

Technical note

Project:	Southend-on-Sea Road Safety Services	To:	Adrian Watling
Subject:	Maya Road junction with A13 Ness Road	From:	Samantha Moores
Date:	5 Apr 2018	cc:	Mark Gregory

MAYA CLOSE / WATERLOO ROAD JUNCTION WITH A13 NESS ROAD, SHOE BURYNNESS

Introduction

Atkins were requested to undertake an accident investigation of the A13 Ness Road / Maya Close junction following a fatal accident in 2015 and local concerns.

Accident Summary:

Search period – 1st November 2007 to 31st October 2017

During the 10-year study period 3 personal injury accidents occurred within a 50m radius of the junction of Maya Close with A13 Ness Road (which consequently includes the junction with Waterloo Road).

These accidents resulted in 1 fatal accident, 1 serious injury accident and 1 slight injury accident, giving a severity ratio of 66.6%.

All 3 accidents occurred on a dry road surface and during the hours of daylight.

Two of the accidents involved motorcyclists.

One accident occurred in 2009, 1 in 2012 and 1 in 2015.

Accident details:

1. Accident occurred on Thursday 5th November 2009 at 07:10 and resulted in slight injury. A car turned out of Waterloo Road across the path of a motorcyclist who was travelling north on Ness Road. There was another car parked on the west kerb of Ness Road which reportedly obstructed the visibility between the car and the motorcyclist. The motorcyclist incurred slight injuries.
2. Accident occurred on Tuesday 9th October 2012 at 16:00 and resulted in serious injury. A car was travelling southbound on Ness Road when a child pedestrian (age 10) ran into the road from the east kerb and was hit by the car. The pedestrian sustained serious injury.
3. Accident occurred on Wednesday 11th November 2015 at 13:35 and resulted in a fatality. A car turned right out of Maya Close onto Ness Road and hit a motorcyclist who was travelling southbound on Ness Road.

Site visit observations:

The site was visited on Thursday 29th March 2018 at approximately 10:00. Multiple vehicles were observed parking on the double yellow lines to the north of Maya Close on the eastern side of Ness Road during the site visit. This restricted visibility to the right for road users exiting Maya Close. This visibility was further reduced by the right-hand bend and the litter bin located next to the brick built planted area.

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Visibility to the left was restricted to some extent by parked vehicles. Some of Ness Road to the south of Maya Close was coned off meaning that visibility was slightly better than might otherwise be expected.

The images below show the view to the right when exiting Maya Close restricted by parked vehicles, the bin and planting and also the view southbound along Ness Road approaching Maya Close.



Image 1 – view to right exiting Maya Close



Image 2 – view southbound along Ness Road approaching Maya Close

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Options for remedial measures:

The following options have been considered for this junction. Each measure has been briefly assessed in terms of potential accident savings, cost and suitability for the junction in question.

1. Junction ahead warning signs – provide a staggered junction ahead warning sign on each approach to the junction on Ness Road. This measure would be relatively low cost and relevant to accidents 1 and 3.
2. Build-out at junction – provide a build-out to bring forward the give-way line from Maya Close to improve visibility. This measure would be relevant to accidents 2 and 3.
3. Ban right turn from Maya Close – this measure would be difficult to enforce and there are no opportunities nearby for road users to safely undertake a U-turn which would further reduce the compliance with the banned manoeuvre. This measure would be relevant to accident 3 only. Furthermore, the straight-ahead movement would not be banned and two-wheeled vehicles could still be hit road users travelling from Maya Close to Waterloo Road in a similar fashion to motorcyclist.
4. Provide mini-roundabout – would require more extensive changes to the road layout at higher cost, relevant to accidents 1 and 3. Four-arm mini-roundabouts tend to have high accident rates so accident savings may not be obtained.
5. 'SLOW' road markings – provide 'SLOW' road markings adjacent to the junction ahead warning signs. This measure would be relatively low cost and would support the signing.
6. Parking enforcement – monitor non-compliance of parking restrictions in the vicinity of Maya Close / Waterloo Road. Provide enforcement to deter unsafe parking.
7. Relocate street furniture – relocate the litter bin to the other side of the brick built planter to improve visibility to the right from Maya Close. This measure would be low cost and relevant to accident 3.
8. Trim vegetation in planter – at the time of the site visit (early spring) the vegetation in the planter did not restrict visibility from the junction. However, with spring /summer growth this could also impinge visibility. This measure is low cost and relevant to accident 3.
9. Add 'Think Bike' Posters for road users leaving Maya Close for a limited period.

Conclusions

The Ness Road/Maya Close/Waterloo Road junction had a low accident rate (0.3 per year) but high severity (two of the three accidents had killed or seriously injured casualties). Two of the three accidents involved motorcyclists. An analysis of the accidents together with a site visit has determined various options.

Recommended package of remedial measures:

Provide junction ahead warning signs (staggered) on both approaches to the junction in conjunction with 'SLOW' road markings. Provide a build-out to bring forward the give-way line for Maya Close. Support these remedial measures with relocating the bin, trimming the vegetation and monitoring the non-compliance with parking restrictions.