

CHEWTON MENDIP TURNPIKE WALL RESTORATION PROJECT



Summary Report May 2006



Partnership Project

The Partners:

- Chewton Mendip Community including Chewton Mendip CEVA Primary School, Chewton Mendip Parish Council, Chewton Mendip Evergreens, Chewton Mendip Church PCC - The Church of St. Mary Magdalene
- Countryside Agency
- English Heritage
- Mendip Hills AONB
- Somerset County Council
- Somerset Highways
- Waldegrave Estates
- Wessex Water

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Report – May 2006

Part 1 – Introduction and Summary

This report has been produced by Somerset County Council to mark the successful completion of the above project which was aimed at improving the condition and safety of walls on the section of the A39 between Chewton Mendip and Bathway. The old stone walls on the route are believed to date back to its turnpike days.

The issue of ownership of the walls has never been resolved and so it was decided that the best thing to do would be to work in partnership to carry out this enhancement work. Early in 2005/06 initial moves were made to secure external funding to carry out works to the east and west boundary walls running either side of the A39.

Somerset County Council (SCC) approached the Countryside Agency for Aggregates Levy Sustainability Fund (ALSF) money in the first instance. SCC then approached English Heritage who also expressed an interest in contributing from their ALSF fund due to the historic nature of the walls. An Expression of Interest was submitted to both funds in June 2005. Both funding parties advised us to seek community support and needed more information on past quarrying activity in the area before inviting us to progress with the application.

After visits to the site by representatives from both funders and various negotiations with them, SCC then approached the Parish Council who discussed the matter at a meeting and agreed to lend their support. As a result of that, more interest was generated within the community and SCC received letters of support from Chewton Mendip CEVA Primary School, Chewton Mendip Evergreens and Chewton Mendip Church PCC.

Negotiations were carried out with the Manager of the Waldegrave Estates in order to secure 'in-kind' scheme contributions in terms of land, stone, storage, etc. Mendip Hills AONB also agreed to contribute some funding towards the project. The balance and greater part of the funding was then supplied by Somerset County Council Highway Structures budget, together with a contribution from the County Council's biodiversity budget (to support ecological work involved in the scheme.)

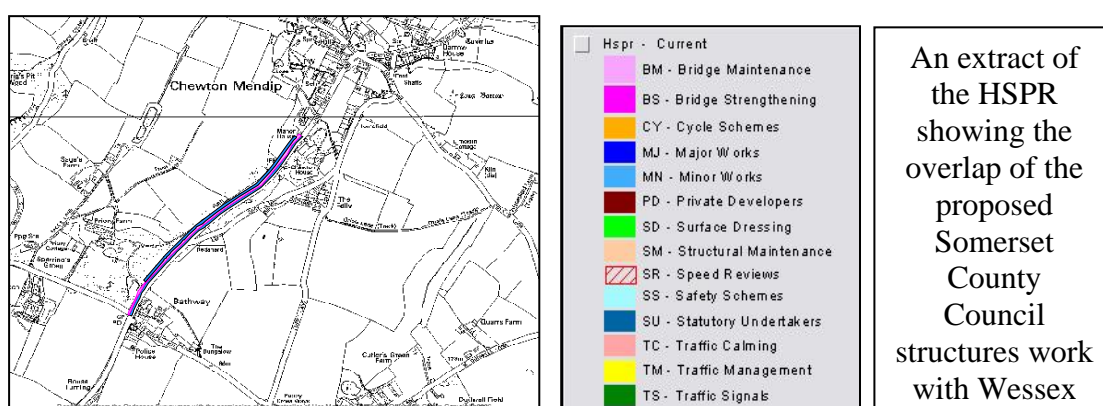
The offers from key external funding partners were confirmed in November 2005 and further negotiations and agreements were secured during the detailed design and planning phase.

Construction projects are never free from problems and bringing the scheme together to meet funding requirements and to complete the work during the least disruptive time (before Easter) was difficult. However the key stakeholders appear to be very pleased with the final result. We have since received positive reports from the community and it is clear that this project has provided a wider and safer footpath, as well as a much improved wall (on both sides of the road) which will be there for many years to come. The project has also addressed biodiversity issues and enabled bird and bat boxes to be installed, wild-flower seed-planting and a considerable amount of safety related tree-work to be carried out.

Part 2 – Planning the Scheme

Any scheme with a large variety of stakeholders can be a challenge to bring together. Sometimes these stakeholders are not obvious and actually have to be ‘found’. Somerset County Council have a special way of doing this:

When a Somerset County Council scheme has been outlined, it is recorded immediately on the Somerset Highway’s ‘Highway Scheme Proposal Register’ (or HSPR). This national award winning map database system, unique to Somerset, allows Somerset’s highway and structures engineers to see what else is planned for a section of road. This in turn allows clashes to be avoided and opportunities to link and combine work to be spotted. The HSPR system showed that Wessex Water were planning a new sewer at the same location from Bathway to Chewton Mendip.



Contact was quickly made and plans put in hand to bring forward the Wessex work. Initial estimates indicated that the sewer work would need a road closure of 6 to 8 weeks. This would have been separate and in addition to Somerset’s expected similar duration of structural work needing a road closure. The challenge was then to substantially improve on these figures with a joint scheme.

Early in January 2006 the local community and businesses, spearheaded by Chewton Mendip Parish Council, also raised concern over the duration of the work and the necessity for, and length of, the road closure. A public meeting was held in the village with the divisional County Councillor and Somerset Highways’ officials on the 25th January. It was agreed at the meeting that a road closure was needed but the County Council also promised to redouble its efforts to reduce its duration. To this end the start of the work was deferred until 13 February to allow more valuable planning time.

Scheme and Funding Partners			
CHEWTON MENDIP PEDESTRIAN IMPROVEMENT AND HIGHWAY WALL REMEDIAL SCHEME			
	WE WOULD LIKE TO APOLOGISE FOR ANY INCONVENIENCE CAUSED DURING THE WORKS	ALL ENQUIRIES: SOMERSET HIGHWAYS	
	PLEASE NOTE THESE WORKS HAVE ALSO BEEN COORDINATED WITH WESSEX WATER SEWER RENEWAL WORK WHICH WAS BROUGHT FORWARD TO REDUCE FUTURE DISRUPTION	CONTACT: Mr. Keith Dingle TEL: 01623 483035	

The ‘Scheme Board’

Part 3 – Building the Scheme

Work started in earnest to the A39 at Chewton Mendip on Monday 13th February and comprised wall, tree and pedestrian safety improvements to the North East Wall, wall and tree safety improvements to the West Wall and the new mains sewer installation carried out by Wessex Water. This part of the report will explain each of these scheme elements in turn.

North East Wall

Work began with the dismantling and recovery of stone from damaged and collapsing sections of the north east wall.

Three very large beech trees suffering from extensive internal rot were removed with help from heavy lifting equipment. Supervision was provided by qualified tree surgeons. It is intended that the trees are replaced with new specimens, in order to maintain biodiversity in the area, but they shall be planted safely away from the road.



Chewton Mendip N.E. Wall. Demolition of wall, stone recovery and tree removal



Tree Surgeon removes branches from larger trees prior to felling. The branches of these larger trees overhung the road by a large margin



Crane lowering a section of tree trunk which weighed several tonnes



'Formwork' fixed in before concrete pour on one of the north east wall sections

Behind the new north east stone wall facing was a substantial concrete 'gravity' block to ensure that the new wall would remain permanently stable with little need for future maintenance. The material excavated from behind the wall was deposited at agreed

locations in the Waldegrave Estate to reduce transportation and disposal charges.

The rebuilt north east wall was then carefully merged into the lower level original wall at its southern end, and the embankment behind the wall reinstated to its previous profile with original soil.

Once the retaining wall was complete, kerb resetting and footpath construction were carried out, with an increase in kerb height in order to discourage vehicles from leaving the road and using the footway. New footway surfacing was applied to the area of works giving a flat, smooth finish and enabling better access for all.



Facing stone work to the north east wall progressed well

West Wall



Chewton Mendip West Wall: Section of grouted and 'repointed' wall in foreground. Collapsing section (beside wheelbarrow) had to be removed and is awaiting rebuilding once the sewer trench work was clear

Collapsing sections of the west wall were dismantled. Trial areas for repair grouting and 'repointing' were successful in stabilising the wall whilst also leaving a good finished appearance. Whilst the newly 'repointed' areas presently look different, they should 'weather in' over time to a good match with the rest of the wall. English Heritage provided very helpful advice to this end.

Once the trials were successfully concluded, the work could press on in earnest. Large sections of the west wall were then prepared for 'repointing' with power washing, whilst there were several operations, the bulk of the work involved the grouting of voids behind intact wall sections followed by very extensive 'repointing' of the wall face. This work was carried out by a specialist contractor using 'heritage' type materials.





Skilled operatives completed the first stage of pointing. The mortar 'gun' enabled the joints to be deep filled much quicker than conventional techniques. The process and initial appearance is not dissimilar to the filling of joints with grey toothpaste. After the 'initial set' the mortar was hand finished to a suitable profile slightly recessed from the stone faces.

Localised areas of the west wall were rebuilt in a matching style to the original wall so as to preserve its historic appearance. Cold weather early in the scheme hampered progress a little but was accelerated towards the end as weather improved.



Detailed view of a section of wall after completion of grouting and 'repointing' work

Wessex Water's New Sewer

Initial work involved trial holes along the full length of the closed road section to Bathway in order to establish a safe alignment for the sewer installation avoiding other buried services whilst also investigating the ground conditions under the road surface. Rock was encountered just below the road construction and a special rock cutting trenching machine was brought in.



View north towards footbridge showing Wessex Water's trench cutting machine progressing south towards Bathway



Wessex Water's trench cutting machine being checked over prior to recommencing excavation through the rock underlying the road surface



Final stages of Wessex Water sewer pipe being laid

After the completion of the trenching and excavation work pipe laying began. A number of access chambers were constructed to allow for future inspection and maintenance of the sewer.

Finally the trench was back filled using 'foamed' concrete. Resurfacing and white lining were added later. The work was carefully co-ordinated with the ongoing structural work to ensure all work was conducted safely and efficiently.

Part 4 - Conclusion

All elements of the project were completed within programme and the road was successfully re-opened on 13th April in time for the Easter weekend. Further minor works to the west wall were required after Easter, however these were undertaken under traffic lights. The total duration of the closure was ultimately 8 weeks and 4 days. This compared favourably with the 13 weeks of closure and 13 weeks of traffic lights anticipated if the Somerset and Wessex Water schemes had been carried out separately. The work appears to have been carried out to everyone's satisfaction and there is relief that the disruption was less than expected. The key funding partners have recorded their approval of the footway and structural works and local stakeholders have registered their satisfaction with the scheme as a whole. The advantages of mains sewerage at Bathway will be appreciated by the residents, whilst the safer road, footway and highway walls on this old turnpike route will be of benefit to the travelling public for many years to come.

'Before'



The Completed Works



Part 5 – Thanks and Acknowledgements

The following groups and organisations played a key part in supporting and delivering the scheme. Without the support of the whole community the project would not have been possible.

- Chewton Mendip Community as a whole
- Chewton Mendip CEVA Primary School
- Chewton Mendip Parish Council
- Chewton Mendip Evergreens
- Chewton Mendip Church PCC
- Countryside Agency (ALSF)
- County Councillors
- English Heritage (ALSF)
- Mendip Hills AONB
- Somerset Highways (a partnership between Somerset County Council, Atkins Consultants and Atkins Construction Services)
- Waldegrave Estates
- Wessex Water

Works Subcontractors:

- Crestmoor Construction Services
- Ram Services Limited