Report to the Cabinet

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Portfolio:	Planning & Economic Development.						
Subject:	Broadway Town Centre Enhancement Scheme.						
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Recommendations/Decisions Required:

(1) That the construction difficulties presented by the presence of the shallow medium pressure gas main be noted, and that, in view of the costs and scheme delays associated with the diversion of the main, the enhancement scheme agreed by Cabinet in April 2006 be abandoned; and

(2) That, given the options set out in the report and subject to the agreed capital budget not being exceeded, the revised proposals be agreed in principle and a further report on the details of options 2 and 3 (paragraphs 19 and 20) be received once the technical issues with National Grid Gas and Essex County Council have been resolved.

Background:

1. The Broadway Town Centre Enhancement Scheme (TCE) was originally conceived back in 1998 as part of a review of three town centres. Three schemes were prepared, one of which, Buckhurst Hill has been fully implemented, one, Loughton High Road, partially implemented, and the Broadway, which was agreed for implementation in April 2006.

2. The Broadway TCE implementation was structured to take place in two phases. The first phase was the upgrading of the Burton Road off-street car park, the installation of CCTV and the second phase the substantive works to the Broadway itself plus the remaining smaller off-street car parks. A range of new parking controls was also agreed. Phase 1 works commenced in October 2006 and was substantially completed by December 2006.

3. The TCE scheme is being delivered via a 'Design and Build' type of contractual arrangement with Gabriel Civil Engineering Contractors. The current budgetary position is as follows:

Date	Item	Budget
April 2006	Original target price	£2,781,000
April 2006	Capital salaries, commuted sums, fees, supervision etc	£332,000
	Original scheme budget	£3,113,000
Dec 2006	Increase in provision to cover unforeseen works (Dec 2006)	£61,500
	Currently approved scheme budget	£3,174,500

Design issues:

4. The approved scheme requires, amongst other things, the removal of the current

central reservation in the Broadway and the creation of a one-way street and extended pedestrian facilities. Located under the central reservation is a medium pressure gas main under the control/ownership of National Grid Gas (formerly Transco). This was clearly shown through the original enquiries made of the statutory undertakers, an action which is part of the normal early stage of the design process. National Grid Gas responded to these searches with record drawings, which indicated that the main was at a depth of 1200 mm (4 feet). This was considered to be accurate information especially given that there was a line of street lighting columns in place along the central reservation whose fixings would have extended significantly into the ground, and the design or construction difficulty. It is not normal practice at this early stage in the process to investigate further, for example through the digging of trial holes, ahead of the scheme being approved and the detailed design commencing.

5. The development of the master plan therefore progressed, through a further consultation with the Broadway Focus Group and was, as set out above, approved by Cabinet in April 2006. Robert West were engaged by the Council to produce the "Client Requirement Document", which sets out for the contractor the basic tenets of what the client envisages from the project. The contract with Gabriel places the responsibility for design with them, which they discharged through the appointment of Robert West Consulting (RWC) as their nominated designers. This was a pragmatic arrangement given RWC's previous association with the Council in drawing up the master plan and taking the design through consultation, amongst other things.

6. Following their appointment, Gabriels met with National Grid Gas on site when they had been informed that National Grid Gas saw no difficulties with the design proposals. Once the scheme was approved and funded, RWC, working now for Gabriel, began to undertake design work to develop the master plan. At this stage, in order to design the new carriageway, the original information provided by National Grid Gas was re-checked, including on-site investigations. It then came to light that the depth information was incorrect in that the main was in fact at a depth of just 450mm (18 inches) below the proposed new running surface.

7. This information was extremely unwelcome, since it became apparent to the Design Team that the scheme as envisaged would not be able to proceed in its original format with the gas main at this very limited depth. RWC and Gabriels entered into discussions with National Grid Gas to see what options were available to enable the scheme to proceed, the outcome of which was that either:

- (a) the gas main is moved away from the carriageway and under the new paved pedestrian area; or
- (b) the gas main is left in the same location but lowered to a depth of approximately 850 mm (2 feet 10 inches) so that it cannot be damaged by the weight of traffic passing over it.

8. National Grid Gas state that the pipe in its current state has a life expectancy of up to 100 years. They therefore have no plans now, or in the foreseeable future, to undertake works to it or relocate it. Therefore, if the main has to be moved, or is damaged through works, the costs will have to be met by the developer, that being this Council. Furthermore, because the gas main is old and lined with a plastic liner there is also a risk that once works to relocate commence, the scale of the works may extend beyond the immediate scheme area, adding even further to the costs. With respect to National Grid Gas programming the required works, it has a policy of only undertaking works of this nature when gas demand is low; this means that works can only be undertaken during the summer months. The scale of the works are such that National Grid Gas estimates that the Broadway would need to be closed for 10 to 12 weeks. This is in addition to the closure period of 6 to 8 weeks needed then to complete the enhancement works themselves. The costs associated with the diversion or lowering of the main are estimated by National Grid Gas to range between

£140,000 and £300,000 depending on the condition of the liner and the eventual scale of the diversion works.

Scheme Programme:

9. Whilst it is entirely possible for the Cabinet to agree the additional capital sum, the scale of the additional works puts considerable delays into the implementation programme. As stated above, National Grid Gas will not undertake these works other than during the summer months. They also need a 12 to 13 week lead in time which means that even if Cabinet and Council were to increase the capital budget, National Grid Gas would not be able to commence the works this year and they would not start until the Spring of 2008. The Broadway would then be facing a complete closure of up to 20 weeks to enable National Grid Gas, and then the Council, to complete their respective works.

10. A delay of this scale would impact directly upon the Council's budget, since the contractor would have to leave the site and return in a year's time, during which period mobilisation and construction costs would have increased. It is also likely that National Grid Gas's costs would similarly increase between now and Spring 2008.

11. If substantive works did not commence until Spring 2008, they would not be completed until late Spring 2009, a construction period of around 15 months in period, during which there would be very considerable local disruption to trading conditions. Given the known difficulties of trading conditions at the Broadway, this is considered unacceptable, a fact confirmed by the Broadway Focus Group at its meeting on the 15 March 2007.

Alternative Options:

12. The Design Team (Council officers, Gabriel, RWC and Stace) considered a number of alternative options and has been working on an alternative scheme which seeks to overcome these technical issues, provides an acceptable scheme to the local community and can be delivered within the currently agreed budget. In so doing, the design team has tried very hard to retain as many of the local aspirations from the original scheme as possible, including the fundamental requirement that the Broadway looks noticeably different upon completion and was therefore considerably more than just a 'glorified highway' maintenance scheme.

13. A proposal has been drawn up which encompasses the following key elements:

- the gas main is left in situ;
- a central pedestrian area is maintained;
- two way traffic flow is retained;
- road and footway surfaces are brought up to a high standard;
- high quality street furniture is included;
- through traffic is slowed; and
- parking is controlled.

The new proposal is set out at Appendix 1. Officers and RWC will describe the proposal in more detail at the meeting.

14. This alternative was presented by the Portfolio Holder to the Focus Group at its meeting on 15 March 2007. Whilst there was naturally great disappointment that the original proposal could no longer be delivered (on the grounds of both potential cost and trade disruption), the Focus Group supported the proposed alternative design and was of the view that it met many of the aspirations of the local community, and that if implemented it would result in a much improved local environment along with a welcome reduction in the scale of disruption during its construction. The Focus Group was made fully aware that any change to the scheme would require Cabinet and, dependant upon the final estimated cost, possibly Council approval.

15. There remain however some potential technical challenges even with the revised scheme. Although the proposal does not directly require the gas main to be diverted, caution is required in working in close proximity to a main, which is so shallow in the ground. This may restrict the manner in which the concrete slabs can be repaired, since it will be very difficult to use mechanical means of breaking out slabs close to the main for fear of damaging it directly or undermining it thereby causing damage. National Grid Gas has, of course, made it clear that if their main is damaged during construction, they would hold us liable to meet the costs of repair or diversion. The table in paragraph 21 below therefore assumes that works to the gas main will be incurred.

16. The design team are therefore investigating the use of less invasive repair methods such as the use of vacuum void grouting (VVG) to fill voids under the slabs in order to stabilise them thereby enabling them to be overlain with a new asphalt running surface. This solution is of itself not entirely without risk, and officers are currently in discussion with the County in respect of what 'guarantee period' they would expect to see with a solution of this nature. This issue is being approached on the basis that whatever is done constitutes a significant improvement to the County's current poor infrastructure. If the revised scheme was to be approved it is anticipated that, allowing for a break for this year's Christmas and New Year period, works could be completed by March or April 2008.

Budget Implications:

17. The currently approved budget for the Broadway TCE scheme is £3,174,500 made up of the original budget of £3,113,000 and the additional capital sum of £61,500 agreed by the Cabinet and the Council in December 2006.

18. The capital budget for the scheme has been carefully reassessed, taking into account all the expenditure both before and after the Cabinet approval for the scheme to go ahead and the contract being entered into. An estimate of the revised scheme has been drawn up, firstly based on the total reconstruction of the carriageways. This reflects the worst-case scenario, since the use of the less invasive methodology would be cheaper. The cost of the worst-case design proposal is estimated at £1,722,758, which includes a contingency sum of £75,000.

19. However, as indicated above, there are risks associated with this design due to the need to break out the concrete slabs in close proximity to the shallow gas main. Therefore an estimate has been sought for the less invasive grouting approach, which, including the pre and post testing required to ensure the system can be used and has been successful is $\pounds1,621,300$.

20. In summary the budget options can be set out as follows, noting that the estimated outturns have allowed for the cost of any works likely to be undertaken in 2008 increasing by 7% and any fees incurred in 2008 by 3%.

Option 1 – original proposal		Option 2 – 'Worst case' reconstruction		Option 3 – 'Grouting' solution	
Agreed budget	£3,174,500		£3,174,500		£3,174,500
Spent to date	£1,018,800		£1,018,800		£1,018,800
Remaining works	£2,290,900		£1,722,800		£1,621,300
Estimated outturn	£3,309,700		£2,741,600		£2,640,100
Gas main risk	£300,000		£300,000		
2008 cost increase	£165,400		£85,400		£80,650
Estimated outcome	£3,775,100		£3,127,000		£2,720,750
Overspend/(saving)	£600,600		(£47,500)		(£453,750)

Statement in Support of Recommended Action:

21. It is a considerable disappointment that the location of the gas main has come to light at this late stage resulting in the need to abandon the originally agreed enhancement scheme for the Broadway. There has been very strong local support for the original consultation and design process and the local community has patiently waited since 1998 for an enhancement scheme to commence. Despite this disappointment, there remains a significant appetite to see a viable enhancement scheme progress, one that meets local aspirations as far as possible, is deliverable with minimum disruption locally and within the Council's budget. On current scheme estimates for both options 2 and 3 this can be achieved.

Other Options for Action:

- 22. At this stage the alternative options appear to be as follows. In essence they are:
- (a) provide the additional capital funding, accept the time delay in construction and undertake the existing agreed scheme;
- (b) delay the decision on the revised scheme in order to determine whether the County Council will provide support funding to reduce the Council's exposure to risk given that the highway infrastructure is the responsibility of the Highway Authority;
- (c) commit additional resources to working up a further range of scheme options in addition to the revised proposal set out in this report; or
- (d) abandon phase 2 altogether, perhaps with the exception of the improved street lighting which would support the operation of the improved and installed CCTV system.

24. Option (a) is feasible but the Council opens itself up to considerable financial risks due to the delay in scheme implementation. Furthermore, the Traders, via the Focus Group, have expressed grave reservations in respect of the economic effects of an extended period of closure which would be required for the original scheme to proceed. They were also concerned that the works would commence in spring 2008 which would not provide sufficient time for the Broadway to recover from the problems currently being experienced.

25. Option (b) suggests that since the Council is investing a significant capital sum into the County's highway infrastructure, it would be equitable if the County was to make a contribution to the costs. There have been indications from senior County politicians that some capital support would be forthcoming, but to date this has not materialised. In any event, if it were to, it would in all probability be at the expense of other County schemes scheduled for implementation during 2007/08 within this district. It is worth reiterating that the option 3 will require County support in relation to the use of a grouting system to stabilise the Broadway infrastructure.

26. Option (c) suggests that the Council asks the design team to undertake further work on developing alternatives to the revised proposal. The team has thought carefully about options and the design being put forward does seem to be the most practical in all the circumstances. However, there may be others but there will be costs incurred. There will also be a delay in bringing back any further ideas to the Cabinet, which will put in jeopardy the construction timetable.

27. Option (d) suggests that, in view of the technical difficulties and the risks to which the Council is exposed in delivering phase 2, the remainder of the scheme is abandoned. This would result in phase 1 remaining as it is, with the improved car parks and the installation of CCTV. Expenditure to date on phase 1 totals £1,018,800. There would however be significant local concern about such action given the strong commitment that the Council has given, through its corporate planning processes, to the delivery of a Broadway enhancement scheme. However, the Council has received unsolicited approaches in respect of a wider

and more comprehensive regenerative scheme for the Broadway, which it could explore over time. It is likely however that any such regenerative scheme would take a very long time to plan, consult upon and deliver due to the complexities of land and property ownership, tenure etc.

28. In the event that phase 2 was to be abandoned, it would be reasonable to complete the upgrade of the street lighting in the Broadway, as a complement to the newly installed and now operational CCTV system. The contract has been structured in such a way that the Council would only be liable to meet costs incurred to date in the event that phase 2 did not proceed.

Consultation Undertaken:

29. The Focus Group was consulted at its meeting on 15 March 2007 and were against continuing with the existing scheme (cost, disruption and delays) and were in favour of going forward with the revised design, subject to budget compliance

Resource implications:

Budget provision: Table in paragraph (20).

Personnel: Nil.

Land: Works to ECC highway infrastructure, but local shops and accommodation in the ownership of the Council.

Community Plan/BVPP reference: N/A. **Relevant statutory powers:** N/A.

Background papers: Previous Cabinet reports. Environmental/Human Rights Act/Crime and Disorder Act Implications: None. Key Decision reference (if required): Will advise when key decisions have ref nos.