

Sandy Lane Improvement North Northampton

Proposed Amendments to Environmental Bunds
Supporting Statement

Date 8th January 2010

QM

Issue/revision	Issue 1	Revision 1	Revision 2	Revision 3
Remarks				
Date	08-01-10			
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Project number				
File reference				

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Background

Sandy Lane Improvement North received planning consent on 22nd February 2007 and a copy of the approved scheme plan is appended to this report for information (appendix A).

Commencement of works on site has been delayed due to a request for a judicial review of the planning processes and delays in finalising the land acquisition with the landowners and their legal representatives. The planning consent notice requires works to commence within three years and a contract has now been awarded with works commencing on site in early February 2010 and lasting for approximately 45 weeks.

Introduction

In light of the time elapsed since the original planning submission and the possible changes in design standards, guidance and best practice, MGWSP have reviewed the scheme proposals with a view to reducing both the environmental impact and cost of the scheme. Several options have been identified and approval is now being sought for the implementation of these measures from the appropriate parties (Planning and Highway Authorities).

This supporting statement sets out details of a proposal to reduce the volume of excavated material being removed from the site and outlines the positive financial and environmental benefits that would result from this approach.

The Proposal

The construction of Sandy Lane Improvement North will result in a total volume of excavation of 127,199 m³. Paragraph 8.46 of the Environmental Statement sets out the principles and objectives of the mitigation measures included in the scheme design including “to screen specific views from properties and footpaths” and to this end the approved scheme included the provision of a 2 metre high environmental bund where the road is not in cutting. This was designed to mitigate noise and visual intrusion to residents of the adjacent residential estate and, combined with other areas of deposition where the road is on a slight embankment, reduced the volume of surplus material to be removed off site to 88639m³. In total, approximately 21280m³ of surplus material is to be placed in the environmental bunds.

The land acquisition process is now complete and NCC have acquired two parcels of land between the old and new roads south of Weggs Farm Road which are considered to be of insufficient size for any practical use. It is therefore recommended that additional surplus material should be stockpiled on the larger of these two parcels of land (the southernmost plot) up to a maximum height of 4 metres, and the resulting mound landscaped as part of the scheme landscaping contract to follow the main engineering works. The smaller plot is the proposed location of the contractors compound and as such is not available for stockpiling of surplus material. Such a proposal would reduce the volume of surplus material to be removed from site by approximately 47000m³ and a plan is included in Appendix B and a typical cross section in Appendix C.

Environmental Impacts

Reduction in vehicle movements and material off site:

The removal of this volume of surplus material (88639m³) off site would require a total of approximately 11000 vehicle movements based on 8m³ capacity lorries with associated noise, Co₂ emissions and traffic congestion on the existing highway network. Reducing the volume of material to be disposed of by 47000m³ would reduce vehicle movements and associated nuisance by around 5875 trips i.e. 53%.

Increased mitigation of noise and visual intrusion:

In addition to the reduction in vehicle movements and the reduced quantity of material potentially going to landfill, the increased size and height of the bund will enhance the noise reduction properties of this feature and also reduce visual intrusion of the new road to residents of the area and users of the proposed cycleway which is to be created when the old, redundant section of Sandy Lane is downgraded to a pedestrian and cyclist facility.

Appendix C includes typical cross sections and demonstrates how, if the bund is constructed at 2m high as approved, the tops of HGV's using the new road will be visible to pedestrians and from first floor windows of adjacent residential properties particularly in the early years prior to the landscaping maturing. The typical cross section of the revised 4m high bund demonstrates how the amended bund will provide effective screening from the footway/cycleway and adjacent dwellings from day one of the new road opening and noise reduction properties of the revised bund will increase as the landscaping matures.

Visual impact of revised bund:

Whilst the increased size of the proposed amended bund will reduce the visual impact of the new road from residents, the bund itself might be considered visually intrusive by some affected residents. The typical cross sections contained within Appendix C show a comparison between the approved environmental bund and the proposed amended bund to give an indication of scale and the impact on adjacent residential properties. Appendix E shows the view looking north along Sandy Lane from Berrywood Road (proposed bund would be on the left) showing the height and density of the existing hedgerow and trees between the dwellings and the bund whilst Appendix F shows an existing newly constructed bund between housing on Rothersthorpe Road and the road serving the Pineham development site.

Noise and dust nuisance:

Creation of the bund itself will, inevitably, result in a short term nuisance due to the generation of noise and dust by construction operations. Condition 4 of the planning consent notice requires the implementation of a Construction Environmental Management Plan (CEMP) and the CEMP covers the mitigation of noise and dust nuisance. The CEMP limits working hours to between 8am and 6pm Mon to Friday and 8am to 1pm on Saturdays (consistent with working hours restrictions contained in condition 7 and 8 of the consent notice). The CEMP also requires the contractor to comply with good practice contained within BS 5228 Part 1:1997 relating to minimising of construction related noise.

Mitigation of constructed generated dust nuisance is covered under section 6.2 of the CEMP which states:

Best practicable means (BPM) to control emission of construction dust shall be implemented to minimise the impacts. Control measures for dust emissions shall include:

- ◆ Regular water-spraying and sweeping of unpaved and paved roads.
- ◆ Sheeting or enclosure of all loads of potentially dusty materials to be transported on the public highway.
- ◆ Restricting vehicle speeds on unmade surfaces on site to no more than 15mph.
- ◆ Maintaining potentially dusty exposed surfaces in a damp condition by application of water sprays/mobile bowsers preferably making use of rain or grey water.
- ◆ Regular inspection and cleansing of paved surfaces – especially site access points - using appropriate means to minimise dust mobilisation
- ◆ Provision and supervised use of vehicle cleaning facilities before site exits to the public highway.
- ◆ Use of wet suppression or air extraction and filtration during disc cutting operations.
- ◆ Minimise the surface area of unmade roads.
- ◆ Clearance of any spillages of potentially dusty materials as a matter of priority using appropriate means to minimise dust mobilisation
- ◆ Storage of any dusty or waste materials in covered skips (if practicable) or screened areas and as far from potentially sensitive receptors as possible (such materials should be removed from the site for proper disposal as soon as possible);

As part of the active management of the works, daily visual inspections of site conditions, potential dust sources and control measures shall be made to ensure appropriate allocation of resources and effectiveness. These inspections and any observed incidences of visible dust entrainment should be recorded in a site log book by the nominated site environmental manager. Weather forecasts should be used to inform control planning and dust-raising activities should be avoided during high winds.

Other construction stage impacts:

The CEMP also ensures that “best practicable means” shall be used to prevent the depositing of mud and other debris on the public highway and requires the contractor to undertake a risk assessment of activities likely to result in the generation of vibrations. Any tasks resulting in a perceptible level of vibration at residential properties are not permitted to be undertaken before 9am on any working day.

Ecology and Biodiversity:

No ecological implications are envisaged to arise from the placement of surplus material onto existing agricultural land as this land has little or no habitat value currently, indeed, the subsequent landscaping of the proposed bund will provide greater habitat opportunities than the current land usage. The loss of the existing hedgerow will lead to a net loss of habitat value but this value cannot be ascertained without a series of surveys, some of which cannot be undertaken until April in strict accordance with the appropriate regulations. It is therefore proposed to proceed on the basis that the existing hedgerow will be translocated in order to minimise the loss of habitat and surveys will be undertaken by specialist staff to identify if this hedgerow has sufficient value to justify this

course of action. If the hedgerow surveys subsequently prove that the environment is species poor and therefore of limited ecological value, a separate application will be made to the LPA for its removal and replacement with new hedgerow. This will also be dependent on the contractors programme of works and when the area under the hedgerow will be required for the deposition of surplus material assuming this application is granted.

Heritage and Archaeology:

No excavation will be undertaken (beyond stripping topsoil) and there is therefore thought to be no detriment to any buried heritage assets.

Drainage:

Currently, the agricultural land to the west of the existing Sandy Lane falls towards the carriageway. Much of this catchment area is severed by the creation of the new road and the design of the new drainage system has evolved to cater for surface water run-off from the land to the west.

The bund will be located to the east of the new road and a 300mm filter drain provided to drain the highway verge and the western side slope of the bund. The top of the bund and the eastern side slope must fall towards the old road due to the topography of the land, and the existing drainage ditch will be backfilled. In order to ensure that the provision of the bund is neutral in terms of surface water run-off, it will be necessary to provide a grip drain between the base of the new bund and the proposed combined footway/cycleway. The surface of the new footway/cycleway will be designed to fall away from the bund towards the existing drainage ditch between the highway and the residential estate. There will be no net change to either the catchment area of the new scheme, nor therefore the proposed drainage design. As the basis of these proposals is to devise a system of surface water drainage which is neutral when compared to both the existing scenario and the approved scheme, it is not considered that any revision to the Flood Risk Assessment is required as this deals primarily with mitigating the flows from the newly created impermeable area down to the run-off rates for greenfield and sets out the discharge rates from the balancing pond into Dallington Brook, neither of which are affected by the revised bund proposals and associated minor drainage measures.

Summary

In summary, permitting an increase to the size of the bunding from the approved proposals to those shown in Appendix B and C will eliminate around 5875 HGV journeys and associated noise nuisance and environmental impact. In addition, it will save 47000 m³ of surplus material from going to landfill sites and enhance the mitigation of noise and visual intrusion caused by the Sandy Lane Improvement North scheme. Drainage issues are relatively minor and can be dealt with effectively and the reduction of habitat value caused by the loss of the existing hedgerow will be minimal if the hedgerows are translocated. Construction of the bund will create noise and dust nuisance if not effectively managed but the restrictions placed on the contractor by the Construction Environmental Management Plan are designed to reduce these to an acceptable level and this is a short term issue compared to the long term benefits which can be realised by allowing the increase to the size and height of the environmental bunds.