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## HIGHWAY REPORT

## REGARDING

## The Redevelopment of Former Chambers Bus Depot Church Square Bures St Mary Suffolk CO8 5AB

The proposal is the construction of local convenience store and 10 no. apartments/houses (a net increase of 9 dwellings) including associated drainage, parking, hardstanding, fences/walls and other infrastructure (following demolition of outbuildings and in-filling of former vehicle inspection pits, partial demolition of former bus depot and house)

## KEITH ANTHONY BERRIMAN - EXPERIENCE \& QUALIFICATIONS.

I am an Incorporated Engineer, a Fellow of the Institute of Highway Engineers, a Fellow of the Chartered Institution of Highways \& Transportation.

I have been engaged in the practise of highway and traffic engineering for over forty-five years. I have worked in both the public and private sector since 1975 and have been an independent consulting engineer since 1988.

I provide specialist highway, traffic and transport advice to developers, Local Authorities, planning consultants, architects, and engineering consultants, on highway, traffic, and transport issues.

I have advised on all types of proposals including, residential, commercial, leisure, education, retail, and roadside services developments: having advised on small and large examples of such projects.

Over the years, I have given highway and traffic evidence at many public inquiries, including Section 78 inquiries. Local Plan Inquiries, and Roads Inquiries.

Formerly, I was Head of Highways Development Control at Essex County Council. I am now Director of The Highway Traffic \& Transport Consultancy Ltd (The HTTC Ltd).

I have carried out investigations and visited the former Bures Bus Depot site, to carry out observations, for the purposes of providing this report.

Keith A. Berriman
I.Eng., FIHE FCIHT.

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### 1.00 Highway and Traffic Issues related to the former Bures Bus Depot site.

1.01 This report considers the highway and traffic issues related to this proposal, which is...

The construction of local convenience store and 10 no. apartments/houses (a net increase of 9 dwellings) including associated drainage, parking, hardstanding, fences/walls and other infrastructure (following demolition of outbuildings and infilling of former vehicle inspection pits, partial demolition of former bus depot and house)
1.02 This follows from the instruction by Mr. Charles Aldous to The HTTC Ltd., to assess the main issues raised in the Transport Assessment (TA) submitted by Ardent Consulting Engineers (ACE), in order that he can make this report available to Bures St. Mary Parish Council. This report also considers the acceptance of this proposal by Suffolk County Council, as County Highway Authority (CHA).
1.03 As will be seen, the conclusion of this report is that this development is not acceptable in highway and traffic terms, and should be refused on highways grounds since there will be an unacceptable impact on highway safety.
1.04 Various concerns are raised in this report which have not been considered in the ACE TA, nor do they appear to have been considered by the CHA , or the Road Safety Audit team. These mostly pertain to the assessment of the practical impacts of the significant increase in traffic flows (e.g. pedestrian, cycle, car) at the proposed substandard access, located directly at the junction of Church Square with High Street/Bridge Street, the classified highway B1508.

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1.05 Taking account of the information submitted with the planning application, it is the case that this proposal should be refused on highway safety grounds with the following wording, or similar, of the main refusal reason.

This development proposal will result in significant increases in traffic flows (e.g. pedestrian, cycle, car) at a poorly located and designed access directly at the existing junction to the B1508 Bridge Street/High Street, at a blind bend, resulting in high total numbers of conflicting and hazardous movements of all traffic types in this location, to the detriment of highway safety.
1.06 Other refusal reasons might also be properly added as below.

This development will result in an unacceptable mixing of delivery hgv's, manual delivery movements, commercial refuse collection vehicles, residential refuse vehicles and customer and residential traffic (pedestrian, cycle, car) within the site, to the detriment of highway safety. This may also adversely restrict the convenient use of on-site parking facilities, potentially leading to increased demand for on-street car parking in this area which is already subject to high demand. Delivery hgv's and commercial refuse collection vehicles appear to be likely to park at or near to the junction, blocking the site access and adversely affecting the pedestrian access route, in order to move goods to the store area or collect store refuse.

The development does not comply with the residential guidance (Manual for Streets and SCC emerging document 2020) for limiting the reversing distances of refuse vehicles and fire tenders with the consequential increased potential for collisions, including pedestrians and cyclists. As regards the latter, this does not comply with the Building Regulations (Requirement B5). Hence, any planning consent may not be implementable.

Car parking facilities do not comply with current SCC guidance, potentially leading to increased demand for on-street car parking in this area which is already subject to high demand, including parking along the access route, including within the new residential area.

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### 2.00 Reasoned justification for the proposed main highway refusal reason 1.

2.01 Proposed first refusal reason.

This development proposal will result in significant increases in traffic flows (e.g. pedestrian, cycle, car) at a poorly located and designed access directly at the existing junction to the B1508 Bridge Street/High Street, at a blind bend, resulting in high total numbers of conflicting and hazardous movements of all traffic types in this location, to the detriment of highway safety.

## Actual increase in activity at the access and in its vicinity.

2.02 The ACE TA text does not set out the actual total daily weekday increases in traffic flows at the proposed substandard access. It refers only to the development generated flow levels during the network peak flow hours. This may be appropriate for the assessment of junction capacity. However, to properly consider what the increases will be for the potentially conflicting and hazardous movements at that access (and on the highway in the vicinity), one must consider total additional traffic flows e.g. the additional flows of pedestrians, cyclists, cars and hgv's produced by the development proposal.
2.03 In order to do this, one must determine what the current planning use of the site is, and consider if this is a realistic planning fallback position with which to assess the likely vehicle flows of the existing site use, for comparison with the proposed development flows.

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2.04 This existing site use is confirmed in the TA...
2.13. The entire site was then leased to a pizza oven manufacturer (Dragon Ovens) in 2017 until surrender of their lease in early April 2021, and the site has now been sold with full vacant possession. A retrospective planning application (BDC ref DC/19/02345) was granted consent for B2 use on the site in March 2020.
2.14. The former depot buildings extend to over 7,200 sq ft (669m2) Gross Floor Area (GFA), with the office areas and a single linked residential dwelling house (currently occupied) providing a further 2,850 sq ft (265m2) of accommodation. The total employment floorspace totals some $737 \mathrm{~m}_{2}$ GFA for the workshop/depot and ancillary offices and stores.

NB - In view of the above, any references to the bus depot vehicle flows are irrelevant and cannot be considered as a realistic planning fallback position.
2.05 a) At ACE Table 5.5, the TA then shows trip rates, and peak hourly flows, for this realistic planning fallback position, with a gross floor area (GFA) of 737 sq.m. This data is taken from the ACE TRICS data tables at pages 162 to 173 of the TA. From these TRICS tables the following daily, two way flows (total rates) are calculated for this consented use of the site [total rate per 100 sq.m GFA x 737/100].

Daily all vehicles $(7.295 \times 7.37)=54 \mathrm{vpd}$
Daily OGV's ( $1.435 \times 7.37$ ) $=11 \mathrm{vpd}$
Daily cyclists $(0.251 \times 7.37) \quad=\quad 2$ cyclists/day
Daily pedestrians $(0.814 \times 7.37)=6$ peds/day
[Total people per day on site $=(9.138 \times 7.37)=67$ people per day]
[NB - divide the above by 2 to get approximate arrival and departure numbers]

## The Highway Traffic \& Transport Consultancy

2.05 b) Again, using the TRICS data submitted by ACE, but now for the convenience store of 428 sq.m GFA, the following comparative daily flows are evident. This data is taken from the TRICS data tables at pages 202 to 218 of the TA.

| Daily all vehicles | (221.954 $\times 4.28$ ) | = | 950 vpd | (v54) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Daily OGV's | ( $2.793 \times 4.28$ ) | $=$ | 12 vpd | (v 11) |  |
| Daily cyclists | (10.861 $\times 4.28$ ) | = | 46 cyclis | /day | (v2) |
| Daily pedestrians | ( $338.463 \times 4.28$ ) | $=$ | 1449 pe |  | (v 6) |

[Total people per day on site $=630.083 \times 4.28=\mathbf{2 6 9 6}$ people per day] This data is taken from the TRICS data table at pages 162 to 173 of the TA.(v 67)
[NB - divide the above by 2 to get approximate arrival and departure numbers]
2.06 Comparing the above two sets of traffic movements, the consented use of the site $v$ the convenience store use of the site gives a total traffic movement comparison at and along the proposed substandard access of some:

Consented use of site $\mathbf{7 3}$ per day v convenience store use $\mathbf{2 4 5 7}$ per day This demonstrates the substantial additional level of activity at the proposed substandard access (and in its immediate vicinity). NB - this will be even greater if the traffic movements related to the residential proposals were included. The significant number of additional "all traffic type trips" of some 2400 per day, indicates the high level of additional potential traffic conflicts at and along the site access and on the highways immediately adjacent to the site.

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2.07 When comparing "Total People" visiting the site for the consented site use and the proposed convenience store use, the ACE TRICS data figures reveal that the consented use produces 67 total people per day whereas the proposed convenience store use produces $\mathbf{2 6 9 6}$ total people per day.
2.08 As can be seen at 2.05 , these are extremely significant increases in the potential for conflicting movements at the access, across the High Street B1508 at the blind bend, and in the immediate vicinity of the site. This is particularly concerning when considering the proposed poorly located and designed access, in this specific location, where these interactions will take place between these various traffic types, including the "unprotected" cyclists and pedestrians, with the latter no doubt including mothers with children (on foot and in prams).

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Highway safety issues relating to the significantly increased use of the proposed substandard access, and traffic interactions on Bridge Street/High Street B1508, Church Square, and the internal layout.

Extract of proposed access and minor works.

2.09 ACE has submitted a series of hgv turning geometry plans relating to a 10 m rigid delivery vehicle, and a standard residential refuse vehicle. These are useful in explaining the dangerous manoeuvring difficulties likely to be experienced by the drivers of such vehicles visiting the site. NB - it is not clear why ACE has not chosen an articulated hgv as the "design vehicle", as it seems likely that such a sized hgv will deliver to the site.

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2.10 It is noted that the Road Safety Audit (RSA) gives no consideration to these hgv turning geometries, even though the RSA guidance GG119 for Stage 1 RSA's says..

## Are widths and swept paths adequate for all road users?

Similarly, the CHA does not appear to have considered these serious issues. Indeed the RSA and CHA assessments appear to be lacking in other important highway safety considerations as set out in GG119 for Stage 1 RSA's, and as forming any standard Highways development Management assessment of a development proposal e.g.

Are there any conflicts between turning and parked vehicles?
Is the junction type appropriate for the traffic flows and likely vehicle speeds? Have all walking needs been considered, especially at junctions?
2.11 As set out below, the ACE TA hgv turning diagrams confirm a catalogue of critical highway safety issues demonstrating the hazardous hgv manoeuvres produced by the proposed development, affecting the B1508, Church Square and the site access.
2.12 Even if it is claimed that the Co-op will try to ensure that only this 10 m sized vehicle will deliver to the site (the ability to do this seems unlikely), the consent is likely to be for a convenience store use and any future company taking over the store is unlikely to be controlled in such a way. In that regard, it seems likely that articulated hgv's will visit the site. It has not been demonstrated that

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these can be turned within the site, leading to this delivery vehicle type having to sit on the access road whilst unloading and having to reverse into/out of the site across the adjacent junction area. The TA should include articulated hgv turning diagrams for all internal and external manoeuvres.
2.13 Below are the submitted 10 m rigid hgv and refuse vehicle turning geometry plans extracted from the TA, with relevant comments.
a)


The entering hgv has to cross the centreline of the High Street on the blind bend, into the opposing northbound traffic stream. The entering hgv also takes up the whole of the entry road width, crossing the centreline of the access road, into the opposing (exiting) traffic stream, and where crossing southbound pedestrians are unlikely to have adequate visibility of the approaching hgv , and where it is unlikely that the hgv driver will have adequate sight of crossing pedestrians. In both cases, the hgv driver may be forced to come to a standstill in the major road, or across the major road, or in the access road, due to the opposing vehicles.

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b)


The entering refuse vehicle has to significantly cross the centreline of High Street on blind bend, blocking the whole lane of the opposing northbound traffic stream. The entering hgv has to cross the centreline of the access road, into the opposing (exiting) traffic stream, and where crossing southbound pedestrians are unlikely to have adequate visibility of the approaching hgv, and where it is unlikely that the hgv driver will have adequate sight of crossing pedestrians. In both cases, the hgv driver may be forced to come to a standstill in the major road, or across the major road, or in the access road, due to the opposing vehicles.

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c)


The $10 \mathrm{~m} \mathrm{hgv} /$ refuse vehicle driver is unlikely to have adequate visibility of an approaching southbound major road vehicle, at the point at which he has to commit to driving forward to cross the southbound traffic stream on the shown necessary alignment to enter the access. If he creeps forward to maximise his visibility of southbound approaching vehicles, then these turning diagrams do not reflect that practical manoeuvring situation. In both cases the hgv movement conflicts with left turning vehicles into Church Square, and into the site.

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d)


In both the above cases, the exiting hgv has to cross into the entry route of any left turning vehicle entering the proposed development and entering Church Square. As the hgv driver has to commit to this movement within the access road, not at the Give Way line, and, at some distance from the junction with Church Square, it is unlikely that any southbound left turning entering driver will have adequate warning of such a movement and will meet the exiting hgv head-on. Furthermore, at the point where the hgv driver crosses into the entry lane, he will not have an adequate view of southbound vehicles on the B1508. Similarly, any light vehicle driver entering the site, turning right from the B1508, will be unlikely to expect such an unusual movement and will have to brake to a sudden halt when the hgv blocks his entry route. The hgv drivers cannot make any attempt to cross to, and use, the "Give Way" markings at the junction of Church Square with the B1508, as it will not be possible to physically carry out this manoeuvre.

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e)


For these hgv movements, the likelihood is that the hgv will have to stop at an oblique angle, at the Give Way markings, and thus straddle the whole of the carriageway of Church Square, blocking access to/from the square.
2.14 It might be argued that the number of hgv movements will be relatively low. However, it is clear that all these hgv movements will produce such fundamentally dangerous, unexpected and hazardous conflicts with vehicles using the highways adjacent to the site that even smaller numbers than these will produce unacceptable adverse highway safety conditions. Indeed, it may well be that these are illegal movements, being an offence. This is a matter for the CHA to consider. In all cases, the hgv driver and all other drivers exiting the site, have to view, consider, and assess multiple potential vehicle approaching movements, plus potential cyclist movements, and pedestrian crossing movements at each prescribed "uncontrolled crossing" (see drawing at page 9 above).

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2.15 As regards pedestrian movements at these uncontrolled crossings across the B1508 and Church Square (i.e. each dealing with a proportion of the total daily pedestrian flow of some 1450 peds per day), it is noted that the RSA raised pertinent highway safety problems about these and proposed pedestrian crossing locations e.g. the RSA said...

### 3.4 Non-Motorised User (NMU) Provision

3.4.1 PROBLEM

Location: High Street - proposed crossing point, northem side of the carriageway.
Summary: Insufficient pedestrian / traffic intervisibility may lead vehicle to pedestrian collisions.

The ACE "Designer's Response" does not appear to satisfactorily address the RSA "Problem". Also, the Designer appears to rely on this point.
safer. There is no existing accident problem in the vicinity
and speeds are low, in the region of 20 mph ( $85^{\text {th }} \%$ ile). The
This comment has no relevance, as it is not the existing situation that is of importance, but the future hazardous "with development" situation, with the significant additional daily vehicle flows (some 950 vpd ) and additional pedestrian movements (some 1450 peds/day) at the site and on the adjacent highways.
2.16 Furthermore, the proposed B1508 pedestrian crossing point is located at a wide section of carriageway, where, even with the proposed footway widening, pedestrians still have to walk more than 8 m to cross the road. This puts them in conflict with approaching vehicles for significant period of time, particularly so for mothers walking with children and/or using a pushchair, and elderly or disabled customers.

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2.17 It is also noted that the indicated Stopping Sight Distance for approaching southbound drivers relies on the driver's approach visibility being available across the inside of the bend. Thus, requiring the east/northbound lane being clear of any vehicles which will block that drivers' approach visibility. As there will be increased vehicle flows due to the proposed development, including vehicles waiting to turn into the site and/or Church Square, this clear sight area cannot be guaranteed or relied upon.
2.18 Taking account of that situation, the actual SSD available to a southbound driver is likely to be more of the order of only some 15 m (or less). The ACE TA states at page 9.
the recorded $85^{\text {th }}$ \%ile southbound speed along the site frontage was 22.6 mph The TA refers to the Manual for Streets for its assessment of the SSD and major road junction visibility distances (see below for relevant table)


Using the TA $85^{\text {th }}$ \%ile figure of 22.6 mph , this gives an SSD in the "up to 25 mph " band i.e. requiring an SSD and major road distance of 33 m . Hence, the TA proposed major road distance of 23 m is much less than required. Worryingly, the actual practical SSD of some 15 m is less than half of the required distance, meaning that the southbound driver could not stop in time if confronted with a pedestrian in the carriageway in front of him.

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2.19 Furthermore, if the required SSD is 33 m , then the proposed 23 m major road distance at the site access junction, when looking north, is also inadequate, as it also should be 33 m . In order to comply with this, it seems likely that a significant proportion of the building frontage will need to be removed.
2.20 All of these same entry and exit movement types will be carried out by the drivers of the significantly increased levels of light vehicles (saloon cars and lgv's - in excess of some 950 movements per day). One has to ask how those drivers will deal with the various turns shown in the series of diagrams above. Certainly, light vehicle drivers exiting from the site will have the same problems of having to position their vehicles obliquely across the junction of Church Square with High Street, in order to comply with the Give Way markings, and then turn left or right onto the High Street. Effectively, this is a "two stop" procedure at the site access "Give Way" and the Church Square "Give Way" with the B1508.
2.21 This will have an effect on the capacity of the access to Church Square and the junction of Church Square with the B1508, as there will not be an available free flow movement to turn left, and an awkward manoeuvre to turn right. I note that ACE confirms that it has taken advice from the TRL as to whether PICADY can properly model these junctions. This advice should be included within the submission, so that it can be properly considered by interested parties. My suspicion is that a more complex model than PICADY is likely to be required to properly assess the junctions capacities.

## The Highway Traffic \& Transport Consultancy

2.22. Similarly, for the right turn entry from Bridge Street into the site access, the light vehicle driver will have to drive obliquely across the junction with Church Square. It seems unlikely that he will be able to signal and make a separate right turn into Church Square, and then signal and make a separate left turn into the site, due to the lack of adequate distance to carry out such a manoeuvre.
2.23 Additionally, there may well be a signalling problem as the driver will be signalling right turn into Church Square but any following driver, turning into Church Square, may not expect the crossing movement into the site access. For the southbound drivers on the B1508, they are unlikely to expect a car to drive across them, but more likely to expect the driver to turn right into Church Square, as the right turn signal would indicate.
2.24 The TA should include the saloon car/lgv turning plans for all the necessary turns to enter and exit the site, so that these potentially dangerous and awkward movements can be properly considered. As indicated above, the level of daily entries and departures related to the convenience store will total some 950 vpd , with pedestrian flows within the same area totalling some 1450 peds/day. Clearly, the potential for vehicle/vehicle conflicts and vehicle/pedestrian conflicts will be high. This will be for every day that the facility is open, and for the period of any planning consent, if that was to be granted.

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2.25 Hence as regards the above submitted information, this development should be refused on the indicated highway safety grounds, and on grounds of the severe residual cumulative adverse highway safety impacts on the adjacent highways and within the site i.e. the National Planning Policy Framework (NPPF) confirms this.

## 111. Development should only be prevented or refused on highways grounds if

 there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.
### 2.26 Comments as regards the initial length of the access road, as shown below.



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2.27 If it is accepted that the design vehicle for the convenience store must be an articulated hgv, then such a vehicle must sit on the access road carriageway, effectively blocking that route in order to unload. Additionally, the artic will be unlikely to be able to turn within the site. Hence it will have to reverse into, or out of, the site, across the Church Square junction with the busy B1508. Such a movement will produce conflicting and dangerous traffic conditions.

## Hazardous, inconvenient \& unacceptable access route design - refusal reason 2.

This development will result in an unacceptable mixing of delivery hgv's, manual delivery movements, commercial refuse collection vehicles, residential refuse vehicles and customer and residential traffic (pedestrian, cycle, car) within the site, to the detriment of highway safety. This may also adversely restrict the convenient use of on-site parking facilities, potentially leading to increased demand for on-street car parking in this area which is already subject to high demand. Delivery hgv's and commercial refuse collection vehicles appear to be likely to park at or near to the junction, blocking the site access and adversely affecting the pedestrian access route, in order to move goods to the store area or collect store refuse.
2.28 The TA shows that a 10 m rigid hgv can turn within the "delivery area". However, as shown in the above drawing (2.26) there does not appear to be any connecting route to the goods storage area (see "store" highlighted on the drawing) from the delivery area. This means that deliveries will have to be manually wheeled/carried along the main pedestrian route to the store, thereby conflicting with the entering and exiting pedestrian flows (including mothers with pushchairs, and disabled shoppers etc.). Alternatively (and more likely), the

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delivery driver will unload from the more convenient access road position, with easy access to the "store", but blocking the vehicular access route to the car park and the residential properties, as well as again conflicting with the use of the pedestrian route. Indeed, in such a circumstance the delivery driver may well choose to then turn around within the store car park aisle (the refuse vehicle turning area), as this will be a much easier manoeuvre for him, rather than using the smaller, tighter delivery area. Hence, adding further to the conflicts between hgv's and customers using the car park. NB - based on the TA TRICS data, the customers using the car park could be some ( $273.595 \times 4.28$ ) 1172 "vehicle occupants" each day.
2.29 Additionally, the delivery area includes a refuse storage area. It seems unlikely that a commercial refuse vehicle could manoeuvre into this area. Hence, the refuse vehicle will have to park on the access road, blocking the vehicular access route to the store and the residential properties, as well as again conflicting with the use of the pedestrian route. This commercial refuse vehicle will then also turn within the customer car park.
2.30 Again it may be argued that the number of hgv movements may be relatively low, but it is the time spent unloading goods, and collecting refuse that will lead to unacceptable blockages of vehicular access to the site. Additionally, the mixing of reversing hgv's and the numerous pedestrian/cyclist shoppers in the customer car park will lead to the potential for conflicts between these unprotected customers and these manoeuvring hgv's.

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2.31 Manual for Streets, and the SCC emerging residential design guidance warns of the consequences of such situations. This guidance makes clear the dangers of refuse vehicles reversing where members of the public are located (here- moving around the car park area). Presumably, this applied to all hgv's.

## Manual for Streets says...

6.8.8 Reversing causes a disproportionately large number of moving vehicle accidents in the waste/recycling industry. Injuries to collection workers or members of the public by moving collection vehicles are invariably severe or fatal. BS 5906: 2005 recommends a maximum reversing distance of 12 m . Longer distances can be considered, but any reversing routes should be straight and free from obstacles or visual obstructions.

## SCC Residential Design Guide (emerging guidance) also says....

### 2.3.5.2

A clear working area is required around the vehicle of at least 3.5 m wide and 4 m long and, wherever possible, routing should always operate forward and reversing avoided. The additional time adds to the cost of providing the service and this manoeuvre causes a disproportionately large number of moving vehicle accidents in the waste industry. Injuries to collection workers or members of the public by moving collection vehicles are invariably severe or fatal.
2.31 Furthermore, three sets of access doors open outwards onto the main pedestrian route (highlighted in yellow above at 2.26). This is dangerous and will block the main pedestrian route at the site, thereby conflicting with the pedestrian flows (including mothers with pushchairs, disabled shoppers etc.) to and from the site and possibly forcing pedestrians onto the vehicular access road.

## The Highway Traffic \& Transport Consultancy

2.32


As regards the refuse vehicle turning (and potential delivery hgv turning) within the customer parking area, this is a basic problem caused by the design of the development which does not provide a separate and segregated service area for delivery of goods and collection of refuse - as most store developments do. The same concerns as above must be raised..

Reversing causes a disproportionately large number of moving vehicle accidents in the waste/recycling industry. Injuries to collection workers or members of the public by moving collection vehicles are invariably severe or fatal.

## The Highway Traffic \& Transport Consultancy

2.33 Such a manoeuvre, within the store car park, with pedestrians milling about (again, including mothers with children, and old/disabled customers - potentially some 1172 per day) cannot be considered a safe environment. It may well be found acceptable in an industrial/commercial situation where pedestrian movements are low, but it is not acceptable here. Furthermore, pedestrians and cyclists accessing the residential area, appear to have to be on the same vehicular surface as the manoeuvring hgv.

Unacceptable reversing of hgv's in a residential setting - refusal reason 3.
2.34 The development does not comply with the residential guidance (Manual for Streets and SCC Draft document 2020) for limiting the reversing distances of refuse vehicles and fire tenders with the consequential increased potential for collisions, including pedestrians and cyclists. As regards the latter, this does not comply with the Building Regulations (Requirement B5). Hence any planning consent may not be implementable.


Once again, the RSA has not considered an issue which is clearly set out in the GG119 guidance i.e.

Has provision been made for safe access and egress by emergency vehicles?

## The Highway Traffic \& Transport Consultancy

2.35 Clearly, no refuse vehicle turning area or fire tender turning area has been provided at the residential turning head. The required reversing distance is then some 40 m . As already stated above, for refuse vehicles, Manual for Streets, and the SCC emerging residential design guidance warns of the consequences of such situations. This guidance makes clear the dangers of refuse vehicles reversing where members of the public are located (here- moving around the car park area).

## Manual for Streets says...

6.8.8 Reversing causes a disproportionately large number of moving vehicle accidents in the waste/recycling industry. Injuries to collection workers or members of the public by moving collection vehicles are invariably severe or fatal. BS 5906: 2005 recommends a maximum reversing distance of 12 m . Longer distances can be considered, but any reversing routes should be straight and free from obstacles or visual obstructions.

## SCC Residential Design Guide (emerging guidance) also says....

### 2.3.5.2

A clear working area is required around the vehicle of at least 3.5 m wide and 4 m long and, wherever possible, routing should always operate forward and reversing avoided. The additional time adds to the cost of providing the service and this manoeuvre causes a disproportionately large number of moving vehicle accidents in the waste industry. Injuries to collection workers or members of the public by moving collection vehicles are invariably severe or fatal.
2.36 For fire tenders, the Building Regulations requirement is that the maximum reversing distance is 20 m . Hence, this proposal does not comply with the Building Regulations (Requirement B5). Therefore, any planning consent may not be implementable.

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## Car parking numbers - Refusal reason 4.

2.37 Car parking facilities do not comply with current SCC guidance, potentially leading to increased demand for on-street car parking in this area which is already subject to high demand, including parking along the access route, including within the new residential area.
2.38 The TA confirms that 25 car parking spaces are required for the convenience store. Only 18 spaces are provided i.e. a shortfall of 7 retail parking spaces. As already indicated, the area in the vicinity of the site is the subject of heavy on-street parking. There is not any alternative public parking available which would support the ACE claim that car parking provision can be reduced in town centre locations. It is apparent that such a "town centre" description should be one where public parking facilities are available in order to claim this reduction. This is not the case here, where the lack of the necessary on-site parking spaces will simply add to local on-street parking demand, including potential customer parking taking place along the site access road, including the new residential section.
2.39 As regards, the residential parking, the 3 visitors spaces are not well located to the houses. It is likely that visitors to the houses will park on the access road and/or turning head. Also, the double parking spaces (nose to tail design) do not provide for convenient use by residents. It can be the case that one car is parked in the designated spaces, with the second car being left on the access road to

## The Highway Traffic \& Transport Consultancy

enable easy movement of either vehicle without the potential need to move the front vehicle to allow the rear vehicle to leave. Both of these situations will lead to vehicles being parked on the narrow 4.1 m carriageway, or partly on the footway. In either case, convenient access to residents may be restricted, and, more importantly access to emergency vehicles, particularly fire tenders could blocked.

## Possible additional matters.

2.40 As indicated at 1.02 of this report, the instruction by Mr. Charles Aldous to The HTTC Ltd., was to assess the main issues raised in the Transport Assessment (TA) submitted by Ardent Consulting Engineers (ACE). That work is as set out above. Therefore, it needs to be understood that other highway matters may still be of concern, and may yet be raised against this development proposal but are not included within the scope of this report e.g.

The relocation of the bus stops appears to place the westbound stop within a narrow area of the B1508 carriageway. This appears likely to result in a potential for the stopped bus to obstruct through traffic. Whereas its current location is a at wide area of carriageway where vehicles can pass. I have observed that the bus can wait for some minutes while "losing time" to bring the bus back in line with its timetabling.
3.01 The development has not been properly considered, including in terms of the significant levels of increased movement of all transport modes.
3.02 Taking this into account, the development is unacceptable in highway terms since:
a) the proposed access is badly designed and located, and will lead to extremely hazardous hgv movements across the adjacent junction, and on the B1508;
b) light vehicle drivers will have similar highway safety issues; and,
c) the development proposes unsafe crossing locations for pedestrians.
3.03 The lack of a separately accessed service area will result in hgv parking and turning on the access road, across the main pedestrian route, and within the store car park to the detriment of the safety of customers.
3.04 Minor but critical design features have resulted in unsafe conditions for pedestrians using the footway access route into the site.
3.05 Inadequate car parking numbers and design will lead to further demand for on-street parking which appears to be already under stress. It may also lead to on-street parking within the development itself, being likely to result in access difficulties for residents and emergency vehicles, including fire tenders.
3.06 Taking account of all the above highway and traffic safety issues, this development proposal will result in an unacceptable impact on highway safety, and the residual cumulative impact on the road network will be severe.
3.07 This development proposal should be refused on highway grounds.

