

**WH/251/2010 Site: Former Shredded Wheat Factory, Welwyn Garden City
District Ref: N6/2010/2055/MA**

Decision: Refusal

1. Traffic arising from the proposed development will be detrimental to highway safety, capacity and free flow of traffic and therefore fails to comply with PPG13 and the Hertfordshire Local Transport Plan.
2. In respect of capacity analysis the applicant has failed to demonstrate that the proposed mitigation measures can
 - (i) adequately offset the potential increases in demand.
 - (ii) feasibly and reasonably be delivered.
3. The applicant has failed to demonstrate satisfactory measures to promote sustainable travel and therefore fails to comply with PPG13 and the Hertfordshire Local Transport Plan.
4. The applicant has failed to demonstrate the impact of the site layout upon the safety of pedestrians and cyclists and therefore fails to comply with PPG13 and the Hertfordshire Local Transport Plan

Comments

These comments are based on the following documentation:

- Transport Assessment revision B dated 10 June 2011 and drawings submitted following the issue of a Regulation 19 notice by WHBC.
- Addendum report to the Transport Assessment dated 12 September 2011.

They also relate to pre-application discussions between HCC and the applicants transport consultants Arup and Safety Audits of the proposed highway works.

The assessment is based on the information available at the time of writing and although the Highway Authority considers that some issues may be able to be resolved through discussion there are fundamental issues that account for the Highway Authority recommending the current scheme is refused.

Policy

The proposals would be contrary to the guidance in PPG13 which aims to give priority to people over ease of traffic movement and plans to provide more road space to pedestrians, cyclists and public transport in town centres, local neighbourhoods and other areas with a mixture of land uses.

New development should help to create places that connect with each other sustainably, providing the right conditions to encourage walking, cycling and

the use of public transport. People should come before traffic.

PPG 13 comments that the planning system can have a substantial influence on the safety of pedestrians, cyclists and occupants of vehicles through the design and layout of footpaths, cycleways and roads. Planning can also influence road safety through its control of new development

The proposals would be detrimental to HCC's Local Transport Plan (LTP3) 2011-2031 challenges to:

- Keep the county moving
- Improve accessibility for all
- Improve road safety

To meet these challenges the County Council will ensure the transport and safety implications of development proposals are considered.

Section 3.8 of the LTP states that development will be resisted where

- i) the proposals would increase the risk of accidents or endanger the safety of road or rights of way users
- ii) the proposals would cause or add significantly to road congestion, especially at peak travel times."

Conclusion

The proposed development requires major changes to the highway network adjacent to the site and wider mitigation to accommodate the predicted levels of traffic. However even with the road widening of Broadwater Road and changes to the Bridge Road/Broadwater Road junction the highway network can not accommodate the predicted levels of traffic by 2016 and makes no allowance for future development of the adjacent Pall Mall site. The Highway Authority considers that the proposed highway works will not improve accessibility for local residents and may increase the potential for conflict between vulnerable road users and vehicles. The scheme appears to have given highway capacity a higher priority than the needs of cyclists and pedestrians and this relates to the internal layout in addition to the proposed changes to Broadwater Road. The proposals are therefore contrary to PPG13 and the Hertfordshire County Council Local Transport Plan.

Detailed response

Capacity

- **Trip Rates**

Trip rates for the proposed land uses were agreed between the applicant and HCC at the pre-application stage in March 2010. All trip rates are based on sites within town centres with good access to public transport.

- **Trip generation**

Following agreement of the trip rates a schedule of land use was provided by Arup to calculate trip generation which was input into the WGC Paramics model. The figures for trip generation and trip distribution were agreed on 17/03/2010. It was acknowledged that the land use schedule may change before the scheme was submitted as a planning application. Arup recalculated the trip generation and revised trip generation figures used in the Paramics model on 23/03/2010. HCC consider that the trip generation figures used in both the Paramics modelling and the Transyt modelling are robust. The proposed land use submitted for this application will generate slightly fewer trips than used in the modelling work.

- **Trip distribution**

It was agreed at the pre-application stage that the traffic from the site would be distributed 50% north and 50% south from the site.

- **Growth rates.**

It was agreed at pre-application stage that all future year modelling would be based on low growth rates. The growth rates are taken from the national Temprow datasets.

- **Future year modelling**

Modelling was carried out for the year 2016 and 2021. The modelling for 2021 included for an Supplementary Planning Document (SPD) compliant development on the Pall Mall site. The following modelling exercises were carried out; Paramics 2016, Transyt 2016, Transyt 2021 and Paramics 2021.

- **Modelling of junctions**

Discussions at pre-application (Arup paper Proposed Transport Assessment Methodology 29 July 2009) agreed that, following the modelling in Paramics, certain junctions would be looked at in more detail, particularly the Bridge Road/Broadwater Road signal junction and the new signalised junctions onto Broadwater. In the first meeting regarding scoping (28/9/2009) it was agreed that Broadwater Road/Chequers Roundabout and Broadwater Road/Osbourne Way junctions would be analysed. Although these are considered within the Paramics model which indicates that congestion occurs at these junctions, no further detailed

analysis had been carried out on these junctions in the TA June 2011. The Transport Addendum includes modelling for the both the Broadwater Road/Chequers roundabout and the Broadwater Road/Osbourne Way roundabout and assesses the impact of the proposed mitigation measures at these junctions.

- **Broadwater Road/Bridge Road junction.**

The original proposals for Broadwater Road/Bridge Road signals allowed for a 3 lane approach on each arm and two lane exits on all arms except Bridge Road East. The revised drawings submitted with the Addendum report show 3 lane approaches on Broadwater Road and Bridge Road, 2 lane approaches on Bessemer Road and Bridge Road East. All arms now have a single exit lane. Redesigning this junction has allowed for staggered pedestrian crossing islands to be provided. The alterations to the timings of the traffic signals have improved flow through the junction compared with the earlier layout and design. This is discussed in more detail below.

- **Paramics Modelling 2016**

The Paramics modelling for 2016 is based on the layout submitted in the TA and demonstrates that the network will perform considerably worse in the PM peak when compared with the base model which allowed for an SPD compliant scheme for the site. The modelling includes for widening on the south bound approach to Chequers roundabout.

In the PM peak the main source of congestion is the westbound approach of Bridge Road at the Campus gyratory as the queues consistently block back to the John Lewis roundabout.

The results of the Paramics modelling were fed into the Transyt analysis for the signalised junctions on Broadwater Road.

The table below gives some comparisons between the SPD base scenario and Spenhill scenario in 2016. The figures for the base scenario are taken from MVA Information note 1 Version1 dated 15 April 2010 which allows for an SPD compliant scheme but with the existing road layout. This is compared with the Spenhill scheme with the proposed changes to Broadwater Road.

2016 AM Peak	SPD Base scenario	Spenhill scenario Current application June 2011 layout
Main congestion hotspots	Standborough Road N/B Chequers N/B Parkway S/B Osborn Way S/B	Standborough Rd N/B Chequers N/B Parkway S/B Osborn Way S/B Bessemer road S/B Bridge road W/B
Periodic queuing	Bridge Road/ Broadwater Road	Broadwater Road/Bridge Road
Non released vehicles	<10	1,015
Average vehicle speed (kph)	16	13
Average time spent in network (s)	299	426

2016 PM Peak	Base scenario	Spenhill scenario Current applicatin
Main congestion hotspots	Broadwater Road/ Bridge Road Parkway S/B and N/B Osborn Way S/B Bridge Road W/B Broadwater Road S/B Church Road	Broadwater Road/ Bridge Road Parkway S/B and N/B Osborn Way S/B Bridge Road W/B Broadwater Road S/B Church Road Digswell Road
Non released vehicles	<10	2,353
Average vehicle speed (kph)	14	9
Average Time spent in network (s)	361	591

The volume of non-released traffic gives an indication of the vehicles that could not be released into the network due to congestion. If the value is high (as in the Spenhill scenario) it identifies a congested network that has no available space left for other vehicles to join.

No further Paramics modelling has been carried out to take account of the revised road layout at Broadwater Road/Bridge Road submitted with the Transport Addendum report.

- **Transyt modelling 2016- Broadwater Road**

Transyt modelling has been carried out on the three proposed junctions of Bridge Road/Broadwater Road, Broadwater Road/ Hyde Way and the new joint site access with Taylor Wimpey for 2016. Two scenarios were run for the AM and PM peak, the 'likely peak' scenario and the 'release of held back traffic' scenario. The Highway Authority considers the 'release of held back traffic' the most robust analysis as it ensures all traffic to and from the development is included.

The original Transyt modelling shows that in the 'held back traffic' scenario, the PM peak shows the higher level of congestion with queuing on Bridge Road extending beyond the John Lewis roundabout.

The Addendum report shows the results of the Transyt modelling for the revised junction layout. This shows that this layout does improve flow through the junction, however in the release of held back traffic the PM peak still shows certain movements through the junction are operating above capacity. The Addendum Report confirms that although some congestion occurs in the PM peak this is primarily confined to Bessemer Road and Bridge Road East and that the two more critical arms (Broadwater Road and Bridge Road) are considered to operate satisfactorily. HCC consider that Bessemer Road is a critical arm as it is a principal road the A1000 and designated as a main distributor road. The queuing on both Bessemer Road and Bridge Road East will queue beyond the next junction in the network. The queuing on Broadwater Road for the straight ahead and left traffic needs to be accommodated evenly within the two lanes to prevent queuing back through the Hyde Way signals, this will be dependent on how the lanes are marked between the Hyde Way signals and the Broadwater Road signals. This has not been shown.

Paragraph 4.51 of Guidance on Transport assessments states that the key issue is the need to ensure that development proposals strive to achieve nil-detriment to the strategic network for the opening year and appropriate horizon year. In this case it is necessary to compare the proposals with an SPD compliant scenario as the highway authority have accepted that the redevelopment of this site will have some impact on the highway network.

In paragraph 8.5.7 the TA suggests that the 'Release of held back traffic' scenario would not occur as a proportion of the traffic would relocate onto the adjacent road network beyond the limits of the PARAMICS model. This is dependent on there being an alternative route for this traffic. Although some traffic from areas such as Shire Park may chose to use alternative routes, for other traffic originating within or with destinations within the Paramics model there is no obvious alternative north south route through Welwyn Garden City or east to west.

The TA suggests that the trip generation used in the traffic modelling should be considered an overestimate as the trip generation used in the

modelling is slightly higher than that expected to be generated from the development. However the 2016 modelling does not include for any traffic from the Pall Mall site and the inclusion of these trips would give a greater level of traffic than used in the modelling.

The TA also states that the number of car trips for the office element will be lower than predicted due to the restricted parking, public transport links and travel plans. In response the HA would state that the trip rates used were based on town centre sites with restricted parking and good public transport links.

● **Transyt modelling 2021- Broadwater Road**

The 2021 Transyt modelling was carried out with and without Pall Mall traffic. The cycle time used was 120 seconds and background traffic was increased using low growth factors. Based on the revised junction layout in the Addendum report even without allowing for development on the Pall Mall site, Bessemer Road, Bridge Road East and Broadwater Road are all shown operating with a Degree of Saturation (DoS) of 100% or more in the PM peak with significant queues forming. The results worsen with the inclusion of Pall Mall traffic.

Although background rates were agreed at the scoping and set at low growth, the Addendum report states that the traffic growth figures used may be an overestimate. These growth rates have been calculated using Temprow which is based on Government predictions. Although traffic growth has been lower over the last few years Temprow is considered the most acceptable form of traffic growth prediction. It should be noted that when comparisons have been made with an SPD compliant scheme the same level of background growth has been applied.

● **Future Year modelling 2021 - Paramics**

The future years modelling for 2021 showed a worsening of the network performance when compared with 2016 despite the introduction of the mitigation measures identified in the 2016 modelling.

2021 AM Peak	Spenhill scenario (current application)
Main congestion hotspots Periodic queuing	Unreleased vehicles at Bessemer road S/B Chequers N/B Parkway S/B Bridge road W/B Stanborough Rd N/B at Gosling roundabout Queuing on Bridge Road E/B Broadwater Rd/Tesco junction
Non released vehicles	963

Average vehicle speed (kph)	13
Average time spent in network (s)	392

2021 PM Peak	Spenhill scenario (current application)
Main congestion hotspots	Unreleased vehicles on Bessemer Rd S/B Digswell Rd S/B Chequers N/B Queuing on Parkway S/B Osborn Rd S/B Bridge Rd E/B Broadwater Rd N/B
Non released traffic	3,010
Average vehicle speed (kph)	7
Average time spent in network (s)	735

2021 Saturday Peak	Spenhill scenario (current application)
Main congestion hotspots	Unreleased vehicles on Bessemer Rd S/B Digswell Rd S/B Stanborough N/B Queuing on Parkway S/B Osborn Rd S/B Bridge Rd E/B
Non released traffic	2291
Average vehicle speed (kph)	9
Average time spent on network (s)	576

The results of the Paramics 2021 show that allowing for low background growth, and a series of mitigation measures being introduced, by 2021 the proposals will increase queuing and reduce traffic speeds within the town centre in the PM peak. The proposed mitigation works do not result in a nil-detriment scenario.

Although the scheme submitted in the Addendum report addresses the issues raised previously regarding the length of the pedestrian crossings there are still safety and capacity issues relating to the proposals that the highway authority consider have not been addressed.

- **Broadwater Road/Chequers Roundabout**

The Addendum report contains modelling to consider the impact of the development proposals on this junction in both 2016 and 2021. The proposals lead to increased congestion at this junction by 2016 and therefore as suggested in the Paramics modelling report, mitigation measures are proposed which would widen the northbound approach from Chequers as well as widen the southbound approach on Broadwater Road. The modelling shows that with these mitigation measures in the release of held back traffic scenario for 2016, some arms of the junction are still operating above capacity and queuing has increased on the Chequers arm in the am peak and Broadwater Road west arm in the PM and Saturday peak. However the queues can be accommodated on the road network without affecting other junctions.

- **Osborn Way Roundabout**

The Addendum report contains modelling to consider the impact of the development proposals on this junction in both 2016 and 2021. The proposals lead to increased congestion at this junction by 2016 and therefore as suggested in the Paramics modelling report, mitigation measures are proposed which would widen the southbound approach on Osborn Way. The modelling shows that the proposed mitigation would improve the operation of the roundabout and that it would accommodate the development proposals in the Release of Held back traffic scenario for 2016.

- **Mitigation measures**

The TA states a five fold mitigation strategy:

1. The promotion of sustainable travel initiatives with the proposed development and across the wider WGC area.
2. Implementation highway improvements along Broadwater Road included in the traffic modelling assessment and at the Chequers, Gosling and Osborn Way roundabouts, at the Campus and on Parkway.
3. Linked signal timings of the site access junctions and Broadwater road/Bridge Road.
4. Consideration given to limited future highway upgrades on the road network with the aim of redistributing through traffic onto more strategic routes away from the town centre.
5. Continued monitoring of traffic levels in the town centre to identify where future highway upgrades are most needed.

The Addendum report provides drawings and cost estimates for the mitigation measures identified in the Paramics report.

From the 2016 recommendations

- signalisation of the Campus,
- removal of 50m of on-street parking on the Parkway northbound on the approach to the Campus
- extension by 50m of the Broadwater Rd southbound flare on the approach to the Chequers roundabout
- extension by 25m of the Chequers northbound flare on the approach to the Chequers Roundabout

From the 2021 recommendations

- widening of the southbound and eastbound approaches to the Osborn Way roundabout,
- widening on southbound exit from Gosling roundabout (it should be noted the drawings submitted show widening on the southbound entrance to the roundabout)
- extension of the flare length of Disgwell Road on approach to the Campus

The TA proposed that these mitigation measures be reviewed in more detail at a later date and a monitoring programme set up to establish how traffic volumes are changes and where highway works are needed. HCC and WHBC were concerned that with this approach it would be difficult to ensure that sufficient levels of contributions were included for within any S106 agreement to ensure these works could go ahead. The Addendum report now provides estimated costs of the mitigation works and states that these would be used as a basis for agreeing an appropriate level of developer contribution towards the cost of delivering the works as part of a S106 Agreement. No discussions regarding this have yet taken place. Therefore the HCC considers that it has not been demonstrated that the proposed mitigation measures can feasibly and reasonably be delivered

Access to Pall Mall site.

Although no provision was made within the original Transport Assessment for access to the Pall Mall site, this matter has since been reviewed by Arup and is now included within the TA revision B for the 2021 modelling. Two scenarios have been introduced for the Pall Mall site, one it being used as warehousing with all traffic accessing the site via the Bridge Road left in and left out and one with an SPD mix of offices and residential with 90% of the traffic using the shared Spenhill Taylor Wimpey road and 10% using the network rail access to Bridge Road Trip rates used were the same as those used for the Spenhill site.

The addition of the Pall Mall site traffic increases the amount of queuing

observed in the Paramics and Transyt 2021 modelling which was already showing that the junctions were operating over capacity.

Safety

- **Safety audit**

Following an interim safety audit by Hertfordshire Highways, the applicants have provided a designers response to the points raised in the audit. This has been reviewed by Hertfordshire Highways. The view of the HCC is that while the applicant has managed to address some of the issues raised in the safety audit other matters are still outstanding. The revised junction layouts submitted as part of the Addendum Report have also been submitted for an interim safety report. The following comments relate to this latest report.

The Safety Audit raises the concern that the need for increased capacity has been considered to the exclusion of the requirements of pedestrians and cyclists.

There are a number of issues raised in the safety audit reports which have not been addressed in either the designer's response or in the revised layout submitted with the Addendum Report. Resolving some of these issues may have an impact on the design and capacity of the highway network. Some of the main points are as follows:

1. Proposed signal junctions may not be able to accommodate large vehicles. Although tracking diagrams have been provided, they are not for the worse case type of vehicle and therefore some amendments to the layouts may be required to ensure that kerbs do not get over-run.
2. No tracking has been provided for the traffic movements in and out of the eastern arm of Hyde Way to and from Broadwater Road. The introduction of signals and islands at this junction may make it difficult for delivery vehicles to access the industrial units on Hyde Way.
3. New Southern Access - joint with Taylor Wimpey. The access to No 29 Broadwater Road has still not been incorporated in this junction and the stop line would need to be moved to accommodate access. This would have an impact on the length of the proposed right turn stacking and may impact on the flow through the traffic signals.
4. Pedestrian islands in the centre of the new access road and the store arm of Hyde way are substandard as is the island on the northbound approach to the shared access. These alterations may impact on lane and or footway widths and therefore the highway authority can not be assured that this junction can meet all the necessary safety and capacity requirements.
5. Broadwater Road/Bridge Road junction. The safety audit has raised a number of concerns relating to the layout of this junction that

have not been addressed either in the Designers response or in the new layout submitted with the Addendum report.

Although some of the issues raised in the Original Interim Safety report and the safety comments are detailed matters that could be addressed during the detailed design process for the section 278 agreement, others need to be addressed to ensure that the proposals will not increase the risk of accidents or endanger the safety of road or rights of way users contrary the LTP3.

Sustainability/Accessibility

- **PTU**

There has been discussion between Arup and HCC over the preferred location of the bus stops. The balance is to try and ensure that all residential properties on the site are within walking distance of a bus stop. It has now been agreed between HCC and Arup that new bus stops should be provided between on Broadwater Road, between Bridge Road and Hyde Way. This will allow bus route (403) to be diverted via Hyde Way, ensuring frequent services of four buses per hour each way to the northern part of the site. Agreement in principal has been given by Arriva to divert via Hyde Way which would be subject to appropriate junction alterations at Peartree Way. Arup have provided a layout drawing for alterations to the HydeWay /Peartree junction including the provision to relocate bus stops from Peartree Lane to Hyde way. This plan has not yet received HCC approval. Measures may need to be put in place to ensure that other large vehicles do not start using this route.

The TA sets out proposed improvements to bus services and funding for bus services that would form part of the S106. Generally the £200,000 towards the 403 service would seem a good starting point for negotiation but no details have so far agreed.

The TA also refers to a 5 year contribution which will again need further discussion and should be towards passenger transport enhancements such as services, accessibility issues at WGC bus station, AVL, etc.

The existing bus shelter on the southside of Bridge Road currently blocks the route of any future shared cycleway/footway. The applicant has agreed to carry out the earthworks required to provide a recessed bus shelter at this location.

- **Cycling**

It is proposed to provide 950 cycle parking spaces across the site, 750 located to serve the various units on the site which meets the

requirements of the WHBC parking standards and a further 200 to serve the railway station. Currently there are approximately 120 spaces provided in Hyde Way.

The rail strategy in LTP3 (April 2011) states that safe and secure cycle parking should be provided for 5% of joining passengers. This equates to approximately 400 cycle spaces for Welwyn Garden City Station. If the applicants are proposing to only provide 200 spaces, additional land should be set aside within the development to allow for some additional spaces to be provided as and when required. Currently the cycle racks are located on the public highway. If Hyde Way is 'stopped up' as proposed by the applicant, measures must be put in place within S106 agreement to ensure that all issues relating to maintenance and access are covered to the satisfaction of the highway authority.

It is proposed that following the stopping up of Hyde Way, a cycle route between the Hyde Way/Broadwater Road junction and the railway footbridge will be provided across the site. Measures to ensure that access for cyclists across the site is maintained will need to form part of the S106 Agreement.

- **Pedestrian network - internal/external, crossings**

As part of the proposals it is proposed to stop up Hyde Way as public highway. However a pedestrian route linking from Broadwater Road to the footbridge will be maintained as a public route. The details of this will form part of the S106 Agreement. The pedestrian route will be the southern footway of Hyde Way. This will be a 3m wide footway.

- **Promotion of sustainable travel initiatives**

Although the TA mentions that the proposed measures to mitigate against the impact of the development will include the promotion of sustainable travel initiatives across the wider Welwyn Garden City area, there are no details within the TA of what the measures are. There are proposal to improve bus services to the site through the S106 to meet the aspirations of the SPD, however there are no proposals for improvements outside the immediate site area for cycleways or pedestrians that would encourage trips to and from the site by means other than the private car. HCC consider that there are measures that could be supported to promote sustainable travel initiatives across the wider WGC area which would support the aim of reducing reliance on the private car. For example HCC has aspirations for a bus lane/cycle route on Bridge Road and for the improving the bus station to meet the requirements of the Equality Act.

Travel Plan

A revised travel plan was submitted as part of the Addendum Report. This revised travel plan is a Framework Travel Plan (FTP) and follows the format requested by HCC Sustainable Travel Advisor. It sets the overall

targets and outcomes for the whole site as well as a requirement for individual landowners/occupiers to develop their own travel plans. Each of the individual travel plans would have their own targets specific to their land use but each would feed into the FTP. The FTP co-ordinator would then be responsible for the site achieving the stated targets. The revised travel plan is based on outcomes that are best expressed in terms of the maximum levels of car use to be allowed. HCC considers that format of the FTP is a good starting point for further discussion on issues such as the maximum number of vehicle trips to be permitted from the development and the measures that would need to be put in place to ensure that the demand for parking particularly for the residential and offices can be met on site. HCC considers that subject to these details being agreed and targets and penalties included in the S106, the completion of the Travel Plan could be covered by Planning Condition.

S106 issues

The Addendum Report contains a list of highway and transport items to be covered within a S106 Agenda. This list is extensive and as yet no detailed discussions have been agreed and therefore the Highway Authority are uncertain as to whether the measures put forward will address their concerns, mitigate fully against the proposals and support the aims of the LTP.

Internal site layout

It is proposed that the internal road and footway layout within the site will remain private and not be adopted as public highway. However HCC has concerns that the proposed layout does not fully consider the safety of pedestrians and cyclists and that potential points of conflict have not been reduced.

Though the residential part of the site is in outline only, the main roads in the site form part of the detailed application. It is important that all roads within the site are designed to keep traffic speeds to low. The Addendum Report states that a 20mph speed limit will be enforced throughout the site through signage and traffic calming measures however no details have been provided.

The potential for conflict between pedestrians and cyclists moving east/west across the site and vehicles using the station drop off and surface leisure centre car park still exists. The Addendum report states this will not be an issue as traffic speeds will be low and the only traffic will be vehicles accessing the leisure centre drop off and surface car park. No mention is made of the station drop off. The station drop off is located so that all pedestrians and cyclists coming to or from the footbridge link to the station and town centre will have to cross it

The SPD road layout followed a grid format, with vehicles being able to move throughout the site. The proposed layout separates the proposed Tesco store traffic from the traffic from the remainder of the site, each being served by an access onto Broadwater Road. Similarly the traffic for the store service yard, the hotel and the YMCA can only be accessed from the Bridge Road access. Although this layout will prevent the site being used as a rat run to avoid the traffic signals on Broadwater Road, the Highway Authority was concerned that there was no provision for alternative routing should any of these routes become blocked. The revised TA and drawings show an emergency access route between the leisure centre car park and the northern access road which could be brought into use should the main access road to the site become blocked. The Highway authority would recommend that the fire service should be consulted regarding any access requirements they may have.

Between Hyde way and the new southern access it is proposed to provide a 2m wide footway on Broadwater Road, however drawing number 568_07_802 of Volume 3-Addendum Drawings and Parameter Plans shows an illustrative plan which indicates that this footway will be oversailed by balconies. A proposed ownership boundary is indicated at the edge of the boundaries. The Addendum Report states that the extent of footway oversailed by balconies will be privately maintained however no plan is provided to show whether it is intended that the whole width of footway would be privately maintained or just part of it.

Drawing no 207043-00-231 has been provided in the Addendum Report to demonstrate how a hammer head turning area can be provided on the YMCA access road, however this turning head does not appear to follow the line of the proposed emergency access link, and the tracking over runs the site boundary. The Highway Authority is therefore unable to determine whether an adequate turning head can be provided.

The construction phase drawing indicates a kiss and ride layby on Broadwater Road. It is not clear whether this is within the existing highway layout or the proposed highway layout.

Although it is proposed that the roads within the site will remain private, the Highway Authority has raised concerns regarding the layout at the western end of the proposed shared access road and the connection to the Taylor Wimpey site. This junction is shown with traffic on the shared access road giving way to traffic on the north-south boulevard. The southern end of the boulevard is a dead end that may or may not be used for parking therefore this junction will not operate as a give way but rather a tight bend. It is not clear whether adequate forward visibility can be achieved around this bend even allowing for speeds of 20mph. It is important that adequate visibility is provided between those exiting from the Boulevard and those using the western roadway within the Taylor Wimpey.

Depending on how these roads are connected, traffic from within the Spenhill site could use the Taylor Wimpey Roads to try and avoid the traffic signal controlled junction of the shared access road with Broadwater Road

It should be noted that the proposed Highway Layout drawing in the TA No 207043-00-229 still shows the loading layby on Broadwater Road north of the Hyde way signals which the Highway Authority understood to have been removed from the scheme.

General Comments

Bridge-feasibility

It is recognised within both the SPD and the TA that the footbridge forms an important link between the site and the town centre and railway station and is an important east /west pedestrian link. A separate application has been received for the bridge. The provision of a lift and steps will ensure access by all including the mobility impaired.

Parking

The level of parking required for the development will be determined by the LPA, however the agreed levels of trip generation were based on constraint levels of parking. It is noted that for all uses on the site, the levels of parking have been constrained apart from for the proposed food store, where the level of parking is almost the maximum requirement based on the WHBC parking standards. The TA sets out the proposed parking strategy and this should be agreed with the LPA.

Within the GTP it is proposed that parking on street in the site would not be permitted except in designated bays between 0600-1800 Monday to Saturday. The TA acknowledges that the restrained level of parking for the residential and office part of the development may have an impact on parking in the surrounding residential area and puts forward a proposal to introduce a CPZ across the western part of Peartree. This would be a matter for the LPA to determine. The aims of the Green Travel Plan will only be achieved if parking from the development is not allowed to spread off site. How this is to be achieved will depend on the measures in the individual Travel Plans, S106 agreement and management strategies of the occupiers of the site.