

Princes Risborough infrastructure phasing and delivery

This appendix sets out an approach to the delivery of a potential western relief road and other infrastructure associated with the delivery of an expansion of the town by 2500 homes.

Western Link Road

In February to March 2016, WDC consulted on a draft town plan for Princes Risborough for the major expansion of the town. This major expansion is dependent on the delivery of extra highway capacity in the form of new road infrastructure as the current network in the town is not amenable to expansion and would be in conflict with ambitions for creating a people-friendly town centre. WDC, the County Council and the Local Enterprise Partnership jointly commissioned a study to assess a wide range of options for a new road and the results were fed into the preparation of the draft plan.

At the time of the consultation the draft plan showed two possible options for a western link road: one integrated with the development (option 11b), and one taking a wider route away from the town (option 17). Both option 11b and 17 were for 40mph and in part 30mph roads. There was mixed feedback from the consultation, some favouring option 17 that went wider round the town and others the integrated option; while other points of view argued that the case for major new road infrastructure had not been made, or that a much wider bypass option should have been progressed. The draft concept plan shows that both route options 11b and 17 rely on an alignment in the southern section that incorporates Shootacre Lane, and 11b also incorporates a length of Picts Lane. There was considerable local concern about the upgrading of these roads and the associated increase in traffic and possible environmental harm. In response to this, WDC commissioned further highway feasibility work to examine alternative alignments in the southern section of the route. This commission was also required to review and revise the construction costs of the main options, and to provide a concept design and costs for an underpass under the branch railway line between Wades Park and Park Mill Farm.

The further emerging work has identified a southern alignment which crosses Picts Lane in the area of the former Total Carbide site, running across the field to join the A4010 just south of the entrance to Culverton Farm. The cost review concluded that:

- The Option 17 route = £80m
- The Option 11b route, via Picts Lane and Shootacre Lane = £48m
- The Option 11b route with Culverton southern variation may lead to cost reductions over the Picts Lane and Shootacre Lane route.

Both options perform well in delivering journey time savings; both distribute traffic from the development into the wider network, providing relief for the town centre; while 11b also provides direct access to the railway station from the development to maximise the use of public transport, particularly by commuters. Option 17 has some merit as an element in upgrading the A4010 as a strategic north-south route; however, there are insuperable difficulties in upgrading the remainder of the A4010, not least since it traverses the Chilterns AONB from Kimble to High Wycombe. Other north-south solutions are being explored, including access to the M40. The recent announcement of the Oxford-Cambridge Expressway options¹ means that

¹ <https://www.gov.uk/government/publications/the-national-infrastructure-commissions-interim-report-into-the-cambridge-milton-keynes-oxford-corridor>

committing to a strategic role for the A4010 at this stage would be premature until there is more certainty on the wider strategic context. Ultimately WDC have to demonstrate that the road is deliverable in the context of the Local Plan, and through developer funding, from which it must be concluded that development can only make a partial contribution to the costs of Option 17.

As no further funding sources have come forward to fill the gap for the Option 17, and no reasonable prospect that they will do, it is reasonable to conclude that this route is not deliverable. Further funding sources have been announced as part of the Autumn Statement. These have been looked into and are not appropriate: in terms of unlocking housing or reducing local congestion, both these are achieved by option 11b. The final decision on the route has to be made by Cabinet and Council in March 2017.

However, for the time being and given that at present there is no reasonable prospect of delivering option 17, attention has been paid to the detail of delivering option 11b. This note therefore examines how option 11b might be delivered.

On- and off-site road infrastructure

On and off-site road infrastructure will be delivered using s.106 agreements on a pro-rata phased basis as the developments come forward. More detailed information on how this will take place is given at the end of this note.

On-site delivery of the road will be achieved as the expansion is built out. Part of the road runs through the area where the 2,500 homes will be built. Roads to access the homes would have been required anyway. Developers will be required to build those roads to an agreed specification, on an agreed alignment, to provide this portion of the road. The costs that would have been incurred in building normal estate access roads can therefore be deducted from the overall costs of the road. This is estimated to be £19.5m. All development costs are factored into viability assessment but on-site infrastructure is more straightforward to deliver.

In terms of off-site works, these will be financial contributions. No piece of off-site infrastructure will require more than 5 developments to contribute towards it to ensure its delivery.

In terms of working out the pro-rata amounts for off-site works, this is being based on the 'worst case' costs of £48m for the construction of option 11b. It is necessary to take the £19.5m for the on-site works from this total, giving £28.5m. On a pro-rata basis across 2,400 homes², this gives around £12k per home, which evidence indicates is financially viable.

This pro-rata approach needs to be further refined to take into account the other on-site infrastructure that is required of different phases. For example, where a primary school is required, an allowance needs to be made to reduce the costs of the off-site works, which would be passed to development parcels without those costs.

Off-site elements of the road include the need to enhance the capacity of two under-bridges of the branch railway line, one over Summerleys Road in the south and one over Grove Lane in the north at Little Kimble. It is the need for the works to these bridges which is the primary reason for the significant costs of the road (£20m). The overall costings of the road options include modification to the under-bridges to bring up to HGV standards as there are currently height limits on these bridges.

² The expansion area allows for 2,500 homes. 96 have been granted permission on a brownfield site at Leo Labs. This gives, in round terms, a balance of 2,400 homes to deliver the relief road.

It is proposed that the vast majority of the off-site highway works will be undertaken through s.278 agreements by the developer. The exception to this is the works to the railway under-bridges. It is expected that Network Rail will require that works to these bridges are undertaken by themselves. There is therefore a degree of risk transfer that is required to the public sector to deliver these sections of highway improvements.

In summary, then, new road infrastructure is required at Princes Risborough in the context of the major expansion of the town. It is plan-led and so must demonstrate delivery through the plan and through development both on and off-site; and funded through the consequent uplift in land values.

Town improvements

The delivery of alternative road capacity at Princes Risborough creates the opportunity to calm traffic in the town. This will be achieved by a traffic management package along the A4010 through the town, with a range of measures including speed restrictions and mini-roundabouts.

Relieving the town centre of a proportion of traffic will allow innovations to the highway and public realm to create a more people-friendly environment, so enhancing the town economy.

Network Rail

Changes to the railway asset are required to deliver a comprehensively planned expansion of the town. This includes a new underpass between Park Mill Farm and Wades Park; and improved railway under-bridges at Summerleys Road and Grove Lane. This introduces risks to the delivery and funding of the project, in terms of gaining Network Rail cooperation, and securing possession of the railway line, respectively.

In terms of delivery, Network Rail is preparing to implement the East West Rail project in the Princes Risborough Area. For this project, in the long term, Network Rail requires land to the north of the Princes Risborough to Aylesbury line for future twin tracking, although this is not in the scope of the current scheme being implemented. The draft Plan seeks to reserve 15m of land along the railway to be passed to Network Rail, in exchange for an MoU with Network Rail about the scheduling of works to the underbridges. If Network Rail fail to secure the 15m of land, they will need to purchase it at residential land values – or worse, homes could be constructed on it. There is thus a direct benefit to Network Rail of participating in this project.

Works to the underpass would also be part of this MoU. Emerging feasibility work indicates that the underpass would cost around £2m to deliver. In September 2015 Network Rail consulted on their own underpass solution here as part of the East West Rail project. Since that time, Network Rail removed the underpass from the scope of their project – however, its delivery as part of the plan project would also support longer-term Network Rail aspirations here.

In terms of finance, and securing possession of the railway line, the work to the underbridges and underpass could be synchronised with the track possessions that are scheduled to the Princes Risborough line for the Marsh Crossing, which we understand are planned works relating to the integration of HS2 and the East West Rail project, minimising the costs to Network Rail. However, there is a risk that this will not be achieved, and if the costs of further track possessions are not borne by

Network Rail, they will fall to this project. Possession costs, once known, will also be factored in to the overall project costs in case a fall-back position is needed.

Work is in hand at WDC in relation to the preparation of this MoU. BCC and Network Rail will be closely involved in this, and signatories to it. Where necessary third party landowners will also be part of this process, and signatories. Achieving a signed MoU will significantly enhance the deliverability of this project.

Other infrastructure

The at-grade crossing of the railway line between Park Mill Farm and Wades Park will need to be replaced by a pedestrian/cycle underpass. This is a significant measure needed to ensure the integration of the expanded town with the existing town and safe access to the town centre and other local facilities such as the Risborough Springs leisure centre. Preliminary costings indicate that the underpass will cost around £2m. Possession of the railway line may need to be secured depending on the final preferred construction solution.

Two primary schools, of two forms of entry each, will be required. The expansion area generates 3.6 forms of entry and it was originally thought that the 0.6 form of entry would be absorbed through the expansion of other primary schools in the area. Permissions granted since then have used up this capacity and so the expansion will require up to four forms of entry. The expansion area naturally falls into two neighbourhoods north and south of the stream, indicating that one primary school should be in each neighbourhood. This would be provided on site as part of the development, secured through a s.106 agreement. The requirement would be to set aside land for the school and contribute to construction costs.

Princes Risborough secondary school will need to expand by up to 2 forms of entry. This is likely to be funded by a mixture of CIL and national funding.

Although the area Clinical Commissioning Group does not require any expansion of GP surgeries as a result of the expansion, there is a local aspiration to merge and relocate the two existing GP surgeries in the town into a new facility. Further work will be needed to build a business case for the merger and to identify a suitable site for a new facility.

Relocation of Hypnos

The current Hypnos factory on Longwick Road is outgrowing its premises and at present it also relies on land from a third party. The owners would like to relocate within the Risborough area into enlarged premises with a showroom facility, in a visible location. A number of locations have been explored, including existing land by Regent Park and the new proposed allocation there. However the railway bridge across the access is too low for the Hypnos delivery vehicles and it is felt the site would not be prominent enough to suit the business needs. Releasing Hypnos's current site would help to support the comprehensive development of the expansion area. The Council is in active discussions with Hypnos about possible sites for relocation.

Viability

A number of scenarios have been tested informally, using the Garden City & Large Site Financial Model produced by the Advisory Team for Large Applications (ATLAS) part of the Homes and Communities Agency. The model has been developed as a high level financial model that can enable viability testing of long term, large scale sites at an early stage in the planning process. The assessment uses a residual land

value assessment where costs and values are calculated and compared with a benchmark land value to assess viability.

The Council has used this model to assess the large scale expansion of Princes Risborough to assess the impact on viability of the identified infrastructure and affordable housing costs.

The assumptions in the model are based on benchmarks proposed by the authors of the model (ATLAS) and where they have been varied based on local knowledge and information.

The scenarios tested were based on the information about the size of expansion area and infrastructure costs in the draft Plan. Since then, the size of the proposed expansion has marginally increased and the cost of the western link road has decreased. Hence these viability tests represent a 'worst case' approach and therefore can be seen as robust in the context of current thinking.

At that time, scenarios tested looked at an expansion of 2200 homes in the Risborough expansion area, the assessment tested 3 options for new road infrastructure required in the context of the dependent development: a wider relief road option costing £78 million (Option 17); an integrated road costing £52 million (option 11b) and a minimum scheme based on 11b but with less expansive improvement to the railway under-bridges (£46.5 million). The main difference between the minimum scheme and the integrated route relates to the reduced improvements at either end of the through route where it passes through existing railway bridges.

Otherwise all assessments shared a common set of infrastructure costs covering education, community and other social infrastructure as identified by discussions with infrastructure providers.

The viability assessments are all based on the assumption that all required infrastructure and policy requirements are met, and as such can be seen as a worst case scenario.

There is a significant amount of S.106 and CIL cost incurred by this level of development: the initial assumption is that the infrastructure will all be provided by way of S106 contributions, however, there is scope to utilise CIL for specific elements of the infrastructure thereby reducing the overall contribution required.

The model shows that on the minimum scheme, there is head room in the region of £21k per dwelling for infrastructure contributions.

In relation to the road the assumption in all cases is that the full cost of providing the new road, both on- and off-site, is met by the development.

The Council is in the process of reviewing this viability work to inform a final full viability assessment that will accompany the final version of the Plan together with updated housing numbers and infrastructure costs, but in the meantime, current testing indicates that major new road infrastructure in the context of the major expansion of Princes Risborough can be achieved.

Phasing and delivery schedules

This section includes:

- Figure 1 – housing delivery zones in the expansion area
- Table 1 – indicative number of homes in housing delivery zones
- Table 2 – indicative sequencing of the elements of the relief road, showing on-site and off-site elements, including costs
- Figure 2 – a plan showing the sequencing of road elements from Table 2
- Table 3 – Commentary on delivery of road elements in south-to-north order. Exact timing will need to be tested /modelled.
- Table 4 – delivery scenario showing income from zones and sequencing of road elements against this

Figure 1 Housing zones in the expansion area (indicative)

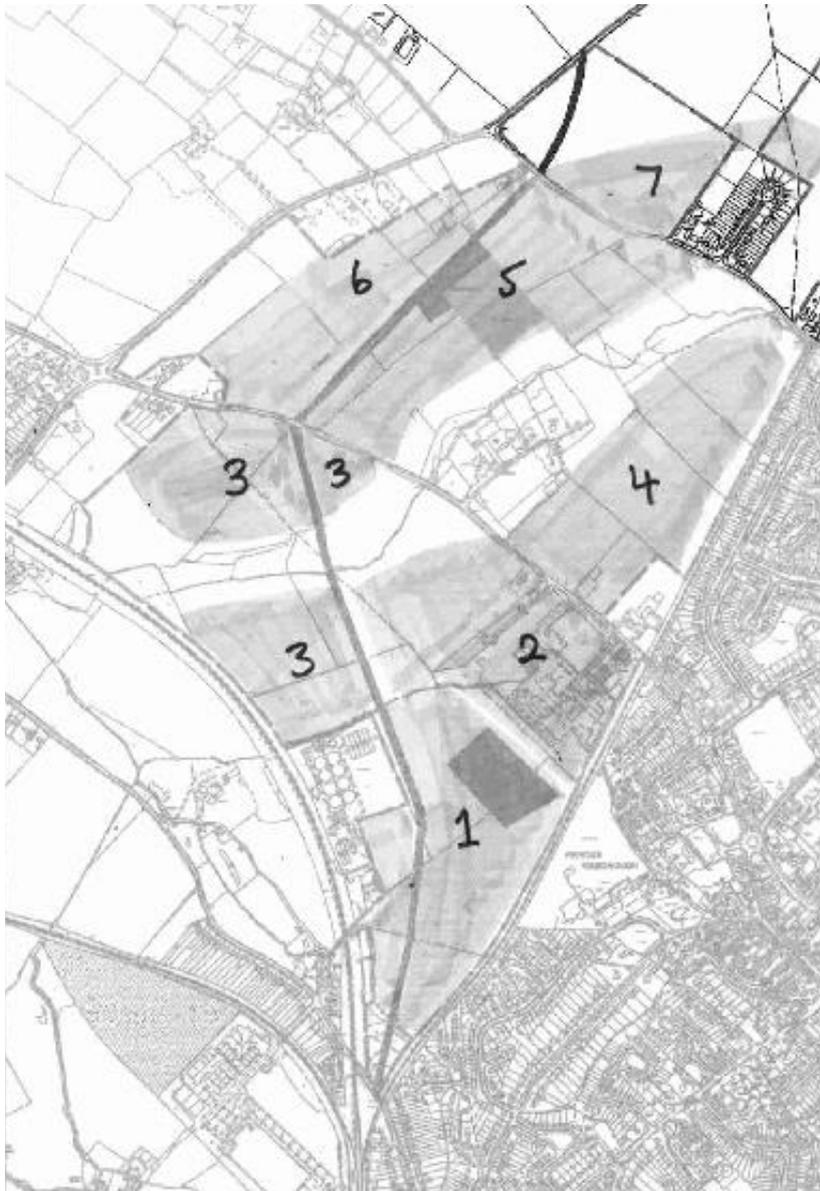


Table 1 Indicative number of homes in delivery zones

Zone	Approx no. homes	On-site requirements
1	370	Primary school; relief road; underpass; 15m railway corridor
2	380*	
3	450	Relief road
4	470	15m railway corridor
5	400	Relief road and primary school
6	270	Relief road
7	160	Relief road and sports hub
Total	2500	
Less Leo	2404	

Housing numbers subject to change

* Less 96 for Leo Labs already permitted – so contributions now fixed

Phasing and sequencing of the development parcels has not been fixed and there is every likelihood that many parcels will overlap, or may come forward in another order. What is set out below is an indicative sequence for the purposes of demonstrating one way in which development might occur, and how significant infrastructure could be delivered alongside. A master plan exercise would examine other options for sequencing and phasing, if more flexibility is sought. This master plan would form a bridge between the plan policies and individual applications, providing policy interpretation and more detail on phasing, delivery and equitable distribution of planning obligations.

Zones 1 and 2 are expected to deliver earliest in the plan period.

Zones 3 and 4 are likely to progress next, with some overlap with 1 and 2

Zone 3 is likely to overlap with zones 5 and 6

Zone 7 is expected to be developed latest, though some land in 7 may come forward earlier.

Table 2 Potential sequencing of route elements in delivery order (see Figure 2)

Order of delivery	Road element	Reason for phasing	Cost* / on-site	Cumulative cost
1	Access through Sumitomo	To provide direct access to the Station and options for routing of bus services at an early stage	£798,600	£798,600
2	Sumitomo to Longwick Road	Required to access the new development	On-site	
3	Length through site by railway station	Required to access the new development	On-site	
4(i)	EITHER: upgrade of Shootacre Lane / Picts Lane	To mitigate the impacts on Poppy Road of new traffic movements	£3,071,000	£3,869,600
4(ii)	OR: Culverton Farm length	To mitigate the impacts on Poppy Road of new traffic movements	£2,297,000	£3,209,000
4	Summerleys road improvements, junction upgrade and bridge improvement	To complete the southern part of the new route.	£8,325,000	£12,194,000
5	Longwick Road – Mill Lane	Required to access the new development	On-site	
5/6	B4009 improvements	To complete the northern part of the new route	£4,125,000	£16,319,000
6	Grove Lane bridge and associated junctions	To allow the A4010 to be reassigned to the new route.	£11,946,000	£28,265,600

*includes 20% risk contingency and optimism bias of 44% for roads, 66% for underbridges. Excludes land and property purchase, part 1 Compensation claims, diversion of services, drainage proposals and lighting.

Figure 2 Sequencing of road elements

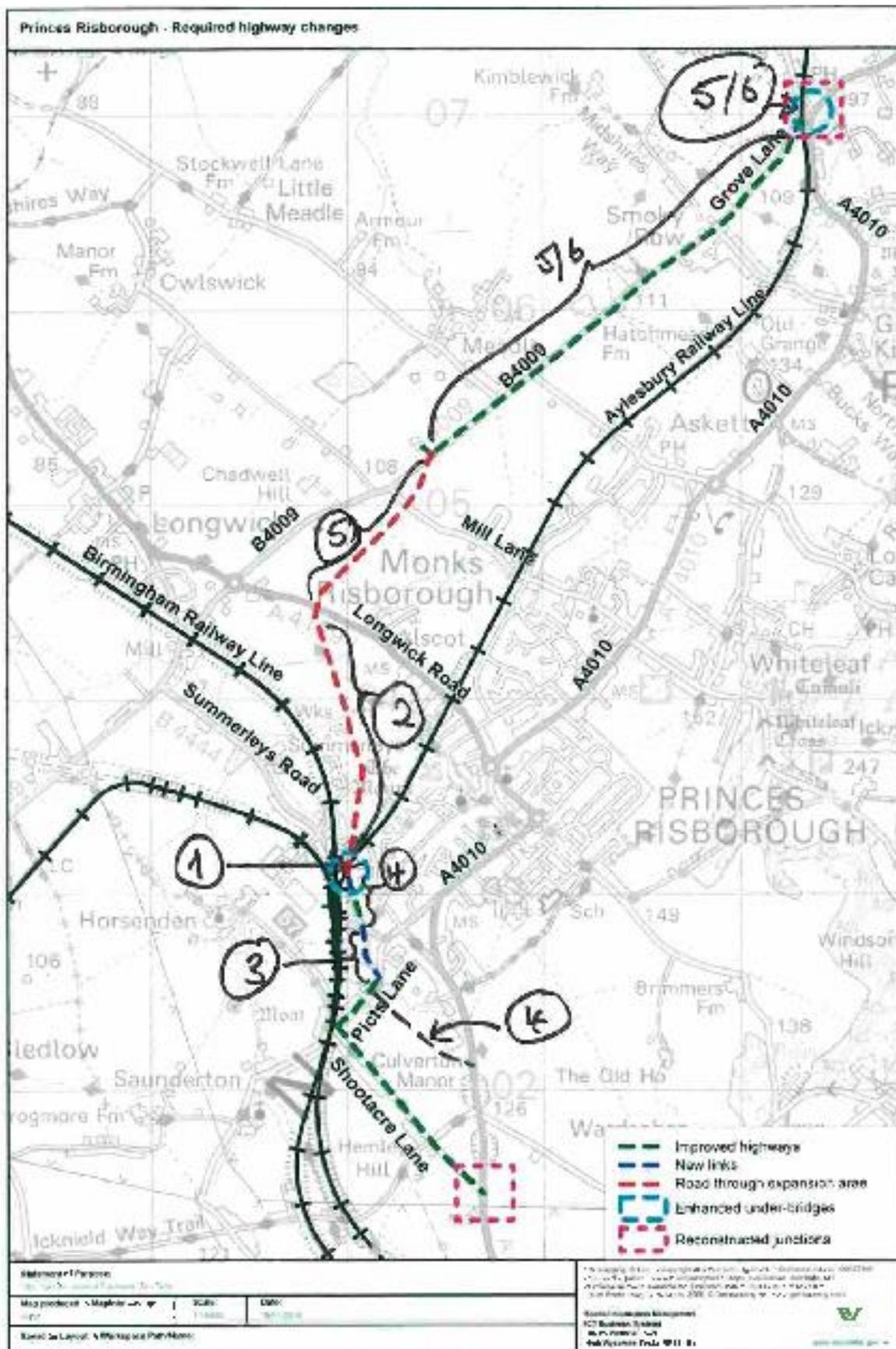


Table 3 Delivery of relief road elements, from south to north

Table 2 sequence no.	Housing zone(s)	Road element	Delivery factors
4(i)	1-3	EITHER Upgrade of Shootacre Lane and Picts Lane	To be funded via s106 agreement and delivered via s.278 agreement through planning permission to: <ul style="list-style-type: none"> • Zones 1 – 3 land purchase also required
4(ii)	1-3	OR Culverton Farm section	To be funded via s106 agreement and delivered via s.278 agreement through planning permission to: <ul style="list-style-type: none"> • Zones 1 – 3 • Land off Poppy Road land purchase also required.
3	n/a	Length within site near railway station	To be delivered on-site via s.106 through planning permission for the railway station site via s278 agreement
4	1-4	Summerleys Road upgrade, new junction and bridge improvements	To be funded via s106 agreement through planning permission to: <ul style="list-style-type: none"> • Zones 1-4 To be delivered in partnership with Network Rail. Timing to coincide with possession of railway line for HS2 or EWR projects. Forward funding/grant funding may be required.
1	Pre-1	Access through Sumitomo	To be funded via s.106 agreement through planning permission to: <ul style="list-style-type: none"> • Zones 1 - 3 Forward funding/borrowing will be required for priority junction. Direct delivery required by the public sector. Later upgrade of junction etc. part of item 4 above. Land purchase required.
2	1 and 3	Boundary of Sumitomo – Longwick Road	To be delivered on-site via s.106 and s278 agreement through planning permission to: <ul style="list-style-type: none"> • Zones 1 and 3
5	5 and 6	Longwick Road – Mill	To be delivered on-site via s.106 and s278 agreement through planning permission to:

		Lane/B4009	<ul style="list-style-type: none"> • Zones 5 and 6
5/6	7	B4009 / Grove Lane	<p>To be funded via s106 agreement and delivered via s.278 agreement through planning permission to:</p> <ul style="list-style-type: none"> • Zones 5 – 7 • Kimble NDP
5	Zones 4-7	Grove Lane bridge and associated junctions	<p>To be funded via s106 agreement through planning permission to:</p> <ul style="list-style-type: none"> • Zones 4 - 7 <p>To be delivered in partnership with Network Rail</p> <p>Timing to coincide with possession of railway line for HS2 or EWR projects. Forward funding/grant funding may be required. Land to be purchased by WDC/BCC</p>

Table 4 Income from housing zones against road element delivery (indicative sequence)

Zone	dw	Income @ c £12K dwelling per	Cumulative income	Cost of off-site road elements	Cumulative costs	Element delivered
1	370	4,350,340	4,350,340	798,600	798,600	Sumitomo
2	284	3,339,180	7,689,520	3,071,000	3,869,600	Shootacre Lane / Culverton farm
3	450	5,290,954	12,980,475	8,325,000	12,194,600	Summerleys road and bridge
4	470	5,526,108	18,506,583			
5	400	4,703,071	23,209,653			
6	270	3,174,573	26,384,226	4,125,000	16,319,600	B4009
7	160	1,881,228	28,265,454	11,946,000	28,265,600	Grove lane bridge and junctions
Total	2404	28,265,454		28,265,600		