

Design Review Report

A40 Llanddewi Velfrey to Penblewin –
Penblewin to Redstone Cross Area

DCFW Ref: N144

Meeting of 16th July 2020



Review Status

Meeting date	16 th July June 2020
Issue date	28 th July2020
Scheme location	Pembrokeshire
Scheme description	Road infrastructure
Scheme reference number	N144
Planning status	Pre-application

PUBLIC

Declarations of Interest

Panel members, observers and other relevant parties are required to declare ***in advance*** any interests they may have in relation to the Design Review and meeting Agenda items. Any such declarations are recorded here and in DCFW's central records.

Consultations to Date

The entire scheme was previously reviewed by the Commission in June 2017, November 2018 and December 2019, February and April 2020, and a workshop held on 11th June 2020. This report should be read in conjunction with the reports from the previous review meetings and workshop, and it should be noted that it focusses upon key items arising from a workshop hosted by DCFW on 16th July 2020 as the proposals move through procurement stages. The meeting of 16th July 2020 focussed on the Penblewin to Redstone Cross Area and further work to the de-trunking and village centre.

The Proposals

The existing A40 runs through Llanddewi Velfrey, in part splitting the community. Provision for non-motorised users is limited to intermittent substandard footways. The landscape is formed of gently rolling countryside with wide shallow valleys divided by low ridges. At Llanddewi Velfrey the existing A40 follows the crest of a ridge with relatively steep slopes falling to the north. A sequence of cuttings and embankments will be required across the ridge at the eastern end of the proposed scheme. The proposed highway improvements will divert the trunk road to the north of the village. This allows all local access onto the trunk road to be rerouted to strategic junctions. The new carriageway will be to a Wide Single (WS) 2+1 standard with a third lane providing safe unambiguous overtaking opportunities in both directions.

At the review of the 12th December 2019 further information became available as to the Western part of the scheme, and current consideration of consultation responses on Option 2B. This was understood to be likely to come forward, ahead of draft Orders scheduled for March 2020, but was not reviewed in full at the time. Details of this part of the proposals were discussed in brief at the February 2020 Review and subsequently at the April 2020 Review.

The Redstone Cross Area did not come forward for review with DCFW until 16th July 2020 following further comments made during the workshop of 11th June 2020 and subsequent report. Whilst the Commission understood that relatively little scope may exist for change, the Redstone Cross area is part of the scheme as a whole and for completeness and openness it should benefit from the same iterative, collaborative and robust consideration as that afforded the major route and de-trunking proposals. The focus of the meeting of the 16th July 2020 was therefore on this part of the scheme and the evolution of the de-trunking and village centre proposals.

Structure of the 16th July workshop

The Design Commission welcomed the team back for this workshop focussing on the Redstone Cross Area and the evolving de-trunking and village proposals, all of which are considered in the context of design intent and procurement, as it evolves post-Public Local Enquiry (March 2020), through key phases of procurement to a construction programme anticipated for start in 2021. At this meeting DCFW were given to understand that a draft Inspectors report was the subject of fact-checking and publication was to be expected shortly. For this meeting, based on material available the Commission directed the team to focus on the preparation of the following:

Penblewin to Redstone Cross

With the draft Orders already published we see limited scope for change in this area, however, for the benefit of learning for the future, collaboration and to develop our earlier brief comments on this section, the Commission sees benefit in exploring the process that has driven the proposals¹. DCFW's focus, as always, is on ensuring public value is delivered. We would therefore like to explore the following aspects which are focused more on the transport planning aspects of the scheme rather than design detail:

¹ At the time of the Review and when this Report was being drafted, DCFW was informed that draft Orders were to be published on the 8th July 2020, however they were not published until 29th July 2020.

- What are the current and anticipated movements and flows on this stretch of the A40 and the Redstone Cross junction and what are the benefits of the proposed arrangement?
- What are the benefits of the scheme for Narberth?
- Do you have any additional 3D model views to help explain the impact on properties at the Redstone Cross junction?
- It would be constructive to review the WelTAG transport planning objectives and to follow through how these and other client and third-party requirements have influenced the current design. The requirements/desire for more movements on the Redstone junction seem to have emerged incrementally. Considered afresh could this have led to alternative solutions at this location; possibly obviating the need for T-junctions?
- The design speed of the de-trunked section does not appear to match the speed limit of 40mph with the carriage way width remaining 7.3 metres.

De-trunking

- Please highlight the aspects that have changed or developed since we last saw the proposals.
- What local engagement has taken place?

This steer was provided with the expectation of the availability of the Inspectors Report in mind, the knowledge that the Client is already engaged in a PQQ exercise which has the input of an Employers Agent and the detailed comments made by the Design Commission in their report of the workshop of the 11th June 2020.

Main points from the meeting of 16th July 2020

The Commission credited the team for a comprehensive presentation and discussion, again demonstrating their continued engagement with the process.

The discussion at this meeting was comprehensive, building on the most recent comments made by the Commission and the need for this project to achieve quality 'well beyond standard'. This has been well rehearsed in successive reviews and reflected in our previous reports. As previously noted, the potential to secure and protect the design intent and quality will now result, or not, from two critical actions:

- a culture of quality being established and communicated in procurement, and
- exceptional contract administration with a suitably skilled team able to protect the client's interest, design quality and public value.

The importance of achieving both applies to the entire scheme including the Redstone Cross area.

Penblewin to Redstone Cross

The team explained the process for the identification of selected routes and subsequent public consultation on three route options which included alternative proposals for junction arrangements. The presentation and discussion helped clarify the manner in which the approach to the Redstone Cross area has evolved, how it has been influenced, and why an option which apparently scored poorly in public consultation, emerged as that which was preferred.

The Commission wished to understand the rationale for the approach adopted when a roundabout could have obviated the need for the use of T-junctions and over-bridge, providing an at-grade solution, allowing the re-use of the old A40 without necessitating an over-bridge and whilst still taking traffic away from the Redstone Cottages.

The team response noted that this was identified as a strategic route important for east-west business traffic and that a new roundabout would take the total to three in this area in quick succession. This would result, in their view, in vehicles being 'over-slowed', negatively affecting journey time and emissions objectives, active travel opportunities and peak tourist traffic volumes. The Commission noted the project teams' need to achieve a positive BCR (Benefit Cost Ratio), a critical influence in the scope available them throughout.

The Design Commission also explored the benefits to Narbeth, noting that the new route would result in a 'no change' scenario in terms of traffic volume – whilst it would not be worsened, neither would it be improved. The 'gap' in active travel identified by Sustrans was noted, albeit largely linked to the long-distance leisure cycle use of the de-trunked route. Greater opportunities for active travel on a day to day shorter distance basis, were not evident.

Benefits to Redstone Farm and Cottages were considered given that the properties, particularly the cottages, are in close if not perilous proximity to the current highway, at some points within a few metres. The new approach enhances access for the nearby industrial and agricultural uses and improves access and screening for the Redstone Cottages and Blaenmarlais Care Home whilst also offering opportunity to combine previously divided agricultural land parcels into single ownership and control. New side roads are also designed to the same 70kph (40mph) design speed, however the

Commission raised concern about the need for further robust safety audit and the need to be absolutely convincing regarding speed and safety, especially at slip roads and junctions.

Pulling the A40 and A4313 away from the Redstone properties has obvious benefits however the characteristics of the new intervention reflect an engineered solution more obviously than one which considers place-making. Greater attention could be afforded the areas where the footpath and lane meet the highway. Considerable areas of tarmac surface remain at the junctions, where softer landscaped and grassed areas (including 'islands' at the junction) might better reflect the more distinctive characteristics of a country/rural route. This might also assist the realisation of full active travel potential, not just trunk road objectives.

De-trunking and village benefits:

The Commission has previously noted this as a primary innovation in the procurement context for schemes such as this in Wales. Our comments in previous reports as to securing the benefits and the quality of urban and highway design, need to be implemented if the full potential is to be realised. Given our comments in June, which should be read in conjunction with this report, the Commission welcomed the additional work being done.

The further work done, and creativity reflected in the presentation of character areas, materials and surface treatments, potential for rain gardens and soft landscape are all encouraging and welcomed. Enhanced amenity, public rights of way, heritage assets and routes are all positive along with improved crossings, greater accessibility, and continuity of cycle and pedestrian routes.

There are some issues still to be resolved in relation to the village heart not least the relationship between residential properties and parking requirements yet to be tested. These may be addressed by private/off-road facility, but the implications were not yet clear and need further swift investigation. The food outlet which provides part of the attraction for the stop-off/cycle hub destination will no doubt have strong views as to parking provision and passing vehicle trade. Early and detailed community engagement will be critical to ensuring that the design ambition is not undermined by the dominance of car parking.

Some reflective discussion considered the nature of materials, the Welsh village character being perhaps less formal, and that care should be taken in relation to the village green spaces, their design quality and maintenance arrangements. Whilst hard surfaces may require less maintenance, there is a risk of overproviding hard landscape in space likely to be very sparsely occupied most of the time. There are some key design issues around

managing essentially suburban traffic in rural settings, yet to be resolved. The use of sustainable materials and contributions to decarbonisation also need to be clearly communicated. Critical to success, as previously noted, will be sufficient funding, high quality project management and contract administration. Project management will need to be exceptional in the further design development stages, in the process for meaningfully engaging the community and for protection and control of quality during implementation.

Summary and recommendations

The Design Commission welcomed the opportunity to consider and more fully understand the Penblewin to Redstone Cross Area and the evolving de-trunking work to enhance and benefit Llandewi Velfrey. There are a few key items which still require focus, and which can usefully inform learning and practice for such schemes now and in the future.

The importance of the BCR model, its influence and how it is assembled is critical to design scope and quality of outcome. It is important that key stakeholders are engaged early to inform the model, how it is weighted on strategic issues, expected changes in the nature of vehicles and emissions rates, future route use, landscape and property enhancement etc. In building the picture of project benefits balanced with project costs the BCR threshold here seems to address the urban/highway model but is insufficiently attuned to the more rural character of this route and 'softer' benefits to be accrued. This project provides an opportunity to learn from the decisions that have been influenced by the BCR model and subsequent scoring of key decisions. We remain skeptical as to the choice of route, junctions and over-bridge as compared to roundabouts, given that journey time savings are minimal, vehicle emissions will already decrease over time adding air quality benefit and the rate of accident reduction would suggest further benefits. These appear to have been more heavily influenced by the pressures of the established BCR model than other considerations.

Overall, the approach to the Redstone Cross Area is now better communicated and the clarification is helpful, better demonstrating the benefits to the local residents, businesses and their properties. The recombining of land adjacent to the A40 and Redstone Cottages is a key opportunity and good solution. If the de-trunked section is enhanced by the proposed changes to sightlines, planting and screening it will better reflect its new role and rural character. Very large highway curves require attention in detail design and procurement to minimise sweeping paths of tarmac and maximise the more rural, greener nature of spaces in front of the Redstone Cottages. Attention should be paid to the expanse of hard surfaces throughout, including within the de-trunking work. Benefits for Narbeth remain negligible and we question whether 'no change' can be considered a beneficial outcome.

For the de-trunking and village centre opportunity, vigilance and further work is required. Effective use of the time available now is essential to resolve key design issues such as the village heart and the nature of the relationship between properties, parking, trade and amenity requirements. Significant detail is still required to resolve issues and agree soft planting or other alternatives to hard surfaces and communicate these and other requirements clearly in imminent procurement.

Building the project governance and contract administration capacity on the client side is as important as accurately assessing the skills of the contractor side. Aspects of the de-trunking and village centre will come at the latter part of the project as a whole, and as time passes there is a risk that quality will diminish, and project objectives will not be met. Requiring the contractors to engage in post-appointment consultant with DCFW and at intermediate stages in the village project could assist the client with quality monitoring, evaluation and guardianship of the client ambition.

The team will need to use time wisely to ensure that client ambitions are fully communicated to tendering contractors avoiding a bare minimum approach. Clear direction from the client is needed in order to set out expectations for bidding teams, including very clear directives toward the nature and scope of consultation and engagement from day one.

Quality is critical along with the skills needed for design development and public engagement. Design Intent and procurement documents (discussed extensively in previous reviews of the A40) must be used to communicate requirements at step one – providing a level playing field for bidding teams in the Invitation to Tender (ITT). Demonstrating the right skills in contractor teams and evaluating the tender accordingly.

Identifying and protecting budgets will also help to maintain pressure on contractors to fully respond to the client requirements and ambition matching design quality aspiration to delivery. The client team must grasp the opportunity that exists now to exert maximum client influence on the tender, contractor selection, contractor design and construction processes. Without careful drafting and appropriate emphasis there is risk of contract requirements being open to interpretation that results in compliance without having met the client ambition. The procurement process must be used to avoid this and realise the potential quality and innovation, inherent in the scheme.

The Design Commission wishes to acknowledge the considerable commitment made by this team to involve others and to genuinely collaborate with DCFW on robust analysis of

the approach to this project. It presents a mutual opportunity now, during and after construction to learn from, capture and share the lessons and value of such engagement for future projects.

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A Welsh language copy of this report is available upon request.

Attendees

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