

## **DELEGATED ITEM**

# **Proposed Local Safety Scheme – A640 Huddersfield Road and A672 Ripponden Road, Denshaw**

## **Report to Executive Director, Economy Place and Skills**

Portfolio Holder :  
Neighbourhoods – Councillor J Stretton

Officer Contact : Ian Matten  
Ext. 1866

### **Purpose of Report**

The purpose of this report is to seek approval for the implementation of a Local Safety Scheme along the A640 Huddersfield Road and A672 Ripponden Road Denshaw. The affected section of the A640 is along the rural section from Denshaw through to the Kirklees Borough boundary and the section of the A672 is from Denshaw through to the Borough boundary with Calderdale. The proposed road safety scheme is designed to reduce the potential for road traffic accidents occurring along with the number of resultant casualties. This is proposed in pursuance of provisional 2020 casualty reduction targets and is in accordance with the Council's statutory obligation to reduce road traffic accidents under Section 39 of the Road Traffic Act 1988. The scheme will reduce the pain, grief and suffering associated with road traffic accidents.

### **Executive Summary**

The sections of the A640 and A672 between Denshaw and the Borough boundary with Kirklees and Calderdale has been the subject of an accident investigation study to address the number and severity of recorded injury accidents. The study included the crossroads within the centre of the village. The investigation has been completed by the Casualty Reduction Section of Unity Partnership. The utilisation of injury accident data has been used to identify causation factors and trends to the recorded injury accidents. This in conjunction with traffic speed data has been used as a basis to identify remedial measures to address the accidents.

The accident study makes use of injury accident data recorded over the five year period October 2005 to September 2010. The main focus of concern is the rural section of the A640 Huddersfield Road from Denshaw through to the Borough boundary with Kirklees. During this five year period nine injury accidents have been recorded, 44% were classed as being a KSI accident, ie where a casualty was either killed or seriously injured. This accident severity is very high in comparison when compared with that recorded on all of the roads within Oldham whereby 9.8% of the accidents are KSI accidents. In conjunction with the accident data, the speed, volume and direction of vehicles has been recorded at four locations along the length of the study route. It is felt that a route treatment approach in the form of improvements to road markings, traffic signs and alterations to the current speed limit are required to reduce the potential for further accidents occurring and reduce the severity should an accident occur. The measures as proposed within this report are intended to highlight hazards to drivers as they approach them, focus the drivers attention and encourage drivers to travel at an appropriate speed to safely negotiate the hazard.

### **Recommendations**

It is recommended that a Local Safety Scheme for the A640 and A672, as shown on drawings numbered 1034021/A3/2/102 and 1034021/A1/1/103 to 1034021/A1/1/107, be approved for implementation in 2011/12 financial year, at an estimated cost of £28,700, to be financed from the Local Safety Scheme budget;

The proposals for the A640 Huddersfield Road consist of:

- Relocation of the Denshaw village gateway along with an extension of the 30 MPH speed limit;
- An extension of the 40 MPH speed limit from the village gateway to the northern side of New Years Bridge;
- A reduction in the speed limit to 50 MPH from 60 MPH beyond New Years Bridge to the Borough boundary with Kirklees;
- The creation of a speed limit gateway at the Borough boundary with Kirklees utilising road markings laid on red textured surfacing along with traffic signs;
- The erection of warning signs to alert drivers of forthcoming hazards;
- The erection of chevron signs on the severe bends;
- Improvements to the road markings at New Years Bridge; and
- Introduction of continuous double white line systems where forward visibility is limited.

The proposals for the A672 Ripponden Road consist of;

- Alterations to the continuous double white line system on the 50 MPH section near to the Borough boundary with Calderdale.

**Proposed Local Safety Scheme – A640 Huddersfield Road and A672 Ripponden Road, Denshaw**

**1 Background and Current Position**

1.1 Every year, around 3,500 people are killed on Britain's roads and 40,000 are seriously injured. In total, there are over 300,000 road casualties, in nearly 240,000 accidents and about fifteen times that number of non-injury incidents. In 2009 there were 471 recorded personal injury accidents in Oldham resulting in 695 casualties, with 68 sustaining fatal or serious injuries.

1.2 Oldham and the other Greater Manchester authorities have been working towards stretched casualty reduction targets to be achieved by 2010. All categories are compared with the average of 1994 – 98 as the base years.

The 2010 targets are;

- 50% reduction in killed or seriously injured (KSI) casualties
- 55% reduction in child killed or seriously injured casualties
- 30% reduction in slightly injured casualties

Different but equally onerous targets have been proposed by the Department for Transport (DfT) for 2020, compared to new base years of 2004-08.

1.3 The A640 Huddersfield Road, between Denshaw and the Kirklees boundary, has been highlighted for treatment as there have been nine collisions resulting in personal injuries during the five-year study period from 01 October 2005 to 30 September 2010. The nine accidents resulted in fourteen casualties, one of which led to a fatality and a further five were seriously injured. The severity of accidents on the A640 is high, with a Severity Index of 44%, compared to Oldham's average for all its roads of 9.8%.

1.4 Whilst the A640 is the main source of concern, the accidents and traffic flows through Denshaw and along the A672 Ripponden Road have also been assessed under this study.

1.5 The investigations and development of proposals has been undertaken by Unity Partnership on behalf of Oldham Metropolitan Borough Council.

**2 Site Conditions**

2.1 The section of the A640 investigated is a 4km (2.5 miles) single-carriageway road having the typical characteristics of the other moorland roads within the borough.

- 2.2 The route studied begins in Denshaw at the crossroads where it meets the A672 Ripponden Road. From the crossroads travelling eastwards the route is a wide single carriageway road passing residential properties and a primary school (Christ Church CE Primary School). The speed limit restricts vehicles to 30 MPH. The basic lining and signing sufficiently brings the attention to passing traffic of the presence of the school. Whilst travelling eastwards passing the school and residential properties the road proceeds up along a shallow incline and the speed limit becomes 40 MPH. From observation it appears that vehicles begin to increase speed whilst still passing the residential properties as they approach the start of the 40 MPH speed limit. The village gateway incorporates the change to the speed limit from 30 to 40 MPH. This is positioned on the transition from a long straight section into a sharp bend. It is felt that as drivers are travelling uphill along the straight section, on seeing the 40 MPH sign in the distance begin to increase their speed.
- 2.3 Continuing eastwards the road is straight and relatively wide for approximately 0.5km and limited to 40 MPH. However, traffic flow data indicates that 54% of vehicles are travelling in excess of the 40 MPH speed limit. Towards the end of this straight section the speed limit becomes derestricted whereby cars can travel at 60 MPH.
- 2.4 Still travelling eastwards, drivers travel along a sweeping left hand bend which has a double apex. Approximately half way through this bend the carriageway has been resurfaced giving a differential in the level of camber on the old and new surfaces along with a differential in levels of grip. Forward visibility through the bend is limited due to the rising topography of the adjacent land. There have been a number of 'damage only' accidents here whereby drivers lose control of the vehicle and collide with the adjacent retaining wall. It is felt that the change in surfacing is contributing these accidents.
- 2.5 Beyond the bend the alignment of the road is relatively straight as it approaches the reservoir. However, at the reservoir the road turn sharply right through a 90 degree bend, crosses the reservoir and then turns sharply left through 90 degrees. Heading north beyond the reservoir the road climbs relatively steeply in places, taking on a meandering and undulating nature. The road retains this characteristic through to the boundary with Kirklees, and along some sections continuous double white line have been marked out due to visibility being restricted both by the horizontal and vertical alignment.
- 2.6 The carriageway surfacing along the moorland section is mainly in a satisfactory condition having been surface dressed in recent years. However, this is degraded by the presence of a trench reinstatement which appears to be failing in some locations. Analysis of the accident data suggested that one local depression may possibly have been a contributory factor to a fatal accident. The structural defect has been notified to Oldham Council's Highway Maintenance Section for remedial works.

2.7 Verge marker posts have been erected along the moorland section, however a substantial number of these are either missing or leaning. It is likely snow clearing operations are the likely cause of making the posts lean.

2.8 Cat-eye road studs have been installed along the centre line. A number of these have been plucked out and the remainder appear to be in poor condition.

### 3 Speed Surveys

3.1 Comprehensive speed measurements were undertaken at six locations on the A640 Huddersfield Road and the A672 Oldham Road and Ripponden Road, in 2010 and 2011. The results recorded are summarised in the table below.

3.2

Site and Direction <i>For site locations; Please refer to Drawing</i>		<b>Average Speed</b> (mph)	85 <sup>th</sup> Percentile Speed (mph)	% Over Current Speed Limit
Site 1 - 30mph A672	N bound	31.9	38.0	54.7
	S bound	29.7	34.7	37.8
Site 2 – 40mph A640	NE bound	41.9	48.9	53.6
	SW bound	42.1	49.4	53.6
Site 3 – 60mph A640	NE bound	37.5	43.3	0.0
	SW bound	36.6	42.5	0.0
Site 4 – 60mph A640	NE bound	40.3	48.1	0.4
	SW bound	37.0	43.9	0
Site 5 – 40mph A672	NE bound	42.9	50.5	59.1
	SW bound	42.3	49.3	55.1
Site 6 – 40mph A672	NE bound	36.6	42.3	19.2
	SW bound	38.1	44.0	29.0

*Table 1 – Traffic Survey Key Indicators  
Please refer to Drawing Numbers - 1034021/1000/001  
1034021/1000/002*

3.3 Out of the six locations where traffic counts have been carried out, three have recorded a poor compliance to the speed limits. Sites 1 and 5 in the table above are located on the A672 Ripponden Road to the north of Denshaw, site 1 being within the 30 MPH speed limit and site 5 on the 40 MPH speed limit. At both of these locations the percentage of vehicles exceeding the speed limit are high. The 85<sup>th</sup> percentile speed, the speed at which 85% of traffic is

travelling at or above is 49.3mph in the 40mph section and 34.7mph in the 30mph section.

- 3.4 Site 6 is located on the A672 Oldham Road to the south of Denshaw along the section which is restricted to 40 MPH. There is a greater compliance to the 40 MPH speed limit by drivers travelling northwards to the 30 MPH speed limit than those travelling southwards away from the 30 MPH speed limit.
- 3.5 Site 2 is on the A640 Huddersfield Road to the east of Denshaw located within the 40 MPH speed limit. There is poor compliance with the 40mph speed limit as 53.6% of traffic is travelling in excess of the speed limit in both directions.
- 3.6 Site 3 and 4 are located on the section of the A640 where the speed limit for cars is 60 MPH. The vast majority of drivers are recorded as adhering to the speed limit. The 85<sup>th</sup> percentile speeds recorded at these two sites are between 42.5mph and 48.1mph. This demonstrates that the meandering alignment, both vertically and horizontally, is constraining the speed of vehicles.
- 3.7 The volume of traffic travelling on the section of the A640 between Denshaw and the Kirklees boundary is very low in comparison with other A class roads within Oldham. The average daily two-way traffic flow is 1140 vehicles per day. In comparison the A672 which carries an average daily two-way traffic flow of 4740 vehicles.

#### **4 Accident Record**

- 4.1 In the five-year period between 01 October 2005 and 30 September 2010, nine personal injury accidents were recorded on the A640 Huddersfield Road between Denshaw village crossroads and the borough boundary with Kirklees. These collisions resulted in fourteen casualties, comprising of one fatality, five seriously injured and eight slightly injured. A further five accidents were recorded at the crossroads in the centre of Denshaw which led to seven casualties, two of which sustained serious injuries.
- 4.2 The severity of the injury accidents which have been recorded on the A640 Huddersfield Road has a high ratio of KSI accidents to slight accidents, 44% of the accidents on Huddersfield Road have resulted in a KSI incident. In a direct comparison to all roads in Oldham KSI accidents accounted for 10% of all accidents.
- 4.3 Out of the nine accidents which occurred on Huddersfield Road one occurred in the dark. Five of the nine accidents occurred on a wet road surface. On all of Oldham's roads 26% of accidents occur during the hours of darkness, and 34% occur when the road surface is wet. Whilst there does not appear to be an issue with accidents occurring in the dark on Huddersfield Road, accidents on a wet road surface do appear high, 55%, in comparison with the 34% which are record on all of Oldham's roads. This would indicate that there are

issues with the level of skid resistance on the road surface or the condition of the road markings are poor.

- 4.4 Two-thirds of the accidents (six) involved a single vehicle whereby the driver had lost control of the vehicle. Five of these six incidents involved the vehicle being driven in an eastbound direction towards Kirklees. Two accidents were head-on collisions and one resulted from a motorbike turning into the path of oncoming vehicles.
- 4.5 Five injury accidents have been recorded during the five year period at the crossroads junction in Denshaw where the A640 and the A672 cross. This is a five arm junction with a relatively complex layout. One of the accidents occurred in adverse weather when snow was drifting. Two of the accidents involved a vehicle turning right from the south eastern arm across the path of a vehicle travelling in a south westerly direction, one of which was alcohol related. The remaining accident involved a vehicle turning left from the south eastern arm and colliding with a vehicle travelling in a north easterly direction.
- 4.6 Along the section of the A672 Ripponden Road between Denshaw and the Borough boundary with Calderdale there have been nine injury accidents recorded during the five year study period. One of these accidents was classed as serious, the other eight being classed as slight. The nine accidents resulted in nineteen casualties, one of which was seriously injured. Whilst there has been the same number of accidents on the A640 the severity of the accidents on the A672 is less.
- 4.7 Two of these accidents on Ripponden Road occurred in severe weather conditions, one being on an icy road surface and the other occurred during snowy conditions. Of the remaining seven accidents, four occurred on a wet road surface and three occurred in dry conditions. Discounting the two accidents which occurred during adverse weather conditions the four which occurred on a wet road surface account for 57% of the injury accidents recorded here. When comparing this to the accidents which occurred on a wet road surface on all of Oldham's roads (34%) the accident rate on a wet road surface on Ripponden Road is considerably higher.
- 4.8 When looking at the individual details of the accidents there are no common trends to these. The accidents do not form clusters, they are spread along the length of the route. When looking at the nine accidents, two were essentially due to the icy and snowy weather conditions. Two accidents resulted in head-on collisions when a vehicle errantly crossed the centreline. Two accidents resulted in head-on collisions when a driver attempted to carry out an overtaking manoeuvre. One accident was caused by a HGV reversing into a lay-by. One accident resulted from a vehicle turning right across the path of an oncoming vehicle and the final accident occurred when a driver lost control of the vehicle when attempting to avoid a dog in the road.

## 5 Proposals and Justification

- 5.1 It is proposed to extend the 30mph speed limit eastwards along the A640 Huddersfield Road to a point 100 metres from its current terminal point. A new village gateway will be created at this point utilising the speed limit signs and Denshaw signs, along with a 30mph speed roundel marked out on the carriageway on a red textured patch. At this point the carriageway will be reduced in width to 6m by marking out nearside hatching along both lanes. The width of the carriageway will continue at 6m to the point where the village gateway is currently located. On the approach to the proposed gateway dragons teeth road markings will be marked out. The relocation of this gateway and the extension of the 30mph speed limit are intended to instil a greater compliance with the 30mph speed limit in the vicinity of the residential properties.
- 5.2 The section on the A640 which is current restricted with a 40mph speed limit is just 300m long. From the traffic surveys which were undertaken there is poor compliance to the 40mph speed limit which can partly be attributed to this being a short length. It is proposed to extend the length of the 40mph speed limit eastwards to a point 230m east of the double bends through the reservoir, a distance of 900m.
- 5.3 In association with the extension of the 40mph speed limit it is proposed to erect bend warning signs with 'Max speed' supplementary plates. One is to be erected on the approach to the bend with a double apex where three accidents had been recorded, the supplementary plate stating 'Max speed 30' and another to be erected on the approach to the double bend between the reservoirs, this stating 'Max speed 20'. A series of chevron signs are also to be erected. The reduction in the speed limit and the erection of the warning signs and chevrons will instil better driver behaviour and focus their attention of the hazard ahead.
- 5.4 Beyond the proposed 40mph speed limit on the A640 it is proposed to reduce the currently derestricted speed limit to 50mph through to the Borough boundary with Kirklees. At the boundary a gateway will be created utilising the speed limit signs, a 50mph speed limit roundel marked out on a red textured surface patch and the carriageway being visually narrowed with edge of carriageway markings.
- 5.5 In conjunction with the reduction to the speed limit to 50mph, it is proposed to erect bend warning signs on the approaches to the tighter bends along with chevron signs at the bends. The reduction in the speed limit and the advanced warning will enable drivers to safely negotiate the tight geometry of the bends.

- 5.6 The new speed limits have been determined using procedures set out in Department of Transport Circular 01/2006 – Setting Speed Limits. For rural roads, this uses an assessment framework that seeks to achieve an appropriate balance between safety and mobility objectives and takes into account the class of the road, measured speeds, accident rate and the roads' character in each case, for example considering the number of bends, junctions and accesses.
- 5.7 Road studs have been installed along the centre line of the route on the section of the A640 which is currently de-restricted. Some of the reflectors in the inserts have been lost and most are in a poor state therefore giving poor retro-reflectivity. It is suggested that the inserts are replaced to ensure that at night and in poor driving conditions drivers are given good information about the alignment of the carriageway ahead.
- 5.8 Throughout the length of the rural section of the A640, except for two lengths of double white lines systems, the centre line is marked out using a hazard centreline marking. The two double white line systems are both approximately 180m long with a gap of 65m between the two. They are located approximately 650m from the Borough boundary. It is proposed to replace the hazard centreline with a continuous double white line on the section between the two existing double white line systems. This will deter drivers from attempting to carrying out an overtake manoeuvre on the short section between the double white lines.
- 5.9 Travelling northwards away from Denshaw along the A672 the speed limit increases from 30mph to 40mph and then to 50mph through to the Borough boundary with Calderdale. The section within Calderdale is derestricted. At three locations along the section which is restricted to 50mph, double white centreline systems have been marked out. The first section is adjacent to The Rams Head Inn and runs for 180m, the centre line reverts back to a hazard centreline and then there is another double white line system for 220m. The third length of double white centrelines is located approximately 1 kilometre from the boundary with Calderdale and runs for 600 metres. The central length of this double white centreline line system consists of a continuous line on one side and a broken line on the other. To prevent drivers from attempting an overtake manoeuvre here it is proposed to make the lines continuous on both sides.
- 5.10 The proposed measures will contribute to raising awareness of the hazards and potential dangers along the A640 and A672. The measures included to achieve this objective principally consist of improvements to traffic signs and road markings, at and on approaches to hazards so as to highlight them better and particularly to persuade drivers to travel within the limits of safety. Details of the alterations to the speed limits are attached schedules.
- 5.11 The overall scheme is estimated to reduce accidents by two per year.

## 6 Consultations

- 6.1 G.M.P. View - The Chief Constable has been consulted and recommends that the existing 30 mph carriageway roundel is removed.
- 6.2 T.f.G.M. View - The Director General has been consulted and has no comment on this proposal.
- 6.3 G.M. Fire Service View - The County Fire Officer has been consulted and has no comment on this proposal.
- 6.4 N.W. Ambulance Service View - The County Ambulance Officer has been consulted and has no comment on this proposal.

## 7 Comments Of Ward Councillors

- 7.1 The Ward Councillors were consulted and no comments were received.

## 8 Financial Implications Summary Implications

	Budget 2011/12 £'s	Report Implications 2011/12 £'s	Difference £'s
<b>Capital</b>	28.7	28.7	-
<b>Financed by:</b>			
LTP	(28.7)	(28.7)	-
<b>Revenue</b>			
Annual maintenance		1.0	1.0

### 8.1 Capital Implications

This scheme is included in the Economy, Places and Skills – Transport capital programme in 2011/12. The estimate is as follows:

	2011/12 £
Construction Works	19,700
Fees: Accident Analysis, Outline Design and Consultations	9,000
Total	<u>28,700</u>

The estimate has been provided by an officer from Unity Partnership in January 2012 and includes a 10% contingency.

## 8.2 Revenue Implications

The annual maintenance cost which is estimated at £1000 will be a charge against the Highways Operations budget. There are significant pressures in this area and the Directorate will have to manage its resources to ensure that there is no adverse overall variance at year end. In this financial year there has currently been approximately £12,000 of similar additional commitments. (Sadrul Alam / David Leach)

## 9 **Legal Services' Comments**

9.1 The overall speed limit framework, including the setting of national limits for different road types, and which exceptions to the general limits can be applied, is the responsibility of the government. The three national speed limits are:

- the 30mph speed limit on street lit roads (sometimes referred to as Restricted Roads)
- the national speed limit of 60mph on single carriageway roads
- the national speed limit of 70mph on dual carriageways and motorways

These national limits are not, however, appropriate to all roads. The speed limit regime enables traffic authorities to set 'local speed limits' in situations where local needs and considerations deem it desirable for drivers to adopt a speed which is different from the respective national speed limit.

9.2 Before changing a local speed limit the Council should satisfy itself that the benefits exceed the disbenefits. The Council should assess a number of factors including accident and casualty savings and conditions and facilities for vulnerable road users. The estimated collision and injury savings should be an important factor when considering changes to a local speed limit. (A Evans)

## 10 **Cooperative Agenda**

10.1 In respect of the proposals contained within this report there are no Co-operative issues or opportunities arising and the proposals are in line with the Council's Ethical Framework.

## 11 **Human Resources Comments**

11.1 None.

## 12 **Risk Assessments**

12.1 None.

## 13 **IT Implications**

13.1 None.

**14 Property Implications**

14.1 The proposed works are all within the adopted highway.

**15 Procurement Implications**

15.1 None.

**16 Environmental And Health & Safety Implications**

16.1 Energy – None.

16.2 Transport - As the objective of the scheme is accident reduction, the costs of the accidents to society are expected to be reduced.

16.3 Pollution - Reductions in the speed of traffic should in turn lead to reductions in air and noise pollution.

16.4 Consumption and Use of Resources - The implementation will result in a limited use of natural resources, in accordance with current specification.

16.5 Built Environment - The measures will emphasise the residential nature of the area.

16.6 Natural Environment - The scheme will result in a small number of additional signs in the rural part of the scheme length, which will have a negligible impact.

16.7 Health and Safety - The entire report is concerned with the Council's duty to prevent road traffic accidents contained within the Road Traffic Act 1988.

**17 Equality, Community Cohesion and Crime Implications**

17.1 The Local Safety Scheme is designed to reduce the number of injury accidents and thereby have a positive effect on community cohesion.

**18 Equality Impact Assessment Completed?**

18.1 No.

**19 Key Decision**

19.1 No.

**20 Forward Plan Reference**

20.1 Not applicable.

21 **Background Papers**

21.1 The following is a list of background papers on which this report is based in accordance with the requirements of Section 100(1) of the Local Government Act 1972. It does not include documents which would disclose exempt or confidential information as defined by the Act :

File Ref : 1034021

Name of File : Proposed Local Safety Scheme

Officer Name : Mr I Matten

Contact No : 0161 770 1866

Signed <u>                    <i>Carol Brown</i>                    </u> Carol Brown AED Economy, Place and Skills	Dated <u>                    23.4.12                    </u>
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Report Tracking	
<b>Where</b>	<b>When</b>
EMT	
Leadership	
Joint Leadership	
Overview & Scrutiny	

## **SCHEDULE 1**

OLDHAM BOROUGH COUNCIL  
ROAD TRAFFIC REGULATION ACT 1984  
THE OLDHAM – VARIOUS ROADS (30MPH AND 40MPH) SPEED LIMIT ORDER  
2000

The Revocation of the 30mph speed limit from Schedule 2 Part 1

HUDDERSFIELD ROAD (A640), DENSRAW	Extending from its junction with Ripponden Road for a distance of 380 metres east of this point
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The Revocation of the 40mph speed limit from Schedule 2 Part 2

HUDDERSFIELD ROAD (A640), DENSRAW	Extending from a point 350 metres east of its junction with Ripponden Road to a point 650 metres east of this location
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## **SCHEDULE 2**

Proposed 30mph Speed Limit Order

HUDDERSFIELD ROAD (A640), DENSRAW	From its junction with Ripponden Road (A672), Denshaw for a distance of 560 metres in an easterly direction
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## **SCHEDULE 3**

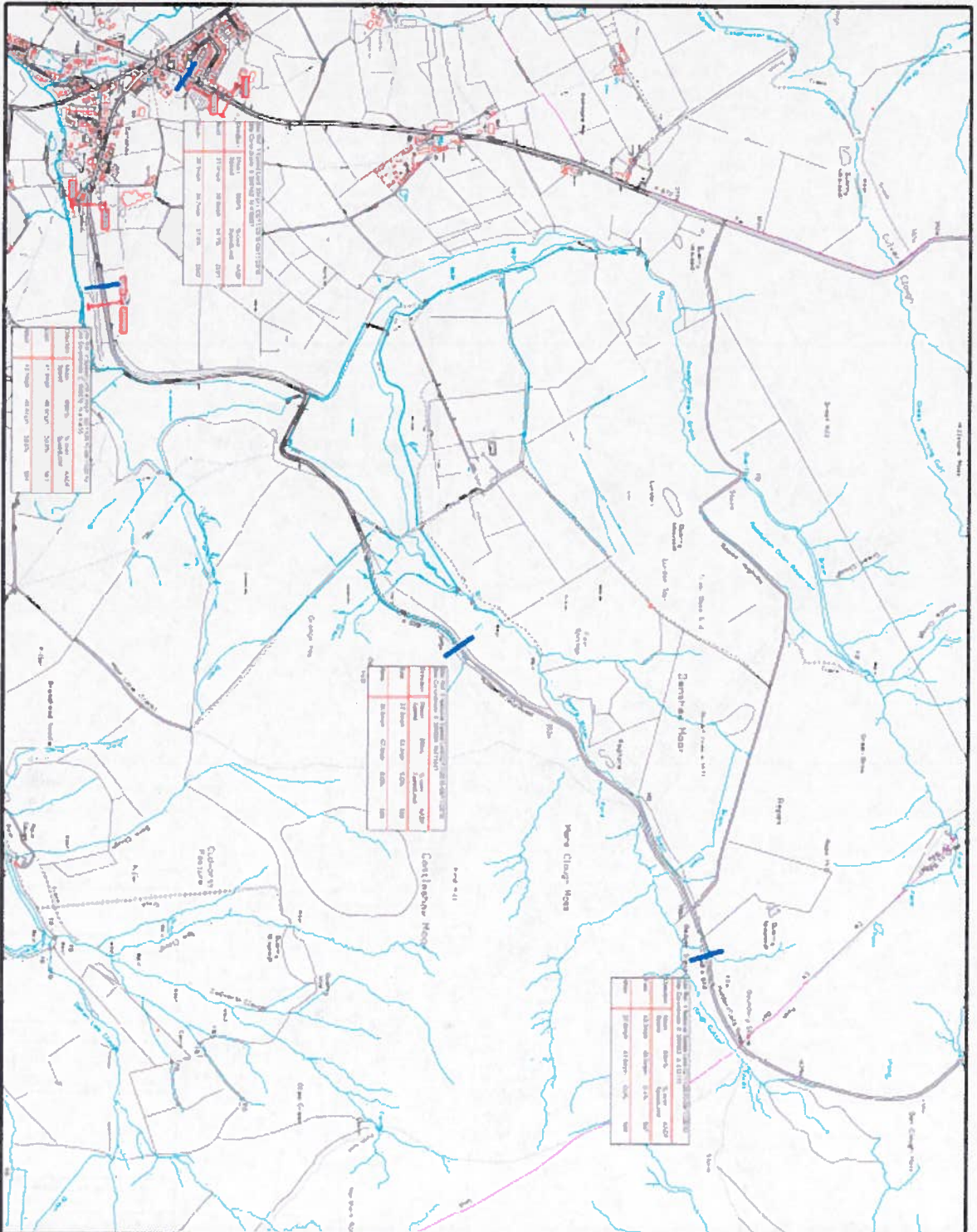
Proposed 40mph Speed Limit Order

HUDDERSFIELD ROAD (A640), DENSRAW	From a point 560 metres east of its junction with Ripponden Road (A672), Denshaw for a distance of 1.32 kilometres in an north easterly direction
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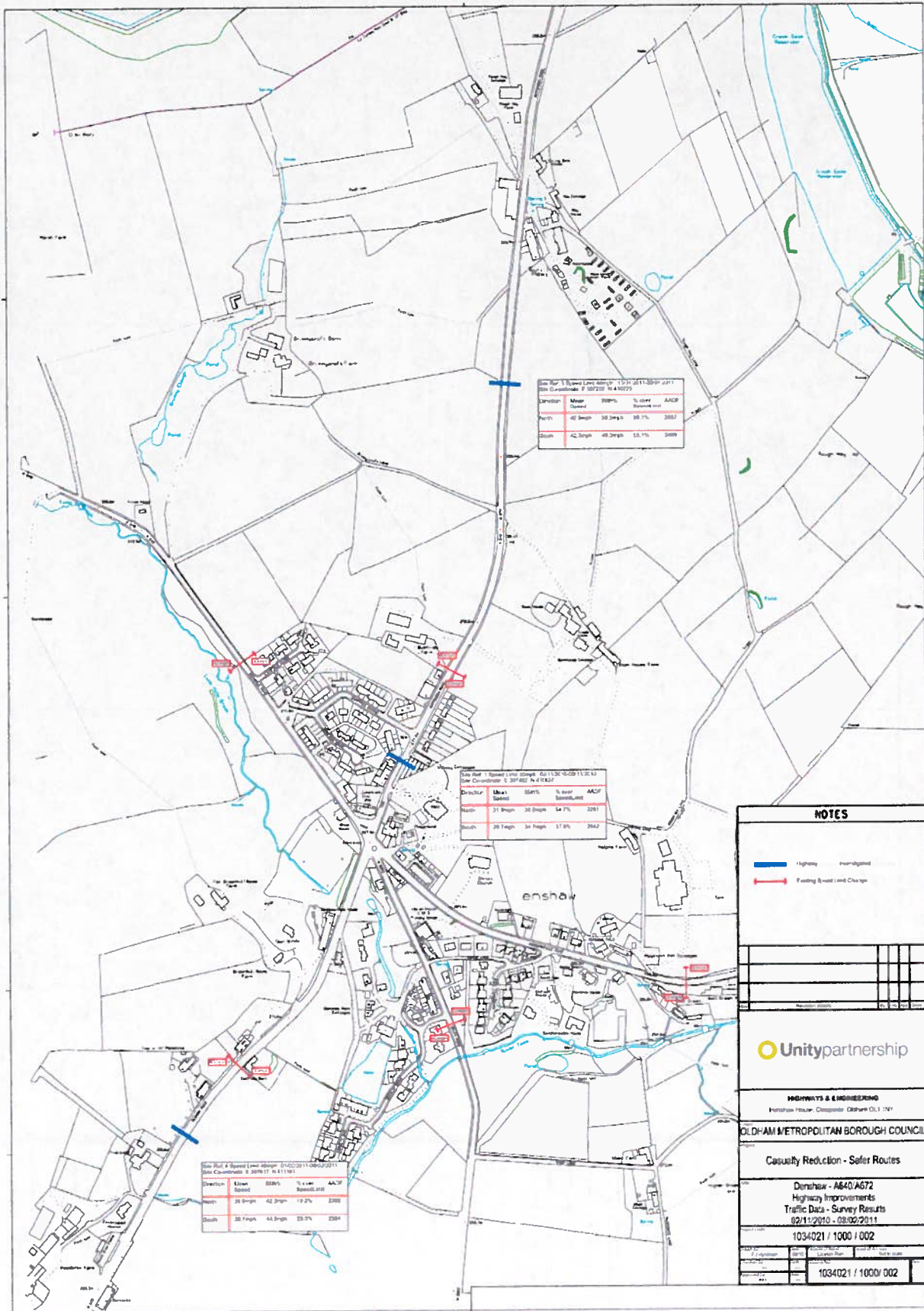
## **SCHEDULE 4**

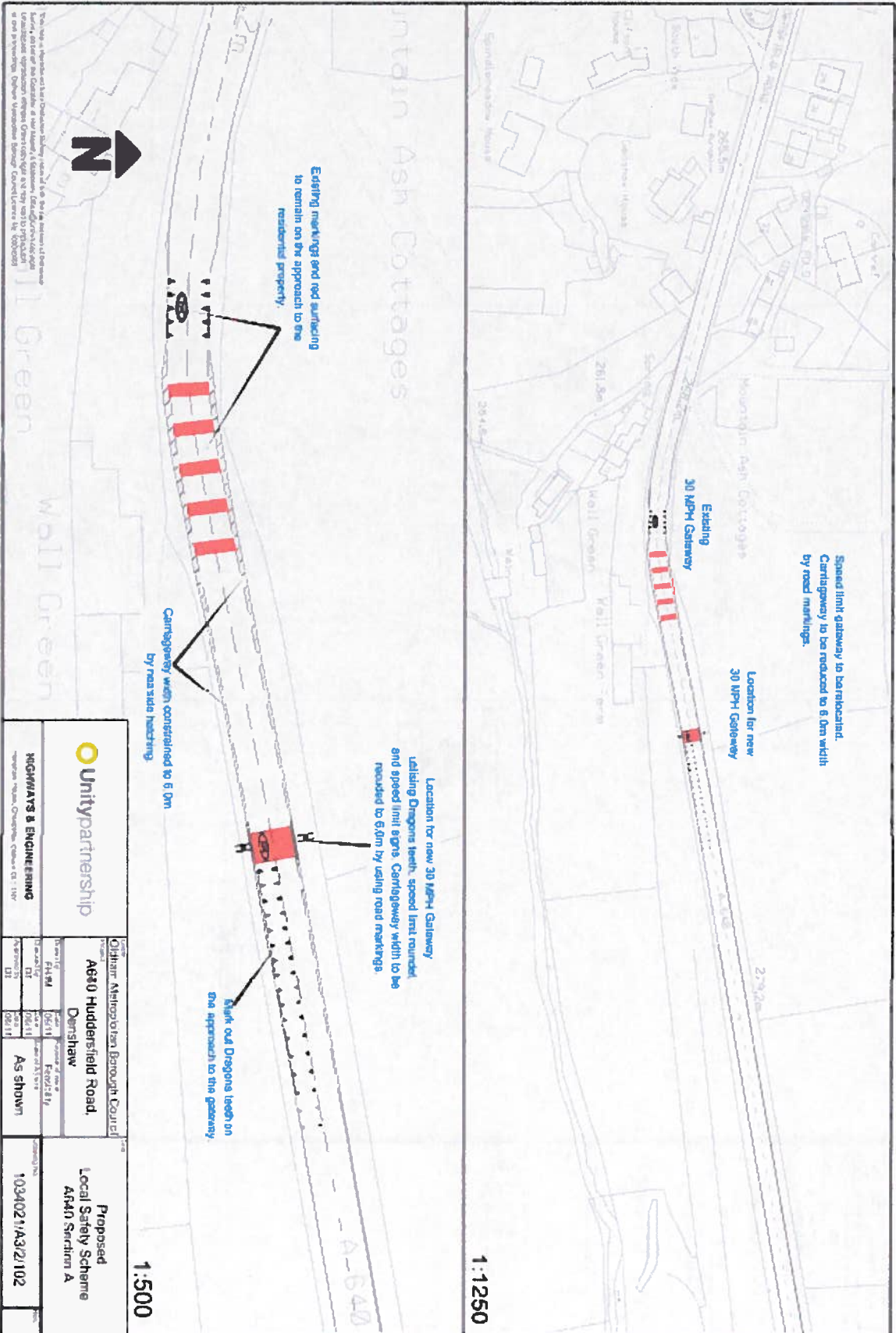
Proposed 50mph Speed Limit Order

HUDDERSFIELD ROAD (A640), DENSRAW	From a point 1.88 kilometres northeast of its junction with Ripponden Road (A672), Denshaw to the boundary with Kirklees, a distance of 2.00 kilometres
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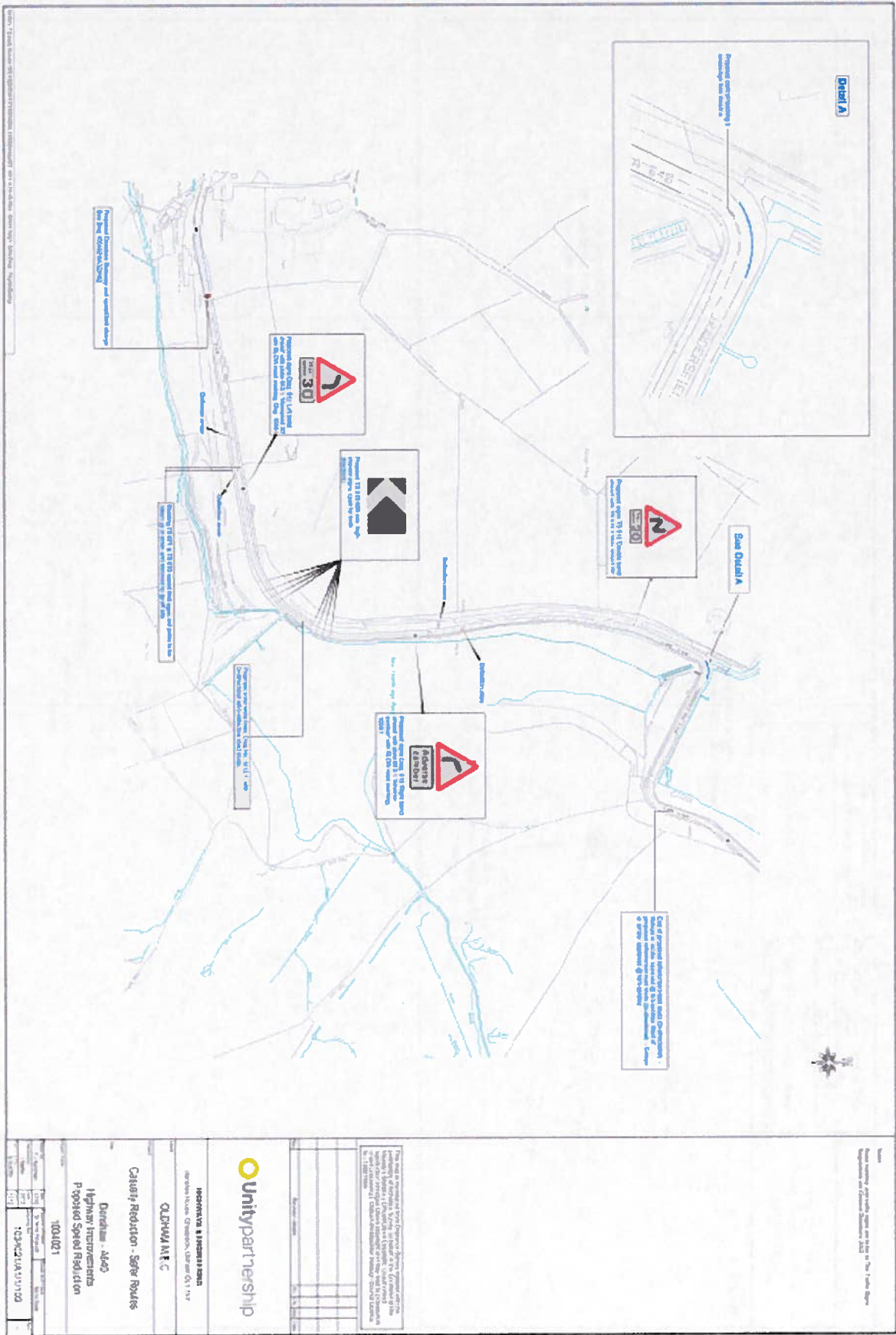
<p><b>NOTES</b></p> <p>Blue line: Highway bridge and approach, Gully</p> <p>Red line: Access Road and Drive</p>	
<p><b>Unitypartnership</b></p> <p>100 BROADWAY, SUITE 1000, WILMINGTON, DE 19801</p>	
<p><b>ST. DEAN METROPOLITAN BOROUGH COUNCIL</b></p> <p>100 BROADWAY, SUITE 1000, WILMINGTON, DE 19801</p>	
<p><b>Casualty Reduction, Salt Flares</b></p> <p>Contract: 4441</p> <p>Hydroxy equivalents</p> <p>Task Data - Salt Flares</p> <p>28/11/2010 - 08/11/2010</p> <p>Ref: TRN 364</p>	
<p>03/06/2011 / 1500 / 2011</p>	





This plan is dependent on the Design Statement and is subject to the provisions of the Highways Act 1980 and the Traffic Signs Regulations and General Directions 2002. It is not to be used for any other purpose without the written consent of the Design Statement. Design Statement No. 10000000

		01484 451000 A630 Huddersfield Road Denshaw		Proposed Local Safety Scheme A630 Section A	
HIGHWAYS & ENGINEERING 10000000 10000000		Date of Issue 06/11	Date of Review 06/11	1034021/A3/2/102	



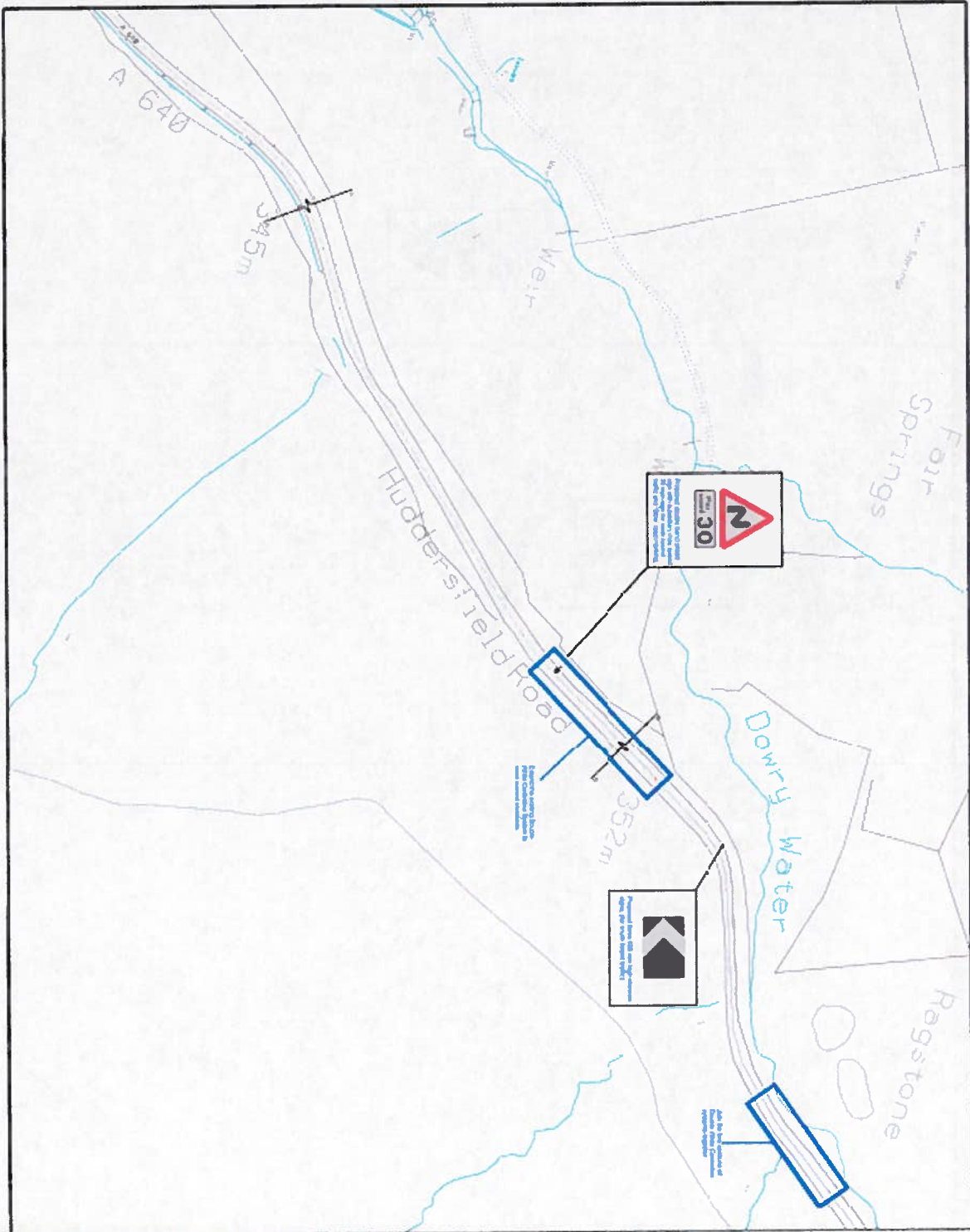
Date: \_\_\_\_\_  
 Scale: \_\_\_\_\_  
 Author: \_\_\_\_\_  
 Checked: \_\_\_\_\_  
 Approved: \_\_\_\_\_

This plan is a summary of the proposed design for the proposed road works. It is not a final design and should not be used for construction purposes. The final design will be provided in the form of a detailed engineering design.

**Unity partnership**  
 HOVORKA & JACOBSON  
 100/1021  
 100/1021  
 100/1021

**Calgary Reduction - Safe Routes**  
 Duration - 1800  
 Highway Incidents  
 Posted Speed Reduction





Authority and Council Approval  
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10/2021/AT/1105

**Unitypartnership**  
 4 SPURWAY & LANE, LEIGH, LANCASHIRE  
 LEIGH, LANCASHIRE, LANCASHIRE, L20 1ST

OLPHAM, W.C.  
 County Recorder - Salford  
 District - A64  
 Highway Instruments  
 Proposed Single Speed Limit  
 10/2021

1	2	3	4	5	6	7	8	9	10



