

Technical Note

Project No: ITB15185
Project Title: St Leonard's Parish Centre, Chesham Bois
Title: Review of transport information for planning application
Ref: ITB15185-001 TN
Date: 9 March 2020

EXECUTIVE SUMMARY

Chesham Bois Parish Council (CBPC) have appointed i-Transport LLP to review relevant transportation material submitted with planning application reference PL/20/0401/FA and to give CBPC independent transport advice on the impact of the proposal such that they can be properly informed on the proposals. The key transport matters are trip generation of the proposed development, car parking provision and site access and internal highway matters.

Trip generation

During a typical weekday evening peak-hour (1700-1800) the development is forecast to result in 23 additional vehicle movements, this is the equivalent amount of new traffic that might be expected from around 50 new residential dwellings. We would expect BCC to require some assessment of the impact of this level of new traffic on the local highway network.

On a Sunday, unlike the typical weekday peak periods, it is reasonable to assume that there will not be any significant off-site traffic capacity impact as a result of the increased movements - as the local network is likely to be less busy when compared to the weekday peak period. The principal highway impact on a Sunday is likely to be whether the cars expected at the site can all be safely parked on the site or whether they will need park on local roads.

Car parking provision

Should the existing travel patterns experienced at the site and the existing church continue then the proposed parking of 87 spaces is likely to be sufficient, even on a Sunday. However, should the proposed development display travel characteristics that are more typical of a place of 'Public Assembly' then the level of car parking proposed maybe be insufficient and may result in increased on-street parking in the surrounding area which is a consequence that the local parking standards specifically seek to avoid.

The applicant should be requested to complete a car parking accumulation exercise based on a TRICS 'typical of a place of Public Assembly' and Pre-School trip rate to confirm the proposed amount of car parking can accommodate the likely parking demands that might be expected.

Car parking space geometry

BCC's pre-application advice requires that parking spaces of 2.8m x 5m are provided, with any parallel spaces measuring 3m x 6m. We would also expect any aisle between the parking bays to be 6m in width – this is the width needed to ensure vehicles can comfortably enter and exit individual parking spaces. i-Transport drawing

ITB15185-GA-001 shows various dimensions of the proposed parking spaces and demonstrates that the aisle widths are often significantly less than 6m. In practice this will mean that many of the parking spaces cannot be physically accessed if any of the adjacent spaces are occupied. This leads to further concern that the level of parking proposed may not be sufficient and that there may be increased on-street parking in the surrounding area. The parking layout should be reviewed to ensure that all spaces can be accessed and egressed even when adjacent spaces are occupied. This is to ensure that the proposed spaces can all be used.

Site access

The point of access for the proposal is broadly in the same location as the existing access, however the proposal will result in a greater (i.e. more intensified) use of the access and we would expect BCC highways to wish to be certain that the land needed to provide the visibility splay to the left is available and can be secured in order to ensure a 'safe and suitable' access is provided for perpetuity. The splay to the left crosses Common Land and the applicant has indicated to us in correspondence that the Planning Inspectorate has confirmed to them that any application to deregister the Common Land can be dealt with after the planning application has been determined. It would be helpful if this correspondence could be shared and be confirmed that BCC share this view as there seems to be some risk that a permission might be granted for an access that cannot, in the fullness of time guarantee that suitable visibility splays will be provided.

Refuse collection vehicle turning

The site layout accommodates a 9.86m refuse vehicle. Any larger vehicle may not be able to safely turn on the site and could have to reverse out onto the public highway causing a danger of users of that highway. The applicant has confirmed that waste collection will be privately managed and as such they can negotiate a contract that ensures no refuse vehicle larger than 9.86m is used for the collection. This is a reasonable response, and this could be secured by a suitably worded planning condition.

SECTION 1 INTRODUCTION AND PREVIOUS WORK TO DATE

1.1 Introduction

1.1.1 The Parochial Church Council of St Leonard's Church (PCCSLC) are seeking to redevelop the existing St Leonard's Church Parish Centre in Chesham Bois. A planning application has now been submitted to Chiltern District Council (CDC) under application reference PL/20/0401/FA.

1.1.2 The planning application proposes::

- ***A new Parish Centre with 1,035m² of floorspace over 2 storeys with 740.5m² being the total public area***
- ***60m² of office (B1) usage which is composed of parish council offices and church offices***
- ***A separate 134m² pre-school***
- ***2 new houses provided for parish church staff. (A new rectory with a garage and a keepers cottage)***
- ***136m² of space for a café in the entrance space of the Parish Centre*** (included in the 1035m² above).

1.1.3 Chesham Bois Parish Council (CBPC) have appointed i-Transport LLP to review relevant transportation material from the applicant and to give CBPC independent transport advice on the impact of the proposal such that they can be properly informed on the proposals, enabling them to make representations on the application to CDC.

1.2 Previous work

1.2.1 We reviewed a draft Transport Statement by HVJ Transport Ltd (HVJT) November 2019 and provided a summary of our review to HVJT. They responded and provided an updated version of the Transport Statement (December 2019) and a 'Vision and use Statement with Travel Plan'. The purpose of this note is to:

- i Set out the main transport areas and review the HVJT / PCCSLC response to those matters; and
- ii Based on the material submitted with the planning application, make recommendations for CBPC to consider in their response to the planning application as statutory consultee.

SECTION 2 KEY TRANSPORT MATTERS AND APPLICANT RESPONSE

2.1.1 Having undertaken a review of the November 2019 Transport Statement the key transport matters were:

- Trip generation of the proposed development
- Car parking provision
- Site access and internal highway matters

2.2 Trip generation

2.2.1 The forecast trip generation assessment is based on an acceptable methodology using the TRICS database. Whilst the land uses parameters used in deriving some of the trip rates appear incompatible with TRICS best practice guidance, this is unlikely to materially alter the overall forecast weekday morning, evening or daily trip generation.

2.2.2 In addition, no multi-modal trip generation analysis is provided (i.e. the assessment only assesses the impact of vehicle trips to the site). To determine the full additional transport demands arising from the development, all modes of transport should ideally be considered.

2.2.3 However, the biggest issues with regard to trip generation are:

- The impact of overall daily increase in weekday morning and evening peak vehicle movements; and
- The impact of the likely number of vehicles needing to park on the site – particularly for the traditional Sunday morning Church period.

Daily increase in vehicle movements

2.2.4 Table 7.20 of the HVJT Transport Statement sets out the increase in vehicle movements arising from the development. This is re-produced below in **Table 2.1**.

Table 2.1 Daily net increase in vehicle movements (Typical weekday)

Time	Existing	Proposed	Net Increase
0000-0100	0	0	0
0100-0200	0	0	0
0200-0300	0	0	0

Time	Existing	Proposed	Net Increase
0300-0400	0	0	0
0400-0500	0	0	0
0500-0600	0	0	0
0600-0700	0	0	0
0700-0800	2	7	+5
0800-0900	8	22	+14
0900-1000	7	19	+12
1000-1100	6	13	+8
1100-1200	5	16	+11
1200-1300	7	31	+23
1300-1400	5	28	+23
1400-1500	4	21	+17
1500-1600	7	24	+17
1600-1700	7	18	+11
1700-1800	7	31	+23
1800-1900	5	33	+28
1900-2000	3	32	+30
2000-2100	1	18	+17
21-00-2200	2	18	+16
2200-2300	0	11	+11
2300-2400	0	6	+6
24 Hour	76	349	+273

Source: HVJT TA December 2020

2.2.5 The HVJT Transport Statement notes that the data above ***'may not account for the church services on Sunday which will likely represent the peak demand for the new parish centre'***. The extent of vehicular traffic generated by the development on a Sunday is not quantified or assessed in the Transport Statement.

2.2.6 In terms of the weekday morning and evening peak hour traffic (which the Transport Statement does quantify), this is not the subject to any further assessment in terms of the likely impact of this vehicle

traffic on the local highway network, for example no junction capacity modelling has been undertaken at the Glebe Way or North Road junctions with Bois Lane.

2.2.7 To provide some context to the likely scale of the increase in traffic, the development is forecast to result in 23 additional vehicle movements between 1700-1800, this is the equivalent amount of new traffic that might be expected from around 50 new residential dwellings.

Sunday morning peak period vehicle movements

2.2.8 The HVJ Transport Statement does not include any formal assessment of the likely traffic generation of a Sunday morning service. Some assessment work has been completed by HVJT and the PCCSLC and this has been checked for consistency:

- Table 6.1 of the HVJT Transport Statement notes that 150 people would be expected on site and that would result in 50 cars (i.e. car occupancy would be three people per vehicle).
- Section 7.2 of the PCCSL Vision and Use Statement (with Travel Plan) also notes ***“The ratio of car use is approximately 1 car to 3 persons for our Sunday usage. It holds reasonably true for larger church events also. At full capacity (275 people) the car park provision is therefore close to the 91 spaces calculated via this ratio, should this be the parking need.”***
- A Travel Survey to identify how visitors to the current Parish Hall travel was also undertaken by the PCCSLC, the survey was completed by 42 individuals 16 visiting for a church service, 16 for the Parish Centre and 18 visiting The Beacon (some respondents had more than one purpose for their visit). This identified that 67% of visitors travelled by car (including 23% who came as a Single Occupancy Vehicle (SOV) trip, under this scenario:
 - The hall has a capacity of 275 people
 - 67% of 275 people means that 184 people will travel to the site in a car
 - Of the 184 people, 23% will be SOV, i.e. 42 cars will arrive at the site with just one person in them
 - If assuming that the remaining 142 car travellers arrive at the site in a car that has three people in each, this will mean a further 47 cars arriving at the site
 - This could lead to a parking demand for 89 cars (42+47)

2.2.9 The information provided suggests that the proposed development will generate somewhere between 100 and 180 vehicle movements on a Sunday, i.e. between 50 cars 'in' at around 10am and 50 cars 'out' at around 1pm or, at the higher end, 90 cars 'in' at around 10am and 90 cars 'out' at around 1pm.

Trip generation summary

- 2.2.10 During a typical weekday evening peak hour, the development is forecast to result on 23 additional vehicle movements between 1700-1800, this is the equivalent amount of new traffic that might be expected from around 50 new residential dwellings. We would expect BCC to require some assessment of the impact of this traffic on the local highway network.
- 2.2.11 On a Sunday, unlike the typical weekday peak periods, it is reasonable to assume that there will not be any off-site traffic capacity impact despite the higher number of vehicles expected. This is due to the local network being likely to be less busy on a Sunday when compared to the weekday peak period.
- 2.2.12 The principal highway impact on a Sunday is likely to be whether the cars expected at the site can all be safely parked on the site or whether they will need park on local roads.

2.3 Car Parking

Using recorded / forecast travel patterns

2.3.1 As set out above, at full capacity (275 people) the car parking need on a Sunday, based on the application of the recorded travel patterns at the existing Parish Centre and Church is 91 spaces.

2.3.2 Section 7.2 of the PCCSLC Vision and Use Statement (with Travel Plan) notes ***“the new building will have a much larger capacity than the existing Parish Centre, and greater parking needs. It will be therefore be essential for future car parking to be contained within the new Parish Centre site so as not to increase parking on surrounding streets. The proposed Parish Centre facilities and associated car parking will comfortably allow for regular Sunday services to be facilitated, as well as larger events to take place should there be a demand for them”.***

2.3.3 In response to our analysis, the PCCSLC has confirmed that 87 parking spaces will be provided on the site, this is made up of:

- 23 spaces (including 3 disabled parking bays) in a primary car park;
- 49 spaces in a secondary car park;
- 15 spaces in an overflow area of reinforced grass beyond the woodland;
- This will give a total maximum capacity including the overflow of up to 87 spaces (not including residential parking); and
- In addition, the PCCSLC also intend to implement a Travel Plan which seeks to achieve a reduction in the use of car travel and an increase in walking, cycling and car sharing as part of a more sustainable approach to travel to and from the new parish centre site.

2.3.4 Based on the application of the recorded travel patterns at the existing Parish Centre and Church the proposed 87 spaces is likely to be sufficient for the maximum expected demand. The applicant states that any further demand will be addressed as part of a Travel Plan for the site. Whilst this is not unreasonable, the Travel Plan would need to provide some degree of certainty that it would deliver a range of measures that can ensure the proposed spaces are sufficient.

Using car parking ‘standards’

2.3.5 When considering the proposed land use against the Chiltern District Council Parking Standards (1997) for ‘public assembly buildings’ (which is the land use which the building falls under) the proposal should provide:

- 1 space per 5m² of gross floor area
- **1,035m² @ 1/5m² = 207 spaces**

2.3.6 It is acknowledged that the Chiltern District Council Parking Standards 1997 are in the process of being updated in the Chiltern and South Bucks Local Plan 2036 which has been submitted for examination. The proposed car parking standards are set out in Appendix 3 of that document and they note that public assembly buildings should provide:

- 1 space per 8m² of gross floor area
- **1,035m² @ 1/8m² = 129 spaces**

2.3.7 The above parking standard has been derived by CDC and South Bucks using TRICS which is an industry standard trip generation database that holds nationwide records of transport movements at a wide range of land uses. This has been used by CDC and South Bucks to set the resulting parking standards at all land uses so that they will provide a suitable level of car parking for that land use. There is a reasonable expectation that a public assembly building of 1,035m² could result in demand for 129 spaces.

2.3.8 In addition, the proposed car parking under draft policy **Policy DM CP3 – Car Parking Standards**, state:

Planning permission will be granted provided that car parking is implemented in accordance with the parking standards set out in Appendix CP3. Non-residential development should not result in increased on-street parking in residential areas (underlining is our emphasis)

2.3.9 The proposed car parking standards include a note stating:

The car parking standards set out here are optimum standards; the level of parking they specify should be provided unless specific local circumstances can justify deviating from them. Proposals for provision above or below this standard must be supported by evidence detailing the local circumstances that justify the deviation. This evidence must be included in (and/or consistent with) the developer's Travel Plan and Transport Assessment (Ref: Appendix 3, Table 7 Chiltern and South Bucks Local Plan 2036)

Car parking summary

2.3.10 Should the existing travel patterns experienced at the site and the existing church continue then the proposed parking is likely to be sufficient. However, should the proposed development display travel characteristics that are more typical of a place of 'Public Assembly' then the level of car parking proposed maybe be insufficient and the development may result in increased on-street parking in the surrounding area which is a consequence that the proposed standards specifically seek to avoid.

2.3.11 The applicant should be requested to complete a car parking accumulation exercise based on a TRICS 'typical of a place of Public Assembly' and Pre-School trip rate to confirm the overall parking demands that might be expected at the site.

2.4 Site access and internal highway matters

Site access

- 2.4.1 The proposed access arrangement provides 2.4m x 43m visibility splays which is in line with the posted speed limit for Manual for Street (the relevant design guidance), however BCC highways (in their pre-app comments Ref: Tristan Higgs email 15/11/19) notes that, ***“these splays would pass over Common Land. An application to the Secretary of State for Food and Rural Affairs will need to be made in order to achieve visibility splays to the left upon exit in perpetuity”***. We assume the ‘application’ to the Secretary of State would be to deregister that part of the Common Land over which the visibility splay passes.
- 2.4.2 In response, HVJT has quite reasonably suggested the PCCSLC might carry out a speed survey to justify the use of a reduced visibility splay which we assume would potentially not need to pass over the Common Land. This is a reasonable approach but the speed survey that would be needed to justify the reduced visibility splay has not yet been commissioned.
- 2.4.3 In summary, the point of access for the proposal is broadly in the same location as the existing access, however the proposal will result in a greater (i.e. more intensified use) of the access and as such we would expect BCC highways to wish to be certain that the land needed to provide the visibility splay to the left is available and can be secured in order to ensure a ‘safe and suitable’ access is provided for perpetuity.
- 2.4.4 The applicant has indicated to us in correspondence that the Planning Inspectorate has confirmed to them that any application to deregister the Common Land can be dealt with after the planning application has been determined. It would be helpful if this correspondence could be shared.

Car parking space geometry

- 2.4.5 In addition to our commentary on car parking numbers, the submitted plans of the site have been reviewed for geometry as we have seen BCC’s pre-application advice requiring that parking spaces of 2.8m x 5m are provided, with any parallel spaces measuring 3m x 6m. Whilst not requested by BCC, we would also expect any aisle between the parking bays to be 6m in width – this is the width needed to ensure vehicles can comfortably enter and exit individual parking spaces.
- 2.4.6 i-Transport **drawing ITB15185-GA-001** shows various dimensions of the proposed parking spaces and demonstrates that whilst the bays are often longer than is needed, the aisle widths are often significantly less than 6m. In practice this will mean that many of the parking spaces cannot be

physically accessed if any of the adjacent spaces are occupied. An extract of our drawing is shown in **Image 2.1** for information.

Image 2.1 Extract of i-Transport drawing ITB15185-GA-001



Source: i-Transport drawing ITB15185-GA-001

2.4.7 The parking layout should be reviewed to ensure that all spaces can be accessed and egressed even when adjacent spaces are occupied. This is to ensure that the proposed spaces can all be used.

Refuse collection vehicle turning

2.4.8 In addition, the site layout has been assessed for its ability to accommodate a 9.86m refuse vehicle. Any larger vehicle may not be able to safely turn on the site and could have to reverse out onto the public highway causing a danger to users of that highway.

2.4.9 We have reported this to the applicant and their response is that waste collection will be privately managed and as such they can negotiate a contract that ensures no refuse vehicle larger than 9.86m is used for the collection. This is a reasonable response and this could be secured by a suitably worded planning condition.

SECTION 3 SUMMARY AND RECOMMENDATIONS

3.1.1 Chesham Bois Parish Council (CBPC) have appointed i-Transport LLP to review relevant transportation material submitted with planning application reference PL/20/0401/FA and to give CBPC independent transport advice on the impact of the proposal such that they can be properly informed on the proposals, enabling them to make representations on the application to CDC.

3.2 Summary

3.2.1 The key transport matters are:

- Trip generation of the proposed development
- Car parking provision
- Site access and internal highway matters

Trip generation

3.2.2 During a typical weekday evening peak-hour (1700-1800) the development is forecast to result on 23 additional vehicle movements, this is the equivalent amount of new traffic that might be expected from around 50 new residential dwellings. We would expect BCC to require some assessment of the impact of this traffic on the local highway network.

3.2.3 On a Sunday, unlike the typical weekday peak periods, it is reasonable to assume that there will not be any off-site traffic capacity impact as a result of the increased movements (despite the movements being higher than in the week), this is because the local network is likely to be less busy when compared to the weekday peak period. The principal highway impact on a Sunday is likely to be whether the cars expected at the site can all be safely parked on the site or whether they will need park on local roads.

Car parking provision

3.2.4 Should the existing travel patterns experienced at the site and the existing church continue then the proposed parking of 87 spaces is likely to be sufficient. However, should the proposed development display travel characteristics that are more typical of a place of 'Public Assembly' and Pre-School then the level of car parking proposed maybe be insufficient may result in increased on-street parking in the surrounding area which is a consequence that the local parking standards specifically seek to avoid.

3.2.5 The applicant should be requested to complete a car parking accumulation exercise based on a TRICS 'typical of a place of Public Assembly' and Pre-School trip rate to confirm the proposed parking can accommodate the overall parking demands that might be expected at the site.

Site access

3.2.6 The point of access for the proposal is broadly in the same location as the existing access, however the proposal will result in a greater (i.e. more intensified use) of the access and we would expect BCC highways to wish to be certain that the land needed to provide the visibility splays is available and can be secured in order to ensure a 'safe and suitable' access is provided for perpetuity.

3.2.7 The applicant has indicated to us in correspondence that the Planning Inspectorate has confirmed to them that any application to deregister the Common Land can be dealt with after the planning application has been determined. It would be helpful if this correspondence could be shared.

Car parking space geometry

3.2.8 BCC's pre-application advice requires that parking spaces of 2.8m x 5m are provided, with any parallel spaces measuring 3m x 6m. We would also expect any aisle between the parking bays to be 6m in width – this is the width needed to ensure vehicles can comfortably enter and exit individual parking spaces. i-Transport **drawing ITB15185-GA-001** shows various dimensions of the proposed parking spaces and demonstrates that the aisle widths are often significantly less than 6m. In practice this will mean that many of the parking spaces cannot be physically accessed if any of the adjacent spaces are occupied, this leads to further concern that the level of parking proposed may not be sufficient and that there maybe increased on-street parking in the surrounding area. The parking layout should be reviewed to ensure that all spaces can be accessed and egressed even when adjacent spaces are occupied. This is to ensure that the proposed spaces can all be used.

Refuse collection vehicle turning

3.2.9 The site layout accommodates a 9.86m refuse vehicle. Any larger vehicle may not be able to safely turn on the site and could have to reverse out onto the public highway causing a danger to users of that highway. The applicant has confirmed that waste collection will be privately managed and as such they can negotiate a contract that ensures no refuse vehicle larger than 9.86m is used for the collection. This is a reasonable response, and this could be secured by a suitably worded planning condition.

3.3 Recommendations

3.3.1 Based on the above, the following recommendations are made for inclusion in CBPC's statutory response to the planning application:

- Attention be drawn to Table 7.20 of the HVJT Transport Assessment where 23 additional vehicles are expected to be generated in a weekday evening period hour. This is the equivalent amount of new traffic that might be expected from around 50 new residential dwellings. We would expect BCC to require some assessment of the impact of this traffic on the local highway network.
- Given the lack of reconciliation between the proposed number of car parking spaces and the amount required by CDC's 'TRICS based' Parking Standards, the applicant should be requested to complete a car parking accumulation exercise using a TRICS 'typical of a place of Public Assembly' and Pre-School trip rate to confirm the proposed level of parking is sufficient for the overall parking demands that might be expected at the site.
- Many of the parking spaces cannot be physically accessed if any of the adjacent spaces are occupied, this leads to further concern that the level of parking proposed may not be sufficient and that there may be increased on-street parking in the surrounding area. The parking layout should be reviewed to ensure that all spaces can be accessed and egressed even when adjacent spaces are occupied. This is to ensure that the proposed spaces can all be used.
- The use of the site access will be intensified and the land needed to provide the visibility splay to the left requires the deregistration of Common Land. The applicant states that this can be dealt with after the planning application has been determined. It would be helpful if this correspondence could be shared.
- Waste collection will be privately managed to ensure no refuse vehicle larger than 9.86m is used for the collection. This must be secured as part of the planning permission if granted.

DRAWINGS



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CLIENT: PCC OF ST LEONARD'S CHURCH

REV	DATE	BY	DESCRIPTION	CHK	APD
STATUS: FOR INFORMATION					
DRAWN: JD		CHECKED: SJ		APPROVED: SJ	
PROJECT No: ITB15185		SCALE @ A3: 1:500		DATE: 09.03.20	
DRAWING No: ITB15185-GA-001					REV: -



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TITLE: PROPOSED SITE LAYOUT - PARKING GEOMETRY
PROJECT: ST LEONARD'S CHURCH PARISH CENTRE