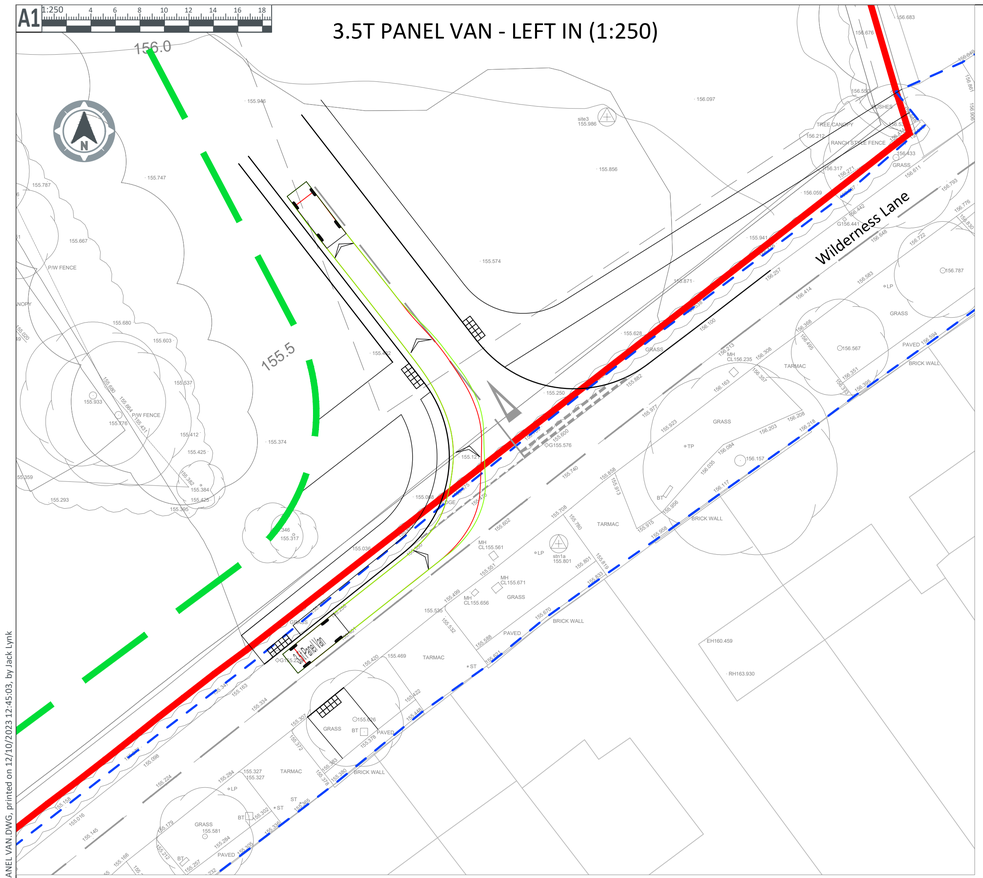
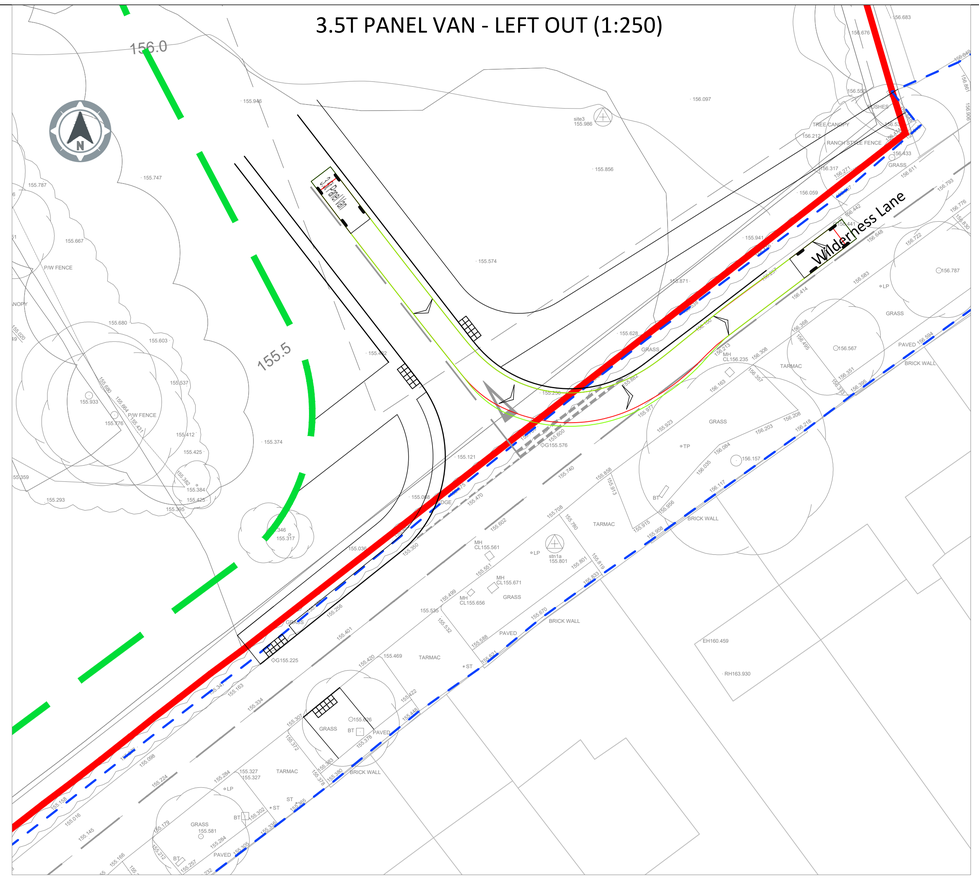
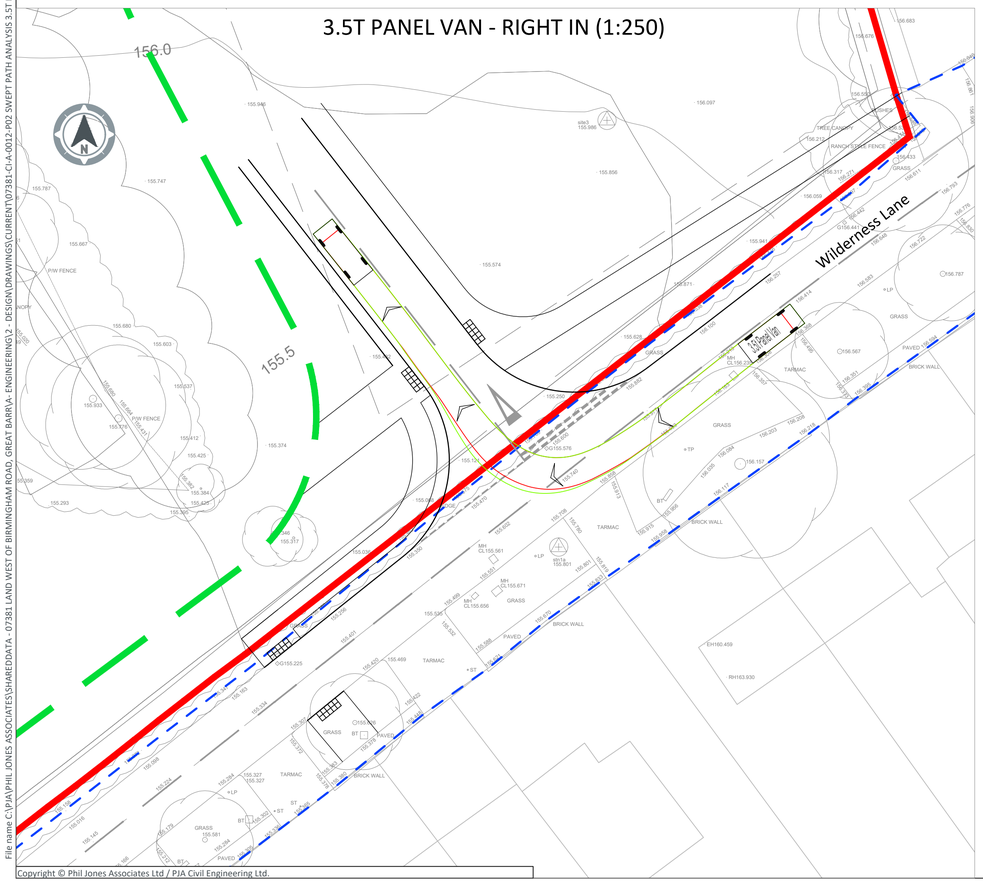
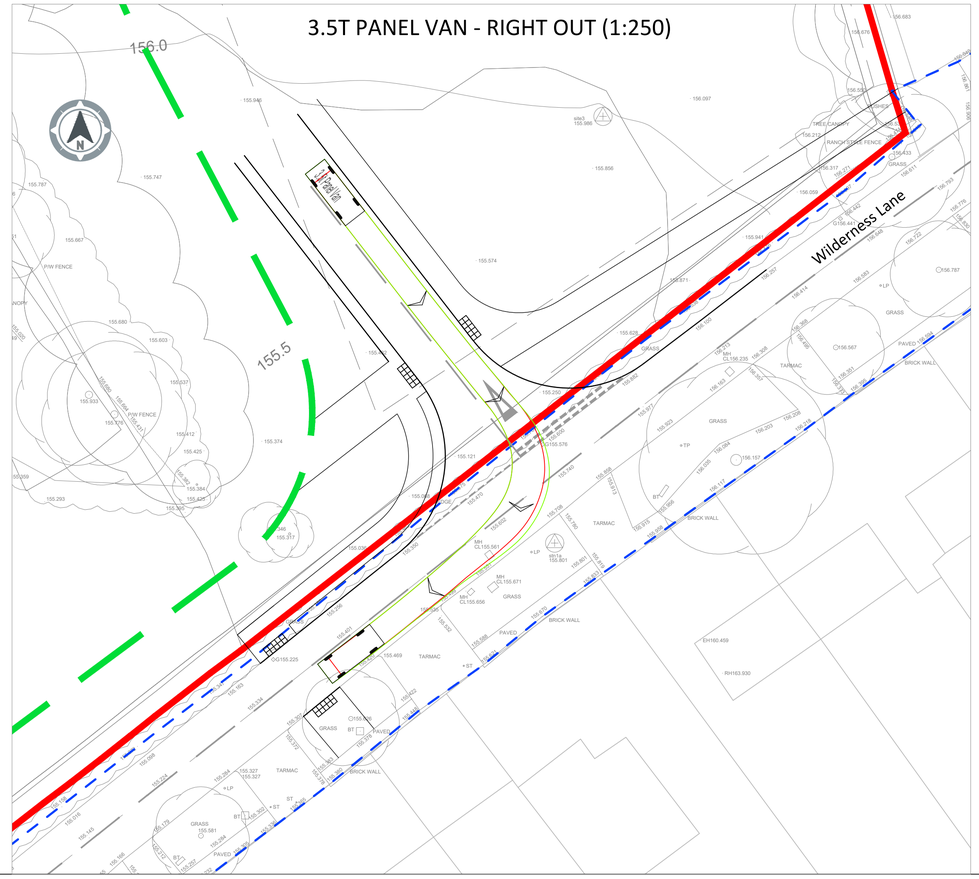








Notes

1. This drawing is to be read in conjunction with all other relevant Engineering and Architect's details.
2. The purpose of this drawing is to display the various design vehicle swept paths manoeuvring through the proposed junction. The drawing is for discussion purposes only, with the design subject to further design development, modelling assessment, data collection and consideration of constraints.
3. The concept design is based from the drawing received from FPCR Environment and Design Ltd, ref: '9364-FPCR-XX-ZZ-DR-L-0012-P06-Illustrative MasterPlan' received September 2023.
4. The site boundary is based from CAD drawing received from Wain Estates, ref: '23-07-31 Red Line Plan Rev B' received June 2023.
5. The highway boundary has been produced from PDF drawing received from Sandwell Metropolitan Borough Council ref: ' bham rd', drawn May 2020. The boundary produced follows the topo survey up till it's extents and then follows the OS mapping.
6. The concept alignment and junction has been based on MfS, local authority design standards, existing road conditions and the vehicle swept paths presented have informed/validated the proposed geometry of the junction.
7. The design geometrical parameters are presented on the supporting General Arrangement with drawing reference 07381-CI-A-0001.
8. The design vehicles that have been considered in the swept path analysis have been listed below and the relevant vehicle profiles are included to highlight the vehicle dimensions. The vehicle profiles selected below have the most onerous swept path criteria for both British and European standards. Therefore, the swept paths presented are robust and provide comfort that the junction manoeuvres for the typical vehicles below can be satisfied.

   European Design Vehicles
   Small Sized Vehicle
   - Large Car (2006)

   Medium Sized Vehicle
   - 3.5t Panel Van*

   Large Sized Vehicles
   - Refuse vehicle - Phoenix 2-12W (with Elite 2 4x2 chassis)

   British Design Vehicles - DB32
   Medium Sized Vehicle
   - Emergency vehicle - DB32 Fire Appliance

8. The vehicle swept paths have been tracked at 10mph.

   Offsets to the channel and centre line of the proposed road alignments have been maintained for all vehicle manoeuvres at 0.25m where possible.

9. Design approach/summary/assumptions;
   - The proposed simple priority junction design allows unrestricted vehicle swept path movements of small sized vehicles in and out of the junction. The vehicle movements do not significantly intrude into the opposing lane to access or egress the junction.
   - Medium and Large vehicle movements into and out of the proposed access junction intrude into the opposing lanes. The vehicle movements of these large vehicles are predicted to be infrequent and gaps in the traffic will need to be negotiated to carry out the movements into or out of the proposed junction.

CDM Note

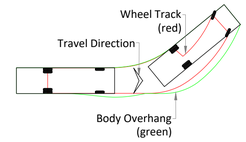
These drawings have been produced with reference to the CDM Regulations 2015.

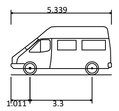
Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9.

KEY

- Site Boundary
- Highway Boundary
- Proposed Cycle Route/Footpath Link Through Development

Typical Vehicle Track





3.5t Panel Van	
Overall Length	5.339m
Overall Width	1.986m
Overall Body Height	2.565m
Min Body Ground Clearance	0.338m
Track Width	1.986m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	6.400m

Rev	Date	Revision Note	Drw	Chk	App
P02	12/10/2023	Notes updated	JAL	AN	JO
P01	25/08/23	First issue	RJ	ARP	AN

PJA
Park Point, High Street, Longbridge, Birmingham, B31 2UQ, UK
T: +44 (0) 121 475 0234
transport • engineering • placemaking
Birmingham | Bristol | Cambridge | London | Manchester | Reading
Melbourne | Perth
pja.co.uk | pja.com.au

Client
Wain Estates (Land) Limited

Project
Land West of Birmingham Road, Great Barr

Title
Swept Path Analysis
3.5t Panel Van

Drawing Issue Status
For Planning

PJA Ref
07381/A

Scale @ A1
1:250

Date
25/08/2023

Drawing No.
07381-CI-A-0012

Revision
P02

Primary Contact
Andrew.Nixon@pja.co.uk