Bridge Design to Eurocodes BS EN 1990-1', which from April 2010 replaced British Standards as the principal design for bridges in the UK. It will be more resilient, with less steel to maintain/paint than the existing structure, and I consider this to provide 'betterment' to the University's asset as it is a modern replacement bridge with longer design life.

4.4.4 Cable routes over / under the bridge (including fibre optic cables owned by Oxford University Telecoms Network (OUTN)) were highlighted at the site meeting and the strategy for migrating the cables to the new bridge were discussed. The university's infrastructure will be maintained throughout (minimal, typically overnight, shutdowns of cable infrastructure will be required to switch between the old and the new route) and any such temporary changes in service will be communicated in advance. The works will include a temporary cable suspension bridge or other suitable route being installed, with cables installed, prior to demolition of the existing bridge.

4.4.5 In respect of fallback access if Sheepwash Bridge is closed, please see my response at 4.2.2 and 4.2.3.

4.5 OBJ/22 Property: Kenmare Estates Limited (Co-op') The Co-op Children's Nursery, 1 Roger Dudman Way, Oxford, OX1 1HW.

4.5.1 The nursery building eastern elevation needs to be moved circa 2m west, to allow for the new Roger Dudman Way (RDW) road alignment. The reason for the required modifications to the nursery are as follows.

4.5.2 A new railway line (Down Oxford Passenger Loop) needs to be installed to the west of the current Down Oxford Relief. To achieve the stated operational platform length, the new line needs to be supported by an additional span over Sheepwash Cut. This will lie along the current RDW road and footway alignment, therefore the road and footway need to shift west.

4.5.3 The new road and footway alignment runs approx. 1.5m higher than the ground level around the Co-op nursery, hence a retaining wall is required between the footway and the nursery building.

4.5.4 This retaining wall will also be designed to capture ground water and divert away from the nursery building. There also has to be future access to maintain the retaining wall (e.g. repair mortar joints or spalling or similar maintenance activity). This retaining wall can be tapered in thickness but is likely to be in the region of 300-450mm thick in order to take accidental highway loading onto the footpath.

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4.5.5 Physical and electrical clearances from the kinematic envelope² of the train to structures and people need to be maintained to meet national standards, including separation by distance from 25kV electrical traction power system (BS EN 50122), that is likely to be installed in the future under the DfT Transport Decarbonisation Plan.

4.5.6 The combination of track alignment requirements (the curvature required for smooth track transitions giving safe passage of rail vehicles and comfortable experience for passengers) and the clearances required, restricts the position of the bridge spans. The bridge span positions are also governed by constructability reasons, i.e. being able to install bearing pads on the existing abutments, as illustrated in Figure 4.

4.5.7 These clearances and alignments have been optimised to facilitate the minimum possible land requirements. See Figure 3 for a section through the new Sheepwash structure showing the close proximity of the spans to each other, particularly given the relative skews (angles) of the bridges. The road and track spans need to be built to a certain level of robustness to withstand accidental impacts by vehicles or trains.

4.5.8 Separately, Becket Street car park is suitable for temporary occupation by the nursery as the site is flat, has already been prepared for vehicle loading and is likely to be able to take the loading for temporary accommodation on spread footings. It has good access in order to build the temporary accommodation and is a similar walking distance from the station as the existing nursery building. The site can easily be made secure with fencing and appropriate external surfaces can be installed for children's play.

² Defined as the furthest extent that the rail vehicle could be relative to the track whilst moving at linespeed, including suspension, wind and failure effects)

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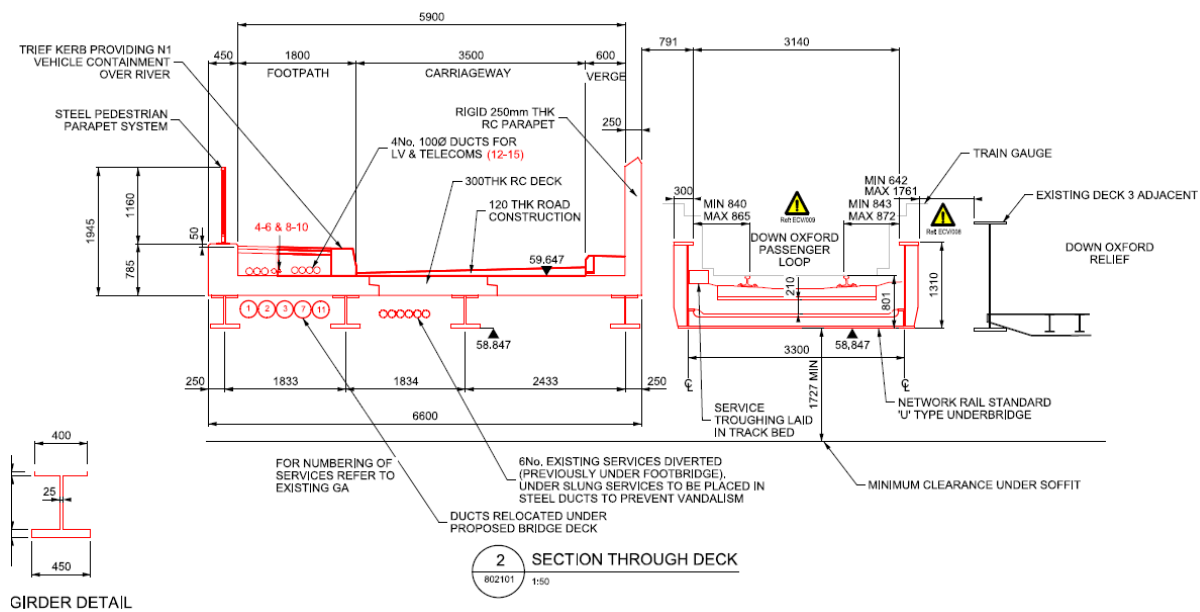


Figure 3: Cross-section of the new Sheepwash road and rail spans at the western extent.

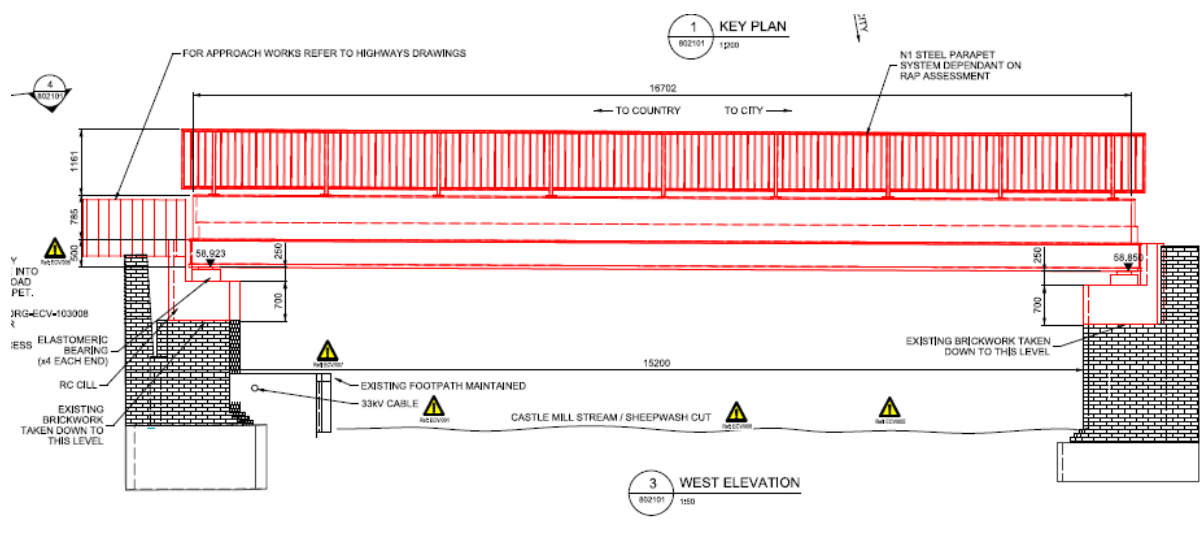


Figure 4: Proposed Western Elevation showing abutment interventions

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4.5.9 As to whether any alternative scheme could theoretically reduce the land take from the Co-op nursery (whilst retaining the existing vehicular access over Sheepwash Bridge as is necessary), any such scheme would need to:

- Replace all discrete spans of Sheepwash Bridge apart from easternmost span carrying Oxford Bay 1 and Oxford Bay 2.
- Replace sheepwash bridges with a large continuous deck.
- Move the Down Oxford and Down Oxford Relief east (which has limits as non-compliances to NR track standard NR/L2/TRK/2102 become more likely for the separation of tracks near switches and crossings). This would then enable the Down Passenger Loop span to move east.
- Realign a substantial portion of platform 4. Platform 4 would no longer be straight but have a slight s-bend, which is not as safe for train dispatch (due to sighting) and could lead to more passenger train interface issues (due to greater stepping distances)

Figure 5 shows the layout of tracks and bridges east of the Co-op nursery. This alternative approach would reduce the amount of land take from the Co-op nursery by about 1m, but would give rise to very substantial additional costs and disruption, to the extent of being disproportionate and impractical. Public funding is unlikely to be secured for this option given the limited benefit to substantial cost ratio. It also would still be unlikely to entirely remove the need for land take from the Co-op.

This would add additional disruption to the railway, station, footpath and Sheepwash cut waterway, and is significantly more expensive requiring new large 4 track rail spans and extra track and platform remodelling. This alternative scheme would also still require temporary relocation of the nursery due to close proximity working on Roger Dudman Way and potentially (depending on the exact rail realignment parameters) still require a small amount of land approx. 300mm wide to allow for a maintenance space next to the retaining wall. For those reasons, it does not form the basis of the scheme being taken forward.

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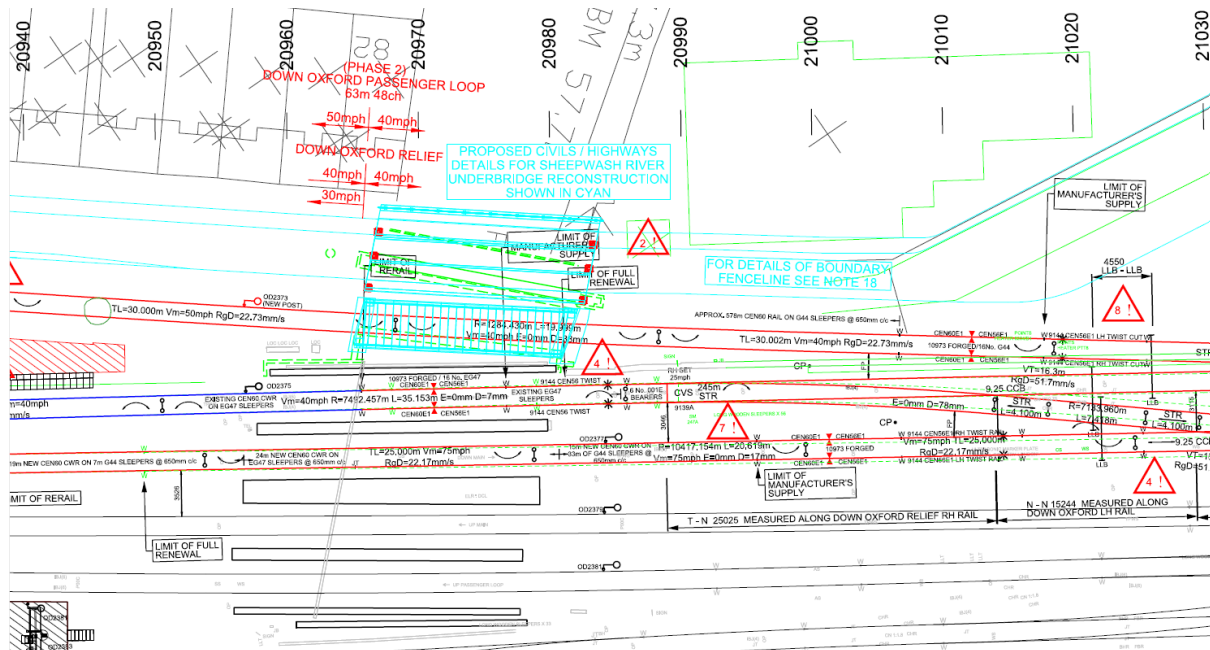


Figure 5 – Plan of Sheepwash Bridge and Track Realignments. Colour key: Green remove, Red new, Blue modify, Black remains.

4.6 OBJ/09 - OBJ/16 & OBJ/18 - OBJ/28 – Osney Lane/Mill Street, Cemetery Footbridge

4.6.1 Network Rail plan to temporarily close Osney Lane/Mill Street, Cemetery Footbridge to carry out works to the western abutment, in order to facilitate the installation of 8124 points and gauge clearance for the new Down Oxford Passenger Loop. This closure in terms of time will be kept to a minimum (it is anticipated that this is likely to be in the order of two weeks) and the bridge will not lose functionality outside this period for pedestrians because of the OSP2 project.

5. CONCLUSIONS

5.1.1 As outlined above I am satisfied that the technical design of the scheme is appropriate, will achieve the scheme's objectives, and complies with best engineering practice.

5.1.2 The scheme has been developed to date to yield the most appropriate engineering solution taking into account all stakeholders, landowners, operational constraints and technical limitations.

5.1.3 Network Rail have sought to minimise the impact of the OSP2 Project upon the objectors through engineered solutions.

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5.1.4 Alternatives have been considered but are not feasible, including the substantial remodelling of Sheepwash Bridge to avoid land take from the Co-op nursery. Sequencing of the Sheepwash Bridge remodelling has been considered to avoid road closures, with a fall back option of alternative access from the north. Staging and constructability issues have been considered, as well as the facilities for passengers and staff, and for the location of the Pumpkin café during the works.

6. WITNESS DECLARATION

6.1 Statement of declaration

6.1.1 I hereby declare as follows:

6.1.2 This proof of evidence includes all facts which I regard as being relevant to the professional opinion which I have expressed and I have drawn the inquiry's attention to any matter which would affect the validity of that opinion.

6.1.3 I believe the facts which I have stated in this proof of evidence are true and that the opinions are correct.

Signature & Date



Lawrence Walton

05/11/2021

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Appendix 1 – Train service patterns before (2019) and after (2024) Oxford Phase 2

2019

Service	From	To	Runs
GW Fast	Oxford	Paddington	All day
GW Fast	Hereford/ Great Malvern	Paddington	All day
GW Fast	Oxford/ Banbury	Paddington	Peak only
GW Fast	Worcester FS	Paddington	Peak only
GW Slow	Banbury/ Oxford	Didcot	All day. Extends to Banbury every other hour
GW Slow	Oxford	Reading/ Didcot	All day
Chiltern	Oxford	Marylebone	All day
Chiltern	Oxford	Marylebone	All day
Chiltern	Oxford	Marylebone	Peak only
Cross-country	Midlands / North	South Coast	All day
Cross-country	Midlands / North	South Coast	All day
Freight	Oxford North Jn	Didcot North Jn	All day
Freight	Aynho Jn	Didcot North Jn	All day

2024

Service	From	To	Runs
GW Fast	Oxford	Paddington	All day
GW Fast	Hereford/ Great Malvern	Paddington	All day
GW Fast	Oxford/ Banbury	Paddington	Peak only
GW Fast	Worcester FS	Paddington	Peak only
GW Slow	Banbury/ Oxford	Didcot	All day. Extends to Banbury every other hour
GW Slow	Oxford	Reading/ Didcot	All day
Chiltern	Oxford	Marylebone	All day
Chiltern	Oxford	Marylebone	All day
Chiltern	Oxford	Marylebone	Peak only
Chiltern	Birmingham MS	Oxford	Alternate hour to Banbury extension
Cross-country	Midlands / North	South Coast	All day
Cross-country	Midlands / North	South Coast	All day
Freight	Oxford North Jn	Didcot North Jn	All day
Freight	Aynho Jn	Didcot North Jn	All day
EWR	Milton Keynes	Oxford	All day
EWR	Milton Keynes	Oxford	All day
Freight	Oxford North Jn	Didcot North Jn	All day
Freight	Aynho Jn	Didcot North Jn	All day

THE NETWORK RAIL (OXFORD PHASE 2 STATION IMPROVEMENTS (LAND ONLY)) ORDER
Proof of Evidence – Engineering

Appendix 2 – Sheepwash Bridge Construction Staging

