
Job Title Horner Avenue, Fradley South, Lichfield

Job Number IPD-20-524

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To Fradley & Streethay Parish Council

cc

Topic Review of Highways Access Proposals under Planning Application ref: 22/00106/FULM

INTRODUCTION

Infrastructure Planning & Design (IPaD) Ltd has been requested by Fradley & Streethay Parish Council (FSPC) to assist with a review of the latest proposals for a new 109 dwelling residential site located off Horner Avenue in Fradley, Lichfield as detailed under planning submission ref: 22/00106/FULM.

FSPC previously made representations to the same site under planning application ref: 20/01178/FULM which Lichfield District Council refused, and which has since been withdrawn. Under the previous planning application, FSPC raised concerns with regards to the detrimental impact that this site would have on existing road user safety and loss of public amenity to existing residents in Fradley South.

One of the specific reasons for FSPC's objection to the previous application was that the proposed site access arrangements were unsuitable and did not accord with existing local design standards as set out within Staffordshire County Council's 'Staffordshire Residential Design Guide: Supplementary Planning Guidance on Design Quality in Residential Areas (2000)'.

IPaD has undertaken a review of the latest site proposals as set out within planning application (ref: 22/00106/FULM) to ascertain whether the latest proposals offer suitable changes to the proposals for site access that would be sufficient in overcoming previous highways and transportation concerns registered by FSPC under the earlier application.

DETAILS OF SCHEME & ACCESS ARRANGEMENT PROPOSALS

A review has been undertaken of the supporting Transport Assessment (document ref: 21 1222 326254 TA 001 dated January 2022) that was submitted by the applicants' highways and transportation consultants' 'Mode' to determine the key aspects of the latest development proposals.

From this document it is understood that the applicant is proposing a build of up to 109 residential dwellings, all served off a single point of vehicle access that would connect directly through to the rear of the Horner Avenue 'cul-de-sac' with the new spine road that services the site connecting to the existing turning head located on the eastern side of the road. An emergency vehicle only access (closed to general traffic) would be provided off Ward Close.

In review of the above, it is clearly the case that all of the 109 additional residential properties proposed would be serviced via a single vehicular route with all vehicle traffic being required to turn into, or emerge, from Horner Avenue in accessing or egressing the site. The proposed site spine road as shown on drawing ref: J32 6254 PS 011 in the Mode Transport Assessment (Appendix A)

can therefore logically be described to be an extension of the eastern side of the existing Horner Avenue 'cul-de-sac' as there is no alternative through route that could be made to/ from the site.

APPLICANT JUSTIFICATION OF ACCESS PROPOSALS

As a means of justification for the placement and form of the proposed site access, in paragraph 4.3.4 of the Mode Transport Assessment, the Staffordshire Residential Design Guide is referred to as follows:

“The existing carriageway width of Horner Avenue is 5m and the section of the turning head that will form the access to the site has a width of 5.4m with 6.0m radii. In line with SCC’s Residential Design Guide, the site will be served by a ‘major residential access road’ which will be provided at 5.5m – therefore the access road will widen to 5.5 metres as it enters the site from the turning head”.

Whilst the quotation above correctly references the Staffordshire Design Guide standards as a means to justify any proposal for new residential streets, in defining the access route as a ‘major residential access road’ it does not apply the correctly met standard in this case as it considers only the section of new build carriageway - namely the central spine road extension from the Horner Avenue eastern turning head, and neglects to consider the existing section of the Horner Road carriageway between the spine road connection and Worthington Road that will also be utilised as a key part of the site access proposals.

To determine the correctly met standard in this case, further consideration of the existing characteristics of the section of Horner Avenue that will be utilised as part of the access route to the development site has been made as it is key that this is also included as part of any assessment of met standards forming, as it does, the northern extremity of the cul-de-sac route in and out of the site and in so doing will receive 100% of all generated traffic from the site.

DESIGN STANDARDS ASSESSMENT

The existing carriageway section of Horner Avenue between the proposed site spine road and its connection to the wider off-site road network at Worthington Road falls into two distinct parts in terms of their characteristic features. The first section being between the connection through to Worthington Road that leads immediately from the t-junction at the top of the road (i.e. the ‘northern section’), and the second being the points at which Horner Avenue branches into two eastern and western spurs, the critical section being in this instance the eastern spur which leads through to the proposed site spine road.

The northern section of the Horner Avenue route is formed of a road carriageway which is 5m in width and has two 2m wide footways along both sides of the carriageway.

The eastern spur section of Horner Avenue has a narrowed carriageway width of 4.8m with a single 1.3m width footway along on one side of the carriageway (northern side only).

In terms of the identification of current classifications of both of these distinct sections of Horner Avenue, their characteristics have been matched with the specified road hierarchies as set out within the Staffordshire Residential Design Guide.

The importance of the specified road hierarchies along with all other design standards set out within the Staffordshire Residential Design Guide is made clear at the outset of the document by ensuring that appropriate design can be applied under given

circumstances *“to create residential environments that are visually attractive, safe, convenient, secure, and economical in both construction and maintenance”*.

In terms of residential ‘lower order’ roads/ streets, the design standards set out a hierarchy of three principal types, each being suitable in serving a maximum number of dwellings to ensure that the car does not over dominate in the environment as described in paragraph 128 below:

“Lower Order Roads should be designated as places where people live rather than traffic routes. Vehicles should be subordinated to the needs of the pedestrian, the cyclist, and the child playing in the street. The objective is to ensure that the scale and proportion of the road reflects this distinction. Whilst highway needs should continue to be met in the interests of safety and access the road layout and design should largely be determined by the spatial organisation of buildings and open spaces in the development”.

The guidance then goes on to describe the three main lower order road types in terms of their defining characteristics which are summarised as follows:

1. Major Residential Access Road

- Is a connecting street or loop or can form part of a spine road serving a large development.
- Can serve up to a maximum 300 residential dwellings.
- Has a carriageway width of at least 5.5m.
- Has footway widths of at least 1.8m on either side of carriageway.
- Designed to accommodate a maximum design speed of 30kph (20mph).
- Minimum kerb radius to adjoin to existing road is 10m.

2. Minor Residential Access Road

- Is a cul-de-sac, connecting street or loop.
- If designed as a single access cul-de-sac can serve up to 100 residential dwellings, or up to 200 dwellings if designed as a connecting street or loop.
- Has a minimum carriageway width of 5 metres.
- Has footway widths of at least 1.8m on either side of carriageway although a single 1.8m footway is acceptable where less than 25 dwellings are served.
- Designed to accommodate a maximum design speed of 30kph (20mph).
- Minimum kerb radius to adjoin to existing road is 10m.

3. Minor Access Way

- An informal shared use pedestrian/ vehicle surface on which pedestrians are given priority by virtue of distinctive design features.
- Can serve up to a maximum of between 25 to 50 residential dwellings depending upon length of road.
- Has a carriageway width of between 3.5m to 6m to accommodate road features to discourage speed.
- Footway not required however a single 1.3m to 1.8m footway along one side of the carriageway may be provided under certain circumstances.
- Designed to accommodate a maximum design speed of 24kph (15mph).
- Minimum kerb radius to adjoining higher order road of 10m or to adjoining minor access road of 6m.

Given the categorisations of each of the lower order road hierarchies above and current road design characteristics along Horner Road, it can be concluded that the two distinct parts of Horner Road in its existing form fall into two separate design standard categories as follows:

- Initial section up to t-junction with Worthington Road (northern section) = **Minor Residential Access Road** of a cul-de-sac arrangement. Since it has a minimum road width of 5 metres with accompanying 1.8m footways along both sides of the road.
- Eastern spur section = **Minor Access Way**. Since it has a road width of less than 5 metres with a single footway of 1.3 metres on one side of the road.

Under no circumstances do either of the two existing sections of Horner Avenue meet the design standard requirements as defined under the 'Major Residential Access Route' road hierarchy category, which currently forms the basis for justification of the proposed development site as set out within the Mode TA.

IMPLICATIONS FOR DEVELOPMENT

Horner Avenue in its entirety currently serves a total of 36 residential properties. The eastern spur alone serves a total of 11 residential properties. By considering the identified lower order road classifications for each road section as identified above; together with the defined maximum residential thresholds that can be achieved as per the standards; and existing land use already present, a calculation can be made of any additional land use that each section of Horner Avenue in their current form could suitably accommodate as below:

1. Northern Section (Minor Residential Access Road Cul-de-Sac).

- 100 dwellings max servicing capacity of road section.
- Subtract 36 existing residential properties.
- Could serve up to an additional 64 residential properties without further enhancement.

2. Eastern Spur (Minor Access Way).

- 25 dwellings max servicing capacity of road section (being a cul-de-sac of less than 100m in length).
- Subtract 11 existing residential properties.
- Could serve up to an additional 14 residential properties without further enhancement.

So therefore, without substantial enhancement to existing carriageway widths and footway provision along Horner Avenue, the amount of traffic associated with further development that can be suitably accommodated along this route is up to maximum limit of a further 14 residential properties.

CONCLUSION & RECOMMENDATION

The results from the analysis above demonstrate that the existing section of Horner Avenue that is intended for use as a critical part of the singular vehicle access route into the proposed development site is not currently built to a standard that can accommodate the increased volumes of traffic generated by the proposed development.

To accommodate both traffic associated with the proposed additional 109 properties set out within the most recent planning application ref 22/00106/FULM together with that associated with existing properties located off Horner Avenue, substantial further enhancement is required to the existing northern and eastern sections of Horner Avenue to bring them up to a standard required under a 'Major Residential Access Route' that would increase the allowable development servicing limit along this section of road up to 300 residential properties.

The importance of the application of the design standards is clearly accepted by the applicant's transport consultants and they have sought to ensure that any new construction of road associated with the delivery of their internal spine road accords with standards for a 'Major Residential Access Route'. It is clearly not appropriate however in this instance for the applicant to justify the use of the application of the road design standards only in consideration of the new-build sections of spine road that will extend from the proposed connection off Horner Avenue, given that Horner Avenue will also form a critical aspect of the designated access route to and from the site.

The required enhancement along Horner Avenue would need to match that already being proposed by the applicant for their spine road extension off Horner Avenue which would entail widening of both sections of Horner Avenue's northern and eastern carriageways up to a minimum width of 5.5m, and to accommodate pedestrian footways along both sides of the road to a minimum width of 1.8m. Improvements to existing junctions along the route would also need to be undertaken such as an upgrade to the existing informal 'tabletop' junction at the point at which the eastern and western spurs meet by removing the no-right of way arrangement and formalising priority for the main through route (the eastern spur) with a give-way arrangement for the minor arm (western spur). Under such an arrangement, forward visibility splays would need to be maintained around the bend section which would be difficult to achieve given present third party land constraints.

At this stage, there does not appear to be any consideration given to the enhancement of Horner Avenue to the required levels of improvement to accommodate the levels of development being proposed. Indeed, given present constraints it is difficult to see

how this section of Horner Avenue could accommodate the required improvements needed to service the application site based upon it being the only proposed route of vehicle access for the given scale of development suggested.

Consequently, as matters stand it is IPaD's conclusion that the applicant has provided no further justification or grounds that would satisfy concerns related to FSPC lifting its present objection to the scheme and considers that whilst there has been some change to key aspects of the site development proposals, the principles and detail set out in reference to the vehicular and non-vehicular access to the site remain intrinsically the same as under the previous planning application (ref: 20/01178/FULM).

Given this, IPaD recommends that FSPC continue to offer their objections to the current scheme under 22/00106/FULM on grounds of failure of appropriate highways standards being applied which has resulted in proposals for a substandard highways access, and which may further have consequences in terms of its potential for detrimental impact on existing road user safety, and on levels of public amenity.