

Transport

This note sets out the updated Transport S106 from the Cranbrook expansion applications (15/0045/MOUT, 15/0046/MOUT,)15/0047/MOUT). The note supersedes the transport section on pages 7 -11 of Devon County Council's s106 request dated 11 January 2017 (the other sections still stand).

Measures to provide safe and suitable access for active travellers are still sought, and the amount requested has been updated to reflect revised cost estimates.

Following the withdrawal of Highways England concerns about the impact on the A30 airport junction, the county council S106 requests focus on public transport measures to provide extra transport capacity and mitigate the impact of development on the East West corridor.

Background.

Traffic modelling undertaken by Devon County Council, in liaison with Highways England, identifies that beyond development of 6,500 dwellings and the consented employment sites in the West End the operation and safety of strategic highway infrastructure (including M5 Junction 29, Tithebarn Link Road and the A30 airport junction) will begin to be compromised.

The 6,500 figure is considered to be made up of 580 dwellings at Redhayes and 6,000 homes at Cranbrook. Current expansion applications take Cranbrook above this figure. A further 900 dwellings on the corridor have also been granted consent at Mosshayne.

As such, and consistent with our position at the Local Plan hearings and policies in the NPPF, to accommodate development beyond 6,500 dwellings the county council is seeking contributions towards sustainable infrastructure to encourage a significant shift to non-car modes. Central to this are improvements to public transport.

Public transport

The Devon County Council July 2013 Axminster-Honiton-Exeter corridor report prepared for the East Devon Local Plan Hearings set out that rail enhancements could accommodate growth on East of Exeter corridor. Enhanced frequency to Honiton/Axminster was identified as providing capacity for 2,900/3,500 additional dwellings.

This assessment is based upon an East Devon rail demand matrix created from Lennon data, new station patronage forecasts for Cranbrook and background growth from Network Rail Regional Urban Market study.

The patronage uplift arising from frequency enhancements is then calculated using standard elasticities. This additional patronage is converted to car driver trips using rail abstraction and car occupancy rates taken from WebTAG. Further details of the methodology are provided in the Local Plan report.

<http://www.devon.gov.uk/axminster-honiton-exeter-rail-corridor-report.pdf>

Since 2013, additional rail options have been identified. These include half hourly frequency to Cranbrook only (achievable with enhancements to Exmouth junction and additional signalling) and a 2nd station at Cranbrook, assumed to be served by an hourly call only. Applying the same methodology for these measures the corresponding level of trip relief has also been identified. This relief, alongside corresponding development accommodated and estimated anticipated cost of measures is identified in the table below.

It should be noted that the numbers below also include trips with destinations along M5/A38/A380 corridor and Avocet Line and are therefore approximately 20% higher than in the corridor report.

	Rail Enhancement	Peak Hour Highway trips removed	Homes unlocked	Estimated cost
1	Axminster half hourly	240	3,500	£25,000,000 ¹
2	Honiton half hourly	200	2,900	£15,000,000 ¹
3	Cranbrook half hourly	90	1,300	tbc ²
4	Cranbrook 2 nd station	85	1,200	£6,000,000 ³

¹ Cost estimates for the loop are included in the 2013 corridor report

² Costs likely to include additional signalling. Further work required to identify cost.

³ based on the cost of the first station, plus an allowance for inflation

The County Council has also undertaken further analysis on the impact of enhancing bus services, which can provide relief in the region of 40-50 peak hour vehicle trips. Although lower impact than the rail options, in combination with one of options 3 or 4 they could provide sufficient capacity for further major development on this corridor.

Although the above identified projects provide some additional transport capacity, neither provide sufficient capacity in isolation to mitigate the impacts of the current applications at Cranbrook.

On that basis, the county council seeks a contribution towards enhancing public transport provision to Cranbrook. This contribution could then be used flexibly to help deliver a package of public transport measures including enhanced bus services to Cranbrook, enhanced rail frequency to Cranbrook and a 2nd station at Cranbrook that, in combination, would provide a similar level of mitigation as the passing loops identified in the 2013 corridor report.

The public transport sum is still based on the expected cost of the 'Honiton' loop and based on 7,620 homes the amount sought is £8,380,000 = $1,620/2900 * 15,000,000$. This amount to be revised proportionately if the number of homes above 6,000 falls or increases. To reflect 5 years of inflation these figures should either be uplifted to 2018 prices, or indexed to a 2013 base within the S106. Land for the second station should also be safeguarded.

To assist with forward design required to confirm detailed costs and bring forward projects we request that a proportion of this contribution, in the region of 10%, is paid following occupation of the first dwelling.

Walking and cycling

The NPPF is clear on the need to provide for sustainable transport modes, and that the facilities provided should be safe, secure and minimise conflict between pedestrians, cyclists and traffic. In addition, adequate provision for pedestrians and cyclists will reduce the burden on the highway network and contributes to significant benefits for human health and the environment.

The county council has identified a number of dedicated off-site pedestrian/cycle links that are required to connect residents of Cranbrook and Rockbeare to nearby amenities and employment sites. These routes are set out in the table below.

High quality routes of a standard consistent with the strategic cycle network are requested for the East/west linkages where demand will be highest. For north and south routes which connect employment and leisure facilities a modest standard of trail route is sought.

Cost estimates per metre have been based on schemes delivered by the County council in 2013-2014. These identify a cost of £500 per metre for higher quality routes, and £250 per metre for a more modest trail. To reflect 5 years of inflation these figures should be uplifted by 15% to 2018 prices. Alternatively, a £500 per metre figure indexed to a 2013 base would also be acceptable approach within the S106.

Measure	Description	Length (metres)	Cost	Justification
Westbound from Cranbrook To Blackhorse	High quality route from western edge of Cranbrook expansion (Station Road) to Mosshayne Lane	1,650	£950,000	Provide a safe, direct and attractive route towards amenities, jobs and existing cycle network in Exeter.
Eastbound from Cranbrook to Whimple	High Quality segregated route from Cranbrook to the 'the Green' on western edge of Whimple	800	£460,000	Provide safe and suitable route to adjacent settlement of Whimple.
Southbound trail to Airport Business Park	North-south trail linking Cranbrook to Airport via Rockbeare	3,000	£860,000	To provide a safe and attractive route from Cranbrook and Rockbeare to strategic employment sites.
Northbound trail to Broadclyst	New trail from from Cranbrook to Broadclyst Village	2,500	£715,000	Safe and suitable route to adjacent settlement of Broadclyst and leisure recreation facilities.
			£2,985,000	Total

In addition to this, the development will need to provide appropriate suitable walking and cycling facilities connecting to these routes as part of its built form within the town. In particular, a high quality east west active travel route will need to be provided through the development. It is recommended that this is either a segregated route of appropriate standard parallel to the rail line or instead provided along the Main Link Road of future expansion phases.

Travel Plan and Shared Mobility

The requirement for Travel Planning for large developments is explicitly set out in Paragraph 36 of the NPPF. The process for the original application site of 2,900 dwellings was refined as part of the November 2014 Deed of Variation. This secured a contribution of £12,000 per year for 10 years be made to Devon County Council to carry out residential Travel Planning.

It is recommended that this approach is continued for the expansion areas. To reflect the additional dwellings in these applications and indexation since 2014, a contribution of £19,000 per annum for 15 years is requested from these applications.

A key part of reducing reliance on private cars, is giving residents access to a car on an ad hoc basis. This can be achieved with shared mobility schemes such as Car Clubs (as included in the initial phases of Cranbrook) and e-bikes. This approach should be continued and enhanced, and provision will need to be made for one of these features for every 400 dwellings. To best cater for future demand flexibility is requested to enable a mix of car club vehicles or bike docking station within the numbers for each area. The following is therefore requested:

- A total of four car club vehicles and/or e-bike docking stations and bikes, and associated lining and signing for the eastern expansion (15/0047/MOUT)
- A total of four car club vehicles and/or e-bike docking stations and bikes, and associated lining and signing for the southern expansion (15/0046/MOUT)
- A total of two car club vehicles and/or e-bike docking stations and bikes and associated lining and signing for the western expansion. (15/0045/MOUT)

The S106 should be worded to cover the capital cost of the vehicles, docking stations, installation, signing, lining and ancillary works for the above sites. Applying a figure of £30,000 per car club vehicle and £30,000 per e-bike docking station including a set of 5 bikes, this element of the S106 is a total of £300,000.

Indicative locations for these should be identified in the S106 with the final positioning agreed through the subsequent reserved matters applications,

although the applicant is advised that it is expected these would be focused on the relevant local centres for each area. These should be provided incrementally as each phase grows.

Highways

The development proposes significant changes to the B3174. These changes and other measures on and/or adjacent to the public highway should be provided through highway works undertaken as part of the application (under a highways agreement).

Central to this will be provision of appropriate pedestrian cycle network to connect residents to key services, jobs and transport facilities and the proposed onward routes. In particular, we would expect to see enhanced links between sites south of London Road and the rail stations. This could be linked to the access works, or secured through the S106.

Summary

The delivery of the West End of East Devon requires substantial investment in sustainable modes of transport in order to ensure adequate modal shift occurs.

The proposed developments represent a significant amount of housing and travel growth and appropriate contributions to provide the infrastructure to accommodate this additional demand are sought. The revised amount of transport contributions requested from the Cranbrook expansion applications is:

- **£8,380,000** towards public transport infrastructure
- **£2,985,000** towards offsite walking and cycling infrastructure
- **£ 300,000** towards shared mobility vehicles, plus
- **£ 19,000 per annum** for Travel Planning

The above figures are based on the requirements for the 3 expansion applications. Should these be brought forward separately, the county council would be able to provide a breakdown for each individual site.