

Appendix A

Land adjoining Weston
Evaluation

Draft

A1 Land adjoining Weston

A1.1 Overview

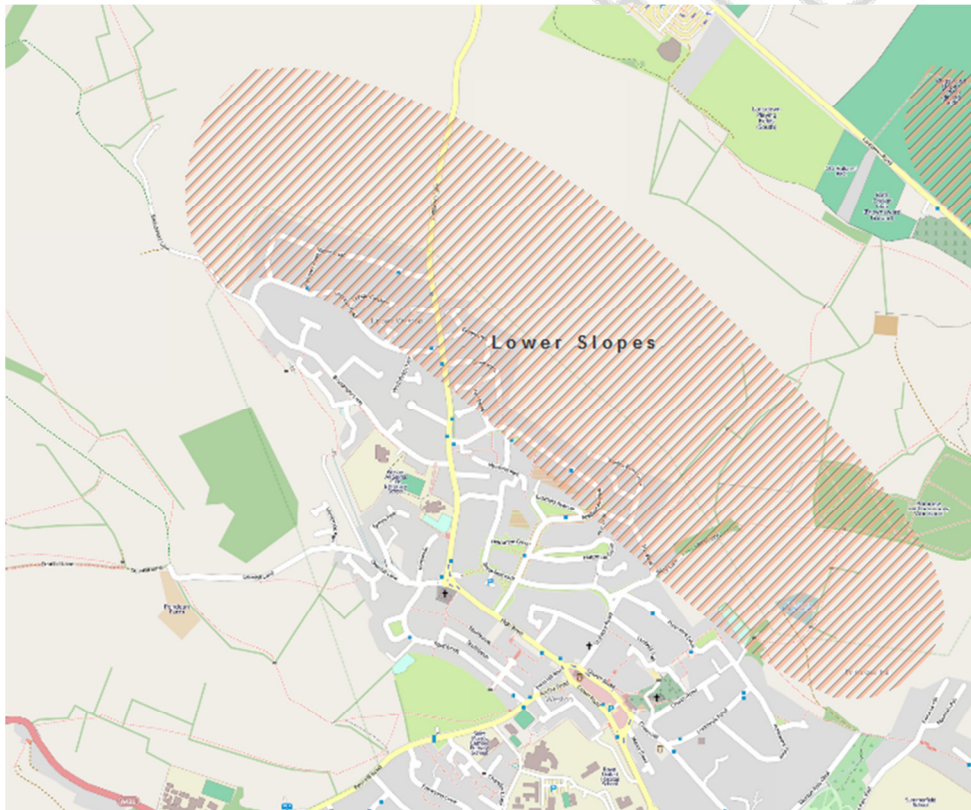
The land is mostly in agricultural use and located on the northern edge of the settlement boundary of Weston, Bath.

The fields on the plateau are angular and of medium to large size. On the slopes the fields tend to be smaller and more regular in shape. There are a small number of woodlands on the steeper slopes. Adjacent uses include agricultural land to the west of Lansdown Lane; Lansdown Park and Ride to the north west.

To the south, the development area is in close proximity to the existing residential area and facilities provided in Weston, with a network of green spaces to the south east, namely – Summerhill Park and Royal Victoria Park.

This location has close proximity to a number of local amenities throughout Weston and South Lansdown including schools, local shops, pubs, GPs and dentists.

Figure 14: Land adjoining Weston Location



A1.2 Census (2011) Mode Share Review

A review of the recently released journey to work information for the ward indicated the following mode share. The results have been ranked to compare the mode share with other B&NES wards and against each of the other locations evaluated.

Table 29: Census Mode Share Review, Weston Ward, Bath²²

Mode	Percentage of Journeys to Work	Ward rank within B&NES (of 37)	Ward rank amongst locations examined (of 8)
Walk	23%	11	2
Cycle	5%	5	1
Bus	9%	9	3
Train	4%	16	4
Car as driver	52%	11	2
Car as passenger	5%	The overall impact of these modes on trip generation from each location is negligible and ward to ward differences between these modes are measures in tenths of percentages. Rankings were therefore not calculated.	
Taxi	0%		
Motorcycle	1%		
Other Public Transport	0%		
Other	1%		
Total	100%	N/A	N/A
Of which sustainable ²³ modes account for:	41%	11	2

Compared to the other locations, Land adjoining Weston has an established pattern of sustainable travel, with the ward having the second lowest proportion of car driver trips of the locations examined.

A1.3 Sustainable Transport

A1.3.1 Walking

The area is in an open rural setting and is bisected by Lansdown Lane which is a key link between the Lansdown and Weston areas. There is currently no footway provision along this rural route. Alternative pedestrian access is currently achieved via the adjacent Public Rights of Way network.

ACCESSION analysis indicates that this location is within a 20-minute walk of the Bath suburb of Weston. The High Street offers numerous local amenities such as a local supermarket, pharmacy, post office, pubs, and restaurants. This location is also within 20 minutes walking distance of The Royal United Hospital, to the south of Weston, a large employer and an important destination within B&NES.

A1.3.2 Cycling

There are no designated formal cycleways in the area however on-street provision offers direct access into the city centre.

ACCESSION analysis indicates that it is possible to cycle into central Bath from in less than 20 minutes. Opportunities for cycling trips to and from this location are therefore considered to be good.

²² Table excludes “work from home” and “not in employment” as these modes do not impact on the modal choice for off-site trips.

²³ Sustainable modes are considered to be walk, cycle, bus, rail, other public transport.

A1.3.3 Public Transport

The bus services operating within 400m of this location are indicated overleaf.

Table 30: Bus Services Operating within 400m, Land adjoining Weston

Service No.	Route	Frequency (two-way)	Bus Stop Location
14	Weston-Bath-Bear Flat-Wansdyke Est-Odd down	5 mins	Eastfield Avenue
17	Upper Weston - Penn Lea Rd - Bath Bus Station - Oldfield Rd - Moorlands Est. - Kingsway	15 mins	Napier Road
20A	Bath bus station-Weston-RUH-Twerton-Fox Hill University-Widcombe-Bath Bus Station	15 mins	Lucklands Road

This location is well served by established local bus services offering good connections to and from central Bath and Lower Weston.

ACCESSION analysis for this location based on existing service provision indicates:

- It is possible to reach Weston and the edge of Bath city centre by bus in 15 minutes.
- It is possible to reach Bath city centre in 30 minutes by bus.
- Regular rail travel to/from this location is unlikely given the distance between this location and Bath Spa station.

All the current bus stops within the vicinity of this location are pole and flag types. Consideration may be given to upgrade these facilities should this location come forward.

A1.4 Highways

A1.4.1 Access

The location of the developmental area offers the potential for multiple access points dispersing demand across the highway network. Access constraints exist around this location dictating that the following access locations should be considered:

- East and west from Lansdown Lane to the northern areas of this location.
- From the existing settlement to the south through a number of existing openings and gaps in the built form
- At the east end of this location from the corner of Summerhill Park.

The majority of trips are likely to travel along Lansdown Lane and High Street before dispersing across routes into Bath (Weston Road, Upper Bristol Road) and towards Bristol/Keynsham (A4, Kelston Road).

A1.4.2 Vehicular Trips

Trip generation for Land adjoining Weston has been calculated assuming a car modal share of 53% and a total of 300 residences, of which 35% are affordable housing units, and a primary school accommodating 220 pupils.

Table 31: Peak Hour Trip Generation

Offsite Trips	AM Peak Hour		PM Peak Hour	
	Inbound	Outbound	Inbound	Outbound
Vehicles	70	110	92	55

A1.4.3 Destination and Assignment

The primary destinations for vehicular trips from this location based on 2001 Census journey to work distributions for car trips originating in the Weston Ward are:

Table 32: Distribution of Car Trips from Weston Ward

Destination	Percentage of Vehicular Trips
Bath	57%
Keynsham	1%
Midsomer Norton/Radstock/Westfield	2%
Other B&NES	6%
City of Bristol	9%
South Gloucestershire	9%
Somerset	1%
Wiltshire	6%
Other	9%
TOTAL	100%
Contained with B&NES	66%

Residents of the Weston ward typically work in Bath with Bristol and South Gloucestershire the next most popular destinations, attributable to this wards location on the western side of Bath. A total of 57% of trips stay within Bath of which 2% are retained within the Weston ward, with 14% destined to the nearby Newbridge ward and 8% destined to the Lansdown ward.

Assignment of vehicular trips has been undertaken and this identifies the following key impacts:

- A significant increase in demand along Lansdown Lane and Crown Road through Weston.
- There are opportunities for trips into Bath to distribute onto the three key approaches (Weston Road, A4 Upper Bristol Road and A36 Lower New Road).

- Trips towards Bristol, Keynsham and South Gloucestershire have opportunities to distribute along the A4, Kelston Road and Lansdown Road towards the A420 west.
- Vehicular trips are also forecast along Lansdown Road to access the A420 east and M4.

Table 33: Additional Vehicular Trips Resulting from Development

Highway/Area	AM Peak Hour				PM Peak Hour			
	NB	SB	EB	WB	NB	SB	EB	WB
Lansdown Road to/from A420	18	11			9	14		
Lansdown Lane to/from Bath	59	92			78	46		
Weston Road			16	10			13	14
Upper Bristol Road to/from centre			9	13			11	7
Lower Bristol Road			21	14			10	18
Kelston Road to/from Keynsham			4	6			5	3
A4 East to/from Saltford			7	11			9	6
A4174 Ring Road	3	2			1	1		
A4 Bath Road to/from Bristol			4	6			5	3

A1.4.4 Changes in Volume and Capacity

The potential impact of development in terms of percentage increase in 2029 traffic volumes has been calculated. This identifies Lansdown Lane as the only highway experiencing a significant increase in traffic volumes as a result of development. Increases along Weston Road, Upper Bristol Road and Lower Bristol Road are minimal and within typical day-to-day variation.

Table 34: Increase in Vehicular Trips as Proportion of 2029 Background Traffic

Highway/Area	AM Peak Hour				PM Peak Hour			
	NB	SB	EB	WB	NB	SB	EB	WB
Lansdown Road to/from A420	2%	1%			1%	2%		
Lansdown Lane to/from Bath	14%	11%			14%	7%		
Weston Road			2%	2%			2%	2%
Upper Bristol Rd to/from centre			1%	1%			1%	1%
Lower Bristol Road			3%	2%			1%	2%
Kelston Road to/from Keynsham			0%	2%			2%	0%
A4 East to/from Saltford			0%	1%			1%	0%
A4174 Ring Road	0%	0%			0%	0%		
A4 Bath Road to/from Bristol			0%	1%			0%	0%

Highway link volume/capacity ratio has been calculated for key links in the study area based on year 2029 traffic forecast with the development.

This identifies potential congestion and delays as a result of insufficient link capacity in the AM peak hour along Lansdown Road north of the racecourse,

Lansdown Lane/Crown Road through Weston, Weston Road, Upper Bristol Road and the A4 east of Saltford. In the PM peak hour only Weston Road is forecast to be overcapacity.

Comparison of Table 34 and Table 35 shows that the impact of development is only significant in percentage terms along Lansdown Lane. Any development of the Land adjoining Weston location would need to consider link and junction capacity improvements along Lansdown Lane/Crown Road potentially as far as Windsor Bridge.

The Weston Road capacity has been calculated based on the section of Weston Lane connecting Crown Road to Weston Road as this is the capacity constraint along this route. The development is forecast to result in an additional 25 vehicular trips along this route in peak hours (one every two minutes).

Table 35: Volume/Capacity on Link, With-Development 2029

Highway/Area	AM Peak Hour				PM Peak Hour			
	NB	SB	EB	WB	NB	SB	EB	WB
Lansdown Road to/from A420	63%	108%			70%	66%		
Lansdown Lane to/from Bath	55%	106%			70%	78%		
Weston Road			115%	85%			107%	80%
Upper Bristol Rd to/from centre			118%	68%			88%	83%
Lower Bristol Road			60%	66%			60%	72%
Kelston Road to/from Keynsham			74%	30%			21%	77%
A4 East to/from Saltford			110%	76%			85%	91%
A4174 Ring Road	35%	49%			35%	57%		
A4 Bath Road			33%	67%			43%	50%

A1.4.5 Potential for Mitigation

An initial evaluation of highway infrastructure and transport services has been undertaken to identify potential measures and constraints along key highways.

- The area has the feasibility to provide a connection to Cotswold Way, a pedestrian/cycle route which connects to lightly trafficked residential streets providing for journeys into Lansdown (and on to central Bath). This route could provide a high-quality, safe route for residents in the area and measures to create and improve this link, such as signage and street lighting, should be considered.
- Weston ranks fairly low amongst Bath wards for use of public transport and improvement to bus services could encourage modal shift, providing relief on routes to/from the city centre. The quantum of development is unlikely to support commercial diversion of services so any masterplan should prioritise pedestrian links to existing stops on Lansdown Lane, Purlwent Drive or Eastfield Avenue. Pedestrian and bus infrastructure improvements should be considered.
- This location is fairly linear and would facilitate multiple points of access dispersing demand across multiple junctions. The linear nature of this

location would also support phased development over long period allowing time for travel patterns to adapt to changes in demand or infrastructure.

- Measures to improve traffic flow along Weston High Street/Crown Road should be evaluated.
- The vehicular impacts of development are largely confined to junctions along Lansdown Lane, High Street, Crown Road and Combe Park. Junctions along this corridor as far as Windsor Bridge may require highway capacity improvement works to facilitate development.
- Expansion and continued promotion of the Newbridge Park and Ride facility should be considered. This could potentially reduce traffic along the corridor by sufficient margin to offset development and reductions in traffic along Lower Bristol Road would allow drivers to divert from Weston Lane which cannot be improved due to existing residential development adjacent to the highway boundary.

A1.5 Conclusions

In comparison with other locations examined in this study, Land adjoining Weston is in an area with a well-established pattern of sustainable travel. Local facilities are of a reasonable standard with opportunities identified to establish sustainable transport routes. A significant proportion of vehicular trips are forecast to travel into Bath providing opportunities to encourage modal shift to more sustainable modes.

This location facilitates dispersal of trips into Bath centre via multiple approaches. However, highway capacity improvements are likely to be required along Lansdown Lane, Crown Road and Combe Park potentially as far as Windsor Bridge. It should be noted that the primary routes into Bath currently experience congestion and some routes are forecast to be over link capacity in the future assessment years however demand from the development on any one link is relatively low due to dispersal. The Newbridge Road park and ride facility offers the opportunity to reduce flows along routes into Bath potentially offsetting some of the impact of development.

Overall the location has established sustainable travel behaviour and highways impact disperses onto multiple approaches and primarily occurs along routes with potential for mitigation through capacity improvement or management measures such as park and ride.