

Land at Bank Top Farm, Hollingworth Road

106 Albert Mill
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Existing Farm Access Appraisal Note

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Client:	Bank Top Farm	Job No	J325773
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Prepared by:	LW/MA		

1. Introduction

1.1 Preamble

- 1.1.1 Mode Transport Planning ('Mode') has been appointed by Bank Top Farm (the 'Applicant') to provide transport planning and highways advice in relation to a planning application (Planning Ref: 23/01061/FUL – resubmission of 22/01216/FUL) for the erection of a farm shop and café at Bank Top Farm on Hollingworth Road near Littleborough.
- 1.1.2 The development proposals include vehicular access via a new priority junction on Hollingworth Road.
- 1.1.3 Rochdale Metropolitan Borough Council (RMBC) Highways and Transport for Greater Manchester (TfGM) raised no objections to the development proposals, including the new access junction on Hollingworth Road.
- 1.1.4 It is understood that RMBC Planning has raised concerns about the development proposals, specifically relating to the impact on the green belt and resulting visual harm. RMBC Planning has suggested that farm shop is relocated to the existing farm site and accessed via the existing farm access track from Hollingworth Road.
- 1.1.5 This Technical Note provides a technical appraisal of the existing farm track and its suitability to serve a farm shop - focusing on key highway and transport considerations, including:
 - Visibility splays along Hollingworth Road;
 - Gradient along access track road and at the junction with Hollingworth Road;
 - Carriageway improvements - geometry and potential passing places;
 - Swept path analysis; and

- Sustainable accessibility.

1.1.6 The above analysis is based on topographical survey data recorded along a c.170m section of the existing farm track, including the access junction on Hollingworth Road. The topographical survey data is attached in [Appendix A](#).

2. Existing Access Appraisal

2.1 Existing Access

- 2.1.1 The existing farm access is a single-track lane c.2.6m wide. The gradient along the majority of the access is c.9.8%.
- 2.1.2 The land on either side of the access falls from east to west at a steep gradient of around 30%.
- 2.1.3 The existing access is not surfaced along the entire length and is particularly muddy in parts. This would ideally need resurfacing along the entire route to ensure that it is suitable for both vehicles and pedestrians.
- 2.1.4 [Photograph 2.1](#) and [Photograph 2.2](#) show the condition of the access and the gradient of the access and the surrounding land.

Photograph 2.1 : Existing Access



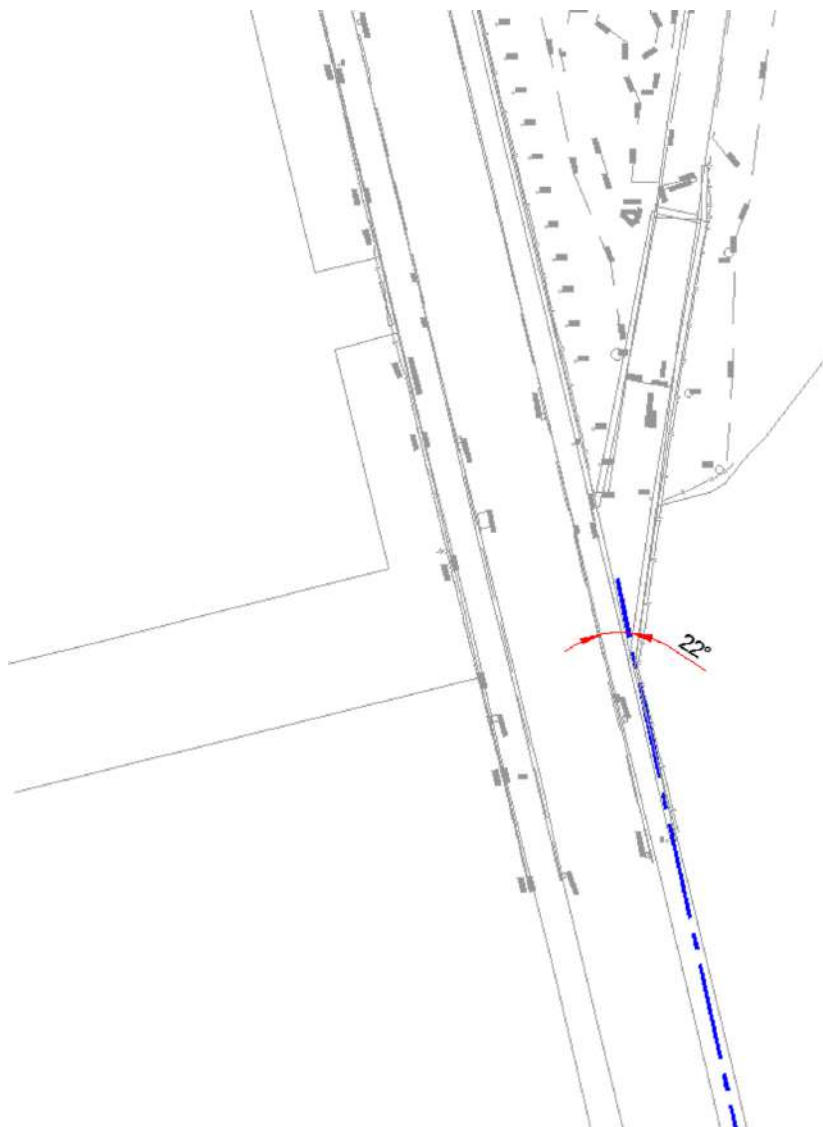
Photograph 2.2 : Existing Access



2.2 Visibility Splays

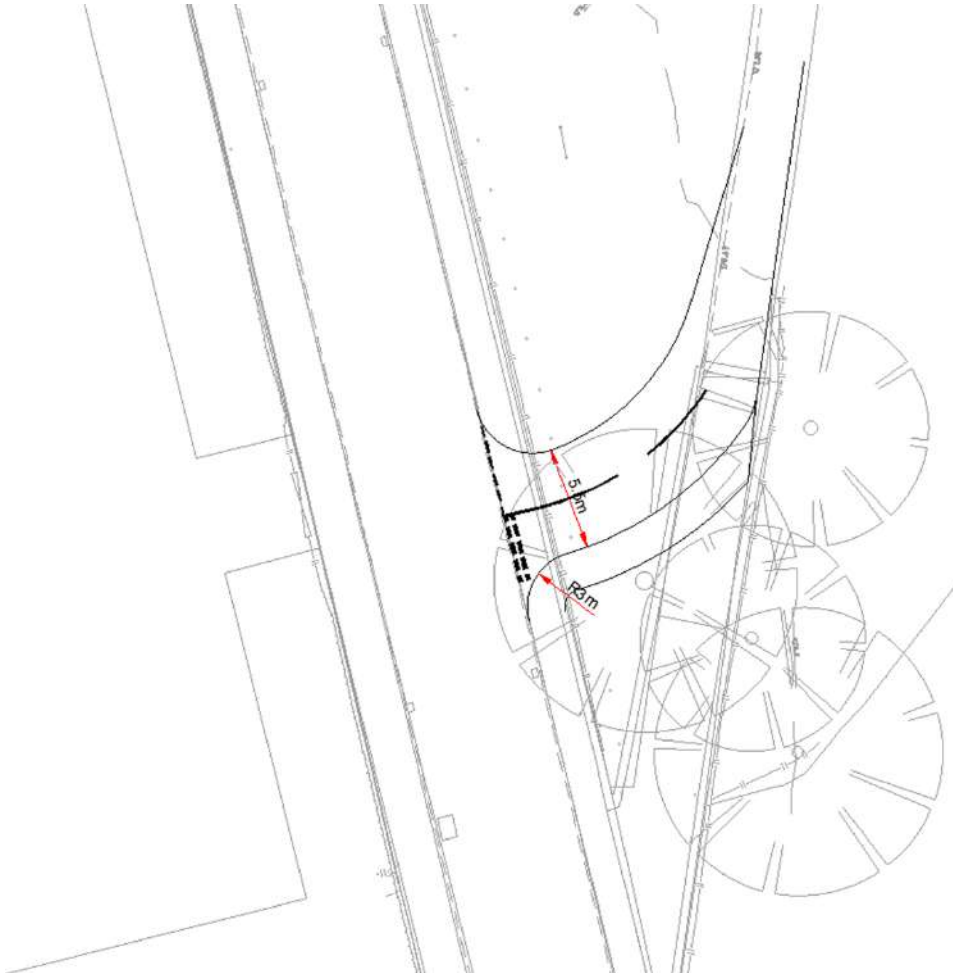
- 2.2.1 The existing farm access meets the adopted highway at an acute angle. Priority junctions should meet at 90 degrees but there is a tolerance of + or – 10 degrees.
- 2.2.2 At 22 degrees the access would be unsafe, requiring drivers to look over their shoulder to see oncoming vehicles and would likely result in “looked but failed to see” style accidents.
- 2.2.3 The required visibility splay to the south crosses third-party land with the existing access arrangement meaning that the access cannot be considered to be safe enough to accommodate the intensification of use that would come with the proposed development.
- 2.2.4 **Figure 2.1** shows the existing junction angle and the required visibility splay to the south.

Figure 2.1 : Existing access alignment and visibility



- 2.2.5 In order to deliver a safe access, the access junction would need to be reconfigured to ensure that it is perpendicular to the adopted highway.
- 2.2.6 This would require the entire junction position and centreline to be moved to the north to ensure that a suitable centreline radius can be delivered and the required visibility splay can be accommodated within the Applicant's land ownership or the adopted highway.
- 2.2.7 The reconfigured access will likely result in the loss of the tree to the north of the existing access due to the impact on the route protection zone (as shown in [Figure 2.2](#)).
- 2.2.8 In addition, to provide a footpath to the access junction and access lane (details for the pedestrian access requirement are considered further below) , the width required would also likely result in the loss of one further tree to the north of the group (as a minimum) due to impact on the root protection zone.
- 2.2.9 The proposed access would need to be wide enough to accommodate cars accessing and egressing the site simultaneously to prevent any detrimental impact on road safety from vehicles waiting within the adopted highway.
- 2.2.10 The required changes to deliver a suitable access are shown in [Figure 2.2](#).
- 2.2.11 Whilst a suitable access junction could be designed in layout terms, it would not be in line with technical guidance for gradient considerations as below. There would also be significant costs to deliver this new access and significant visual considerations from the consequent loss of trees (as is considered by the Landscape Architect).

Figure 2.2 : Perpendicular access arrangement



2.3 Gradient

- 2.3.1 The existing gradient of the access road is c.9.8% along its length whilst the initial section of the access road is 8.5%, this exceeds design standards for both vehicles and pedestrians.
- 2.3.2 The introduction of the perpendicular access junction (as shown in Figure 2.2) would result in the new section of carriageway requiring a gradient of 16.7% to fit with existing site levels.
- 2.3.3 This is more than double the maximum permitted gradient of 8% for vehicles and more than triple the maximum gradient for pedestrians of 5% and is therefore **not** consider to be acceptable to deliver access to the proposed development.
- 2.3.4 The new junction would also require a level section of carriageway at the junction to prevent vehicles from rolling on to the main arm of the junction, including for this would further increase the required gradient for the rest of the access road and would not therefore be acceptable to deliver access to the development.

2.3.5 It is not therefore considered that an acceptable access could be provided in highway design terms such that the development could be delivered via the existing farm access track and therefore at the farm complex.

2.4 Geometry and Passing Places

- 2.4.1 Whilst the proposed development will not generate enough trips to require a two-way carriageway, the nature of the proposed development will likely result in a number of conflicting vehicle movements as there is no defined arrival and departure profile associated with customers to a farm shop during the opening hours, as would be expected with an employment development for example, and with short duration customer trips likely arriving and departing in within the same hour.
- 2.4.2 On this basis, a two-way carriageway format would provide some benefit to the operation of an access arrangement for a commercial and farm shop development. This would require very significant engineering works for the whole length of the access track to create width for the carriageway and pedestrian footway, with significant visual and cost implications.
- 2.4.3 Whilst an access arrangement using passing places could be sufficient, this would lead to vehicle congestion on the access lane during busy periods e.g. customer/ customer; customer/ deliveries; customer/ farm vehicles; as well as pedestrian and cyclist accessibility to be considered. This mixed use arrangement is a clear consideration to movement and safety.
- 2.4.4 Guidance states that passing places should be provided at no more than 60m intervals. The access drive to the farm is c.200m therefore this requires a minimum of 3 passing places if both ends of the route are suitable for two-way movements.
- 2.4.5 Based on the gradient of the land, all passing places would need to be located on the eastern side of the access road to avoid the need for significant retaining structures to support the weight of vehicles on the western (slope away) side. This arrangement would also result in outbound vehicles having to give-way at all passing locations.
- 2.4.6 Based on the gradient of the access road, this would require vehicles on the steep downhill slope to stop within the places, and vehicles entering up-hill having to wait for vehicles to enter a passing place before starting again on the steep slope. Based on the site's location it is known to be susceptible to ice and snow over the winter months and this arrangement would be particularly unsafe in these conditions.
- 2.4.7 Based on the gradient of the land, passing places will need to be cut into the hill and surrounded by c.2m high retaining walls. This will result in the need for additional width and scope of engineering works for the creation of the passing places and will result in high costs for the retaining structures.

- 2.4.8 In addition, if single carriageway layout is considered, a pedestrian footway would be necessary along the length of the access with engineering works and retaining structures required to create the width necessary for a footway also; with additional works needed in the passing places.
- 2.4.9 Lighting to the access track or passing places as a minimum would also be necessary (given the gradient and positioning on the slope).

2.5 Swept Path Analysis

- 2.5.1 With the existing farm access junction arrangement, delivery and refuse vehicles would be required to enter and exit to the south only from Hollingworth Road.
- 2.5.2 Currently cars can also only access the site from the south without overrunning the centreline on Hollingworth Road which could result in additional turning movements in the adopted highway for any vehicles arriving from the north. **Visibility for movements is addressed above and considered inadequate.**
- 2.5.3 The proposed perpendicular access arrangement could accommodate two-way car movements but with servicing vehicles overrunning the centreline as is common for uses with a low number of OGV trips.
- 2.5.4 It is also understood from the Applicant that refuse collections do not occur to the farmhouse as the gradient (and arrangement for turning) is prohibitive. As such, it is questioned whether a farm shop at the farm complex would be serviced for refuse collections.

2.6 Sustainable Accessibility

- 2.6.1 The farm access track is c.2.6m wide, leaving only c.0.7m for pedestrians to pass moving cars. Guidance states that 0.75m is the minimum width requirement for pedestrians, notwithstanding the need for additional clearance due to the presence of moving vehicles.
- 2.6.2 This width would also be detrimental to more vulnerable road users such as wheelchair users, pushchairs or parents walking with children who would require additional width.
- 2.6.3 When the site is being accessed by farm vehicles, delivery vehicles or refuse collection vehicles which are typically 2.5m wide, pedestrians would have no space to pass at all and would be required to relocate to a passing bay.
- 2.6.4 On the basis that the current site access track arrangement cannot meet design requirements or be safely used by pedestrians, the site cannot be considered technically acceptable or sustainable in planning policy terms.
- 2.6.5 In order to provide a layout which could conform with design standards and planning policy (excluding gradient), a separate pedestrian footway would be required.

- 2.6.6 If this was located on the western side of the track this would require a retaining wall/engineering works along the full length of the access road to support the footway construction along with provision of a suitable guardrail due to the slope away nature of the field below.
- 2.6.7 If the footway was located on the eastern side it would also require a retaining wall along the length of the access road to support the embankment, and would further increase the height of the retaining walls around the passing places to beyond 2m.

3. Summary and Conclusion

3.1 Summary

- 3.1.1 The existing farm site access fails to meet design standards and cannot deliver the required visibility splays without the use of third-party land. On this basis, the existing access arrangement would be considered unsafe for the intensification of vehicle movements that would result from additional development traffic.
- 3.1.2 The site access junction could be improved to meet current design standards; however, this would result in an unsuitable gradient along the access road for use by both vehicles and pedestrians. Works for access improvement would be of significant cost and would result in loss of mature trees.
- 3.1.3 Based on the width of the access track and land gradient either side of the track, significant improvement of the route would be required via, at minimum, the introduction of passing places that would require c.2m high retaining walls for 3no. passing places resulting in significant engineering works and high costs to deliver the route.
- 3.1.4 The width of the existing access provides insufficient width for vehicles and pedestrians to pass and would be particularly unsafe for more vulnerable road users. On this basis, pedestrian access provision to the site would not be considered appropriate and would not conform with planning policy and sustainable access opportunities.
- 3.1.5 The introduction of a segregated pedestrian route would require the introduction of a retaining wall along the length of the access road with significant cost and visual implications.

3.2 Conclusion

- 3.2.1 It is therefore concluded that development of a farm shop and car park at the existing farm complex and buildings cannot achieve suitable or safe access which would comply with the relevant design guidance or planning policy.

APPENDIX A Topographical Survey Data

