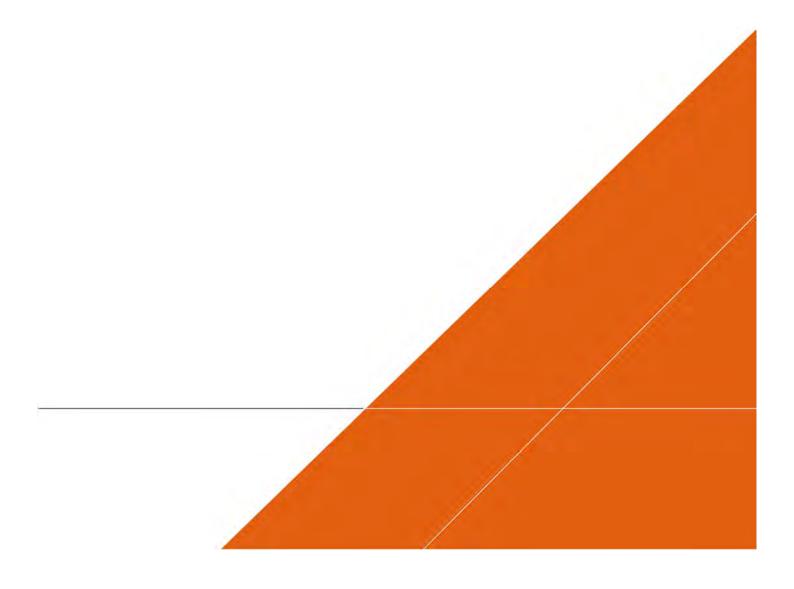


OPTIONS REPORT

Loughor – Gowerton Cycleway (NCN Route 4) Enhanced Cycleway Provision

Report No: 10029743-ARC-6.1-RP-0011

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CONTACTS



JOHN PHILLIPS
Framework Manager

m +44 (0)7793 980737 e john.phillips@arcadis.com Arcadis.
Arcadis Cymru House
St Mellons Business
Park
Fortran Road
Cardiff
CF3 0EY
United Kingdom

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This report dated 17 October 2019 has been prepared for City & County of Swansea Council (the "Client") in accordance with the terms and conditions of appointment dated 01 May 2018(the "Appointment") between the Client and **Arcadis Consulting (UK) Limited** ("Arcadis") for the purposes specified in the Appointment. For avoidance of doubt, no other person(s) may use or rely upon this report or its contents, and Arcadis accepts no responsibility for any such use or reliance thereon by any other third party.

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1 Introduction

1.1 Introduction

- 1.1.1 The existing *Sustrans* National Cycle Network (NCN) is a UK-wide network of signed walking and cycling paths connecting cities, towns, and the countryside. The Network itself is owned by various landowners and authorities across the UK and Wales. NCN Route 4, is a long-distance cycling route from London to Fishguard in west Wales. A section of the route runs through Swansea from the Neath Estuary to Loughor in the west.
- 1.1.2 Much of the route of NCN (Route 4) in the City and County of Swansea Council (CCoS) area is off-road with only small isolated sections where it shares the road space with other vehicles and traffic.
- 1.1.3 The City and County of Swansea Council (CCoS) commissioned Arcadis
 Consulting (UK) Ltd. (Arcadis), to review a section of NCN Route 4 between the
 start of Pant-Y-Cob Road in Gowerton, to the western end of Loughor Bridge.
 This section has a number of issues where the route is either non-standard width
 or uses public roads and the road-space is shared with other traffic.

1.2 Purpose of this report

1.2.1 Arcadis have undertaken a feasibility study and preliminary review of the route of NCN4 within the area shown below in Figure 1.

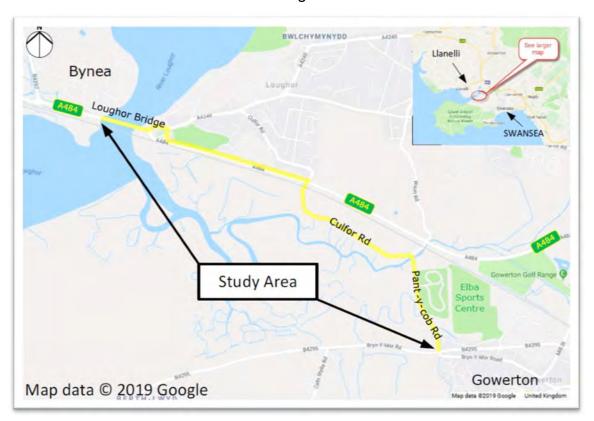


Figure 1 – Study Area

- 1.2.2 A number of site visits have been made to view the condition of the route and assess the current issues.
- 1.2.3 A request has been made to various key stakeholders and interested parties for their views and knowledge, and a number of replies have been received. Please refer to the Stakeholder Summary in the Appendix.
- 1.2.4 A Feasibility Study involves reviewing the available data and identifying plausible options for future changes to the route which offer significant improvements to all users and offer value for money.
- 1.2.5 This Options Report summaries the findings of the Feasibility Study to allow CCoS to choose a preferred option to develop further and act as the basis of an application to appropriate funding bodies to secure sufficient budget to undertake the recommended works.

1.3 Structure of report

- 1.3.1 The Feasibility Study has divided the route into discrete Sections based on distinct geographic parameters for each Section. These have then been subdivided again to allow specific areas to be considered in more detail.
- 1.3.2 For every Section (and Sub-section), a number of Options have been identified. These are shown on the set of drawings included in the Appendix. Please refer to these drawings to see the full extent of the options identified.
- 1.3.3 The following text describes each section and offers possible options with a recommended choice for further development. The Summary Section groups all the recommended options for each section into a summary of the preferred selections for the route as a whole.



Plan Showing Route Sections

2 Section A West of Loughor Bridge

2.1 Current Route

- 2.1.1 This section of NCN Route 4 runs west from the western abutment of Loughor Bridge. Once off the A484 Loughor Bridge the route runs along an unnamed lane until it joins Yspitty Road. The route then continues west.
- 2.1.2 This section does not form part of this study.

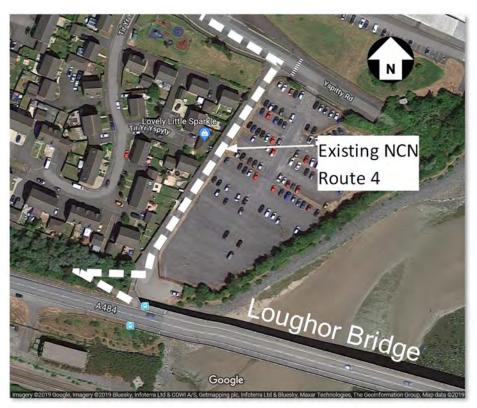
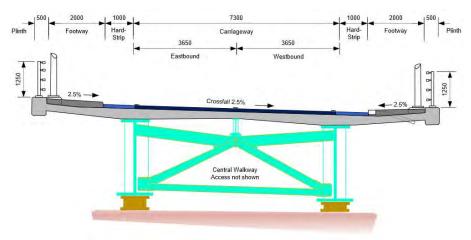


Figure 2 – Section A [not part of this study]

3 Section B: Loughor Bridge

3.1 Current Route

3.1.1 Across the structure, the cycle route runs alongside the A484 along the northern verge of the bridge. The A484 road is 7.3m wide, plus 1m hard strips and a 2m verge on both sides. It is a busy road into Llanelli with a posted speed limit across the bridge of 30mph.



Existing Section (looking East)

- 3.1.2 The cycleway is shared with pedestrians and is generally 2m wide, narrowing to 1.5m to pass the lighting columns on the structure located inside the parapets. Existing parapets are approximately 1.2m high on both sides of the bridge.
- 3.1.3 There are drainage outlets on the southern kerb line as this is the low side of the carriageway which has a uniform crossfall of 2.5%.

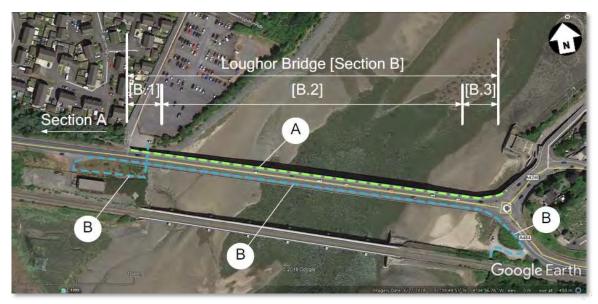
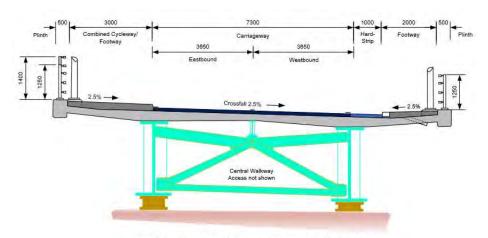


Figure 3 - Section B

3.2 Option A

- 3.2.1 The proposal is to widen the northern verge to 3.0m wide by moving the kerb line and losing the hard strip on this side only. The southern verge remains as the existing footway for pedestrians only.
- 3.2.2 The crossfall across the verge will remain at 2.5%, with new verge infill and surfacing across the entire width. It is unknown what services are in the verge at this stage, so further surveys are required but there will be a lighting power feed which will need to be considered.

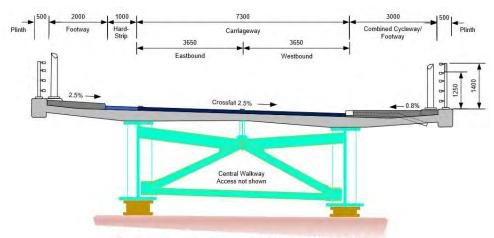
- 3.2.3 The existing lighting column plinths will locally reduce the cycleway width to approx 2.5m wide. Some form of road marking with a small taper either side of the plinths is suggested to help prevent collision with the columns. It may be necessary to paint warning markings on the columns to highlight their presence.
- 3.2.4 Removing the hard-strip places pedestrians and cyclists closer to the live traffic and their safety should be assessed. Active Travel Design Guidance also recommends an additional width of 0.25m cycle track adjacent to parapets higher than 1.2m. This would not be achievable within the confines of the metre width hard-strip and all risks will need to be carefully assessed.
- 3.2.5 The parapet railings will need to be raised to a minimum of 1.4m high and two Advance Direction Signs (ADS) currently straddling the footway will need to be raised such that the mounting height is 2.4m, if they cannot be moved off the structure. The positioning of the posts will also need attention as they will now fall squarely in the centre of the proposed cycleway.



Option A - Northbound Verge Widening

3.3 Option B

- 3.3.1 Proposal is to widen the southern footway to 3.0m wide by moving the kerb line and losing the hard strip on this side. This will involve modifying the carriageway drainage as the kerb-outlets are on this side of the bridge.
- 3.3.2 As with Option A, the existing lighting columns will constrain the width locally to 2.5m, and the parapet height will need to be raised to 1.4m minimum.
- 3.3.3 The cycleway will need to ramp down and pass beneath the bridge at the western abutment to re-join NCN Route 4 along the lane towards Yspitty Road.
- 3.3.4 At the eastern end of the bridge, the route will either have to cross the A484 at a new crossing point, or link into a new route beneath the existing railway embankment (see Section 9).



Option B - Southbound Verge Widening

3.4 Recommended Option

- 3.4.1 **Option A** is preferred as it allows an easier connection to Station Road at the eastern end of the bridge and onward to Yspitty Road towards Bynea in the west.
- 3.4.2 It also does not require any changes to the drainage system on the bridge deck and maintains the verge crossfall at 2.5%. It is a relatively simple construction operation to cut out the existing hard-strip and replace with a new kerb-line, then break-out the existing verge and replace with new.
- 3.4.3 Both options considered will require temporary traffic management in place across the bridge to protect the work-site but it may be possible to maintain two-way flow during construction.
- 3.4.4 The additional height of the parapet may discourage anglers from using this verge as they can cause an obstruction to cyclists trying to pass using the current arrangement.

4 Section C: Loughor Bridge to Station Road

4.1 Current Route

4.1.1 This section currently runs along the southern footway between the island and the junction with Station Road. It is shared a footway and cycleway approximately 2m wide adjacent to the retaining wall near the roundabout.



Photo showing narrow width of existing cycleway

4.1.2 The existing route is narrow for the most part, and the crossing point has limited visibility to vehicles travelling toward the roundabout.

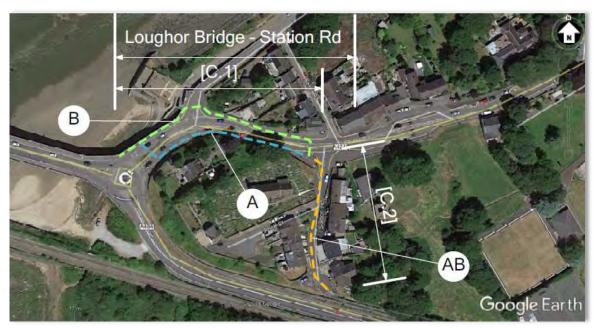


Figure 4 – Section C

4.2 Option A

4.2.1 The proposal is to retain the existing route along the southern footway.

4.2.2 There is an existing crossing point using a kerbed central reserve refuge area close to the existing roundabout. Visibility from the crossing around the bend is very limited and gives users of the crossing little time to see traffic coming down the hill toward the roundabout.



Photo showing visibility approaching crossing point

- 4.2.3 There is a pinch-point on the corner of the house where the path width is narrow (approx 2m wide) and this width continues around the curve up away from the roundabout. However, it may be possible to re-align the kerb line and central white lining to allow the verge width to be increased here. If this is not possible a small triangle of land will need to be acquired to gain adequate width around the bend and improved visibility for on-coming traffic.
- 4.2.4 Moving the kerb-line will involve altering the carriageway drainage on this side and may reduce the width available for vehicles using the right-turn lane.
- 4.2.5 A variation to improve the visibility of the crossing point may be to move the location of the crossing to the end of the central island away from the roundabout.
- 4.2.6 The route then follows Station Road until it joins the off-road section through Parc William. While this section is non-segregated and shared with other traffic, it is a short, quite residential cul-de-sac with very little traffic. In line with current Design Guidance (Active Travel (Wales) Act), this may be considered a 'Quiet Street' and safe for cyclists to use with a low volume of other traffic.

4.3 Option B

- 4.3.1 The proposal is to route the cycleway along the existing northern footway, across the foreshore access road and provide a crossing point further up the hill close to Ferry Road.
- 4.3.2 Moving the crossing point of the A4240 Castle Street toward the top of the hill near Ferry Road gives improved visibility of the crossing point both for approaching drivers and for users of the crossing.



Photo showing visibility from possible new crossing point

- 4.3.3 The crossing point may be controlled or uncontrolled but if uncontrolled, then a central island refuge should be provided. The road markings here do have a right-turn lane, so it may be wide enough to provide a refuge. Alternatively, a controlled 'toucan' style crossing, with or without a raised table, may be considered. Further investigation into the most appropriate crossing type will be necessary during the next stage of development.
- 4.3.4 Once over the A4240, the route follows Station Road until it joins the off-road section through Parc William. While this section is non-segregated and shared with other traffic, it is a short, quite residential cul-de-sac with very little traffic, effectively a 'Quiet Street'.

4.4 Recommended Option

- 4.4.1 **Option B** is preferred as the existing footway is generally wide enough to accommodate a 3m cycleway without major modifications to kerb lines except adjacent to Loughor Bridge and a short section opposite the rear of No. 5 Ferry Road.
- 4.4.2 If the northern verge widening option across Loughor Bridge is adopted, it will form a continuous route along this section of the road across the bridge.

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- 4.4.3 A new crossing point will be required across the foreshore access road. Visibility here is good particularly if it is sited slightly down the access road, away from the junction itself.
- 4.4.4 A new crossing point of the A4240 will also be required opposite Station Road junction. This is considered a safer location to cross Castle Road than the current crossing point close to the roundabout as visibility is much improved. A controlled, Toucan style crossing may be appropriate.

5 Section D: Station Road to Culfor Road

5.1 Current Route

- 5.1.1 This section currently runs along a purpose made off-road route through Parc William joining Ferndale Road, a quiet residential road, then running off-road behind housing to join Culfor Road adjacent to an underpass beneath the A484.
- 5.1.2 Despite the short section using Ferndale Road, this section is considered suitable for cyclists and pedestrians to use.



Figure 5 - Section D

5.2 Option A

5.2.1 Proposal is to retain existing route unaltered. A condition survey is recommended, and some vegetation clearance may be required. Signage may also need to be reviewed but work along this section is likely to be minimal.

5.3 Recommended Option

- 5.3.1 **Option A** is preferred as the current provision is largely segregated from other traffic for the majority of this section.
- 5.3.2 The only shared use segment is a quiet residential cul-de-sac, as this is considered a 'Quiet Street' and is a low risk for cyclists and pedestrians to share with a small amount of other traffic.

6 Section E: Culfor Road

6.1 Current Route

6.1.1 This section currently runs from the end of the off-road section of cycleway up to Island Bridge crossing of Afon Lliw.

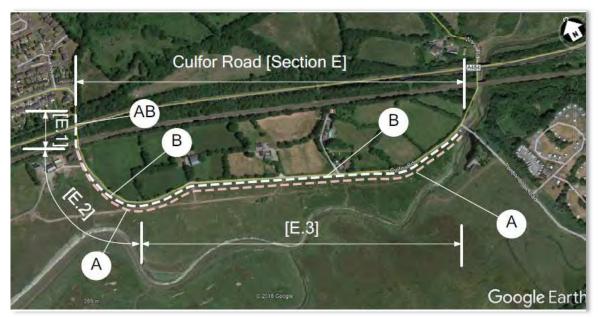


Figure 6 - Section E

- 6.1.2 Section E.1 runs through two underpasses, one for the A484, the other for the railway embankment. There is existing provision for cyclists or pedestrians through both underpasses in the form of painted white lines on either side of the carriageway.
- 6.1.3 There is very little forward visibility around the bend as the road exits from the railway underpass [E.2], however the road straightens to give good forward visibility up to the river crossing point [E.3].
- 6.1.4 The speed limit is 30mph, although the actual speeds along this section may be higher from anecdotal evidence.
- 6.1.5 The roadway is generally narrow, approximately less than 6m wide and has white-lined cycle lanes on edges of the carriageway to delineate an area for cyclists to use (approximately 1.5m wide). Motorised traffic can use the space

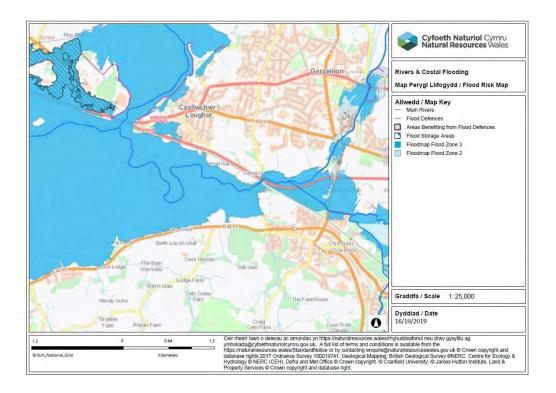
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between the road markings provided no other vehicles are coming the other direction. The running carriageway between these two white lines is not wide enough for two vehicles to pass one another so vehicles must straddle the cycle lanes to pass one-another. See photo below.



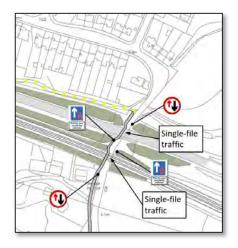
Photo - Culfor Road travelling west

6.1.6 There is a flood plain to the south of the road, while the north side is fields and a number of accesses to isolated properties. The existing carriageway is largely over-the-edge drainage apart from a short kerbed 'Aco' drain section along the northside between the property accesses. The road is slightly lower than the adjacent fields and floods regularly both from surface water and fluvial events as shown on the NRW flood map below. Surface rainwater can stand in the designated cycle lanes for some time before it permeates away, forcing cyclists out into the road section.



6.2 Option A

- 6.2.1 This proposal is to provide a new segregated cycleway parallel to the southern verge of Culfor Road.
- 6.2.2 The Section E.1 runs through two underpasses, one for the A484, the other for the railway embankment. The proposal is to provide a segregated cycleway by narrowing the road available to other traffic and implementing a 'Priority' system using appropriate signage and road markings. This could be employed on both underbridges but there may be sufficient width beneath the Llanelli Link Road underbridge to allow a separate 3m cycleway alongside the carriageway. See both alternatives below.



Priority flow system through both underpasses



Priority flow system through rail underpass

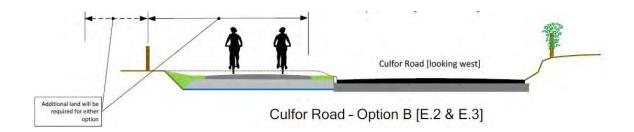
6.2.3 For the remainder of Culfor Road the cycleway route would run parallel to, and offset from, Culfor Road down to Island Bridge. See below.



- 6.2.4 This option will require land acquisition for most of the Section. The choice to run the cycleway away from the edge of the existing Culfor Road along the outside of the existing hedge line is to preserve the hedgerow and to allow construction of the cycleway without affecting the existing carriageway.
- 6.2.5 The cycleway shown above is raised to avoid the need to excavate in the flood plain. However, existing ground conditions are unknown and further investigations will be required to determine exact requirements for any ground treatment or earthworks. It should be noted that a raised embankment may act as a barrier to flood water and prevent Culfor Road from draining after a flood event. A solution may be to include drainage culverts through the embankment, but due regard should be given to increased maintenance liability this will incur.
- 6.2.6 If a raised option is chosen, culverts beneath the track will be required at regular intervals to relieve any flooding to Culfor Road. An alternative to this may be to place the finished surface of the cycleway flush to the existing ground.
- 6.2.7 A sustainable drainage system such as 'swales' will be required to drain the cycleway. This will allow water to permeate into the existing groundwater system.
- 6.2.8 The only work to the existing Culfor Road will be to remove the current road-markings.
- 6.2.9 This Option will be relatively quick to construct and have minimal impact on the traffic using Culfor Road.
- 6.2.10 Slightly more land will need to be acquired for this Option than for Option B.

6.3 Option B

6.3.1 This proposal is to provide a new segregated cycleway adjacent to the existing Culfor Road carriageway. A kerb and separation strip between the existing carriageway and new cycleway will be required.



- 6.3.2 The interface between the roadway and cycleway construction may be problematic and a new verge drain (not shown) may be required. Drainage to the cycleway and carriageway would require careful design. A particular challenge will be to find a suitable outfall for all drainage solution in this low-lying area.
- 6.3.3 This Option will require land purchase as the cycleway cannot fit within the existing boundary.
- 6.3.4 It is likely Culfor Road will need to be closed to traffic (or at least limited to oneway) during the construction period.
- 6.3.5 A sustainable drainage system will be required to drain both the existing carriageway and new cycleway. This may involve kerb outlets along Culfor Rd., but these will require regular cleaning and maintenance.

6.4 Recommended Option

- 6.4.1 **Option A** is preferred as avoids the need to alter the existing carriageway and the vertical profile of the cycleway may be smoothed to follow the existing ground level, rather than the existing carriageway level which is irregular.
- Other advantages are that it will largely avoid the need for traffic management along Culfor Road (except at tie-ins) which may then operate unaffected by construction. Also, the condition and make-up of the existing road is unknown and works to the edge of the carriageway may result in extensive reconstruction work across a greater width than anticipated.
- 6.4.3 The impact on flooding will need to reviewed for either option.
- 6.4.4 Additional land take will be required for this Option, but some land will also be required for Option B.

6.4.5 Drainage of surface water run-off may be over-the-edge into adjacent 'swales', possibly with a filter drain running beneath the swale to allow water to filter into the existing ground water system.

7 Section F: Island Bridge (Pant-y-cob Road)

7.1 Current Route

- 7.1.1 The existing structure is a single span bridge across the Afon Lliw river.
- 7.1.2 The bridge is very narrow, with a single running lane approximately 3m wide plus 0.5m verges. It has a weight limit of 7.5 tons and protective bollards at each end to prevent collisions with parapet ends. See photo below.



Photo from mid-point of Island Bridge

- 7.1.3 Condition of the masonry abutments is unknown, but a visual inspection shows a number of cracks in wingwalls both sides but generally the overall structure appears solid but will require a full inspection and assessment to determine its condition and suitability for use.
- 7.1.4 The roadway is too narrow for vehicles to pass on the structure and an in-formal, uncontrolled 'give-way' arrangement if on-coming vehicles approach the bridge from either end.
- 7.1.5 There is no provision for cyclists or pedestrians across the bridge.

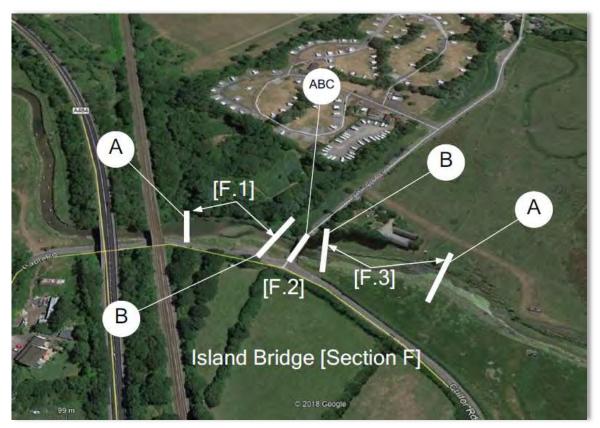


Figure 7 - Section F

7.2 Option A

- 7.2.1 The proposal is to provide a new cyclist/pedestrian only structure a considerable distance away from the existing crossing point, either upstream or downstream.
- 7.2.2 The existing structure would be unaffected and continue to operate as it does currently.
- 7.2.3 The optimum location of a new cycle/pedestrian overbridge would need to be determined by further studies and investigations. The position will be chosen to tie into the alignment of an off-line option of the route though Section G (Pant-Y-Cob Road).
- 7.2.4 Flooding impact on, and caused by, any new structure will need to be considered for all options, but it may be less severe further downstream.

7.3 Option B

- 7.3.1 The proposal is to provide a new cyclist/pedestrian only structure immediate adjacent to the existing crossing point, either upstream or downstream.
- 7.3.2 The existing structure would be unaffected and continue to operate as it does currently.

- 7.3.3 The optimum location of a new cycle/pedestrian overbridge would need to be determined by further studies and investigations. The new route would run parallel to the existing structure and connect into the existing Pant-Y-Cob road as quickly as possible.
- 7.3.4 As noted previously, no records on the condition of the existing structure are available but from a visual inspection the abutments appear to be in poor condition with cracking apparent (see photo below). It is suggested any new structure is fully independent of the existing bridge and abutments to avoid further damage.



Photo - West Abutment of Island Bridge

7.3.5 A full inspection and condition survey of the existing structure is recommended to determine its integrity and suitability for continued operation in its current capacity. If the structure is in such poor condition it may be that working adjacent may cause further damage and Option C is more suitable.

7.4 Option C

- 7.4.1 The proposal is to demolish the existing structure and provide a new structure for all vehicles with a separate provision for cyclists/pedestrians.
- 7.4.2 This will require closure of the route at this end of Pant-Y-Cob road during the construction period.

- 7.4.3 It is unlikely the existing abutments will be suitable for incorporation into a new structure. These may need to be removed completely or depending on the location/form of a new structure, it may be possible to leave them in situ but made redundant.
- 7.4.4 This will be the most expensive option at this location involving constructing a new bridge carrying vehicular traffic. It will be a minimum of 6m width road plus a verges on both sides with a 3m wide separate cycleway. Total width of new structure could be between 10m to 13m wide.

7.5 Recommended Option

- 7.5.1 **Option A** or **Option B** are equally viable, and the choice will be decided by the route of the cycleway through Section G.
- 7.5.2 Option C is considered unviable at this stage due to the costs involved in constructing a new structure to carry all traffic. However, depending on the condition of the existing structure, and its capacity to continue to operate with present (and predicted) loading, it may be that this structure will have to be replaced (or undergo significant strengthening work) in the short-term future. If this is the case, then Option C would be the most appropriate solution.
- 7.5.3 The choice of a preferred solution will require further inspection and assessment of the existing structure.

8 Section G: Pant-Y-cob Road

8.1 Current Route

- 8.1.1 This section currently runs along the existing Pant-Y-Cob Road between the Island Bridge crossing of the Afon Lliw and the junction with the B4293 Bryn-Y-Mor Road and NCN Route 4.
- 8.1.2 The existing carriageway is marked with broken white lines to delineate a cycleway, but this is shared with other traffic as the overall road width is approximately 6m wide.
- 8.1.3 This arrangement is between the Island Bridge and an unnamed hump-backed bridge approximately two thirds of the way along toward Bryn-Y-Mor Road. From the hump-backed bridge to Bryn-Y-Mor Road, the carriageway width varies with some sections only suitable for single-way traffic. There is no provision for cyclists or pedestrians through this section

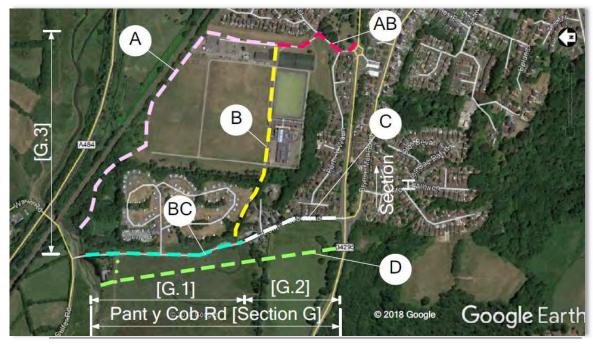


Figure 8 - Section G

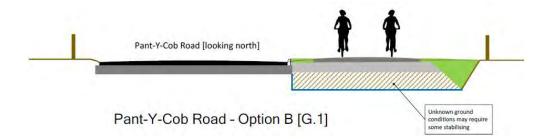
8.2 Option A

- 8.2.1 This proposal is to provide a new route around the Elba Sports Centre playing field joining a new cycleway adjacent to Ffordd Beck before joining NCN Route 4.
- 8.2.2 The route will require a new cycle/pedestrian crossing of the Afon Lliw close to the railway embankment [Option A in Section F.1], then a new off-road route through the scrub/woodland adjacent to the Caravan Park. The route would then skirt the edge of the playing fields, through a storage area, until it exits the Sports Centre at Ffordd Beck. A new cycleway adjacent to Ffordd Beck will link it to NCN Route 4.
- 8.2.3 The main advantage of this route is it is largely completely off-road and away from traffic [excepting the Ffordd Beck portion]. All land is within Council Ownership so no additional acquisition will be required.
- 8.2.4 Ideally the route will utilise a new structure across the river. However, the structure will incur significant costs. A variation may be to link back to the existing Island Bridge along the southern back of the Afon Lliw.
- 8.2.5 The impact on the woodland area will need to be carefully investigated and further surveys undertaken.

8.3 Option B

8.3.1 The proposal is to provide a segregated cycleway adjacent to the east side of Pant-Y-Cob Road between the Island Bridge and a point before the stone hump-backed bridge near the end of the Caravan Park. The route would then follow the

southern edge of the Caravan Park to link onto the Elba Sports Centre playing field near the new Primary School.



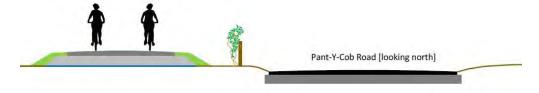
- 8.3.2 The route would then run alongside the Primary School Access Road and link to a new cycleway adjacent to Ffordd Beck will link it to NCN Route 4, as Option A above.
- 8.3.3 A sustainable drainage system will be required to drain both the existing carriageway and new cycleway. This may involve kerb outlets along Pant-Y-Cob Road, which will require regular cleaning and maintenance.

8.4 Option C

- 8.4.1 The proposal is for the narrow section of Pant-Y-Cob Road between the hump-backed bridge to Bryn-Y-Mor Road. It is to provide a separate 3m footway/cycleway adjacent to the west side of Pant-Y-Cob Road. This will require land take from the field opposite the houses along this section, including the removal of an established hedgerow.
- 8.4.2 The existing hump-back bridge with either require replacement with a new structure, or a new cycleway/footway bridge running parallel to it.
- 8.4.3 Land will also be required from Pant-Y-Cob Cottage (opposite Lon Y Cob), together with a new retaining garden wall.

8.5 Option D

8.5.1 This option is to provide a new 3m wide cycleway/footway through the field between Bryn-Y-Mor Road and a new crossing point of the Afon Lliw.



Pant-Y-Cob Road - Option D [G.1]

8.5.2 This will be a new route away from traffic on Pant-Y-Cob Road which will remain as existing.

- 8.5.3 The route may run close to the inside of the hedge row to minimise land-take, or it may run directly across the field providing access can be maintained to both sides. This field appears to be used only for pasture, so if the cycleway is unfenced, livestock may pass freely across it. However, it will require some form of sheep-grid and style crossing at each end of the field. This may not be attractive to riders or pedestrians and be difficult for limited mobility users.
- 8.5.4 The route will pass on the outside of Pant-Y-Cob Cottage and a new ditch crossing will be required. The route could then run either adjacent to- or parallel to Pant-Y-Cob Road toward Island Bridge. Crossing of the Afon Lliw could be any of the options listed for Section F.
- 8.5.5 If a raised option is chosen, culverts beneath the track will be required at regular intervals to relieve any flooding to Pant-Y-Cob Road. An alternative to this may be to place the finished surface of the cycleway flush to the existing ground.
- 8.5.6 A sustainable drainage system such as 'swales' will be required to drain the cycleway. This will allow water to permeate into the existing groundwater system.

8.6 Recommended Option

- 8.6.1 **Option A** is the recommended route around the Elba Sports Centre playing field, with a new cycleway through the Sports Centre joining a new cycleway adjacent to Ffordd Beck before joining NCN Route 4. This utilises land already in the ownership of the Council, so no further land acquisition is required.
- 8.6.2 The route would be largely away from other traffic and should be pleasant to travel along. It offers a direct link to the new Primary School and Sports Centre and may encourage more cycle journeys to these destinations.
- 8.6.3 This route was also suggested by one of the Stakeholders, so it has some support.
- 8.6.4 Crossing the Afon Lliw could be via a new cycleway/footway only bridge close to the railway, or it could link back to the existing crossing point to utilise the existing crossing if funding for a new bridge was not immediately available.
- 8.6.5 Drainage of surface water run-off may be over-the-edge into adjacent 'swales', possibly with a filter drain running beneath the swale to allow water to filter into the existing ground water system.

9 Other Options Considered and Rejected

9.1 Loughor Bridge Southern Route

9.1.1 Routing the cycleway along the southern verge was rejected as it will require additional crossing points of the A484 at either end of the Loughor Bridge. This will introduce additional potential conflict points and also require cyclists to dismount.

- 9.1.2 In addition, as the carriageway drainage for the existing road runs along this verge, it will require modification if the kerb-line is altered. Also, widening the verge will reduce the crossfall to nearly flat unless the parapet plinths are altered.
- 9.1.3 Off the Loughor Bridge at the eastern end there is an existing underpass beneath the railway line. This was for a railway line serving the foundry further up the estuary. The railway is long gone but the underpass is still open and could be made serviceable for cyclists to use. This would then open up access to the southern side of the Loughor Bridge. Travelling east, the route of the cycleway could skirt the edge of the estuary flood plain and either tie back into Culfor Road, or a new route long the Roman Road (see below).

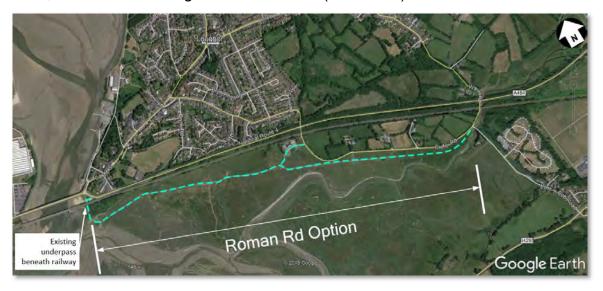


Figure 9 - Roman Road Option

9.1.4 The route would also present problems with gates at existing field boundaries crossing the route at various points. Some form of arrangement with local landowners may be required, or ultimately it may require additional land purchase between the route and Culfor Rd to effectively move the boundary and avoid the issue. But this may prove expensive and lack support.

9.2 Island Bridge Alternatives

- 9.2.1 Given the form and overall condition of the existing structure, particularly the abutments, it is unlikely to be suitable to widen the existing structure in some way to provide enough width for a separate cycleway. It is also unlikely it will be possible to support a new cycleway cantilevered from the existing parapets.
- 9.2.2 It is considered a better solution will be to either replace the existing structure completely or provide a new structure alongside (but independent from) the existing one.

9.3 Changes to Road Priorities on Culfor Rd

- 9.3.1 Consideration was given to making Culfor Road one-way only. The road width would be narrowed to 3m, this would then allow a separate cycleway/footway to run along the existing carriageway between the off-road link [Section D], and Island Bridge.
- 9.3.2 A variation would also be to just make Island Bridge one-way only from north to south.
- 9.3.3 The downside is it would restrict access to the properties to the north side of Culfor Road and will have an impact of the wider traffic flows across the area. It may also be difficult to enforce as traffic may be tempted to still use Island Bridge in both directions as this is a long established route.
- 9.3.4 This option would cost relatively little to achieve and be quick to implement. On the face of it, it is an attractive option and may be worth considering further.

9.4 Closure of Island Bridge to vehicles

- 9.4.1 This is an option to close Island Bridge to traffic in both directions except for pedestrians and cyclists.
- 9.4.2 This option has a number of positives. It solves the issue of the existing bridge condition and capacity, and it will prevent 'rat-running' along Pant-Y-Cob Road by turning it into an access only route to the caravan park and houses. It will greatly reduce traffic using Pant-Y-Cob Road and with only local access traffic, the route will become more attractive to for cyclists and pedestrians.
- 9.4.3 However, it is known that the area in- and around- Bryn-Y-Mor Road suffers from considerable congestion when Pant-Y-Cob Road is closed due to flooding. A permanent closure is likely to have similar effects, at least in the short term as it will deny this route as a link between north Gower and Loughor and force all traffic onto the A484 Roundabout and Mill Street which are already over capacity at peak times. Some improvement of the route along Mill Street and at A484 Roundabout may be required to compensate for this closure and this may be prohibitively expensive.

9.5 Alternative route to Culfor Rd

9.5.1 There is a bridleway running from the end of the 'off-road' section up and over the hillside to re-emerge on Waun Road. It forms part of the West Coast Path and is largely the same route as NCN4 (see below).



Figure 10 - West Coast Path Section

- 9.5.2 The route may warrant further investigation as a possible alternative to options along Culfor Road [see Section E].
- 9.5.3 It will connect into Waun Road which is very narrow at this point and has poor horizontal and vertical alignment back down towards the A484 overbridge. If the new cycleway is to run alongside Waun Road, then the carriageway itself will require upgrading to current standards. This will involve significant works given the existing road width and gradient and established hedgerow on both sides.
- 9.5.4 Forward visibility around the rail bridge abutment is very limited and the road width between the abutment and pier is approximately 6m with no current provision for pedestrians or cyclists. A single lane 'Priority Flow' arrangement might allow a cycleway through this narrow gap but issues with visibility may still be problematic.
- 9.5.5 This route is slightly longer than using Culfor Road and may therefore not be attractive to users who are familiar with Culfor Road.

10 Stakeholders

10.1 Consultations

- 10.1.1 The following Stakeholders were contacted by e-mail on 8th October 2019:
 - Carmarthen County Council
 - Sustrans (Wales)
 - Welsh Cycling
 - Bynea Cycling Club
 - Cycling UK (Swansea and West Wales)

- Wheelwrights
- 10.1.2 Responses were received are shown in the table in the Appendix, together with key points raised.

10.2 Summary of Responses

- 10.2.1 By and large, the respondents were critical of the sections of the route shared with traffic. The main problem appears to be when two on-coming vehicles have to pass each other there is not enough room for cyclists (or pedestrians). There is also a problem that single vehicles pass to close to cyclists while overtaking on shared sections. These issues would not be problematic if motorists took cyclists into account more when driving along narrow roads. However, changing driver behaviour is a long-term issue and a more immediate solution is required.
- 10.2.2 The existing section of off-road route was generally accepted as good quality, if a little narrow in places, but it is traffic-free so is acceptable from a safety perspective.
- 10.2.3 The existing northern footway over Loughor Bridge was considered too narrow and the parapet height too low for safe cycling. The narrow width of the combined cycleway/footway across the bridge caused a particular problem if pedestrians were encountered fishing from the bridge.
- 10.2.4 One respondent suggested a new route through the Elba Sports Centre to avoid the problems of Pant-Y-Cob Road. Another respondent suggested moving the route to the northern footpath as it exits from Station Road and runs toward Loughor Bridge. Both these suggestions have been considered as viable options.
 - Generally, the whole route was identified as below the standard of the remainder of NCN Route 4 in the area. All respondents appeared to be in support of improving this section of NCN Route 4.

11 Recommendation

11.1.1 The suggested route options are summarised below

Section	Preferred Option	Reason	
B Loughor Bridge	Option A - Northern verge widened to 3.0 m	Better connection to NCN Route 4, no impact of deck drainage.	
C Loughor Bridge to Station Road	Option B – Use northern footway with new crossing point.	Wider footpath on this side so minimal modifications, improved visibility to crossing point. Station Rd section unchanged	

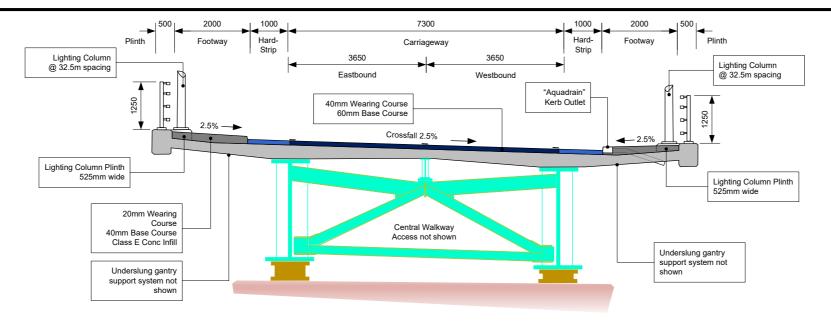
OPTIONS REPORT

D Off-road Link	Option A – retain as existing	Nominal cost (vegetation clearance)
E Culfor Road	Option A – Priority flow system beneath underpasses then a parallel route alongside, but separate form, Culfor Rd up to Island Bridge	Option A avoids need to do work to existing carriageway and provides a safe, scenic route away from all traffic. (However, Option B will require less land purchase.)
F Island Bridge	Option A – new cycleway structure and retain existing bridge for other traffic.	Option A has been chosen with as a new crossing point to link into Option A, Section G and run through Sports Centre. (However, all other Options require further work to confirm if appropriate, particularly if existing structure has limited life)
G Pant-Y-Cob Road	Option A – Link through Elba Sports Centre	Takes route away from other traffic and provides a direct link from NCN Route 4 to Sports Centre and Primary School.

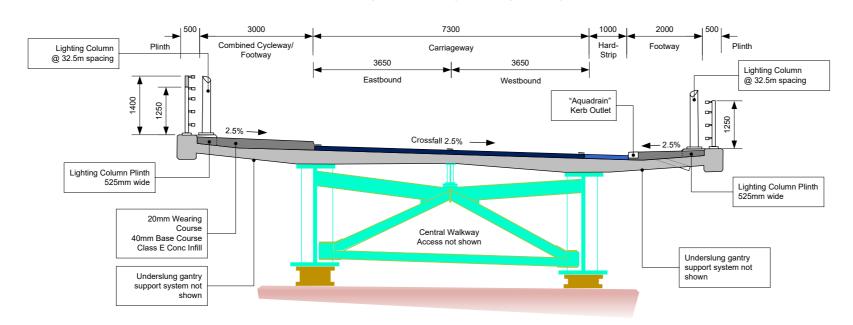
OPTIONS REPORT

APPENDIX A

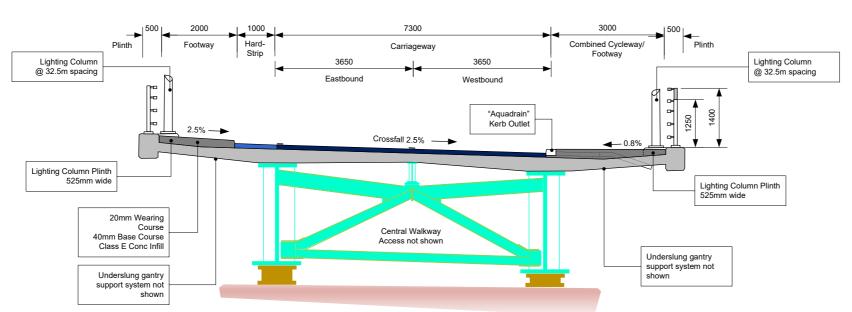
Route Sections and Cross Sections Stakeholder Responses



Existing Section (looking East)



Option A – Northbound Verge Widening



Option B – Southbound Verge Widening

02	Parapet height amended	Nov 19
01	First Issue	Nov 19
Issue	Description	Date

INFORMATION ONLY

Scales	NITO	Current Issue Signatures	
	NTS	Author	CBM
Original Size	A3	Checker	SA
Height Datum	N/A	Approver	JPP
Grid	N/A	© Copyright Reserv	ed

Filename

Dinas County of Shanses



St Mellons Business Park Fortran Road, St Mellons Cardiff CF3 0EY

Tel: +44 029 20926700

Project

Loughor - Gowerton Cycleway Feasibility Study

Title

Loughor Bridge
Typical Cross Sections

awing No.

Sketch A

02



	SECTION		
	B.1 B.2 B.3		
Option A	Widen existing footway in north verge to 3.0m wide, new cycleway route as existing on northern side		
Option B	Extend 3.0m wide cycleway along southern verge to existing access, then return below abutment to link into NCN4	Widen existing footway on south verges to 3.0m wide, new cycleway route on southern side	Extend 3.0m cycleway along southern verge of A484 to existing railway underpass

02	First Issue	Nov 19
01	Draft for comments	Nov 19
Issue	Description	Date

FOR INFORMATION ONLY

Scales	NITO	Current Issue Signatures	
	NTS	Author	
Original Size	A3	Checker	
Height Datum	N/A	Approver	
Grid	N/A	© Copyright Reserve	ed

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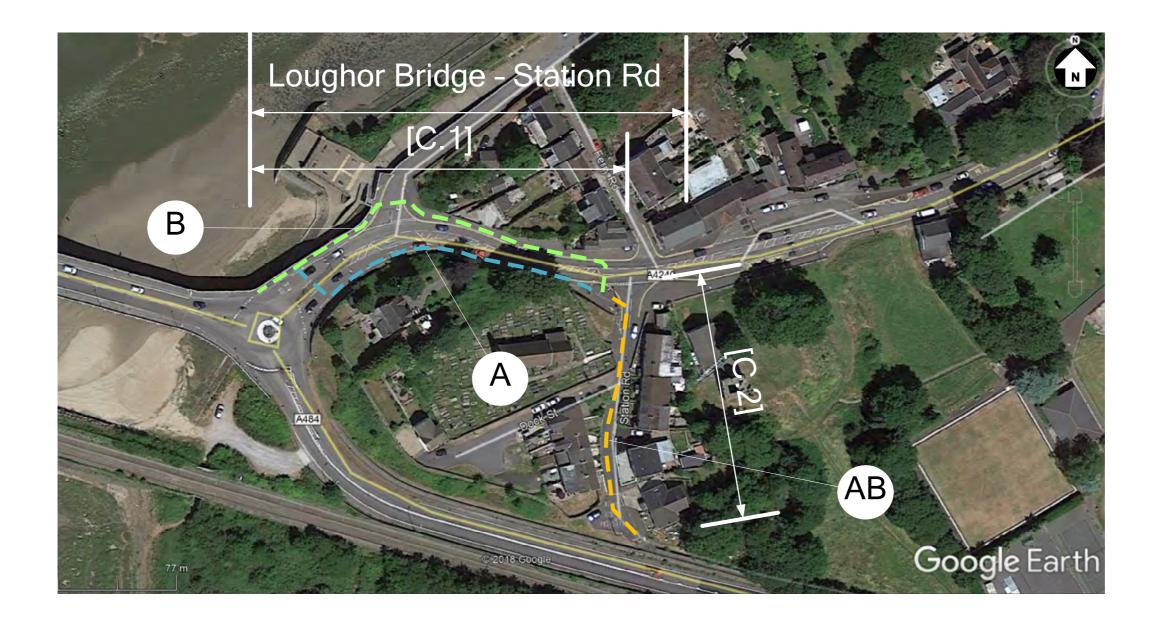
Title

Section B Loughor Bridge

Drawing No.

Sketch B

02



	SECTION		
	C.1	C.2	
Option A	Cycleway route as existing on southern side of A4240, widen existing footway to 3.0m wide where land available. May need to realign kerbing and existing roadmarkings.	Retain existing on-road route of cycleway along Station Road [no change]	
Option B	Install new crossing point at junction with Station Rd and route new cycleway along northern footway [which is generally wider than southern footway]. Will require new crossing points of Foreshore Road.	Retain existing on-road route of cycleway along Station Road [no change]	

02	First Issue	Nov 19
01	Draft for comments	Nov 19
Issue	Description	Date

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	NTS	Author	
Original Size	A3	Checker	
Height Datum	N/A	Approver	
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Project

Loughor - Gowerton Cycleway Feasibility Study

Title

Section C Station Road Link

Drawing No.

Sketch C

02



	SECTION
	D.1
Option A	Retain as existing

02	First Issue	Nov 19
01	Draft for comments	Nov 19
Issue	Description	Date

Scales	NTS	Current Issue Signatures	
	N15	Author	
Original Size	A3	Checker	
Height Datum	N/A	Approver	
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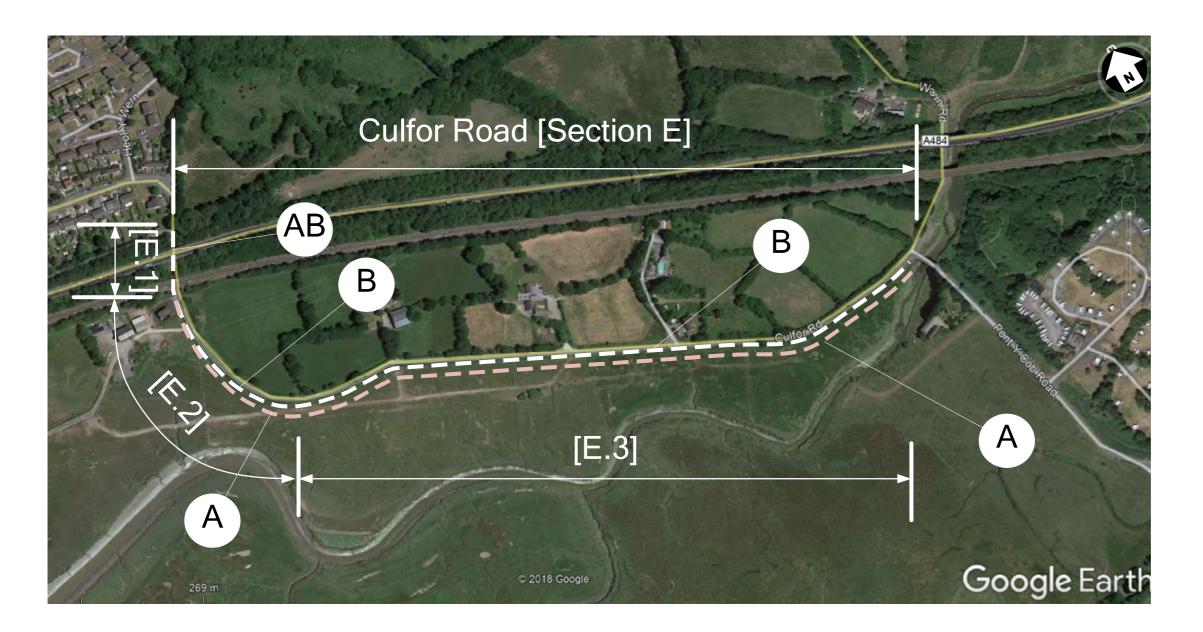
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Loughor - Gowerton Cycleway Feasibility Study

Section D Off-Road Link

Sketch D



	SECTION		
	E.1	E.2	E.3
Option A	Reduce Carriageway to 3.0m wide with segregated 3.0 cycleway, and 'priority flow' system beneath structures.	Provide 3.0m segregated cycleway parallel to existing carriageway on other side of existing fence line	Provide 3.0m segregated cycleway parallel to existing carriageway
Option B		Provide 3.0m segregated cycleway adjacent to existing carriageway	Provide 3.0m segregated cycleway adjacent to existing carriageway

02	First Issue	Nov 19
01	Draft for comments	Nov 19
Issue	Description	Date

Scales	NTS	Current Issue Signatures		
	NIS	Author		
Original Size	A3	Checker		
Height Datum	N/A	Approver		
Grid	N/A	© Copyright Reserved		





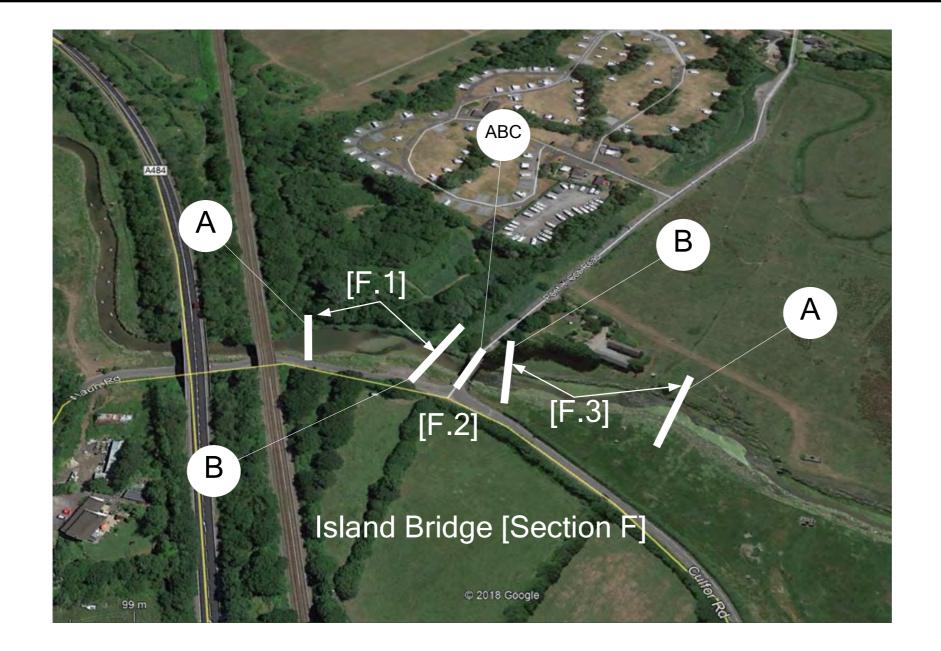
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Tel: +44 029 20926700

Loughor - Gowerton Cycleway Feasibility Study

Section E **Culfor Road**

Sketch E



	SECTION		
	F.1	F.2	F.3
Option A	New Cycleway Structure across Afon Lliw to link into cycleway routed into Elba Sports field	Retain existing structure and road width. Cyclists and pedestrians share road space as existing layoout	New Cycleway Structure across Afon Lliw to link into cycleway routed across marsh to west side of Pant-Y-Cob Road
Option B	New Cycleway Structure across Afon Lliw to link into cycleway routed along east side Pant-Y-Cob Road	Retain existing structure and road width for vehicles, build new cycleway structure alongside existing bridge	New Cycleway Structure across Afon Lliw to link into cycleway routed along west side of Pant-Y-Cob Road
Option C	N/A	Replace structure on existing alignment wide enough for 6.0m roadway plus 3.0m cycleway	N/A

02	First Issue	Nov 19
01	Draft for comments	Nov 19
Issue	Description	Date

Scales	NTS	Current Issue Signatu	ires
	INIS	Author	
Original Size	A3	Checker	
Height Datum	N/A	Approver	
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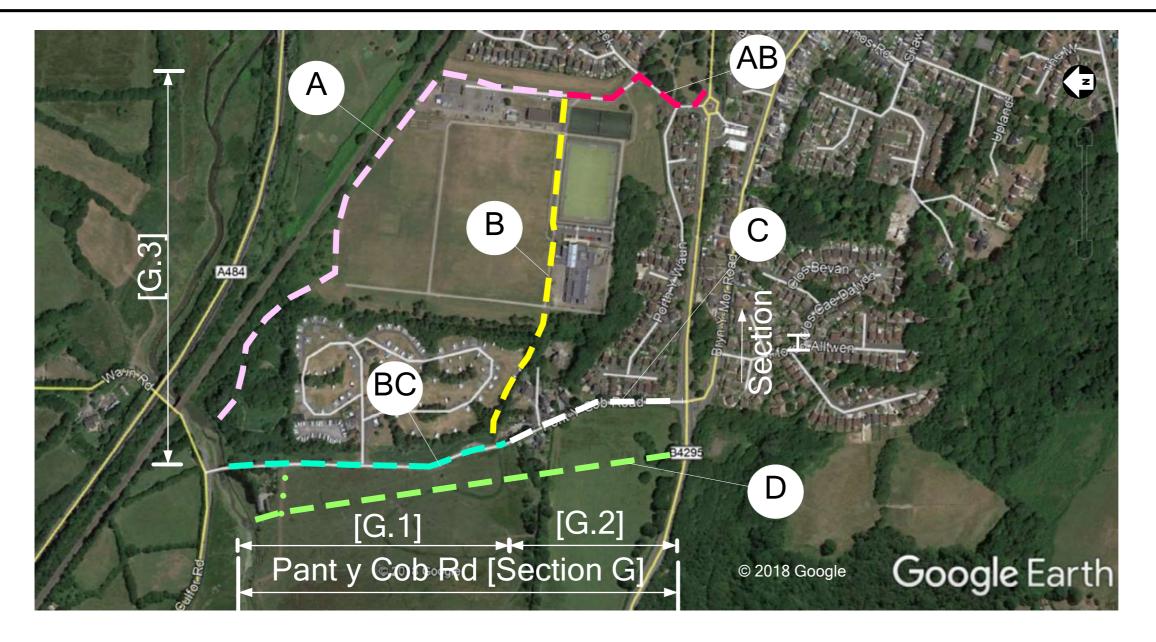
Arcadis Cymru House St Mellons Business Park Fortran Road, St Mellons Cardiff CF3 0EY

Tel: +44 029 20926700

Loughor - Gowerton Cycleway Feasibility Study

Section F Island Bridge

Sketch F



	SECTION		
	G1	G2	G3
Option A	New link around Elba Sports Field		New segregated 3.0m cycleway adjacent to Ffordd Beck
Option B	New section of 3.0m cycleway adjacent to east side of Pant-Y-Cob	New link past Primary School	New segregated 3.0m cycleway adjacent to Ffordd Beck
Option C	New section of 3.0m cycleway adjacent to west side of Pant-Y-Cob	New section of 3.0m cycleway adjacent to west side of Pant-Y-Cob Road, with Priority system for traffic along narrow stretch adjacent to Lon-Y-Cob	N/A
Option D		New off-road link between NCN Route 4 to new crossing point of Afon Lliw	

02	First Issue	Nov 19
01	Draft for comments	Nov 19
Issue	Description	Date

Scales	NITO	Current Issue Signatures	
	NTS	Author	
Original Size	A3	Checker	
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Project

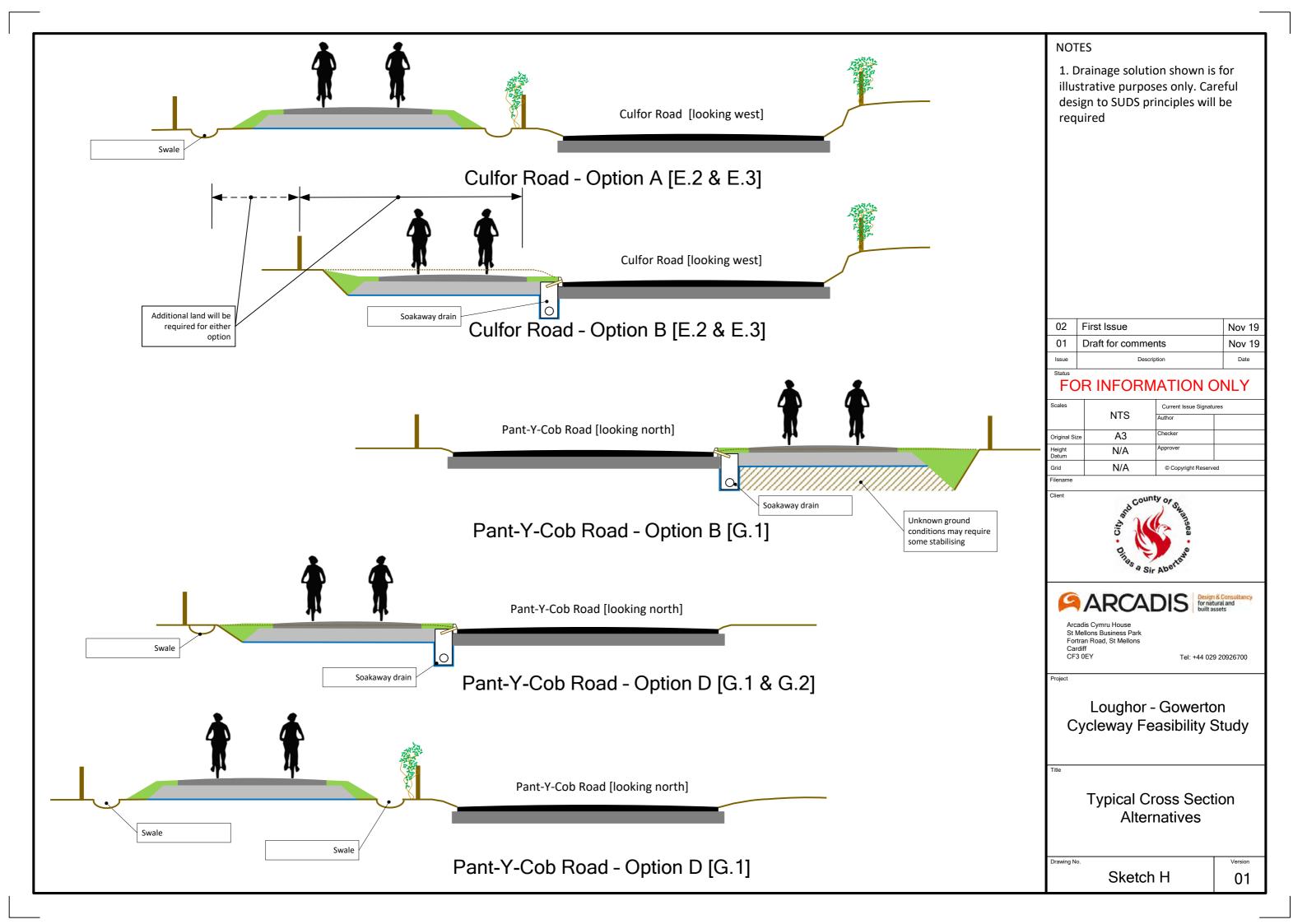
Loughor - Gowerton Cycleway Feasibility Study

Title

Section G Pant-Y-Cob Road

Drawing No.

Sketch G



Loughor to Gowerton Cycleway Feasibility Study

Register of Stakeholder Comments

Printed on: 07/11/2019

E-mail issued on 08/10/19 to the following
tjevans@carmarthenshire.gov.uk
nick.bike@hotmail.co.uk
john.sayce@ntlworld.com
gareth.govier@swansea.gov.uk
info@welshcycling.co.uk
byneamembership@gmail.com
ian.davies49@ntlworld.com

Ref	Date Received	From	e-mail	Organisation	Key comments
1	08 October 2019	lan Davies	ian.davies49@ntlworld.com	Cycling UK Swansea and West Wales	- Pont-y-Cob Rd and Culfor Rd are narrow, although there are cycle route lanes painted on the sides, they don't offer any protection to us from motorists - Pot holes. Both these roads have a poor surface and lots of pot holes - Narrow bridges - small bridge on Pant-y-Cob Rd over the brook near Lon-Cob & Island Bridge on Pant-y-Cob/Waun Rd
2	10 October 2019	David Naylor	davidjnaylor@davidjnaylor.plus.com	Wheelrights/Cycling UK	- Switch cycleway to other side of Station Road
3	10 October 2019	Philip Snaith	philipsnaith13@yahoo.com	Carmarthenshire Cycle Forum	- None applicable to east of Loughor Bridge
4	16 October 2019	John Sayce	07518 141727	Wheelrights Chair	- Many issues with route as a whole - Likes Elba Sports field route - Parapets on Loughor Bridge too low
5	22 October 2019	John Sayce	john.sayce@ntlworld.com	Wheelrights Chair	- Many issues with route as a whole - Likes Elba Sports field route - Parapets on Loughor Bridge too low

Phillips, John

From: David Naylor <davidjnaylor@davidjnaylor.plus.com>

Sent: 10 October 2019 08:37

To: Phillips, John

Cc:'john sayce'; 'Philip Snaith'; 'Ryland Jones'; 'Nick Guy'; Judd, David; Walsh, ChrisSubject:RE: Loughor to Gowerton Cycleway Feasibility Study - Stakeholder Message

Attachments: loughorNCR4rev.pdf

From: Nick Guy [mailto:nick.bike@hotmail.co.uk]

Sent: 09 October 2019 22:36 **To:** David Naylor; Ryland Jones **Cc:** john sayce; Philip Snaith

Subject: FW: Loughor to Gowerton Cycleway Feasibility Study - Stakeholder Message

Hello John Phillips,

Your email below has been forwarded to me by Wheelrights' Secretary, Nick Guy. I am responding on behalf of Wheelrights and also Cycling UK whose local rep. I am.

I have been a regular user of the section of NCR 4 under consideration ever since Sustrans created it as an NCN route. While we welcomed the provision of cycle lanes on Pont-y-Cob Road and the 'new' (several years ago) section through Parc Williams we are concerned about the short bit at the east end of this section between Station Road and the roundabout at the east end of the bridge. In 2011 I and the then Swansea Council Cycling Officer, Rob Wachowski, surveyed the area and I produced the attached report. (This can also be accessed from http://www.wheelrights.org.uk/infrastr.htm. Scroll down to "NCR 4 east of Loughor Bridge" in the "Swansea Bay Cycle Routes" section.) No action has been taken since then. As this report makes clear there is a safety issue with the existing route. Experienced cyclists generally avoid it and use the road instead.

Linked to this is the inadequate width of the crossing across the N. side of Loughor Bridge. Before I came on the scene David Judd, then the local Sustrans manager, sought to have the footway widened. It never has been. It should be.

I trust that this is of assistance.

Regards, David

David Naylor (Coordinator of Wheelrights Routes Group.)

From: Phillips, John < John. Phillips@arcadis.com>

Sent: 08 October 2019 14:31

To: tjevans@carmarthenshire.gov.uk <tjevans@carmarthenshire.gov.uk>; nick.bike@hotmail.co.uk <nick.bike@hotmail.co.uk>; john.sayce@ntlworld.com <john.sayce@ntlworld.com>; gareth.govier@swansea.gov.uk <gareth.govier@swansea.gov.uk>; info@welshcycling.co.uk <info@welshcycling.co.uk>; byneamembership@gmail.com <byneamembership@gmail.com>; ian.davies49@ntlworld.com <ian.davies49@ntlworld.com>

Cc: Jones, Simon L <Simon.L.Jones@swansea.gov.uk>; Metzaki Burgham-Malin, Chrysi

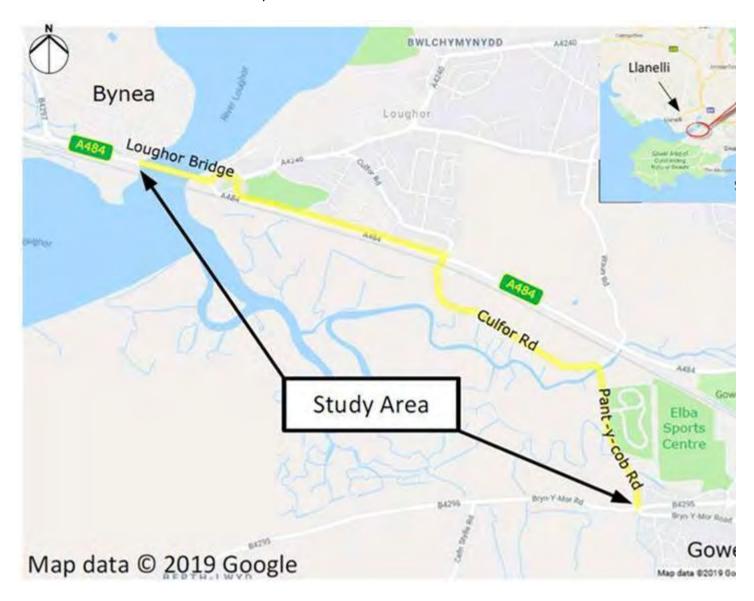
<Chrysi.Burgham.Malin@arcadis.com>

Subject: Loughor to Gowerton Cycleway Feasibility Study - Stakeholder Message

Dear Sir/Madam

We are working on behalf of City & County of Swansea, investigating part of Sustrans National Cycling Network (NCN) Route 4, between Gowerton and the Loughor Bridge – please see the study area below. We are e-mailing this to you as a potential Stakeholder or interested party and would be grateful if this is not you, you could forward it to the most appropriate person to respond in your organisation.

The City & County of Swansea is committed to promoting active travel by encouraging cycling and walking across the county. However, this part of NCN Route 4 is largely shared with other vehicles and is out of character with the majority of the rest of the Route. Therefore, we are undertaking a feasibility study to consider other possible options for this section of NCN Route 4 to maintain safety of all road users.



We are seeking views and feedback from you (and your membership) on your experience of this part of the Route. In particular we would be interested to hear of any problems or incidents encountered in the past five years. Equally, we shall be pleased to hear any positive comments regarding journeys along this section. Please note, we are seeking comments only on this specific section of NCN Route 4, not for any other parts of the Network. Note also, this is at a

very early feasibility stage and we are just looking at possible options with no firm commitment to progress any work. This is a request to engage with you to help us gauge any particual problems or issues from regular users of the route.

We will be very grateful to know your views and if you can respond to me, John Phillips, at the e-mail address below before 25th October, or if you prefer please call me on 07793980737 to discuss further.

With Regards,

John Phillips BSc(Hons) CEng MCIHT MAPM GMICE | Framework Manager | john.phillips@arcadis.com

ARCADIS Consulting (UK) Limited | Arcadis Cymru House, St Mellons Business Park, Fortran Road, Cardiff. United Kingdom CF3
0EY

M: +44 (0)7793 980737



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Review of NCR 4 crossing at E. end of Loughor Bridge A report based on a site visit on 1 December 2011

Present: David Naylor (Wheelrights)

Rob Wachowski (CCS)

Apologies Fraser Arnot (Sustrans)

Introduction

The purpose of the site visit was to review the recommendation (from Wheelrights and Swansea Sustrans Rangers *) that the crossing of the A4240 immediately N. of the A484 roundabout should be moved. It was considered that the present crossing was unsafe principally because of the narrowness of the shared use path on the SE side of the A4240 and the poor visibility of the crossing for vehicles approaching the roundabout.

Photo 1 illustrates this lack of visibility; the existing crossing is out of sight round the corner.

The review

It was confirmed that the existing crossing location was unsuitable for the reasons given above. It was also noted that the signing did not make it clear that eastbound cyclists were meant to cross the A4240 here.

A preferred location is to the NE close to Station Road where the new NCR 4 route joins the A4240. The proposed location is shown on Photo 2 and Figure 1 (overleaf).

In addition to the poor visibility caused by vegetation encroaching on the path (Photo 1 and Photo 3 taken on the route viewed from the opposite direction.) the route crosses the driveway in the centre of Photo 1.

To provide continuity across the access road to the Loughor riverside amenities and businesses it is recommended that the path be taken across this junction as shown in Figure 1. This is in accordance with LTN2/08 section 7.3.2 illustrated in Fig. 7.4.







All the existing signing will need removing, with new signing provided to identify the realigned route. Note: The existing "Cyclists dismount" signs are inappropriate and should not be replaced.

^{*} See report *NCN 4: recommendations for infrastructure changes from Loughor Bridge to Blackpill*, prepared by David Naylor, Nov. 2011.

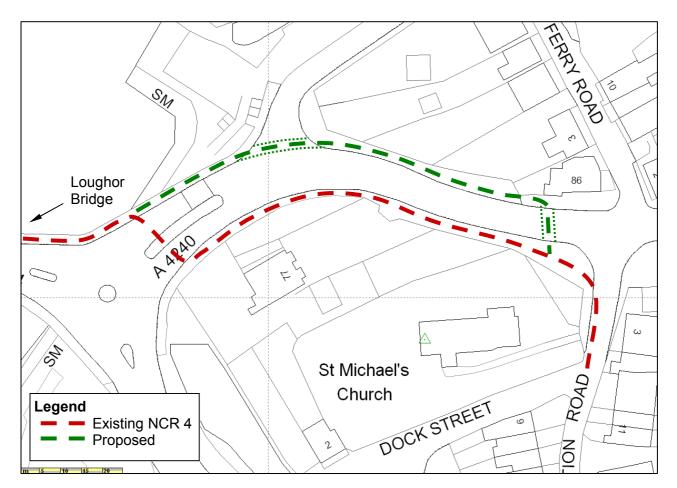


Figure 1. Junction showing existing and proposed crossings

Conclusion

The existing crossing and its approach from Station Road are unsafe and should be replaced as indicated.

David Naylor (Wheelrights)
December 2011

Phillips, John

From: lan Davies <ian.davies49@ntlworld.com>

Sent: 08 October 2019 18:00

To: Phillips, John

Subject: RE: Loughor to Gowerton Cycleway Feasibility Study - Stakeholder Message

To: John.Phillips@arcadis.com

Date: 08-Oct-2019

From: Ian Davies, Cycling UK Swansea and West Wales

Subject: Lougher to Gowerton Cycleway. Issues experienced with current NCR4

Hi John,

I acknowledge your email about the Feasibility Study regarding alternative options to the current section of NCR4 between Gowerton and Lougher Bridge.

You asked if we had experienced ant issues or problems on this part of the route, well, yes we have! I don't have any documented reports or evidence of accidents or incidents but I can offer my opinion based on my experiences of cycling with Cycling UK Swansea, (formerly Swansea CTC) over the last 25 years.

Just some stats to add some weight to the report:

Cycling UK Swansea organise rides in 5 categories

Grade 1 Easy rides up to 30 miles, generally flattish.

Grade 2 Leisure rides up to 50 miles with more hills and a brisker pace.

Grade 3 Moderate rides up to 75 miles with lots of hills and a brisker pace

Grade 4 and 5 rides, harder, longer and faster etc.

We have a published programme of organised rides on Wednesdays and Sundays and often Fridays and other days organised at short notice. In the 11 months since the last AGM at the end of October 2018 to the end of September 2019 we held 209 rides. Many of these rides would start at Gowerton and go in the direction of Lougher Bridge and/or return via that route. For the 11 months mentioned above, we used that section of the route 102 times.

At Gowerton, we meet and start from the traffic lights junction of Gorwydd Rd, Mill St, B4295 and Victoria Rd. The Grade 1 and 2 rides would almost always use the full section of NCR4 between Gowerton and Lougher Bridge involving the path alongside the B4295, Pont-y-Cob Rd, Culfor Rd, Ferndale Drive, the path off Bwrw Rd to Station Rd. The Grade 3 rides would normally stay on Culfor Rd to the A4240 Castle St to avoid the slow path, children, dogs and gates. I know other Cycling groups in the "Go Faster" category won't use this section of path at all but will continue along Victoria Rd to the roundabout on the A484 and go along the A484 to Lougher Bridge.

Problems we (Cycling UK Swansea) have experienced.

- Pont-y-Cob Rd and Culfor Rd are narrow, although there are cycle route lanes painted on the sides, they don't
 offer any protection to us from motorists who are intent on passing anyway. Close Pass rules do not apply on
 these sections. We routinely cycle in single file which probably create more problems for us by giving the
 motorist some squeeze through space. This is particularly applicable to White Vans, BMW's and more recently
 Audi's.
- Pot holes. Both these roads have a poor surface an lots of pot holes which means we often have to deviate out
 from the lane, however, these sections also have a very high water coverage which hide the pot holes, these are
 particularly dangerous.

• Pinch points. Travelling from Gowerton, the first pinch point is the small bridge on Pont-y-Cob Rd over the brook near Lon-Cob. You will be aware I am sure that motorists seldom give way to cyclists and this point is an example of that. Second pinch point and a much greater danger is the bridge over the Afon Lliw at the junction of Pont-y-Cob Rd, Waun Rd and Culfor Rd. If there are any cars here on any of the roads, we almost always have some sort of conflict. A motorist may wait patiently and give way to a lone cyclist but a long line of 10 or more will mean a much longer wait so they invariably cut us off. Frequently we have been in the process of crossing and an oncoming vehicle keeps coming which means us being squeezed against the bridge railings.

My apologies if the above sounds like a good moan at the motorist, I am a motorist most of the time and do see both sides of an argument of cyclists vs motorists and often cyclists vs pedestrian and/ or dogs. Moaning aside, this section of NCR4 is still a much safer route for cyclists than any other route between Gowerton and the Lougher Bridge.

I hope the comments above may be of some use, if you would like any more information, please don't hesitate to contact me. Would it be of use to you if I had an example of an accident or incident? I could ask the membership if needed via our Facebook page.

If needed, you can find more information about us and the rides programme on our web page and Facebook page, see the details on the attached card.

Regards,

lan.



From: Phillips, John [mailto:John.Phillips@arcadis.com]

Sent: 08 October 2019 14:32

To: tjevans@carmarthenshire.gov.uk; nick.bike@hotmail.co.uk; john.sayce@ntlworld.com;

gareth.govier@swansea.gov.uk; info@welshcycling.co.uk; byneamembership@gmail.com; ian.davies49@ntlworld.com

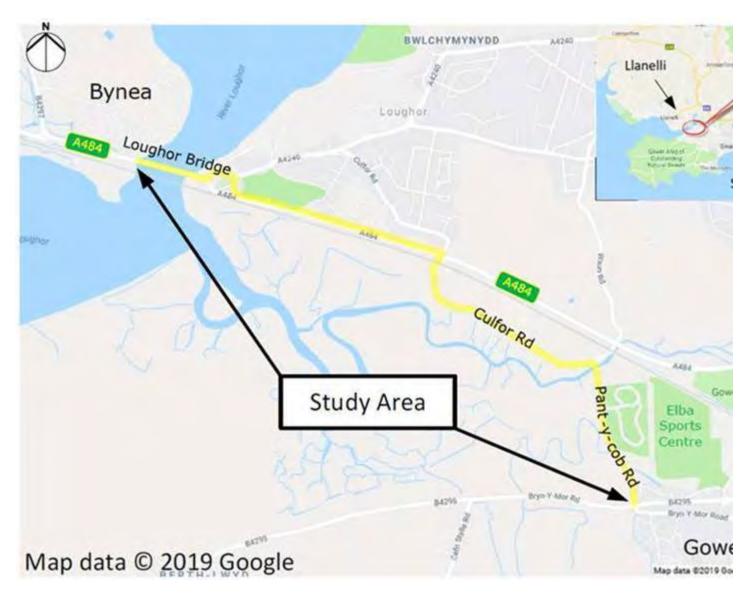
Cc: Jones, Simon L; Metzaki Burgham-Malin, Chrysi

Subject: Loughor to Gowerton Cycleway Feasibility Study - Stakeholder Message

Dear Sir/Madam

We are working on behalf of City & County of Swansea, investigating part of Sustrans National Cycling Network (NCN) Route 4, between Gowerton and the Loughor Bridge – please see the study area below. We are e-mailing this to you as a potential Stakeholder or interested party and would be grateful if this is not you, you could forward it to the most appropriate person to respond in your organisation.

The City & County of Swansea is committed to promoting active travel by encouraging cycling and walking across the county. However, this part of NCN Route 4 is largely shared with other vehicles and is out of character with the majority of the rest of the Route. Therefore, we are undertaking a feasibility study to consider other possible options for this section of NCN Route 4 to maintain safety of all road users.



We are seeking views and feedback from you (and your membership) on your experience of this part of the Route. In particular we would be interested to hear of any problems or incidents encountered in the past five years. Equally, we shall be pleased to hear any positive comments regarding journeys along this section. Please note, we are seeking comments only on this specific section of NCN Route 4, not for any other parts of the Network. Note also, this is at a very early feasibility stage and we are just looking at possible options with no firm commitment to progress any work. This is a request to engage with you to help us gauge any particualr problems or issues from regular users of the route.

We will be very grateful to know your views and if you can respond to me, John Phillips, at the e-mail address below before 25th October, or if you prefer please call me on 07793980737 to discuss further.

With Regards,

John Phillips BSc(Hons) CEng MCIHT MAPM GMICE | Framework Manager | john.phillips@arcadis.com

ARCADIS Consulting (UK) Limited | Arcadis Cymru House, St Mellons Business Park, Fortran Road, Cardiff. United Kingdom CF3
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M: +44 (0)7793 980737



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Phillips, John

From: SAYCE JOHN < john.sayce@ntlworld.com>

Sent: 21 October 2019 21:21

To: Phillips, John

Subject: Re: Loughor to Gowerton Cycleway Feasibility Study - Stakeholder Message

Attachments: Gowerton -Loughor map.pdf; GOWERTON TO LOUGHOR ROUTE FOR CYCLISTS.docx

Good morning John,

First of all, many thanks for having the time to chat with me last week.

I have now attached our reply as well as a map of the area.

We would be happy to help you in the future

My regards,

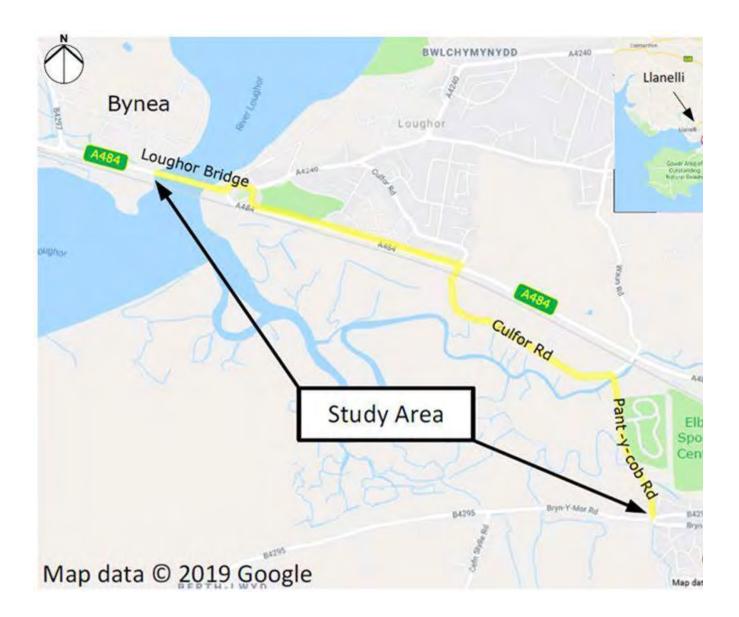
John Sayce

On 08 October 2019 at 14:31 "Phillips, John" < John. Phillips@arcadis.com> wrote:

Dear Sir/Madam

We are working on behalf of City & County of Swansea, investigating part of Sustrans National Cycling Network (NCN) Route 4, between Gowerton and the Loughor Bridge – please see the study area below. We are e-mailing this to you as a potential Stakeholder or interested party and would be grateful if this is not you, you could forward it to the most appropriate person to respond in your organisation.

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We will be very grateful to know your views and if you can respond to me, John Phillips, at the e-mail address below before 25th October, or if you prefer please call me on 07793980737 to discuss further.

With Regards,

John Phillips BSc(Hons) CEng MCIHT MAPM GMICE | Framework Manager | john.phillips@arcadis.com

ARCADIS Consulting (UK) Limited | Arcadis Cymru House, St Mellons Business Park, Fortran Road, Cardiff. United Kingdom CF3 0EY

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GOWERTON TO LOUGHOR ROUTE FOR CYCLISTS (NCN 4)

Dear John Philips

I know you have already had some correspondence from David Naylor a Wheelrights member who has commented on the western section of the route at Loughor bridge. I think there is near universal concern about the state of Loughor bridge with the sidewinds increasing the hazards to cyclists as well as the 2m shared pathway and low level parapets.

Wheelrights is the Swansea Bay cycling campaign group that was established in 1994. Our aims are to

- Encourage more people to cycle regularly for everyday journeys.
- Secure improved cycling provision in the Swansea Bay area.
- Support and organise events to promote these aims.

In July 2017 after the local government elections, the C&C of Swansea stated that they would build safe cycling routes into Swansea city centre for another 10 wards in the next 5 years. The section of NCN 4 that you are consulting on is the only part of NCN 4 between Port Talbot and Burry Port that is not off road. Consequently, the residents of the Lower and Upper Loughor wards do not have a safe cycling route into Swansea that is available to them at the moment.

As a group, we try and campaign for the needs of those who have just started to cycle as well as those who are confident cyclists. You will be aware that the Welsh Government has declared that there is a climate emergency so that Active Travel has become increasingly important in their deliberations, particularly with the need to reduce carbon emissions and get people more active. Cycling is one of the best ways to achieve these aims.

Cycle routes can be classified as follows in a priority order from the safest routes to those for only the very confident and proficient cyclist.

- 1. Dedicated off-road track for cyclists only
- 2. Shared use off -road track away from polluting traffic.
- 3. Shared use Off-road track next to a road.
- 4.Dedicated on road cycle lane with some separation like humps or bollards.
- 5. Dedicated cycle lane with only white line segregation.
- 6. Cycling on-road amongst the traffic.

The route between Station Rd by the Church and the A474 road bridge over Culfor Rd.at A can be classified as 2 for almost the whole route and can therefore we considered as safe for all levels of cycle proficiency. The one exception to this is the short 80 m. section that leads from Station Rd into Parc William. This section is too narrow not meeting the 3m. width specified in the design guidance. Also, it slopes down to the park, presenting a hazard to oncoming cyclists and pedestrians as well as poor visibility around the corner at the top of the slope.

However, the section between the road bridge at point A and Pont-y-cob traffic lights at E is a combination of 5 and 6 and is therefore suitable only for those who are proficient cyclists, as motor traffic can drive at speeds of 40 mph or more. This road is badly potholed, forcing cyclists out of their lane into the traffic lane creating risks for them as well as frustration for motorists. Flooding of the road occurs at spring high tides! One of our members comments

'The two river bridge pinch points on the Culfor road/Pont y Cob road are dangerous for cyclists as their sight lines are very short for all road users. Vehicles do end up confronting each other on the bridges with neither party willing, or sometimes able, to reverse.'

Virtually all our respondees have also commented negatively about the bend at point B, Here is one member's comment

I once had a near-miss on Culfor Road while cycling towards Loughor, as I was approaching the corner just before the railway bridge. It is a blind bend; I was overtaken by a vehicle which continued into the path of an oncoming van. The oncoming vehicle was forced into the verge (off the tarmac). In the case of a bad overtake such as this you have nowhere to go but into a hedgerow'

2 other members write

'I've cycled the route in question many times. It is completely out of character to the rest of the route as far as Burry Port. I had never considered an alternative, completely off- road path, but that would be great. The section from the Gowerton traffic lights down to the first river bridge can be difficult especially cycling up the slope.' 'I have seen a walker unable to walk along Pontycob Rd as the queuing traffic had pinned her into the hedgerow'.

This section consists of Culfor Rd and Pont-y-Cob Rd, were built to serve a few houses and farms like Island House. They were never designed to take through traffic which is why they are narrow. But many cars now use this route to avoid congestion on other roads often resulting in a build- up of motor cars and vans.

To make this section of the NCN 4 suitable for less confident cyclists, a route needs to consist of either priorities 1,2 or 3 above to conform with the rest of NCN 4 from Port Talbot to Burry Port.

Wheelrights concludes that there are 2 options to achieve this aim.

- 1. Purchase land adjacent to the road to build a shared use path. This might be both costly and take a long time to complete.
- 2. Construct a new path from D to G alongside the railway line to join with the existing footpath across the Elba playing fields. This path on the playing fields would need to be widened and perhaps another exit constructed from the fields at H to join a quiet residential street Ffordd Gamlas. Culfor Rd would then be blocked at point C. Traffic from Gowerton to Loughor would still be able to use PontyCob Rd and Waun Rd., whilst Culfor Rd would remain open to cyclists as well as access to properties on that road. This would have the additional benefit of opening up a new route for pedestrians

If neither of these were available a lesser alternative might be considered. Close the bridge over the River Lliw at D to motor traffic but allow pedestrians and cyclists to use it. It would still be possible for motor traffic to use Culfor Rd and Waun Rd. as a through road, but Pont-y-Cob would become a dead end. This would have the advantage of reducing the traffic and making the road quiet enough for cyclists and pedestrians. It would return the road to its original purpose and be cheap and quick to implement.

Please let me know if we can assist any further

John Sayce

Chair, Wheelrights

Phillips, John

From: Philip Snaith <philipsnaith13@yahoo.com>

Sent: 10 October 2019 14:13 **To:** Phillips, John; David Naylor

Cc: 'john sayce'; 'Ryland Jones'; 'Nick Guy'; Judd, David; Walsh, Chris

Subject: Re: Loughor to Gowerton Cycleway Feasibility Study - Stakeholder Message

From our perspective in the West the only "fixable" element of this section is Loughor to the end of Loughor Bridge. We are not aware of too many issues on the marsh road and if there were the constraints are numerous! We would concur with Ryland's assessment of both the issues and solutions.

Phil Snaith, Chair of Carmarthenshire Cycle Forum

On Thursday, 10 October 2019, 08:37:08 BST, David Naylor davidjnaylor.plus.com> wrote:

From:Nick Guy [mailto:nick.bike@hotmail.co.uk]

Sent: 09 October 2019 22:36 **To:** David Naylor; Ryland Jones **Cc:** john sayce; Philip Snaith

Subject: FW: Loughor to GowertonCycleway Feasibility Study - Stakeholder Message

Hello John Phillips,

Your email below has been forwarded to meby Wheelrights' Secretary, Nick Guy. I am responding on behalf of Wheelrights and also Cycling UK whose local rep. I am.

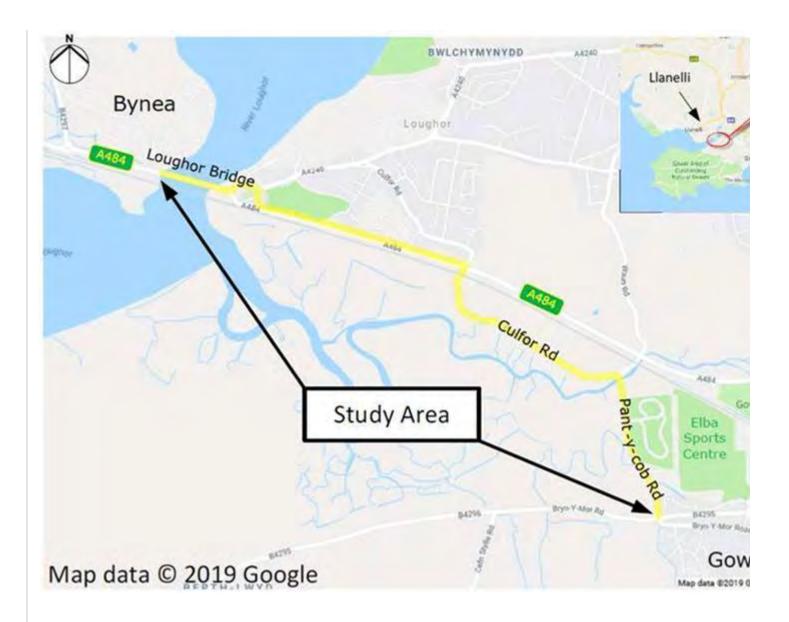
I have been a regular user of the section of NCR 4 under consideration ever since Sustrans created it as an NCN route. While we welcomed the provision of cycle lanes on Pont-y-Cob Road and the 'new' (several years ago) section through Parc Williams we are concerned about the short bit at the east end of this section between Station Road and theroundabout at the east end of the bridge. In 2011 I and the then Swansea Council Cycling Officer, Rob Wachowski, surveyed the area and I produced the attached report. (This can also be accessed from http://www.wheelrights.org.uk/infrastr.htm. Scroll down to "NCR 4 east of Loughor Bridge" in the "Swansea Bay Cycle Routes" section.) No action has been taken since then. As this report makes clear there is a safety issue with the existing route. Experienced cyclists generally avoid it and use the road instead.

onthe scene David Judd, then the local Sustrans manager, sought to have thefootway widened. It never has been. It should be.
I trust that this is of assistance.
Regards,
David
David Naylor (Coordinator of WheelrightsRoutes Group.)
From: Phillips, John <john.phillips@arcadis.com> Sent: 08 October 2019 14:31 To: tjevans@carmarthenshire.gov.uk<tjevans@carmarthenshire.gov.uk>; nick.bike@hotmail.co.uk<nick.bike@hotmail.co.uk>; john.sayce@ntlworld.com<john.sayce@ntlworld.com>; gareth.govier@swansea.gov.uk<gareth.govier@swansea.gov.uk>; info@welshcycling.co.uk <info@welshcycling.co.uk>; byneamembership@gmail.com <byneamembership@gmail.com>;ian.davies49@ntlworld.com <ian.davies49@ntlworld.com> Cc: Jones, Simon L<simon.l.jones@swansea.gov.uk>; Metzaki Burgham-Malin, Chrysi<chrysi.burgham.malin@arcadis.com> Subject: Loughor to GowertonCycleway Feasibility Study - Stakeholder Message</chrysi.burgham.malin@arcadis.com></simon.l.jones@swansea.gov.uk></ian.davies49@ntlworld.com></byneamembership@gmail.com></info@welshcycling.co.uk></gareth.govier@swansea.gov.uk></john.sayce@ntlworld.com></nick.bike@hotmail.co.uk></tjevans@carmarthenshire.gov.uk></john.phillips@arcadis.com>
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Linked to this is the inadequate width ofthe crossing across the N. side of Loughor Bridge . Before I came

of the rest of the Route. Therefore, we areundertaking a feasibility study to consider other possible options for

thissection of NCN Route 4 to maintain safety of all road users.



We are seeking viewsand feedback from you (and your membership) on your experience of this part of the Route. In particular we would be interested to hear of any problems or incidents encountered in the past five years. Equally, we shall be pleased to hear any positive comments regarding journeys along this section. Please note, we are seeking comments only on this specific section of NCN Route 4, not for any other parts of the Network. Note also, this is at a very early feasibility stage and we are just looking at possible options with no firm commitment toprogress any work. This is a request to engage with you to help us gauge any particular problems or issues from regular users of the route.

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With Regards,

JohnPhillips BSc(Hons) CEng MCIHTMAPM GMICE | Framework Manager | john.phillips@arcadis.com

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Arcadis Cymru House St Mellons Business Park Fortran Road Cardiff CF3 0EY United Kingdom

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