

Yew Tree Bottom Road, Epsom

Feasibility Report



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Pedestrian Improvements

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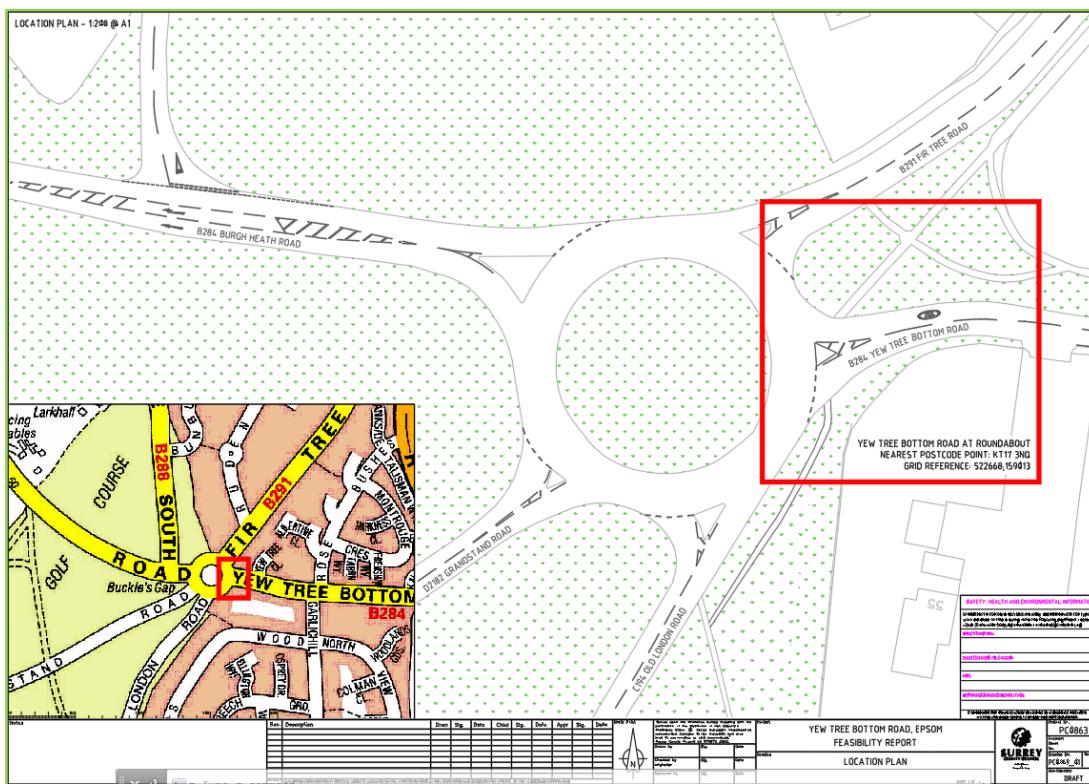
1. INTRODUCTION:

This feasibility study is to look into the potential measures to increase pedestrian safety when crossing Yew Tree Bottom Road.

2. SITE ANALYSIS AND DATA COLLECTION:

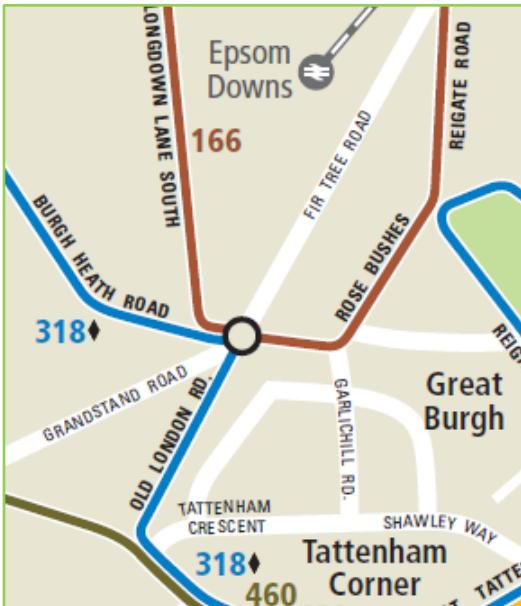
2.1 Site Analysis

Yew Tree Bottom Road is one of the five arms of a busy roundabout in Epsom, just 0.65 miles from Epsom Downs Racecourse. The other four roads are B291 Fir Tree Road, B284 Burgh Heath Road, C194 Old London Road and D2182 Grandstand Road. Yew Tree Bottom Road is a distributor of local traffic to Epsom Town Centre, Burgh Heath and Banstead. Through traffic from a wider area also uses the road linking routes such as the A217 and providing access to the M25. Due to this volume of traffic and speed of vehicles, pedestrians can be put at risk when trying to cross the highway. Yew Tree Bottom Road is on the border of two districts, Epsom & Ewell and Reigate & Banstead, and is within Green Belt land.



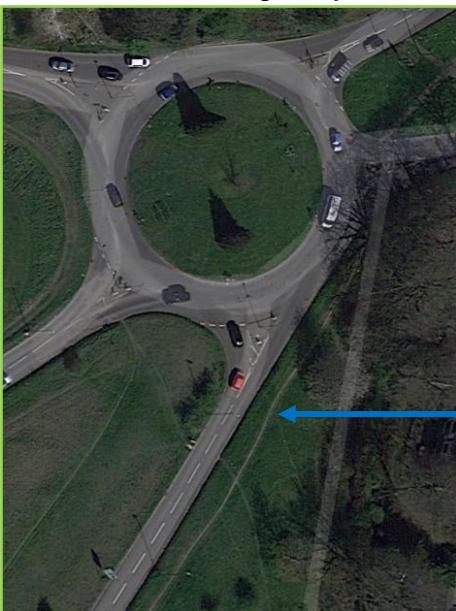
Yew Tree Bottom Road is a single carriageway road which averages at 6.5m wide and has residential properties on both sides of the carriageway. The road is subject to a 30mph speed limit for the majority, except for the first 20 metres at the eastern end which is 40mph in line with the roundabout and all other surrounding roads. Yew Tree Bottom Road has a system of street lighting along its entire length. Yew Tree Bottom Road forms part of the 166

bus route that help to form an important part of the integrated transport system. Buses on the 166 route travel though Yew Tree Bottom Road every 30 minutes.



Yew Tree Bottom and Fir Tree Road are the only surrounding roads with footpaths, and with no safe crossing points at any locations. The lack of dropped kerbs in Yew Tree Bottom Road and Fir Tree Road means that there are no safe places for the disabled and elderly people to cross.

An informal track has been created adjacent to Old London Road, showing that a large number of pedestrians use the island in Yew Tree Bottom Road to cross the carriageway.



Informal track created by excessive pedestrian use.

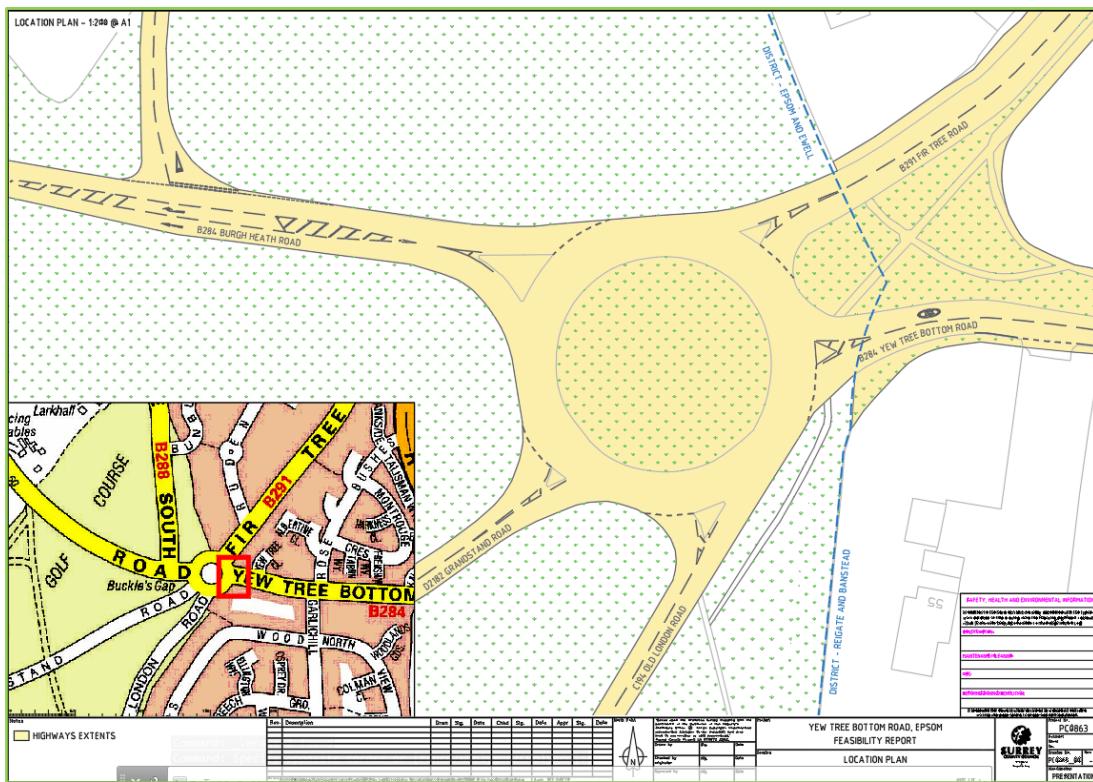
For a more detailed existing layout plan see drawing number PC0866_01.

2.2 Personal Injury Collision Data

There has been no recorded accidents in the last five years.

2.3 Highways Extents

The Highways Information Team provided information regarding the highway extents at Yew Tree Bottom Road. The below location plan shows that the verge adjacent to Old London Road is not within the highway boundary. Therefore the area in which pedestrians are crossing Yew Tree Bottom Road is not within Surrey's highway boundary, but is part of Epsom Downs, which is owned by the Jockey Club and managed by the Epsom and Walton Downs Conservators. No contact has been made with the owners of the land but it is a possibility that the land could be obtained at a cost, or permission could be gained in order to carry out any potential works. Further investigation would be needed in order to clarify this. ***For a more detailed location plan see drawing number PC0866_00.***



3. DISCUSSION AND OPTIONS:

As the works are to be included within a 40mph speed limit, Traffic Management costs of roughly £500 will need to be added to each of the below estimates. An additional 30% uplift has been added to the estimates to account for design fees and contingency.

3.1 Option 1 – Dropped Kerbs

Installing dropped kerbs on the island and footways makes the crossing point accessible for all. This option will be cheap and easy to complete and will require the least construction. However, just installing dropped kerbs is not compliant with the DDA crossing guidelines as there are no tactiles to assist the visually impaired. In addition, for the island to be an effective crossing for pedestrians, the lamp column would need relocating. There is also only enough space to fit one dropped kerb on the southern footway, which is not ideal for pedestrians. In conclusion, this option would not improve the situation. ***The price for the changes in PC0866_02 will cost approximately £4,750.***

3.2 Option 2 – New Island

Removing the existing island and replacing it with a much larger island will increase the waiting area in central island, which will in turn increase pedestrian safety. There will be a larger area of dropped kerbs and will be a shorter crossing distance across the carriageway. The larger island will not affect vehicle movements but should assist with slowing them down on approach to the roundabout. Unlike Option 1, the lamp column will not need to be relocated. However, like Option 1, this option is not compliant with the DDA crossing guidelines as there are no tactiles to assist the visually impaired. ***The price for the changes in PC0866_03 will cost approximately £5,200.***

3.3 Option 3 – Build Out

Constructing a build out on the southern side of the carriageway will increase visibility in to Yew Tree Bottom Road, making it safer for pedestrians to cross. At present, pedestrians crossing the carriageway to the north have very limited visibility and are in a dangerous situation every time they attempt to cross the road. The construction of the build out will also shorten the crossing distance and will create a better alignment for crossing – it is no longer at a difficult angle for pedestrian. In addition, the new build out is to be constructed on highways land, so therefore no land constraints will be encountered – however, there will still be land issues regarding the breaking out of existing area and the installation of grasscrete. It will also not affect vehicle movements and should assist with slowing them down on approach to the roundabout. However, the lamp column would need relocating as it is in the line of the crossing point. ***The price for the changes in PC0866_04 will cost approximately £5,700.***

3.4 Option 4 – Build Out & New Island (With Tactiles)

As discussed in Option 3, the new build out will increase visibility for pedestrians crossing Yew Tree Bottom Road. The shorter crossing distance between the build out and the new central island will also increase safety for pedestrians. This option does not affect vehicle movements, and will act as the most effective traffic calming feature compared to all of the above options. Breaking out and removing the existing island and replacing with new will mean a more suited alignment and will create a more clear crossing

route across the carriageway. The addition of tactiles will create a formal crossing point and help the visually impaired cross the road safely. However, the lamp column would need relocating as it is in line of the new crossing point.

The price for the changes in PC0866_05 will cost approximately £9,300.

3.5 Option 5 – Build Out & New Island (No Tactiles)

This option is a variance of Option 4, but without the tactiles on the new island and footways. However, this option does not comply with the DDA crossing guidelines. ***The price for the changes in PC0866_06 will cost approximately £7,000.***

3.6 Option 6 – Do Nothing

Despite the obvious lack of a crossing point across Yew Tree Bottom Road, there have been no reported accidents in the last five years. Also, purchasing the land in order to carry out the works could prove a costly exercise.

4. RECOMMENDATION

Bearing these considerations in mind, it is recommended that the local committee considers Option 4 as the preferred option. With a large number of pedestrians using the footpaths, Option 4 is seen as the most effective way to reduce the chance of a collision involving vehicles and pedestrians. Given that, at present, this island is the only way for pedestrians to cross the busy roundabout, I believe that it would be best to introduce the most extensive option.

6. APPENDICES

A) Drawings showing proposed options:

PC0863_00 – Location Plan

PC0863_01 – Existing Layout

PC0863_02 – Option 1 – Dropped Kerbs

PC0863_03 – Option 2 – New Island

PC0863_04 – Option 3 – Build Out

PC0863_05 – Option 4 – Build Out & New Island (With Tactiles)

PC0863_06 – Option 5 – Build Out & New Island (Without Tactiles)

PC0863_07 – Vehicle Tracking