

## Technical design note

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|--------------------|---------------------------------------------------------------------------|----------|--------------------------|
| Project name       | McDonald's Pontardawe                                                     |          |                          |
| Design note title  | Neath Port Talbot County Borough Council - Highways Observations Response |          |                          |
| Document reference | 15297-HYD-XX-XX-RP-TP-1003                                                |          |                          |
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| Revision           | P01                                                                       |          |                          |
| Date               | 15 February 2024                                                          | Approved | <input type="checkbox"/> |

### 1. Introduction

#### 1.1 Aim of Note

- 1.1.1 This Transport Note (TN) has been prepared by Hydrock on behalf of McDonalds Restaurants Ltd to address the highways comments received from Neath Port Talbot Council (NPT) associated with live planning application P2023/0101 (PP-11913031). The NPT comments are dated 22nd December 2023.
- 1.1.2 The proposals seek permission for the erection of a freestanding drive-thru/restaurant, car parking, landscaping, and associated works, including Customer Order Displays (COD) and play frame.
- 1.1.3 This TN sets out comments from NPT highways, with the Hydrock response following shown as a 'pull-out box'. The numbering of the NPT comments is repeated for ease of reference. This TN confirms that there are no overriding highway related issues that would warrant a reason for refusal in planning terms.

#### 1.2 Cycle Use Within Site

- 1.2.1 Many of the points raised in the comments appear to relate to cycle facilities within the site. It is fully agreed and accepted that cycle connectivity to the both the Tesco store and McDonalds is important, particularly given their location relative to the existing cycle route. There is a direct link from the existing cycle route to the edge of the McDonalds site, only a few meters from the restaurant and associated cycle parking. Similarly, the existing cycle route is very close to the Tesco car park. Both of the sites have exceptional cycle connectivity.
- 1.2.2 It would however be very unusual to require individual operators to provide dedicated cycle routes within their boundaries, and would have minimal benefits in terms of influencing modal choice. Nobody has genuine expectations of segregated provision that literally takes them 'door to door', and it would be difficult to argue that customers' modal choices would truly be affected by whether or not there is a cycle path within the car park (approximately the last 15m of their journey).

1.2.3 Furthermore (noting that no cycle accidents have been recorded within the site) any perceived safety benefits to cyclists of providing a shared use pedestrian / cycle path within the site need to be set against potential additional risks for pedestrians using the path. Car parks are inherently low speed and therefore low risk environments that are safe to cycle through at the end of a journey. Given that any suggested shared path would route past the Tesco parent and child spaces, and would also be used by people pushing trolleys (plus any abandoned trolleys), it is not considered that there would be any net benefit in providing the requested route and that it could, in fact, have an adverse impact on pedestrian safety and comfort. This is acknowledged at paragraph 1.3.5 of ATAG, which states:

*Walking and cycling are brought together in the Act because they share a number of characteristics. However, that does not mean they can be treated the same. The cycle is a machine that can travel at speed which makes it an ideal replacement for the motor car for many journeys, but it also means that it can be unsuitable for sharing provision with pedestrians in many contexts. (our underlining)*

1.2.4 It is also covered in ATAG Table 11.1, which sets out that mixed traffic is suitable for most users in 20mph areas with flows of less than 4,000 AADT.

1.2.5 Within the context of this development, it means that the site will provide an excellent connection to the adjacent cycle route, but cycles and vehicles will mix within the site with the off-carriageway areas dedicated to pedestrians. Alternatively, people can wheel their bikes if they prefer. Cycles are not well-suited to manoeuvring around pedestrians within the relatively tight constraints of a restaurant site and will be expected and encouraged to dismount at the site boundary. This has a number of implications in terms of the requested path and crossing widths that are addressed in more detail below.

## 2. Comments

2.1.1 1. Section 2.4 Model Extents and Zoning Structure – zoning is noted and deemed acceptable.

*Hydrock Comment - Noted and accepted.*

2.1.2 2. Section 3.2 Model Parameters: only 3 days have been accounted for Thursday 18th, Friday 19th and Saturday 20th, noted that they have identified the network peak times but we have not had evidence of the full raw data survey we requested 7 days or traffic counts? However, within Traffic Surveys, item 3.3.2 it is noted that a 7 day period of surveys on Monday 15th May to Sunday 21st May 2023 was undertaken – there is missing raw data in regards to Traffic accounts?

*Hydrock Comment - The unabridged raw MCTC survey results are provided as a separate attachment. The modelling covers the busiest combined development periods with the busiest observed periods during the survey.*

# Superseded



2.1.3 3. Section We wish to see the RFC for existing traffic flows, post development traffic flows and forecast of 5 and 10 year post development flows for this development.

*Hydrock Comment - RFCs are covered within Section 9 of the TA. They are provided for 2022 base, 2024 base and 2024 base + development as agreed at Scoping stage. The modelling outputs form Appendix J of the TA.*

*The more detailed VISSIM modelling subsequently agreed and undertaken reflects the years modelled within the TA. This modelling approach does not output RFC values, but instead provides queueing and journey time data. The addition modelling can be provided if required, but is likely to show a relatively lower level of development impact due to the higher levels of base traffic.*

2.1.4 4. No accident data provided.

*Hydrock Comment - Accident data would not normally be included in a Model Validation Report, which is concerned only with the accuracy of the base model. Local accident records were however examined as part of the Transport Assessment and are included as Section 2.3 of that document. There have been no accidents within the study area in the past five years.*

2.1.5 5. The queuing needs to be shown in a table within the main body of the TIA for ease of reference together with vehicle lengths. Noted that AM, PM and INTER are in reference to the 18th, 19th and 20th of May 2023 and not full 7 days as requested – assumption was made by the applicant that these three days were identified to be the highest peak times but no evidence to support this?

*Hydrock Comment - The Model Development and Forecasting Report includes tabulated queue lengths in meters within Section 4.3. VISSIM models flows reflecting the mix of vehicles observed, with a random element to reflect day to day junction operation (hence the use of multiple runs to obtain statistically valid results), so average vehicle lengths will vary.*

2.1.6 6. Whilst we agreed to the use of Vissim, it appears that not having being used the Vissim process previously, the report throws up a lot of anomalies that make the data unclear for us to review. It is difficult to cross reference the data with the locations, routes, queuing times, lengths of queues, forecasting post development, full survey data – we usually refer to tools and software such as TRICS, PICADY, ARCADY (Junction 9 TRL) and TEMPRo Version 8 software. Furthermore, In Wales we refer WelTAG and TfW whereas in this report it refers to WebTAG and TfL? We need to be very clear that the information submitted is able to support the development and not make significant assumption that can and will be challenged in planning committee by members.

*Hydrock Comment - WebTAG and TfL guidance on microsimulation modelling are used UK-wide as best practice for the development and validation of microsimulation models. WelTAG does not provide detailed modelling guidance, and primarily relates scheme appraisal methods to the TfW wider transport strategy. No reference to detailed modelling standards or guidance is made in either the TfW or WelTAG documents and WebTAG and TfL are the correct references for this more detailed guidance.*

*The modelling was agreed in advance and has been undertaken using standard best-practice approaches and it is not evident which elements are unclear. We would be happy to meet to discuss any individual issues.*

# Superseded

- 2.1.7 7. We are not satisfied with the contents of this report and cannot support the Vissim model. We think this is not 'fit for purpose' to satisfy the Councils Highways Authority. Therefore we request that the applicant provide clear evidence/results and data based upon the comments above.

*Hydrock Comment - As above, the modelling approach was agreed in advance and has been carried out in accordance with best practice. We would be happy to meet to clarify any outstanding issues.*

- 2.1.8 8. It is evident that the existing car park allocated for Tesco has never been used to it full capacity and would alert to the fact that there is capacity on the highway network to support additional vehicle movements within the car parking area and surrounding highway network.

*Hydrock Comment - It is not clear what concern is being raised here. The comment appears to suggest that the local highway network does have capacity to accommodate additional traffic movements. This is the position demonstrated by the modelling.*

- 2.1.9 9. Width of island for waiting pedestrians and visibility to crossing point – edge treatment/fencing? Confirmed in meeting that barrier is 0.6 high width needs to be (2.5+0.25 DE401).

*Hydrock Comment - The width of footpath at crossing point has been increased to 3.2m to accord with ATAG 12.3.7 (Pg 184).*

- 2.1.10 10. Need to provide a cycle link between Tesco and McDonalds (to edge of proposed development). Width of path is not shown on the drawing please confirm, please also confirm edge treatment both sides – width required 2.5 for path plus 0.5 offset to upstands over 0.6m, 0.25 to upstands between 0.15 and 0.6, and 0.2 for kerb.

*Hydrock Comment - the path in question is a dedicated pedestrian route used by people with children and those pushing trolleys. It is not appropriate for pedestrians and cyclists to mix under these circumstances. Given the low speed environment, cyclists will mix with vehicles or dismount on entry to the site; this will be encouraged through signage.*

- 2.1.11 11. Confirm width of shared use path to crossing point and space between barriers. Needs to comply with ATAG

*Hydrock Comment - All internal crossing points are 2.7m wide (ATAG 12.3.7). The distances between fence barriers are no less than 1.5m minimum in order to allow for people pushing cycles (ATAG 9.17.10). As above, the strong preference is that cyclists dismount once they reach the edge of the site, as this is not an area where pedestrians are likely to expect to be sharing with cyclists. People who use adapted cycles and rely on them for mobility will be able to safely mix with traffic within this very low-speed environment.*

# Superseded



2.1.12 12. Provision needed for both walking and cycling at the crossing point. Please confirm type and width of crossings, width of traffic island (to accommodate a bike) and width of road.

*Hydrock Comment - As above, all internal crossing points are 2.7m wide (ATAG 12.3.7). The distances between fence barriers are no less than 1.5m minimum in order to allow for people pushing cycles (ATAG 9.17.10). As above, the strong preference is that cyclists dismount once they reach the edge of the site, as this is not an area where pedestrians are likely to expect to be sharing with cyclists.*

2.1.13 13. Overrunning of traffic islands with vehicles will not be permitted on safety grounds.

*Hydrock Comment - swept path drawings are attached. As with any layout, the space requirements of occasional visits by larger vehicles need to be balanced with creating a 'tighter', lower speed environment for smaller cars and vans. As a result, there are some areas where minor oversteering of islands occurs. Any servicing would take place during quieter periods at the restaurant with staff acting as banksmen as required, mitigating any safety concerns. This could be included in a Service Management Plan that could be conditioned.*

2.1.14 14. Island parking needs to be kerbed along zig-zag between spaces to prevent drivers passing through island.

*Hydrock Comment - Low level rubber 'sleeping policemen' have been added to the central island bays to prevent vehicles passing through the bays.*

2.1.15 15. We do not support the painted footway as there is no protection for pedestrians from vehicles.

*Hydrock Comment - The previous painted pedestrian walkway has been revised to show raised kerbs where possible. As with all car parks, there will be places where pedestrians are potentially in areas where vehicles can cross. This is commonplace in car parks across the UK, but their inherent low speeds mean that the associated risks are minimal. Notwithstanding this, there are fully kerbed walkways provided a short distance from all parking spaces. There are some sections of painted walkway within the car park in areas where pedestrians are likely to walk (as they do in any car park). The purpose of the paint is to highlight the potential presence of pedestrians to drivers and increase their caution when manoeuvring.*

2.1.16 16. Tracking of vehicles driving into and out of each of the bays to ensure no conflict between vehicles and pedestrians and vehicles.

*Hydrock Comment - As above there will be areas where pedestrians are potentially in areas where vehicles can cross. This is commonplace in car parks across the UK, but their inherent low speeds mean that the associated risks are minimal. Notwithstanding this, there are fully kerbed walkways provided a short distance from all parking spaces.*

2.1.17 17. Tactile paving needed on crossing point not corduroy paving – raised kerbs required to protect pedestrians at crossing points and between crossing and end parking bay.

*Hydrock Comment - Appropriate tactile paving and raised kerbs have been added to all crossing points as requested.*

# Superseded

2.1.18 18. Need sufficient space for tactile paving and parking bay.

*Hydrock Comment - It is not clear what area this refers to, but the layout has been fully reviewed and revised to ensure that there are clear, protected areas available for pedestrians within the site and that these do not conflict with parking spaces.*

2.1.19 19. Crossings must comply with ATAG.

*Hydrock Comment - As above, all internal crossing points are 2.7m wide (ATAG 12.3.7). The distances between fence barriers are no less than 1.5m minimum in order to allow for people pushing cycles (ATAG 9.17.10). As above, the strong preference is that cyclists dismount once they reach the edge of the site, as this is not an area where pedestrians are likely to expect to be sharing with cyclists.*

2.1.20 20. Link to southern crossing – please confirm the width of path. Path needs to comply with ATAG DE401 be 3.2m wide (2.5+0.5+0.2).

*Hydrock Comment - The path close to the southern crossing is currently 3.0m wide and this is not affected or reduced by the proposals. This 3m width runs for approximately 10m up to the crossing, with the remainder of the path at 3.2m. As comment 21 acknowledges, this is a secondary cycle route, which requires a 0.5m additional width adjacent to vertical feature more than 0.6m high, or 0.25m adjacent to features 0.15-0.6m high. The work required to widen the footway to a consistent 3.2m would be significant and, due to gradients etc. would have knock on impacts elsewhere. This is not proportionate to the benefit achieved (there would also be a significant carbon impact). This is acknowledged in Section 10.7 of ATAG which sets out a process where existing routes with minor deficiencies than cannot be reasonably rectified can still be accepted with an associated statement. It is suggested that this represents the best way forward in this instance. Alternatively, the adjacent wall next to the ramp could be reduced in height to less than 0.6m.*

2.1.21 21. Shared use path around the periphery of the site needs to be in accordance with DE401 of the ATAG. Pg 380 For a secondary route 3.2m wide min (2.5+0.5+0.2)

*Hydrock Comment - With the exception of the short length approaching the southern crossing as detailed above, the remainder of the shared use path around the periphery of the site meets the 3.2m requirement.*

2.1.22 22. Bus stop bay/delivery area - a TRO is required for parking restriction in bus stop/proposed delivery bay area

*Hydrock Comment - Noted and accepted. This could be implemented during the construction period and can be conditioned. It should however be noted that the previous bus shelter has already been removed and it is understood that the bus route is no longer active.*

# Superseded

2.1.23 23. Deliveries to the bus bay are not supported as deliveries would need to be wheeled across active travel route a safe route to school and along island by EV charging points.

*Hydrock Comment - Deliveries would be undertaken to within the site using the parking bays hatched in blue below. This would be done outside the restaurant's opening hours, or during less busy periods. If undertaken when the restaurant is open, members of staff would act as banksmen. This could be included in a Service Management Plan that could be conditioned.*

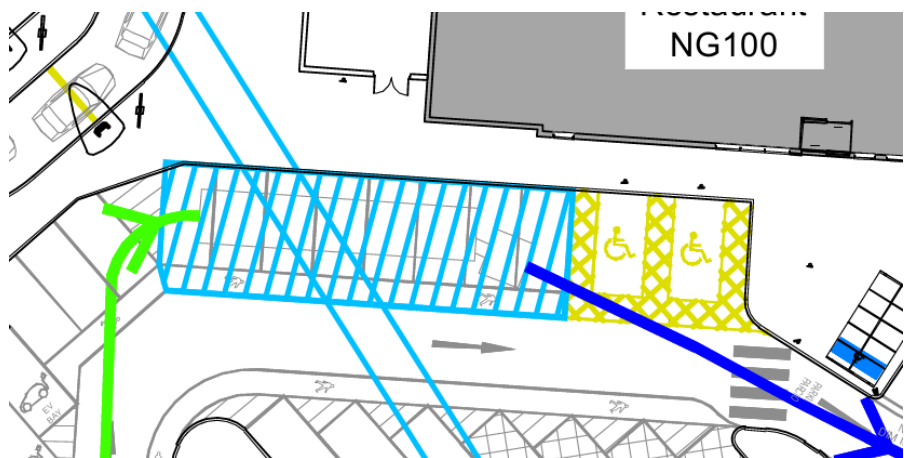


Figure 2.1: Flexible loading bay within site

2.1.24 24. There are still concerns about the deliveries to bay numbers 16,17,18,19,20,21 and 22 as this is more than likely going to be a 24hr facility it could possibly lead to the loss of 5 parking bays while deliveries are being undertaken.

*Hydrock Comment - There would be a strong commercial imperative for the restaurant to undertake any deliveries during less busy periods as any space blocking would affect income. It is not clear what the concern would be in relation to the very short-term loss of spaces during these quieter periods. In the unlikely event that no spaces were available at the site during deliveries, it is likely that customers would simply use the drive through instead or wait for a short time in the adjacent Tesco car park (which the officers acknowledge not to be fully utilised). Surrounding roads have parking controls in place and it is highly unlikely that any overspill parking would occur.*

2.1.25 25. Crossing of waiting lane – please confirm the width of the gap in the barriers, must be compliant with ATAG and allow 1.5m opening for adapted bikes.

*Hydrock Comment - The distances between fence barriers are no less than 1.5m minimum in order to allow for people pushing cycles (ATAG 9.17.10). As above, the strong preference is that cyclists dismount once they reach the edge of the site, as this is not an area where pedestrians are likely to expect to be sharing with cyclists.*

# Superseded



2.1.26 26. Confirm type and width of crossing, must comply with ATAG.

*Hydrock Comment - As above, all internal crossing points are 2.7m wide (ATAG 12.3.7). The distances between fence barriers are no less than 1.5m minimum in order to allow for people pushing cycles (ATAG 9.17.10). As above, the strong preference is that cyclists dismount once they reach the edge of the site, as this is not an area where pedestrians are likely to expect to be sharing with cyclists.*

2.1.27 27. Confirm the width of island by EV charging points – needs to be compliant with ATAG 2.5+0.5+0.5 = 3.5m

*Hydrock Comment - As detailed above, this area of the site is not appropriate for cyclists, is not a cycle route and is intended to cater for pedestrians only. Signage will be used to encourage cyclists to dismount on entry to the site.*

2.1.28 28. Crossing of waiting lane – please confirm the width of the gap in the barriers, must be compliant with ATAG and allow 1.5m opening for adapted bikes.

*Hydrock Comment - As detailed above, this area of the site is not appropriate for cyclists, is not a cycle route and is intended to cater for pedestrians only. Signage will be used to encourage cyclists to dismount on entry to the site. Notwithstanding this, the gap between any bollard is no less than 1.5m (ATAG 9.17.10).*

2.1.29 29. Confirm type and width of crossing must comply with ATAG.

*Hydrock Comment - As detailed above, this area of the site is not appropriate for cyclists, is not a cycle route and is intended to cater for pedestrians only. Signage will be used to encourage cyclists to dismount on entry to the site. Notwithstanding this, the crossing is 2.7m wide in accordance with ATAG 12.3.7.*

2.1.30 30. Ramp – gradient 1:20 desirable - width of ramp 1.8m desirable minimum. Handrails to be provided (1.8m clear width between handrails). Compliant with DE103

*Hydrock Comment - The ramp has a maximum gradient of 1:20 desirable maximum gradient ramp with 2.0m desirable minimum ramp surface width and 1.8m between handrails. This accords with ATAG DE103 Ramps (Pg 328).*

2.1.31 31. Confirm width of steps must comply with DE104 of the ATAG.

*Hydrock Comment - The new pedestrian steps are 1.4m wide (1.2m wide between handrails). This accords with ATAG DE104 Steps (Pg 331).*

2.1.32 32. Confirm the number of cycle storage stands

*Hydrock Comment - Four cycle stands will be installed, providing parking for eight cycles. In addition, there will be one accessible stand, accommodating one cycle, and lockable storage for two cycles. In total there are facilities to accommodate 11 cycles.*

# Superseded



2.1.33 33. Confirm if there are adapted bike spaces - Table 14.4 ATAG

*Hydrock Comment - See above comment. An accessible stand will be provided.*

2.1.34 34. Confirm that layout complies with ATAG figure 14.25 pg245

*Hydrock Comment - We can confirm that the cycle parking layout does fully accord with ATAG Figure 14.25.*

2.1.35 35. Confirm the space between cycle storage and barrier.

*Hydrock Comment - The distance between the cycle storage central frame post and the building is 2.8m. The distance between the cycle storage central frame post and barrier fence is 1.4m. The distance between the cycle hoop and barrier fence is 1.2m. These distances accord with ATAG 14.8.17.*

2.1.36 36. Confirm the gap in barrier and space between street furniture.

*Hydrock Comment - Please see above comment.*

2.1.37 37. Confirm the space between building and barrier. Needs to be 3.5m to comply with ATAG.

*Hydrock Comment - Where pedestrians are intended to pass, the minimum distance between the building and any individual bollard is 1.8m, with the majority wider at 2.1m or more. As detailed in the introduction, the area is not intended to be used by cyclists.*

2.1.38 38. Hatching should be on both sides of the disabled parking bays to allow drivers to reverse into spaces and exit their vehicles.

*Hydrock Comment - Noted and accepted. The accessible bays and patio fencing have been adjusted to provide access to both sides of parking bay.*

2.1.39 39. Confirm transition between the store and the parking bays for people using the disabled bays. Pedestrian guardrail at back of bays in this location is preventing access.

*Hydrock Comment - The pedestrian guardrail here is intended to enclose the patio area on the exit from the restaurant. This is to prevent children inadvertently entering the road area, or places where vehicles may be reversing. The restaurant remains accessible from both ends of the disabled bays. It is considered that the safety benefits outweigh the minor disadvantage to one of the disabled spaces.*