5.1/

Introduction

The delivery strategy underpins the development framework expressed in section 4 by detailing;

- Phasing and risk analysis of the housing sites (including the further expansion options that could be needed to meet the shortfall against Core Strategy targets)
- Phasing and risk analysis of the strategic employment land sites and specific examination of the issues and opportunities affecting alternative site locations
- An action plan which identifies the next steps to be taken in order to move the masterplan forward. This includes identification of responsibilities and support required.

The spatial framework has identified

5.2/

Housing sites

urban extension sites for housing development (N1-N4 and E1-E4).

It is estimated that the development of these sites would yield between 1557 and 2070 dwellings depending on the density at which they are developed (i.e. 30dph - 40dph). This density range has been derived from (i) an appreciation that the sites are likely to accommodate family housing, (ii) precedent developments and (iii) awareness of design influences e.g. characteristics of Penrith's built form and constraints such as topography.

Taking the mid-point of this density range (the 'average'), development at 35dph could yield approximately 1800 dwellings across the 8 sites. This would - as acknowledged at section 4 - result in a shortfall against Core Strategy targets: urban extension sites would need to deliver about 2300 dwellings in order to meet those targets.

For this reason, a number of 'further extension' sites have been identified. The size / extent of these have been calculated to have the capacity to meet

the shortfall of circa. 500 dwellings, at 35dph. Therefore, should the shortfall need to be addressed, the option would be to either develop one of these in its entirety, or develop more than one but with reduced site areas.

In addition, some of the 'further extension' sites could potentially offer an alternative to one or more of the identified development sites. This could for example be the case with further extension site option D, which could see development taking place to the west of the M6. This is not currently preferred, but circumstances could change over time.

The housing market (both national and local) is still - as at early Summer 2011 - recovering from the recent recession and it is anticipated that investment will remain uncertain for several more years. Housebuilders need clarity as to what housing land will be available to them, and when, in order to plan future development in a recovering market.

It is therefore important to establish a timescale for development which will prioritise sites that could be delivered in the short term. These 'early wins' will boost the local property market and demonstrate to housebuilders the viability of investing in the remaining schemes.

The following three tables (over page and continuing overleaf) set out an indicative timetable for the delivery of the key tasks of each project over the next 15 years. The tables describe three main phases – Phase One (2011-2015), Phase Two (2016-2020) and Phase Three (2021-2025).

Notwithstanding, the tables are principally organised by risk. 'Tier 1' locations are assumed to be low risk, with few constraints and a high likelihood of successful delivery. 'Tier 2' locations have some constraints which may limit deliverability if not mitigated. Constraints in the 'Tier 3' locations (primarily the further extension sites) are largely unknown at this stage, and so cannot be guaranteed as viable options.

Tier 1: Low Risk					
Carleton Fields (E1-E2)					
Size (ha, net): 16.1 Potential Residential Capacity:					
30: DPH: 483					
35 DPH: 564					
40 DPH: 644					
Phase: One					

Comments

A prime location for housing development. Housebuilders are in place and negotiating planning permission. The housing numbers presently aspired to by housebuilders (640-690) would meet, and potentially exceed, Masterplan projections. However the loss of some land at Carleton Fields (E2) may not be supported by the landowner/housebuilder.

Carleton North (E3)

Size (ha, net): 3.1	Potential Residential Capacity:					
	30: DPH: 93					
	35 DPH: 109					
	40 DPH: 124					

Phase: One

A prime location for housing development. Has a landowner with aspirations housing and previous housebuilder interest. However, the loss of land on this site (relative to the original Sustainable Urban Extension proposal) may not be supported by the landowner. It will also limit the scale and type of development which can be delivered and may make the site less attractive to volume housebuilders.

Salkeld Road (N1)

Size (ha, net):	Potential Residential Capacity:			
5.3	30: DPH: 159			
	35 DPH: 186			
	40 DPH: 212			

Phase: One Comments

The landowner has aspirations for housing, although no developer interest at present.

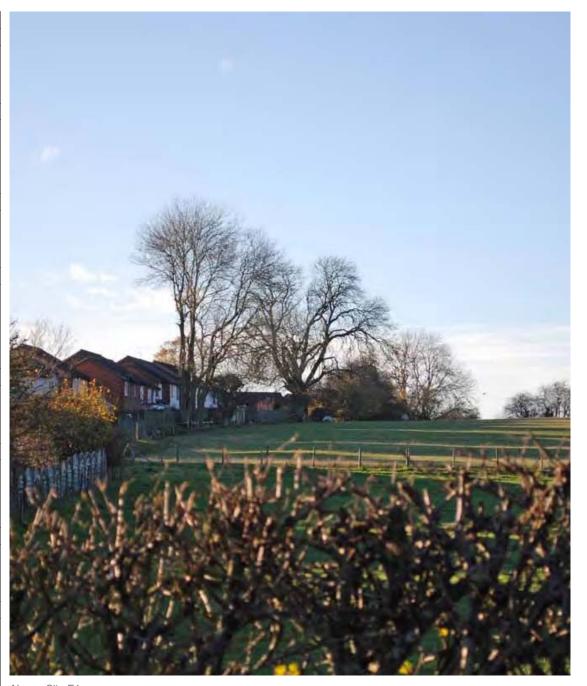
Carleton South (E5) (School development)

Size (ha, net): tbc

Phase: One

Comments

Demand exists for a new school, particularly in the east where existing schools are already oversubscribed. To meet growing needs from new housing developments it is envisaged that this would be delivered in Phase One. A likely location would be on land around the Cross Keys Pub. This could be accompanied by a neighbourhood scale retail/service development which would serve expanding communities and provide monies to cross-subsidise a school.



Above: Site E1

Tier 2: Moderate Risk					
Carleton South (E5) (Housing development)					
Size (ha, net): 3.6	Potential Residential Capacity:				
	30: DPH: 108				
35 DPH: 126					
40 DPH: 144					
Phase: Two					

Comments

The area is a logical extension to an expanding and high value residential area. However, ownership details and ground conditions have yet to be clarified. It is not clear if housing immediately fronting the A66 would be appropriate or if an additional buffer is required. It is assumed that the school would be developed first (to meet immediate needs) with housing to follow in Phase Two.

Salkeld Road Expansion Option (A)

Size (ha, net): 17.0	Potential Residential Capacity:			
	30: DPH: 510			
	35 DPH: 595			
	40 DPH: 680			

Phase: One, Two or Three

Comments

If allocated as a housing site, Salkeld Road Expansion Option would be developed in any of the Phases. This would be dependant on developer aspirations, for example a volume housebuilder may wish to undertake a large scheme which included both Salkeld Road (N1) and the Salkeld Road Expansion Option. The site is in three ownerships which may impact on delivery. There are also visual and environmental impacts due to site location. Servicing and infrastructure development required.

White Ox Way/Inglewood Road (N2)

Potential Residential Capacity:			
30: DPH: 192			
35 DPH: 224			
40 DPH: 256			

Phase: One

Comments

The area is a logical extension to existing built form. It is seen as an affordable housing opportunity next to existing low cost housing. The area is in multiple ownerships.

Raiselands (N3-4)

` ′					
Size (ha, net): 8.8	Potential Residential Capacity:				
1	30: DPH: 264				
	35 DPH: 308				
	40 DPH: 352				

Phase: Two

The area is a logical extension to existing built form. Site is owned by a housebuilder. However, stakeholder consultations indicate that this site is constrained by topography with a residential capacity of only 150 dwellings. Development would also be limited if a West Coast Main Line Crossing was delivered across N4.



Above: Site E5

35 DPH: 595 40 DPH: 680

Phase: Three

Comments

Delivery would be dependant on developing White Ox Way/Inglewood Road (N2) first. Servicing and infrastructure development required. Relocation of the existing travellers' site would also be required. Potential topography issues which may limit development

Raiselands Expansion Option (C)

Size (ha, net): 17.0 **Potential Residential Capacity:** 30: DPH: 510 35 DPH: 595 40 DPH: 680

Phase: Three

Comments

The area is isolated from the existing Penrith urban area and could not be delivered until Raiselands (N3) has been developed. The combined Raiselands development represents a significant expansion of Penrith northwards. Servicing and infrastructure development required. There are also potential topography issues which may limit development

Parcel 65

Size (ha, net): Employment 36.4

Phase: One-Three

Comments

The areas is heavily constrained by flood risk, road access, servicing and multiple ownerships. Low employment land values (£370,000/ha) will make delivery of an economically viable development difficult. Delivery is dependant on completion of Eden Business Park Phase I. It is assumed that employment development will be continuous throughout the Masterplan period.

Land West of M6 Expansion Option (D)

Size (ha, net):	Potential Residential Capacity:			
17.0	30: DPH: 510			
	35 DPH: 595			
	40 DPH: 680			

Phase: Three

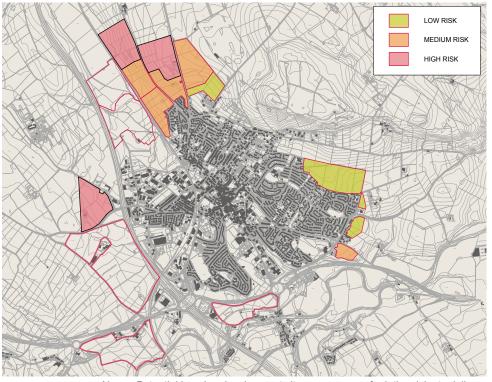
The area is an extension into countryside west of town. Infrastructure investment would be required including improved road links to the A66. Ownerships and site conditions are unknown. This could form part of a larger mixed-use development with employment provision on land to the south, linking to the A66.



Above: Land west of the M6

The following pages set out a summary description of each potential housing development site. Phasing and delivery considerations have created a two-pronged strategy that considers risk and the steps needed to facilitate delivery

alongside a likely timescale for delivery. Sites are described here relative to their 'tier' of risk, which is illustrated in the plan below.



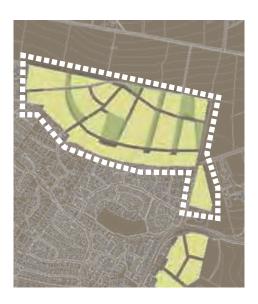
Above: Potential housing development sites - summary of relative risks to delivery

Tier 1: Low Risk

Carleton Fields (E1-E2) - Phase One

Description

Development of SHLAA sites P10-P14, P15 (partial), P52 and P67 for 483-664 dwellings as a northern extension to Carleton. Road access to new the housing would be via Carleton Meadows and Carleton Hill Road. Carleton Hill Road to be widened to provide pedestrian footways between E1 and Carleton Avenue.



Commentary

This is an established housing site, with housebuilders in place who are negotiating planning permission. Consultations indicate that housebuilders are looking to develop 640-690 dwellings in the Option Area, which would meet, and potentially exceed, Masterplan projections.

A reduced development area at E2 (reduced from 3.33 ha to 1.1 ha) is understood at the current time to align with the aspiration of interested parties to pursue a bespoke low density development here.

Risk Description	Probability	Impact	Mitigating Action
Housebuilders are looking to deliver lower density schemes which no longer provide appropriate housing numbers.	Medium	High	Ongoing negotiations with housebuilders to determine changing aspirations and market demand. If necessary, some Option Areas (and the phasing strategy) may have to be altered to reflect changing market conditions and ensure the overall delivery of 2600 dwellings.
Housebuilders no longer interested in the reduced E2.	Medium	High	Negotiations with housebuilders and landowners ensure that appropriate development opportunities are available in each Phase. This could include housebuilders delivering larger schemes across multiple Option Areas.
Housebuilders are unwilling to fund all road improvements.	Medium	Medium	Where possible, the costs of road improvements should be spread across the multiple developments being undertaken in each phase.
The development of E1 puts additional pressure on residential roads such as Carleton Meadows.	Medium	Medium	If required, further traffic modelling to be undertaken during the planning phase.

Carleton North (E3) - Phase One

Description

Development of SHLAA sites P16 (partial), P26 and P53 (partial) for 93-124 dwellings as an eastern extension to Carleton. Road access to the new housing would be via Carleton Avenue (A686), with improvements to the Carleton Avenue/Carleton Hill Road Junction to create a more pedestrian friendly space.



Commentary

This is an established housing site, which has seen previous housebuilder interest. The main landowner has aspirations for housing. However E3 is far smaller than the original Sustainable Urban Extension (SUE) proposal (reduced from 11.63 ha to 3.1 ha (net)) and landowners/housebuilders may object to the loss of development land.

Bick Description

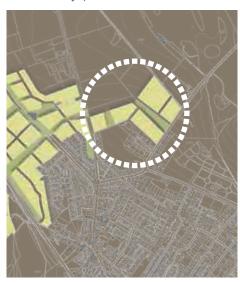
Risk Description	Probability	Impact	Mitigating Action
Housebuilders are looking to deliver lower density schemes which no longer provide appropriate housing numbers.	Medium	High	Ongoing negotiations with housebuilders to determine changing aspirations and market demand. If necessary, some Option Areas (and the phasing strategy) may have to be altered to reflect changing market conditions and ensure the overall delivery of 2600 dwellings.
Housebuilders no longer interested in the reduced E3.	Medium	High	Negotiations with housebuilders and landowners ensure that appropriate development opportunities are available in each Phase. This could include housebuilders delivering larger schemes across multiple Option Areas.
Housebuilders are unwilling to fund all road improvements.	Medium	Medium	Where possible, the costs of road improvements should be spread across the multiple developments being undertaken in each phase.
The development of E3 may have environmental impacts to the established green corridor.	Low	Low	Environmental assessments, undertaken during the planning process, should identify any mitigation measures which could be integrated into the development.
The development of E3 may impact on archaeology associated with the Roman road (which passes through the site).	Low	Low	If the Area is deemed to have archaeological value, surveys will need to be undertaken prior to development. These should identify any mitigation measures which could be integrated into the development.

Probability Impact

Salkeld Road (N1) - Phase One

Description

Development of SHLAA sites P18 and P27-28 (partial) for 159-212 dwellings as a northern extension to Fair Hill. Road access to the new housing would be via Salkeld Road and Inglewood Road. Improvements to surrounding roads will include reconfiguring the Scotland Road/ Salkeld Road Junction and widening Inglewood Road (with the provision of new footways).



Commentary

The main landowner has aspirations for housing, although there is no housebuilder interest at present. N1 is far smaller than the original Sustainable Urban Extension (SUE) proposal (reduced from 23.69 ha to 5.3 ha (net)) and landowners/housebuilders may object to the loss of development land. However, this is proposed in response to significant concerns over landscape character and visual impact, and a strategy to cluster expansion north on lower lying, more accessible land. Further Expansion location A would replace the capacity to that of the original Option Area, however this would compromise these objectives.

Notwithstanding, delivery of N1 would still generate environmental impacts. The area sits on the slope of Beacon Hill, above the 185 metre contour, and is visible from much of Penrith. Any housing scheme would have to be delivered to a high standard, minimising visual impacts.

Risk Description	Probability	Impact	Mitigating Action	
Housebuilders are looking to deliver lower density schemes which no longer provide appropriate housing numbers.	Medium	High	Ongoing negotiations with housebuilders to determine changing aspirations and market demand. If necessary, some Option Areas (and the phasing strategy) may have to be altered to reflect changing market conditions and ensure the overall delivery of 2600 dwellings.	
Housebuilders not interested in the reduced N1.	Medium	High	Negotiations with housebuilders and landowners ensure that appropriate development opportunities are available in each Phase. This could include housebuilders delivering larger schemes across multiple Option Areas.	
Housebuilders are unwilling to fund all road improvements.	Medium	Medium	Where possible, the costs of road improvements should be spread across the multiple developments being undertaken in each phase.	
The development of N1 may have visual impacts on surrounding uses and on views of Beacon Hill from across Penrith.	High	Medium	Planning officers should work with housebuilders to ensure a high quality scheme is delivered which will enhance the local environment. This might require that housing is delivered at a lower density here than elsewhere.	
The development of N1 may impact on archaeology associated with the Roman road (which passes through the site).	Low	Low	If the Area is deemed to have archaeological value, surveys will need to be undertaken prior to development. These should identify any mitigation measures which could be integrated into the development.	

Carleton South (school) - Phase One

Description

The development of a new school, potentially on land at the Cross Keys public house.

This could be accompanied by a neighbourhood scale retail/service development which would serve existing and new communities.



Commentary

Demand exists for a new school, particularly in Carleton where existing schools are already oversubscribed. E5 is viewed as a preferred location for this use because of its good road access to Carleton and Pategill. However, pedestrian crossing would have to be put in place to provide safe crossings of Carleton Road and Carleton Avenue (A686).

Risk Description	Probability	Impact	Mitigating Action
After further study, Area E5 identified as inappropriate for a school (e.g. because of the traffic risk from surrounding main roads).	Medium	Medium	Although suggested for E5, Eden District Council (EDC) should also consider if E1 or E3 would be more appropriate as both sit within the Carleton residential area. E1 in particular would be accessible to Carleton residents without crossing any major roads.
Developers are unwilling to contribute to the school.	Medium	Medium	Where possible, the costs of facilities such as the school (which have wider benefits for Penrith), should be spread across the multiple developments being undertaken in each phase.

Tier 2: Moderate Risk

Carleton South (E5) – Phase Two

Description

Development of 3.6 ha (net) of land for 108-144 dwellings off Carleton Avenue (A686) as an eastern extension to Carleton. This site was not considered for residential uses in the SHLAA or subsequent studies. Access to the new housing would be via Frenchfield. Housing capacity would be reduced if a new school was developed on Carleton Avenue frontage.



Commentary

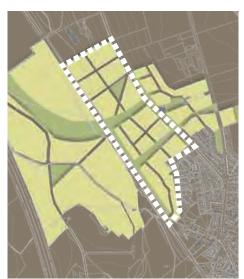
The Area is a logical extension to Carleton, building on the Phase One growth in E1-3. However, ownership details and ground conditions have yet to be clarified. The area fronts the A66 and while housing on this frontage would be separated from the duel carriageway by an embankment it may be that additional buffering would be required, thereby reducing the net developable area.

Risk Description	Probability	Impact	Mitigating Action
Housebuilders are looking to deliver lower density schemes which no longer provide appropriate housing numbers.	Medium	High	Ongoing negotiations with housebuilders to determine changing aspirations and market demand. If necessary, some Option Areas (and the phasing strategy) may have to be altered to reflect changing market conditions and ensure the overall delivery of 2600 dwellings.
Demand for E5 has not been established and housebuilders may not be interested in the site.	Medium	High	Ongoing market analysis and discussions with housebuilders to determine changing demand. If necessary, some elements of the Masterplan may have to be changed to reflect housebuilder requirements and demand.
Housebuilders are unwilling to fund all road improvements.	Medium	Medium	Where possible, the costs of road improvements should be spread across the multiple developments being undertaken in each phase.
Site conditions may constrain development.	Medium	Medium	Further study is required to establish if any site constraints exist and what mitigating actions can be undertaken.

Raiselands (N3, N4)

Description

Development of SHLAA sites P19-25 and P66 (enlarged) for 264-352 dwellings as a northern extension to Fair Hill. Road access to the new housing would be via the A6 Scotland Road which could potentially be reconfigured to create a more pedestrian friendly street space. The option also exists to create a new link from Scotland Road over the West Coast Main Line to the



new and existing employment opportunities of Eden Business Park. This would pass through N4. Improvements to surrounding roads will include reconfiguring the Scotland Road/ Salkeld Road Junction.

Commentary

As with N2, N3-4 represents a logical extension to the existing built form of Fair Hill. The Area is owned by a housebuilder who might be willing to consider a combined development with schemes elsewhere in Penrith (in which case the Area may be developed in Phase One). However, the owner claims that this area is constrained by topography with a residential capacity of only 150 dwellings. If a road link between Scotland Road and Eden Business Park is also required, this will further impact on the extent of the developable area.

Risk Description	Probability	Impact	Mitigating Action
Housebuilders are looking to deliver lower density schemes which no longer provide appropriate housing numbers.	Medium	High	Ongoing negotiations with housebuilders to determine changing aspirations and market demand. If necessary, some Option Areas (and the phasing strategy) may have to be altered to reflect changing market conditions and ensure the overall delivery of 2600 dwellings.
Housebuilders are unwilling to fund all road improvements.	Medium	Medium	Where possible, the costs of road improvements should be spread across the multiple developments being undertaken in each phase.
Topography reduces the net developable area.	High	High	Further study of this area may be required to determine if topography is a constraint and what mitigating actions can be taken. If sufficient housing cannot be delivered in N3-4 then a further allocation of land from the Expansion Options may be required to make up the shortfall.
Delivery of the Scotland Road/Eden Business Park link road reduces the net developable area.	Medium	Medium	If sufficient housing cannot be delivered in N3-4 then a further allocation of land from the Expansion Options may be required to make up the shortfall.

White Ox Way/Inglewood Road (N2)

Description

Development of SHLAA sites P41, P55-56, P58, P69 (partial), P70, P72 and P96-97 for 192-256 dwellings as a northern extension to Fair Hill. Road access to the new housing would be via Inglewood Road and potentially also from the A6 Scotland Road. Improvements to surrounding roads will include reconfiguring both the Scotland



adjacent section of Scotland Road to create a more pedestrian friendly street space.

Commentary

N2 represents a logical extension to the existing built form of Fair Hill. The existing housing of the Fair Hill neighbourhood has some of the lowest property values in Penrith and consultees suggest that N2 would therefore be a logical location for affordable housing. However, the site is in multiple ownerships and the interest of owners in housing development has not been established.

Risk Description	Probability	Impact	Mitigating Action
Housebuilders are looking to deliver lower density schemes which no longer provide appropriate housing numbers.	Medium	High	Ongoing negotiations with housebuilders to determine changing aspirations and market demand. If necessary, some Option Areas (and the phasing strategy) may have to be altered to reflect changing market conditions and ensure the overall delivery of 2600 dwellings.
Land owners do not support a large housing development.	Low	High	On going negotiations to consider how owner aspirations can be met within the Masterplan. EDC to facilitate discussions between owners and housebuilders, if necessary.
Housebuilders are unwilling to fund all road improvements.	Medium	Medium	Where possible, the costs of road improvements should be spread across the multiple developments being undertaken in each phase.

Salkeld Road Further Expansion A

Description

One of four possible expansion options which could be allocated to provide the additional 17 ha of housing land (510-680 dwellings) needed to meet Core Strategy targets. Road access to the new housing would be via Inglewood Road. Improvements to surrounding roads would include reconfiguring the Scotland Road/Salkeld Road Junction and widening Inglewood Rood (with the



provision of new footways).

Commentary

If allocated as a housing site, the Salkeld Road Expansion Option could be developed in Phases One, Two or Three. This would be dependent on developer aspirations. For example, a volume housebuilder may wish to undertake a large scheme which includes both Salkeld Road (N1) and the Salkeld Road Expansion Option in Phase One. Alternatively, a phased scheme, expanding northward over the Masterplan period (with growth dictated by market conditions) might be preferable.

The site is in three ownerships which may impact on delivery. Greater investment in servicing and infrastructure would also be required to bring forward this large greenfield site.

Risk Description	Probability	Impact	Mitigating Action
Housebuilders are looking to deliver lower density schemes which no longer provide appropriate housing numbers.	Medium	High	Ongoing negotiations with housebuilders to determine changing aspirations and market demand. If necessary, some Option Areas (and the phasing strategy) may have to be altered to reflect changing market conditions and ensure the overall delivery of 2600 dwellings.
Land owners do not support a large housing development.	Low	High	On going negotiations to consider how owner aspirations can be met within the Masterplan. EDC to facilitate discussions between owners and housebuilders, if necessary.
Housebuilders are unwilling to fund all road improvements.	Medium	Medium	Where possible, the costs of road improvements should be spread across the multiple developments being undertaken in each phase.
The development of Expansion Option A (alongside N1) may have visual impacts on surrounding uses and on views of Beacon Hill from across Penrith.	High	High	Planning officers should work with housebuilders to ensure a high quality scheme is delivered which will enhance the local environment. This might require that housing is delivered at a lower density here than elsewhere.
The development of Expansion Option A may impact on archaeology associated with the Roman road (which passes through the site).	Low	Low	If the Area is deemed to have archaeological value, surveys will need to be undertaken prior to development. These should identify any mitigation measures which could be integrated into the development,

Tier 3: High Risk

White Ox Way/Inglewood Road **Further Expansion Option B**

Description

One of four possible expansion options which could be allocated to provide the additional 17.5 ha of housing land (510-680 dwellings) needed to meet Core Strategy targets. Road access to the new housing would be via Inglewood Road, with the option of additional access from the A6 Scotland Road. Improvements to surrounding roads will



include reconfiguring the Scotland Road/ Salkeld Road Junction and widening Inglewood Rood (with the provision of new footways).

Commentary

Delivery would be dependent on the successful completion of White Ox Way/ Inglewood Road (N2) and the extension of servicing and infrastructure from N2. Land ownerships are unknown while potential topography issues may limit development. There is an existing travellers' site in the area which would have to be relocated.

Risk Description	Probability	Impact	Mitigating Action
Housebuilders are looking to deliver lower density schemes which no longer provide appropriate housing numbers.	Medium	High	Ongoing negotiations with housebuilders to determine changing aspirations and market demand. If necessary, some Option Areas (and the phasing strategy) may have to be altered to reflect changing market conditions and ensure the overall delivery of 2600 dwellings.
Land owners do not support a large housing development.	Low	High	Ongoing negotiations to consider how owner aspirations can be met within the Masterplan. EDC to facilitate discussions between owners and housebuilders, if necessary.
Housebuilders are unwilling to fund all road improvements.	Medium	Medium	Where possible, the costs of road improvements should be spread across the multiple developments being undertaken in each phase.
Topography reduces the net developable area.	Medium	High	Further study of this area may be required to determine if topography is a constraint and what mitigating actions can be taken. If sufficient housing cannot be delivered in N3-4 then a further allocation of land from the Expansion Options may be required to make up the shortfall.
The development of Expansion Option B (alongside N2) may have visual impacts on surrounding uses and on views of Beacon Hill from across Penrith.	Medium	Medium	Planning officers should work with housebuilders to ensure a high quality scheme is delivered which will enhance the local environment. This might require that housing is delivered at a lower density than elsewhere.
An alternative location for the travellers' site cannot be found.	Medium	High	Further study of traveller requirements and potential alternative sites, if necessary considering land in other parts of Eden District.
Relocation of the travellers' site raises public/political objections.	High	High	Further negotiation and debate involving local elected representatives and community stakeholders via council meetings and other consultative forums.

Raiselands Further Expansion C

Description

One of four possible expansion options which could be allocated to provide the additional 17.5 ha of housing land (510-680 dwellings) needed to meet Core Strategy targets. Road access to the new housing would be via the A6 Scotland Road which could potentially be reconfigured to create a more pedestrian friendly street space.



Commentary

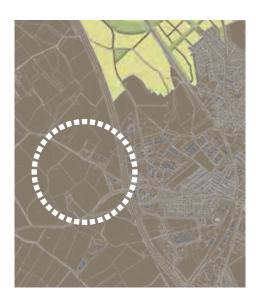
Delivery would be dependent on the successful completion of Raiselands (N3-4) and the extension of servicing and infrastructure from N4. The development of Expansion Option C (alongside N3-4) would represent a significant expansion of Penrith northwards, delivering housing up to 1.5 miles from the town centre. Land ownerships are unknown while potential topography issues may limit development.

Risk Description	Probability	Impact	Mitigating Action
Housebuilders are looking to deliver lower density schemes which no longer provide appropriate housing numbers.	Medium	High	Ongoing negotiations with housebuilders to determine changing aspirations and market demand. If necessary, some Option Areas (and the phasing strategy) may have to be altered to reflect changing market conditions and ensure the overall delivery of 2600 dwellings.
Land owners do not support a large housing development.	Low	High	On going negotiations to consider how owner aspirations can be met within the Masterplan. EDC to facilitate discussions between owners and housebuilders, if necessary.
Housebuilders are unwilling to fund all road improvements.	Medium	Medium	Where possible, the costs of road improvements should be spread across the multiple developments being undertaken in each phase.
Topography reduces the net developable area.	High	High	Further study of this area may be required to determine if topography is a constraint and what mitigating actions can be taken. If sufficient housing cannot be delivered here then a further allocation of land from the other Expansion Options may be required to make up the shortfall.

Land West of M6 Expansion Option (D)

Description

This further extension option extends housing development west of the M6 on land between Greystoke Road (B5288) and Newton Road, adjacent to Gilwilly Industrial Estate and Castletown. Road access to the new housing would be via both Greystoke Road (B5288) and Newton Road.



Commentary

The site would extend the Penrith urban area west of the M6. However, this would have smaller landscape/ sustainability impacts than might initially be apparent. For example, despite the barrier of the M6 this site is closer to Penrith Town Centre than any of the other Expansion Options. New pedestrian/bus links to the town centre could be created via Greystoke Road/ Newton Road.

It would also be possible to create a mixed use scheme in this area with retail/residential uses on land north of Newton Road and employment uses on land between Newton Road and the A66. This would address some of the issues associated with employment provision in N5.

The infrastructure needs of this proposal have yet to be determined but are likely to include the signalising of the Gilwilly Road/Newton Road/Haweswater Road junction. The site has not been surveyed in detail and land ownerships are unknown.

Risk Description	Probability	Impact	Mitigating Action
Housebuilders are looking to deliver lower density schemes which no longer provide appropriate housing numbers.	Medium	High	Ongoing negotiations with housebuilders to determine changing aspirations and market demand. If necessary, some Option Areas (and the phasing strategy) may have to be altered to reflect changing market conditions and ensure the overall delivery of 2600 dwellings.
Land owners do not support a large housing development.	Low	High	On going negotiations to consider how owner aspirations can be met within the Masterplan. EDC to facilitate discussions between owners and housebuilders, if necessary.
Housebuilders are unwilling to fund all road improvements.	Medium	Medium	Where possible, the costs of road improvements should be spread across the multiple developments being undertaken in each phase.
Constraints reduce the net developable area.	Medium	High	Further study of this area will be required to determine if constraints exist and what mitigating actions can be taken. If sufficient housing cannot be delivered in Option D then a further allocation of land from the other Expansion Options may be required to make up the shortfall.
Public opposition to the loss of greenfield land	Low	Low	Further negotiation and debate involving local elected representatives and community stakeholders via council meetings and other consultative forums.

Infrastructure

Development will be supported by a range of highways improvements, both to main roads surrounding the urban extension sites and town centre routes.

Potential infrastructure changes are summarised in the tables to the right.

Intervention	Phase Undertaken	Cost, £	Comments
Penrith North			
Reconfigure Scotland Road/Salkeld Road junction.	Phase One	600,000	Installation of a roundabout.
Widen Inglewood Road, plus new footways.	Phase One	200,000	Locally widen the road and add footways.
Scotland Road reconfigured to create a more pedestrian friendly street space.	Phase Two	Optional scheme to be delivered if resources are available	Alterations to the A6, between N2 and N3-4, altering the road to reflect its residential location.
Penrith Town Centre			
Restrict access/ pedestrianise the town centre section of Stricklandgate.	Phase One or Two	500,000	Closing northern side of the gyratory from Portland Place to Corney Place and turning it into pedestrian public realm.
Duke Street converted to two way.	Phase One or Two	50,000	Convert the southern side of the gyratory to two way traffic. Traffic management and signage.
Green Streets.	Phase Two or Three	Optional scheme to be delivered if resources are available.	Public realm improvements to key routes into the town centre.

Intervention	Phase Undertaken	Cost, £	Comments
Penrith East			
Carleton Road/ Carleton Avenue junction reconfiguration.	Phase One	500,000	Reconfigure junction and introduce traffic signals.
Carleton Hill Road — widened to provide footways.	Phase One	30,000	Add footways along eastern side of road and on western side of road, north of Azealea Close.
Penrith West			
Signalise Gilwilly Road/ Newton Road/ Haweswater Road.	Phase Three	750,000	Carriageway widening, new footways, street lighting, signal equipment, landscaping, utilities and traffic management.
Total		2,630,000	

As these tables show, most of the highways alterations will be undertaken in Phase One or Two, to coincide with the development of urban extension sites. Improvements in Penrith Town Centre will also be undertaken during Phases One and Two to prepare the town centre for the increased traffic/ pedestrian flow associated with planned population growth.

However, as the main source of funding for these improvements will be Section 106 contributions from developers (discussed below), then delivery will also be determined by when sufficient monies are available to meet these high costs.

EDC will negotiate Section 106 agreements and coordinate delivery. This will be undertaken in partnership with Cumbria County Council (CCC) for highways improvements.

It is recommended that a detailed

infrastructure plan be prepared. clarifying the infrastructure needs of housing and employment areas, along with the finance requirements. The plan should also provide a delivery strategy and identify implementation responsibilities.

All of the sites will also require new internal access roads which will access new housing and connect to the existing road network. These are directly linked to the development and will be delivered by the housebuilder and funded through development finance. EDC's role would be to agree a standard of design in planning permissions/development agreements and ensure that the standard is achieved.

New highways infrastructure may include a new road link between Scotland Road and Eden Business Park, crossing the West Coast Main Line.

Source: Aecom, 2011

Funding

It is not envisaged that public funding will form a significant element of programme finance. Housing values in Penrith are good, particularly in Carleton, and profitable schemes are possible on all of the Option Areas. Funding and delivery will be by private housebuilders and Housing Associations. The provision of a new school in East Penrith, would need to be funded, utilising developer contributions.

The Masterplan proposes a wide range of infrastructure improvements, both on main roads surrounding the Option Areas and in the town centre. Even at a low level of intervention these are projected to cost £3.13 million (see above). Finance for these will be primarily through Section 106 contributions.

Housebuilders will be expected to contribute to highways alterations which will directly benefit their development site. They will also be expected to make a contribution to town centre improvements, as will the developers of

other schemes (not related to the Masterplan) which are brought forward in Penrith over the next 15 years. If, as is discussed below, planning briefs are developed for the Option Areas these should specify what contributions will be required. This will give developers certainty about what they will be required to fund and allow them to make informed investment choices.

Obtaining the total funding required for highways interventions will take time and it is unlikely that the bulk of the funds will be available before Phase Two. EDC should therefore consider if there are any 'early wins' which the Council could deliver in Phase One, through public sector funds and any existing Section 106 monies.

EDC should also consider if it wishes to borrow against the projected private sector contributions to permit the delivery of highways improvements early on. Conversations with the emerging Local Economic Partnerships indicate such borrowing is now the preferred method by which local authorities can support private sector led projects. New

legislation, which will enhance Council borrowing powers (Tax Increment Financing), is expected in summer 2011.

The New Homes Bonus is another method for generating funds; although not until some new housing has been completed. This scheme will match fund the additional council tax for each new home, for each of the six years after that home is built. Additional monies (£2,100 over six years) are available for affordable homes. £1 billion has been allocated for the Bonus in the 2010 Comprehensive Spending Review, and local authorities can apply for monies from 2011 onwards.

Planning

Although most of the Masterplan will be delivered by private developers, overall strategic leadership will come from EDC. The first step will be for EDC to establish the policy framework for the Masterplan, adopting and taking ownership of the Strategy through the Housing DPD. Council Cabinet and officers will need to confirm that internal organisational resources and capabilities will be

available, as required.

It would be beneficial for EDC to produce planning briefs for the Option Areas. These will ensure that a good standard of design is applied across the Option Areas, while giving developers certainty about what infrastructure they will be required to fund. These could be individual briefs for individual Option Areas or two larger briefs covering the north and east respectively (with another brief for developments west of the M6, if appropriate).

A brief for Option Areas E1-2 would be unnecessary as planning negotiations are already underway regarding the development of this land.

Strategic employment land

The Eden Core Strategy provides a target of 30ha of additional employment land in Penrith through to 2025. This reflects the policy priority that the town should deliver 60 percent of all land provision in Eden District.

The Masterplan provisionally identifies 36.4 ha (net) of land north of Eden Business Park Phase I (Masterplan Area N5-6, which includes Parcel 65) to meet this need. However, concern has been raised about the viability of N5-6 in terms of accessibility, flood risk, infrastructure costs and multiple land ownerships. This section therefore considers the issues and opportunities of developing N5 or one of four alternative employment sites in Penrith.

The alternative sites are:

- A. Land West of the M6 (bounded by the West Coast Main Line, Mile Lane, B5288 Greystoke Road/Norton Road and M6)
- Size: 62.00 ha
- **B**. Redhills Extension (development south and west of the existing Redhills Business Park, bounded by Redhills Business Park/A66, Reged, River

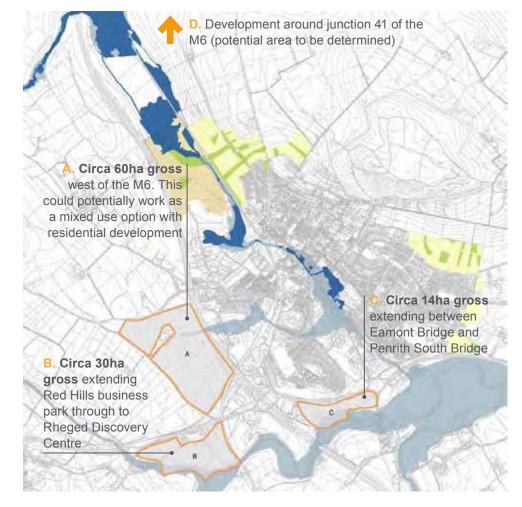
Eamont, and the West Coast Main Line) - Size: 29.50 ha

C. Land at Eamont, South of the A66 (bounded by A66, Highways Depot, River Eamont/Skirsgill Lane, A6) - Size: 14.35 ha

D. Land at M6, Junction 41 (land east of the M6, north and south of the B5305) - Size: Flexible.

The following analysis does not consider any of the five Sustainable Urban Extension (SUE) sites as employment options. The SUEs are too small and distant from existing employment to be viable office/industrial locations. Also the loss of any of these sites to employment would have a significant impact on Penrith's future residential provision.

This section also provides some delivery advice on the provision of a strategic employment site and discusses the options for delivering a new road link between the A6 Scotland Road and N5. crossing the West Coast Main Line.



Site N5-6 (Parcel 65 plus proposed extension to north)

Issues **Opportunities** Site provisionally provides 36.4 ha (net) This site (potentially) provides a of land. However, flood risks may significant forward land supply which can meet future needs. Sufficient land reduce this by more than a third is provided to support the requirements A reduced developable area would of both large firms and smaller make justifying large infrastructure companies development (i.e. a bridge across the Reflects existing patterns of West Coast Main Line or road link to employment growth Junction 41) difficult Provides a greater critical mass of A constrained site, with high development, linked to Eden Business construction costs/development risks Park Phase I and Gilwilly Industrial and low land values (£370,000/ha) Estate would also make developers unwilling to contribute to infrastructure Links directly to the new housing sites proposed in the Masterplan Final Multiple land ownerships Option. Development would be dependant on completion of Eden Business Park Phase I, including an appropriate development on WA Developments owned land Baseline research suggests that private sector demand for employment land and property at Eden Business Park is limited Present planning designations exclude B8 uses from Eden Business Park. However this is a key employment use in Penrith Focusing all of Penrith's employment land supply, for the Core Strategy period, into a single location (which may not be desirable for all developers/ occupiers and is constrained) is a significant risk

Source: BE Group, 2011

Land West of the M6

Significant new road infrastructure is required (from A66/A592 roundabout, north through the site to Mile Lane/ Greystoke Road) along with the improvement of existing roads. However, as no new M6/West Coast Main Line bridge is required,

Issues

The capacity of Junction 40 to support additional traffic from the west would have to be confirmed

infrastructure costs will be less than at

- The capacity of the B5288 M6 bridge to support additional traffic would have to be confirmed
- Loss of greenfield land

Parcel 65.

- Planning policy would need to confirm that the land is not protected
- Land ownerships unknown
- Topography, drainage, etc. issues need to be considered
- Potential for public opposition to loss of greenfield land
- Focusing all of Penrith's employment land supply, for the Core Strategy period, into a single location (which may not be desirable for all developers/ occupiers) is a risk

Opportunities

- This site provides a significant forward land supply which can meet future needs up to, and beyond, 2025
- Opportunity to develop a new road access from A66/A592 roundabout, north through the site to an expanded Mile Lane/Greystoke Road/Newton Road. This would also provide an alternative access to Gilwilly Industrial Estate/Eden Business Park (via the B5288 Newton Road and existing M6 bridge). This has the potential to reduce the traffic impact on Junction 40, M6 by feeding traffic into the junction from the west as well as the east.
- The development would extend the Penrith urban area west of the M6. However, this would have smaller landscape/sustainability impacts than might initially be apparent. For example, despite the barrier of the M6 this site is closer to Penrith Town Centre than Parcel 65
- Opportunity to create pedestrian/bus links to Penrith Town Centre via Greystoke Road/Newton Road
- Existing employment use (Alba Proteins) could be retained, with the development of compatible general industry/logistics uses on land surrounding.
- Site large enough to hold a range of employment uses, including a good quality B1 offices on key frontages
- Option to create a mixed use scheme, possibly with retail/residential uses on land north of Newton Road. This would deliver a sustainable new community west of the M6 while meeting some housing needs.

Source: BE Group, 2011

Redhills Extension

Issues		Ор	portunities
Ean	e limited by surrounding uses (River mont, West Coast Main Line, etc.)	•	Expansion of a successful existing business park with a proven demand for accommodation
	e will not (by itself) meet all ployment land needs	•	Site has the potential to reduce the
indu	nd appropriate for B1 office/light ustrial uses, but the high quality all environment mitigates against		traffic impact on Junction 40, M6 by feeding traffic into the junction from the west as well as the east
	ger B2/B8 general industry/ rehouse uses		business uses, including small business
	ated from Penrith, with few options sustainable transport links		workshops and managed office schemes, similar to existing premises at Redhills
	quires the expansion of Slapestones ad and junction improvements at	Opportunity to permit some reta	Opportunity to permit some retail/retail warehouse and trade uses which would
	od risk from River Eamont needs to investigated		complement adjacent Rneged.
• Lan	nd ownerships unknown		
	nning policy would need to confirm the land is not protected		
	ography, drainage, etc. issues need e considered.		

Source: BE Group, 2011

Land at Eamont, South of the A66

Opportunities
Extends existing employment areas while providing new employment
opportunities in the south and east of the town
Makes use of a vacant gateway location into Penrith
Opportunity to provide access via the
existing Highways Depot
Size of site and proximity to Junction 40 would make it a location for a good
quality office development (similar to Penrith 40).

Source: BE Group, 2011

Land at M6, Junction 41

Iss	ues	Орро	ortunities
•	Land supply limited by flood risk, north and south of the B5305		pportunity to limit future traffic impacts a Junction 40
•	Isolated from Penrith, with few options for sustainable transport links		istance from urban area would make this te a good location for larger industrial
•	Development may require a new road link		ses
	between the B5305 and Eden Business Park. This would be a significant		nmediate M6 access would make the te a good location for logistics uses
	infrastructure cost relative to the scale of development		ption to hold this site in reserve, for evelopment after 2025, development by
•	Planning policy would need to confirm that the land is not protected		large occupier, or if other sites do not eet all requirements.
•	Topography, drainage, etc. issues need to be considered		
•	Land ownership issues		

Source: BE Group, 2011

Recommendation

N5-6 provisionally provides sufficient employment land to meet Core Strategy requirements and allows that employment to be directly linked to new housing development in the north of Penrith. However, the land is highly constrained and infrastructure costs likely to be significant. Demand for land and property in this area is low and developers are unlikely to be willing to support the high risks and costs associated with delivering this site. It is therefore recommended that EDC do not focus future employment development at N5, rather allowing Eden Business Park to expand naturally should future market demand require it.

Land West of the M6 (Alternative A) provides 62 ha, a significant forward land supply which can meet future needs up to, and well beyond, 2025. Sufficient land is provided to support the requirements of both large firms and smaller companies. The site is far less constrained than N5-6, in terms of flood risk, although the grounding conditions and ownerships would have to be

investigated further.

Although the barrier of the M6 gives the impression that this site is separate from the Penrith Urban Area, it is actually closer to Penrith Town Centre than N5-6 and equally accessible by road. Road access from the south would be via a new link from the A66 (from the A66/ A592 roundabout) and from the north via an improved B5288. This would require investment in new and existing road infrastructure. However, as a new bridge is not required the costs of this could be less than those at N5-6. Finally, the scale of the site raises the possibility of a mixed use development, providing a high quality new community in the west of Penrith and meeting some housing needs. It is therefore recommended that EDC proceed with development here rather than at Parcel 65.

The Redhills Extension or Land at Eamont alternatives are too small to meet all employment land needs by themselves, particularly after land in flood risk areas has been excluded. However, Redhills is an established and successful location for office and small

business development. It would be an appropriate location for further B1 office/light industry and should be considered for this use if additional demand emerges in the future. Permitting some development on this site would also ensure that developers have a choice of sites in Penrith, to meet their varying needs.

Land M6, Junction 41 is distant from Penrith and could not be easily linked to the town without significant further investment in infrastructure. Also there are the flood risks which affect N5 extend north to Junction 41. It is not recommended that this site be used to meet immediate Core Strategy needs. However, the site could meet some longer term requirements, for example to accommodate a larger occupier or logistics uses which would not be appropriate within the Penrith settlement boundary, in terms of highways, ground conditions, railway buffer zone, etc.

West Coast Main Line Bridge

If major employment development does proceed at N5-6, the EDC will have to

determine if it also wishes to proceed with development of a new access road from the A6 Scotland Road, through N4 and over the West Coast Main Line to link with Cowper Road.

Delivery of this link road would have clear traffic benefits in terms of providing two-way traffic flow through Eden Business Park, linking employment to the new housing of N1-4 and permitting businesses alternative access to the M6, via Junction 41. It would also permit residents in the north of Penrith to access Junction 40, M6 without passing through the town centre.

However, these benefits must be set against the high costs and logistical difficulties of delivering this link. As discussed, N5-6 is a constrained area where high construction costs/ development risks and low land values (£370,000/ha) will mean that most developments are likely to be of marginal profitability. Monies will not be available to make large contributions to infrastructure. Some funds may be obtained from housebuilders in the Option Areas but it is unrealistic to

assume that they will be willing and able to make further large contributions alongside the £3.13 million needed elsewhere. Housebuilders in Carleton may be unwilling to fund schemes which will not deliver much benefit to their developments. The link road is therefore unlikely to be brought forward without some public sector gap funding.

The public funding environment is in flux, with previous grant programmes removed by nationally driven spending cuts, while emerging funding options (such as Tax Increment Financing) are not fully developed. It is therefore not possible to definitively state where (or if) gap funding could be found. Options to consider include:

Tax Increment Financing (TIF) (allows local authorities to borrow against predicted growth in their locally raised business rates) – TIF applies where private sector funding for a scheme to deliver economic growth and renewal cannot cover the full infrastructure costs. A bill outlining local authority powers to raise TIF is expected in July 2011. Detailed guidance to follow.

- New Homes Bonus (discussed above)
 Acceptable uses can include improving public realm/play areas, transport improvements and town centre regeneration.
- Regional Growth Fund Can be used to support the infrastructure costs of large commercial developments which will deliver significant growth in jobs. However any bid must be private sector led.
- European Regional Development Fund
 Priority three for the North West looks to develop high quality sites and premises of regional importance, however the scheme has a Merseyside focus.

In practice, unless substantial public support can be secured, the link is likely to remain aspirational. Discussions indicate that without the link road, significant further development in N5-6 will not be possible. The existing cul-de-sac access is already close to the accepted maximum length for such a road, and extending it further would

breach safety regulations (fire safety, etc.).

The alternative to a West Coast Main Line crossing would be to extend Cowper Road north to Junction 41, M6. The costs of this route may be even higher than a bridge over the West Coast Main Line and would raise the same issues.

If N5-6 was not allocated for major employment uses, then the link would be hard to justify purely as a town centre bypass for the residents of North Penrith (or to allow existing employment at Gilwilly Industrial Estate/Eden Business Park to access Junction 41, M6). Rather residents on N1-4, seeking to access the M6, should be encouraged to travel to Junction 41 and reduce pressure on the town centre and Junction 40, M6.

Delivery Advice

It is not possible to provide detailed delivery advice until the preferred location for a strategic employment development in Penrith has been determined. However, it is possible to make a number of comments which will be largely applicable to any of the proposed employment sites.

Site conditions, ownerships and infrastructure needs have not been fully explored for the employment options. Therefore a first step for EDC would be an additional site assessment, clarifying that a viable development can be achieved. Studies should also ensure that surrounding roads can support the additional traffic generated and that connections to local services can be made without prohibitive extra costs.

The present land take-up rate in Penrith is 1.3 ha/pa so any strategic employment site is likely to be developed incrementally over the Masterplan period. The allocation of a very large site (e.g. 62 ha west of the M6), would give Penrith a forward land supply for the post 2025 period.

It is assumed that all development will be undertaken by the private sector, which would also be responsible for servicing and infrastructure provision. Developer contributions to associated

5.4/ Actions

highways improvements elsewhere may also be required. However, (even without delivery of a West Coast Main Line bridge) the infrastructure costs of such a large greenfield development are likely to be high. Therefore some publicly funded site preparation may be required in Phase One, to support development. This may include new site access roads, junction improvements and mitigation measures against site constraints (e.g. flood risk). EDC should consider what capacity it has to support employment development, through its own funds, Section 106 contributions or other public funding sources (discussed above).

Demand analysis shows ongoing requirements for B8 logistics accommodation in Penrith, particularly on strategic sites with M6 access. However, this use is not permitted in

Eden Business Park. EDC needs to clarify if this policy will be continued on the future strategic employment sites or if B8 uses will be acceptable. In developing planning policy, EDC should be aware that the greater demand is for light industrial and logistics uses rather than office accommodation.

If land west of the M6 is brought forward, this is likely to include development in proximity to the Alba Proteins Plant. Future research should consider what buffering is required around the plant and how much land would be lost to this.

If both employment and housing development (Expansion Option D) are allocated on land west of the M6 then there is an opportunity for a mixed use development. Further design work would be required to ensure that a high quality and cohesive development could be

delivered while protecting high quality greenspace in the area. It should also consider what opportunities would exist for cross-funding between uses.

In the light of the range of delivery considerations and recommendations that have been set out in this document, the table to the right summarises a number of key actions and responsibilities.

Element	Action	EDC Lead Responsibility	Critical Support
Management Arrangements	Confirm that internal organisational resources and capabilities will be available as required for future phases of the Masterplan	EDC Cabinet	Policy & Performance Technical Services Finance
	EDC officers to take ownership of the Masterplan	Policy & Performance	Technical Services
Financial Resources	Secure budget resources to facilitate execution of the Masterplan e.g. any additional surveys relating to highways, ground conditions in the Expansion Options and employment sites, along with any further external professional consultancy inputs	Technical Services	Finance EDC Cabinet
Planning Strategy	Commence assessment of any planning policy amendments to be promoted through the LDF Core Strategy, and other Development Plan Documents, relating to the Masterplan Option Areas	Policy & Performance	Technical Services
	Officers to confirm which of the Expansion Options and Strategic Employment Land Options is to be allocated and amend planning policy where appropriate	Policy & Performance	EDC Cabinet Technical Services
	Confirm scope of the Section 106 contributions required to support infrastructure development associated with the Masterplan	Policy & Performance	EDC Cabinet Technical Services
	Planning officers to develop and adopt Planning Brief(s) setting design standards and planning gain expectations for the Option Areas	Policy & Performance	Technical Services
	Clarify what uses will be acceptable on the strategic employment site and if B8 logistics are appropriate.	Policy & Performance	Technical Services

Element	Action	EDC Lead Responsibility	Critical Support
Infrastructure and Services Delivery	Further ground surveys, needs assessments and financial appraisals to address any outstanding infrastructure questions, notably the infrastructure needs of the preferred strategic employment site and the feasibility and viability of a West Coast Main Line Bridge. Planning policy to be amended if necessary.	Technical Services	Finance EDC Cabinet Policy & Performance
	Discussions with Cumbria County Council (CCC) to clarify any outstanding highways questions and determine responsibility for the delivery of infrastructure	Technical Services	Policy & Performance
	Clarify the financial arrangements for the delivery of infrastructure including developer contributions, EDC and CCC contributions, any other public funding and any borrowing requirements.	Technical Services Policy & Performance	Finance EDC Cabinet
	If necessary, an Infrastructure Plan to be developed, clarifying infrastructure needs, finance requirements, outlining a delivery strategy and identifying implementation responsibilities	Policy & Performance	Technical Services Finance EDC Cabinet CCC

Source: BE Group, 2011



