

	<h2>Hendon Area Sub Committee</h2> <h3>12 Febraury 2015</h3>
<p style="text-align: right;"><b>Title</b></p>	<p><b>Devonshire Road Traffic Management Scheme</b></p>
<p style="text-align: right;"><b>Report of</b></p>	<p>Interim Commissioning Director for Environment</p>
<p style="text-align: right;"><b>Wards</b></p>	<p>Mill Hill</p>
<p style="text-align: right;"><b>Status</b></p>	<p>Public</p>
<p style="text-align: right;"><b>Enclosures</b></p>	<p>Appendix A:</p> <ul style="list-style-type: none"> <li>• Outline design drawings: Options 1 and 2.</li> <li>• Accident plot for 5 year record (Figure 1)</li> <li>• Pedestrian Survey Analysis (figure)</li> </ul>
<p style="text-align: right;"><b>Officer Contact Details</b></p>	<p>Lisa Wright Traffic and Development Manager 020 8359 3555</p>

<h2>Summary</h2>
<p>This report informs the Hendon Area Committee of proposed Traffic Management Options considered for Devonshire Road including junctions with Tavistock Avenue, Ashley Walk, Osborn Gardens and Devonshire Crescent.</p> <p>This report also informs the Area Committee of the reasons for the proposed traffic management options considered.</p>

<h2>Recommendations</h2>
<ol style="list-style-type: none"> <li>1. That the Committee note the intention to address traffic management concerns on Devonshire Road;</li> <li>2. That the Committee be mindful of the Councils current approach to traffic calming</li> <li>3. The Committee decide whether or not vertical traffic calming features should be reintroduced on Devonshire Road;</li> <li>4. Subject to a preferred option being chosen, the authorising Officers to proceed with commissioning a detailed design and associated public consultation with a view to implementation when resources are in place and following liaison with local ward members.</li> </ol>

### **Option 1**

- **Traffic island with illuminated bollards and a high level beacon on Devonshire Road in the vicinity of the vertical crest on the road over rail bridge;**  
**Improved carriageway markings at the junction of Tavistock Avenue with Devonshire Road;**
- **Improvements at the Tavistock Avenue/Ashley Walk/Devonshire Road junction including pedestrian improvements;**

### **Option 2**

- **As per Option 1 above with the addition of the implementation of speed cushions on the immediate approach to the five existing traffic islands and an additional set of three cushions in the vicinity of Osborn Gardens;**

## **1. WHY THIS REPORT IS NEEDED**

- 1.1 In 2011 existing speed cushions on Devonshire Road (NW4) were not replaced following resurfacing. Concerns have been raised by local residents and Councillors regarding increased vehicle speeds on Devonshire Road. Vehicle Activated Signs (driver feedback speed limit signs) were introduced in 2013, but local residents are still concerned about traffic speeds as well as pedestrian movements at Tavistock Avenue on event days associated with the local stadium.
- 1.2 The London Borough of Barnet commissioned a Traffic Management Study to address the concerns of local residents and Councillors by proposing options to reduce danger of excessive speeds from through traffic with minimal adverse effects on overall traffic flows. This study has assessed the existing arrangements on site, analysed accident data, undertaken traffic speed and volume data collection and undertaken pedestrian usage and crossing counts. The preferred option will be included in the 2015/16 Local Implementation Programme (LIP) which was agreed by the January 2015 Environment Committee.
- 1.3 Devonshire Road is a 9m wide urban two lane single carriageway subject to a 30mph speed limit with footways to both sides, bounded by private housing. The studied section of Devonshire Road is approximately 525m in length and incorporates junctions with Tavistock Avenue and Ashley Walk to the western end, Osborn Gardens and Devonshire Crescent (W) to the eastern end.

## **2. REASONS FOR RECOMMENDATIONS**

- 2.1 Following site observations and desktop analysis of the five year accident record, vehicle speed and volume data and the pedestrian survey, a number of options have been developed to mitigate the concerns of local residents and Councillors and address the findings of the study.
- 2.2 During the five year period between 1 May 2009 and 30 April 2014 there were seven recorded personal injury accidents as shown in the following table. One accident was classed as serious and six were classed as slight which resulted

in a total of 14 casualties. One casualty received serious injuries and the remaining 13 were classed as slight; they included nine drivers, four passengers and one cyclist. A driver sustained serious injuries from the collision of two emergency vehicles at the junction of Devonshire Road with Osborn Gardens. 71% of the recorded personal injury accidents have occurred since September 2011, after the previous vertical traffic calming measures were removed.

Year	Fatal	Serious	Slight	Total
01/09/09 – 31/12/09	0	0	0	0
2010	0	0	0	0
2011	0	1	2	3
2012	0	0	2	2
2013	0	0	1	1
01/01/14 – 30/04/14	0	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>7</b>

- 2.3 ATC 7 day traffic speed and volume survey was undertaken on Devonshire Road with counters located outside No.130 between 25<sup>th</sup> September and 1<sup>st</sup> October 2014. The following table summarises the results:

Day (24 hr)	E/B Volume	E/B Mean Speed	E/B 85 <sup>th</sup> ile	W/B Volume	W/B Mean Speed	W/B 85 <sup>th</sup> ile
Monday	7632	28.1	32.7	7960	28.9	33.3
Tuesday	0	0	0	0	0	0
Wednesday	0	0	0	0	0	0
Thursday	7207	28.8	33.6	7272	28.7	33.1
Friday	7433	28.7	33.3	7477	28.3	32.7
Saturday	6844	29.1	33.8	6727	28.8	33.6
Sunday	6440	29.2	34.4	5887	30.5	35.3
<b>Average Daily Total</b>	<b>7111</b>	<b>28.8</b>	<b>33.6</b>	<b>7065</b>	<b>29</b>	<b>33.6</b>

*\* The eighty-fifth percentile (85<sup>th</sup>ile) speed is the speed at which 85% of the vehicles using that road travel at or below. It is a nationally used benchmark by highway authorities and gives an indication of the extent of speed/trends at a given location.*

- 2.4 Analysis of the summary data would indicate that the 7-day mean vehicle speeds are just below the posted 30mph speed limit. It is also apparent that the volume of traffic travelling in each direction is broadly similar. Historical speed readings indicate that pre resurfacing (2011) the 85<sup>th</sup>ile speed for eastbound traffic was measured at 30.1mph and westbound traffic was 29.6mph when vertical traffic calming was in place. Immediate speed readings after removal of the vertical traffic calming in September 2011 resulted in 85<sup>th</sup>ile speeds of approximate 10mph above the posted speed limit. Post resurfacing speed checks in September 2012 indicated 85<sup>th</sup>ile speed readings of 34.3mph for eastbound traffic and 32.7mph for westbound traffic.

The most recent speed survey is broadly similar with the September 2012 survey.

- 2.5 A detailed pedestrian survey was undertaken on Thursday 9<sup>th</sup> October 2014 to assess weekday conditions and again on Saturday 11<sup>th</sup> October 2014 to coincide with a match at the local stadium to assess the frequency of crossing movements at the junction of Tavistock Avenue and Devonshire Road. The weekday pedestrian survey was undertaken in 15 minute intervals between 07:00 – 10:00 hours, 12:00 – 14:00 hours and 15:00 – 18:00 hours. The Saturday survey was undertaken in 15 minute intervals between 13:00 – 15:00 hours and 17:00 – 19:00 hours with total pedestrian movements detailed on the attached plan (Figure 1). The following table summarises the results:

Location Thursday 9 <sup>th</sup> October 2014	Highest Pedestrian Flow Hour	Second Highest Pedestrian Flow Hour
<b>Junction Arm</b>		
Tavistock Avenue	08:00 – 09:00 (W/B)	15:00 – 16:00 16:00 – 17:00 (E/B)
Devonshire Road (East)	08:00 – 09:00 (N/B)	08:00 – 09:00 (S/B)
Ashley Walk	08:00 – 09:00 (W/B)	15:00 – 16:00 (E/B)
Devonshire Road (West)	15:00 – 16:00 (N/B)	15:00 – 16:00 (S/B)
<b>Movements between Arms</b>		
Tavistock Avenue to Devonshire Road (East and West)	08:00 – 09:00 (E/B)	15:00 – 16:00 (W/B)
Devonshire Road (East) to Tavistock Avenue & Ashley Walk	07:00 – 08:00 (N/B)	08:00 – 09:00 15:00 – 16:00 (S/B)
Ashley Walk to Devonshire Road (East and West)	08:00 – 09:00 (W/B)	15:00 – 16:00 (E/B and W/B)
Devonshire Road (West) to Tavistock Avenue & Ashley Walk	15:00 – 16:00 (N/B)	08:00 – 09:00 (S/B)

- 2.6 From site observations and the results of pedestrian survey, there are clear pedestrian desire lines on all four arms of the cross roads junction with pedestrian refuges provided on Devonshire Road (East and West) and Tavistock Avenue with associated dropped kerbs and blister tactile paving. Whilst there are dropped kerbs on the Ashley Walk arm, there is no blister tactile paving. The results of the pedestrian survey on Thursday 9<sup>th</sup> October indicate there are broadly similar movements around the junction with a slight increase in the number of east to west crossing movements to the south of the junction.

<b>Location Saturday 11th October 2014</b>	<b>Highest Pedestrian Flow Hour</b>	<b>Second Highest Pedestrian Flow Hour</b>
<b>Junction Arm</b>		
Tavistock Avenue	14:00 – 15:00 (W/B)	13:00 – 14:00 (E/B)
Devonshire Road (East)	14:00 – 15:00 (S/B)	17:00 – 18:00 (N/B)
Ashley Walk	17:00 – 18:00 (E/B)	14:00 – 15:00 (W/B)
Devonshire Road (West)	17:00 – 18:00 (S/B)	17:00 – 18:00 (N/B)
<b>Movements between Arms</b>		
Tavistock Avenue to Devonshire Road (East and West)	14:00 – 15:00 (W/B)	17:00 – 18:00 (W/B)
Devonshire Road (East) to Tavistock Avenue & Ashley Walk	13:00 – 14:00 (N/B)	17:00 – 18:00 (S/B)
Ashley Walk to Devonshire Road (East and West)	17:00 – 18:00 (E/B)	14:00 – 15:00 (W/B)
Devonshire Road (West) to Tavistock Avenue & Ashley Walk	17:00 – 18:00 (S/B)	14:00 – 15:00 (N/B)

2.7 The results of the pedestrian survey at the junction on a match day also show broadly similar pedestrian numbers with a slight increase of movements on the southern half of the junction.

## **PROPOSED OPTIONS FOR CONSIDERATION**

### 2.8 Option 1

2.8.1 Option 1 incorporates a pre-formed traffic island with illuminated bollards and a high level beacon on Devonshire Road in the vicinity of the vertical crest on the road over rail bridge at the western end of the studied section, physically narrowing the carriageway at a point that is visible on both approaches.

2.8.2 The existing carriageway markings (central hatching, speed limit roundel and give way markings) are in a poor condition and will be refreshed, though it should be noted that the carriageway surface is worn in places and any refreshed marking may not last due to reduced adhesion. It would be preferable to resurface this section of Devonshire road prior to refreshing any carriageway markings.

2.8.3 Heading eastbound towards the crossroads junction of Tavistock Avenue with Devonshire Road there is a proposed dual aspect Vehicle Activated Sign (VAS) depicting a Cross Roads Ahead warning sign with integrated

30mph speed limit sign. On the northern footway there are a number of trees that have excessive low level foliage that both obstructs forward visibility for drivers and restricts the useable width of footway. This excessive foliage will be removed.

2.8.4 The corner radii of the Tavistock Avenue/Ashley Walk/Devonshire Road crossroads junction will be tightened to reduce vehicle speeds during turning and decrease the carriageway width for pedestrians to cross. The reduced corner radii will incorporate dropped kerbs and blister tactile paving, as will the existing central pedestrian refuges at this junction. Proposed build outs at the junctions of Osborn Gardens and Aberdare Gardens will locally narrow Devonshire Road, incorporating dropped kerbs and blister tactile paving will also improve visibility between opposing drivers and for crossing pedestrians.

2.8.5 The estimated construction cost of Option 1 is £36,200 (based on prices contained in Year 2, Volume 4 Adjusted Rates – LoHAC Northwest1) and is exclusive of any topographical surveys, detailed design or statutory undertakers mitigation works.

## 2.9 Option 2

2.9.1 Option 2 incorporates a pre-formed traffic island with illuminated bollards and a high level beacon on Devonshire Road in the vicinity of the vertical crest on the road over rail bridge at the western end of the studied section which will physically narrow the carriageway at a point that is visible on both approaches.

2.9.2 The existing carriageway markings (central hatching, speed limit roundel and give way markings) are in a poor condition and will be refreshed though it should be noted that the carriageway surface is worn in places and any refreshed marking may not last due to reduced adhesion. It would be preferable to resurface this section of Devonshire road prior to refreshing any carriageway markings. Between the crest and Tavistock Avenue junction, there is a proposed carriageway narrowing formed with build outs to each side of Devonshire Road and changes to the central hatched markings.

2.9.3 Heading eastbound towards the crossroads junction of Tavistock Avenue with Devonshire Road there is a proposed dual aspect VAS depicting a Cross Roads Ahead warning sign with integrated 30mph speed limit sign. On the northern footway there are a number of trees that have excessive low level foliage that both obstructs forward visibility for drivers and restricts the useable width of footway. This excessive foliage will be removed.

2.9.4 The corner radii of the Tavistock Avenue/Ashley Walk/Devonshire Road crossroads junction will be tightened to reduce vehicle speeds during turning and decrease the carriageway width for pedestrians to cross. The reduced corner radii will incorporate dropped kerbs and blister tactile

paving, as will the existing central pedestrian refuges at this junction. Proposed speed cushions on the immediate approach to the five existing traffic islands will provide vertical traffic calming on Devonshire Road, with an additional set of three cushions in the vicinity of Osborn Gardens to maintain even distances between speed reducing features.

- 2.9.5 The estimated construction cost of Option 2 is £56,600 (based on prices contained in Year 2, Volume 4 Adjusted Rates – LoHAC Northwest1) and is exclusive of any topographical surveys, detailed design or statutory undertakers mitigation works.

### **3. POST DECISION IMPLEMENTATION**

- 3.1 Post decision implementations will depend on the decision taken by the Subcommittee.

### **4. IMPLICATIONS OF DECISION**

#### **4.1 Corporate Priorities and Performance**

- 4.1.1 The subject of this report is in accordance with Objective one of the London Borough of Barnet Corporate Plan 2013-2016. This objective is to maintain a well-designed, attractive and accessible place, with sustainable infrastructure across the borough. Within this objective, there are six performance measures set out in the 2014 Addendum to the Corporate Plan. These are the performance measures, which the subject of this report will be measured against if the Committee decides to approve a Traffic Management Scheme for Devonshire Road.

- 4.1.2 Further by seeking to address pedestrian and traffic safety concerns, this is within the context of the intervention criteria set by 'Priorities of the Traffic Management Budget' Cabinet Report of July 2002.

- 4.1.3 The measures also dovetail with School Travel Plan initiatives for Dollis Junior School that Barnet support in order to create an environment that encourages an active lifestyle and reduces obesity by promoting walking and other sustainable modes of school travel.

#### **4.2 Resources (Finance & Value for Money, Procurement, Staffing, IT, Property, Sustainability)**

- 4.2.1 None in the context of this report.

#### **4.3 Legal and Constitutional References**

- 4.3.1 The Council's Constitution Responsibility for Functions: Area Committees discharge various functions including highway use and regulation not the responsibility of the Council, within the boundaries of their areas in accordance with Council policy and within budget.

- 4.3.2 There are no legal references in the context of this report.

#### **4.4 Risk Management**

- 4.4.1 None in the context of this report. Risk management may be required for work resulting from this report.

#### **4.5 Equalities and Diversity**

- 4.5.1 Proposed changes associated with the design options for the Devonshire Road Traffic Management Study are not expected to disproportionately disadvantage or benefit members of the community.

#### **4.6 Consultation and Engagement**

- 4.6.1 Consultation and engagement with residents will be undertaken following selection of a preferred design by the Committee and authorising Officers.

### **5. BACKGROUND PAPERS**

There are no background reports.