

Stanton Cross Route 2 Highway Works at London Road Roundabout

Proposals for Reducing Impacts on TPO Trees

Wellingborough Walks Action Group

14 June 2023



INTRODUCTION

Detailed design linked to the Stanton Cross Route 2 highway works is currently underway as part of the Section 278 Agreement process. In February 2023 a number of trees along the London Road corridor were felled. Further tree felling is proposed to accommodate the planned highway works.

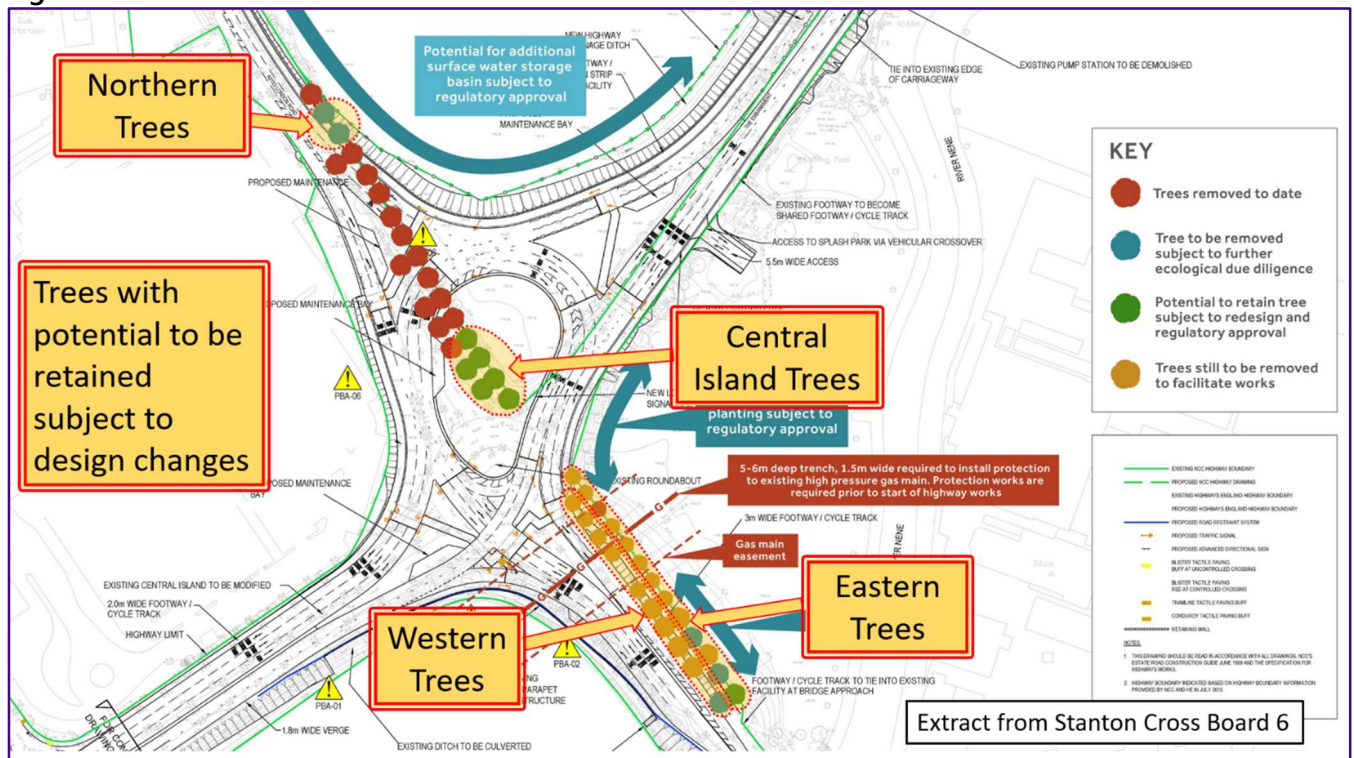
A review of the current design drawings indicates that there is scope for modest adjustments to the design to ensure that further felling of the TPO protected lime trees can be avoided, or significantly reduced.

This report outlines a number of possible design solutions to minimise adverse impacts and retain as many as possible of the remaining trees. All of the options discussed can be carried out as part of the normal S278 design development process.

LOCATION OF TREES

The following diagram identifies the locations of the trees.

Figure 1 – Tree Location Plan



[Figure 1 is based on Board 6 displayed at the public information event held on 23 March 2023]

For the purposes of this report the trees are divided into four groups as follows

Northern Trees – Two remaining trees to the north of the existing London Road Roundabout

Central Island Trees – Trees north of the existing roundabout that will lie within the proposed central island

Eastern Trees – Trees south of the roundabout, lying to the east of the existing footway/cycleway

Western Trees – Trees south of the roundabout, lying to the west of the existing footway/cycleway

CURRENT DESIGN PROPOSALS

On 8 June 2023 two drawings were made available as follows:

Stantec Drg no 44482/S278/100/002 Revision C – General Arrangement (dated 25.07.19); and
Stantec Drg no 44482/S278/200/002 Revision C – Site Clearance (dated 08.02.21)

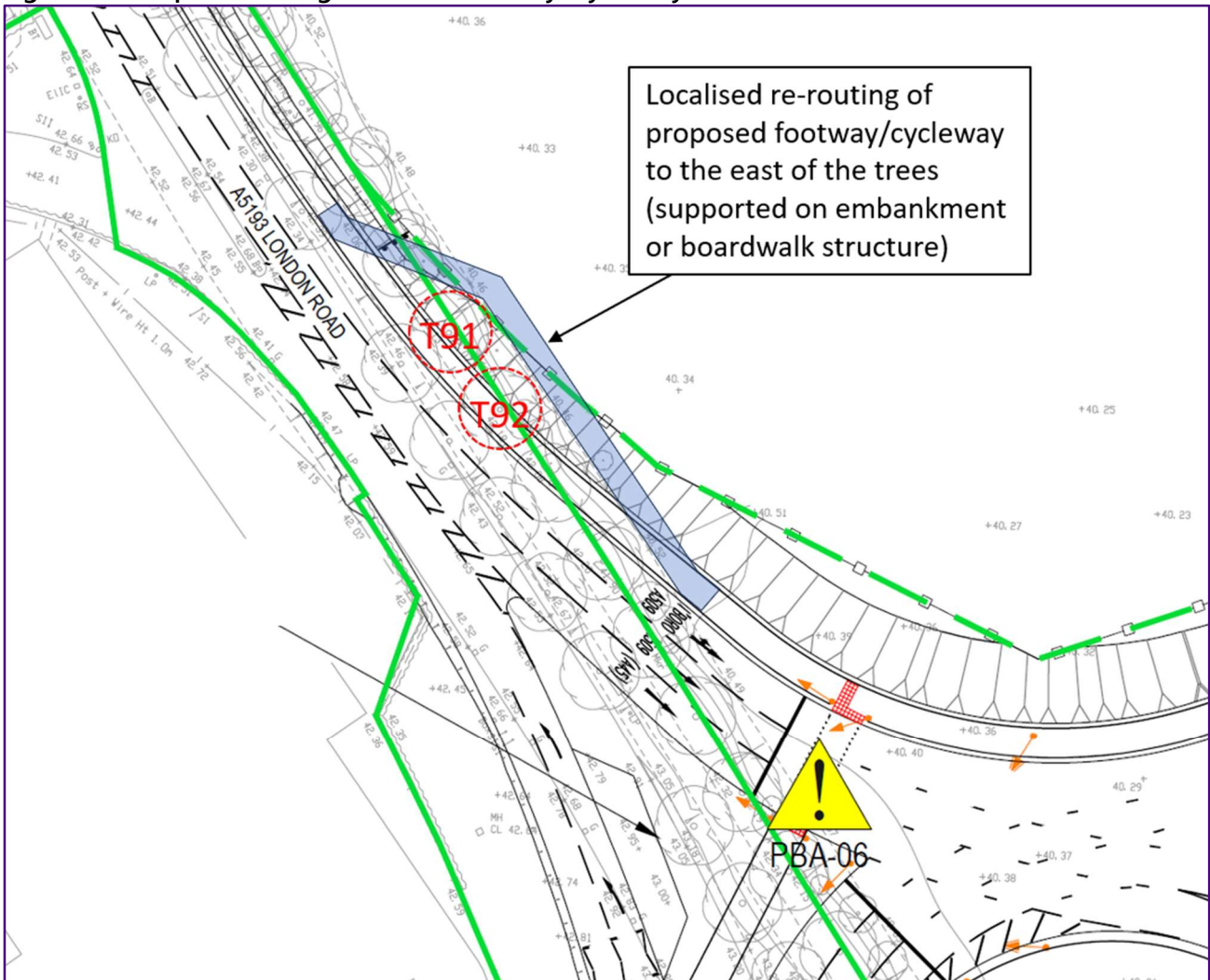
Both drawings pre-date the Board 6 information by over two years but are understood to represent the current design proposals progressing through the S278 Technical Approval process.

The following sections of this report contain proposals for design modifications for each of the four tree groups. These have been developed using the General Arrangement drawing listed above.

NORTHERN TREES

Trees T91 and T92 were not felled in February when adjacent trees in this area were removed. Potential exists to retain these two trees by locally re-routing the proposed footway/cycleway as shown in Figure 2. Adjustment of the highway boundary in this area can be undertaken as part of the S278 process, without affecting the original planning permission.

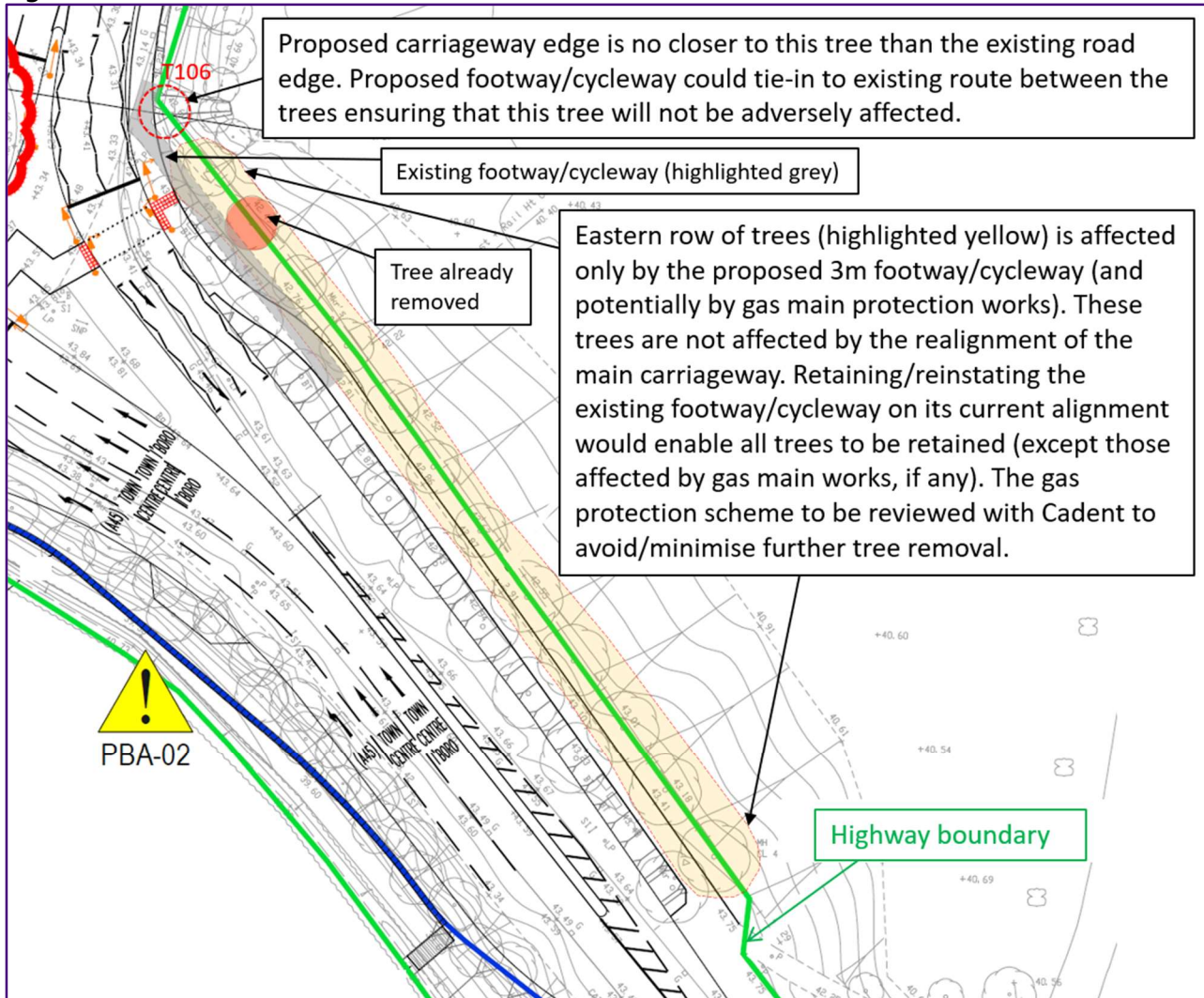
Figure 2 – Proposed Realignment of Footway/Cycleway



the current footway/cycleway in this area, which varies in width from 2.5m (near the roundabout) to 2.9m (at the southern end of the tree line). To the south of the River Nene, the route narrows to between 1.4m and 1.8m.

There is no material benefit to be gained from widening the section between the avenue of trees to 3.0m as the current 2.5m-2.9m route will continue to provide a reasonable level of service. Retention of the existing footway/cycleway will avoid any impacts on the eastern trees.

Figure 4 – Eastern Trees



As indicated in Figure 4, the northernmost tree (T106) is not affected by the proposed new kerb line (the new kerb position is no closer to the tree than the existing kerb). By retaining the current footway/cycleway between the trees and tying-in the new footway/cycleway from Embankment (B570) at this point, T106 could be retained.

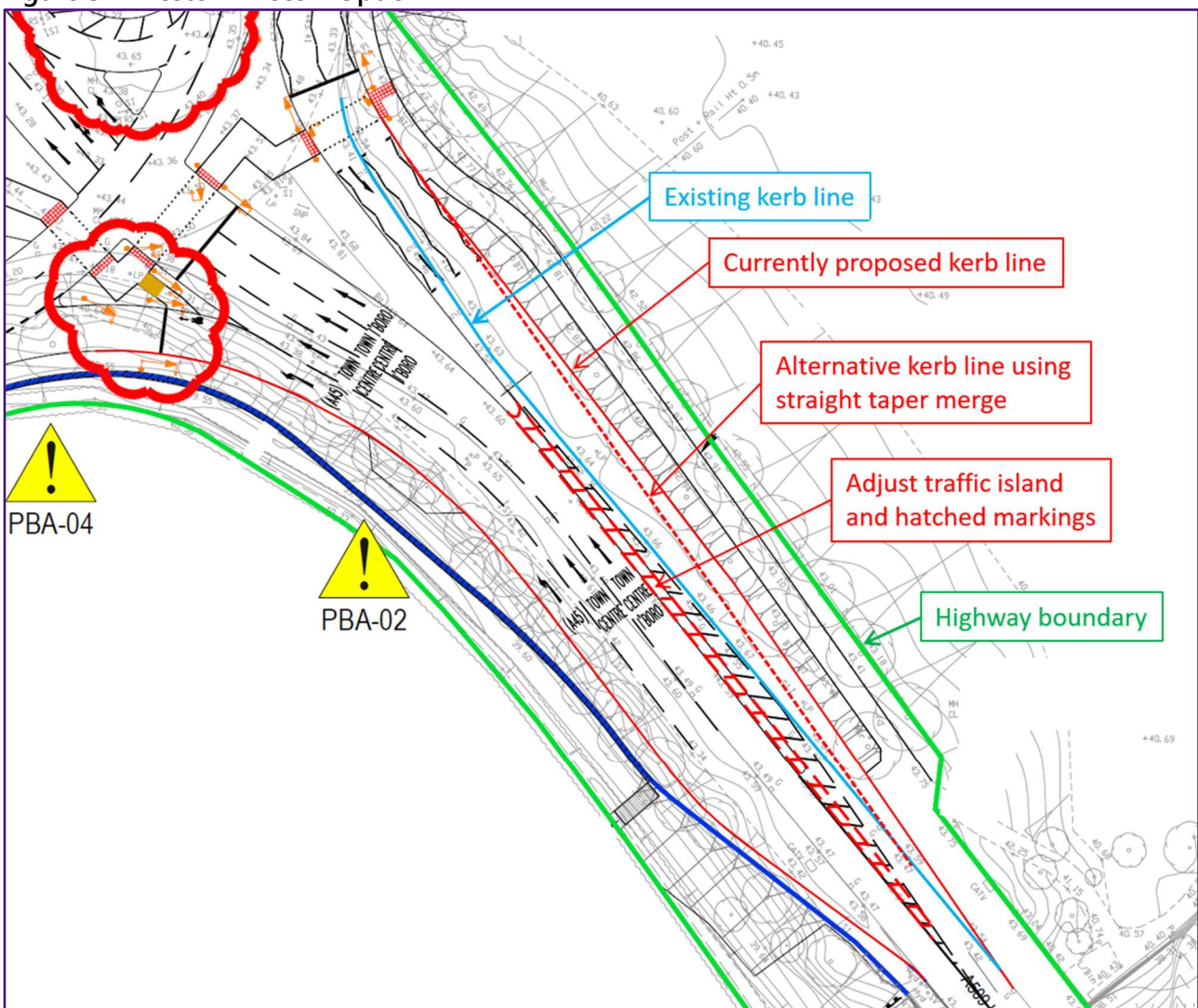
Some trees at the northern end of this group have the potential to be affected by protection works for the high pressure gas main (operated by Cadent) that crosses London Road to the south of the roundabout. No details have been provided of the likely protection works needed. However, the trees predate the gas main and were in place when the main was laid. There will be no traffic loading on the pipe, where the gas main crosses the avenue of trees, so the extent of protection works needed in this area is unclear. It is recommended that designers work with Cadent to identify a solution that minimises any unnecessary adverse impacts on the protected lime trees.

National Grid also owns equipment in this area and have proposals to divert high voltage cables within the embankment meadow, to the east of the eastern trees. Discussions between National Grid and Wellingborough Town Council have confirmed that they are willing to ensure that the route of the cables avoids any impacts on the trees.

WESTERN TREES

The proposed widening of the London Road (south) arm of the junction to accommodate six traffic lanes (4 northbound and 2 southbound) requires the carriageway to be widened on both sides of the road. As shown in Figure 5, the current design proposes to relocate the eastern kerb line close to the row of lime trees, particularly at the southern end of the row. The extent of carriageway widening is dictated by the length of the proposed traffic island (which separates northbound and southbound traffic lanes) and the merge design. A more compact arrangement could be considered, utilising a straight taper merge (as shown dashed red in Figure 5), together with shortening of the central traffic island and adjustments to the hatched markings.

Figure 5 – Western Trees – Option 1

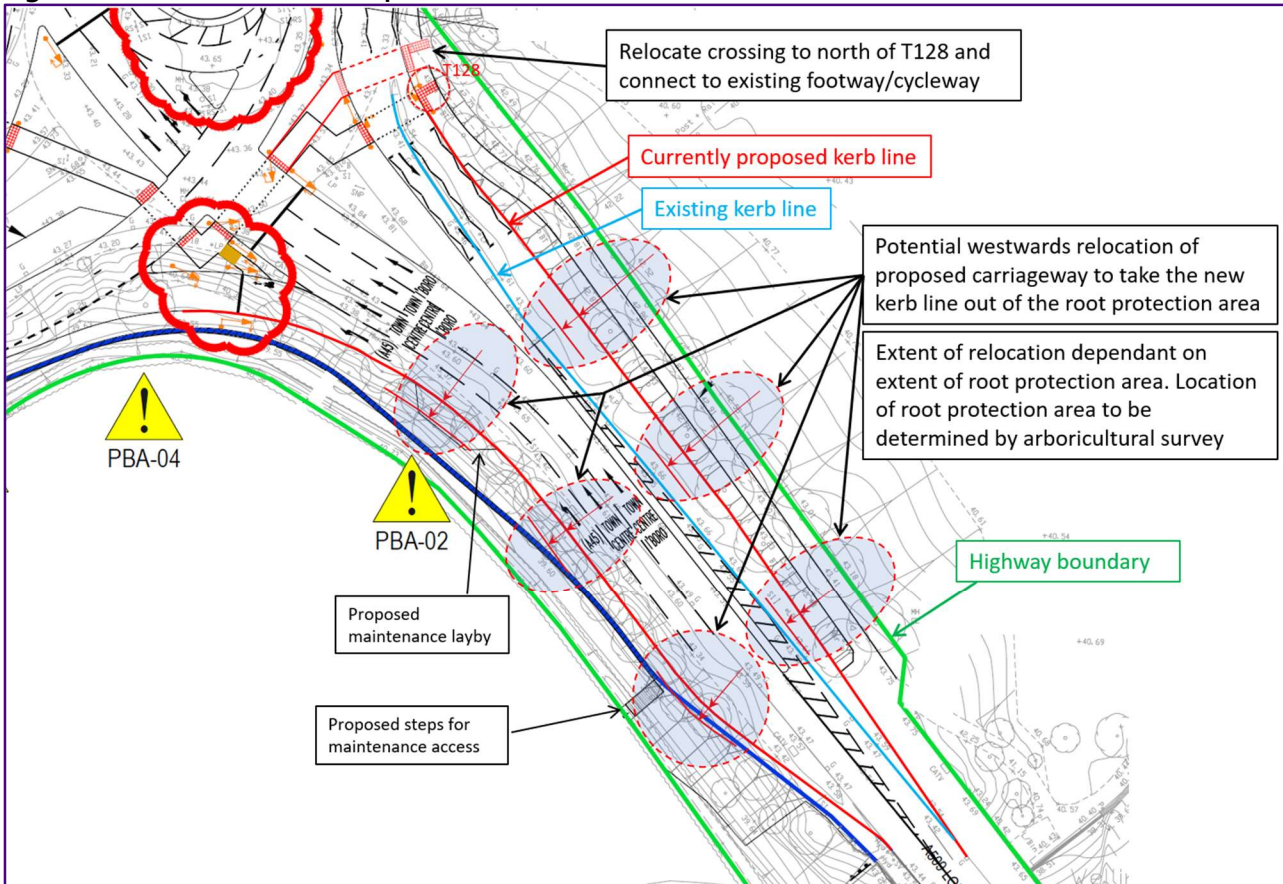


This arrangement would move the proposed kerb line further away from the trees. The extent to which this would reduce the impact on the trees would need to be confirmed by specialist arboricultural assessment. Lime trees are known to have a relatively compact, "oblique" (heart

shaped) root structure which typically spreads much less widely than “lateral” or “tap” root structures. Subject to further investigation, this minor adjustment to the traffic island and merge taper has the potential to save a number of trees.

An alternative solution would be to realign the London Road (south) arm of the junction westwards by a few metres to take the carriageway construction out of the RPA’s of the trees, as illustrated in Figure 6.

Figure 6 – Western Trees – Option 2



An arboricultural survey of the tree roots using Ground Penetrating Radar (GPR) scanning or hand-dug trial excavations, will be needed to determine the extents of RPA’s. This will identify the amount by which the road alignment needs to be adjusted in order to avoid/minimise further tree loss.

Adjustments to the western kerb line, to accommodate movement of the carriageway away from the trees, can be undertaken within existing highway limits as indicated above. Some small adjustments to the line of the proposed retaining wall (shown in dark blue) are likely to be needed at the southern end, together with small adjustments to the proposed maintenance steps. The proposed maintenance layby would need to be relocated to an alternative location or removed. Again, these modest changes can be accommodated within the normal S278 design process.

CONCLUSION

In conclusion, there are opportunities to avoid or substantially reduce any further felling of TPO trees, subject to further arboricultural investigation and modest adjustments to the design. Any changes can be undertaken as part of the current S278 Technical Approval process.