

## 6

# Part 2 Appraisal

### 6.1

#### **Introduction**

#### 6.1.1

The Part 2 Appraisal provides the basis for more detailed assessment of the options to be undertaken in terms of their performance in relation to the Transport Planning Objectives and STAG Criteria of Environment; Safety; Accessibility & Social Inclusion; Economy and Integration.

#### 6.1.2

Following the recommendations of the Part 1 Appraisal, a sustainability package (Option A) incorporating cycling and walking improvements; bus enhancements; demand management and traffic management measures was considered in further detail to understand the extent to which these improvements could alone support the future development of Perth and increased demand on the transport network.

#### 6.1.3

The impact of the sustainability package was tested based on the following assumptions. These assumptions are considered to be realistic targets for mode shift and were agreed in consultation with PKC:

- 20% of all car trips travelling less than 2km in Perth would transfer to walking;
- 5% of all car trips travelling between 2-6km in Perth would transfer to cycling;
- 20% of all car trips passing the proposed / existing Park & Ride sites with a city centre destination would transfer to Park & Ride; and
- A spreadsheet based logit model was used to estimate the number of car trips that would transfer to bus due to the increase in parking charges. This model calculated the generalised cost of travel for car and bus trips and the proportion of the total demand that would use each mode.

#### 6.1.4

Table 6.1 provides a breakdown for each individual theme the number of trips transferring from car in both person trips and vehicle trips in parentheses. In summary, a transfer of 2,500 trips in the AM period and 3,900 in the PM period to sustainable modes is achieved. This represents 5.3% of total vehicle trips.

Theme	Assumption	No. Person trips (vehicle trips)			
		Test 1		Test 2	
		AM	PM	AM	PM
Walking	20% increase in walking	1185 (988)	2548 (2124)	1186 (989)	2517 (2098)
Cycling	5% increase in cycling	265 (221)	511 (426)	300 (250)	555 (463)
Bus - Park & Ride	20% increase in P&R use	195 (163)	590 (492)	190 (159)	300 (250)
Demand management – parking charges, car to bus	Short stay £2; long stay £10; trip transfer to bus	888 (740)	286 (239)	876 (730)	590 (492)
<b>Total</b>		<b>2534 (2112)</b>	<b>3935 (3281)</b>	<b>2553 (2128)</b>	<b>3963 (3303)</b>

**Table 6.1: Summary of trip transfer for Sustainable Transport package – number of person trips with number of factored vehicle trips in parentheses.**

#### 6.1.5

As identified in Chapter 2, congestion in the city centre of Perth is a key problem where through traffic from the A90; A93 and A94 wishing to cross the River Tay conflicts with local traffic in the city centre in and around Perth. The small proportion of total trips which the sustainability package could accommodate illustrates that in isolation these themes alone would be unlikely to provide a transport network capable of supporting the increase in demand on the transport network and future development of Perth.

#### 6.1.6

Furthermore a comparison of the number of trips transferring from car to sustainable modes and the number of trips generated by the proposed developments shows:

- The trips for Test 1 are 3,847 and 5,696 in the AM and PM periods respectively. The corresponding number of trips transferring from car to sustainable modes is 2,112 and 3,281. This suggests that approximately 55% and 58% of committed/allocated development trips could be supported by the sustainable measures alone in the AM and PM peak respectively..
- The number of trips in Test 2 is 6,743 and 9,128 in the AM and PM periods, respectively, with 2,128 and 3,303 trips transferring to sustainable modes. These figures imply that approximately 32% and 36% of committed; allocated and aspirational development trips could be

accommodated by the implementation of only the sustainable measures in the AM and PM peak respectively.

6.1.7

The small proportion of total trips which a package of sustainable measures could alone support illustrate that in isolation these measures would be unlikely to provide a transport network capable of supporting the increase in demand on the transport network and future development of Perth. However, taking account of national; regional and local policy these measures do have a role to play in encouraging further travel by sustainable modes and therefore form a core element of all options considered. Accordingly, options with the addition of new Cross Tay Link Road (CTLR) targeted at relieving east-west movements across Perth city centre and thereby also providing increased opportunity for the development of the proposed “sustainable” measures were identified for more detailed Part 2 Appraisal.

## 6.2 **Road Network Improvements**

6.2.1 Taking into consideration the level of development sustainable measures could alone support, it is apparent further more significant measures are required to provide a transport network capable of supporting the future development of Perth . In reviewing the problems at present, it is evident the key issue surrounds east-west movements converging on the Perth and Queens Bridges which provide access to the city centre from the north and are also used by through traffic to/from the A93 and A94 in particular.

6.2.2 Taking account of the problems identified with the road network in Perth and future development proposals, east-west movements are considered the key issue with an alternative River Tay crossing required to relive congestion on the existing road network, especially within the city centre and to address conflict between local and through traffic at key junctions.

6.2.3 To address the key pressures on the road network and the growth anticipated with further development in Perth consideration has been given to the following interventions:

- City centre traffic management measures (including signal optimisation).
- City centre junction improvements.
- New Cross Tay Link Road (CTLR) for east-west movements.

6.2.4 Initial model results and the assessment of problems on the network concluded that the city centre traffic management measures (including signal optimisation) and city centre junction improvements should be included along with the sustainable transport package as essential parts of any intervention taken forward.

6.2.5 Taking account of the existing problems, potential options for consideration for a new east-west CTLR include:

- Link road from the A9 (North of Inveralmond) to the A94 (North of Scone) with a new junction to the A9 with /without a Western Edge Link.
- Link road from the A9 (existing Luncarty junction) to the A94 (North of Scone) with/without a Western Edge Link.
- Link road from A912 Dunkeld Road to the A94 (North of Scone).
- Link road from the A912 Dunkeld Road to the A94 (South of Scone).
- Link road from Inveralmond roundabout to the A94 (North of Scone).

- 6.2.6 Appendix E provides further detail on the existing road conditions; potential route corridors for the CTRL; outline costs and indicative alignment of each corridor. It is assumed the standard of the carriageway of each corridor will be a rural single carriageway (S2) with a design speed of 100kph. This would be subject to review on commencement of the DMRB Stage 1 on the basis of a better understanding of the design parameters, and in particular traffic data analysis.
- 6.2.7 More detailed design work would be required of any potential corridors taken forward to the DMRB process.
- 6.2.8 Currently southbound traffic going to Perth from the A90 travels through the city centre via the A912 with the option for northbound traffic to also route via the A912. Consideration was therefore also given to whether a new junction at Friarton providing a new access to Perth for A90 southbound traffic, would provide benefit by taking trips off the existing bridges and through the centre of Perth. Initial model results concluded that this intervention alone would not sufficiently accommodate trips to meet the objectives of the study, however it was considered that this measure should be tested in combination with other interventions as it could provide additional benefit to reducing city centre through trips.
- 6.2.9 As detailed in Chapter 2, the constraints of the surrounding topography and also the River Tay and rail line mean future development opportunities are focused to the west/north-west of the city centre around an area referred to as the Western Edge. The problems highlighted in Chapter 2 illustrate the congestion experienced at the A85 Crieff Road/A9 junction and the need for improvement to the local and strategic road network at this location.
- 6.2.10 Accordingly, a separate STAG type Development Impact Assessment (DIA) has been completed for the Western Edge area, including consideration of options for a new junction layout with plans on-going to move forward with this project. In view of the planning applications coming forward this junction improvement is a key priority and would form the first key improvement taken forward.
- 6.2.11 Also, not only will this help to provide a smoother flow for through traffic and local traffic, but the reduced congestion would aid the reliability of the current bus services and may allow for the link to the Tesco store in this area to be re-instated on the Service 1/2.
- 6.3 **Option Tests**
- 6.3.1 A series of option tests were developed to test the impact of different interventions in the Part 2 Appraisal. Central to each option test is the

package of sustainable transport interventions alongside a road based intervention, this being the variation tested.

6.3.2 In summary, the options include a core element incorporating a package of sustainable transport measures; city centre traffic management and junction improvements and the provision of a new CTRLR for which multiple alignments are presented. Each option also includes an improvement of the A85 Crieff Road/A9 junction.

6.3.3 Some of the options also include a Western Edge Link extending from the CTRLR to Bertha Park, a key development area to the north-west of the city centre, and new slips at Friarton. Two options (B and D) were also considered, essentially Option C and E respectively but without the Western Edge Link, however they were not progressed to Part 2 on the basis that without this link it would not be possible to fully achieve the development proposals to the north-west of the city centre.

6.3.4 The options progressed to Part 2 Appraisal are set out below:

- **Option C** – CTRLR between the A9 trunk road (North of Inveralmond Roundabout) to the A94 north of Scone with a new junction to the A9 + Option A + A85 Crieff Road/A9 junction improvement + Western Edge link.
- **Option E** – CTRLR between the A9 trunk road (existing Luncarty junction) to the A94 north of Scone + Option A + A85 Crieff Road/A9 junction improvement + Western Edge link.
- **Option F** – CTRLR from the A912 (Dunkeld Road) to the A9 (north of Scone) + Option A + A85 Crieff Road/A9 junction improvement + Western Edge link.
- **Option G** – CTRLR from the A912 (Dunkeld Road) to the A94 south of Scone + Option A + A85 Crieff Road/A9 junction improvement + Western Edge link.
- **Option H** – CTRLR from Inveralmond roundabout and the A94 (north of Scone) + Option A + A85 Crieff Road/A9 junction improvement + Western Edge link.
- **Option I** – Option C plus new M90/A912 Friarton junction.
- **Option J** – Option E plus new M90/A912 Friarton junction.
- **Option K** – Option G plus new M90/A912 Friarton junction.

6.3.5 Table 6.2 summarises the option tests considered, including those options which were not progressed to more detailed appraisal on operational and environmental grounds. A detailed appraisal of the options taken forward was undertaken in accordance with STAG. This was supported by traffic modelling work undertaken using the PARAMICS micro-simulation model of Perth. In summary the options include:

Option	Description	Status
A	<p>Sustainable transport package:</p> <ul style="list-style-type: none"> <li>• Pedestrian/cycle network.</li> <li>• Bus/P&amp;R network.</li> <li>• Traffic management.</li> </ul> <p>Plus:</p> <ul style="list-style-type: none"> <li>• City centre junction improvements.</li> </ul>	<p>In isolation these measures would fail to provide a transport network capable of supporting the increase in demand on the transport network and ongoing development of Perth. However, in accordance with local, national and regional policy they are integral to all the options.</p>
B	<p>Cross Tay Link Road between the A9 trunk road (North of Inverlorn Road) to the A94 north of Scone with a new junction to the A9 + Option A + A9/A85 Crieff Road junction improvement.</p>	<p><b>Rejected</b> - Without the Western Edge Link it would not be possible to achieve the development proposals for the area around Inverlorn Industrial Estate and the A85 (Crieff Road) to the north/north-west of the city centre.</p>
C	<p>Cross Tay Link Road between the A9 trunk road (North of Inverlorn Roundabout) to the A94 north of Scone with a new junction to the A9 + Option A + A9/A85 Crieff Road junction improvement + Western Edge Link.</p>	<p>Part 2 Appraisal.</p>
D	<p>Cross Tay Link Road between the A9 trunk road (existing Luncarty junction) to the A94 north of Scone + Option A + A9/A85 Crieff Road junction improvement.</p>	<p><b>Rejected</b> - Without the Western Edge Link it would not be possible to achieve the development proposals for the area around Inverlorn Industrial Estate and the A85 (Crieff Road) to the north/north-west of the city centre.</p>
E	<p>Cross Tay Link Road between the A9 trunk road (existing Luncarty junction) to the A94 north of Scone + Option A + A9/A85 Crieff Road junction improvement + Western Edge link.</p>	<p>Part 2 Appraisal.</p>

Option	Description	Status
F	Cross Tay Link Road from the A912 (Dunkeld Road) to the A9 (north of Scone) + Option A + A9/A85 Crieff Road junction improvement + Western Edge link.	<b>Rejected</b> - The alignment for this route would have had significant severance impacts on Scone Palace and was therefore rejected on environmental grounds and not assessed in detail at Part 2.
G	Cross Tay Link Road from the A912 (Dunkeld Road) to the A94 south of Scone + Option A + A9/A85 Crieff Road junction improvement + Western Edge link.	Part 2 Appraisal.
H	Cross Tay Link Road from Inveralmond roundabout and the A94 (north of Scone) + Option A + A9/A85 Crieff Road junction improvement + Western Edge link.	<b>Rejected</b> - The alignment for this route would have had significant severance impacts on Scone Palace and was therefore rejected on environmental grounds and therefore not assessed in detail at Part 2.
I	Option C + New M90/A912 junction at Friarton.	Part 2 Appraisal.
J	Option E + New M90/A912 junction at Friarton.	Part 2 Appraisal.
K	Option G + New M90/A912 junction at Friarton.	Part 2 Appraisal.

**Table 6.2: Option Tests**

6.3.6

Figure 6.1 illustrates the different route alignments for the new CTRLR across the River Tay taken forward to more detailed Part 2 Appraisal.

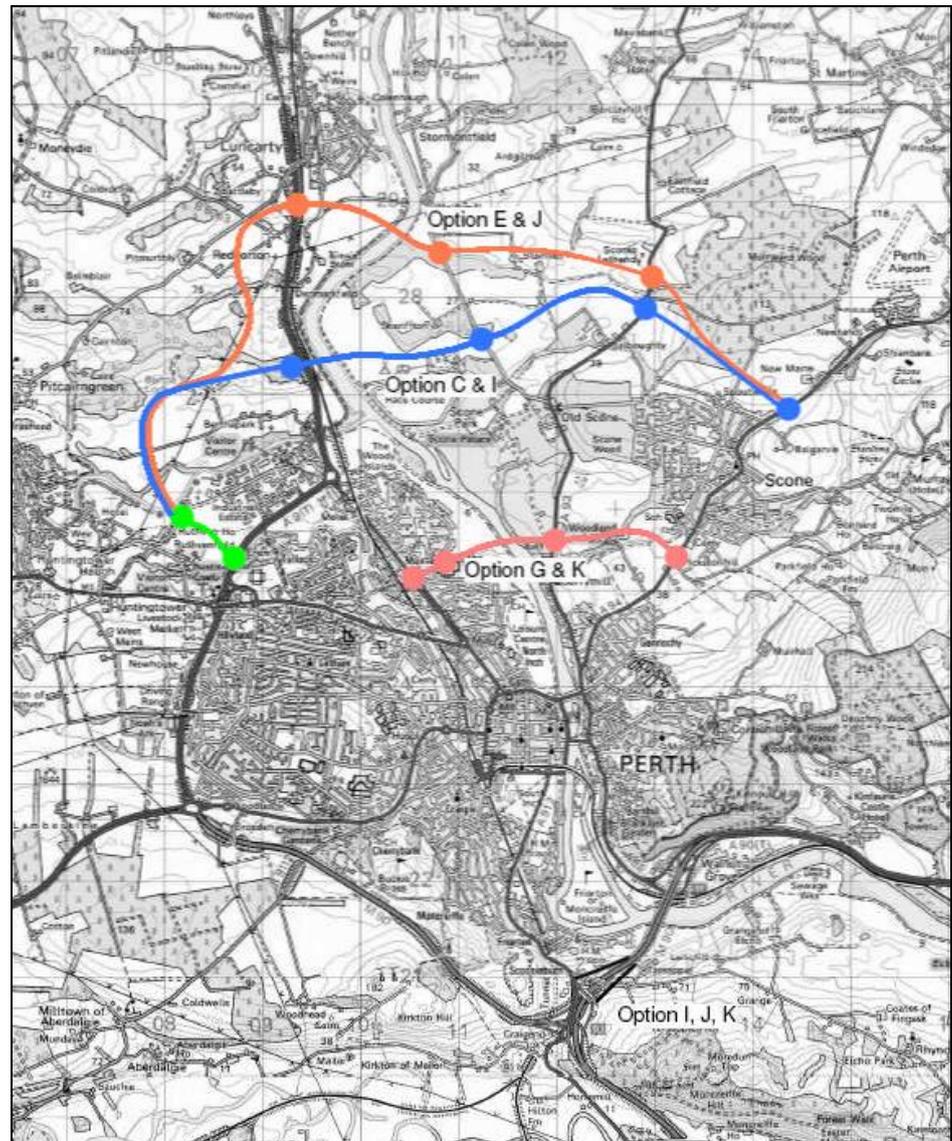


Figure 6.1: Road alignments

6.3.7

All the options (with the exception of options F and H which were rejected on environmental grounds at an early stage in the Part 2 Appraisal) were tested against a do-minimum scenario which included 35% of committed/allocated developments trips. Development over this threshold resulted in gridlock occurring in the model which would have provided an unreliable basis for assessment. The fact the model could not accommodate the full amount of committed development underlines the scale of the transport problems that require to be addressed within Perth in order to meet the study objectives.

6.3.8

In light of the above, the options were tested under two development scenarios. These were: Test 1 which included all the committed and

allocated development; and Test 2 which comprised all the committed ; allocated and the aspirational development. Further details on the content of the committed; allocated and aspirational developments can be found in Chapter 4 and Appendix B. It is therefore important to note in viewing the results reported in later chapters, the options were tested against a significantly higher level demand compared to the do-minimum. Accordingly, this means the options need to perform significantly better than the do-minimum in order to show an improvement over the do-minimum results.

6.3.9 The assessment of the economic benefits and costs of the options also considered a third demand scenario. This scenario, named Test 3, assumed the full amount of committed development would be in place by 2018 and the aspirational development would be built by 2028. This test was used as it made the best use of existing model data to provide a profile of costs and benefits in the economic assessment. It also represented a realistic scenario under which the committed and aspirational developments would be implemented in a phased manner.

6.3.10 It should be stressed that Test 3 consists of a combination of Test 1 (in 2018) and Test 2 (in 2028). The economic assessment was therefore undertaken using model data from both Test 1 and Test 2. There are no model results reported for Test 3 as they are the same as either Test 1 or Test 2 depending on the year being considered.

6.3.11 The traffic flow across the bridges in the centre of Perth under the Test 1 and Test 2 demand scenarios are shown in Table 6.3 to Table 6.6. These figures show the options reduce the amount of traffic on the bridges to less than the do-minimum level, and in the majority of cases to less than the base model level, which represents traffic flows in 2003.

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
Perth Bridge Eastbound	628	708	410	482	317	418	474	314
Perth Bridge Westbound	1168	1193	768	975	520	736	933	500
Queens Bridge Eastbound	1004	1137	990	994	913	802	817	711
Queens Bridge Westbound	1045	1065	975	1003	951	834	873	796

**Table 6.3: Test 1 Existing Bridge Traffic Flows (Vehicles) – 2 Hour AM Period**

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
Perth Bridge Eastbound	983	1042	791	889	618	783	893	613
Perth Bridge Westbound	1199	1265	842	1013	688	789	970	605
Queens Bridge Eastbound	2178	2187	1892	1923	1876	1692	1740	1676
Queens Bridge Westbound	1047	1086	919	941	907	776	800	773

**Table 6.4: Test 1 Existing Bridge Traffic Flows (Vehicles) – 2 Hour PM Period**

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
Perth Bridge Eastbound	628	708	448	513	338	459	530	351
Perth Bridge Westbound	1168	1193	889	1086	640	858	1051	624
Queens Bridge Eastbound	1004	1137	1046	1068	966	835	838	745
Queens Bridge Westbound	1045	1065	1011	1045	991	868	913	835

**Table 6.5: Test 2 Existing Bridge Traffic Flows (Vehicles) – 2 Hour AM Period**

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
Perth Bridge Eastbound	983	1042	879	988	735	862	988	737
Perth Bridge Westbound	1199	1265	967	1150	764	903	1087	717
Queens Bridge Eastbound	2178	2187	1981	2038	1952	1789	1822	1750
Queens Bridge Westbound	1047	1086	952	969	938	819	850	811

**Table 6.6: Test 2 Existing Bridge Traffic Flows (Vehicles) – 2 Hour PM Period**

### 6.3.12

The reduction in traffic flows on the existing bridges demonstrates the effect that the proposed options will have in reducing traffic levels in the centre of Perth. This reduction in traffic will be sustained by the introduction of traffic management, bus priority, pedestrian and cycle measures that will make use of the spare road capacity created by the transfer of traffic to the new bridge. These measures in turn will encourage mode shift from car to more sustainable modes of travel and in doing so “lock in” the benefits of the new CTRLR. The specific locations of these measures have not been considered at this stage as this is a strategic level study which has concentrated on demonstrating the principle rather than proposing detailed designs.

## 6.3.13

Table 6.7 to Table 6.10 show the predicted traffic flows on the proposed new bridge and slip roads at Friarton under the Test 1 and Test 2 demand scenarios. The figures show the greatest traffic flows on the new bridge under Options G/K, followed by Options C/I and then Options E/J. There is a similar level of flow on the Friarton slip roads in each option. It should be noted the traffic flows on the new bridge are similar for each option with and without the Friarton slip roads. This shows the slip roads attract different trips to those using the new bridge and are therefore a complimentary scheme.

	Option C	Option E	Option G	Option I	Option J	Option K
New Bridge Eastbound	853	747	1036	851	757	1035
New Bridge Westbound	932	642	1226	931	637	1220
Friarton On Slip	-	-	-	387	394	398
Friarton Off Slip	-	-	-	309	306	304

**Table 6.7: Test 1 New Infrastructure Traffic Flows (Vehicles) – 2 Hour AM Period**

	Option C	Option E	Option G	Option I	Option J	Option K
New Bridge Eastbound	1001	820	1328	1000	811	1309
New Bridge Westbound	1074	807	1345	1070	811	1410
Friarton On Slip	-	-	-	324	340	343
Friarton Off Slip	-	-	-	333	332	338

**Table 6.8: Test 1 New Infrastructure Bridge Traffic Flows (Vehicles) – 2 Hour PM Period**

	Option C	Option E	Option G	Option I	Option J	Option K
New Bridge Eastbound	942	834	1089	943	844	1101
New Bridge Westbound	1076	760	1354	1068	753	1339
Friarton On Slip	-	-	-	457	465	464
Friarton Off Slip	-	-	-	362	364	364

**Table 6.9: Test 2 New Infrastructure Traffic Flows (Vehicles) – 2 Hour AM Period**

	Option C	Option E	Option G	Option I	Option J	Option K
New Bridge Eastbound	1245	1025	1433	1235	1024	1408
New Bridge Westbound	1208	942	1491	1209	928	1459
Friarton On Slip	-	-	-	369	377	388
Friarton Off Slip	-	-	-	362	364	384

**Table 6.10: Test 2 New Infrastructure Traffic Flows (Vehicles) – 2 Hour PM Period**

6.3.14

The two way traffic flows on sections of the strategic road network under the Test 1 and Test 2 demand scenarios are shown in Table 6.11 to Table 6.14. It can be seen there is generally an increase in traffic flows on the strategic road network under the options. This is due primarily to the increase in the number of trips in the network as a result of the proposed developments. It is however also likely there will be some trips re-routing from the centre of Perth to use the strategic road network and the new CTLR / slip roads at Friarton.

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
Barnhill Int – Craigend Int	4973	5386	5283	5358	5323	6142	6209	6200
Craigend Int – Broxden Rbt	4522	4789	4948	4921	4834	5112	5086	4999
Broxden Rbt – Crieff Rd	3696	3992	5439	5298	5268	5544	5416	5400
Crieff Rd – Inveralmond Rbt	3703	3708	4429	4342	4479	4466	4379	4529
Inveralmond Rbt – Luncarty Int	2865	3059	4128	3869	2782	4098	3863	2801

**Table 6.11: Test 1 Strategic Network Traffic Flows (Vehicles) – 2 Hour AM Period**

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
Barnhill Int – Craigend Int	5420	6014	5732	5860	5826	6516	6646	6640
Craigend Int – Broxden Rbt	5275	5804	5647	5785	5549	5785	5871	5700
Broxden Rbt – Crieff Rd	4579	5192	6230	6232	6198	6321	6281	6297
Crieff Rd – Inveralmond Rbt	4450	4868	5643	5784	6070	5625	5737	6097
Inveralmond Rbt – Luncarty Int	4074	4440	5713	5637	4685	5726	5617	4701

**Table 6.12: Test 1 Strategic Network Traffic Flows (Vehicles) – 2 Hour PM Period**

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
Barnhill Int – Craigend Int	4973	5386	5431	5489	5498	6432	6543	6540
Craigend Int – Broxden Rbt	4522	4789	5183	5146	5077	5353	5356	5295
Broxden Rbt – Crieff Rd	3696	3992	5817	5682	5625	5919	5828	5776
Crieff Rd – Inveralmond Rbt	3703	3708	4668	4610	4744	4681	4639	4763
Inveralmond Rbt – Luncarty Int	2865	3059	4286	4064	2745	4300	4051	2756

**Table 6.13: Test 2 Strategic Network Traffic Flows (Vehicles) – 2 Hour AM Period**

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
Barnhill Int – Craigend Int	5420	6014	5790	5955	5943	6651	6854	6873
Craigend Int – Broxden Rbt	5275	5804	5743	5949	5694	5869	6098	5846
Broxden Rbt – Crieff Rd	4579	5192	6496	6602	6445	6604	6695	6572
Crieff Rd – Inveralmond Rbt	4450	4868	5897	6060	6293	5863	6049	6311
Inveralmond Rbt – Luncarty Int	4074	4440	5918	5876	4418	5927	5877	4442

**Table 6.14: Test 2 Strategic Network Traffic Flows (Vehicles) – 2 Hour PM Period**

### 6.3.15

Average journey times on the A989 in the centre of Perth and on the M90/A9 under the Test 1 and Test 2 demand scenarios are shown in Table 6.15 to Table 6.18. The results show the journey times on the A989 under the options are reduced to less than the do-minimum level and less than the base model level in the majority of cases. The journey times on

the M90/A9 are seen to increase in the options, over the level observed in the do-minimum. It is considered this is due primarily to the increase in the number of trips on the network as a result of the proposed developments and it is therefore important the results presented are viewed in this wider development context.

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
A989 Clockwise	540	534	488	503	479	494	499	475
A989 Anti-clockwise	567	560	543	544	515	530	539	506
A90 East to A9 North	586	542	575	573	560	595	590	585
A9 North to A90 East	511	548	573	559	890	579	568	877

**Table 6.15: Test 1 Route Journey Times (Seconds) – 2 Hour AM Period**

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
A989 Clockwise	672	840	534	541	540	523	544	521
A989 Anti-clockwise	674	752	576	596	566	558	578	546
A90 East to A9 North	599	567	612	585	591	614	599	605
A9 North to A90 East	501	549	666	607	893	671	621	828

**Table 6.16: Test 1 Route Journey Times (Seconds) – 2 Hour PM Period**

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
A989 Clockwise	540	534	500	512	481	497	506	481
A989 Anti-clockwise	567	560	547	573	519	544	560	521
A90 East to A9 North	586	542	615	622	606	634	632	626
A9 North to A90 East	511	548	626	585	1206	638	605	1180

**Table 6.17: Test 2 Route Journey Times (Seconds) – 2 Hour AM Period**

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
A989 Clockwise	672	840	555	576	564	534	565	547
A989 Anti-clockwise	674	752	601	660	591	580	609	560
A90 East to A9 North	599	567	668	646	617	668	652	662
A9 North to A90 East	501	549	786	698	1919	773	693	1879

**Table 6.18: Test 2 Route Journey Times (Seconds) – 2 Hour PM Period**

### 6.3.16

The average journey times for all trips in the model area are shown in Table 6.19 to Table 6.20 for the Test 1 and Test 2 demand scenarios. These figures show there is a reduction in the average journey time in the options when compared to the do-minimum journey times. This demonstrates that the options provide an overall benefit to traffic in the road network and that it is operating more efficiently.

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
2hr AM Period	415	476	403	411	437	397	405	432
2hr PM Period	414	570	432	431	469	423	425	458

**Table 6.19: Test 1 Average Journey Times (Seconds)**

	Base	Do Min	Option C	Option E	Option G	Option I	Option J	Option K
2hr AM Period	415	476	437	448	498	430	436	486
2hr PM Period	414	570	485	484	591	472	466	586

**Table 6.20: Test 2 Average Journey Times (Seconds)**

## 6.4

### 6.4.1

#### **Summary**

All the options reduce traffic on the existing Perth and Queens Bridge to less than the do-minimum and in the majority of cases to less than the base model (2003). Option G would provide the greatest relief, in part due to the proximity of this link to the city centre. For the options including new slips at the Friarton junction on the M90, additional traffic would be removed from the city centre and in doing so increase the scope to introduce more extensive demand management/sustainability measures within the immediate city centre areas.

### 6.4.2

The reduction in traffic levels achieved in the centre of Perth indicates the CTLR would provide additional network capacity. This spare capacity

would provide relief to enable the introduction of bus priority, pedestrian and cycle measures and traffic management measures proposed as part of the sustainable transport package.

6.4.3 In network operational terms, Options C; E and G work under Test 1 while under Test 2 Options C and E work, however G and K do not due to constraints on Dunkeld Road, primarily as a result of the rail bridge which narrows the road to single carriageway impacting on the operation of both the local and strategic road network.

6.4.4 It is the purpose of the remainder of this report to document the outcome of the detailed STAG Part 2 Appraisal and to look at the options taken forward in terms of their performance against the STAG Criteria, namely:

- Environment;
- Safety;
- Accessibility and Social Inclusion;
- Integration; and
- Economy.

6.4.5 The report also documents findings under the headings of:

- Cost to Government;
- Risk and Uncertainty;

6.4.6 The remainder of this report follows the structure set out above, firstly setting out the performance of the different options against the STAG Criteria and then reporting the study findings in terms of Cost to Government and Risk and Uncertainty. In contrast to the STAG Part 1 Appraisal, this section provides the results of a more detailed and, where possible, quantitative analysis of the impacts.

6.4.7 The performance of each option is summarised in the Part 2 ATs included in Appendix F.

# 1 Introduction

- 1.1 The following Supplementary Guidance sets out the basis on which Perth and Kinross Council will seek contributions from developments in and around Perth towards the cost of delivering the transport infrastructure improvements which are required for the release of all development sites and to support the growth of Perth and Kinross.
- 1.2 This Supplementary Guidance should be read in conjunction with Local Development Plan Policy PM3: Infrastructure Contributions and Developer Contributions Supplementary Guidance.

# 2 Background

- 2.1 The Local Development Plan identifies that the biggest single constraint facing Perth and Kinross is the capacity of the roads infrastructure in and around Perth. Not only is congestion becoming a problem but the Council was required to identify Perth as an Air Quality Management Area due to the levels of pollution evident in several areas of the City. The principal cause of that pollution is standing traffic.
- 2.2 In October 2010 Perth & Kinross Council published 'Shaping Perth's Transport Future: A Transport Strategy for Perth and the Wider Region'. This strategy emerged from traffic modelling work, which demonstrated that the combination of background traffic growth and new consented developments will cause not only unacceptable congestion, but also further exacerbate the existing poor air quality. To do nothing is recognised as not an option and the Council has been working in tandem with TACTRAN, (The Regional Transport Authority) in consultation with Transport Scotland to identify a package of measures, which will remove constraints not only for the long term development of Perth and Kinross, but also provide regional benefits to the national Trunk Road network. 'Shaping Perth's Transport Future' presents a range of different infrastructure packages and can be viewed on the Council website at the following link: [www.pkc.gov.uk/transportconsultation](http://www.pkc.gov.uk/transportconsultation)

concern in terms of health), which together are taken to account for Local Air Quality.

7.10.2

Table 7.10 and Table 7.11 set out the change in CO<sub>2</sub> emissions over the 60 year period, and the monetized present value of each option against the do-minimum. The results from both Test 1 and Test 2 for the global air quality assessment (Unit 7.4.2) indicate that Option I is the most favourable in terms of greenhouse gas emissions. For options without the Friarton slips. Option C is the best performing.

Option	Change in CO <sub>2</sub> Emissions (tonnes) against the Do-Minimum	Discounted Monetized Present Value of Change in CO <sub>2</sub> Emissions (£) against the Do-Minimum
C	-40,472.76	-£427,747.39
E	-26,365.28	-£278,747.92
G	-27,029.55	-£285,648.56
I	-50,209.27	-£530,520.39
J	-36,788.08	-£388,822.96
K	-39,235.97	-£414,563.11

Table 7.10: Test 1 CO<sub>2</sub> Emissions (tonnes)

Option	Change in CO <sub>2</sub> Emissions (tonnes) against the Do-Minimum	Discounted Monetized Present Value of Change in CO <sub>2</sub> Emissions (£) against the Do-Minimum
C	44,161.11	-£466,483.02
E	56,650.12	-£598,385.64
G	111,740.49	-£1,180,395.75
I	30,571.10	-£322,983.36
J	41,760.93	-£441,064.28
K	99,009.26	-£1,045,752.33

Table 7.11 : Test 2 CO<sub>2</sub> Emissions (tonnes)

#### Local Air Quality

7.10.3

The results for each option are presented in Table 7.12 to Table 7.15 for NO<sub>2</sub> and PM<sub>10</sub> respectively. The total emissions exposure estimate for each option against the do-minimum scenario is presented, along with the total population numbers where air quality is not likely to improve and likely to improve. The results from Test 1 local air quality assessment (Unit 7.4.3) indicate that Option I is the most favourable. For Test 2 Option C is the most favourable option.

- Has economic benefits that outweigh the costs and therefore provides good value for money.
- **Corridor E**
  - Would support future development in and around Perth but offer slightly lower relief in terms of removing traffic travelling through the centre of Perth than Corridor C as a more northern corridor is likely to be less attractive to users.
  - Offers less benefit in terms of air quality and noise than Corridor C, but would pose less of an environmental impact to the Scone Palace Gardens and Designed Landscape and associated Scheduled Monuments.
  - Has economic benefits that outweigh the costs and therefore provides good value for money.
- **Corridor G**
  - Would not support future development proposals and would constrain the ability of Perth and the wider region to develop in the long-term.
  - Would not address congestion problems at key locations on the local and trunk road network, including Dunkeld Road and Inveralmond roundabout.
  - Would impact on environmental designations, in particular the entrance to Scone Palace Gardens and Designed Landscape.
  - Has economic benefits that do not outweigh the costs and therefore does not provide good value for money.

The addition of new slip roads at Friarton would provide additional benefits to all of the corridors in terms of removing additional traffic from Perth city centre and in doing so increase the scope to introduce more extensive public transport, walking, cycling and traffic management measures. This additional infrastructure would also provide further improvements in terms of greenhouse gas emissions, local air quality and noise. The SEA Environmental Report reports on the environmental impacts of the CTLR corridors with and without the Friarton slips.

Based on the technical work undertaken and presented in the Perth Traffic and Transport Issues Transport Appraisal, CTLR Corridor C (with/without the inclusion of Friarton slips) emerged as the preferred CTLR corridor. Due largely to impacts on the Scone Palace Gardens and Designed Landscape the SEA Environmental Report, however, has recommended the strategy should either include Corridor E (with/without the inclusion of Friarton slips) or an amended Corridor C re-routed to the north.

The recommendations of the SEA, alongside views gathered from the public and other stakeholders during the consultation programme, will inform the finalisation of the strategy and the proposals to be taken forward.

#### *City Enhancements*

The provision of a CTLR and removal of traffic travelling through the centre of Perth would provide the opportunity to improve the public transport, walking and cycling networks in and around Perth.

The development of the measures, otherwise referred to as the ***City Enhancements package***, is at an early stage and the focus of work to date has been to develop outline concepts based around different levels of change (minor, moderate and major).

## 8.3.4.2 2033 Do-Something Traffic Flows

Traffic flows at critical locations in the 2033 Do-Something Corridor C model are shown in Table 8.11a and Figure 8.15. The differences between the flows in the 2033 Do-Something Corridor C and 2033 Do-Minimum model are shown in Table 8.11b and Figure 8.15.

<b>A9(T)</b>						
South of Broxden Rb	3,400	2,810	<b>6,210</b>	2,450	3,010	<b>5,460</b>
North of Broxden Rb	3,880	3,490	<b>7,370</b>	2,780	2,570	<b>5,350</b>
South of Inveralmond Rb	3,600	2,550	<b>6,150</b>	1,870	2,630	<b>4,500</b>
North of Inveralmond Rb	2,840	3,470	<b>6,310</b>	2,770	2,650	<b>5,420</b>
North of Luncarty	1,680	1,330	<b>3,010</b>	1,370	1,540	<b>2,910</b>
<b>A85(T)</b>						
West of A9(T)	2,050	1,970	<b>4,020</b>	1,190	2,410	<b>3,600</b>
East of A9(T)	1,870	1,310	<b>3,180</b>	1,950	1,530	<b>3,480</b>
Smeaton's Bridge	730	1,410	<b>2,140</b>	750	890	<b>1,640</b>
West of M90(T) J11	1,370	1,500	<b>2,870</b>	1,440	1,290	<b>2,730</b>
<b>A93</b>						
East of Broxden Rb	2,500	2,380	<b>4,880</b>	1,410	2,990	<b>4,400</b>
Queen's Bridge	1,100	1,390	<b>2,490</b>	1,850	880	<b>2,730</b>
North of Scone	290	520	<b>810</b>	400	480	<b>880</b>
<b>A94</b>						
East of Scone	740	750	<b>1,490</b>	730	720	<b>1,450</b>

Table 8.11a: 2033 Do-Something Corridor C - Traffic Flows (vehicles) (Traffic flows based on the average of 20 model.)

<b>A912</b>						
South of Inveralmond Rb	1,630	2,340	<b>3,970</b>	2,140	1,570	<b>3,710</b>
North of M90(T) J10	1,760	990	<b>2,750</b>	940	1,480	<b>2,420</b>
<b>M90(T)</b>						
East of Broxden Rb	2,910	3,170	<b>6,080</b>	2,920	2,370	<b>5,290</b>
South of M90(T) J10	4,190	2,720	<b>6,910</b>	2,210	3,690	<b>5,900</b>
East of M90(T) J10	3,490	2,860	<b>6,350</b>	2,380	2,980	<b>5,360</b>

Table 8.1 (Continued): 2010 Base - Traffic Flows (vehicles) (Traffic flows based on the average of 6 model runs)

The traffic flows presented in Table 8.1 indicate that significant volumes of traffic use the road network within Perth City Centre and the wider Perth area during the 'core' peak periods.

#### 8.1.4 Journey Times

Average modelled journey times on key routes in the AM and PM peak periods are shown in Table 8.2. The extents of the key routes are shown in Figure 8.4.

JT Route 1	South to East	18m 38s	20m 12s
JT Route 2	East to South	21m 22s	16m 43s
JT Route 3	West to East	16m 10s*	22m 19s
JT Route 4	East to West	20m 49s	18m 32s
JT Route 5	North to East	17m 7s	20m 45s
JT Route 6	East to North	24m 47s*	16m 48s
JT Route 7	South to North	7m 10s	6m 23s
JT Route 8	North to South	6m 44s	7m 54s

Table 8.2: 2010 Base - Average Modelled Journey Times (mins / secs) (Journey times based on the average of 6 model runs)

\*Estimate of typical journey time as no trips complete this movement within the modelled period.

connect the CTRLR with the A93. The exact location for the junction will require careful consideration as the A93 has a sinuous horizontal alignment. Local realignment of the A93 may be required.

Consultation with Historic Scotland indicates that they believe Corridor C1 would result a direct physical impact to the nationally important Scone Palace Gardens and Designed Landscape resulting in a significant adverse impact. The corridor would result in the severance of the designation which would separate Scone Palace from its northern policies.

If Corridor C1 is taken forward detailed consultation is required with Historic Scotland to identify mitigation measures. It is noted however, that Historic Scotland currently views the impacts as ones that can not be reduced through mitigation, given the impact upon the legibility and character of the designation.

Given Historic Scotland's view on mitigation, if Corridor C1 is taken forward, it is recommended work is carried out to identify the reasons the area received its designation as well as changes in land use since then allowing consideration of the designation in its current context.

Corridor C2 extends north of the Scheduled Monuments (**Figure 6.6**) to allow for a route that connects to a northern junction on the A9 as discussed in **Sections 6.4.3** and **6.4.4**. It is noted, as discussed previously, that Historic Scotland may object to the severance issues with any proposed linkage passing between the Ancient Monuments as well as the severance of the Designed Landscape from Scone Palace as discussed for Corridor C above. If Corridor Amended C is taken forward it is recommended the study into the evolving land use discussed above is undertaken.

#### 6.4.6 A93 – A94

The remaining section of both Corridor C and Amended C continue in a south easterly direction for approximately 1.8km (**Figure 6.7**, over the page). The corridors passes through slightly undulating farmland and wooded areas, the most significant being Muirward Wood, north of Scone and the Cramock Burn. The existing ground level rises from approximately 50 metres to 90 metres above mean sea level from west to east respectively.

It is anticipated an at-grade roundabout will be provided to connect the CTRLR with the A94 to the north west of Scone.

consultation (with affected landowners, Perth & Kinross Council and the Scottish Government) will be required to ensure the viability of farmholdings is not affected by the scheme.

### 7.2.2 Corridors C1 and C2 Impacts

The presence of a route alignment within these corridors will potentially result in localised increases to noise and vibration levels at sensitive residential properties including 'The Kennels' to the north of the River Almond, Balboughty, and properties within New Scone, Denmarkfield and New Mains. The final impacts will be dependent on the detailed route alignment and appropriate noise and vibration assessments for predicted traffic flows and construction noise will be required.

Initial air quality assessment work undertaken during the Perth Traffic & Transport Issues STAG2 shows that Corridor C1 performs the best in terms of the assessment of impacts to both local and global air quality with traffic also being removed from the AQMA which covers the city centre. Although the initial assessments carried out during the Perth Traffic & Transport Issues STAG show that emissions will rise overall as a result of the implementation of the corridor, this was accounting for the additional traffic generated by the committed, allocated and aspirational development contained within the Local Development Plan and as such included significant increases in vehicle numbers on the transport network.

Route alignments within Corridors C1 and C2 have the potential to cause both direct and indirect impacts to proposed core path routes and Rights of Way, and any Cross Tay Link Road (CTRL) alignments identified within the corridors should be routed to minimise severance, and to either maintain or enhance the safety of its users. The identified core paths potentially impacted include:

- METH/2
- LUNC/113
- LUNC/114
- LUNC/119
- LUNC/102
- LUNC/2
- SCON/139
- SCON/140

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2 Perth Traffic & Transport issues Scottish Transport Appraisal Guidance (STAG) Report (2010). Halcrow Group Ltd.



Please reply to the Larbert office

13<sup>th</sup> June 2013

██████████  
Development Plan Assistant  
The Scottish Government  
Directorate for Planning and Environmental Appeals  
4 The Courtyard  
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Dear Ms Smith

**PERTH AND KINROSS PROPOSED LOCAL DEVELOPMENT PLAN  
THE TOWN AND COUNTRY PLANNING (DEVELOPMENT PLANNING) (SCOTLAND) REGULATIONS  
2008  
ISSUES – 20d EFFECTIVENESS OF STRATEGIC SITES, 21 PERTH STRATEGIC DEVELOPMENT AREA –  
WEST/NORTH WEST PERTH & 24 PERTH AREA (WITHIN CORE) TRANSPORT INFRASTRUCTURE**

I refer to your notice of the 16<sup>th</sup> May regarding the unresolved issues in respect of the above local development plan, and the further information required in relation to the above issues.

Springfield Properties would make the following responses to the questions posed by the Reporter:

**Question 6**

The document, *Shaping Perth's Transport future; A Transport Strategy for Perth and the Wider Region*, identifies clearly the key traffic and transportation challenges currently facing Perth and presents the arguments as to why a transport strategy is required for the city. This document includes the following statement,

*'The local road network in the centre of Perth is extremely busy during the morning and evening rush hours and can become gridlocked during special events, incidents and accidents.'* (source: Section 2, page 2)

and further,

*'A key congestion problem results from the conflict between local traffic and traffic travelling through the city converging in the centre of Perth to use one of the two existing bridges over the River Tay (Perth Bridge and Queen's Bridge). Other key congestion areas include;*

- *Trunk Road Network – A9, Inveralmond Roundabout, Broxden Roundabout, A85 (Crieff Road),*
- *Local Road Approaches,*
- *Town Centre’. (source: Section 2, page 2)*

Following the identification of the key constraints and traffic problems in the city, a vision of the future transport network based on eight strategic objectives is identified. This vision is summarised as follows,

*To ‘provide a transport system in and around Perth that will support sustainable economic growth, protect and improve the environment and improve social inclusion and accessibility’ (source: Section 3 Vision, Page 5)*

As part of a comprehensive series of ‘interventions’, the above document then identifies the need for an alternative route for vehicles travelling through Perth and so remove non-essential traffic from the city. In order to facilitate this objective;

*‘a new crossing over the River Tay has been identified as a key requirement for the transport network’. (Source: Section 6 page 12)*

In line with government guidance a full STAG appraisal has also been undertaken by Perth and Kinross Council. This appraisal has considered a number of transportation options and strategies before concluding that a new crossing of the River Tay, the Cross Tay Link Road (CTLR) was required to meet the council’s policy objectives.

In answer to the point raised in Question 6 as to whether the CTLR should be considered as one of local rather than strategic importance, although the CTLR is being promoted by the local authority rather than by central government, the objectives of the CTLR are consistent with national government policies and objectives. Further, the detailed appraisal of the various options and transportation strategies which led to the advancement of the CTLR have also been evaluated by way of the STAG assessment process as required by the Scottish Government.

Therefore, although the CTLR is a scheme being promoted by Perth and Kinross Council it will also have positive implications on the wider travel patterns in the Perth area and has the potential of meeting a number of central government targets including those relating to environmental matters such as air quality.

With regards to the potential funding mechanism for delivering the CTLR, Springfield Properties (Springfield) have worked and will continue to work closely with officers of Perth and Kinross Council and have responded both pro-actively and positively to the proposed strategy for the delivery and funding of not only the CTLR but other transportation improvements identified in the document, *‘Developer Contributions Transport Infrastructure’*.

Following a detailed assessment of this document we are of the opinion that the approach suggested for identifying how the proposed infrastructure associated with the CTLR will be funded is one that Springfield can both support and assist the council in introducing.

Furthermore, whilst there are still further details of the delivery and funding strategy to be agreed, we consider the approach identified in the above document to be both intellectually robust and a sound basis for the development of an infrastructure delivery framework.

We particularly welcome some of the innovative ideas suggested in the above document. This includes the potential for agreeing with developers a reduction in the financial contribution towards infrastructure works in exchange for the release of land necessary for new infrastructure such as the CTRL. (Source: Paragraph 3.5 of the document, 'Developer Contributions Transport Infrastructure'.)

Similarly, paragraph 3.10 of the above document makes a number of innovative suggestions including the potential for further reducing the level of developer contribution by up to 30% through the promotion of sustainable transport measures which result in a reduced level of trip making by private car.

To summarise, although the details of both of these and the other ideas contained in this document have still to be formalised and the details agreed to, Springfield are pleased to confirm that a robust approach to the funding and delivery of the CTRL has been proposed by council officers, and as a result, is one that Springfield can work with in assisting Perth and Kinross Council in delivering the CTRL.

#### **Question 7**

Through discussions with officers of Perth & Kinross Council it is our understanding that potential funding mechanisms required to deliver the proposed improvements to the A9/A85 junction are currently being considered. We also understand that a Section 75 agreement between the council and J Sainsbury is being concluded which will identify a payment of approximately £2m towards the A9 / A85 junction improvements. Given both of the above, we therefore see no risk to the long term 'deliverability' of the CTRL.

#### **Question 13**

Again through discussion with officers of Perth & Kinross Council we understand that the current completion date for the CTRL will be 2020. However, given the nature of the scheme it is also important to identify the other key delivery milestones. Our understanding is that the first element of the CTRL, namely the improvements to the A9/A85, including a new section of road infrastructure terminating at Ruthvenfield Road, is being reported to the Council on 26<sup>th</sup> June to secure funding for its implementation and that the detailed design for this new infrastructure is now underway.

The next part of the CTRL to be promoted by Perth and Kinross Council will be the crossing of the River Almond and a new section of highway infrastructure within Bertha Park. This next phase will provide access to the proposed new educational facilities located in the western part of the site currently being promoted by council officers and which will also be fundamental to the success of Bertha Park.

It is an important point to note that the incremental approach to the delivery of the CTRL will require close co-operation between council officers, their advisors, and Springfield. This is particularly relevant with regards to the detailed design of the bridge crossing of the River Almond and the location and design of the first roundabout junction within the Bertha Park site. This junction will also provide access to the proposed new educational facilities currently being advanced by Perth & Kinross Council and which we understand is planned to open in 2018. It is imperative therefore that the new crossing of the River Almond is in place prior to this.

#### **Question 17**

Through discussions with officers of Perth & Kinross Council we understand that the current cost estimate for the A9/A85 junction improvement does not include the provision of a link road into site H7. It is also our understanding that the detailed design, along with the possible cost, for the section

of the CTRL between Ruthvenfield Road across the River Almond and into site H7 is currently being advanced by council officers.

#### **Question 21**

Again through discussions with council officers it is our understanding that a wide range of 'scenarios', including the two identified in the question have been assessed on behalf of the council by their advisors as part of the STAG assessment undertaken during the preparation of the document, *A Transport Strategy for Perth and the Wider Region*'.

#### **Question 22**

It was previously proposed by ARUP on behalf of Springfield that the first part of Bertha Park could be developed prior to the advancement of the CTRL by way of the existing bridge over the River Almond located in the south-eastern corner of the site. This would then offer a connection to the wider road network, including the Inveralmond signalised roundabout, by way of Ruthvenfield Road. This bridge crossing is used currently for access to Bertha Park and forms part of the adopted road network.

It was originally suggested that up to 300 residential units at Bertha Park could be accessed by way of this route, which is in line with the current guidance from Perth & Kinross Council as presented in the document, 'Roads Development Guide'. Paragraph 4.6.4 of this document suggests that in the context of the Road Layout for Residential Core Roads that;

*'Residential Core Roads should be laid out to discourage through traffic movements and be of loop form where possible, and may serve up to 400 dwellings. However, only 300 dwellings may be served from a single access point'.*

Further paragraph 5.1.3 states;

*'...a maximum of 300 dwellings can be served from the existing road network by a single junction'.*

However, in order to develop an access to Bertha Park from the east an emergency access is also required. This was originally proposed to be by way of an existing access into Bertha Park from the A9 at a point just to the north of the Inveralmond roundabout. Investigations undertaken by ARUP showed that the operation of the existing road network would not be compromised by the additional trips associated with a 300 unit development.

However, it is also accepted that there would be a number of operational and design issues which would require resolution before an access to Bertha Park from the east by way of the existing bridge over the River Almond could be advanced. This would include a detailed assessment of existing infrastructure including the bridge over the River Almond. Although the principal of accessing Bertha Park from the east was accepted by council officers there was a concern expressed regarding the number of residential units which could be served by this route.

However, it is important to stress that the earlier proposal to provide access to Bertha Park by way of Ruthvenfield Road and via the existing bridge over the River Almond is no longer being advanced by the promoters of Bertha Park. As explained in previous answers, the current proposals are to commence the development of Bertha Park from the west, initially in close proximity to the proposed new educational facilities, and then developing Bertha Park eastwards using as a development template the currently being developed Bertha Park Masterplan. The development of Bertha Park will therefore be complementary to the development of the CTRL.

In summary therefore, it is the position of the promoters of Bertha Park that in order to successfully deliver both the site and the CTRL, full co-operation is necessary with council officers with regards to the funding, design and building of the CTRL and particularly the section of new road passing through Bertha Park.

Yours sincerely



Annie Russell  
Land Manager  
Springfield Properties PLC

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14 June 2013  
13 06 14 PKC LDP Savills Answers to DPEA Covering Letter



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Dear Ms Smith

**PERTH AND KINROSS PROPOSED LOCAL DEVELOPMENT PLAN  
THE TOWN AND COUNTRY PLANNING (DEVELOPMENT PLANNING) (SCOTLAND) REGULATIONS 2008  
ISSUES – 20d EFFECTIVENESS OF STRATEGIC SITES, 21 PERTH STRATEGIC DEVELOPMENT AREA –  
WEST/NORTH WEST PERTH & 24 PERTH AREA (WITHIN CORE) TRANSPORT INFRASTRUCTURE**

We write to enclose our answers to questions 6, 7, 9, 13, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28 as requested in your email of 16<sup>th</sup> May 2013.

Given the technical nature of these questions, the following individuals have participated in these responses:

Alastair Wood MA(Hons) AIEEMA, MRTPI MRICS, Savills – Director of Planning  
Marcus Collings MRICS, Savills – Consultant, Development  
Claire Carr BA(Hons) MSc MCILT MCIHT, SKM Colin Buchanan - Section Manager, Traffic & Development.

Our view that the Proposed Plan should be revised to re-instate the principle of development at Almond Valley is supported by all the main landowners required to deliver this namely:

- The Pilkington Trust
- St Johnstone Football Club
- Stewart Milne Group Limited
- The Robert Reid (1999) Discretionary Trust.

The Perth West site has had to be re-evaluated following the decision taken in the space of one morning by Councillors to abandon the previous well thought out development strategy for the delivery of the required housing numbers in the Perth Core Area. This has resulted in the need to make housing numbers add up through dividing the housing that would have been delivered at Almond Valley between Perth West and Bertha Park without having a suitable solution for the additional unnecessary infrastructure this new strategy would require and the funding implications the removal of Almond Valley has for the delivery of housing at Bertha Park or Perth West up to 2024. The current development framework for the Perth Strategic Area has not been properly thought out and severe physical infrastructure and financial constraints will be required to be overcome should any significant housing land be capable of being delivered within the plan period.

Whilst we can confirm we are willing to take part in the proposed Hearing Session on these issues on 25<sup>th</sup> July, we consider that the DEPA should require further procedure in the form of Inquiry Sessions or at least further Hearing Sessions in order that Perth and Kinross Council's position can be properly examined.

The Council's position, which is entirely of its own making, has left the delivery of a previous coherent development strategy for the Perth Strategic Development Area in chaos. The piecemeal and expensive strategy currently proposed merely makes the required housing numbers add up in the absence of development at Almond Valley with resultant consequences for additional infrastructure, cost and delay in securing the required investment and delivery of housing development for Perth.

The Reporters should be aware of the following timescales in the consideration of the position:

7 <sup>th</sup> April 2008	Application for Planning Permission in principle for an 1,800 unit residential led development at Almond Valley registered by Perth & Kinross Council
26 <sup>th</sup> May 2009	Perth & Kinross Council publishes a masterplan to deliver infrastructure and housing in West/North West Perth 'The Perth Western Expansion Study'
26 <sup>th</sup> August 2009	Perth & Kinross Council Enterprise and Infrastructure Committee approves the Perth Western Expansion Study and instructs the detailed design of the A85/A9 junction upgrade
14 <sup>th</sup> September 2011	Detailed Planning application for the A85/A9 Junction Upgrade submitted
7 <sup>th</sup> December 2011	Planning Permission in Principle for Almond Valley refused, contrary to officers recommendation, 6-5, by the Perth and Kinross Council Development Control Committee
10 <sup>th</sup> January 2012	Almond Valley removed from the Draft Proposed Plan, contrary to officers recommendation, by the Full Committee of the Council
6 <sup>th</sup> February 2012	Planning Application Appeal lodged to the DPEA by The Pilkington Trust against the refusal of Planning Permission in Principle
3 <sup>rd</sup> May 2012	Council Elections
30 <sup>th</sup> May 2012	The Development Management Committee of the Council approves the food superstore application on a non allocated auctionmart site. Almond Valley is cited in the Committee Report as part of the justification for this development
30 <sup>th</sup> May 2012	The Development Management Committee approves the A85/A9 Junction improvements. Almond Valley is cited in the Committee Report as the means by which funding for this will be provided.
31 <sup>st</sup> July-1 <sup>st</sup> August 2012	Appeal Inquiry and Hearing Sessions on the Almond Valley Planning Application Appeal
12 September 2012	DPEA Reporter accepts Almond Valley in principle but dismisses the Almond Valley Planning Application Appeal on grounds of prematurity in advance of the consideration of the LDP Proposed Plan.
23 <sup>rd</sup> January 2013	Perth & Kinross Council Full Committee approve submitting the LDP Proposed Plan to the DPEA for Examination

We trust that our answers to the DPEA's questions and the information set out above confirms our position in respect of the Examination of the LDP Proposed Plan. We trust that the DPEA will note our considered opinion that further procedure in the form of Inquiry or Hearing Sessions should take place during the course of the Examination of the Perth & Kinross LDP Proposed Plan in order that the current development strategy for the Perth Core Area can be properly assessed.

Should there be any matters that the DPEA require further clarification on or that require further discussion, please do not hesitate to contact Alastair Wood of this office.

Kind regards

Yours sincerely

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Alastair Wood

Enc.

## LDP Examination Hearing Questions Responses

### Responses prepared by Savills on behalf of the Pilkington Trust

*Issue 20d The Effectiveness of Strategic sites*

*Issue 21 Perth Strategic Development Area*

*Issue 24 Perth Area (within core) Transport Infrastructure*

#### Document List

<b>DPEA Reference</b>	<b>Savills Reference (additional documents)</b>	<b>Document Name</b>
	SAV01	Volume 1: DMRB Stage 1 Assessment Report – Halcrow
	SAV02	Pre-cognition of Alex Deans DPEA Reference: PPA-340-2065 9 July 2012
	SAV03	Scottish Government Housing Statistics for Scotland (3 June 2013)
	SAV04	PWEA Committee Report 26 August 2009
	SAV05	PWEA Combined Report
	SAV06	Developer Contributions Transport Infrastructure SPG May 2013
	SAV07	Draft Proposed PKC LDP Committee Report 10 January 2012
	SAV08	Draft Proposed Plan Section 4 Spatial Strategy Intro and Perth Core Area 10 January 2012
	SAV09	PKC Proposed Plan Full Council Meeting Minutes 10 January 2012
	SAV10	Proposed Plan Issued for Consultation Section 4 Spatial Strategy Intro and Perth Core Area 30 January 2013
Core_Doc_021		Shaping Perth's Transport Future – Model Input Report – SIAS December 2011
Core_Doc_048		Scottish Planning Policy
Core_Doc_019		PAN 2/2010
	SAV11	PKC A85/A9 Junction Upgrade Committee Report 30 May 2012
	SAV12	Sainsbury's Committee Report 30 May 2012
	SAV13	TD 22/06
	SAV14/SAV15	Proposed Plan Representations – Muir Group
	SAV16	Pre-cognition of Alex Deans DPEA Reference: PPA-340-2065 9 July 2012

## **CTLR funding**

### **Question 6**

**Paragraph 2.7 of Schedule 4 Document 446 estimates that 40% of the overall transport infrastructure costs can be met from “other funding mechanisms including working with government bodies to bring forward funding.”**

**What is the basis for this confidence and what specific mechanisms are anticipated?**

**Does the absence of any commitment to CTLR in the Strategic Transport Projects Review (STPR) indicate that this project is regarded as one of local rather than strategic importance and does this have implications for access to government funding?**

**What confidence is there in the ability of the development industry to fund the other 60% of the overall transport infrastructure costs over the next 30 years?**

Volume 1: DMRB Stage 1 Assessment Report (SAV01) estimates that the Cross Tay Link Road (CTLR) will cost between £88.5m and £95.6m excluding all land costs, design fees, site supervision and VAT. These figures include the costs associated with construction of the Western Edge Link which provides a connection between the proposed new junction on the A9 at the western end of the CTLR, Bertha Park and the A9/A85 Crieff Road Junction Improvements.

Given that neither of these improvements were identified as an investment priority within the Strategic Transport Projects Review there is very little evidence to support the Council’s assertion that other government funding sources might become available to help fund 40% of these schemes.

Even if this is the case, we have doubts as to whether the development industry can fund the remaining 60% over a 30 year period. Document 446 states the overall total transport infrastructure costs as £135m. The Council is therefore suggesting that the development industry can provide £81m of the total amount. If the higher estimates for the CTLR and A85/A9 are taken into account this could be over £140m and more still if significant improvements are required around Broxden to facilitate the Council’s current development strategy.

Document 446 states that contributions for residential development will be set at £36 per sq metre (or £3,276 for the average UK house of 91 sq m). Other uses will pay differing amounts with foodstores set at £682 per sq metre, retail £219, employment £26 and other at £104. No breakdown for the transport contributions is given but it is expected that the vast majority will come from residential developments.

TAYplan identifies a Housing Requirement of 7,240 units for Perth in the period 2010-2024. If this were extrapolated over 30 years it suggests a Housing Requirement of 15,514 units (517 per annum). At £3,276 per house this suggests a transport infrastructure contribution of £50.8m leaving £30.2m to be paid by other uses.

According to the Scottish Government Housing Statistics for Scotland, published on 3 June 2013 (SAV03), the ten year average new build completion rate for the whole of Perth & Kinross was 771 units per annum. The completion rates are not broken down any further but this would suggest the required 517 units per annum from Perth’s HMA is ambitious meaning the proposed receipts of £50.8m to pay for the required infrastructure are highly unlikely to be realised during the Council’s suggested timeframe.

Other developments will certainly be able to make transport infrastructure contributions with employment making the lowest contribution per sq metre and retail the highest. Proposed Plan suggests that there is little need for convenience floorspace over the life of the plan (but of course that will change over a 30 year period) but it does suggest there is a need for additional comparison retail floorspace. It is very possible that these uses could make substantial contributions over the 30 year period but predicting the levels is extremely difficult.

All of the above leads us to conclude that it will be very challenging for the development industry to fund 60% of the overall transport infrastructure costs set out within Document 446. In our opinion we expect the contribution rate for residential would need to be substantially higher than £36 per sq metre.

If the previous well thought out and planned development strategy for the Perth Core Area were reinstated as set out in the Perth Western Expansion Study (SAV04/05), Almond Valley would pay for the A85/A9 junction upgrade and the element of the Western Edge Link from the A9/A85 junction to the new river crossing over the Almond. Both H7 and H70 have significant infrastructure costs, particularly H70 which requires a new junction onto the A9 to the south, so their ability to also fund the A9/A85 improvements is doubtful.

#### Question 7

**The authority expects to recoup from developers, at least some of the £15M it appears to be willing to commit to funding the A9/A85 junction improvements (ref Schedule 4 Document 452 Committee Report).**

**As this would be drawn from the same funding source as the funding for the CTRL (contributions from developers in the Perth area), when considering the availability of developer funding for the CTRL and the scale of any shortfall, should this be factored into the estimates?**

We have factored this cost into our estimates in the answer to Question 6, above. Notwithstanding this, the most recent cost estimate for the A9/A85 junction improvements is £17M (source Developer Contributions Transport Infrastructure SPG May 2013, SAV06) and without Almond Valley it is difficult to see how this will be funded through developer contributions given the scale of investment required to deliver the CTRL and the Western Edge Link Road.

The Council itself acknowledges that it now has a shortfall of £15M in order to fund the A9/A85 upgrade (Document 452 – Composite Capital Budget, Additional Capital Expenditure) sets out at paragraphs 3.1.1 and 3.1.2 that for the A9/A85 Road Junction:

*'The impetus for this project arises following the Almond Valley and Sainsbury supermarket planning decisions. The Almond Valley developer had previously indicated a willingness to fully fund the road junction improvement scheme, however this has lapsed following the rejection of the development proposals. It is anticipated that further developer contributions will arise from implementation of the Transport Infrastructure Developer Contribution Contributions Policy. Draft Supplementary Guidance for the policy was considered by the Environment & Infrastructure Committee on 7 November 2012 (Report No. 12/506 refers) to progress the consultation process. However, an early decision on the Council's commitment to progress the scheme (subject to funding) is required to allow Sainsbury to enter into a Section 75 agreement with the Council. This will allow the supermarket development to proceed, with a planned opening towards the end of 2014. The junction will also enable housing development at Perth West and the opening up of new industrial land at Inveralmond.*

*The indicative net capital cost for this project is £15M (after developer contributions). In the longer term, there is also the opportunity for partial recovery of costs in the form of further developer contributions. The Scottish Government may also be willing to assist with funding for this project as part of the A9 dualling upgrade and officers have commenced engagement with the relevant parties to ascertain the funding options available. The projected shortfall in funding for this project is currently in the region of £15M. The Executive Director (Environment) will continue dialogue with Transport Scotland to secure additional funding to reduce the projected shortfall.*

*It is therefore proposed that the Council support the requirement for this project in principle, until the level of external funding from the Scottish Government and other developer contributions is known.'*

It is clear from this statement that the Council through its political stance to reject the Almond Valley application and remove it from the Proposed Plan, both contrary to their own officials recommendations, has created an issue in respect of infrastructure funding which would not exist if the previous planned strategy for housing development in the Perth core area had not been abandoned for reasons of perceived political expediency in the course of one morning on 10<sup>th</sup> January 2012 (SAV07/SAV08/SAV09/SAV10).

## **CTLR impact**

### **Question 9**

**Did the modelling work that informed the CTLR process in the Perth Traffic and Transport Issues Transport Appraisal 2010 take account of site H70 being developed?**

**If not, is the impact of the CTLR likely to be any different now that H70 is proposed?**

The modelling work undertaken as part of the Perth Traffic and Transport Issues Transport Appraisal did not take account of H70 Perth West since the development assumptions only included sites built or with planning permission, sites allocated under the Perth & Kinross Structure Plan (June 2003) and aspirational sites, i.e. those identified to meet increased population targets and known development interests.

The modelling work presented in Shaping Perth's Transport Future – Model Input Report (Core\_Doc\_021), which provided supporting evidence for the planning application for the A9/A85 Crieff Road Junction Improvements, assumed 500 residential units at Perth West (H11) and 1,500 residential units at Almond Valley Village (H8). The modelling demonstrated that, with the access strategies assumed for the respective sites, this quantum of development could be accommodated by the A9/A85 Crieff Road Junction Improvements.

The development of 3,000 residential units at Perth West will have a significant impact on the CTLR, A9/A85 Crieff Road junction and on the Crieff Road corridor generally, especially since the traffic associated with Perth West will require direct access onto Crieff Road. This additional traffic will most likely dictate a requirement for upgrades along Crieff Road corridor and modifications to the approved improvement scheme for the A9/A85 junction, especially at the proposed upgraded roundabout junction with Crieff Road, irrespective of whether or not a second access into Perth West is provided from the A9 to the south.

It is understood that Perth and Kinross Council is currently finalising modelling work in relation to Perth West but this is not yet in the public domain.

The abandonment of the previous considered and tested development scenario for the Perth Core Area with Almond Valley being implemented ahead of Bertha Park means that the Council has created serious issues in respect of delivering the required infrastructure to support the level of housing needed and does not therefore have a generous deliverable 5 year housing supply as required by Scottish Planning Policy (SPP) paragraph 75 (Core\_Doc\_048) and paragraph 55 of PAN 2/2010 (Core\_Doc\_019).

## **CTLR delivery**

### **Question 13**

What is the latest estimate of the completion date for the CTLR?

Volume 1: DMRB Stage 1 Assessment Report (SAV01) indicates that the CTLR will be operational in 2018 and this has been confirmed by Perth and Kinross Council. Given the length of time it has taken to obtain the necessary approvals for the A9/A85 junction improvements and the timescales involved in assembling the necessary land for the CTLR (not to mention funding) it is inconceivable that this road will be operational by 2018. A date of 2020 is more realistic.

## A9/A85 Issues

### Question 16

**Has the council actually committed to forward fund the A9/A85 junction improvements?**

**This is not entirely clear from Schedule 4 Document 452 (Committee Report ) despite what is said in the authority's response to Issue 20d.**

As set out in our answer to Question 7 above, the Council has not committed to fund the A9/A85 improvements and finds itself with a significant shortfall in meeting the costs of the required infrastructure.

Document 452 states that for the A9/A85 Junction Improvements:

*'The impetus for this project arises following the Almond Valley and Sainsbury supermarket planning decisions. The Almond Valley developer had previously indicated a willingness to fully fund the road junction improvement scheme, however this has lapsed following the rejection of the development proposals. It is anticipated that further developer contributions will arise from implementation of the Transport Infrastructure Developer Contributions Policy. Draft Supplementary Guidance for the policy was considered by the Environment & Infrastructure Committee on 7 November 2012 (Report No. 12/506 refers) to progress the consultation process. However, an early decision on the Council's commitment to progress the scheme (subject to funding) is required to allow Sainsbury to enter into a Section 75 agreement with the Council. This will allow the supermarket development to proceed, with a planned opening towards the end of 2014. The junction will also enable housing development at Perth West and the opening up of new industrial land at Inveralmond.*

*The indicative net capital cost for this project is £15M (after developer contributions). In the longer term, there is also the opportunity for partial recovery of costs in the form of further developer contributions. The Scottish Government may also be willing to assist with funding for this project as part of the A9 dualling upgrade and officers have commenced engagement with the relevant parties to ascertain the funding options available. The projected shortfall in funding for this project is currently in the region of £15M. The Executive Director (Environment) will continue dialogue with Transport Scotland to secure additional funding to reduce the projected shortfall.*

*It is therefore proposed that the Council support the requirement for this project in principle, until the level of external funding from the Scottish Government and other developer contributions is known.'*

This despite clear indications by the Council that Almond Valley was a key element in delivering the A9/A85 road improvements and as a key reason for approving the Sainsbury's supermarket at the unallocated auction mart site.

The committee report for the approved A9/A85 junction improvements (which have been approved in full) states at paragraph 59 (SAV11).

*'Indirectly linked and referred to in this application by consultees, objectors and within the Environmental Statement. Planning application 08/00678/IPL is currently being considered as a planning appeal through the Scottish Inquiry Reporters Unit, which if approved should include a commitment towards the delivery of the A9/A85 junction upgrade.'*

The committee report for the approved Sainsbury's application (SAV12) states at paragraph 125:

*'The proposed store is currently considered to be in a poorly accessible and unsustainable location because it is poorly related to existing residential areas within Perth, although the development at Almond valley is the subject of a current appeal.'*

These statements clearly demonstrate the Council's current development strategy for the Perth Core Area is at odds with the considered physical delivery of infrastructure which should include the residential development at Almond Valley in order to be capable of being delivered.

**Question 17**

**Does the cost estimate for the A9/A85 junction improvement include the provision of a link road into site H7?**

**If not, what additional cost would this entail if undertaken as part of that project rather than as part of the CTLR?**

The cost estimate for the A9/A85 Crieff Road Junction Improvements does not include the provision of a link into site H7 Bertha Park. It is estimated that the provision of such a link will be circa half the cost of the upper cost estimated for the proposed Western Edge Link , namely, £5m excluding all land costs, design fees, site supervision and VAT, given the need to provide a bridge over the River Almond.

### Question 18

**In the Main Issues Report (MIR – Core Document 95)), the Perth West site (now Site H70) was not as extensive as is now proposed - it did not include land adjacent to the A85. Why was this?**

The boundary of Perth West has been required to be altered to provide access to the site from the north in order to provide an initial development of 550 houses as there are significant issues in delivering access to the site from the south (see answer to Question 25, below)

The Main Issues Report considered Almond Valley and Perth West as alternative locations for the location of 1,500 houses up to 2024. By the time the Draft Proposed Plan was presented to committee (SAV07) Almond Valley had been selected by Council officers as the only deliverable strategic housing site in the short term. The Committee report (SAV09) states at paragraph 58:

*'A major development at Perth West was the Council's preferred option for a major growth area. Following the publication of the Main Issues Report traffic modelling work was done at the request of Transport Scotland. Various options for accessing the site were considered including a grade separated junction at Broxden. All options investigated had an adverse impact on the Trunk Road network, and would be likely to attract objections from Transport Scotland. Accordingly this option has not been carried forward to the Proposed Plan. However, in recognition that further design work may allow these issues to be resolved the area has been excluded from the Green Belt to allow future consideration of this option. Should any of the strategic development sites not come forward within the early part of the Plan period then the potential of this area will be re-evaluated.'*

The plan was amended during the course of the committee meeting which was adjourned to allow officers to produce a drawing to show what the proposed amendment looked. A ludicrous position and certainly no way to produce properly considered planning policy.

Following the decision of Councillors to alter the coherent long term strategy for strategic housing delivery in Perth during the space of one morning on 10<sup>th</sup> January 2012, Council officers have been forced to evaluate the delivery of housing at Perth West in more detail. In order to make the housing numbers add up on paper, the site has been extended to the A85 to indicate that 550 houses could come forward in the period to 2024. This has been assessed as being acceptable in respect of the numbers of vehicles that would be capable of accessing Perth West from the A85 without redesigning the consented A85/A9 junction upgrade.

The current piecemeal development strategy for strategic housing delivery is a result of perceived political expediency and as currently formed, the Proposed Plan completely disregards the practical and financial realities of delivering the required major housing growth which is required for the Perth Core Area. It results in a requirement for an additional major road junction on the A9 and/or an upgrade at the Broxden roundabout. This denies the long term strategic opportunity at Bertha Park an essential access through Almond Valley rendering significant development at both Perth West and Bertha Park by 2024 undeliverable. This effectively delays the delivery of significant new housing for at least 10 years and leaves the Council without an effective 5 year housing land supply.

Rather than facilitating redevelopment, the Proposed Plan if implemented as currently formed, will mean that there will be no significant housing development in the Perth Core Area over the plan period which will have major implications for the City of Perth and the wider Council area. Almond Valley is a long standing strategic housing site, which has been thoroughly assessed by both officers of the Council, statutory bodies and professional advisers to the Pilkington Trust.

Neither of the alternative sites which the Council has (Bertha Park H7 and Perth West H70) has the ability to deliver significant levels of housing in the short or medium term. This is confirmed in the Proposed Plan (SAV10, pages 77 and 78) which redefines these sites as 'Long Term Strategic Development Areas.'

**Question 19**

**In the MIR (page 80) it is stated that preliminary investigation suggests that the A9/A85 could not support both Almond Valley Village and Perth West.**

**This suggests that some traffic modelling of Perth West had been carried out.**

**What assumptions as to the means of access to Perth West informed this finding?**

The statement that the improved A9/A85 junction could not support both Almond Valley Village and Perth West is underpinned by the modelling work presented in Shaping Perth's Transport Future – Model Input Report (Core\_Doc\_021), which provided supporting evidence for the planning application for the A9/A85 Crieff Road Junction Improvements. This modelling work assumed 500 residential units at Perth West (H11) and 1,500 residential units at Almond Valley Village (AVV) (H8). The modelling demonstrated that this quantum of development could be accommodated by the A9/A85 Crieff Road Junction Improvements with the access strategies assumed for the respective sites, i.e. direct access into Perth West from Crieff Road and a combination of accesses for Almond Valley Village including direct accesses from Crieff Road and a connection to the western dumb-bell roundabout of the A9/A85 Crieff Road Junction Improvements.

The statement suggests that Perth and Kinross Council is of the view that the A9/A85 Crieff Road Junction Improvements could only accommodate the additional traffic demands of up to 2,000 residential units to the west of the A9, irrespective of the location. This is not the case as this level of housing would have to be split between the Almond Valley site and Perth West. This was the basis on which the modelling work was done.

We set out further comments on this in our response to Question 20. It is understood that Perth and Kinross Council is currently finalising modelling work in relation to Perth West but this is not yet in the public domain. It is also understood that the proposed access strategy for Perth West is likely to include a connection to the A9 to the south and improvements to the Broxden Roundabout which would not be required should the previously proposed development strategy including Almond Valley be taken forward.

## Question 20

**If development on H70 were split into northern and southern phases with only the former using the A9/A85 junction, is there any reason to think that the impact of developing that northern phase with a similar number of houses to Almond Valley Village would have any worse impact on the trunk road network than was predicted for the Almond Valley Village scheme?**

In the modelling work undertaken to date, the 500 residential units at Perth West are assumed to access directly onto Crieff Road whereas the 1,500 residential units at Almond Valley are assumed to be served by a combination of accesses including direct accesses from Crieff Road and a connection to the western dumb-bell roundabout of the A9/A85 Crieff Road Junction Improvements. The traffic from Almond Valley Village will therefore be more readily dispersed across the road network in order to minimise its impact on traffic conditions on Crieff Road, especially, at the roundabout junction leading to the A9 slip roads.

If the northern phase of Perth West were to comprise 2,000 residential units with direct accesses onto Crieff Road, the impact of this additional traffic would be more concentrated and hence more significant than if the development were to be dispersed between Almond Valley Village and Perth West.

The concentration of all the additional traffic onto the Crieff Road corridor may dictate a requirement to upgrade the standard of the existing single carriageway Crieff Road between the potential site accesses and the roundabout junction with the A9 slip roads given that this corridor is known to be already operating close to its design capacity. Capacity improvements at junctions along the corridor, above and beyond those already proposed as part of the recent grant of consent for a food superstore at Perth Auction mart, are also likely to be required, especially at the roundabout junction with the A9 slip roads. The greatest impact will be experienced at the latter junction and therefore, a requirement for a much higher capacity junction is likely to be required than that which currently has the benefit of consent. The form of improvement will very much be driven by the magnitude of the forecast conflicting movements and it may be that the forecasts will dictate a requirement for say the introduction of a segregated slip road for A9 bound traffic and a higher standard of connector road between the A85 roundabout and the western dumb-bell roundabout than is currently proposed as part of the A9/A85 Crieff Road Junction Improvements. There may also be knock-on implications for the size of the western dumb-bell roundabout.

The potential improvements suggested above have land and cost and timescale implications. Also, any such changes will be regarded as material changes to the consented improvement scheme and will dictate a requirement for a new planning application together with the re-working of the supporting Environmental Impact Assessment.

The A9/A85 Junction upgrade feasibility study and detailed design took three years from the publication of the first report considering the options until the planning application was approved. The committee report on this application (11/01579/FLL) confirms at paragraphs 59 (SAV11):

*'Indirectly linked and referred to in this application by consultees, objectors and within the Environmental Statement. Planning application 08/00678/IPL is currently being considered as a planning appeal through the Scottish Inquiry Reporters Unit, which if approved should include a commitment towards the delivery of the A9/A85 junction upgrade.'*

The Committee Report also confirms that Transport Scotland and JMP previously advised that the proposed modifications to the trunk road network formed part of the transport strategy to deliver a wider spatial strategy including Almond Valley. Paragraphs 65 and 66 of the Committee Report state:

*'Notwithstanding, the Proposed LDP that has now been published for consultation does not contain an allocation at Almond Valley Village, with housing instead being allocated at Perth West to the south of the A85.'*

*The submission is not considered to demonstrate that the current scheme as detailed in the application would adequately accommodate the spatial strategy now promoted in the Proposed LDP. Transport Scotland prepared to extend the consultation period until such time as further information can be provided that would address the issues identified above.'*

This statement therefore clearly demonstrates that the current development strategy has not been properly tested in light of the current design of the A9/A85 junction upgrade and there could be a delay of up to 3 years if new proposals have to be taken forward.

## Question 21

Has any modelling work been carried out to assess the likely implications for the A9/A85 junction of the following scenarios:

- i. developing Almond Valley Village in conjunction with a proportion of site H70? (There is reference to an additional cost of £11 M for a redesign of the A9/A85 junction upgrade in representation 09086/1<sup>1</sup>);
- ii. developing Almond Valley Village in conjunction with a proportion of site H7 (accessed via a link to the A9/A85 junction in advance of CTRL completion)?

With regard to scenario (i), the modelling work undertaken to date assumes 1,500 residential units at Almond Valley Village and 500 residential units at Perth West (H70). The implication is that this quantum of development can be accommodated with the A9/A85 Crieff Road Junction Improvements in place.

For clarification the reference to the £11M cost in representation 09086/1 is in respect of the delivery of the A85/A9 junction which has since risen to an estimated cost of £15-£17M. Given the fact that the A85/A9 junction upgrade was primarily designed to accommodate Almond Valley there would need to be further transport modelling undertaken and a redesign of the junction with unknown land take and acquisition costs in order to facilitate a southern access from the A85/A9 junction were more than 500 houses proposed on the northern section of Perth West. The previous A85/A9 junction improvements took 3 years from the publication of the first report until final design was approved.

With regard to scenario (ii), the implications of bringing forward development at Almond Valley and at Perth West in advance of the improvement scheme are presented in the Shaping Perth's Transport Future – Model Input Report (Core\_Doc\_021). Development at and a link to H7 Bertha Park was not included in this testing. The conclusions from the modelling were that, in 2015, with the A9/A85 Improvements in place, **“relief was given to the Crieff Road area of the road network at peak times of the day and that the rest of the Perth Road network operated satisfactorily.”** By 2030, the Perth Road network as a whole experiences significant congestion. The conclusion was made that all other LDP and Tayplan proposed developments, which includes H7 Bertha Park, **“... are dependent on further transport interventions, such as local junction improvements and the proposed Cross Tay Link Road.”**

This scenario (ii) is as set out in the Draft Proposed Plan as presented to Perth and Kinross Council Full Council Committee on 10<sup>th</sup> January 2010 (SAV07) and is the only means by which to provide a sensible housing land supply in the short term for the Perth Core Area.

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<sup>1</sup> Savills Representation to Proposed Plan on behalf of Pilkington Trust

## Question 22

Could any part of H7 could come forward before the CTLR using the existing access? On what basis does Springfield contend that the existing access could be used for an initial phase of approximately 300 units?

The representation for Springfield suggests that **“work already carried out by Arup and submitted as part of Springfield’s representations on the Main Issues Report showed there is potential for up to 300 homes to be accessed direct via the existing access from Ruthvenfield Road.”** The representation also claims that **“this was agreed at the time with the Councils Roads officers.”**

Ruthvenfield Road links to Inveralmond Roundabout. With regard to current traffic conditions at Inveralmond Roundabout, the Perth Traffic and Transport Issues Transport Appraisal states that the **“... junctions that experience significant congestion at peak times are mainly .....and Inveralmond Roundabout.”** Furthermore, the appraisal also states that between 1600 and 1630 hours in the PM peak, **“...traffic waits to exit Inveralmond Industrial Estate at Inveralmond Roundabout.”** The Executive Summary to the appraisal also states that **“Whilst there is land for development, primarily in the north and north-west, the road network connections from the existing Inveralmond Industrial Estate and Crieff Road are considered at capacity and unable to cater for further vehicular loading and public transport services without significant improvement.”**

The Summary of Responses by Planning Authority in the document 21 – Perth Strategic Development Area – West/North West Perth states that the **“Transport Scotland Strategic Transport Projects Review recognises that ‘Congestion at the A9/A912 Inveralmond Roundabout is significant.....’.** The addition of 300 dwellings taking access from Inveralmond will exacerbate this issue having a negative impact on the wider strategic and local road networks.”

The reporting of these congestion issues and the conclusion in Shaping Perth’s Transport Future – Model Input Report (Core\_Doc\_021) that all other LDP and Tayplan proposed developments, which includes H7 Bertha Park, **“.... are dependent on further transport interventions, such as local junction improvements and the proposed Cross Tay Link Road”** casts doubt on the validity of Springfields contention.

The reality of the deliverable position in advance of the CTLR for Bertha Park is 200 units as identified in the Draft Proposed Plan as presented to the Full Council Committee on 10<sup>th</sup> January 2012 (SAV08) which would be accessed through development at Almond Valley.

### Question 23

**The plan assumes that 750 units can be delivered on H7 by 2024. In what form? This significantly exceeds earlier estimates of the predicted output from this site during the plan period. What is the reason for the change?**

The Proposed Plan assumes that H7 will deliver 750 units by 2024. Due to the need for the A9/A85 improvements, a section of the Western Edge Link and a bridge over the River Almond we believe the earliest that development could commence is 2016 suggesting a build rate of 94 units per annum. Even this timescale is challenging given the three and a half years it took the Council to determine the Almond Valley application, the likely requirement for compulsory purchase of land to deliver the A85/A9 junction and the initial phase of the Western Edge Link Road and the costs for undertaking this additional unnecessary land assembly and work.

At the same time, the Proposed Plan assumes other sites would deliver a substantial number of units. These are most notably H70 (69 units per annum over a similar period), H4 Marshalling Yard (60 units over the plan period), MU1 Broxden Road, (40 units over the plan period) and a number of other smaller sites such as H1, H2 and H3. The total is therefore well in excess of 250 units per annum.

Most volume housebuilders are seeking outlets that can maintain a sales rate of 2 units a month. This is being achieved in many locations around Edinburgh, Glasgow and Aberdeen but is proving harder to sustain elsewhere. Notwithstanding this, to deliver 750 units on H7 over an 8 year period would require four housebuilders developing simultaneously to a consistently high sales rate. We feel this is extremely challenging, even if this were the only large site in Perth.

At Kirkliston, on the outskirts of Edinburgh, CALA, Walker Holdings, Barratt, Persimmon and Bellway are developing 610 units. Last year the 5 housebuilders sold 115 units between them, up from 61 in 2011. This is one of the best performing sites in Scotland where there has been little competition, although this is likely to change very soon as 3,500 houses at Winchburgh start to come on stream.

Having examined new build sales data within Perth over the last 10 years, produced by Myhouseprice.com, the average sales volume has been 138 units per annum. The highest return dates from 2003 when 281 sales were registered with the next highest return in 2007, at the height of the housing bubble, when 224 units were sold. The last few years have not surprisingly been very poor, with the lowest return dating from 2012 when only 36 sales were recorded. Applying the 10 year average of 138 units suggests 1,100 units could be delivered between 2016 and 2024. Expecting nearly 70% of that to come from H7 seems extremely unlikely.

Planning Advice Note 2/2010: Affordable Housing and Housing Land Audits (Core\_Doc\_019) defines effective land supply. It deals with such matters as ownership, physical, contamination, deficit funding, infrastructure and land use. In addition programming is an important element of any audit. As mentioned in our answer to Question 22, we believe the existing access and bridge is unsuitable for the development of up to 300 units on H7. Consequently development can only occur once the Cross Tay Link Road and A9/A85 Crieff Road junction improvements are constructed. This is a significant infrastructure constraint, and combined with our previous comments, makes the deliverability of 750 units by 2024 highly unlikely.

In contrast, Almond Valley could deliver units to match the market demand whilst at the same time delivering the A9/A85 improvements without the Council resorting to CPO powers since it has the agreement of all landowners required to deliver the project. Without the development of Almond Valley we anticipate a CPO would take at least two years to be granted.

## **A9/Broxden Issues**

### **Question 25**

**How would the southern H70 access work? From Broxden roundabout? If so, with or without grade separation? Is Transport Scotland content with an access from Broxden?**

It is understood that Perth and Kinross Council is currently finalising modelling work in relation to Perth West but this is not yet in the public domain. It is also understood that the proposed access strategy for Perth West is likely to include a connection to the A9 to the south plus a connection to Old Gallows Road in the east in addition to accesses onto A85 Crieff Road, as indicated in the representation from the Muir Group.

The full extent of the southern boundary of the Perth West, including the suggested extension to the red line boundary, extends for approximately 1.2km westwards from the Broxden Roundabout. Current national transport policy is to restrict the provision of new accesses onto the trunk road network and requires the use of existing accesses. It is difficult to envisage how an access junction can be accommodated on the site frontage within the junction spacing requirements of current design guidance without agreeing a departure from standard with Transport Scotland, unless it is sited close to the existing westernmost farm access.

TD 22/06 (SAV13) states that for Rural All Purpose Roads, the minimum spacing requirement is 1km, as dictated by the desirable minimum required weaving length, irrespective of the form of the junction. It is likely that a grade separated junction will be required to accommodate the traffic demands from circa 2,500 residential units assuming that circa 500 units will be accessed from Crieff Road. Such a junction could take the form a dumb-bell roundabout arrangement located at the point of one of the existing farm access junctions. However, the provision of eastern facing slip roads will definitely dictate a departure from standard in respect of junction spacing. The provision of such junctions could cost of the order of £2.5m and there will be land take and environmental issues to address with each. The introduction of grade separation at Broxden Roundabout as part of Intervention 16 of the Strategic Transport Projects Review (STPR) has the potential to cast further doubt on the ability to provide a new junction in a location on the A9 that meets the minimum junction spacing requirements. This is due to the potential need to accommodate west facing slip roads if the grade separation is intended to cater for through movements on the A9.

If a direct access into Perth West is to be provided in advance of the introduction of grade separation of the Broxden Roundabout as part of the STPR, there will need to be major improvement works at the roundabout including widening on the various approaches and the introduction of signal control. Such an improvement could cost of the order £1.5m and there may be land take and environmental considerations.

All of this is completely unnecessary given that the draft Proposed Plan as presented to the Full Committee of the Council on 10<sup>th</sup> January 2012 (SAV08) provides a deliverable solution which will meet the short and medium term housing needs of the Perth Core Area without a significant additional new road junction on the A9 and significant improvements to the Broxden Roundabout or the introduction of a grade separated junction at Broxden.

**Question 26**

**If there is to be an access to the A9 from west of the Broxden roundabout is there any flexibility on the normal minimum 1 km junction separation?**

Current national transport policy is to restrict the provision of new accesses onto the trunk road network and requires the use of existing accesses. It is difficult to envisage how an access junction can be accommodated on the site frontage within the junction spacing requirements of current design guidance without agreeing a departure from standard with Transport Scotland, unless it is sited close to the existing westernmost farm access.

If an at-grade junction is capable of accommodating the traffic demands from the development, it is likely that this will take the form of a large roundabout sited at the point of one of the existing access junctions given the rural location. On the assumption that a grade separated junction is required, this could take the form a dumb-bell roundabout junction again located as above, however, the provision of eastern facing slip roads will definitely dictate a departure from standard in respect of junction spacing. The provision of such junctions could cost of the order £2.5m and there will be land take and environmental issues to address.

Again this extra road junction is not needed to deliver the properly planned and well thought out development strategy for the Perth Core Area as set out in the Draft Proposed Plan (SAV08).

**Question 27**

**H70 was initially discounted as an option because of adverse roads implications. Is this correct? If so, what has changed the authority's mind?**

With regard to H70 Perth West, Schedule 4 no 20 Effectiveness of Strategic Sites of the proposed Plan states that “...**the site is as effective as numerous sites included in the Plan for the period 2016-2024 for up to 500 dwellings. The release of land will come from the development of the approved A9/A85 junction improvements.**” It further states that “**Regarding the transport issues raised, Transport Scotland is undertaking a review of the A9 between Kier Roundabout and Luncarty. The initial findings of this study will be published in June 2013 and may have a bearing on the extent of the developable area of the site and how it is accessed. The site will be developed through a masterplan which will define the extent of the remaining developable area.**”

In summary, Perth and Kinross Council is content that 500 dwellings can be accommodated on H70 Perth West with the A9/A85 Crieff Road Junction Improvements in place. Modelling undertaken in support of the planning application for the improvement scheme confirms that the road network can accommodate these additional traffic demands if the site is accessed from Crieff Road. However, Perth and Kinross Council appears to be reserving its position with respect to the extent of additional development that can be accommodated on the site beyond 2024 pending the results of modelling work of the A9 being undertaken on behalf of Transport Scotland.

This echoes the original position of Council officials as set out in the Committee Report to the Proposed Plan of 10<sup>th</sup> January 2012 (SAV07'). This states at paragraph 58:

*A major development at Perth West was the Council's preferred option for a major growth area. Following the publication of the Main Issues Report traffic modelling work was done at the request of Transport Scotland. Various options for accessing the site were considered including a grade separated junction at Broxden. All options investigated had an adverse impact on the Trunk Road network, and would be likely to attract objections from Transport Scotland. Accordingly this option has not been carried forward to the Proposed Plan .However, in recognition that further design work may allow these issues to be resolved the area has been excluded from the Green Belt to allow future consideration of this option. Should any of the strategic development sites not come forward within the early part of the Plan period then the potential of this area will be re-evaluated.*

As stated in our answer to Question 18 above, the Perth West site has had to be re-evaluated following the decision taken in the space of one morning by Councillors to abandon the previous well thought out development strategy for the delivery of the required housing numbers in the Perth Core Area. This has resulted in the need to make housing numbers add up through dividing the housing that would have been delivered at Almond Valley between Perth West and Bertha Park without having a suitable solution for the additional unnecessary infrastructure this new strategy would require and the funding implications the removal of Almond Valley has for the delivery of housing at Bertha Park or Perth West up to 2024.

**Question 28**

**The plan assumes that 550 units can be delivered on H70 by 2024. What form would this take and on which road improvements would this depend?**

500 dwellings can be accommodated on H70 Perth West with access provided from Crieff Road. Reference to the representation by the Muir Group (SAV14/15) suggests that two accesses are to be provided: one located immediately to the west of the proposed retail development on the Auction mart site; and one located approximately midway along the site frontage further to the west. The westernmost access could take the form of either a ghost island priority junction or an at-grade roundabout dependent upon the prevailing traffic flows. The easternmost access is likely to be signal controlled and will need to be designed to link seamlessly with existing junctions on the A85 corridor. Any new junction will need to be agreed with Transport Scotland given that national transport policy is to restrict the provision of new accesses on to the trunk road network.

Delivery of 500 dwellings on the northern part of the site is dependent on the A9/A85 Crieff Road Junction Improvements being in place. In addition, a series of improvement to junctions along the Crieff Road corridor have been agreed in conjunction with the consented retail development. These include, amongst other things, an improved and upgrade access to the Auction mart site, localised widening of the A85 between the Auction mart site and the A9 junction, replacement of the A9 northbound off ramp roundabout with traffic signals, re-configured and re-phased traffic signals to the east of the A9 and replacement of the A9 southbound off-ramp with traffic signals. The compatibility and requirement for these improvements will ultimately need to be considered in the context of the approved A9/A85 Crieff Road Junction Improvements. However, a scheme of works to the A85 corridor, along the lines of that proposed will also need to be implemented to facilitate the delivery of 500 dwellings on Perth West.

The potential accesses for Perth West from Crieff Road are likely to cost of the order £0.5m and the improvement works identified for the Crieff Road corridor as part of the retail consent are likely to cost of the order £0.75m .

Muir Group's representations to the Proposed Plan state that development will commence in 2015/20016 following site preparation and any necessary infrastructure enhancements. This despite the fact that no masterplan, Environmental Impact Assessment or detailed access designs have been prepared to date. Perth & Kinross Council took three and a half years to consider the planning application for Almond Valley. This evidence suggests that achieving 500 houses on the northern part of the Perth West site by 2024 is ambitious.

The previous development strategy envisaged 1,100 units being delivered on Almond Valley with 200 units coming forward during this time on H7, Bertha Park, (accessed through the development at Almond Valley) has a much more realistic prospect of being realised given that significant issues have already been addressed and the transport infrastructure is designed and consented and capable of implementation in advance of the sites H70 and H7 currently put forward in Proposed Plan for the Perth Core Area.



## **LDP Examination Hearing Additional Questions Responses**

### **Responses prepared by Savills on behalf of the Pilkington Trust**

*Issue 20d The Effectiveness of Strategic sites*

*Issue 21 Perth Strategic Development Area*

*Issue 24 Perth Area (within core) Transport Infrastructure*

The reporter wishes to hear the parties' views on whether, and if so how, access might be taken from the A9 to the west of Broxden roundabout to serve a development in the southern portion of site H70 (Perth West).

### **Document List**

<b>DPEA Reference</b>	<b>Savills Reference (additional documents)</b>	<b>Document Name</b>
	SAV17	Plan Showing Development Framework for the Southern Part of Perth West Site and H70 Boundary in the Proposed Plan
	SAV18	Proposed Plan H70 Boundary

## Question 1

**Whether it is possible, without modifying the size or shape of site H70 from that defined in the proposed plan, to gain access to the site from the A9 west of Broxden roundabout.**

There is no means by which to access the H70 site from the A9 West of Broxden Roundabout without extending the boundary of H70. In its response to the previous DPEA Question 26 (page 4) Transport Scotland is unequivocal on this issue stating that there is no flexibility on the 1km minimum junction separation as set out in its adopted policy contained within TD 22/06 Road Geometry paragraphs 4.38 and 4.36 (SAV13). Transport Scotland reinforces this position in its answer to the Previous DPEA Question 10 (page1):

*'Transport Scotland would be highly unlikely to depart from this mandatory requirement.'*

The response by Transport Scotland to the previous DPEA Question 25 (page 3 second paragraph) is equally clear that it would not accept an access directly from the Broxden roundabout:

*'The proposed mitigation at Broxden had not been agreed since Transport Scotland require to understand the effects of the full LDP allocations at this location. For the avoidance of doubt, Transport Scotland would not accept a new access directly onto the Broxden roundabout'*

No proposals have been submitted by any party to show how these concerns could be overcome without significantly extending the proposed boundary of H70. The position therefore remains as set out by the Executive Director (Environment) of Perth & Kinross Council in his Full Council Committee Report of 10<sup>th</sup> January 2012 (AI\_17 and SAV07, paragraph 58, page 16):

*'... Following the publication of the Main Issues Report traffic modelling work was done at the request of Transport Scotland. Various options for accessing the [H70] site were considered including a grade separated junction at Broxden. All options investigated had an adverse impact on the Trunk Road network, and would be likely to attract objections from Transport Scotland. Accordingly this option has not been carried forward to the Proposed Plan...'*

This position is contrasted by the properly considered proposal for Almond Valley which has been subject to rigorous assessment through the Perth Western Expansion Study (SAV04 and SAV05) which has a fully consented road infrastructure solution in place and has the approval of both the Council and Transport Scotland (SAV11).

This solution is also fully aligned with the Council's 'Shaping Perth's Transport Infrastructure' (Core\_Doc\_021) by providing the funding to implement the A9/A85 Junction improvements and to link with the CTRLR project (AI\_22). Almond Valley should therefore be reinstated in the Local Development Plan as per the considered housing strategy for the Perth Core Area as presented to the Full Council Committee Meeting on 10<sup>th</sup> January 2012 (AI\_17, bottom table page 73 top right corner or page 103 footer).

The Reporters requirement to consider this matter emphasises the fact that the decision made in one morning on 10<sup>th</sup> January 2012 by Perth & Kinross Council was not based on any sound planning judgement or assessment and that it is not physically possible to deliver access into the southern part of Perth West without significantly extending the boundary of the H70 allocation westwards. As the Reporters are wise to note (see response to Question 2 below), this was not publicised as an option in the Main Issues Report, was not included in the Proposed Plan and was not considered in the plan's strategic environmental assessment.

## Question 2

**If the reporter were minded to support the proposed westward extension of H70, on what basis could he recommend modification of the plan so that it incorporated that change, given that this was not publicised as an option in the Main Issues Report, was not included in the proposed plan and was not considered in the plan's strategic environmental assessment?**

We consider that it would be unreasonable, legally impermissible and in any event, inappropriate for the Reporters to incorporate a significant alteration to the Proposed Plan at this late stage to incorporate the westward extension of H70 given that this was not identified in the Main Issues Report, was not included in the Proposed Plan and was not considered in the plan's strategic environmental assessment and therefore has not been appropriately consulted on or subject of the necessary environmental assessment.

Of the proposed 1,500 units stated to be deliverable and effective on the southern part of H70 by the Lamberkin Trust in its answers to the previous DPEA Questions (Ristoul response on behalf of the Lamberkin Trust to Question 28, page 9) by 2024, approximately 1,000 of these are outside the boundary of H70 in the Proposed Plan.

For the Reporters ease of reference we have shown the red line boundary of H70 on the Development Framework Plan submitted by the Lamberkin Trust (Ristoul submission to initial DPEA Questions, Appendix 3, page 5) in document SAV17 submitted with our answers. The Proposed Plan H70 boundary is submitted as document SAV18 in case the Reporters wish to make their own comparison.

SAV17 clearly shows that the entire area identified as 'West Mid Lamberkin' is outside the H70 allocation. Approximately two-thirds of the housing proposed by the Lamberkin Trust is therefore outside the Proposed Plan H70 boundary. The remaining housing at 'East Mid Lamberkin' is therefore ineffective, given the response to Question 1, above, as there is no means of accessing this.

This is not a small 'tweak' to the H70 boundary to accommodate minor adjustments necessitated by ownership or minor technical considerations. It is a significant alteration and proposed release of Greenbelt land (AI\_17 page 12) for 1,000 houses which is not based upon sound planning assessment or logic and cannot be arbitrarily incorporated in to the Proposed Plan at this late stage. Proper assessment and consultation (with resultant significant delay to the adoption of the plan) would be required in order for there to be an argument that this alteration was legally robust. There is also no guarantee that such further assessment and consultation would not identify significant environmental issues which could prohibit adoption. The Perth West site can only therefore be assessed as being ineffective and incapable of delivery housing in at least the short term.

This position further illustrates the fact that the proposals for Perth West were not subject to proper planning assessment and that the proposed effective housing land supply set out in the Proposed Plan (SAV10 page 69, Table under 5.1.11) is wholly unrealistic. Indeed when the Council took the decision to include Perth West and additional housing at Bertha Park in the Proposed Plan on 10<sup>th</sup> January 2012, it was fully aware that these two sites only have long term development potential and were unlikely to be delivered prior to 2020. AI\_18, page 46, middle paragraph, 'Long Term Strategic Development Areas, Perth West, Bertha Park':

*'...It is not expected that these sites will be capable of delivering development before 2020 with only a small contribution being made by the end of the plan period...'*

The SEA on the Proposed Plan was last undertaken in December 2011 at a point when Almond Valley was the identified strategic housing site for the Perth Core Area (AI\_17). No further SEA has been undertaken on the H70 site which as the Reporters are aware, requires an additional new road junction on the A9. Given this requirement for an unnecessary additional major road junction and distributor roads, it is impossible to see on an assessment of alternatives how a further SEA of the Proposed Plan as currently drafted could find H70 to be an environmentally robust option compared with the previously proposed strategy.

The inclusion of distributor road access to the south of the A9 in the Lamberkin Trust proposals also introduces the opportunity for further potential development to the south of the A9 which may mean development on the northern part of the H70 and development at Bertha Park will not be able to come forward, further casting doubt on the delivery of the A85/A9 Junction improvements and the CTRLR proposal. The implications of this significant change in strategy would also have to be part of a lengthy process to update the SEA

The significant alteration of the Proposed Plan which would be required at this late stage may also be found to be unlawful on this basis.

The Reporters must contrast this position to the alternative strategic development strategy for Almond Valley to come forward in the first instance (with longer term development at Bertha Park) which has been properly assessed and consulted on and for which the required infrastructure is fully consented. The timescales for the delivery of Almond Valley (AI\_17, bottom table page 73 top right corner or page 103 footer), page are fully achievable within the plan period and this is an effective alternative to H70.

The only reasonable decision in order for an effective 5 year housing land supply to be provided in the Perth Local Development Plan that the Reporters can take is for H70 to be deleted in its entirety and for the previous development strategy for the Perth Core Area, including Almond Valley, to be reinserted in its place.

### Question 3

**Setting aside the issue of how a development of the southern portion of site H70 would be integrated with the remainder of that site and with existing and proposed features in the locality, such as the proposed Crieff Road supermarket, is the council content with the proposed westward extension of site H70?**

The Council in its answer to the previous DPEA Question 25 stated:

*'...Perth and Kinross Council are of the opinion that a dedicated stand alone access to serve the southern element of H70 would undermine wider sustainability objectives and should not be supported in isolation of an integrated strategy. It is our view that an access strategy will be required to be delivered as part of H70 linking the A9 to the A85 and beyond, demonstrating how local access towards Perth City centre will be achieved and providing evidence of connectivity within the site.*

*A dedicated stand alone access serving the southern element of H70 would lead to inefficient journey route options as illustrated by the accompanying map (AI – 10).'*

For the reasons stated in our response to Question 2 above, the westward extension of H70 into the Greenbelt which is required to deliver approximately 1,000 or two-thirds of the houses proposed by the Lamberkin Trust is likely to be found to be unlawful and could significantly delay the adoption of the Perth Local Development Plan.

The Council has clearly stated in its answers to the previous DPEA Question 25 that it would not accept the development of the southern part of H70 in isolation.

In the absence of a masterplan for the whole of the H70 site the Reporters cannot be satisfied that any housing can come forward without the proposed significant westward expansion of H70. There is no detailed assessment or indication of how any housing could be delivered on the northern section of H70 and no modelling of access from this part of the H70 site onto the A85 (see PKC answer to previous DPEA Question 19).

The responses from the Muir Group and the Lamberkin Trust undermine their assertion that H70 is an effective and deliverable site given the need to significantly extend the H70 boundary to access the southern part of the site and that no detailed assessment has been undertaken as to how the northern part of the site could be accessed. The Council has decided that 550 homes could be effective on the northern part of the H70 allocation up to 2024 (SAV10, page 69 table under 5.1.11) accessed via the improved A85/A9 junction, but has acknowledged that there is neither finance in place at present to pay for the junction upgrade nor will there be sufficient development contributions available to fund these from 550 houses on the northern part of H70.

By the Council's own admission (AI\_38 paragraph 4.2 page 7) it has a current unfunded infrastructure cost of circa £21M which has been created by this revised strategy. An alteration to the Proposed Plan to extend H70 westwards and provide circa 1,000 houses on Greenbelt land at this late stage in the plan process will only be capable of funding an unnecessary additional junction on the A9.

Contrast this to the fully assessed and consented access into the Almond Valley site which is acknowledged in the Council's answer to the previous DPEA Question 20 and shown in document AI\_29 which would be capable of making a significant contribution to the wider transport initiatives and would effectively pay for the first link to the CTRLR and open up the longer term development area at Bertha Park. This road will be required to be built even if Almond Valley is not reinstated into the Proposed Plan (AI\_22) further demonstrating the requirement for additional infrastructure that the Council's current strategy creates.



The only reasonable conclusion that the Reporters can make given these facts is to delete H70 and reinstate Almond Valley as set out in the draft Proposed Plan presented to the Full Council Committee on 10<sup>th</sup> January 2012 (AI\_17, bottom table page 73 top right corner or page 103 footer).

#### Question 4

**Would Transport Scotland be content with an initial 1500 unit phase of site H70 that was accessed from the A9 west of Broxden in the manner that has been proposed if that development did not (at least in the short term) have any vehicular connection with the remainder of site H70?**

In its response to the previous DPEA Question 27 (page 4), Transport Scotland states:

*'...the Transportation Review from Lamberkin Trust focuses on the southern part of the H70 and does not allow a full understanding of the implications of the full H70 site.*

*Transport Scotland has just received further information from Perth & Kinross Council regarding the wider implications of the Local Development Plan spatial strategy including the entirety of site H70. Transport Scotland has requested further detail of the work undertaken to enable a fully informed view to be taken.'*

The 'further information from Perth & Kinross Council' has not been published for wider consultation and it appears from the response by Transport Scotland above it requires further details on this matter.

As stated in our answer to Question 3, above, there appears to have been no work done on how the southern and northern parts of H70 can be fully integrated and how an access route would work from the A85.

The Reporters must contrast this to the design work and assessment that has been undertaken by the Council on the Western Edge Link road through Almond Valley into Bertha Park and then linking to the CTRLR project (shown on the plan submitted by PKC as AI\_22). The Council seems committed to build the Western Edge Link despite the fact that H70 will not be in a position to fund any part of it given the cost for the unnecessary additional road junction onto the A9 that it will need to fund if any development is to be deliverable on the southern section of the H70 site and Greenbelt land.

Almond Valley would be able to provide the funding for the A85/A9 junction and the first section of the Western Edge Link road.

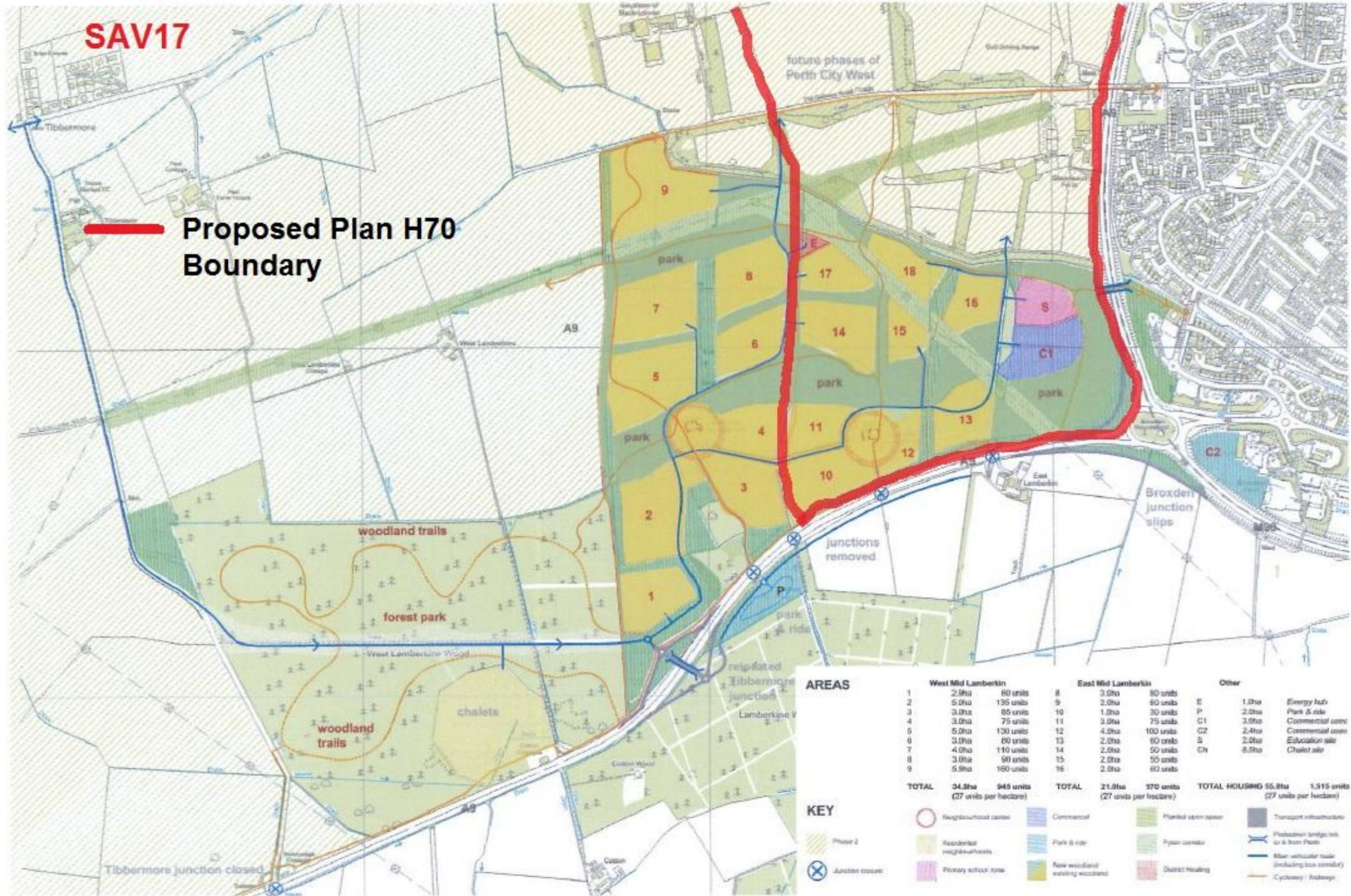
The creation of a mega scale 'cul-de-sac' on the southern part of H70 and additional Greenbelt land is completely at odds with the Scottish Government Policy Designing Streets (Core\_Doc\_014) as there will be no integration with other parts of the city and no opportunity for public transport links through the site and no direct access to existing and proposed facilities.

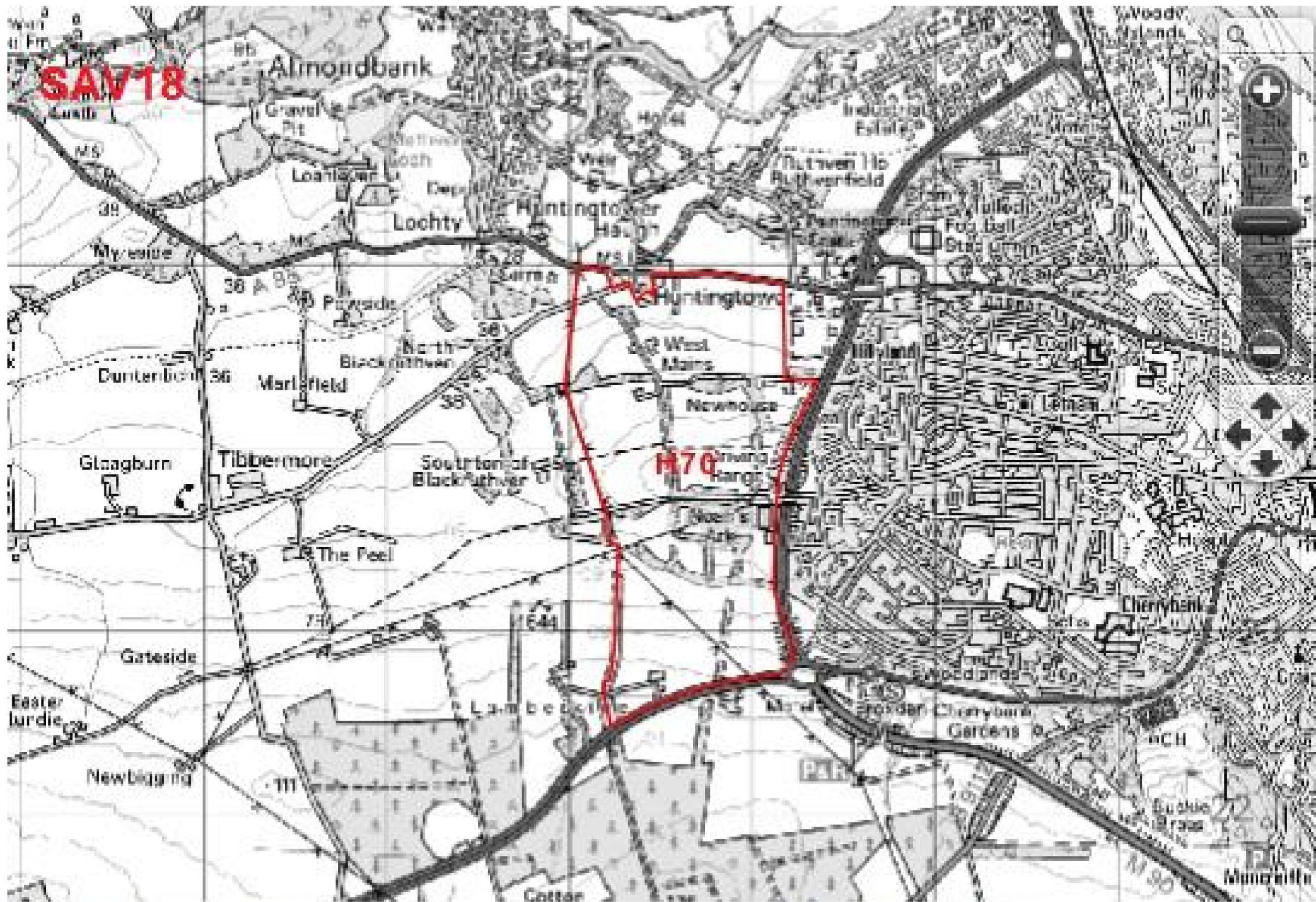
This strategy, if adopted, will force traffic from the proposed development onto the main road network to access key facilities. For example a trip to the proposed Sainsbury's store at the Auctionmart site will take traffic back on to the A9 and to the Crieff Road junction on the A85, potentially without the A85/A9 junction improvements in place. Increased traffic in this instance would have to rely solely on Sainsbury's requirement to widen the A85 corridor between the entrance to its site and the Newhouse Road Roundabout on the A85 to the east of the A9.

The Reporters must compare this chaotic scenario which requires a significant extension of H70 into the Greenbelt with the fully considered, integrated and approved transport infrastructure that would be provided via the development at Almond Valley.



The only rational position for Transport Scotland to take on this matter is to support Almond Valley given its significant contribution towards the wider strategic transport improvements that are capable of being delivered within the plan period. In response, the only rational action that the Reporters should take is to delete H70 from the Proposed Plan and reinstate the previous properly planned strategy including Almond Valley (AI\_17, bottom table page 73 top right corner or page 103 footer).





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# Appendices



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*LODP – 340 – 1 Perth and Kinross Local Development Plan  
Questions on Roads and Strategic Sites  
Response by Ristol Ltd on behalf of the John Dewar Lamberkin Trust  
(the Trust)*

1. Position Statement
2. Briefing Note – traffic modelling - June 2013
3. Perth City West Development Framework - June 2013

Date 14<sup>th</sup> June 2013

Reference: Perth West

## Position Statement



RISTOL

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**Date:** 14<sup>th</sup> June 2013  
**To:** DPEA – LDP – 340-1  
16<sup>th</sup> May 2013 questions  
**From:** Mark Richardson  
BSc (Hons) MRTPI  
**Subject:**

*LDP – 340 – 1 Perth and Kinross Local Development Plan  
Questions on Roads and Strategic Sites  
Response by Ristol Ltd on behalf of the John Dewar Lamberkin Trust (the Trust)*

1.0 This Statement is submitted on behalf of the John Dewar Lamberkin Trust (the Trust) and is made in support of answers to the Reporter's questions (numbers 6, 7, 9, 16, 18, 19, 20, 21, 25, 26, 27, 28 and 30). This Statement is intended to provide a planning policy context for the Trust's interest in the Perth West (H70 allocation) development. Accompanying this Statement is an update on traffic modelling and associated access strategy in support of the Perth West development (contained in *Appendix 2*) and a masterplan framework (contained in *Appendix 3*), both of which are cross referenced in the answers to the above questions. This Statement is consistent with representations made by Ristol Ltd on behalf of the Trust on the Local Development Plan (LDP) Proposed Plan (09166-16-001) and subsequent Schedule 4 Statements (Reference 14, 20D, 22, 27).

1.1 The Trust supports the Perth Area Spatial Strategy contained within the Proposed Plan, with the allocation of Site H70 as an integral part of Perth and Kinross Council's land use strategy. Furthermore, the Trust supports the Council's vision underpinning the spatial strategy, with its focus on delivering new development that facilitates implementation of key Council priorities in the areas of improving transportation infrastructure, education provision, access to affordable housing and quality new places. It is within this context that the Trust have invested time and resources in technical evaluations relating to the delivery of allocation H70, associated engagement with key parties and supporting the principles of developer contributions as contained in the emerging Supplementary Planning Guidance. This is intended to advance the delivery of allocation H70 within the early phase of the LDP.

1.2 The Trust support allocation H70 and the associated Site Specific Developer Requirements for a strategic development of 3,000+ houses, 25 hectares of

employment land, education provision and associated amenities. As the primarily landowner within this allocation, the Trust have advanced technical evaluations in parallel with the LDP review process. This work has focused on understanding the potential development characteristics of the site and addressing constraints to development. Central to this work has been advancing an access strategy to enable allocation H70 to be delivered with the early phases of the LDP. This has involved modelling the traffic impact of the proposed development within the context of the wider LDP spatial strategy and using this assessment to guide a development phasing strategy for the allocation. The aim is to enable Perth West to make a strategic contribution to Perth's housing land requirements within the early stages of the LDP in order to support the wider City investment plan.

1.3 Submissions by the three landowners and developers comprising allocation H70 on key consultation stages in the preparation of the LDP, demonstrate that the respective submissions for each land interest present a compatible, overall framework for the allocation. The key parties are capable of working together to realise phased development through a consistent framework, although at this stage it is too early for fixed agreements, which will emerge in parallel with advancement of detailed technical studies. For example, the Trust are in discussion with the promoters of the northern part of allocation H70 and are progressing complimentary proposals and will, where justified, work together on technical assessments necessary to deliver development in the short term. Neither proposal put forward at this stage rules out, or precludes, the full development of allocation H70 in the fullness of time and both proposals allow for a north/south link to be delivered facilitating full development of allocation H70.

1.4 It is the Trust's position that allocation H70 is deliverable in phases. Work commissioned by the Trust demonstrates that a viable phase 1 exists, constituting the southern half of allocation H70. This would deliver 1,500 houses, a primary school, employment land, park and ride and neighbourhood amenities within the period up to 2024, and is not dependent on construction of the Cross Tay Link Road (CTLR). This first phase would invest in the trunk road network, including an upgraded A9 junction at Tibbermore, improvements to the Broxden junction and provide key sections of the roads infrastructure for a future western bypass. The principles underpinning this view are detailed in *Appendix 2*.

1.5 *Appendix 3* details the framework for a phase 1 development of allocation H70 including investment in non private car vehicular travel patterns within the allocation and into the city centre.

1.6 Key considerations at this stage in the planning process have been;

1. The relationship between allocation H70 and the wider Perth area transportation strategy,
2. An access strategy for the entire H70 allocation.
3. A development phasing strategy.

1.7 The Trust have addressed these key considerations as follows:

- 1.8 Working closely with PKC and Transport Scotland, the modelling of the traffic impact of the development proposal has continued during 2013 in support of the LDP spatial strategy. This is detailed in *Appendix 2*. In summary, the LDP strategy as contained within PKC's *Perth Transport Future (2012)* centres on the delivery of transport infrastructure improvements, comprising the CTLR, improvements to the A85/A9 junction, upgrading trunk road junctions at Inveralmond and Broxden and associated city centre enhancements. Allocation H70 relates to this transport strategy by contributing towards the capital cost of these projects through the Council's developer contributions policy, facilitating improvements to the Broxden junction and through its proposed phasing strategy, relieving traffic pressure on the A85 by concentrating early phased development within the southern part of the site linked to a new A9 junction west of Broxden.
- 1.9 Allocation H70 is therefore an integral part of the LDP transportation strategy whilst being the only strategic development site that does not require construction of the CTLR to be in place prior to the commencement of development, nor utilises the limited traffic capacity on the A85 pre completion of the A85-A9 junction improvements.
- 1.10 The traffic modelling undertaken following the Council's resolution to submit the LDP to Scottish Minister's for Examination, has been informed by Transport Scotland's objection to the LDP (reference 00092-8-001). The aim of this work has been to deliver an access strategy for the allocation which is aligned to the LDP transport strategy and addresses the basis for Transport Scotland's objection which arose as a result of limited information being available on the access strategy at the time of consultation on the LDP Proposed Plan. In their submission, Transport Scotland's expressed concerns on the access strategy for Perth West and its fit with the wider transportation strategy for Perth as it relates to the trunk road network. Transport Scotland noted in the submission that they "would be keen to work with *Perth & Kinross Council and the developers for the site, in order to identify an acceptable access strategy. If an acceptable strategy can be established then objections in relation to the strategic transport network to this allocation can be removed.*" Following this submission, traffic modelling has been undertaken by the Trust in consultation with Perth & Kinross Council and Transport Scotland. This has entailed agreeing a scope of works for modelling, using the Councils PARAMIC traffic model for Perth and testing range of access scenarios and associated development phasing. *Appendix 2* contains a summary of the current work and as at the time of this submission, Transport Scotland have confirmed (10<sup>th</sup> May 2013) that *the principle of the relocated Tibbermore junction west of Broxden to serve the allocation is acceptable and will form part of the AECOM STAG appraisal recommendations.*
- 1.11 However, Transport Scotland require further information on the overall access strategy prior to removing their objection and work currently underway seeks to address this matter. This relates to phasing, access to the A85 as part of the development of the northern part of the allocation and linkages between the A9 and A85. *Appendix 2* contains the latest traffic modelling undertaken to address this point

and has been submitted to Transport Scotland and PKC for review. The Trust consider this submission provides the technical basis for agreement in principle for an entire access strategy for allocation H70.

*An Access Strategy for the Entire H70 Allocation –*

- 1.12 Detailed traffic modelling undertaken in consultation with PKC during 2012-13 has established the principles of an access strategy that will deliver the entire H70 allocation in phases. Commensurate with an LDP review process, this work has focused on strategy and the identification and resolution of key constraints in order to guide detailed design through subsequent planning application processes. Since allocation H70 relates closely to the trunk road network, the assessment work has been undertaken in consultation with Transport Scotland. In parallel with designing an access strategy, the project team has been involved in Transport Scotland's wider assessment of improvements to the A9, including the proposed upgrade to the Tibbermore junction. This has been co-ordinated by AECOM and we understand that they have identified opportunities for improving safety and the predictability of journey times on the A9.

- 1.13 At this stage in the project evolution an access strategy has been presented to both PKC and Transport Scotland which centres on improving road safety, avoiding net detriment to the trunk road network and facilitating the delivery of PKC's transport futures strategy. This is based on a series of key interventions which will be phased to reflect housing construction and delivery of the CTLR and A85/A9 junction improvements as follows:

*Phase 1 – 2015-2024*

- *Perth West South* – relocating the existing junction to Tibbermore (west of Broxden), which is identified as a hazardous at-grade junction, to form a new grade separated all-movements junction 1.5 kilometres west of Broxden (within appropriate junction spacing requirements). This will serve the southern allocation H70 whilst also enhancing the safety of users of the existing Tibbermore Road.
- *Broxden junction* - New slip roads and signalisation
- *Trunk Road Safety Improvements* – closing 8 private dwelling and farm accesses onto the A9 (all within the ownership of the Trust)

*Phase 2 – post 2024*

- *Perth West North* – providing a new junction onto the A85 to serve development on land south of the A85-A9 junction following completion of the CTLR and city centre enhancements.

- 1.14 Based on the modelling work contained in *Appendix 2*, it is proposed that the Phase 1 interventions are delivered as an early development release for up to 1,500 houses, primary school and associated neighbourhood centre, as detailed in the Development Framework – phase 1 contained in *Appendix 3*. Phase 2 would come forward following completion of the CTLR with associated city centre works, as detailed in

*Appendix 2* and deliver a further 1,500 houses within the central and northern parts of allocation H70.

- 1.15 This is a deliverable access strategy with finance and landownership in place to enable the delivery of the strategic intervention through the early phase of the LDP timeframe. In parallel are a range of initiatives relating to public transport (park and ride) and footpath and cycle connections between the proposed residential areas and the existing neighbourhoods to the west of Perth and amenities including proposed neighbourhood centres and primary school. This is detailed in the accompanying masterplan.

*A Development Phasing Strategy –*

- 1.16 Based on the conclusions of the traffic impact modelling on allocation H70, the Trustees have prepared a development framework for the allocation as detailed in *Appendix 3*. Underpinning the framework will be facilitation of PKC’s placemaking objectives (reference policy PM1) and the development framework accompanying allocation H70.

- 1.17 The development framework document in *Appendix 3* outlines the key land use principles that would underpin development of allocation H70 in order to achieve 3,000 plus houses, 25 hectares of employment land, education provision, neighbourhood centre, linkages to Perth city and a district heating system, detailed in the Site Specific Developer Requirements.

- 1.18 It is the Trust’s position that allocation H70 can come forward in phases, with phase 1 based on the southern half of the allocation as shown in the “Phase 1 development framework” contained in *Appendix 3*. The basis for this approach to phasing is as follows:

- *Trunk road safety* – upgrade the A9 Tibbermore Junction, closure of 8 at-grade junctions onto the A9 and improvements to Broxden junction.
- *Alignment with the LDP Spatial Strategy and PKC Transport Futures Study* – releasing a first phase development within the southern part of allocation H70 does not require access to the A85 (thereby retaining vehicular capacity on this strategic trunk road), and is not dependent on the construction of the CTLR or A85/A9 junction upgrade, all of which constrain the short term delivery of strategic allocations including H7 (Bertha Park), H27 (Luncarty) and H29 (Scone).
- *Facilitation of Developer Contributions* – the early release of development within the southern half of allocation H70 enables developer contributions to be made in line with PKC’s Supplementary Planning Guidance, thereby providing capital contributions to enable PKC’s investment in strategic road improvement projects.
- *Deliverability and Viability* – the proposed Phase 1 release of allocation H70 is the subject of continuous development appraisal in line with best practice and can deliver the strategic transport improvements, primary school, neighbourhood centres and circa 1,500 residential units up to 2024.

- 1.19 This proposed Phase 1 release of allocation H70 is controlled by one party (the Trust). Delivery can come forward within the framework of the wider H70 allocation albeit it is also a self standing development proposal in its own right, reflecting previous submissions on the LDP review process. The Phase 1 development concept comprises 130 Ha with the potential to deliver 1,500 residential units of mixed tenure, two neighbourhood centres, a two-stream primary school, 100,000 sq ft commercial land, two neighbourhood centres grouped around existing traditional steading buildings and 40 Ha of park land. The design principles underpinning the Phase 1 allocation reflect the Council's placemaking objectives which underpin the LDP Proposed Plan (Policy PM1). The Trust's project team have undertaken comparative studies of strategic developments throughout the UK and in Europe, in order to inform the masterplanning process. This has included a member of the Trust's team being selected as a member of the Scottish Government's research team into delivering new sustainable settlements, which included visiting the Vauban in Freiburg (awarded the Academy of Urbanisms European City of the Year Award in 2010) and resultant publication for the Scottish Centre for Regeneration Briefing Paper 17/Issues and Lessons from Freiburg Study Visit, in 2011.
- 1.20 Key transport infrastructure includes relocating the A9 Tibbermore Junction to form a grade separated junction which will also serve the development site, the closure of eight at-grade access points to the A9 and new slip roads to Broxden Junction. This Phase 1 development could come forward as either part of the wider H70 allocation or as a unilateral, strategic development project.
- 1.21 Representations reference 09166-16-001 and Schedule 4 – Topic 21 seek amendments to the boundaries of allocation H70 in order to reflect the site boundary shown in the accompanying masterplan and in particular Phase 1 layout. The Council's response has been that detailed boundaries for the allocation should be guided by the access strategy and masterplan framework study, as detailed in this submission.
- 1.22 Strategic technical studies submitted as part of representations on the LDP – Proposed Plan (reference 09166-16-001) have highlighted that there are no strategic constraints towards developing the site in terms of ground condition or service provisions. Technical studies are underway including engagement with statutory utilities and this work will be progressed in parallel with the planning application process.

  
C Mark Richardson BSc (Hons) MRTPI  
Ristol Ltd, on behalf of the John Dewar Lamberkin Trust