



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

- Notes**
- Do not scale from this drawing.
  - All dimensions in metres unless stated otherwise.
  - The purpose of this drawing is to demonstrate the ability to deliver a junction improvement scheme at Dagnell End Road in support of an associated residential planning application.
  - This drawing should be read in conjunction with all other project related drawings.
  - Drawing is based on Topographical survey (ref:27285\_R2) and is limited to a 2D design at this stage.
  - OS Mapping is included for context.
  - Highway Boundary information has been reproduced and interpreted from data received from Worcestershire County Council ref 90067 dated 20/07/20.
  - For Private Land Boundary details refer to drawing 2809-P-014.
  - All boundaries have been reproduced from source data, however there are limited features in which to interpret this information against and as such all boundaries should be verified on site.
  - Design has been based on the principles of DMRB CD123, Design of Signalised Junctions and Traffic Signs Manual Chapter 6.
  - Visibility to the primary signal heads on Birmingham Road have been based on a 70kph design speed to reflect the existing 40mph speed limit.
  - Visibility to the primary signal heads on Dagnell End Road have been based on 85th Percentile speed data undertaken on 18th November 2020 and adjusted to reflect an 85th percentile speed of 44mph and visibility of 120.4m.
  - Curve widening has been applied through the junction to reflect the internal bend radii being less than 90m. Full widening has not been achievable and as such these have been highlighted as Departures from CD123.
  - Vehicle Tracking has been undertaken using the "Design Vehicle" as specified by DMRB CD123. Tracking adjacent to refuge islands has sought to achieve a 500mm clearance between the design vehicle and kerblines where possible as required by Worcestershire County Council. Reference should be made to the predicted daily HGV movements for context.
  - Traffic signal equipment shown on the drawing is indicative and subject to detailed design.
  - The design has been updated in line with highway authority comments and incorporating controlled pedestrian facilities.
  - The design is subject to transport modeling and an updated stage 1 Road Safety Audit.

**Key**

- Highway Boundary
- Land Acquisition Boundary
- Proposed Channel/Kerblines
- Proposed Back of Footway
- Proposed back of verge
- Forward visibility to Primary signal head
- Junction Inter visibility Zone
- Proposed Red Tactile Paving
- Proposed Primary Signal Head
- Proposed Secondary Signal Head

**Departures from Standard**

**DE-01: Lane Widths**

- Standard: DMRB CD123 (5.10)
- Requirement: Inside Lane width 4.4m (50m R)
- Achieved: Inside Lane width 3.5-4.3m (Varies)

**DE-02: Lane Widths**

- Standard: DMRB CD123 (5.10)
- Requirement: Inside Lane width 4.15m (60m R, Interpreted from Table 5.10)
- Outside Lane Width 4.10 (60m R, Interpreted from Table 5.10)
- Achieved: Inside Lane width 4.0m, Outside Lane width 4.0m.

| REV | DATE     | REVISION NOTE   | BY |
|-----|----------|---|----|
| P4  | 23.11.20 | Dagnell End Rd island amended, hatching & Keep clear added              | SG |
| P3  | 19.11.20 | Finalised to topographical survey following meeting with WCC (16/11/20) | SG |
| P2  | 12.11.20 | Updated layout for Topographical Survey incorporating WCC comments      | GH |
| P1  | 07.08.20 | Widening, staggered crossing WCC comments incorporated                  | GH |
| P0  | 01.12.19 | Initial Design  | JL |

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CLIENT: Persimmon Homes South Midlands

PROJECT: Brockhill East  
 Dagnell End Road  
 Junction

DRAWING TITLE: Proposed Signalised  
 Junction Improvements

DRAWING ISSUE STATUS  
**PLANNING**  
 PJA JOB No. SUB-CODE DRAWING NO. REVISION  
 2809 - P - 12 - P4  
 Revision Letters: P - Prelim / A - Approval / T - Tender / C - Construction  
 BIM DRAWING REFERENCE

| SCALE    | DRAWN | REVIEWED | DATE    |
|----------|-------|----------|---------|
| A1@1:500 | GH    | SG       | 12.2019 |

Junction Overview

Junction Detail

