

1. Introduction

Worcestershire County Council (WCC) wish to utilise two existing parcels of land to introduce additional parking to two rail stations, Blakedown and Hartlebury. As part of the initial assessment into the suitability of the sites Jacobs have been commissioned to undertake a study into the relevant highway and rail standards governing the proposed highway access.

2. Standards Assessment

2.1 Design Process

The highway element of the design for the car park access will need to conform to;

- Design Manual for Roads and Bridges (DMRB)
- Traffic Signs Manual

Network Rail and the Office of Rail and Road (ORR) will be required to approve the proposed works through the planning application process. The following process will be followed;

- Planning application submitted and reviewed by Network Rail.
- Network Rail develop an operator and user focused risk assessment based on the proposed works, identifying any risks and measures to mitigate against those risks.
- Network Rail issue the risk assessment to ORR for review.
- ORR review risks / measures and undertake stakeholder consultation before deciding whether to approve the proposal.

2.2 Blakedown

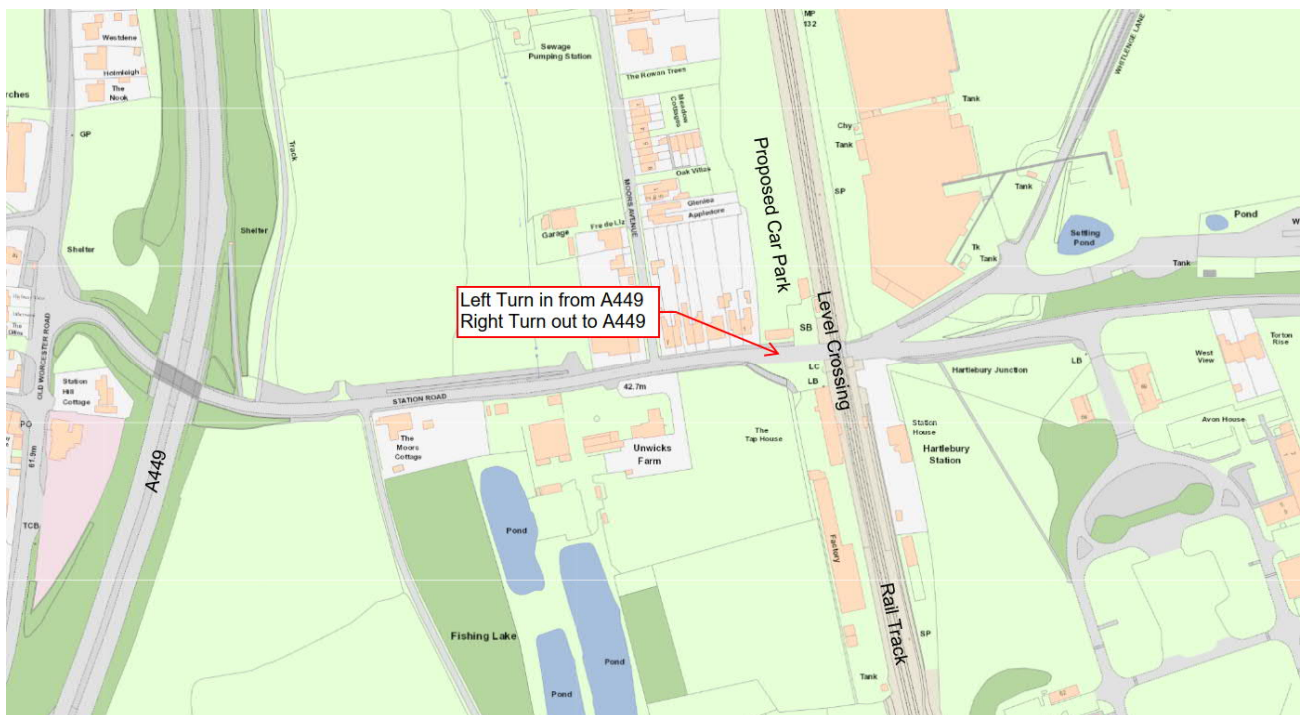


A desktop study has been undertaken as the basis for an initial assessment into the viability of the Blakedown site. The following observations have been made;

- Proposed car parking is to be accessed from Station Drive, a single carriageway with 30mph speed limit.
Land adjacent to Station Drive is made up of residential properties and farm land.
Existing rail parking is made up of a small section of off-street parking adjacent to the eastern platform, with rail users also parking on street along Station Drive.
The proposed car park site currently appears to be utilised as informal off-street car parking.
- Visibility at proposed access (required visibility is shown within drawing B23672-15.24-DR-C-0100);
 - Required – 2.4m x 70m DMRB CD 109 and CD 123 (to be measured to nearside channel)
 - Achieved – East - 31m visibility achieved within existing constraints to nearside channel
West - 36m visibility achieved within existing constraints to approaching traffic
- 21m visibility achieved within existing constraints to nearside channel
- Alterations required to achieve required visibility;
 - Existing Network Rail equipment to be relocated outside of the visibility splay in order to achieve required visibility. To include but not limited to; Traffic Signals, Electrical Equipment, Barriers, Fencing. Permission and technical appraisal of the feasibility of this will need to be obtained from Network Rail.
 - Fence line adjacent to Mill Lane, presumed boundary of residential property, will be required to be realigned to suit visibility splay. Likely requiring land purchase.

- Hedge and fence line adjacent to Station Drive, spanning three presumed residential properties, will be required to be realigned to suit visibility splay. Likely requiring land purchase.
- On first inspection, the alterations required to achieve the visibility required by the standard appear excessive given the nature of Station Drive/ Mill Lane. The next step would be to assess the risks, impacts and benefits or undertaking fewer/none of the alterations and propose a Departure from Standard to the WCC Chief Engineer.
- Traffic flow impact;
It has been identified that a major concern from Network Rail in relation to this type of proposal is the impact of increased traffic flow, related particularly to backing up of traffic on the level crossing. Existing traffic flow data would be required to confirm, but it could be suggested that the majority of traffic accessing the car park would do so from the A456 Birmingham Road. If this was the case the impact upon the level crossing would be low arising from traffic entering the car park doing so by turning left. Similarly, traffic exiting would do so by turning right and not be required to cross the level crossing.

2.3 Hartlebury



A desktop study has been undertaken as the basis for an initial assessment into the viability of the Hartlebury site. The following observations have been made;

- Proposed car parking is to be accessed from Station Road, a single lane carriageway with 30mph speed limit.
Land adjacent to Station Road is made up of residential, industrial and business use, with multiple accesses near the level crossing. It is likely that traffic movements at these sites would be required to interact with the car park traffic flows.
The proposed car parking site is currently under industrial use.
Existing rail parking is made up of a small section of off-street parking adjacent to the western platform,

with rail users also parking on street along Station Road. It appears that the off-street parking may also be utilised for 'The Tap House' public house adjacent to the station.

- Visibility at proposed access (required visibility is shown within drawing B23672-15.24-DR-C-0101);
 - Required – 2.4m x 70m DMRB CD 109 and CD 123 (to be measured to nearside channel)
 - Achieved – East - 57m visibility achieved within existing constraints to approaching traffic
- 11m visibility achieved within existing constraints to nearside channel

West - 70m visibility achieved within existing constraints to nearside channel
- Alterations required to achieve required visibility;
 - Existing Network Rail equipment to be relocated outside of the visibility splay in order to achieve required visibility. To include but not limited to; Traffic Signals, Electrical Equipment, Barriers, Fencing. Permission and technical appraisal of the feasibility of this will need to be obtained from Network Rail.
- On first inspection, the alterations required to achieve the visibility required by the standard appear excessive given the nature of Station Drive/ Mill Lane. The next step would be to assess the risks, impacts and benefits or undertaking fewer/none of the alterations and propose a Departure from Standard to the WCC Chief Engineer.
- Traffic flow impact;

It has been identified that a major concern from Network Rail in relation to this type of proposal is the impact of increased traffic flow, related particularly to backing up of traffic on the level crossing. Existing traffic flow data would be required to confirm, but it could be suggested that the majority of traffic accessing the car park would do so from the west via the A449 and Hartlebury Village. If this was the case the impact upon the level crossing would be low arising from traffic entering the car park doing so by turning left and not being required to queue as they would if turning right. Similarly, traffic exiting would do so by turning right and not be required to cross the level crossing.