Cabinet 9 July 2024 Dinah's Hollow Slope Stabilisation

For Decision

Cabinet Member and Portfolio:

Cllr J Andrews, Place Commissioned Services

Local Councillor(s):

Cllr Jane Somper

Executive Director:

Jan Britton, Executive Lead for Place

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Report Status: Public (the exemption paragraph is N/A)

Brief Summary:

The C13 public highway at Dinah's Hollow, Melbury Abbas runs in a deep hollow. Geotechnical reports have highlighted that the banks, which are in private ownership, are unstable. If a major slip occurred there could be multiple serious injuries and/or loss of life.

The Council as Local Highway Authority has a duty to maintain the C13.

Stabilisation works (using soil nail technologies and appropriate facing and drainage works) on the banks (Scheme) are essential to afford the C13 protection from against landslide. The Scheme has been designed to provide a long-term solution to the unstable banks and to improve the safety of public highway.

The Dinah's Hollow stabilisation scheme works were approved by Cabinet in October 2020. In addition, Cabinet recommended that the affordability of the scheme should be considered as part of the 2021/22 budget setting process and

Medium-Term Financial Plan (MTFP). The estimated costs for the scheme were subsequently included in the MTFP agreed by Cabinet in April 2021.

There has been a significant increase to the Scheme costs since they were agreed by Cabinet. These are due to inflationary effects in the construction industry. The extent of the Scheme has not enlarged since the Cabinet approved it in 2020.

To move the project forward Dorset Council needs to increase the allocated funding and acquire land and new rights for installation of the soil nails and positive drainage on the banks.

Dorset Council continues to negotiate with the owners to agree the purchase of the required land and interests. However, given the safety concerns at Dinah's Hollow, the Council cannot wait for negotiations to break down before commencing the compulsory purchase process and therefore, it will be necessary to make a Compulsory Purchase Order (CPO).

Recommendation:

- 1. Approve full funding for the stabilisation Scheme, with the additional funding achieved through reprofiling the existing Highway budgets for the financial years 2025/26 and 2026/2027.
- 2. Authorise the use of the Council's powers of compulsory acquisition under section 102, 239, 249 and 250 of the Highways Act 1980and the Acquisition of Land Act 1981 and such other powers as may be appropriate to secure a compulsory purchase order ('the CPO') to acquire:
 - all land, interests, and rights in respect of the areas of land shown edged red and shaded pink on the attached Order map at Appendix D; and
 - new rights over the land shown edged red and shaded blue on the attached Order map at Appendix D.
- 3. To delegate to the Interim Lead for Place (including any officer nominated by them):
- To take all necessary steps to secure the preparation, making, and submission to the Secretary of State for Transport for confirmation and implementation of the CPO including (but not limited to) drafting and publishing the Statement of Reasons; the publication, advertisement, notification and service of all necessary notices; the investigation of and

response to objections; and the presentation of the Council's case at any public inquiry or other examination procedure.

- To continue to negotiate to acquire the necessary land and new rights by agreement and to acquire the same by private treaty if agreement can be reached.
- To make minor amendments, modifications and deletions to the CPO and/ or the Order Map including (but not limited to) to the land or new rights required should this be considered appropriate.
- If the CPO is confirmed, the take all necessary steps including (but not limited to) to advertise the confirmation, of the CPO and serve all necessary notices of the confirmation and once the CPO becomes operative to execute General Vesting Declarations under the Compulsory Purchase (Vesting Declarations) Act 1981 and/ or to serve all necessary notices including serving Notices to Treat and Notices of Entry following confirmation of the CPO if required so that the land subject to the CPO vests in the Council.
- To take all steps in relation to any legal proceedings relating to the CPO including defending or settling claims referred to the Upper Tribunal and/or applications to the courts and any appeals.

Reason for Recommendation:

To deliver the stabilisation Scheme approved by Cabinet.

The impact of a major slope failure would be high in respect of health and safety and financial implications. Possible consequences include loss of life, multiple major injuries and legal action. There would also be reputational damage, impact on service delivery and disruption to the highway network affecting a key north-south route.

Negotiations have taken place over a considerable time period and it has not so far been possible to reach a formal agreement. Compulsory purchase powers are therefore sought to enable the Scheme to progress.

1. Background

- 1.1 Proposals for an improvement of the C13 through stabilisation at Dinah's Hollow have been discussed by Dorset Council for over ten years. Further details of the historical development of the Scheme are set out in Appendix B.
- 1.2 On 6 October 2020 Dorset Council's Cabinet approved £130,000 for the drainage work on the east side.
- 1.3 On 6 April 2021 Dorset Council's Cabinet approved a further £4,363 million of the Council's Capital Funds to deliver the whole scheme (i.e stabilisation on both sides of the bank).
- 1.4 This is a critical safety scheme that is included on the Council's Corporate Risk Register. To mitigate the risk of landslip throughout the Hollow rights and acquisition of land on the east and west side of the Hollow are necessary.
- 1.5 Negotiations with the two current owners have been ongoing since at least 2021, but thus far the Council has been unable to reach agreement with the landowners for the acquisition of the land and rights required for the Scheme.
- 1.6 The government guidance "Guidance on Compulsory Purchase Process and The Crichel Down Rules" (CPO Guidance) for acquiring authorities makes it clear that that compulsory purchase is intended as a last resort. However, the CPO Guidance also recognises that acquiring authorities will need to consider when the land to be acquired will be needed. Therefore, the CPO Guidance recommends that acquiring authorities plan a compulsory purchase timetable in parallel with conducting negotiations. In light of this recommendation, the Council is planning to make the CPO in order to secure the outstanding interests required to enable implementation of the Scheme.
- 1.7 Further the CPO Guidance, states 'if an acquiring authority waits for negotiations to break down before starting the compulsory purchase process, valuable time will be lost.'
- 1.8 Given the importance of the Scheme to mitigate safety risks to road users, the Council cannot wait for negotiations to break down before commencing the CPO process and therefore, approval is now required for the Council's use of powers to make a Compulsory Purchase Order relating to land at Dinah's Hollow, Melbury Abbas to deliver the necessary stabilising soil nailing works and any associated works. Nevertheless, the

Council remains committed to continuing discussions with landowners with a view to seeking to acquire all necessary land and rights by agreement.

2. Land and rights required for the Scheme

- 2.1 The land and new rights required for the Scheme are shown on the plan in Appendix D. Parcels of land to be acquired permanently are shaded pink and land over which new rights are to be acquired shaded blue, together these areas make up the proposed Order Land.
- 2.2 The proposed Order Land consists of seven plots of land which comprise woodland, arable and pasture land. There are two landowners currently affected but land referencing is ongoing as part of the CPO process to identify any other qualifying interests in the Order Land.

3. Justification for Land Take

- 3.1 The proposed Scheme follows feasibility work by Parsons Brinckerhoff which concluded that soil nailing of the slopes was the most cost-effective solution to stabilise the banks and ensure safety on the highway. No alternative options with a lesser land take were identified which could either be guaranteed to be effective or not have a significant detrimental effect on the aesthetic of the hollow. For the full options report, please see Cabinet 9 July 2024 Background papers Dinah's Hollow Stabilisation Options Report
- 3.2 Consequently, it is considered that it is necessary for the Council to acquire the Order Land. It is recognised that this will affect the rights of the owners but it is considered that the impact is justified by the compelling public interest which is served by carrying out the Scheme which will improve the safety of road users and afford the highway long term protection from landslip.

4. Financial Implications

- 4.1 An overall budget for the scheme of £4.493 million, allocated from Capital Programme Funds has been carried forward.

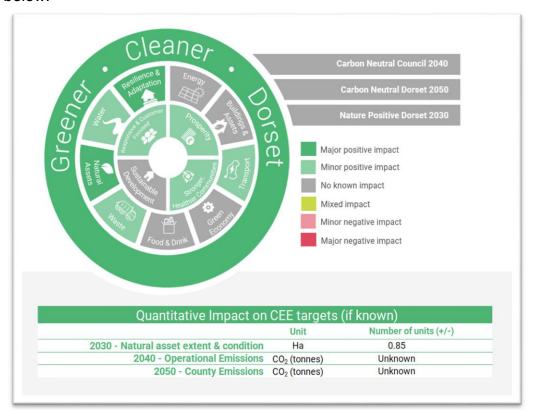
 Since 2021, there have been significant inflationary cost increases within the construction industry and further work has been done to determine the current cost estimate for delivering the scheme.
- 4.2 The current cost estimate for delivering the Scheme in 2025 is £8 million.

4.3 A further capital investment of £3.507m is therefore needed to deliver the Scheme in Dinah's Hollow. It is intended that the additional funding will be made available through the reprofiling the existing Highway budgets for the financial years 2025/26 and 2026/27.

5. Natural Environment, Climate & Ecology Implications

- 5.1 Whilst the slopes at Dinah's Hollow have existed for many years without evidence of major failure, changes could cause a major collapse, for example: prolonged and intense rainfall possibility resulting from climate change.
- 5.2 This proposed Scheme is strongly aligned to the resilience pillar of the Council's Natural Environment, Climate and Ecology Strategy 2023, supporting its vision for a climate resilient Dorset. In particular, it strongly aligns to the strategy's Mission 9 (Resilience and adaptation), by enabling greater climate resilience to critical transport infrastructure given the increased risks of extreme rainfall events linked to climate change and thereby mitigates associated knock-on risks, such as to health or wellbeing or supply chain disruption.
- 5.3 The Government's national Climate Change Risk Assessment evaluates the relevant Risk I5 (I5 Risks to transport networks from slope and embankment failure) as medium to high and highlights transport infrastructure network disruption as a 'very high' damage risk area owing to the associated risk of cascading failures. Its underpinning evidence base (produced by the Climate Change Committee) states that "Increased incidence of high rainfall combined with preceding periods of desiccation and cracking are expected to lead to an increase in incidents of slope failure within the transport network".
- 5.4 The Dorset Council Natural Environment, Climate and Ecological decision wheel is a tool used to identify the climate and ecological implications of proposals.

The results of using the tool in considering the scheme are presented below.



The results show a combination of neutral and positive impacts. In designing the proposed scheme, the Council has carefully considered the environmental impact and has included a number of mitigation measures to reduce any adverse effects such as:

- retention of as many trees as practicable without compromising the integrity of the slope stabilisation measures; and
- ensuring that the existing topography will be unchanged.

For further information, please see Appendix A for supporting tables for Decision Wheel.

6. Well-being and Health Implications

This is a critical safety scheme and if a major slip occurred there could be loss of life.

7. Other Implications

- 7.1 The Council has a legal liability to maintain the highway under the Highways Act 1980. The C13 is such a maintainable highway and the Council owes a duty of care towards road users.
- 7.2 The Highways Act further provides that the Council may maintain such works as it considers necessary for the purpose of affording to the highway protection against landslide or other hazards of nature.

8. Risk Assessment

The existing mitigation works at Dinah's Hollow, restricting traffic to a single lane down the centre of the hollow constrained by concrete barriers, were always seen as interim measures to reduce the risk exposure. The risk of a land slip still remains. Full slope stabilisation provides a long-term solution. The risk has been identified under the infrastructure section of the Corporate Risk Register.

Current Risk: MEDIUM

Residual Risk: LOW

9. Human Rights

- 9.1 The Human Rights Act 1998 incorporated the European Convention on Human Rights (Convention) into UK Law. The Convention includes provisions which aim to protect the rights of the individual (including companies and similar bodies). In resolving to make the CPO the Council must consider the rights of the property owners affected by the CPO, should it be confirmed and in particular, under Article 1 and Article 8 of the Convention.
- 9.2 As the land to be acquired does not include any dwellings and therefore it is considered that Article 8 of the Convention is not directly applicable. However, it is acknowledged that the compulsory acquisition of land required to deliver the Scheme could amount to an interference with the human rights of those with an interest in the land and new rights to be acquired. In this instance, the Council considers that there is a compelling case in the public interest for the compulsory acquisition of the land required for the Scheme that outweighs any interference with such rights

- and therefore the use of compulsory purchase powers in this matter is proportionate.
- 9.3 Without the use of these powers, it is possible that all of the land necessary to deliver the Scheme may not be made available within a reasonable timescale, which would prolong the risk to safety of highway users.
- 9.4 Furthermore, the compulsory purchase process clearly provides for those affected to have a right to object prior to it being confirmed and any objection will be considered by an independent inspector appointed by the Secretary of State for Transport. Any objection may also be considered at a public inquiry held to consider the confirmation of the CPO. Notwithstanding this, any person affected by the proposed CPO will be entitled to compensation pursuant to and subject to the Compensation Code.

10. Equalities Impact Assessment

- 10.1 The Equalities Act 2010 requires all public bodies in discharging their functions to have "due regard" to this duty. There are 3 main aims:-
 - Removing or minimising disadvantages suffered by people due to their protected characteristics
 - Taking steps to meet the needs of people with certain protected characteristics where these are different from the needs of other people.
 - Encouraging people with certain protected characteristics to participate in public life or in other activities where participation is disproportionately low.
- 10.2 An Equalities Impact Assessment has been undertaken and this shows that there are no impacts that are specific to people with protected characteristics. The Scheme is anticipated to benefit all users of the C13 highway by improving the safety of it.

11. Appendices

Appendix A- Climate Emergency Wheel supporting tables.

Appendix B- Dinah's Hollow – Location, history of events, previous decisions.

Appendix C – Programme.

Appendix D- Plan.

12. Background Papers

Cabinet 6 October 2020 <u>Decision - Dinah's Hollow, Slope Stabilisation - Dorset Council</u>

Cabinet 6 April 2021 <u>Decision - Capital Programme 2021/22 - Dorset</u> Council

13. **Report Sign Off**

This report has been through the internal report clearance process and has been signed off by the Director for Legal and Democratic (Monitoring Officer), the Executive Director for Corporate Development (Section 151 Officer) and the appropriate Portfolio Holder(s)

ACCESSIBLE TABLE SHOWING IMPACTS

Natural Environment, Climate & Ecology Strategy Commitments	Impact					
Energy	No known impact					
Buildings & Assets	No known impact					
Transport	Major positive impact					
Green Economy	No known impact					
Food & Drink	No known impact					
Waste	Minor positive impact					
Natural Assets & Ecology	Major positive impact					
Water	Major positive impact Minor positive impact					
Resilience and Adaptation	Major positive impact					

Corporate Plan Aims	Impact
Prosperity	Minor positive impact
Stronger healthier communities	Minor positive impact
Sustainable Development & Housing	Neutral
Responsive & Customer Focused	Minor positive impact

TABLE OF RECOMMENDATIONS

Recommendations	Responses -will this be incorporated into your proposal? How? And if not, why not?
Energy	
Consider opportunities to generate renewable energy on the land	Land is to be used to stabilise the bank and enhance ecology; no land available for renewable energy
Buildings & Assets	
No recommendations found for this category	
Transport	
No recommendations found for this category	
Green Economy	
No recommendations found for this category	

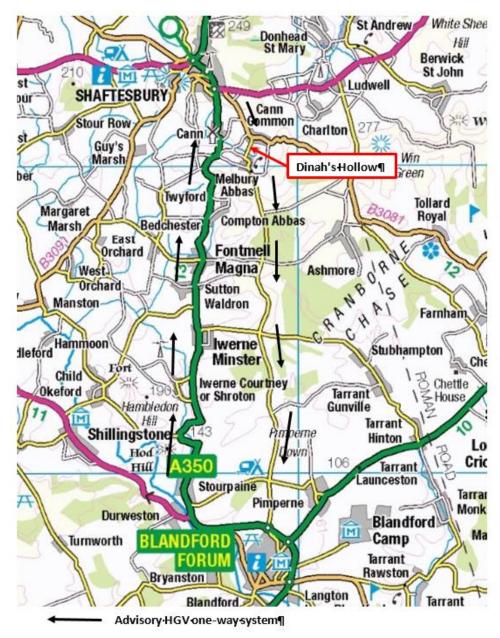
Food & Drink	
No recommendations found for this category	
5 ,	
Waste	
No recommendations found for this category	
Natural Assets & Ecology	
Ensure water quality is protected and/or	
enhanced	There is no significant change to water quali
Water	
No recommendations found for this category	
Resilience & Adaptation	
No recommendations found for this category	

Appendix B

Dinah's Hollow - Location, history of events, previous decisions, estimate, programme and risk assessment

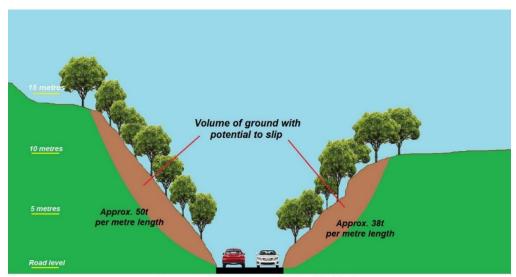
1. Location

1.1. Dinah's Hollow is located just north of Melbury Abbas on the C13. The C13 provides the only suitable alternative north-south link to the A350 through Dorset. It now operates as part of an advisory HGV route taking HGV traffic northbound along the A350 and southbound along the C13.



2. Technical Background to 2012 Closure of C13 Dinah's Hollow

- 2.1. July 2012 A landslip at Beaminster Tunnel overwhelmed the head wall depositing a large quantity of soil on to the highway. The tragedy engulfed a car and killed 2 people. Dorset Highways were prompted to examine other slopes perceived to be at high risk of failure.
- 2.2. Brody Forbes, local geotechnical consultant, placed Dinah's Hollow on high-risk alert. This assessment was confirmed by national consultant Parsons Brinckerhoff (now WSP). Slope analysis calculations demonstrated the possibility of burying a small vehicle.



Cross section through Dinah's Hollow

2.3. April 2014 – Dinah's hollow was closed to traffic removing all risk and eliminating the only practical alternative route to the A350 running north-south through Dorset.

2.4. The geotechnical consultant designed a soil nailing solution similar to Beaminster Tunnel for full mitigation of the risk. The cost was established in collaboration with the contractor from Beaminster Tunnel. Estimated at £4m in 2014.



Soil nails at Beaminster Tunnel

2.5. The slopes on both sides of the hollow are privately owned. Landowners and local residents were opposed to the project and no progress was made in negotiations to transfer ownership or to reach any form of agreement that would permit the installation of soil nails.

3. Cabinet Decision to Re-open C13 Dinah's Hollow

- 3.1. On 13 May 2015 Dorset County Council (DCC) Cabinet considered a paper, 'C13 Road Closure Risk Comparison Analysis'.
- 3.2. The paper discussed: the problems caused by vehicles using unsuitable routes to circumnavigate the closure; local pressure to reopen due to the length of time the road had been closed; anecdotal reports of increased collisions on alternative routes; damage to vehicles and property; and damage to the fabric of the highways.
- 3.3. The Dorset County Council Risk Management template was used to quantify the risk associated with five significant areas of risk: Financial; Strategic; Health & Safety; Reputation; and Service Delivery.
- 3.4. Four scenarios were considered: Re-opening the C13 to all traffic on a temporary basis; Re-opening the C13 to HGVs only on a temporary basis; Retaining the C13 road closure for another 8 month and retaining the road closure for another 27 months. The continued closures were

- assessed as presenting the highest risk, opening to HGVs the lowest risk and opening to all traffic slightly higher.
- 3.5. The minutes 178-180 and Annexures 1 and 2 record the discussion, including public representations, the resolution and the reasons for the decision. Cabinet resolved to re-open the road with temporary traffic management restricting traffic to alternate single lane running between barriers directing vehicles down the centre of the carriageway.
- 3.6. On 10 June 2015 <u>Audit and Scrutiny Committee</u> confirmed the cabinet resolution and the C13 was re-opened in July 2015
- 3.7. Officers continued to work towards obtaining planning consent, landowner approval, LVIA reports, ecological reports and woodland tree preservation orders consent. The geotechnical consultant continued to refine the design of the slope stabilisation.

4. Cabinet decision to suspend work on stabilisation project

- 4.1. On 02 December 2015 Cabinet considered a paper, 'Dorset's North-South Highway Infrastructure (A350/C13 and A37/A354)'.
- 4.2. The paper contained detailed discussion of the economic assessment of improvements to the North-South corridors. It notes that Government funding for transport is closely aligned to delivering economic growth and development. The improvements considered were shown to have a poor Benefit Cost Ratio.
- 4.3. More positively it reports, 'Dorset County Council have recently been approached by Bath and North East Somerset, and Wiltshire Councils to work collaboratively, together with our respective LEPs, to compile an evidence-based prospectus to assist in any future funding bid for a strategic infrastructure improvement between the M4 and the ports of Poole and Portland.'
- 4.4. The <u>minutes</u> 399.3 and 399.4 record the resolution that the proposed Dinah's Hollow Slope Stabilisation scheme be suspended until a definitive decision has been reached regarding the funding of a north/south strategic link between the M4 and Poole Port following the collaborative work with Bath and North East Somerset and Wiltshire Councils. The suspension was conditional on the plastic barriers directing traffic to the centre of the carriageway being replaced with more robust concrete barriers. This mitigation work was completed, and the road has remained open apart from a short period following a landslip (see below).

4.5. Subsequently, the Road Improvement Strategy (RIS2) consultation occurred Dec 2017 - Feb 2018. As part of the consultation response in Feb 2018, DCC made a request to DfT for a strategic study of routes north-south through Dorset in the next Road Investment Strategy (RIS2) period 2020-25. The Budget 2020 confirmed that funding for the study to explore the case for improvements to links between the M4 and the Dorset Coast will be provided. Nationally competitive funding bids could then be made for works from 2025 onwards, but with no guarantee of success. North-south route improvements are supported by BANES, Wiltshire, BCP Councils, the LEPs and the Western Gateway Sub-National Transport Body. However, the A350 has not been included in the Major Road Network (MRN) and is not on the Strategic Road Network (SRN). The potential for Government funding for the improvements at Dinah's Hollow is reduced because it is not on the SRN or MRN.

5. Cabinet Response to Landslip from East Bank

5.1. On 9 March 2016 approximately 35 tonnes of soil slipped from the east bank into the hollow and displaced the concrete barriers closing the road.



5.2. This was reported to the cabinet meeting on 16 March 2016 under the item for the Quarterly Asset Management Report (QAMR) and recorded in minute 55. The cabinet was supportive of actions to be taken by officers, either to reopen the road, or, to keep it closed. The decision would be dependent on assessment of future risk. Audit and Scrutiny

Committee considered the QAMR on 22 March 2016 but did not comment on Dinah's Hollow.

- 5.3. Investigation by geotechnical consultant WSP identified the probable trigger for the landslip as water running off the adjacent land over the face of the slope. The investigation recommended drainage works at the top of the slope to intercept the water to remove this as a possible trigger for future landslips.
- 5.4. On reassessment, the balance of risk to all highway users across all the five significant areas was not affected by the landslip and the road was re-opened with the intention of undertaking the east bank drainage works to mitigate risk.
- 5.5. The Cabinet decision dated 6 October 2020 approved proceeding with the recommended solution of soil nailing to stabilise the banks should be progressed and noted that for full mitigation of the risk of landslip through Dinah's Hollow, work was needed on both sides of the highway.

6. Slope Stabilisation Scheme - Work Ongoing and Required, Cost, Programme

6.1. Due to the time elapsed since Dorset Council Cabinet's approval of the scheme in 2021, the following reports and consent applications are being reviewed and where necessary are being updated:

Landscape Visual Impact Assessment (LVIA)
Consent for Works within Tree Preservation Order (previous consent to fell protected trees granted on 02 February 2016 has expired)
Geotechnical design (review previous work against current best practice for soil nailing and current site conditions)

6.2. The summary costs are:

Total project cost	£8,000,000
Less Corporate Capital funds	
currently allocated	£4,493,000
Additional funding required	£3,507,000

- 6.3. If funding is approved the start date for works on site would be dependent on ecological constraints and the land acquisition timescale.
- 6.4. Prior to commencement of construction, the Council will carry out up to date ecological studies (protected species including badgers, bats, dormouse).
- 6.5. It is estimated that the C13 at Dinah's Hollow would need to be closed for 12 months to deliver the Scheme. An outline programme is included in Appendix C.

Appendix C

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Ongoing Ecological review and Licence applications pre construction																											Т	Т	
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Natural England Licence for Bats (if necessary)																											Т	Т	
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