

Pell Frischmann

Manor Farm, Emsworth

Highways and Transport Technical Note

For Farm Access to Land East of Manor Farm Close, Denvilles,
Emsworth

Chapter 1 Introduction

Title	Details
Project	Manor Farm, Emsworth
Report Title	Transport and Highways Technical Note for Farm Access
Report Reference	107818-PF-C-ZZ-XX-RPT-0002
Report Revision	P00
Date	23rd June 2023

1 Introduction

- 1.1.1 Pell Frischmann is commissioned by Barratt David Wilson Homes to provide Highways and Transport Consultancy Services to support the introduction of a Farm Access at the junction of Manor Farm Close and Fifth Avenue. The Local Planning Authority and Local Highway Authority is Havant Borough Council and Hampshire County Council respectively.
- 1.1.2 This Technical Note has been produced to record Pell Frischmann findings following a review of the two-dimensional design of the access road provided by MJA Consulting Civil and Structural Engineers, checking compliance with the current Local Authority Highway Design Standards and Manual for Streets.
- 1.1.3 In addition to the design review Pell Frischmann have carried out Swept Path Analysis of the proposed access point using the typical farm vehicles agreed with the Client , Tracking results are provided in Appendix B, drawing 107818-PEF-ZZ-SK-DR-CD-00002

2 Site Location

- 2.1.1 The Site is located in Denvilles, Havant and lies to the east of Manor Farm Close. To the south of the site is the West Coastway Line which runs between Brighton and Southampton and the A27 between Portsmouth and Eastbourne. To the west it is mainly residential, and to the north it is predominately farmland.



Site location taken from Google Maps (Red line boundary is existing infrastructure/soft landscaping associated with the existing residential development to the East of the proposed access.

3 Proposed Maintenance access to adjacent land

3.1.1 The proposals for the new access Farm Close as indicated on drawing 4527-MJA-SW-XX-DR-C—700 Rev P2 provided by MJA Consulting Civil and Structural Engineers. The design provided is produced on a topographical base and is therefore assumed accurate and current. No drainage records have been provided although gully points are noted on the topographical survey, additionally no Statutory Undertakers information has been provided and will need to be considered for protection or relocation if affected by the proposals. From a review of the drawing the principals of the design are as follows:

- 5.5m wide carriageway with 6m radii tie in with existing kerb line on Manor Farm Close
- 2.0m wide footway provision on the north side of the access road connecting to the existing footway on Fifth Avenue with the introduction of an uncontrolled crossing and inclusion of Tactile Paving and Dropped Kerbs. The footway on Fifth Avenue to be extended to facilitate the introduction of the crossing point.
- 1.0m wide verge planting area on south side connecting to existing planting on Manor Farm Close.
- Crossing point across the new carriageway to link the realigned gravel path that runs North/South with dropped kerbs and Tactile Paving.
- Reprofiting of existing basin and relocation of existing headwalls, existing pipework to be extend as required.
- Street nameplates to be relocated along with the relocation of 1 number Lamp Column.
- Removal of 2 number saplings to accommodate new access and realigned gravel path.

4 Pell Frischmann Transport Review

4.1.1 For farm access it is assumed that junction/highway capacity assessment will not be needed

4.1.2 The proposed access road is considered suitable to maintain pedestrians and cyclists provisions.

5 Pell Frischmann Highway Review

5.1.1 Pell Frischmann has reviewed the current design as provided by MJA consulting to the relevant standards set out in the Local Authority Design Guide – Hampshire County Council Companion Document to Manual for Streets April 2010 and Manual for Streets produced by the Department for Transport. A full marked-up version with our comments on drawing 4527-MJA-SW-XX-DR-C-700 Rev P2 is provided in Appendix A.

5.1.2 The current access road design of 5.5m in width is in accordance with Hampshire County Council Companion Document to Manual for Streets April 2010 and Manual for Streets (DfT).

5.1.3 The current access road junction radii design of 6.0m in width is in accordance with Hampshire County Council Companion Document to Manual for Streets April 2010 and Manual for Streets (DfT).

5.1.4 The current access road northern footway design of 2.0m in width is in accordance with Hampshire County Council Companion Document to Manual for Streets April 2010 and Manual for Streets (DfT).

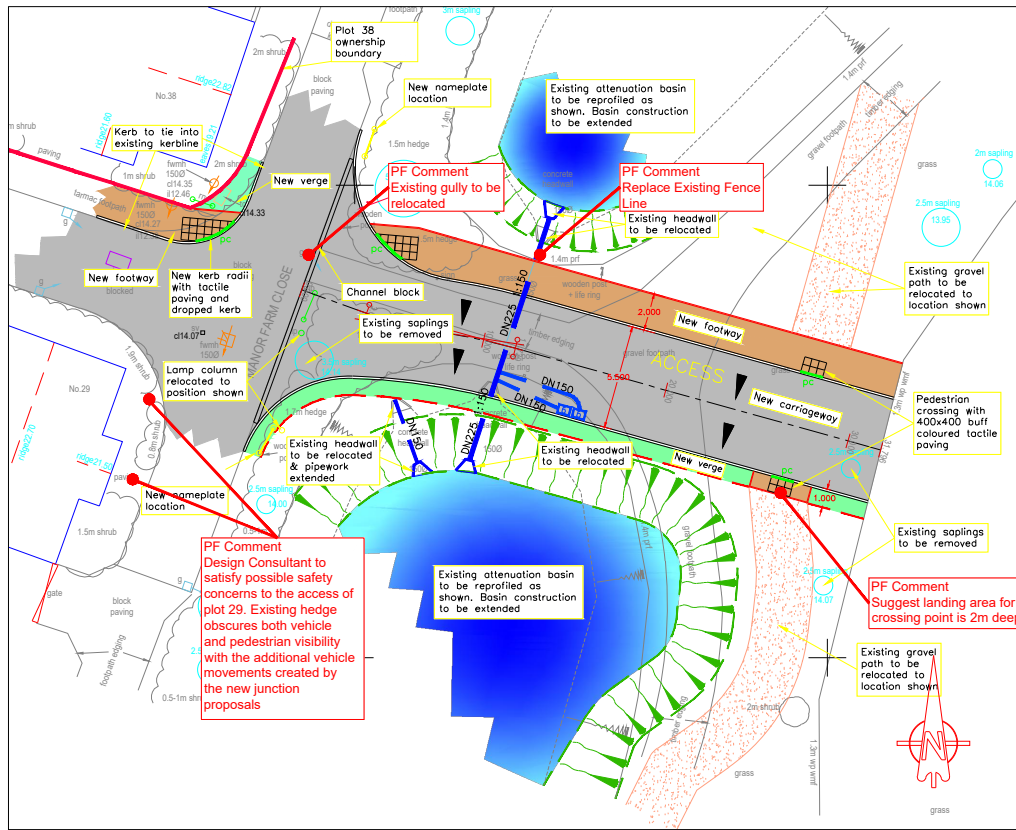
- 5.1.5 No details have been provided on the MJA Consultants drawings in relation to the proposed surfacing and carriageway/footway construction build up for the farm access. The current carriageway surfacing on Manor Farm Close in the vicinity of the proposed access is concrete block paving laid in a herringbone pattern with the footways in asphalt. Fifth Avenue approaching the new access is block paving and appears 'in keeping' with the design ethos of the existing development and is used in many areas. The use of blocked paved roads is as described in Hampshire County Council Companion Document to Manual for Streets April 2010 section 3.26. Asphalt footway construction is as specified in section 3.36.2. However for the Farm access more traditional and hard wearing materials like 'Asphalt' may be more practical for this use.
- 5.1.6 Visibility splays are required for the junction in accordance with Table 7.1 of Manual for Streets. It is assumed that the existing development west of Manor Farm Close has a speed limit of 20 mph with Southleigh Road having a 30mph speed limit. Based on the Visibility Splays set out in Table 7.1 of MfS, Visibility Splays can be met, however existing planted landscaping north and south of the proposed junction may need to be trimmed down and maintained to maximum of 600mm in height.
- 5.1.7 There are no Parking Restrictions within the existing development. Parking spaces may need to be monitored to ensure farm traffic access can be maintained.
- 5.1.8 Design Consultant to ensure gully spacing is in accordance with section 3.16 of Hampshire County Council Companion Document to Manual for Streets April 2010. It is assumed for the purpose of this review that the road drainage connects to a positive system and has the capacity to incorporate the additional hard landscaping areas. This is to be checked.
- 5.1.9 Proposed Road level design is on the provided drawing and appears reasonable. Full details to be developed as part of the Detailed Design for the Farm Access.
- 5.1.10 Reviewing the proposals for the new access against vehicle access on the existing road network, it is unlikely that this will impact on individual access points or driveways located on the existing road.
- 5.1.11 Pedestrian routes as highlighted above are reflected in the new design with the continuation of the route from the north side of Fifth Avenue and the introduction of an uncontrolled crossing. There is however concern in terms of safety and visibility of pedestrians coming from or going to 29 Manor Farm Close. Specifically, an existing hedge obscures both vehicle and pedestrian visibility. This needs further consideration (possibly removal of the hedge) and an 'all access' safe waiting point introduced.
- 5.1.12 Design Consultant to ensure Ponds, Headwalls and piped network is in accordance with section 3.10 of Hampshire County Council Companion Document to Manual for Streets April 2010 and other stated required standards.
- 5.1.13 Street Furniture and safety. The drawings identify most of the street furniture to be relocated as part of the works, it is noted however that fencing along the top of the attenuation ponds has not been shown. This will be required in line with the existing layout. As this is now a vehicle route consideration will be required as to the level of safety this fencing should provide.
- 5.1.14 Swept Path Analysis of the proposed junction has been provided by Pell Frischmann in Appendix B, drawing 107818-PEF-ZZ-SK-DR-CD-00002. The Swept Path Analysis has been carried out with a tractor and a land rover with a trailer.

5.1.15 The Swept Path Analysis drawing indicates the assumed current collection movements at the junction of Manor Farm Close and Fifth Avenue. Also shown are the assumed proposed movements of the Refuse Vehicle either entering and exiting the Development from Fifth Avenue or left and right turn movements from Manor Farm Close southbound from the proposed junction. It is noted that north of the proposed junction, this stretch of Manor Farm Close leads to a dead end. This report is to be regarded as confidential to our Client and is intended for their use only and may not be assigned except in accordance with the contract. Consequently, and in accordance with current practice, any liability to any third party in respect of the whole or any part of its contents is hereby expressly excluded, except to the extent that the report has been assigned in accordance with the contract. Before the report or any part of it is reproduced or referred to in any document, circular or statement and before its contents or the contents of any part of it are disclosed orally to any third party, our written approval as to the form and context of such a publication or disclosure must be obtained.

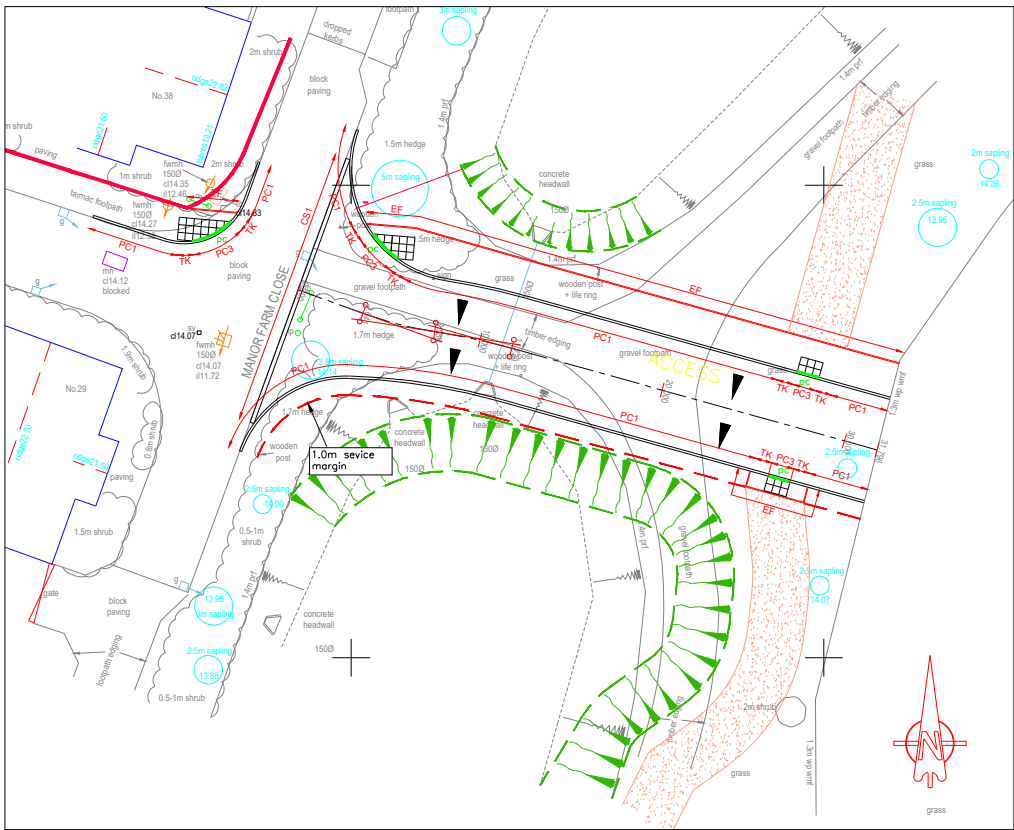
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File Path		Document1				
Rev	Suit	Description	Date	Originator	Checker	Approver
P00		Draft Issue	23-06-23	KM	SE	TM
P01		Final	23-06-23	KM	SE	TM

Ref. reference. Rev revision. Suit suitability.

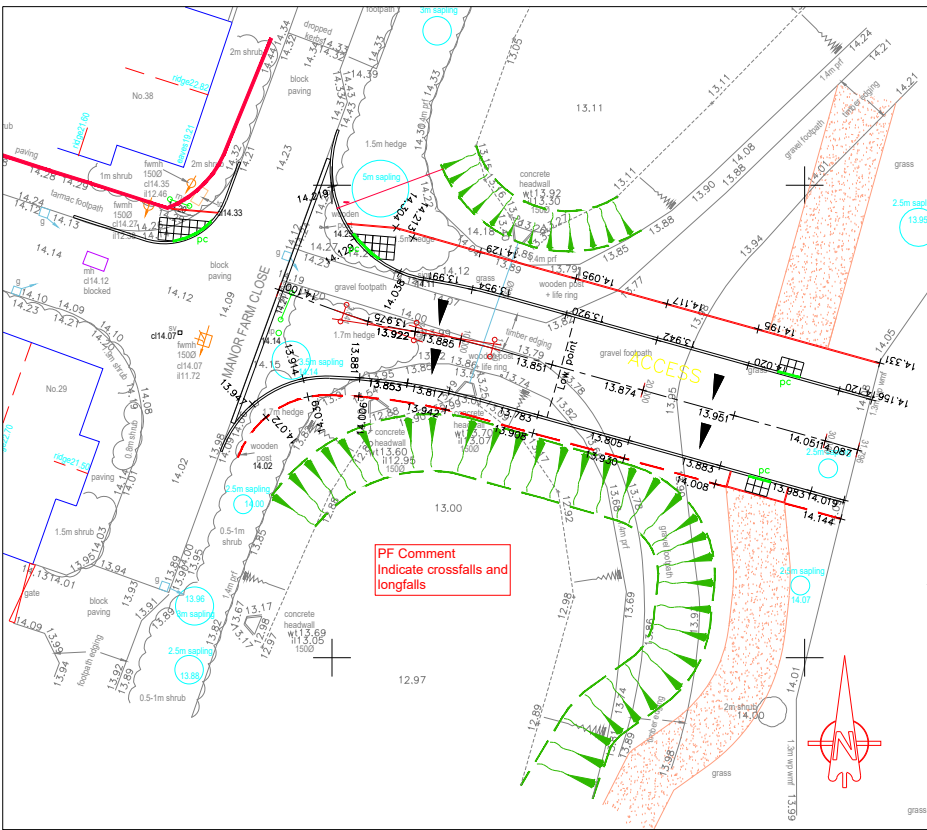
Appendix A Pell Frischmann Design Review Comments



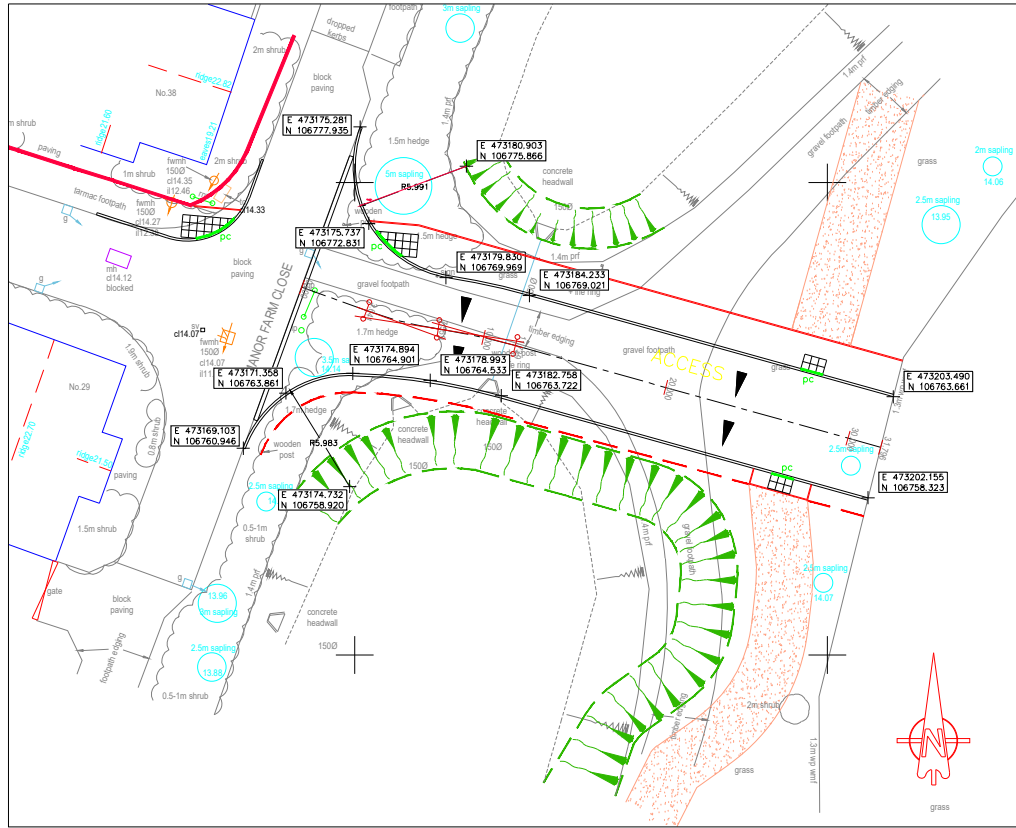
GENERAL ARRANGEMENT LAYOUT
Scale 1:200



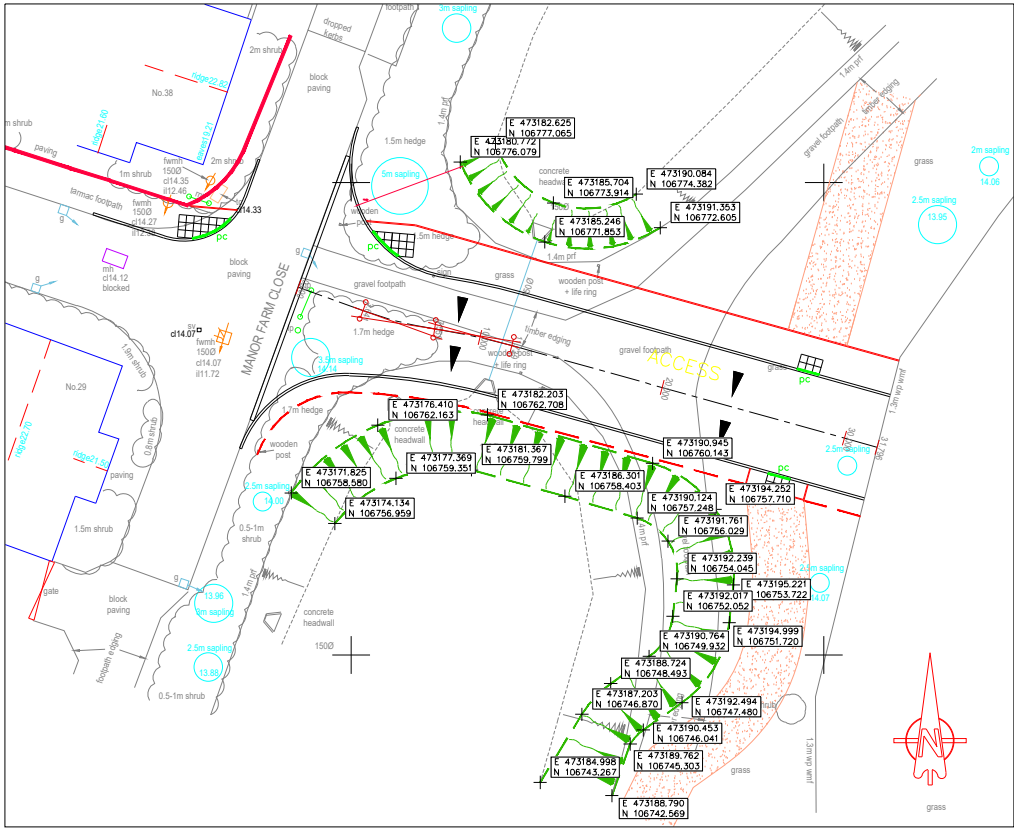
KERB LAYOUT
Scale 1:200



ROAD LEVELS LAYOUT
Scale 1:200



ROAD SETTING OUT LAYOUT
Scale 1:200



POND SETTING OUT LAYOUT
Scale 1:200

Key:

- PC1 Kerb with 100mm upstand. Refer to Hampshire standard detail HCC11/C/010
- PC3 Kerb with 0mm upstand. Refer to Hampshire standard detail HCC11/C/010, HCC11/C/060 and HCC11/C/065
- CS1 Channel block
- TK Transition kerb
- EF Concrete EF edging laid flush. Refer to Hampshire standard detail HCC11/C/045
- Buff coloured tactile paving at pedestrian crossing in accordance with DfT document 'Guidance on the Use of Tactile Paving Surfaces'
- Gully Type 1T. Refer to Hampshire standard detail HCC11/D/015

General Notes:

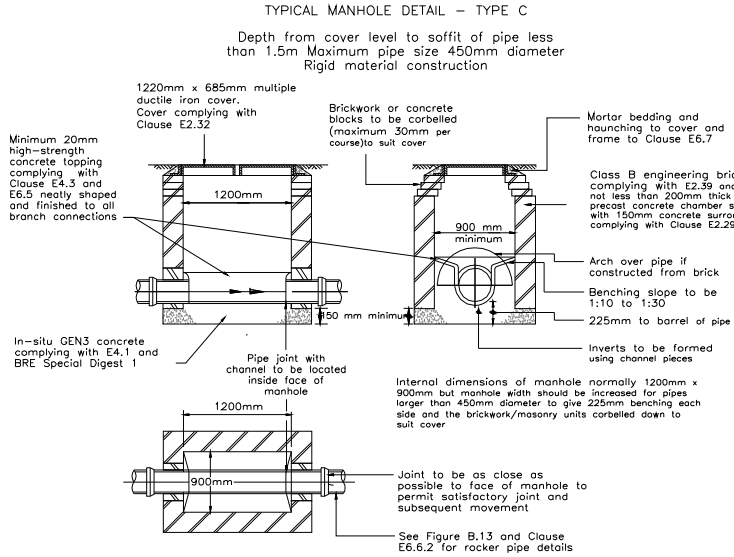
- Do not scale from this drawing.
- All dimensions in metres.
- Survey levels and grid based on Greenhatch Group topographical survey drawing 35045.1 Rev. 0. All levels and grid orientated to OSGB36(15) via Global Navigation Satellite Systems (GNSS) and the O.S. Active Network (OS Net). Refer to top survey drawing for full notes and Survey Station Table.
- This drawing is based on the latest Architectural planning layout and shall be read in conjunction with all other relevant longitudinal sections and construction drawings.
- Any discrepancies with any of the drawings shall be reported to MJA Consulting Engineer.
- The level and location of all existing services shall be verified on site by the Contractor before commencing any construction work.
- Contractor must comply with all current legislation relating to CDM, Health and Safety and COSHH.

Road Works Notes:

- Existing highway drainage network including gully connections to be investigated and in full working order prior to any new drainage is installed. Min. 150mm gully connections to be installed.
- Any existing services currently within the proposed carriageway/footway/verge will require lowering/protecting or diverting to the satisfaction of the undertaker. Any amendments to the existing services to be agreed prior to commencement of S278 works.
- If any services are encountered during the construction phase, Borough Homes and Hampshire County Council to be contacted and any diversionary, lowering/raising or protecting of services to be agreed.
- All new ironwork to be D400 standard.
- All footway/road markings to be removed by water hydro blasting and not by mechanical means. New lines to be in accordance with revised traffic regulation order.
- Existing gullies and kerb drainage to be broken out where indicated. Backfilling to precast gullies shall be carried out to sub-base formation with general fill material Class 1 compacted in compliance with Clause 612. Where mechanical compaction is impractical, backfilling shall be in S14 concrete.

*PF General Comments

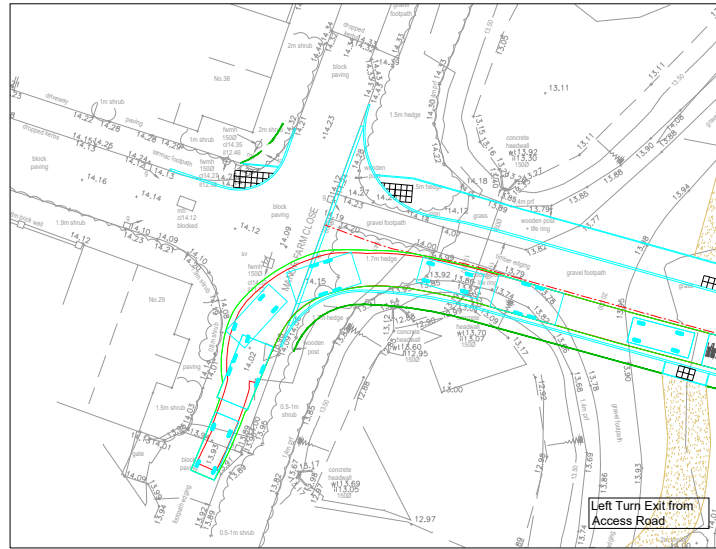
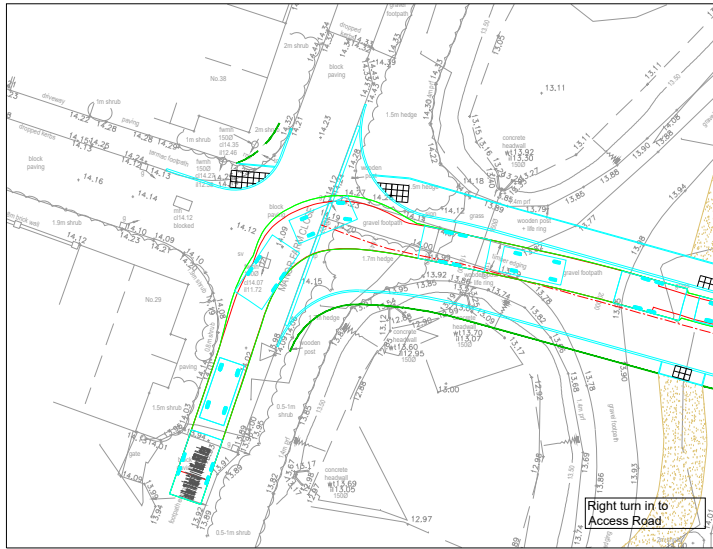
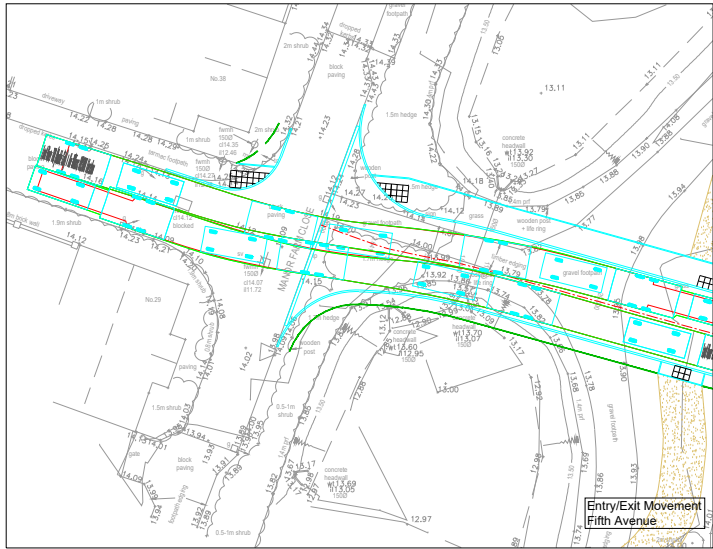
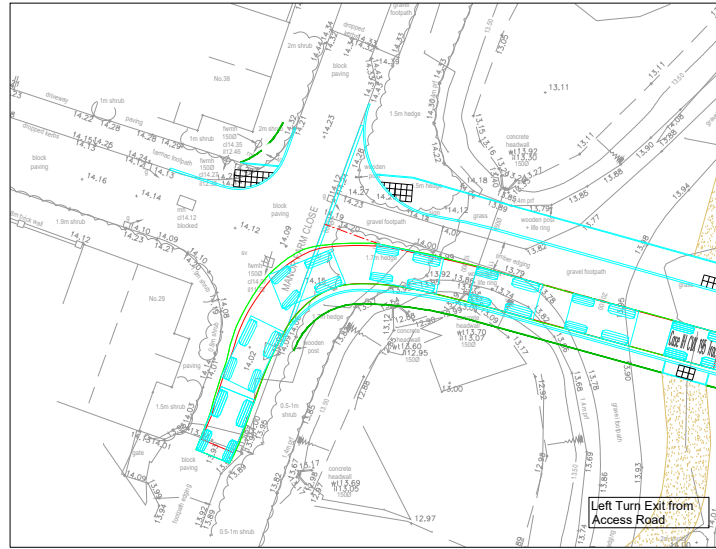
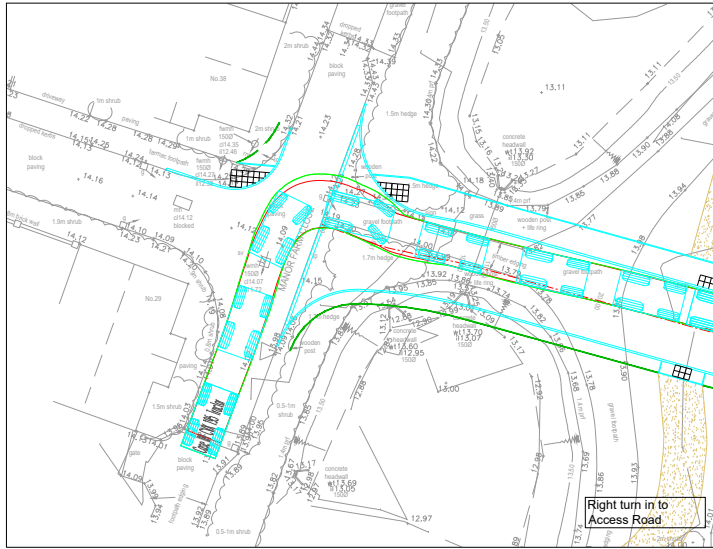
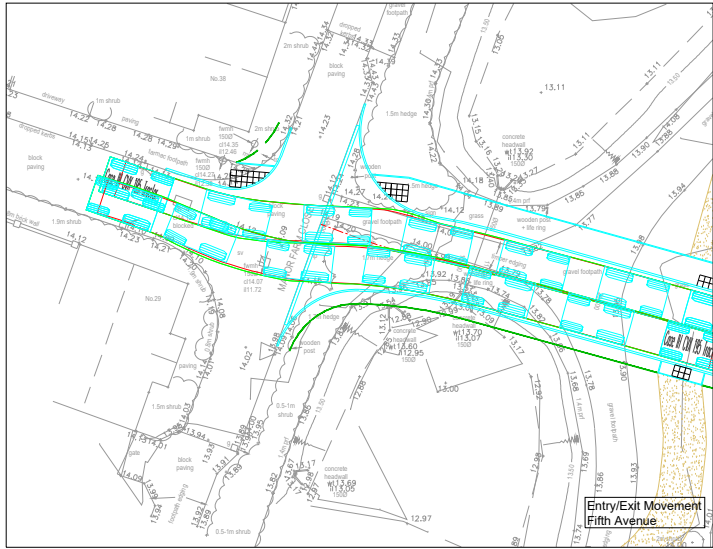
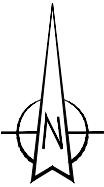
- Add Kerb Radii to access road
- Confirm Carriageway and Footway Construction Types
- Add junction visibility Splays in accordance with Table 7.1 Manual for Streets



Note: The use of precast concrete chamber units to E2.29 with 150mm GEN3 in-situ concrete complying with E4.1 and BRE Special Digest 1 in place of brickwork construction is permitted.

P2	03.04.23	Layout updated in response to Client comments	JPS	KTG
P1	17.02.23	First issue for comment	KTG	AMc
REV. No.	DATE	DESCRIPTION	DRAWN	CHECKED
Client				
Project	Manor Farm Denvilles			
Title	Road layout and setting out details			
Scale:	1:200@A1	Status:	PRELIMINARY	
Drawn:	Project Engineer	MJA Project No:	4527	Date: 17/02/2023
KTG	AMc			
Drawing Number:	4527-MJA-SW-XX-DR-C-700			
Rev:	P2			

Appendix B Swept Path Analysis



- NOTES:
1. Where the Contractor undertakes or engages a third party to undertake temporary works design, or varies the Pell Frischmann design in any way, then the Contractor will take full responsibility and liability for all design aspects, including a Design Risk Assessment. The Contractor shall inform Pell Frischmann of any proposed variances to the design.
 2. This drawing shall be read in conjunction with all other Electrical, Mechanical, Public health & Architectural Drawings & The Specification.
 3. Proposed Layout and Topographical Survey taken from drawing provided by MJA Consulting Civil and Structural Engineers 4527-MJA-SW-XX-DR-C-700.

Vehicle	
Case IH CVX 195 Tractor	
Overall Length	4.76m
Overall Width	2.550m
Overall Body Height	3.129m
Min Body Ground Clearance	0.588m
Max Track Width	2.520m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	5.400m

Land Rover 110 (Double Cab) + Ifor Williams HB510XL Horsebox	
Overall Length	10.198m
Overall Width	2.300m
Overall Body Height	2.820m
Min Body Ground Clearance	0.160m
Max Track Width	2.298m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.200m

P00	Initial Issue	KM	TM	22.06.23
REV	DESCRIPTION	DRN	CHK	APP

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Client
Barratt David Wilson Homes

Project
**Manor Farm Close
Denvilles**

Drawing Title
**Agricultural Vehicle
Swept Path Analysis**

	Name	Date	Scale	1:250 @ A1
Drawn	KM	June 2023	File No.	107818-PEF-ZZ-SK-DR-CD-00002.dwg
Designed	KM	June 2023	Drawing Status	Preliminary
Checked	TM	June 2023		
Approved	TM	June 2023		
Drawing No.	107818-PEF-ZZ-SK-DR-CD-00002			Revision P00