Publication Draft Wyre Local Plan to 2031 Examination

Hearing Statement on behalf of Applethwaite Ltd
Respondent ID 0944

Matter 3 Housing and Employment Objectively Assessed Needs (OAN) and Requirements

Issue 4 The Housing Requirement of 8,225 Dwellings

April 2018
1 Introduction

1.1 This Hearing Statement is submitted on behalf of Applethwaite Ltd ("Applethwaite") in connection with the highway evidence (ED094a) prepared by Lancashire County Council (LCC) that has informed the preparation of the Local Plan, and which recommends that none of the objectively assessed housing need for Wyre should be accommodated at Scorton.

1.2 Whereas ED094a advises that the overarching restriction on housing growth at the majority of settlements within the A6 corridor, is the ability of M55 Junction 1 to accommodate development traffic and the need to avoid a severe impact on the network, it confirms that this is not the case at Scorton which lies ‘outside the A6 restriction zone’ (n). Instead, the LCC desktop analysis concludes that no housing allocation should be made in Scorton due solely to restrictions on the highway network connecting the village to the A6, including single lane bridges with height and weight restrictions, and poor access to public transport.

1.3 It has become necessary for Applethwaite to examine the robustness of the Local Plan highway evidence relating to Scorton as LCC did not initially raise any objection to its planning application (17/00344/FULMAJ) for a development of 25 no. houses and six bungalows on the southern edge of the village. The LCC consultation response (Appendix 1) of the 23rd June 2017 post-dates the Local Plan evidence base and makes no reference to the issues raised in the ED094a desktop analysis as a reason for preventing housing development at Scorton. LCC issued a contradictory consultation response in October 2017 and final correspondence on the 12th March 2018 in line with ED094a (Appendix 2), with the exception of construction traffic.

1.4 Applethwaite appointed the transport consultant Vectos to review the robustness and recommendations of ED094a in connection with the principle of housing growth at Scorton, and its conclusion is that the highway issues raised by LCC have been significantly overstated and the available evidence, including traffic survey data and accident records, shows that no case of severe impact, or indeed any adverse impact, on highway safety can be sustained. The Technical Note prepared by Vectos is attached at Appendix 3 of this Hearing Statement.

1.5 Applethwaite drew the matter to the Local Plan Inspector’s attention following its final correspondence with LCC in March 2018, and is grateful for confirmation that it is appropriate to include it in Examination Matter 3 Issue 4 in respect of whether the perceived highway constraints justify the suppressed housing requirement below the Objectively Assessed Need. This Hearing Statement is therefore confined to highway and accessibility matters and does not consider wider issues concerning the suitability of Scorton as a location for housing growth, and/or the merit of the land at Scorton controlled by Applethwaite for housing development.

1.6 Applethwaite considers that the failure of the Local Plan to allocate land at Scorton for housing development in principle, based on perceived highway and accessibility constraints, is not positively prepared, is not properly evidence-based and justified, and is therefore unsound.

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1 Albeit the Council response to objector ref. 0510/P/02/C in the Statement of Consultation Responses - Appendix 14 (SD007g) confirms that, notwithstanding the perceived LCC highway constraint, it does not agree there should be in effect a moratorium on development in Scorton.
2 Matter 3 Housing and Employment Objectively Assessed Needs (OAN) and Requirements

Issue 4 The Housing Requirement of 8,225 dwellings

Question 4.1 Does the shortfall in the housing requirement against the OAN reflect a positively prepared Local Plan and one that is justified?

2.1 No. The Local Plan fails to comply with the requirements and objectives of paragraphs 17 (bullet point 3) and 47 of the Framework by not identifying sufficient housing supply to meet the OAN in full. The issue of how the unmet OAN (and any buffer) will be dealt with has not been adequately addressed, and insufficient justification has been put forward for setting a requirement that is lower than the OAN.

2.2 Applethwaite considers that the Main Rural Settlement of Scorton can play a small but nevertheless beneficial role, in helping to accommodate part of the unmet OAN and to help sustain the vitality of the village and its services, as well as meeting a range of local needs including affordable housing and purpose-built bungalows for older people.

Question 4.2 Are the highway constraints overstated?

2.3 The attached Technical Note (Appendix 3) prepared by Vectos on behalf of Applethwaite, sets out a comprehensive review of the LCC highway evidence for Scorton presented in the desktop analysis within ED094a. It has appraised the evidence on the basis of accommodating modest housing development at Scorton for approximately 30 no. dwellings on the southern periphery of the village.

2.4 The desktop analysis for Scorton in ED094a puts forward two (perceived) highway constraints as evidence to support the recommendation that none of the OAN can be accommodated at the village. These are;

a) Poor access to public transport;

b) Access restrictions on two of the roads connecting Scorton with the A6, namely Gubberford Lane and Station Lane.

2.5 To appraise these issues, Vectos has firstly reviewed accessibility to and from the southern periphery of Scorton by all sustainable forms of travel including walking, cycling and public transport, and has considered access to the available services and amenities within the village centre. Secondly, it has reviewed accessibility by car from the A6, appraising the effect of the bridges on Gubberford Lane and Station Lane on highway safety, which are identified as LCC as being particular constraints.
a) **Accessibility to Scorton by sustainable forms of travel**

2.6 The detailed evidence presented in the Vectos Technical Note confirms that;

- A choice of safe pedestrian footways and routes connect the southern periphery of Scorton with the village centre, and there have been no incidents between motorists and pedestrians on these routes in the last 19 years. A further pedestrian route connects the village to bus stops on the A6. There is potential to enhance these routes by additional street lighting within the village and surface treatments;

- There are no constraints to access to Scorton by bicycle and the village lies on National Cycle Route 6;

- There would be very low public transport demand for modest development of approximately 30 dwellings. There is a school bus service connecting Scorton with the local secondary school Garstang High School, and there is a funded rural dial-a-bus service available to older and less mobile people covering an 18 mile catchment. On this basis, the absence of public transport will not lead to a materially harmful increase in the use of less sustainable modes of transport;

- Scorton is identified as a Main Rural Settlement in the Wyre Settlement Hierarchy in Policy SP1 Development Strategy of the Local Plan. The up to date Vectos assessment and the Settlement Profile (ED116) confirm that the village provides a good range of community services and amenities including a Primary School, Pre-School, Convenience Store, Post Office, Village Hall, Hairdresser, Mobile Library, Café / Bar, Restaurants, Churches and a Playing Field and Recreation Area;

- Scorton achieves a Medium Accessibility Score using the LCC Residential Accessibility Questionnaire. LCC does not dispute this score;

2.7 It is also important to bear in mind the Government’s recognition at paragraphs 29 and 34 of the Framework, that different policies and measures will be required in different communities, and opportunities to maximise sustainable transport solutions will vary from urban to rural areas.

b) **Accessibility to Scorton by car**

2.8 The detailed evidence presented in the Vectos Technical Note confirms that;

- There is no evidence to indicate that the road design passing under the railway bridge on Gubberford Lane presents a highway safety concern;
• There is no evidence to indicate that the road design passing under the railway bridge and over the River Wyre bridge on Station Lane presents a highway safety concern.

2.9 The Vectos Technical Note is also accompanied by an independent Road Safety Audit (RSA) which corroborates the Vectos evidence and confirms that no road safety issues are identified for either vehicle drivers or pedestrians at both the Gubberford Lane and Station Lane bridges.

2.10 It is therefore concluded that the highway network constraints identified by LCC in the highway evidence base ED094a in relation to Scorton are overstated, and modest housing development of approximately 30 no. dwellings can be safely and sustainably accommodated on the southern periphery of the village and accessed from the A6.

**Question 4.3** In particular would development to meet the OAN result in severe residual cumulative impacts on the highway network having regard to improvements that can be undertaken?

2.11 Applethwaite has commissioned Vectos to assess the traffic impact of modest residential development of approximately 30 no. dwellings in Scorton. This is also presented in the Technical Note attached to this Hearing Statement.

2.12 The desktop analysis in ED094a states that development at Scorton will 'result in an increase of trips during the peak hour which is likely to be all car based. This raises significant concern, in terms of construction activity as well as residential traffic, when considering the current constraints. For these reasons, it is considered that there is not a satisfactory means of managing these impacts (including construction activity) to support development.'

2.13 The robust assessment undertaken by Vectos demonstrates that accommodating a small part of the OAN of approximately 30 dwellings on the southern periphery of Scorton will generate a very low volume of peak hour development traffic and this can be satisfactorily accommodated on the local network within the village and on the A6, and cannot be assessed as a severe residual cumulative impact. This is confirmed by LCC in its 12th March 2018 consultation response to the Applethwaite planning application (Appendix 2).

2.14 Vectos has also undertaken a detailed assessment of the impact of development traffic on highway safety at the Gubberford Lane and Station Lane bridges. Using surveyed traffic flow data for the bridges, the assessment shows that the recorded low flows mean that the network in the vicinity of the bridges can safely accommodate the low level of changes in peak hour traffic flows that will be generated by modest development of approximately 30 no. dwellings. It is therefore demonstrated that development of this scale will not materially impact the operation of the highway network in the vicinity of the bridges and will not lead to any material reduction in highway safety. Development can therefore be accommodated on the southern periphery of Scorton without a severe residual cumulative impact on highway safety.
2.15 It is also the case that not all development traffic will leave and enter Scorton via either Gubberford Lane or Station Lane, as other roads connect the village to other destinations and provide an alternative route to Garstang and the A6.

2.16 In relation to construction traffic, this issue was addressed by Applethwaite during the consideration of its planning application and LCC has confirmed (see its consultation response of the 12th March 2018 at Appendix 2) that this does not present a constraint to development and "it is agreed that construction traffic can be considered as part of the Construction Management Plan."

2.17 It is therefore concluded that the traffic impact constraints identified by LCC in the highway evidence base ED094a in relation to Scorton are overstated, and modest housing development of approximately 30 no. dwellings on the southern periphery of the village to help meet the OAN, would not result in severe residual cumulative impacts on the highway network.

**Question 4.4** What are the prospects of improvements in highway and transport infrastructure being delivered so that housing and other needs can be fully met?

2.18 The Vectos Technical Note demonstrates that no improvements in highway and transport infrastructure are necessary to enable modest housing development of approximately 30 no. dwellings to be delivered on the southern periphery of Scorton.

**Question 4.5** Would a different distribution of development avoid severe highway impacts and allow the Local Plan to meet housing needs?

2.19 Yes. Applethwaite has demonstrated via the Vectos Technical Note attached to this Hearing Statement, that a housing allocation of approximately 30 no. dwellings on the southern periphery of Scorton, which is ranked as a Main Rural Settlement in the Local Plan Settlement Hierarchy and this is not disputed in any representations, will avoid severe highway impacts and will help the Local Plan to accommodate the full OAN for Wyre.

**Question 4.6** Is there justification for releasing more employment sites for housing in view of the shortfall of housing compared to employment land?

2.20 No comment.
Appendix 1
Wyre Borough Council
Planning and Building Control
Civic Centre,
Breck Road,
Poulton-le-Fylde,
Lancashire,
FY6 7PU

Phone: 0300 123 6780
Email: lhscustomerservice@lancashire.gov.uk
Your ref: 
Our ref: LHS/CS/02/17/00344/FUL
Date: 23rd June 2017

For the attention of Karl Glover.

| Proposal | Erection of 31 dwellings with associated access, open space and landscaping |
| Location | Land East Of Gubberford Lane Scotton Lancashire |
| Grid Ref | 350180 - 448409 |

With regard to your letter dated the 21st April 2017

The Highway Development Control Section does not have any objections in principle to the proposed 31 dwellings providing the recommendations referred to in this report, regarding sight lines at the junction of Tithe Barn Lane the sight lines onto Gubberford Road and additional street lighting along Gubberford Lane can be addressed by the applicant. Where the applicant cannot address these issues the Highway Development Control Section would recommend a refusal on highway safety grounds.

Introduction

The proposed development is to provide 31 new dwelling on previously undeveloped land. The site will be accessed from a new access to the east of the existing field access on to Tithe Barn Lane. Tithe Barn Lane an unclassified road and is categorised as a local access road with a speed limit of 60 mph fronting the site access.

Tithe Barn Lane is accessed from Gubberford Lane. Gubberford Lane is classified as the C442 and is categorised as a Secondary Distributor road with a speed limit of 30mph fronting the junction with Tithe Barn Lane.

The planning application is for less than 50 new dwellings and as such the applicant does not need to provide either a transport assessment, transport statement or a travel plan.

From or mapping system "Mapzone", the proposed development does not affect any public rights of way.

Phil Barrett, Director of Community Services
Lancashire County Council, PO Box 100, County Hall, Preston, PR1 0LD www.lancashire.gov.uk
Highway Capacity

TRICS is the national standard system used to predict trip generation and analysis of various types of development. Using a typical TRICS report for a privately owned housing development, the development will generate an estimated 240 two way vehicular movements a day with an estimated am and pm peak flow of 22 two way vehicle movements.

The Highway Development Control Section is of the opinion that the proposed 31 dwellings should have a negligible impact on highway capacity in the immediate vicinity of the.

Highway Safety

The Lancashire County Councils five year data base for Personal Injury Accident (PIA), was checked on the 16th May 2017. The data based indicates there has not been any reported incidents along Tithe Barn lane or at the junction of Tithe Barn lane and Gubberford Lane. The Highway Development Control Section is therefore of the opinion that the highway network surrounding the site is considered to have a good highway safety record.

There has not been any speed surveys carried out on either Tithe Barn lane or Gubberford Lane. The classified speed along Tithe Barn Lane is 60mph, based on observations on site the Highway Development Control Section is of the opinion that 85th percentile speeds, fronting the site access is 20mph in an easterly direction and 30mph in a Westerly direction. The classified speed along Gubberford Lane at the junction to Tithe Barn Lane is 30mph, based on observations on site the Highway Development Control Section is of the opinion that 85th percentile speeds, fronting the junction to Tithe Barn Lane is 30mph in both direction.

Based on the on the guidelines from Manual for Streets and the estimated 85th percentile speeds on Tithe Barn Lane the Highway Development Control Section is of the opinion that the shown sight lines on drawing 2016/1652/002 rev B "Proposed Access" are fully acceptable. The works associate with the provision of the sight lines will require the removal of a large tree (with a recent tree preservation order), part of the existing hedgerow and the provision of a retaining structure, due to the difference in land levels.

Using table 7.1 from Manual for Streets and the estimated 85th percentile speed of 30 mph the sight lines of 2.4 x 43m to be provided in both directions from the junction with Tithe Barn Lane onto Gubberford Lane.

The recommended sight line provision would be considered for reduction if the applicant can provide an acceptable traffic study, which indicates the 85th percentile traffic speeds are less than the estimated speeds. An acceptable traffic study would need to be carried out over a full week and to indicate in both directions the numbers of vehicles, types of vehicles and the speed of vehicles passing the proposed new access.
The applicant should provide accurate details of the required sight line requirement, before determining the application, ensuring the entire sight line requirements are fully achievable over land within the applicants control and/or over the adopted highway and to fully show all works which would be required to provide the sight lines. The sight line splays will require walls, fences, trees, hedges, shrubs, ground growth, structures etc. to have a maximum height of 1.0m above the height at the centre line of the adjacent carriageway.

Where acceptable sight lines at the junction of Tithe Barn Lane onto Gubberford Lane, in a southern direction are not provided the Highway Development Control Section would raise an objection to the development in the interest of highway safety.

Based on observations on site and the details shown on drawing 2016/1652/002 rev B "Proposed Access" the existing sight line to the north is acceptable but the sight line to the south will require more of the hedgerow fronting Gubberford Lane to be removed and the possibility of a tree to be removed.

The Highway Development Control Section fully supports the widening of Tithe Barn Lane to 5.5m with a 2m wide footpath as shown on drawing 2016/1652/002 rev B "Proposed Access". The works associate with the carriageway widening and footpath will require the removal of a large tree, part of the existing hedgerow, a structures agreement with Lancashire County Council for the retaining structure due to the difference in land levels along the southern boundary and the widening of the bridge over the water course.

To support sustainable forms of transport, the promotion of social inclusion and pedestrian safety the Highway Development Control Section recommends a 2m wide footpath on the northern side of the new site access, from the tangent point on Tithe Barn Lane to the proposed footpath fronting plot 2. The provision of the footpath would assist existing pedestrians and new resident of the new estate wanting to leisure walk. The footpath would give pedestrians a safe refuse while car enter and exit the estate and also aid to protect the sight lines at the junction with Tithe Barn Lane and plot 2 onto the new access road.

The Highway Development Control Section is of the opinion that the applicant should pay for the introduction and provision of additional street lighting along Gubberford Lane and Tithe Barn Lane. The system of street lighting from lighting column 1 on Gubberford Lane is to continue to the existing change in speed limit 30/40, approximately 110m south of the junction with Tithe Barn Lane. The street lighting system on Tithe Barn Lane is to start at the junction with Gubberford Lane and to continue approximately 55m east of the new site access. The request for the street lighting is to provide a safe walking facilities for the new residents to access the village facilities to support sustainable transport links. Additionally the street lighting has been requested in the interest of highway safety to highlight the junctions, due to increased vehicle movements at the junctions.

The Highway Development Control Section is of the opinion that the proposed site access for vehicular access is to prescribed design standards. As part of the new
site access works the existing field access, outside the extent of the new footway works is to be removed and reinstated as grass verge.

The applicant is advised that the provision of the new site access works and off-site works for the street lighting on Gubberford Lane and Tithe Barn Lane, the carriageway widening on Tithe Barn Lane, highway structure along Tithe Barn Lane, bridge widening on Tithe Barn Lane, footpath provision on Tithe Barn Lane will need to be carried out under a section 278 agreement of the 1980 Highways Act, as the works are within the existing adopted highway. The Highway Authority hereby reserves the right to provide the highway works within the highway associated with this proposal. Provision of the highway works includes design, procurement of the work by contract and supervision of the works. The applicant is advised to contact the Community Services before works begin on site. Further information and advice can be found at www.lancashire.gov.uk and search for "278 agreement".

The Highway Development Control Section is of the opinion that the proposed development should have a negligible impact on safety in the immediate vicinity of the site providing sight lines at the junction of Tithe Barn Lane the sight lines onto Gubberford Road and additional street lighting along Gubberford Lane are provided as recommended above.

**Sustainable Transport**

Our Public Transport Section have been consulted regarding possible improvements to the public transport system. The Public Transport Section is of the opinion that there is virtually no scope of providing any sustainable delivery of Public Transport to serve this development.

The Highway Development Control Section is of the opinion that the applicant should pay for the introduction and provision of additional street lighting along Gubberford Lane and Tithe Barn Lane as detailed above.

To support sustainable forms of transport, the promotion of social inclusion and pedestrian safety the Highway Development Control Section recommends a 2m wide footpath on the northern side of the new site access as detailed above.

**Internal Layout**

Based on the car parking recommendations in the Joint Lancashire Structure Plan the Highway Development Control Section is of the opinion that the applicant has provided adequate off-road parking provision for each individual property.

To support sustainable forms of transport, the promotion of social inclusion and pedestrian safety the Highway Development Control Section recommends a 2m wide footpath on the northern side of the new site access, from the tangent point on Tithe Barn Lane to the proposed footpath fronting plot 2. The provision of the footpath would assist existing pedestrians and new resident of the new estate wanting to leisure walk. The footpath would give pedestrians a safe refuse while car enter and exit the estate and also aid to protect the sight lines at the junction with Tithe Barn Lane and plot 2 onto the new access road.
The Highway Development Control Section is of the opinion that the proposed carriageway layout is acceptable for vehicle movements including refuse and emergency vehicles with adequate facilities to ensure these vehicle can enter and exit the site in a forward gear.

**Future Highway Adoption and maintenance**

The following comments are regarding the future highway adoption under a section 38 agreement with Lancashire County Council and the applicant is advised to consider these comments as part of this planning application, where they wish to offer the road for adoption. Where the recommendations below are not implemented the highways may not be suitable for adoption and they will remain private. Further guidelines regarding highway adoptable layout can be found on the Lancashire County Council Residential Road Design Guide and the construction of the highway to be to the Lancashire County Council Specification for Estate Roads 2011 edition:-

1. To support sustainable forms of transport, the promotion of social inclusion and pedestrian safety the Highway Development Control Section recommends a 2m wide footpath on the northern side of the new site access, from the tangent point on Tithe Barn Lane to the proposed footpath fronting plot 2. The provision of the footpath would assist existing pedestrians and new resident of the new estate wanting to leisure walk. The footpath would give pedestrians a safe refuse while car enter and exit the estate and also aid to protect the sight lines at the junction with Tithe Barn Lane and plot 2 onto the new access road.

2. At the turning head associated with plots 14 and 28 a 0.5m wide verge area is required to allow vehicles to overhang the kerb line and allow access to maintain the kerbs. The verge width to be increased to 800mm if street lighting is to be located within the area,

The Highway Development Control Section recommends the local planning authority attaches conditions requiring an agreement between the applicant and the local highway authority under Section 38 of the Highways Act 1980 or the constitution and details of a Private Management and Maintenance Company confirming funding, management and maintenance regimes. To ensure that the estate streets serving the development are completed and thereafter maintained to an acceptable standard in the interest of residential / highway safety; to ensure a satisfactory appearance to the highways infrastructure serving the development; and to safeguard the visual amenities of the locality and users of the highway.

The reasoning for the above recommendations are based on the Department of Transport Advice Note "Highway Adoptions" The adoption of roads into the public highway (1980 Highways Act). Which was published in April 2017
Conditions

The Highway Development Control Section recommends the following conditions as part of the formal planning decision:

1. For the full period of construction, facilities shall be available on site for the cleaning of the wheels of vehicles leaving the site and such equipment shall be used as necessary to prevent mud and stones being carried onto the highway. The roads adjacent to the site shall be mechanically swept as required during the full construction period. Reasons: To prevent stones and mud being carried onto the public highway to the detriment of road safety.

2. The layout of the development shall include provisions to enable vehicles to enter and leave the highway in forward gear and such provisions shall be laid out in accordance with the approved plan and the vehicular turning space shall be laid out and be available for use before any development commences and a suitable turning area is to be maintained thereafter. Reasons: Vehicles reversing to and from the highway are a hazard to other road users, for residents and construction vehicles.

3. The new estate road for the approved development shall be constructed in accordance with the Lancashire County Council Specification for Construction of Estate Roads to at least base course level up to the entrance of the site compound before any development takes place within the site and shall be further extend before any development commences fronting the new access road. Reasons: To ensure that satisfactory access is provided to the site before the development hereby permitted becomes operative.

4. No part of the development shall be commenced until the visibility splays measuring 2.4 metres by 43 metres in a southern direction to be provided, measured along the centre line of the widened access of Tithe Barn Lane and the nearer edge of the existing carriageway of Guuberford Lane, to the satisfaction of the Local Planning Authority. The land within these splays shall be maintained thereafter, free from obstructions such as walls, fences, trees, hedges, shrubs, ground growth or other structures within the splays in excess of 1.0 metre in height above the height at the centre line of the adjacent carriageway. Reasons: To ensure adequate visibility at the street junction or site access in the interest of highway safety in accordance with Quality of Development Policy and Transport Policy in the Local Plan.

5. No part of the development shall be commenced until the visibility splays shown on drawing 2016/1652/002 rev B "Proposed Access" on to Tithe Barn Lane. to the satisfaction of the Local Planning Authority. The land within these splays shall be maintained thereafter, free from obstructions such as walls, fences, trees, hedges, shrubs, ground growth or other structures within the splays in excess of 1.0 metre in height above the height at the centre line of the adjacent carriageway. Reasons: To ensure adequate visibility at the street junction or site access in the interest of highway safety in accordance with Quality of Development Policy and Transport Policy in the Local Plan.
6. The car parking and manoeuvring scheme to be marked out in accordance with the approved plan, before occupation of the associated dwelling and permanently maintained thereafter. Reasons: To allow for the effective use of the parking areas.

7. Notwithstanding the provisions of the Town and Country Planning (General Development Procedure) Order 1995 and the Town and Country Planning (General Permitted Development) (Amendment) (No 2) (England) Order 2008, or any subsequent Orders or statutory provision re-enacting the provisions of these Orders, all garages shown on the approved plan shall be maintained as such and shall not be converted to or used for living accommodation without the prior written approval of the Local Planning Authority in consultation with the Highway Authority. Reasons: To allow for the effective use of the parking areas.

8. The existing field access shall be physically and permanently closed and the existing verge and footway and kerbing of the vehicular crossing shall be reinstated in accordance with the Lancashire County Council Specification for Construction of Estate Roads concurrent with the formation of the new access. Reasons: To limit the number of access points and to maintain the proper construction of the highway.

9. No part of the development hereby approved shall commence until a scheme for the construction of the site access and the off-site works for the street lighting on Gubberford Lane and Tithe Barn Lane, the carriageway widening on Tithe Barn Lane, highway structure along Tithe Barn Lane, bridge widening on Tithe Barn Lane, footpath provision on Tithe Barn Lane improvement has been submitted to, and approved by, the Local Planning Authority in consultation with the Highway Authority as part of a section 278 agreement, under the Highways Act 1980. Reasons: In order to satisfy the Local Planning Authority and Highway Authority that the final details of the highway scheme/works are acceptable before work commences on site and to enable all construction traffic to enter and leave the premises in a safe manner without causing a hazard to other road users.

10. No part of the development hereby approved shall commence until a scheme for the retaining structure adjacent to the highway has been submitted to, and approved by, the Local Planning Authority in consultation with the Highway Authority. Reasons: In order to satisfy the Local Planning Authority and Highway Authority that the final details of the retaining structure are acceptable before work commences on site.

11. No part of the development hereby approved shall commence until a scheme for the bridge associated with the culverted water course has been submitted to, and approved by, the Local Planning Authority in consultation with the Highway Authority. Reasons: In order to satisfy the Local Planning Authority and Highway Authority that the final details of the retaining structure are acceptable before work commences on site.
12. Prior to the start of the development, a joint survey shall be carried out between the developer and the planning authority (in conjunction with the highway authority) to determine the condition of Gubberford Lane and Tithe Barn Lane. A similar survey shall be carried out every six months and the final inspection within one months of the completion of the last house, and the developer shall make good any damage to Gubberford Lane and Tithe Barn Lane to return it to the pre-construction situation as required. **Reasons:** To maintain the construction of Gubberford Lane and Tithe Barn Lane in the interest of highway safety.

13. A Traffic Management Plan for the construction works, to be approved in writing by the planning department before any works begin on site and to include:
   - The parking of vehicles of site operatives and visitors;
   - Loading and unloading of plant and materials used in the construction of the development;
   - Storage of such plant and materials;
   - Wheel washing facilities;
   - Periods when plant and materials trips should not be made to and from the site (mainly peak hours but the developer to identify times when trips of this nature should not be made);
   - Routes to be used by vehicles carrying plant and materials to and from the site;
   - Measures to ensure that construction and delivery vehicles do not impede access to adjoining properties.
   **Reasons:** to protect existing road users

14. No development shall be commenced until an estate street phasing and completion plan has been submitted to and approved in writing by the local planning authority. The estate street phasing and completion plan shall set out the development phases and the standards that estate streets serving each phase of the development will be completed. **Reason:** To ensure that the estate streets serving the development are completed and thereafter maintained to an acceptable standard in the interest of residential / highway safety; to ensure a satisfactory appearance to the highways infrastructure serving the development; and to safeguard the visual amenities of the locality and users of the highway, in accordance with Policies [X, Y and Z] of the development plan.

15. No dwelling within phase each phase shall be occupied until the estate street(s) affording access to those dwelling(s) has been completed in accordance with the Estate Street Development Plan. **Reasons:** - To ensure that the estate streets serving the development are completed and maintained to the approved standard, and are available for use by the occupants, and other users of the development, in the interest of highway safety; to ensure a satisfactory appearance to the highways infrastructure serving the approved development; and to safeguard the visual amenities of the locality and users of the highway, in accordance with Policies X, Y and Z of the Development Plan.
16. No development shall be commenced until details of the proposed arrangements for future management and maintenance of the proposed streets within the development have been submitted to and approved by the local planning authority. [The streets shall thereafter be maintained in accordance with the approved management and maintenance details until such time as an agreement has been entered into under Section 38 of the Highways Act 1980 or a private management and Maintenance Company has been established].

17. No development shall be commenced until full engineering, drainage, street lighting and constructional details of the streets proposed for adoption have been submitted to and approved in writing by the local planning authority. The development shall, thereafter, be constructed in accordance with the approved details, unless otherwise agreed in writing with the local planning authority. Reason: - In the interest of highway safety; to ensure a satisfactory appearance to the highways infrastructure serving the approved development; and to safeguard the visual amenities of the locality and users of the highway in accordance with Policies [X, Y and Z] of the Development Plan.

If you have any questions please do not hesitate to contact me.

Yours sincerely

Stewart Gailey
Highway Development Control
Appendix 2
Wyre Borough Council
Planning and Building Control
Civic Centre,
Breck Road,
Poulton-le-Fylde,
Lancashire,
FY6 7PU

Phone: 0300 123 6780
Email: lhccustomerservice@lancashire.gov.uk
Your ref:
Our ref: LHS/CS/02/17/00344/FUL
Date: 17th October 2017

For the attention of Karl Glover.

| Proposal: | Erection of 31 dwellings with associated access, open space and landscaping |
| Location: | Land East Of Gubberford Lane Scorton Lancashire |
| Grid Ref: | 350180 - 448409 |

I refer to the above planning application and would make the following comments.

Lancashire County Council (LCC) as the Local Highway Authority (LHA) is responsible for providing and maintaining a safe and reliable highway network. With this in mind, the present and proposed highway systems have been considered and areas of concern that potentially could cause problems for the public, cyclists, public transport, motorists and other vehicles in and around the area have been identified.

LCC embraces appropriate development within Lancashire in line with local and national policies / frameworks and that which is emerging. This involves working closely with planning authorities, in this case officers of Wyre Council, developers and their representatives and also Highways England. This approach supports the delivery of high quality, sustainable development and an appropriate scale of development that can be accommodated both locally and strategically.

LCC have previously provided comments on the proposed Wyre Local Plan with regard to suitability of housing sites throughout the borough (having regard to the above paragraph). As part of these comments LCC considered, from a highway / transport / NPPF point of view, that housing development in Scorton could not be supported. These comments dated 24th February are available, in full, to view on Wyre’s website as part of their evidence base on the emerging new Local Plan.

A number of sites in Scorton were included as potential locations for housing development in the draft local plan to which LCC as LHA has previously considered and provided comment to Wyre Council (i.e. not recommending progression into the next stage of the Local Plan). The site that this application relates to was not one of the sites considered; however, LCC consider this site to have similar influences on the highway network and as such and in line with our local plan comments the LHA is of the opinion that this site cannot be supported.
Scorton has links to the A6 corridor via Station Lane and Gubberford Lane. Both of these routes are restricted in width (and height) by railway bridges to a single lane with no footways. Further to this, Station Lane is restricted in width (and weight) by the bridge over the River Wyre again to a single lane without footways.

LCC’s comments on the draft local plan included “Indicative sites have poor access to public transport. A single lane arched bridges with height restriction under the railway line on Station Road, another on Gubberford Lane, and a single lane 3t weight restricted river crossing (with no footways) over the River Wyre, provide the only access points into the village from the A6. Development will result in an increase of trips during peak hour which is likely to be all car based. This raises significant concern, in terms of construction activity as well as residential traffic, when considering the current capacity constraints. For these reasons, it is considered that there is not a satisfactory means of managing these impacts (including construction activity) to support development.”

The Local Highway Authority (LHA) would like to note that it is critical that further highway demand (such as from development) does not compromise the safe movement of people and goods by any mode or the quality of life experienced within, through and also beyond this local network.

**Sustainability.**

Scorton lacks a significant number of services / facilities that would make it a sustainable location for development. These are summarised below:-

- a. Transport. There are no public transport facilities in Scorton. The nearest route with a scheduled public service is the A6 some 2km away. The nearest railway station is approximately 14km away in Lancaster.
- b. Local Amenities. Apart from the Post Office there are no other local amenities such as banks and libraries.
- c. Food Retail. Only a small convenience store exists in the village. Suitable for a top up but not really suited for a weekly shop.
- d. Non-Food Retail. None available if farm craft shop is excluded.
- e. Education. The local Primary school located in the village centre. Nearest secondary school over 5km away at Garstang although school service runs from village centre but not past the development site.
- f. Health. No health facilities exist in the village. The nearest facilities are located in Garstang over 7km away.
- g. Employment. There are no employment sites in Scorton. The nearest employment area is located in Garstang.

**Development Proposal**

Notwithstanding the previous comments and our position of non-support, (LCC) Highways have, for completeness, provided the following comments that relate to other details presented in the application proposal.
The proposed development is to provide 31 new dwellings on previously undeveloped land. The site will be accessed from a new access to the east of the existing field access on to Tithe Barn Lane. Tithe Barn Lane is an unclassified road and is categorised as a local access road with a speed limit of 60 mph fronting the site access.

Tithe Barn Lane is accessed from Gubberford Lane. Gubberford Lane is classified as the C442 and is categorised as a Secondary Distributor road with a speed limit of 30mph fronting the junction with Tithe Barn Lane.

The planning application is for less than 50 new dwellings and as such the applicant assumed they did not need to provide either a transport assessment, transport statement or a travel plan. Following discussions with the applicant’s consultants Model Group Ltd carried out a traffic study around the site, over a full week and a summary of the results are shown below.

The traffic study on Gubberford Lane at the junction with Tithe Barn Lane indicates:

1. The 85th percentile speed is 34 south bound and 30mph north bound.
2. The average weekly flow of traffic per day passing the junction with Tithe Barn Lane is 827 south bound and 827 north bound.
3. The morning peak traffic period traffic between 8am and 9am is 63 vehicles south bound and 51 vehicles north bound.
4. The evening peak traffic period between 5pm and 6pm is 66 vehicles south bound and 57 vehicles north bound.

The traffic study on Tithe Barn Lane at the site access indicates:

1. The 85th percentile speed is 25mph east bound and 29mph west bound.
2. The average weekly flow of traffic per day passing the site is 101 east bound and 101 west bound.
3. The morning peak traffic period between 8am and 9am is 6 vehicles east bound and 10 vehicles west bound.
4. The evening peak traffic period between 5pm and 6pm is 11 vehicles east bound and 6 vehicles west bound.

The traffic studies by Model Group Ltd, clearly shows that the peak periods for vehicle movements is higher outside the normal peak periods of 8am to 9am and 5pm to 6pm. (LCC) Highways comments have been based on the normal 8am to 9am and 5pm to 6pm normal peak periods for residential development and indicates the

From our mapping system "Mapzone", the proposed development does not affect any public rights of way.

Highway Capacity

Scorton has limited facilities and amenities within reasonable walking and cycling distances as previously highlighted, this together with the absence of public transport mean that journeys to and from the site will be car dominant.
TRICS is the national standard system used to predict trip generation and analysis of various types of development. Using a typical TRICS report for a privately owned housing development, the development will generate an estimated 240 two way vehicular movements a day with an estimated AM and PM peak flow of 22 two way vehicle movements.

The (LCC) Highways are of the opinion that whilst the proposed 31 dwellings should not have an unacceptable impact on highway capacity in the immediate vicinity of the site, there are sections of the routes to the A6 where road widths are restricted and the impact of the development would have significantly greater impact (see previous paragraphs).

Highway Safety

Lancashire County Councils five year database for Personal Injury Accident (PIA), was checked on the 16th May 2017. The database indicates there has not been any reported incidents along Tithe Barn Lane or at the junction of Tithe Barn Lane and Gubberford Lane. The (LCC) Highways are therefore of the opinion that the highway network in the immediate environs of the site is at present considered to have a good highway safety record.

Between the development site and the A6 along Gubberford Lane there have been 3 injury accidents, 2 accidents resulted in serious injuries and 1 in slight injuries. Of note is that 1 of the serious injury accidents involved cyclists at the railway bridge, where width and visibility are severely limited. The slight injury accident involved a pedestrian on a section where no footways or verge are present. Whilst the accident rate is not exceptional there is a concern that increasing traffic levels will exacerbate accident rates for vulnerable road users, in particular pedestrians and cyclists.

There have been 5 injury accidents, all slight, along the route to the A6 from the development site via Gubberford Lane and Station Lane. One accident involve a pedestrian and one a cyclist, neither of these accidents occurred where there was no footway or carriageway width severely restricted.

(LCC) Highways must re-iterate that highway safety is a major factor in determining whether or not a development proposal is acceptable. (LCC) Highways have concerns over the increased conflict between motorists / pedestrians and motorists / cyclists on sections of the highway which supports sustainable travel. Further to this there is no certainty that the appropriate improvements can be delivered due to very restrictive highway limits.

The applicant’s consultant’s Model Group Ltd carried out a traffic study around the site, over a full week and the study indicates the 85th percentile speed on Gubberford Lane at the junction with Tithe Barn Lane is 34 south bound and 30mph north bound.

A traffic study was also carried out on Tithe Barn Lane at the site access and this study indicates the 85th percentile speed is 25mph east bound and 29mph west bound.
Based on the recommendations from Manual for Streets, Model Group Ltd used these figures to calculate the required sight line distances from the new site access onto Tithe Barn Lane and the sight line requirement for the junction with Tithe Barn Lane and Gubberford Lane a copy of calculations have been provided at the end of this report.

The sight line calculations requires a "Y" distance of 33m in a westerly direction and 40m in a easterly direction onto Tithe Barn Lane from the new site access and a "Y" distance of 51m in a northern direction and 43m in a southern direction from the junction of Tithe Barn Lane onto Gubberford Lane. Model Group Ltd have then shown the sight lines recommendations can be provided on drawing 2016/1652/002 rev D "Tithebarn Lane Proposed Access".

Based on observations on site and the details shown on drawing 2016/1652/002 rev D "Tithebarn Lane Proposed Access", the existing sight line to the north is acceptable but the sight line to the south will require more of the hedgerow fronting Gubberford Lane to be removed and the removal of the semi-mature tree (not known to have a TPO) that is within the hedge line approximately 10m south of its junction with Tithe Barn Lane.

Whilst LCC does not support the proposal, should Wyre be minded to approve the application then I would provide the following comments that identify changes that would need to be addressed as a minimum, based on the details shown on 2016/1652/002 rev D "Tithebarn Lane Proposed Access":-

a) The widening of Tithe Barn Lane to 5.5m will require excavations at the base of the protected tree and details of the construction will need to be agreed with Wyre Borough Council's tree officer. The construction will also need to be to Lancashire County Council's Specification for the Construction of Residential Roads. From the details provided to-date, (LCC) Highways are not convinced these works can be carried out without causing long term damage to the tree.

b) The widening of Tithe Barn Lane to 5.5m will encroach onto the embankment on the southern side of Tithebarn Lane and as such the structure / stability of the embankment will need to be proved and accepted by Lancashire County Council Structures Section, the details of the structure and / or the cutting back of the embankment will again have an impact on the protected tree. From the details provided to-date (LCC) Highways are not convinced these works can be carried out without causing long term damage to the tree and a structures agreement will be required with Lancashire County Council for the retaining structure and/or embankment works due to the difference in land levels along the southern boundary.

c) A structures agreement will be required with Lancashire County Council for the widening of the bridge over the water course.

d) A 2m wide footpath has been shown on the southern side of the listed tree to try and reduce the impact on the embankment. The footpath construction will require excavations at the base of the protected tree and details of the construction will need to be agreed with Wyre Borough Council's tree officer. The construction will also need to be to Lancashire County Council's Specification for the Construction of Residential Roads. From the details
provided to-date, (LCC) Highways are not convinced these works can be carried out without causing long term damage to the tree.

e) The proximity of the footpath with the embankment may also require the structure / stability of the embankment to be proved and accepted by Lancashire County Council Structures Section, before any works begin on site. From the details provided to-date (LCC) Highways are not convinced these works can be carried out without causing long term damage to the tree and a structures agreement may be required with Lancashire County Council for the retaining structure and/or embankment works due to excavations close to the embankment.

f) Due to the changes in levels and the close proximity to the embankment secure guarding will be required to prevent pedestrians falling down the embankment.

g) Where pedestrians are expected the gradient should ideally be more than 5% with a maximum of 8% for wheel chair users (Manual for Streets 2 5.2.5). From observations on site and the details provided to date (LCC) Highways are not convinced these gradients can be provided due to the difference in levels.

h) To improve the sustainability of the site, the existing system of street lighting on Gubberford Lane to continue to the existing change in speed limit 30/40, approximately 110m south of the junction with Tithe Barn Lane.

i) To improve the sustainability of the site, a new section of street lighting on Tithe Barn Lane is to start at the junction with Gubberford Lane and to continue approximately 55m east of the new site access.

The existing field access, outside the extent of the new footway works needs to be removed and reinstated as grass verge.

The (LCC) Highways are of the opinion that the proposed development locally would need to provide sight lines at the junction of Tithe Barn Lane the sight lines onto Gubberford Road and additional street lighting along Gubberford Lane. However, due to the restrictive nature of the roads between the A6 and Scorton there is concern that even relatively low increases in traffic movements would be detrimental to highway safety, as highlighted in previous paragraphs.

**Sustainable Transport**

Scorton has no public bus services, although school transport is provided term time only, with the nearest general service running along the A6 some 2km from the site, along roads where footway provision is mostly non-existent and along points where carriageway width is severely restricted (i.e. at the bridges).

Our Public Transport Section have been consulted and is of the opinion that there is virtually no scope of providing any sustainable delivery of Public Transport to serve this development. Consideration has been given to the developer funding a service through s106 contributions, however, given the scale of the development and the size of Scorton as a whole it is likely that any service would continue to require subsidy beyond that timeframe that it would be reasonable to expect a developer to fund and as such it would be a short lived service.
To address (LCC) Highways concerns between the site and the centre of the village, (LCC) Highways are of the opinion that the applicant would need to pay for the introduction and provision of additional street lighting along Gubberford Lane and Tithe Barn Lane as detailed above. It should be noted that this only addresses part of the (LCC) Highways concerns.

Whilst some local improvements can be made to access to the village centre with its limited provisions the developer is very unlikely to be able to provide sufficient improvements to sustainable travel, to offer appropriate travel choices other than by car and therefore this does not meet the requirements of the NPPF in maximising and promoting sustainable travel and site sustainability. Further, if short term funding were possible for PT, it is unlikely to become a viable commercial service and therefore in order for it to continue it would further subsidy. In the current economic climate LCC has little resource for subsidising bus services which is unlikely to change in the foreseeable future and therefore there can be no certainty that the development will be sustainable.

Internal Layout

Whilst LCC cannot support the proposal I would make the following comments in regard to the internal layout, should Wyre be minded to approve the application.

Based on the car parking recommendations in the Joint Lancashire Structure Plan the (LCC) Highways are of the opinion that the applicant can provide adequate off-road parking provision for each individual property.

The (LCC) Highways are of the opinion that the proposed internal carriageway layout would be acceptable for vehicle movements including refuse and emergency vehicles with adequate facilities to ensure these vehicles can enter and exit the site in a forward gear.

Conclusion

There are a number of issues locally that it is within the gift of the developer to address, however, even if these were addressed to the satisfaction of the LHA, LCC cannot support this proposal and would cite the following reason:

The development site is not in a sustainable location and it is considered to be beyond the capabilities of the developer to make it a sustainable site. This is contrary to the NPPF and the emerging Local Plan.

Conditions

If you are minded to approve this application, LCC would be willing to provide suggested suitable conditions.

Yours sincerely
Stewart Gailey
Highway Development Control
Tithe Barn Lane
Survey Start: Friday 9th September 2016

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**Speeds in Mph**
From MfS

**Formula from Manual for Streets for Calculating SSD**

SSD = vt + \(\frac{v^2}{2d}\)

**Eastbound**

\[
\begin{align*}
v &= \text{speed (m/s)} \\
t &= \text{driver perception-reaction time (s)} \\
d &= \text{deceleration (m/s}^2) \\
25 \text{mph} &= 11 \\
1.5 \text{s} &= 4.41 \text{m/s}^2
\end{align*}
\]

SSD = vt + \(\frac{v^2}{2d}\)

\[
\begin{align*}
\text{SSD} &= 30 \text{ m} \\
\text{Adjusted for bonnet (SSD + 2.4m)} &= 33 \text{ m}
\end{align*}
\]

**Westbound**

\[
\begin{align*}
v &= \text{speed (m/s)} \\
t &= \text{driver perception-reaction time (s)} \\
d &= \text{deceleration (m/s}^2) \\
29 \text{mph} &= 13 \\
1.5 \text{s} &= 4.41 \text{m/s}^2
\end{align*}
\]

SSD = vt + \(\frac{v^2}{2d}\)

\[
\begin{align*}
\text{SSD} &= 38 \text{ m} \\
\text{Adjusted for bonnet (SSD + 2.4m)} &= 40 \text{ m}
\end{align*}
\]
Gubberford Lane (Adjacent to Tithe Barn Lane Junction)
Survey Start: Wednesday 28th June 2017

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From MfS

Formula from Manual for Streets for Calculating SSD
SSD = vt + v²/2d

\[
\text{Eastbound}
\begin{align*}
v &= \text{speed (m/s)} \\
t &= \text{driver perception-reaction time (s)} \\
d &= \text{deceleration (m/s}^2) \\
34 \text{mph} &= 15 \\
1.5 \text{s} &= 4.41 \text{m/s}^2 \\
\end{align*}
\]

SSD = vt + v²/2d
SSD = 49 m
Adjusted for bonnet (SSD + 2.4m) = 51 m

Formula from Manual for Streets for Calculating SSD
SSD = vt + v²/2d

\[
\text{Eastbound}
\begin{align*}
v &= \text{speed (m/s)} \\
t &= \text{driver perception-reaction time (s)} \\
d &= \text{deceleration (m/s}^2) \\
30 \text{mph} &= 14 \\
1.5 \text{s} &= 4.41 \text{m/s}^2 \\
\end{align*}
\]

SSD = vt + v²/2d
SSD = 41 m
Adjusted for bonnet (SSD + 2.4m) = 43 m
For the attention of Karl Glover.

| Proposal: | Erection of 31 dwellings with associated access, open space and Landscaping |
| Location: | Land East Of Gubberford Lane Scorton Lancashire |
| Grid Ref: | 350180 – 448409 |

I refer to the above planning application and would make the following provisional comments based on the "Vectos transport planning specialist" Technical Report dated February 2018.

**General around the site**

Please provide a plan showing the 2m footpath leading from the site access to Gubberford Lane and the footpath on the east of the site access.

The principle of widening Tithe Barn Lane to 4.8m wide is acceptable in principle but the issues regarding retaining structures and the culverted bridge are still to be considered on the south side of the road and the widening on the norther side of the road may now impact on the embankment down to the Bowling Green. The site access and the junction with Gubberford Lane should be proved by swept path analysis for a twin axel refuse vehicle, when a car is in the opposite lane.

Provide details of the street lighting and change in speed limit along Gubberford Lane and Tithe Barn Lane.

It is agreed that construction traffic can be considered as part of the Construction Management Plan.

Provide details of the sight lines onto Gubberford Lane and show all of the works required to provide.

Highway capacity within the village of Scorton and along the A6 are not an issue, the issue is highway safety on the roads, for pedestrians and cyclists, leading from the A6 along Gubberford Lane and Station Lane to Scorton and in particular at the bridges.

The Technical Report indicate a daily average of one vehicle movements per minute. The table 3.3 of the Technical Report does not include traffic generation from the site.
or TEMPRO growth factors. Using the figures in the Technical Review the site will
add 25 additional vehicle trips onto Gubberford Lane during the am and pm rush
hours with a 85% of the traffic generation traveling south of the site and 35% of the
traffic travelling north of the site. This equates to an estimated 16 to 17 additional
cars passing under the bridge on Gubberford Lane and an estimated 8 to 9
additional cars passing under the bridge on Station Lane.

Using the worst case traffic count for the September 2016 evening count of 148
vehicles and the June 2017 am count of 114 vehicles, the proposed development
generate an estimated 10% additional traffic movements in the morning and 13%
additional traffic movements in the evening under the Gubberford Lane Bridge.

When assessing the am and pm peak periods vehicle movements under the
Gubberford Lane bridge is now one vehicle every 27 seconds during the morning
peak period and one vehicle every 22 seconds during the evening period. (LCC)
Highways are of the opinion that the 10 to 13 percent in additional vehicle
movements will significantly increase the opportunity for conflict at the bridges at the
detriment to highway safety for pedestrians,

The (LCC) Highways comments above more than doubles the number of vehicle
movements stated in the Technical Report. The Technical Report has been
averaged over a full day and has not concentrated on peak periods. The traffic count
has also been averaged over a full hour and there will be times within this hour
where the peak flow is higher, than stated in the Technical Report.

Gubberford Lane Bridge

At the bridge on Gubberford Lane there is a narrow footpath along the western kerb
line, it is not possible for north bound traffic; before the bridge; to see the footpath
beyond, as such pedestrians are hidden from view until they walk onto the road. It is
also not possible for these pedestrians to see the north bound traffic until they walk
into the road.

The bridge with a height restriction of 11 ' 9", it is also arched and narrow so high
sided vehicles’ including transit vans need to be in the middle of the road and do not
have any manoeuvring space to move round a pedestrian in the road.

The on road walking distance under the Gubberford Lane Bridge is 45m and using
an average walking speed of 1.2m/second it would take the pedestrian around 37
seconds to reach the continuation of the footpath at the opposite side of the bridge
and with peak hour traffic of a car every 22 seconds conflict with pedestrians at the
bridge will be increased.

(LCC) Highways are of the opinion that the proposed signs on the south of the bridge
would need to be over third party land as a clearance of 500mm is required from the
kerb edge to the side of the sign. The proposed priority signing would encourage
speed of vehicles with the right of way to travel faster as they do not need to stop.
Station Lane Bridge

At the bridge on Station Lane there is a narrow footpath along the southern kerb line, to the east of the bridge only, it is not possible for south bound traffic; before the bridge; to see the footpath beyond, as such pedestrians are hidden from view until they are nearly a third of the way under the bridge. It is also not possible for these pedestrians to see the southbound traffic until they are nearly a third of the way under the bridge.

Due to the low tangent point between the vertical walls and the curved arch pedestrian’s will walk further from the walls to ensure they have head clearance, this could result in pedestrians being nearer half way through the tunnel before being seen.

The bridge with a height restriction of 10’3”, it is also arched and narrow so high sided vehicles including transit vans need to be in the middle of the road and do not have any manoeuvring space to move round a pedestrian in the road.

The on road walking distance under the Station Lane Bridge is 30m and using an average walking speed of 1.2m/second it would take the pedestrian around 25 seconds to reach a safe area to wait off road, at the eastern gate entrance.

(LCC) Highways are of the opinion that the proposed signs on the east of the bridge would need to be over third party land as a clearance of 500mm is required from the kerb edge to the side of the sign. The proposed priority signing would encourage speed of vehicles with the right of way to travel faster as they do not need to stop.

General comments regarding the bridges

A road narrowing line has been indicate on the plans, it is not clear what these lines represent. If lining the maintenance issues will be high as vehicles will be over run the lining frequently. If kerbed issues with construction; drainage; future damage and maintenance; safe running width for vehicles and passing places for pedestrians. The maintenance issues are increased due to being under a railway bridge and additional network rail traffic management implications> in additional any additional maintenance issues will required road closures and diversions due to the narrow road width.

Due to the low tangent point between the vertical walls and the curved arch pedestrian’s will walk further from the walls to ensure they have head clearance the offset of the shown line would need to be proved for each bridge, pedestrians will feel protected by the line and this may not allow room for vehicles to pass pedestrians safely.

If you have any questions please do not hesitate to contact me.

Yours sincerely
Stewart Gailey
Highway Development Control
Tithe Barn Lane
Survey Start: Friday 9th September 2016

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<th>Direction of Traffic Flow</th>
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Speeds in Mph From MfS

Formula from Manual for Streets for Calculating SSD

\[ SSD = vt + \frac{v^2}{2d} \]

**Eastbound**

\[ v = \text{speed (m/s)} \]
\[ t = \text{driver perception-reaction time (s)} \]
\[ d = \text{deceleration (m/s}^2) \]

\[ 25 \text{mph} = 11 \text{m/s} \]
\[ 1.5 \text{s} \]
\[ 4.41 \text{m/s}^2 \]

\[ SSD = vt + \frac{v^2}{2d} \]

\[ SSD = 30 \text{m} \]

Adjusted for bonnet \((SSD + 2.4m) = 33 \text{m}\)

**Westbound**

\[ v = \text{speed (m/s)} \]
\[ t = \text{driver perception-reaction time (s)} \]
\[ d = \text{deceleration (m/s}^2) \]

\[ 29 \text{mph} = 13 \text{m/s} \]
\[ 1.5 \text{s} \]
\[ 4.41 \text{m/s}^2 \]

\[ SSD = vt + \frac{v^2}{2d} \]

\[ SSD = 38 \text{m} \]

Adjusted for bonnet \((SSD + 2.4m) = 40 \text{m}\)
Gubberford Lane (Adjacent to Tithe Barn Lane Junction)
Survey Start: Wednesday 28th June 2017

<table>
<thead>
<tr>
<th>Day</th>
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<th>Southbound</th>
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<td>Wednesday</td>
<td></td>
<td>35.1</td>
<td>31.1</td>
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<tr>
<td>Thursday</td>
<td></td>
<td>34.9</td>
<td>31.8</td>
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<td></td>
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<td>27.1</td>
</tr>
<tr>
<td>Monday</td>
<td></td>
<td>34.4</td>
<td>31.1</td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td>34.9</td>
<td>31.5</td>
</tr>
<tr>
<td>Average 85th %ile</td>
<td></td>
<td>33.9</td>
<td>30.2</td>
</tr>
<tr>
<td>Visi Splay (m)</td>
<td></td>
<td>51</td>
<td>43</td>
</tr>
</tbody>
</table>

From MfS

Formula from Manual for Streets for Calculating SSD
SSD = vt + v^2 / 2d

<table>
<thead>
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<th></th>
<th>Eastbound</th>
<th></th>
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<tr>
<td>v= speed (m/s)</td>
<td>34 mph = 15</td>
<td></td>
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<tr>
<td>t= driver perception-reaction time (s)</td>
<td>1.5 s</td>
<td></td>
</tr>
<tr>
<td>d= deceleration (m/s^2)</td>
<td>4.41 m/s^2</td>
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SSD = vt + v^2 / 2d
SSD = 49 m
Adjusted for bonnet (SSD + 2.4m) = 51 m

Formula from Manual for Streets for Calculating SSD
SSD = vt + v^2 / 2d

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<td>t= driver perception-reaction time (s)</td>
<td>1.5 s</td>
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<tr>
<td>d= deceleration (m/s^2)</td>
<td>4.41 m/s^2</td>
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</tbody>
</table>

SSD = vt + v^2 / 2d
SSD = 41 m
Adjusted for bonnet (SSD + 2.4m) = 43 m
Technical note

VN80962

April 2018
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### APPENDICES

Appendix A Road Safety Assessment
1 INTRODUCTION

1.1 Introduction

1.1.1 This Technical Note has been prepared by Vectos on behalf of Applethwaite Limited to support their representations on the Publication Draft of the Wyre Local Plan 2017.

1.1.2 The Technical Note responds to Matter 3 of the Wyre Local Plan Examination which considers ‘Housing and Employment Objectively Assessed Needs (OAN) and Requirements’.

1.1.3 Issue 4 addresses ‘The Housing Requirement of 8,225 dwellings’. In this regard, and in the context of modest residential development coming forward on the southern periphery of Scorton, this Note considers the following questions raised by the Inspector:

- 4.2 – Are the highway constraints overstated;
- 4.3 – In particular would development to meet the OAN result in severe residual cumulative impacts on the highway network having regard to improvements that can be undertaken; and
- 4.6 – Would a different distribution of development avoid severe highway impacts and allow the LP to meet housing needs.

1.2 Evidence Base

1.2.1 Lancashire County Council (LCC), in their capacity as highway authority, made representations for the draft Wyre Local Plan. This commentary was summarised in a document entitled ‘Implications for housing developments within the proposed Wyre Local Plan’, dated 24th February 2017 (Evidence Base Reference EDO94A).

1.2.2 As part of LCC’s representations the authority considered the potential to develop three sites in Scorton, two for residential purposes (IO_89 and IO_90) and one for mixed use development (IO_91).
1.2.3 Evidence Base ED094A states that the overarching restriction affecting the majority of localities within the A6 corridor is the ability of M55 Junction 1 to accommodate development traffic. As a consequence, the study applies restriction zones to localities depending on their proximity and propensity to use M55 Junction 1.

1.2.4 The highway authority's evidence confirms that Scorton is located in an unrestricted (n3) A6 zone. The study therefore confirms that there is no reason development in Scorton should be constrained based upon impact at M55 Junction 1.

1.2.5 On this basis Evidence Base ED094A states that a desktop assessment (DA) is necessary which will determine the scope for indicative development within the localities. The study notes that the DA takes a broad brush approach which is not as detailed as a transport assessment (TA), and that TA's for individual sites have not been possible due to the lack of detailed information available at that time.

1.2.6 Within Evidence Base ED094A, LCC's desktop analysis for Scorton concluded that:

"Indicative sites have poor access to public transport. A single lane arched bridges with height restriction under the railway line on Station Road, another on Gubberford Lane, and a single lane 3t weight restricted river crossing [with no footways] over the River Wyre, provide the only access points into the village from the A6. Development will result in an increase of trips during peak hour which is likely to be all car based. This raises significant concern, in terms of construction activity as well as residential traffic, when considering the current capacity constraints. For these reasons, it is considered that there is not a satisfactory means of managing these impacts (including construction activity) to support development".

1.2.7 On this basis LCC recommended that no dwellings should be developed in Scorton.
1.3 Technical Note Scope

1.3.1 This Technical Note appraises the scope and potential for modest growth of approximately 30 residential dwellings in Scorton.

1.3.2 While Applethwaite Limited has a land interest in Scorton, this Note considers the scope for development in principal on the southern periphery of the village, with the rest of the village periphery constrained by landscape (areas of natural beauty) and flood risk.
2 ARE THE HIGHWAY CONSTRAINTS OVERSTATED?

2.1 Introduction

2.1.1 Section 2 of this Technical Note considers Session 3 Question 4.2 raised by the Inspector, namely:

"Are the highway constraints overstated."

2.2 Evidence Base EDO94A Desktop Appraisal

2.2.1 In considering development opportunities in Scorton, Evidence Base EDO94A highlighted the following perceived constraints:

"Indicative sites have poor access to public transport. A single arched bridges with height restriction under the railway line on Station road, another on Gubberford Lane, and a single lane 3t weight restricted river crossing (with no footways) over the River Wyre, provide the only access points into the village from the A6."

2.2.2 In short, Evidence Base EDO94A questioned whether Scorton was an accessible location for development, both in terms of non-motorised and motorised forms of travel. These items will be considered in turn.

2.3 Accessibility by Sustainable Forms of Travel

2.3.1 In response to Evidence Base EDO94A the accessibility of the southern periphery of Scorton by walking, cycling and public transport has been reviewed.

Accessibility on Foot

2.3.2 In considering the pedestrian accessibility of the southern periphery of Scorton it is important to recognise the dominant pedestrian desire lines will be between the area of development and Scorton village centre.

2.3.3 A review of the pedestrian infrastructure on the southern periphery of the village indicates that a footway is provided along the western side of Gubberford Lane for almost the entire length between the railway bridge and village centre.
2.3.4 The only area where pedestrians would be required to walk in the carriageway is a short section of approximately 15 metres, as shown in the image below. Assuming an average walking speed of 1.2 m/sec, it would take pedestrians only around 12 seconds to cover this distance.

![Image of pedestrian crossing](image)

**Figure 2.1: Existing Pedestrian Provision on Gubberford Lane/The Square**

2.3.5 Reference to the Crashmap website shows there have been no incidents in this location in the last 19 years, as shown overleaf. This is largely due to the unrestricted visibility and low speed limit in this area, which affords pedestrians and motorists due warning of each other’s presence.
The absence of a short section of footway in this location is therefore not considered to represent a material safety risk to pedestrians.

It is noted that an alternative pedestrian route from the southern periphery of Scorton to the village centre also exists via a route which runs from Gubberford Lane via St Peters Church to Snowhill Lane. The route is part traffic free and provides no physical features (such as steps) to restrict pedestrian movements. This alternative route provides pedestrians with safe connections between the southern periphery of Scorton, Scorton Church of England Primary School and Scorton village centre.

This route is identified in Figure 2.3 below. It is noted that from Gubberford Lane this is signposted as a route to the primary school, thereby making it ideal for parents residing on the southern periphery of the village who are taking their children to school.
Figure 2.3: Pedestrian Route to Scorton C of E Primary School

2.3.9 The route is supported by on-street road markings on the road leading from Snowhill Lane towards Scorton Church of England Primary School and Scorton village centre, as shown overleaf.
2.3.10 In addition, in considering pedestrian movements between the southern periphery of Scorton and the A6 reference to LCC’s MARIO (Maps & Related Information Online) website indicates that a traffic free public footpath runs from Gubberford Lane to Weavers Lane, and thereafter the A6.

2.3.11 This route covers a distance of approximately 1.1 kilometres and is identified by the dashed purple line in Figure 2.5 below. The route is a shorter walking distance from Scorton village centre than both the Gubberford Lane and Station Lane routes.
2.3.12 The route provides the opportunity for pedestrians wishing to walk to the A6 from the southern periphery of Scorton to undertake almost the entire route free from traffic and allows them to avoid the bridge structures on Gubberford Lane and Station Lane identified as constraints by LCC should they so wish.

2.3.13 Significantly the route joins the A6 in close proximity to north and southbound bus stops, from where frequent bus services are operated. While the walking distance is further than desirable, the potential for residents to consider this a viable route does reflect National Planning Policy Framework guidance, which at paragraph 29 states that "different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas".

2.3.14 To enhance the sustainability of the southern periphery of Scorton, consideration could be given to any future residential developments providing some or all of the following improvements:

- Additional street lighting on Gubberford Lane;
- Improvements to the pedestrian route (for example surface treatments or lighting) which links Gubberford Lane and Scorton village centre via Scorton Church of England Primary School and Snowhill Lane; and
- Improvements to the pedestrian route (for example surface treatments or lighting) which links Gubberford Lane and the A6 via Weavers Lane.

2.3.15 It is therefore concluded that there are no pedestrian constraints to development on the southern periphery of Scorton.

Accessibility by Bicycle

2.3.16 Development of the southern periphery of Scorton would also be well located to encourage access by bicycle, with the MARIO website highlighting an on-road cycle route running along Gubberford Lane. This is marked as Route 6.

2.3.17 Improvements to street lighting on Gubberford Lane, which could be provided in conjunction with future residential development, would improve safety for all cyclists.
2.3.18 It is therefore concluded that there are no cycle constraints to development on the southern periphery of Scorton.

**Accessibility by Public Transport**

2.3.19 A modest residential development of the scale considered in this Technical Note would generate in the region of 5 two-way bus trips per day, with a peak hour generation between 1600 – 1700 of 1 two-way trip. This indicates the very low public transport demand of such a scale of development in this locale.

2.3.20 The No 512 bus service operates from Scorton to Garstang High School. This is a service for school children which stops in the Village Square approximately 400 metres walk from the southern periphery of Scorton, and is operated by Bon Chaunce Coaches. The weekday service operates at 07:59 in the morning and 15:24 in the afternoon.

2.3.21 In addition to this service, Wyre Council and LCC promote and fund a dial-a-bus service. This is a scheme aimed at elderly and mobility challenged people that is designed to provide an alternative to the provision of a bus service, especially in rural areas where bus provision is low.

2.3.22 The service is intended to provide such users with regular access to facilities such as supermarkets or day care centres. It operates a door to door service using vehicles that are equipped with lifts and passenger constraints thereby also making them suitable for wheelchair users.

2.3.23 From 1 July 2011 the maximum fares being charged by community transport operators will be as shown below, although some operators may offer lower fares than advertised.

- Up to 2 miles - £2 adult single fare
- Over 2 and up to 4 miles - £3 adult single fare
- Over 4 and up to 9 miles - £4 adult single fare
- Over 9 miles and up to 18 miles - £5 adult single fare

---

2 Based upon the TRICs trip rate assessment agreed by LCC as part of planning application reference 17/00344/FULMAJ

Technical Note
April 2018
• Over 18 miles - £10 adult single fare

2.3.24 For illustrative purposes Figure 2.6 below presents an 18 mile catchment of the southern periphery of Scorton, although clearly journeys of longer distances are accommodated. This shows that the dial-a-bus service provides the opportunity for travel over a considerable area, extending beyond Preston City Centre to the south, and to Blackpool in the west.

![Figure 2.6: Southern Periphery of Scorton 18 mile Catchment](image)

2.3.25 The dial-a-ride service would therefore cater for vulnerable or elderly residents, for whom the car does not present a realistic alternative, allowing them access to a range of services and facilities beyond those offered in Scorton.
2.3.26 In addition to dial-a-bus, there are further alternatives to a regular bus service including Garstang Cabs Minibus service.

2.3.27 As such, it is concluded that the absence of bus services in Scorton will not directly affect the travel choices of the majority of future residents on development on the southern periphery of Scorton, and would not be expected to lead to a material increase in the use of less sustainable means of travel.

2.3.28 Public transport services are available for those prospective residents (young, elderly and mobility impaired) who are most in need of travel assistance. Therefore, in public transport terms the southern periphery of Scorton is not considered unsustainable.

2.3.29 It is therefore concluded that access to public transport services should not be considered as a constraint to development on the southern periphery of Scorton.

2.4 Access to Services

2.4.1 Table 2.1 provides a list of the community facilities and services which are available within Scorton village centre, approximately 300 m from its southern periphery.

<table>
<thead>
<tr>
<th>Spar Convenience Store</th>
<th>The Barn Restaurant, Bar and Shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Office</td>
<td>Scorton Priory Restaurant and Café Bar</td>
</tr>
<tr>
<td>Mobile Library</td>
<td>Scorton Methodist Church</td>
</tr>
<tr>
<td>Scorton C of E Primary School</td>
<td>St Peter's Parish Church</td>
</tr>
<tr>
<td>Scorton Toddlers Group</td>
<td>St Mary and St James RC Church</td>
</tr>
<tr>
<td>Scorton Village Hall</td>
<td>Children's Play Area</td>
</tr>
<tr>
<td>Hairdresser</td>
<td>Bowling Green, MUGA and Playing Field</td>
</tr>
</tbody>
</table>

Table 2.1: Scorton Village Amenities

2.4.2 As Table 2.1 indicates that there is a variety of amenities available in Scorton, servicing a range of daily requirements.

2.4.3 To expand upon this point, LCC provide on their website a Residential Development Accessibility Score Calculator which is used to quantify how accessible a site is.
2.4.4 The questionnaire appraises sites based upon proximity to factors including sustainable transport provision, retail provision, educational establishments, employment provision, other basic services (e.g. post office) and play areas or parks.

2.4.5 The Residential Accessibility Questionnaire has been completed for a generic residential development on the southern periphery of Scorton. This assessment has revealed that a development in this area would score a total of 25 points which reflects a medium level of accessibility$^2$.

2.4.6 It is therefore concluded that access to key services should not be considered as a constraint to development on the southern periphery of Scorton.

2.5 Accessibility by Car

2.5.1 Having demonstrated that the southern periphery of Scorton is an accessible location for development in terms of sustainable modes of travel, and provides a range of key services, the accessibility of the southern periphery of the village by car is now assessed.

2.5.2 In appraising the potential for development in Scorton Evidence Base EDO94A identified the bridge structures on Gubberford Lane and Station Road as being particular constraints. As such, the following paragraphs provide a review of these existing sections of highway.

*Gubberford Lane*

2.5.3 The railway bridge on Gubberford Lane is located approximately 500 metres south of Scorton village centre. The bridge is shown in Figure 2.7 below.

---

$^2$ This score is equivalent to that calculated with respect to planning application reference 17/00344/FULMAJ which was not been contested by LCC.
2.5.4 At its pinch point the bridge provides a circa 4.4 metre carriageway. In the vicinity of the railway bridge footways are absent for a distance of approximately 25 metres. This distance would take a pedestrian approximately 20 seconds to cover based upon an average walking speed of 1.2 metres/second.

2.5.5 To consider in more detail the safety of Gubberford Lane in the vicinity of the railway bridge the Crashmap website has been interrogated for a 5 year period between 2013 and 2017.

2.5.6 Crashmap uses data collected by the police about road traffic crashes occurring on British roads where someone is injured. This data is approved by the National Statistics Authority and reported on by the Department for Transport each year.

2.5.7 The Crashmap website indicates that over this 5 year period two serious incidents have occurred on Gubberford Lane in the vicinity of the bridge, both of which occurred on a Sunday. The location of these incidents is shown in Figure 2.8 below.
2.5.8 The detail of these incidents is provided in Table 2.2 below.

<table>
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<th>Accident Ref</th>
<th>Date</th>
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<th>Cause</th>
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<td>201504WB15485</td>
<td>27/09/15</td>
<td>13:20</td>
<td>South of Gubberford Lane bridge</td>
<td>1 Car 3 Bicycles</td>
<td>Serious</td>
<td>Collision between vehicles</td>
</tr>
<tr>
<td>201304BC13180</td>
<td>29/09/13</td>
<td>05:25</td>
<td>Gubberford Lane bridge</td>
<td>1 M/cycle</td>
<td>Serious</td>
<td>Driver Error – single vehicle collided with bridge structure</td>
</tr>
</tbody>
</table>

Table 2.2: Gubberford Lane Accident Details (2013 – 2017)

2.5.9 While any accidents are regrettable it is noted that an incident rate of less than 1 accident every two years is very low, and certainly does not suggest any underlying safety issues with the design of the highway.

2.5.10 To further explore whether there is an underlying highway safety issue in this location, the full extent of data available on the Crashmap website has been interrogated. This covers a 19-year period between 1999 and 2017, with the results of this analysis shown in Figure 2.9 below.
2.5.11 The extended Crashmap analysis reveals that over a 19 year period only three incidents have occurred on Gubberford Lane in the vicinity of the railway bridge. The detail of these incidents is provided in Table 2.3 below.

<table>
<thead>
<tr>
<th>Accident Ref</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Vehicles</th>
<th>Severity</th>
<th>Cause</th>
</tr>
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<tbody>
<tr>
<td>201504WB15485</td>
<td>27/09/15</td>
<td>13:20</td>
<td>South of Gubberford Lane bridge</td>
<td>1 Car 3 Bicycles</td>
<td>Serious</td>
<td>Collision between vehicles</td>
</tr>
<tr>
<td>201304BC13180</td>
<td>29/09/13</td>
<td>05:25</td>
<td>Gubberford Lane bridge</td>
<td>1 M/cycle</td>
<td>Serious</td>
<td>Driver Error—single vehicle collided with bridge structure</td>
</tr>
<tr>
<td>200104B012101</td>
<td>01/03/01</td>
<td>16:10</td>
<td>South of Gubberford Lane bridge</td>
<td>1 bus/coach</td>
<td>Slight/Serious</td>
<td>Vehicle slowing causing injury to 2 passengers</td>
</tr>
</tbody>
</table>

Table 2.3: Gubberford Lane Accident Details (1999 – 2017)

2.5.12 A total of 3 incidents over a 19 year period certainly does not suggest that there are any underlying highway safety issues with the design of Gubberford Lane in the vicinity of the railway bridge.
2.5.13 It is noted that the most recent incident in this location, which involved cyclists, occurred in 2015. One would presume that should LCC be of the opinion that there is a highway safety issue in this location then in their capacity as highway authority they would be duty bound to implement measures to address this. The fact that there have been no measures introduced on the highway suggests that LCC do not believe there is a highway safety issue in this location.

Station Lane

2.5.14 The railway bridge on Station Lane is located approximately 700 metres road distance northwest of Scorton village centre. The bridge is shown in Figure 2.10 below.

Figure 2.10: Station Lane Bridge
2.5.15 At its pinch point the bridge provides a circa 4.4 metre carriageway. A footway is provided on the eastern side of the bridge up to the bridge retaining wall structure. No footway is present on the western side of the bridge, although a wide verge is present.

2.5.16 Pedestrians passing through the bridge would therefore be required to walk on the carriageway for of approximately 30 metres. This distance would take a pedestrian approximately 25 seconds to cover based upon an average walking speed of 1.2 metres/second.

2.5.17 To consider the safety of Station Lane in the vicinity of the railway bridge the Crashmap website has again been interrogated for the 19-year period between 1999 and 2017. The results of this analysis shown in Figure 2.11 below.

![Figure 2.11: Crashmap Accident Data (1999 - 2017)](image)

2.5.18 The extended Crashmap analysis reveals that over a 19 year period no incidents have occurred on Station Lane in the vicinity of the railway bridge.

2.5.19 The Crashmap results therefore do not indicate that there is any existing highway safety issue for road users or pedestrians in this location.

2.5.20 The Station Lane bridge over the River Wyre is located approximately 1.1 kilometres road distance northwest of Scorton village centre. The bridge is shown in Figure 2.12 below.
The bridge provides a circa 3 metre carriageway and a 3 tonne weight restriction is in place. A 30 mph speed limit is enforced in this location and forward visibility for vehicles approaching the bridge is unrestricted in both directions.

Footpaths are not provided in this location, either on approach to the bridge, or across the bridge itself. However, given the low vehicle speeds and clear visibility for motorists pedestrians are able to safely cross the bridge if required. This would take approximately 30 seconds.

To consider the safety of the river bridge crossing the Crashmap website has again been interrogated for the 19-year period between 1999 and 2017, with the results of this analysis shown in Figure 2.13 below.
2.5.24 The extended Crashmap analysis reveals that over a 19 year period no incidents have occurred at the Station Lane river crossing bridge.

2.5.25 The Crashmap results therefore do not indicate that there are any existing highway safety issues for road users or pedestrians in this location.

2.6 Road Safety Assessment

2.6.1 To further investigate the highway safety conclusions drawn by Vectos an independent Road Safety Assessment (RSA) of the Gubberford Lane and Station Lane railway bridges was undertaken by six:TEN. The RSA was undertaken by Jon Preston, the Director of six:TEN who is a HD19/15 accredited auditor, and a member of the Chartered Institution of Highways and Transportation (MCIHT) and the Society of Road Safety Auditors (MSoRSA).

2.6.2 The RSA considered the existing highway geometry, highway safety records, movements through the bridge (including motorized vehicles, pedestrians and cyclists) and vehicle speeds.

2.6.3 The full RSA is provided in Appendix A and concludes that no existing road safety issues are identified for either vehicle drivers or pedestrians at either the Gubberford Lane or Station Lane railway bridges for the following reasons:
There have been no recorded personal injury collisions at the Station Lane bridge during the past five-year study period or the extended 19-year study period.

Whilst unfortunately there has been two recorded serious injury collisions at the bridge on Gubberford Lane during the past five-year study period, neither collision involved a pedestrian, and both involved different vehicles and the cause in these cases was not consistent.

The extended study period shows that there has only been one additional personal injury collision at the Gubberford Lane bridge, but again involved different circumstances to the two more recent collisions recorded in the past five years.

Two of the collisions at the Gubberford Lane bridge involved a single vehicle and the other collision involved a vehicle colliding with a group of cyclists.

The overall collision rates at the Gubberford Lane bridge is low.

The collision rate at the Gubberford Lane railway bridge during the past five years is 0.40 per year.

The collision rate at the Gubberford Lane railway bridge during the past 19 years is 0.16 per year.

There does not appear to be an underlying road safety issue or collision trend at the Gubberford Lane railway bridge.

Vehicle speeds are generally low near both bridges due to vehicles slowing down to manoeuvre through the bridge and to observe oncoming vehicles.

Speeds are reduced further on Station Road due to the 90° bend immediately to the west of the railway bridge.

The road geometry for drivers at the bridges again acts as a deterrent for higher speeds.

There are a limited number of pedestrians having to walk through the bridges due to the only pedestrian generators being the small Scorton village centre and the Millennium Way on Gubberford Lane.

The number of vehicles using either Station Lane or Gubberford Lane again is generally low and only Gubberford Lane is the signed route to Scorton from the A6.
2.6.4 The independent RSA therefore corroborates Vectos’ conclusions that there are no existing safety issues at the bridges on Gubberford Lane or Station Lane.

2.6.5 As such it is concluded that the access points to Scorton from the A6, including the bridge structures, will not represent a constraint to modest housing development on the southern periphery on Scorton.

2.7 *Are the highway constraints overstated?*

*Conclusions on Question 4.2*

2.7.1 In the context of the opportunity for modest residential development on the southern periphery of Scorton it has been demonstrated that:

- The accessibility of the southern periphery of Scorton for pedestrian, cyclists and public transport users should not represent a constraint to residential development coming forward in this part of Scorton.
- The overall level of services provided in Scorton should not represent a constraint to residential development coming forward in the southern periphery of Scorton.
- The independent RSA corroborates Vectos’ conclusions that there are no existing safety issues at the bridges on Gubberford Lane or Station Lane.
- The access points to Scorton from the A6, including the bridge structures, should not represent a constraint to modest housing development on the southern periphery on Scorton.

2.7.2 *It is therefore concluded that the highway constraints identified by LCC in Evidence Base ED094A have been over stated, and that modest residential development of approximately 30 dwellings could be safely and sustainably accommodated in the southern periphery of Scorton.*
3  WOULD DEVELOPMENT TO MEET THE OAN RESULT IN SEVERE RESIDUAL CUMULATIVE IMPACTS ON THE HIGHWAY NETWORK HAVING REGARD TO IMPROVEMENTS THAT CAN BE UNDERTAKEN?

3.1 Introduction

3.1.1 Section 3 of this Technical Note considers Session 3 Question 4.3 raised by the Inspector, namely:

"In particular would development to meet the OAN result in severe residual cumulative impacts on the highway network having regard to improvements that can be undertaken".

3.1.2 Section 3 of this report therefore reviews the traffic impact of modest residential development coming forward on the southern periphery of Scorton.

3.2 Evidence Base EDO94A Desktop Appraisal

3.2.1 In considering development opportunities in Scorton, Evidence Base EDO94A highlighted the following perceived constraints:

"Development will result in an increase of trips during peak hour which is likely to be all car based. This raises significant concern, in terms of construction activity as well as residential traffic, when considering the current constraints".

3.2.2 The implication of Evidence Base EDO94A is that it is the bridge structures on Gubberford Lane and Station Lane which are of principal concern to the highway authority, and these locations are therefore the focus of this analysis.
3.3 Traffic Impact

3.3.1 To consider the traffic generation of a modest residential development of approximately 30 dwellings, TRICS database trip rates have been utilised. The trip rates adopted have recently been agreed by LCC.³

3.3.2 Based upon the TRICS analysis the following 85th percentile trip rates and resultant vehicle trips were derived.

<table>
<thead>
<tr>
<th></th>
<th>Trip Rates</th>
<th>Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arrive</td>
<td>Depart</td>
</tr>
<tr>
<td>AM Peak</td>
<td>0.235</td>
<td>0.588</td>
</tr>
<tr>
<td>PM Peak</td>
<td>0.353</td>
<td>0.412</td>
</tr>
<tr>
<td>Daily Total</td>
<td>2.424</td>
<td>2.486</td>
</tr>
</tbody>
</table>

Table 3.1: 85th Percentile Residential Trip Rates and Trip Generations

3.3.3 Table 3.1 presents weekday peak hour trips generations relating to 30 dwellings. Outside these peak hours the traffic flows generated by a residential development of this scale would be significantly lower. It should also be noted that the figures presented above represent weekday activity and traffic flows will be lower at weekends, as is typical for residential development.

3.3.4 The adoption of 85th percentile trip rates provides a particularly robust assessment of the traffic generation of a development of this scale.

3.3.5 As a comparison, the agreed TRICS assessment has been interrogated to also derive average trip rates. These are presented in Table 3.2 and reveal that if average rates were adopted then a residential development of this scale would be predicted to generate only 18 two-way trips during the 0800 – 0900 AM peak hour, and 17 two-way trips during the 1700 – 1800 PM peak hour.

<table>
<thead>
<tr>
<th></th>
<th>Trip Rate (per unit)</th>
<th>Traffic Flows</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arrive</td>
<td>Depart</td>
</tr>
<tr>
<td>AM Peak</td>
<td>0.196</td>
<td>0.390</td>
</tr>
</tbody>
</table>

³ Trip rates agreed in relation to planning application 17/00344/FULMAJ
### Table 3.2: Average Residential Trip Rates and Trip Generations

| PM Peak | 0.370 | 0.198 | 11 | 6 |

3.3.6 Notably in LCC's appraisal of development sites undertaken in Evidence Base EDO94A, a two-way trip rate of 0.514/ household during the peak hour was adopted. This is far closer to the average trip rates presented in Table 3.2.

3.3.7 The use of average trip rates is not an unreasonable approach to calculating development trip rates and has been accepted by numerous highways authorities including LCC.

3.3.8 By way of an example, residential developments have recently been approved in Forton, Lancashire for 38 (LPA Ref: 15/00450/OUTMAJ) and 43 dwellings (LPA Ref: 17/00233/OUTMAJ) both of which were supported by transport reports which utilised TRICS generated average trip rates. In both instances LCC raised no objection to the use of the average rates.

3.3.9 The implication of this accepted approach would be that the traffic generation attributed to a 30 dwelling residential development would be around 70% of that considered in this Transport Note. The Note therefore represents a very robust analysis.

### 3.4 Proposed Development Impact

3.4.1 A recently submitted planning application provided a distribution profile for residential development located on the southern side of Scorton. This distribution profile was established using Census data for Wyre District and the Wyresdale Ward, with traffic assigned using the Google Maps routing tool. The resultant distribution profile was agreed with LCC and therefore has been adopted for the purpose of this Transport Note.

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4 Modal Group Transport Statement (December 2016) submitted with Planning Application Reference 17/00344/FULMAJ
3.4.2 Assuming a development of approximately 30 dwellings on the southern periphery of Scorton, accessed from Gubberford Lane, the distribution of vehicle trips is summarised in Table 3.3 below, with this information also presented as the minutes per additional trip.

<table>
<thead>
<tr>
<th></th>
<th>Arrivals From Scorton Village Centre</th>
<th>Arrivals From Gubberford Lane bridge</th>
<th>Departures To Scorton Village Centre</th>
<th>Departures To Gubberford Lane bridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak</td>
<td>2 (1/ 30mins)</td>
<td>5 (1/ 12mins)</td>
<td>6 (1/ 10mins)</td>
<td>12 (1/ 5mins)</td>
</tr>
<tr>
<td>PM Peak</td>
<td>3 (1/ 20mins)</td>
<td>8 (1/ 8 mins)</td>
<td>4 (1/ 15mins)</td>
<td>9 (1/ 7mins)</td>
</tr>
</tbody>
</table>

Table 3.3: Vehicle Trip Assignment

3.4.3 Table 3.3 illustrates that in the AM peak hour, a residential development of 30 dwellings located on the southern periphery of Scorton would result in an additional vehicle every 5 minutes travelling south on Gubberford Lane towards the railway bridge, with an additional vehicle every 12 minutes travelling in the opposite direction.

3.4.4 Meanwhile during the PM peak hour, such a development is forecast to result in an additional movement every 7 minutes travelling south on Gubberford Lane towards the railway bridge, with an additional vehicle movement every 8 minutes travelling in the opposite direction.

3.4.5 To the north towards Scorton village centre, during the AM peak hour a development of this scale is forecast to generate an additional outbound vehicle every 10 minutes, with an additional vehicle every 30 minutes travelling in the opposite direction.

3.4.6 In the same direction during the PM peak hour an additional outbound vehicle every 15 minutes is forecast, with an additional vehicle every 20 minutes travelling in the opposite direction.

3.4.7 Therefore, even allowing for the adoption of robust 85th percentile trip rates, given the very low volume of traffic generated by a residential development of approximately 30 dwellings, the residual cumulative impact cannot be considered to be severe.
3.4.8 However, to further enforce this conclusion the following paragraphs provide a more detailed review of the traffic impact of a residential development of this scale on the Gubberford Lane and Station Lane bridges.

3.5 Impact on Gubberford Lane Bridge

3.5.1 To provide context to the traffic impact of developing approximately 30 dwellings on the southern periphery of Scorton automated traffic count (ATC) data collected on Gubberford Lane in September 2016 and June 2017 has been reviewed.\(^5\)

<table>
<thead>
<tr>
<th>Date</th>
<th>0600-0900</th>
<th>1700-1800</th>
<th>0000-0300</th>
</tr>
</thead>
<tbody>
<tr>
<td>09-Sep</td>
<td>116</td>
<td>157</td>
<td>1821</td>
</tr>
<tr>
<td>12-Sep</td>
<td>109</td>
<td>131</td>
<td>1637</td>
</tr>
<tr>
<td>13-Sep</td>
<td>115</td>
<td>126</td>
<td>1685</td>
</tr>
<tr>
<td>14-Sep</td>
<td>104</td>
<td>173</td>
<td>2199</td>
</tr>
<tr>
<td>15-Sep</td>
<td>111</td>
<td>152</td>
<td>1880</td>
</tr>
<tr>
<td>16-Sep</td>
<td>114</td>
<td>146</td>
<td>1819</td>
</tr>
<tr>
<td>Average</td>
<td>112</td>
<td>148</td>
<td>1840</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>0600-0900</th>
<th>1700-1800</th>
<th>0000-0300</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-Jun</td>
<td>114</td>
<td>127</td>
<td>1619</td>
</tr>
<tr>
<td>29-Jun</td>
<td>129</td>
<td>118</td>
<td>1657</td>
</tr>
<tr>
<td>30-Jun</td>
<td>111</td>
<td>126</td>
<td>1727</td>
</tr>
<tr>
<td>03-Jul</td>
<td>109</td>
<td>135</td>
<td>1670</td>
</tr>
<tr>
<td>04-Jul</td>
<td>108</td>
<td>108</td>
<td>1592</td>
</tr>
<tr>
<td>Average</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 3.4: Gubberford Lane Two Way Traffic Flows

3.5.2 Table 3.4 provides the recorded two-way traffic flow on Gubberford Lane. The ATC data indicates that north and southbound flows on Gubberford Lane are split approximately 50:50 in a north and southbound direction.

3.5.3 The results presented in Table 3.4 therefore show that on average there is approximately 1 vehicle per minute travelling in each direction of Gubberford Lane at peak times. A peak hour traffic flow of this relatively low level means that the opportunity for vehicles to come into conflict at the point of the Gubberford Lane bridge would be minimal.

\(^5\) Data collected in relation to planning application reference 17/00344/FULMAJ
The ATC data is also a useful reference as it illustrates the extent to which traffic flows on Gubberford Lane fluctuate on a daily basis. Table 3.5 presents this information, showing the minimum and maximum peak hour and daily traffic flows recorded during the week in September 2016 and June 2017, together with the difference in traffic flows.

<table>
<thead>
<tr>
<th></th>
<th>September 2016</th>
<th>June 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0800-0900</td>
<td>1700-1800</td>
</tr>
<tr>
<td>Min Flow</td>
<td>104</td>
<td>126</td>
</tr>
<tr>
<td>Max Flow</td>
<td>116</td>
<td>173</td>
</tr>
<tr>
<td>Diff</td>
<td>12</td>
<td>47</td>
</tr>
<tr>
<td>Dev Traffic</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 3.5: Gubberford Lane Two Way Weekday Traffic Flows Variations

Table 3.5 illustrates that the fluctuations in peak hour and daily traffic flows which currently occur on Gubberford Lane during the week are equivalent, or less than, the increases in traffic flow that are forecast to occur at the bridge as a result of developing approximately 30 dwellings on the southern periphery of Scorton.

As previously outlined, in the last five years there have been no recorded incidents at the Gubberford Lane bridge during the week. As such, it is reasonable to conclude that this section of the highway network is able to accommodate changes in traffic flow of the scale which would occur through residential development on the southern periphery of Scorton without a severe highway safety impact being experienced.

A consideration has also been undertaken of the increased frequency with which vehicles would pass through the Gubberford Lane bridge as a result of developing approximately 30 dwellings on the southern periphery of Scorton.

Using the worst case July 2017 AM peak hour average flow, and September 2016 PM peak hour traffic flow (as presented in Table 3.4), this analysis is provided in Table 3.6 below.
Table 3.6: Gubberford Lane Two Way Traffic Flows

<table>
<thead>
<tr>
<th></th>
<th>Without Development</th>
<th>With Development</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Two Way Flow</td>
<td>Secs/Two Way Vehicle</td>
<td>Two Way Flow</td>
</tr>
<tr>
<td>AM Peak:</td>
<td>114</td>
<td>31.6</td>
<td>131</td>
</tr>
<tr>
<td>PM Peak:</td>
<td>148</td>
<td>24.3</td>
<td>165</td>
</tr>
</tbody>
</table>

3.5.9 Table 3.6 indicates that as a result of developing approximately 30 residential units on the southern periphery of Scorton, during the AM peak hour the frequency with which vehicles would pass beneath the Gubberford Lane bridge in either direction would increase by only 4.1 seconds. In the PM peak hour the frequency with which vehicles pass beneath the bridge in either direction would increase by only 2.5 seconds.

3.5.10 Tithebarn Lane also provides an alternative route to Garstang and the A6, and as such, not all residential traffic arriving or departing from the southern periphery of Scorton will necessarily travel along Gubberford Lane and pass under the bridge.

3.5.11 It has been demonstrated, both by Vectos and through an Independent RSA, that there are no existing highway safety issues at the Gubberford Lane railway bridge.

3.5.12 It has been demonstrated that the traffic generated by 30 residential units on the southern periphery of Scorton will not materially alter the existing operation of Gubberford Lane in the vicinity of the railway bridge and therefore it is entirely reasonable to conclude that a development of this scale would not lead to any material reduction in highway safety in this location.

3.5.13 On this basis it is concluded that highway improvements in this location are not required to make residential development of this scale in the southern periphery of Scorton acceptable.

3.5.14 It is further concluded that the residual cumulative traffic impact of a residential development of this scale on the Gubberford Lane bridge cannot be considered to be severe.
3.6 Impact on Station Lane Bridge

3.6.1 Table 3.3 illustrates that in the AM peak hour a residential development of 30 dwellings is forecast to generate 6 outbound and 2 inbound trips in a northerly direction on Gubberford Lane towards Scorton village centre. This equates to an additional outbound trip every 10 minutes and an additional inbound trip every 30 minutes.

3.6.2 In the PM peak hour a residential development of this scale is forecast to generate 4 outbound and 3 inbound trips in a northerly direction on Gubberford Lane towards Scorton village centre. This equates to an additional outbound trip every 15 minutes and an additional inbound trip every 20 minutes.

3.6.3 This is summarised in Table 3.7 below

<table>
<thead>
<tr>
<th></th>
<th>Traffic Flows</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inbound</td>
</tr>
<tr>
<td>AM Peak</td>
<td>2 (1 trip/30 mins)</td>
</tr>
<tr>
<td>PM Peak</td>
<td>3 (1 trip/20 mins)</td>
</tr>
</tbody>
</table>

Table 3.7: Development Traffic Flows To/From Scorton Village Centre

3.6.4 Around these peak hours the volume of traffic generated by a modest residential development of the scale considered would be lower, including at weekends.

3.6.5 To the north of Scorton village centre a choice of route options is available, such that people can either take Station Lane and travel towards the A6, or can continue along Factory Brow which provides an alternative route to the A6 as well as a route to destinations such as Dolphinholme, Street, Abbeystead and Marshaw.

3.6.6 As such, not all residential traffic arriving or departing via Scorton village centre will necessarily travel along Station Road and use the bridge structures.

3.6.7 The RSA included a traffic count at the Station Lane railway bridge which was undertaken between 15:55 and 16:55. This revealed a traffic flow of approximately one car every 2 minutes in each direction (as shown on page 7 of the RSA).
Taking this level of baseline traffic flow, and the robust estimation of traffic generated by a 30 dwelling residential development, the potential for increases in vehicle conflict at either Station Lane bridge structures as result of developing land on the southern periphery of Scorton will be minimal.

It has been demonstrated, both by Vectos and through an independent RSA, that there are no existing highway safety issues at the Station Lane railway bridge.

The robust TRICS analysis demonstrates that only a very low number of vehicles will travel along the Station Lane route to the A6 during peak times, with even lower flows expected outside the peaks and at weekends.

Therefore, developing land on the southern periphery of Scorton for residential purposes will have no impact upon highway operation or safety at either Station Lane bridge structure.

On this basis it is consider that highway improvements in these locations are not required to make a residential development of this scale acceptable.

Therefore, it is concluded that the residual cumulative traffic impact on the Station Lane bridges of developing land on the southern periphery of Scorton for residential purposes cannot be considered to be severe.

Multi-modal Trip Generation

Based upon the aforementioned TRICS trip rates an analysis has been undertaken of the volume of pedestrian and cycle trips which development of the southern periphery of Scorton would generate.

The following paragraphs provide a review of the impact of these trips on the Gubberford Lane and Station Lane bridges.

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6 As agreed with LCC as part of planning application 17/00344/FULMAJ
Pedestrian Trips

3.7.3 Table 3.8 below provides the pedestrian peak hour and daily trip generation of 30 residential dwellings.

<table>
<thead>
<tr>
<th>Trip Rate (per unit)</th>
<th>Trip Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arrive</td>
</tr>
<tr>
<td>AM Peak</td>
<td>0.070</td>
</tr>
<tr>
<td>PM Peak</td>
<td>0.124</td>
</tr>
<tr>
<td>Daily</td>
<td>0.990</td>
</tr>
</tbody>
</table>

Table 3.8: Pedestrian Trip Rates and Trip Generations

3.7.4 Table 3.8 demonstrates that a 30 dwelling residential development would generate a total of 9 pedestrian trips during the AM peak hour, of which 2 would be arrivals (1 trip/30 mins) and 7 would be departures (1 trip/8.5 mins).

3.7.5 During the PM peak hour a residential development of this scale would generate a total of 6 pedestrian trips during the AM peak hour, of which 4 would be arrivals (1 trip/15 mins) and 2 would be departures (1 trip/30 mins).

3.7.6 Given the location of retail, education and social amenities within Scorton the likelihood is that the majority of these pedestrian trips generated by a development on the southern periphery of Scorton will travel to or from the centre of Scorton, rather than via the Gubberford Lane railway bridge.

3.7.7 For a similar reason it would be unlikely that a material proportion of pedestrian trips would continue through Scorton village and then walk along Station Lane via the bridges located on this route, particularly when a more direct and largely car free route to the A6 is also available.

3.7.8 As a worst case, even if it assumed there is a 50:50 north:south split of pedestrian trips on Gubberford Lane (as per the balance of the ATC traffic results on Gubberford Lane), and all these pedestrian trips pass via the bridge structures on Gubberford Lane and Station Lane, this would still only equate to an additional pedestrian movement in each location every 13 minutes during the AM peak hour and every 20 minutes during the PM peak hour.
3.7.9 Considering cumulatively with the existing safety record at the Gubberford Lane and Station Lane bridges, and the minimal increase in traffic resulting from a 30 dwelling residential development, such increases in pedestrian movements will not have any material safety implications in either location, and certainly not an impact which could be considered as severe.

**Cycle Trips**

3.7.10 Table 3.9 below provides the peak hour and daily cycle trip generation of 30 residential dwellings.

<table>
<thead>
<tr>
<th></th>
<th>Trip Rate (per unit)</th>
<th>Trip Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arrive</td>
<td>Depart</td>
</tr>
<tr>
<td>AM Peak</td>
<td>0.004</td>
<td>0.023</td>
</tr>
<tr>
<td>PM Peak</td>
<td>0.024</td>
<td>0.006</td>
</tr>
<tr>
<td>Daily</td>
<td>0.111</td>
<td>0.102</td>
</tr>
</tbody>
</table>

*Table 3.9: Cycle Trip Rates and Trip Generations*

3.7.11 Table 3.9 demonstrates that a 30 dwelling residential development is forecast to generate a total of 1 two-way cycle trip during both the AM and PM peak hours. This equates to a single cycle trip per hour.

3.7.12 Irrespective of whether this cycle trip travels via Gubberford Lane or Station Lane, one additional cycle trip per hour will not have any material safety implications in either location, and certainly not an impact which could be considered as severe.

3.8 **Construction Traffic**

3.8.1 Evidence Base EDO94A raises concerns regarding construction traffic activity in Scorton.

3.8.2 There have been a number of new residential developments located off Station Road in Scorton which have been constructed comparatively recently.
3.8.3 There have been no changes to the highway layout since these developments were constructed, and while the height restrictions on the Gubberford Lane bridge would not prevent access for most construction vehicles, there are alternative routes into Scorton which avoid low or narrow bridge structures should access for larger vehicles be required, albeit this would likely be infrequent.

3.8.4 Therefore, to allow construction of a development in one part of Scorton (where vehicles notably would have had to drive through the village centre) and not in another, would seem contradictory.

3.8.5 The issue of construction vehicle traffic was considered as part of planning application reference 17/00344/FULMAJ, at which time it was suggested that if the highway authority held concerns about HGV traffic the appropriate approach would be to suggest a condition be implemented requiring the developer to prepare a Construction Management Plan. This would allow the impact of HGV construction traffic to be managed and mitigated for.

3.8.6 LCC subsequently confirmed that “it is agreed that construction traffic can be considered as part of the Construction Management Plan”.  

3.8.7 On this basis it can be surmised that LCC do not consider the construction traffic would have a severe residual cumulative impact.

3.9 Would development to meet the OAN result in severe residual cumulative impacts on the highway network having regard to improvements that can be undertaken

Conclusions on Question 4.3

3.9.1 In the context of the opportunity for modest residential development on the southern periphery of Scorton it has been demonstrated that:

- The increase in traffic flow on Gubberford Lane resulting from a development of approximately 30 residential dwellings would be in line with daily traffic flow

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7 LCC Letter of 12th March 2018 (ref LHS/CS/02/17/00344/FUL)
fluctuations, with a nominal increase in the frequency with which vehicles would pass through the bridge.

- Even allowing for robust assumptions, the increase in traffic flow forecast on Station Lane equates to only an additional two-way vehicle movement every 7.5 minutes in the AM peak hour and every 8.5 minutes during the PM peak hour.

- Residential development of this scale would lead to a nominal increase in pedestrian and cycle trips utilising the bridges on Gubberford Lane and Station Lane.

- It has been demonstrated, both by Vectos and through an independent RSA, that there are no existing highway safety issues at the bridge structures on Gubberford Lane or Station Lane.

- Considering the existing safety records, in conjunction with the forecast increase in vehicle, pedestrian and cycle trips resulting from residential development on the scale assessed, it is reasonably concluded that development on the southern periphery of Scorton would not have a material impact upon the safe operation of Gubberford Lane or Station Lane, and certainly not an impact that could be considered as severe.

- On this basis it is concluded that highway improvements are not required to make residential development of this scale acceptable.

- The impact of construction vehicles can be appropriately managed.

3.9.2 It is therefore concluded that the traffic impact constraints identified by LCC in relation to development coming forward in Scorton have been overstated, and that modest residential development on the southern periphery of Scorton would not result in severe residual cumulative impacts on the highway network.
WOULD A DIFFERENT DISTRIBUTION OF DEVELOPMENT AVOID SEVERE HIGHWAY IMPACTS AND ALLOW THE LP TO MEET HOUSING NEEDS?

4.1 Introduction

4.1.1 Section 4 of this Technical Note addresses Session 3 Question 4.6 raised by the Inspector, namely:

"Would a different distribution of development avoid severe highway impacts and allow the LP to meet housing needs".

4.1.2 This section considers this question in the context of modest residential development coming forward on the southern periphery of Scorton.

4.2 Draft Wyre Local Plan

4.2.1 The September 2017 Publication Draft of the Wyre Local Plan states that:

"Based on the housing evidence the Objectively Assessed Housing Need (OAHN), is identified as an annual figure of 479 dwellings or 9580 dwellings over the local Plan period 2011-2031."

4.2.2 However, the Local Plan Strategy then outlines that, primarily due to highway capacity constraints:

"The Local Plan can only deliver 8,224 dwellings or annually 411 dwellings within the local plan period 2011-2031. The Local plan therefore delivers within the Local Plan period, nearly 86% of the OAHN requirement."

4.2.3 The Draft Local Plan therefore delivers a shortfall in dwellings over the period of 2011 – 2031.

4.2.4 The Inspector questions whether a different distribution of development would avoid severe highway impacts and allow the LP to meet housing needs.
4.2.5 While this Technical Note does not attempt to answer this question in full, the clear conclusion which can be drawn from this report is that residential development of approximately 30 dwellings can be delivered on land on the southern periphery of Scorton without resulting in a severe residual cumulative impact upon the highway network.

4.3 Would a different distribution of development avoid severe highway impacts and allow the LP to meet housing needs?

Conclusions on Question 4.6

4.3.1 In the context of the opportunity for modest residential development on the southern periphery of Scorton it has been demonstrated that:

4.3.2 The allocation of land on the southern periphery of Scorton for residential use would help to address Wyre Council’s shortfall in their Local Plan housing supply.
5 CONCLUSIONS

5.1 Introduction

5.1.1 This Technical Note has been prepared by Vectos on behalf of Applethwaite Limited to support their representations on the Publication Draft of the Wyre Local Plan 2017.

5.1.2 The Technical Note responds to Matter 3 of the Wyre Local Plan Examination which considers ‘Housing and Employment Objectively Assessed Needs (OAN) and Requirements’.

5.1.3 Issue 4 addresses ‘The Housing Requirement of 8,225 dwellings’ with the following questions raised by the Inspector:

- 4.2 – Are the highway constraints overstated;
- 4.3 – In particular would development to meet the OAN result in severe residual cumulative impacts on the highway network having regard to improvements that can be undertaken; and
- 4.6 – Would a different distribution of development avoid severe highway impacts and allow the LP to meet housing needs.

5.1.4 This Technical Note considered the questions raised by the Inspector in the context of modest growth of approximately 30 residential dwellings on the southern periphery of Scorton.

5.2 Technical Note Summary

5.2.1 In the context of such modest residential development on the southern periphery of Scorton, this report has been detailed that:

- Evidence Base EDO94A confirmed that Scorton is located in an unrestricted (n3) A6 zone, meaning that there is no reason development in Scorton should be constrained based upon impact at M55 Junction 1.
- LCC confirmed that the desktop analysis of Scorton which informed Evidence Base EDO94A was a broad brush approach which is not as detailed as a transport assessment (TA).
• The accessibility of the southern periphery of Scorton for pedestrian, cyclists and public transport users should not represent a constraint to the residential development of the scale considered coming forward in this area.

• The overall level of services provided in Scorton should not represent a constraint to the residential development on the southern periphery of Scorton coming forward.

• An independent RSA corroborates Vectos’ conclusions that there are no existing safety issues at the bridges on Gubberford Lane or Station Lane.

• The access points to Scorton from the A6, including the bridge structures, should not represent a constraint to residential development on the southern periphery of Scorton coming forward.

• The increase in traffic flow on Gubberford Lane resulting from the development of approximately 30 dwellings on the southern periphery of Scorton would be in line with daily traffic flow fluctuations, with a nominal increase in the frequency with which vehicles would pass through the bridge.

• Even allowing for robust assumptions, the increase in traffic flow forecast on Station Lane equates to only an additional two-way vehicle movement every 7.5 minutes in the AM peak hour and every 8.5 minutes during the PM peak hour.

• The development of approximately 30 dwellings would lead to a nominal increase in pedestrian and cycle trips utilising the bridges on Gubberford Lane and Station Lane.

• Considering the existing safety records, in conjunction with the forecast increase in vehicle, pedestrian and cycle trips resulting from the scale of residential development considered, it is reasonably concluded that the residential development on the southern periphery of Scorton would not have a material impact upon the operation or safety of Gubberford Lane or Station Lane, and certainly not an impact that could be considered as severe.

• On this basis it is concluded that highway improvements are not required to make the development of approximately 30 dwellings on the southern periphery of Scorton acceptable.

• The impact of construction vehicles can be appropriately managed.
5.3 Technical Note Conclusions

5.3.1 Referring to the Inspectors three questions the following conclusions can be drawn:

"Are the highway constraints overstated"

5.3.2 Yes, in the context of modest residential development on the southern periphery of Scorton the highway constraints identified by LCC have been overstated.

"Would development to meet the OAN result in severe residual cumulative impacts on the highway network having regard to improvements that can be undertaken".

5.3.3 No, the development of approximately 30 dwellings on the southern periphery of Scorton would not result in severe residual cumulative impacts on the highway network.

"Would a different distribution of development avoid severe highway impacts and allow the LP to meet housing need."

5.3.4 Yes, the allocation of modest residential development on the southern periphery of Scorton would contribute to the LP meeting its identified housing requirements without having a severe highway impact.

5.3.5 It is therefore concluded that Wyre Council's conclusions regarding residential development in Scorton are unsound and that land on the southern periphery of Scorton should be allocated for residential use.
APPENDIX A

ROAD SAFETY ASSESSMENT
Gubberford Lane and Station Lane
Railway Bridges, Scorton

Road Safety Assessment

610/S06/085/01

29 March 2017
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Disclaimer note

The client has confirmed that it is entering into the agreement under which this report is being prepared on its own behalf and not on behalf of, or for the benefit of any other party and has agreed that in any event of any claim arising out of or in connection with that agreement and/or the report itself it shall be entitled to recover from six:TEN Highways & Traffic Limited only the losses, if any, it has itself suffered.

This report therefore is for the private and confidential use of the client for whom it was prepared solely for the purposes requested by the client. It should not be reproduced in whole or in part or relied upon by any third party for any use whatsoever without the express written authority of six:TEN Highways & Traffic Limited.
1.0 INTRODUCTION

1.1 Terms of reference.

1.1.1 six:TEN Highways and Traffic Ltd have been commissioned by Vectos, to conduct a Road Safety Assessment of the existing railway bridges at Gubberford Lane and Station Lane, Scorton.

1.1.2 The purpose of this assessment is to study the existing highway layout at the bridges and where relevant, provide comment on any issue that could compromise road safety.

1.2 Methodology

1.2.1 The sites have been visited to ascertain the existing road layout, vehicle speed/flow, driver behaviour, and vulnerable road user movements. Photographs are shown in Appendix Two.

1.2.2 Location plan and Ordnance Survey plans of each bridge are shown in Appendix One.

1.2.3 Traffic Flow data for Gubberford Lane was provided and is shown in Appendix One.

1.2.4 A one-hour traffic and pedestrian count was carried out at each bridge during the site visit and is also shown in Appendix One.

1.2.5 Collision data was obtained for the 19-year period 1999 to 2017 from www.crashmap.co.uk and is shown in Appendix One.

2.0 LOCATION

2.1 The bridges are located on the outskirts of Scorton in Lancashire.

2.2 Station Lane bridge is to the northwest of Scorton and is on the road leading from Scorton to the A6 towards Lancaster.

2.3 Gubberford Lane bridge is to the southwest of Scorton and is on the road leading from Scorton to the A6 towards Preston.

2.4 Both bridges are road under rail and allow the roads to cross the West Coast Mainline railway.
3.0 EXISTING ROAD LAYOUT

3.1 Gubberford Lane Bridge

3.1.1 Gubberford Lane is a two-lane single carriageway road with warning line road markings dividing the two traffic lanes.

3.1.2 The warning line terminates either side of the railway bridge due to the reduction in carriageway width through the bridge.

3.1.3 On both approaches to the bridge there are 11’ 9” maximum headroom warning signs with associated supplementary plates stating, “Oncoming vehicles in middle of road”.

3.1.4 Below these signs on the southbound approach is a “pedestrians in the road” warning sign.

3.1.5 Adjacent to the signs on the both approaches is a “Slow” road marking on the carriageway.

3.1.6 The arch of the bridge on either side is highlighted with black and fluorescent yellow boards with associated maximum headroom warning signs.

3.1.7 The carriageway width either side of the bridge varies between approximately 6m and 7m wide.

3.1.8 The carriageway width through the bridge is approximately 4.4m wide and the length of the bridge is approximately 8.8m.

3.1.9 There is a footway on the west side of Gubberford Lane, which leads to Scorton village centre to the north and Scorton Millennium Link footpath to the south.

3.1.10 The footway terminates either side of the railway bridge due to the reduced width under the bridge.

3.1.11 Gubberford Lane is subject to a 40mph speed limit and there is no street lighting within the vicinity of the bridge.

3.2 Station Lane Bridge

3.2.1 Station Lane is a two-lane single carriageway road with no lane or warning line road markings.

3.2.2 Immediately to the west of the bridge is a 90° bend resulting in the bridge having a southbound and westbound approach.

3.2.3 On both approaches to the bridge there are 10’ 3” maximum headroom warning signs with associated supplementary plates stating, “Oncoming vehicles in middle of road”.

3.2.4 There is another 10’ 3” maximum headroom warning sign closer to the bridge on both approaches, both supplemented with “Slow” road markings on the carriageway.

3.2.5 There are 10’ 3” maximum headroom warning signs attached above the arch on either side of the bridge.
3.1.6 On the outside of the 90° bend are chevron signs highlighting a sharp deviation in route for drivers approaching in either direction.

3.1.7 The carriageway width either side of the bridge varies but is generally approximately 6m wide.

3.1.8 The carriageway width through the bridge is approximately 4.4m wide and the length of the bridge is approximately 8.6m.

3.1.9 There is a footway on the south side of Station Lane on the east side of the bridge, which leads to Scorton village centre.

3.1.10 The footway terminates at the railway bridge due to the reduced width under the bridge and does not continue on the west side.

3.1.11 Station Lane is subject to a 30mph speed limit and there one street light either side of the bridge.

4.0 ROAD SAFETY ASSESSMENT

4.1 Visibility

4.1.1 Forward visibility for drivers on the northbound approach to the Gubberford Lane railway bridge is generally good with a clear view for drivers of the bridge structure and through the bridge.

4.1.2 Forward visibility for drivers travelling south towards the Gubberford Lane bridge is slightly reduced due to the right-hand bend on the approach, however, visibility to the bridge structure is generally good, with the visibility through the bridge being reduced.

4.1.3 The forward visibility for drivers giving way from either side of the bridge has been calculated and is shown in Appendix One. It should be noted that these calculations were taken from OS plans only and the drawing had to be amended to show the actual width of the carriageway through the bridge, therefore, the results are approximations only.

4.1.4 The visibility for a northbound driver on Gubberford Lane to an oncoming vehicle is approximately 45m and for a southbound driver is approximately 48m.

4.1.5 Visibility for pedestrians either side of the Gubberford Lane railway bridge is reduced due to the bridge structure, however, the flared wingwalls allow some protection for pedestrians as they look through the structure for oncoming vehicles.

4.1.7 Forward visibility for drivers on the westbound approach to the Station Lane railway bridge is good with a clear view for drivers of the bridge structure and through the bridge.

4.1.2 Forward visibility for drivers travelling south towards the Station Lane bridge is severely reduced due to the 90° left-hand bend on the approach, however, the bend has the benefit of chevron warning signs to slow drivers on this approach.
4.1.3 The forward visibility for drivers giving way from either side of the bridge has been calculated and is shown in Appendix One. As stated above, it should be noted that these calculations were taken from OS plans only and the drawing had to be amended to show the actual width of the carriageway through the bridge, therefore, the results are approximations only.

4.1.4 The visibility for a westbound driver on Station Lane to an oncoming vehicle is approximately 25m and for an eastbound driver is approximately 32m.

4.1.5 Visibility for pedestrians either side of the Station Lane railway bridge is reduced due to the bridge structure, however, the flared wingwalls allow some protection for pedestrians as they look through the structure for oncoming vehicles.

4.1.6 Photographs showing driver and pedestrian visibility are shown in Appendix Two.

4.2 Vehicle Speed & Flow

4.2.1 The author was advised that a speed survey was carried out on Gubberford Lane north of the railway bridge between the bridge and Tithe Barn Lane.

4.2.2 The speed survey showed the 85thile speeds on Gubberford Lane were 33mph northbound and 34mph southbound.

4.2.3 A vehicle speed survey has not been carried out at the railway bridge on Gubberford Lane; however, it was observed during the site visit that speeds were generally significantly lower than the 85thile speeds shown above as vehicles are slowing down to drive through the narrow bridge and preparing to give way to any oncoming vehicles.

4.2.4 A speed survey has not been carried out at the Station Lane railway bridge, however, as per Gubberford Lane it was observed that vehicles are slowing down to travel through the narrow bridge and preparing to give way to any oncoming vehicles.

4.2.5 Vehicle speeds are reduced further at the Station Lane bridge due to the 90° bend on the west side, and drivers receive warning of this bend on their approach by the provision of chevron warning signs.

4.2.6 A traffic survey for Gubberford Lane north of the railway bridge was provided to the author and the details are shown in Appendix One.

4.2.7 The survey shows that on Gubberford Lane the am peak weekday average two-way flow is 113 and the pm peak weekday average two-way flow is 136.

4.2.8 During the site visit a vehicle and pedestrian survey was carried out at the Gubberford Lane railway bridge for one hour on Wednesday 21 March 2018 between 17:00 and 18:00hrs. The results are summarised in the table below:
### Gubberford Lane Railway Bridge 21 March 2018 17:00hrs – 18:00hrs

<table>
<thead>
<tr>
<th>Class</th>
<th>Northbound (towards Scorton)</th>
<th>Southbound (towards A6)</th>
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<tbody>
<tr>
<td>Car</td>
<td>61</td>
<td>43</td>
</tr>
<tr>
<td>Light Goods Vehicle</td>
<td>7</td>
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<td>2</td>
<td>1</td>
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<tr>
<td>Bus</td>
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<td>1</td>
</tr>
<tr>
<td>Motorcycle</td>
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<td>1</td>
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<tr>
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<td>2</td>
</tr>
<tr>
<td>Pedestrians</td>
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<td><strong>Total Vehicles</strong></td>
<td><strong>73</strong></td>
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#### 4.2.9 During the site visit a vehicle and pedestrian survey was carried out at the Station Lane railway bridge for one hour on Wednesday 21 March 2018 between 15:55 and 16:55hrs. The results are summarised in the table below:

### Station Lane Railway Bridge 21 March 2018 15:55hrs – 16:55hrs

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<th>Class</th>
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<tr>
<td><strong>Total Vehicles</strong></td>
<td><strong>39</strong></td>
<td><strong>50</strong></td>
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</table>

#### 4.2.10 The one-hour survey showed that hourly two-way flow on Station Lane at the railway bridge was 89.
4.3 Road Traffic Collisions

4.3.1 Personal injury collision data was obtained from www.crashmap.co.uk for the full five-year period 2012 to 2016.

4.3.2 There have been two recorded personal injury collisions at the Gubberford Lane railway bridge during the study period.

4.3.3 Both collisions were classed as serious.

4.3.4 One collision occurred in September 2013 involving a single vehicle during the hours of darkness on a dry carriageway surface, resulting in serious injuries to the rider of a motorcycle after colliding with the bridge structure.

4.3.5 The other collision occurred during daylight on a dry carriageway surface in September 2015 and was the result of a motor vehicle colliding with a group of cyclists causing serious injuries to three cyclists.

4.3.6 There has been no recorded personal injury collisions at the Station Lane railway bridge during the study period.

4.3.7 A further search of the www.crashmap.co.uk database for the 19-year period 1999 to 2017 shows that there has been one additional recorded serious injury collision at the Gubberford Lane railway bridge.

4.3.8 The collision occurred during daylight on a dry carriageway surface in March 2001 at the Gubberford Lane railway bridge and resulted in slight injuries to one and serious injuries to another bus passenger whilst the bus was braking.

4.3.9 There have been no additional collisions at the Station Lane railway bridge during the extended study period.
5.0 CONCLUSION

5.1 No existing road safety issues have been identified for either vehicle drivers or pedestrians at either railway bridge during this Road Safety Assessment of the existing highway layout at Gubberford Lane and Station Lane, due to the following reasons:

- There have been no recorded personal injury collisions at the Station Lane bridge during the past five-year study period or the extended 19-year study period.

- Whilst unfortunately there has been two recorded serious injury collisions at the bridge on Gubberford Lane during the past five-year study period, neither collision involved a pedestrian, and both involved different vehicles and the cause in these cases was not consistent.

- The extended study period shows that there has only been one additional personal injury collision at the Gubberford Lane bridge, but again involved different circumstances to the two more recent collisions recorded in the past five years.

- Two of the collisions at the Gubberford Lane bridge involved a single vehicle and the other collision involved a vehicle colliding with a group of cyclists.

- The overall collision rates at the Gubberford Lane bridge is low.

- The collision rate at the Gubberford Lane railway bridge during the past five years is 0.40 per year.

- The collision rate at the Gubberford Lane railway bridge during the past 19 years is 0.16 per year.

- There does not appear to be an underlying road safety issue or collision trend at the Gubberford Lane railway bridge.

- Vehicle speeds are generally low near both bridges due to vehicles slowing down to manoeuvre through the bridge and to observe oncoming vehicles.

- Speeds are reduced further on Station Road due to the 90° bend immediately to the west of the railway bridge.

- The road geometry at the bridges again acts as a deterrent for higher speeds.

- There are a limited number of pedestrians having to walk through the bridges due to the only pedestrian generators being the small Scorton village centre and the Millennium Way on Gubberford Lane.

- The number of vehicles using either Station Lane or Gubberford Lane again is generally low and only Gubberford Lane is the signed route to Scorton from the A6.
APPENDIX ONE

6.0 DRAWINGS AND DOCUMENTS
6.1 Location Plan
6.2 Gubberford Lane railway bridge – OS Layout and Approx. Visibility
### 6.4 Gubberford Lane traffic flows

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6.4 Gubberford Lane traffic flows
6.5 Gubberford Lane Latest Five-Year Personal Injury Collision Location Plan (2012-2016)

6.6 Gubberford Lane 19-Year Personal Injury Collision Location Plan (1999-2017)
6.7 Station Lane 19-Year Personal Injury Collision Location Plan (1999-2017)
APPENDIX TWO

7.0 PHOTOGRAPHS

7.1 Gubberford Lane Bridge
7.1.1 Northbound approach to bridge

7.1.2 Northbound approach to bridge
7.1.3 Northbound approach to bridge

7.1.4 Southbound approach to bridge
7.1.5 Southbound approach to bridge

7.1.6 Southbound approach to bridge
7.1.7 Pedestrian view when looking south from end of footway on south side of bridge

7.1.8 Pedestrian view when looking north from end of footway on south side of bridge
7.1.9 Pedestrian view when looking north from end of footway on north side of bridge

7.1.10 Pedestrian view when looking south from end of footway on north side of bridge
7.2 Station Lane Bridge
7.2.1 Westbound approach to bridge

7.2.2 Westbound approach to bridge
7.2.3 Westbound approach to bridge

7.2.4 Southbound approach to bridge
7.2.5 Southbound approach to bridge

7.2.6 Southbound approach to bridge
7.2.7 Pedestrian view when looking east from end of footway on east side of bridge

7.2.8 Pedestrian view when looking west from end of footway on east side of bridge
7.2.9 Pedestrian view when looking north from west side of bridge

7.2.10 Pedestrian view when looking east from west side of bridge
APPENDIX THREE

8.0 AUTHOR’S CURRICULUM VITAE