



Hampshire
County Council

Bridge Replacement Scheme at Upper Mill, Longparish

Details of Scheme for Longparish Parish Council

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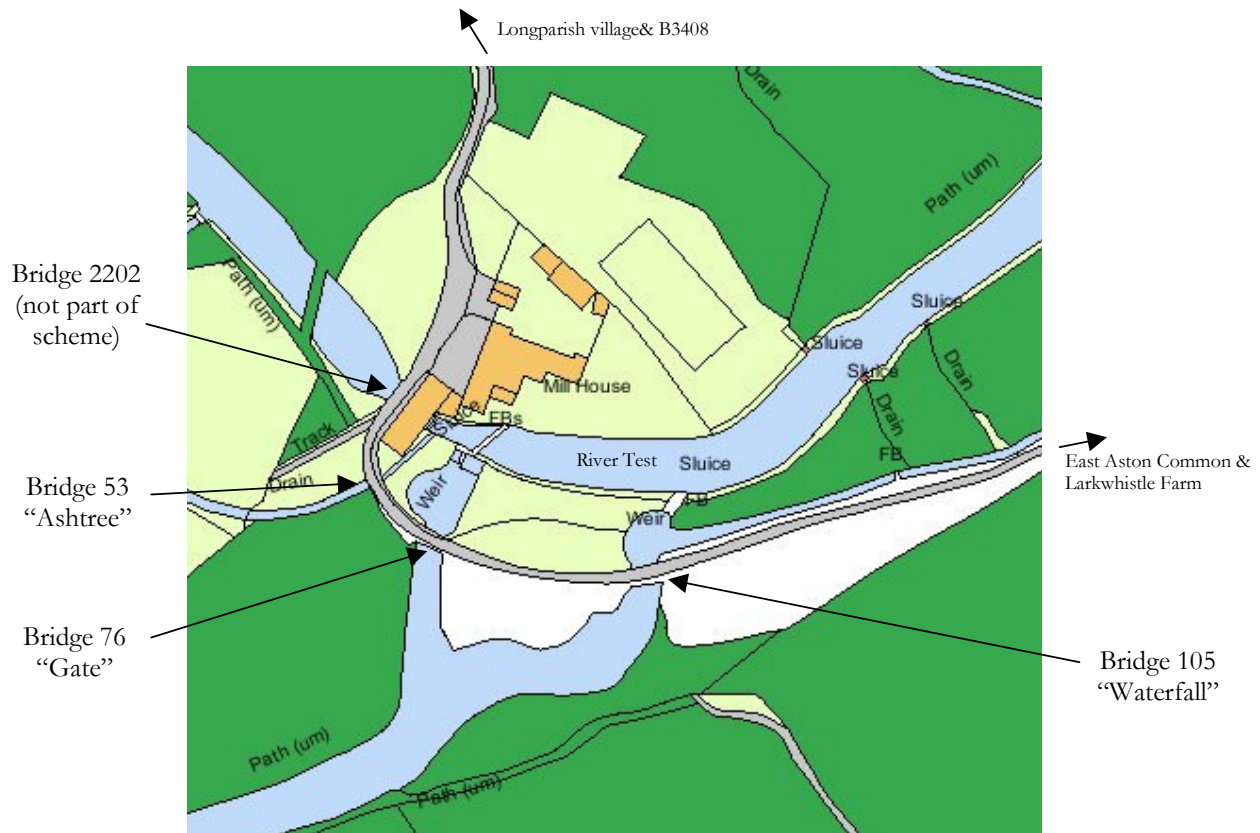


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1. INTRODUCTION

This report gives details of the work which Hampshire County Council intends to carry out to replace three bridges at Upper Mill, Longparish. The bridges concerned are Bridge 53 “Ashtree”, Bridge 76 “Gate” and Bridge 105 “Waterfall” (shown in the map below). This is part of the County Council’s bridge strengthening programme to replace weak bridges.

The scheme is being managed by the Bridges Office which is part of the Engineering Consultancy in Hampshire County Council’s Environment Department.



Scale 1:1750

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1.1. Consultation

This document describes the current plans and these may be subject to change. They have been developed in accordance with technical, legal, statutory and cost limitations. We have also tried to produce designs which will be visually sensitive to the site and which will not adversely affect the local environment.

We would appreciate your views on the plans described in this document. We will take into account any issues which you raise although there may be restrictions, mentioned earlier, which mean that we can not amend the plans.

1.2. Background

The existing bridges were built in the early years of the last century. They are constructed from a combination of steel beams, in-filled with concrete. The bridges are all in poor condition with cracking of the concrete and serious corrosion of the steel beams. The condition of the steel beams is particularly significant, as the design of the bridge and the limited space beneath means that they cannot be repaired.

To date the County Council has produced an outline design for the replacement of the three existing bridges. To achieve this we have carried out extensive site investigations, consultation with statutory bodies and talks with adjacent landowners. Other agencies involved include English Nature, the Environment Agency and the Local Planning Authority.

2. REPLACEMENT STRUCTURES

Images and diagrams of the replacement structure are shown in Appendix A.

2.1. Bridge 53

This structure will be completely replaced. The new bridge will be based on a prefabricated concrete box structure. The use of this type of construction leaves a number of different options for exactly how the bridge will be finished and hence what the bridge will look like.

As this bridge is located close to the mill it is proposed to finish the bridge to look like a brick arch bridge, similar to Bridge 2202 which is attached to mill building. The brickwork would be matched to be as close as possible to Bridge 2202. This is a type of bridge that the County Council has constructed in a number of locations and a photograph of a similar bridge is shown in Appendix A.

It is proposed to widen the space on top of the structure by approximately 1m, with the extra width being on the south-west side of the bridge (see Appendix A for a plan). If the new bridge has brick walls as parapets then the space on the bridge will be much more enclosed compared to the existing bridge. We hope to offset this by widening the bridge. The extra width provided will not be used for road space, but will be a raised, paved verge area. The span, the distance over the bridge, will remain the same as the existing bridge at 3m.

2.2. Bridges 76 and 105

Bridges 76 and 105 will be discussed together as they are almost identical structures. It is proposed to replace the whole of Bridge 76 and to replace the deck of Bridge 105. We plan to construct the replacement bridges from reinforced concrete, similar to the existing bridges, but to a better quality and using an improved design.

The choice of the proposed structure type has been dictated by the technical requirements of the site. The bridge runs at a relatively low level over the river and there is little space between the bottom of the bridge and the bed of the river. The area of flow under the bridge has to be maintained and the level of the road cannot be raised much above the existing level.

A brick arch structure would not provide enough flow area under the bridge. The use of steel for this bridge has been discounted because there isn't enough room under the bridge to safely carry out maintenance. A concrete structure will not require significant maintenance to its underside and will maintain the current level of flow under the bridge.

The design of the proposed bridges is shown in Appendix A. The appearance should be a significant improvement over the existing structures. The bridges incorporate a curved

profile across the top of the bridge which should improve the overall look of the bridge. The bottom of the bridge will be recessed, which should make the bottom of the structure effectively invisible and the bridge look more slender. Finally the material used will be of a higher quality than that used on the existing bridge.

The replacement bridges will be of a similar size and occupy the same positions as the current bridges. It is proposed to use metal handrails similar to the existing bridge to keep the open views along the river.

3. CONSTRUCTION

3.1. Construction works

The County Council will appoint a contractor to carry out the physical construction works. The contractor will be responsible for exactly how the works will be carried out, although they will be subject to any restrictions which the County Council places on them.

3.2. Timing

The most likely start time is currently May/June 2006. The timing of the works is still under discussion with the different agencies involved. The timing of the works is dictated by a number of different factors including the level of water in the river and protecting the different species of wildlife that are present in and around the river.

The works are likely to take up to 6 months to complete. Unfortunately access to the site is limited and this means that substantial works will only be able to take place on one bridge at a time.

3.3. Road closure

The road between the end of the mill building and east side of Bridge 105 will be closed to both vehicles and pedestrians throughout the works (shown in the map below). Access to the footpath from Upper Mill to the middle of the village will be maintained throughout the works, although there may be one or two occasions when access is temporarily blocked. This will be whilst large sections of the replacement Bridge 53 are craned into place.

