LU/304/09

Odyssey
consulting engineers

NEW COTTAGE, TODDINGTON LANE, WICK, LITTLEHAMPTON

Transport Statement

Project No. 09-110
November 2009

ARUN DISTRICT COUNCIL LU/304/09/

NEW COTTAGE, TODDINGTON LANE, WICK, LITTLEHAMPTON

Transport Statement

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Project No. 09-110
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ARUN DISTRICT COUNCIL LU/304/09/

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1.0 INTRODUCTION

1.1 This Transport Statement has been prepared by Odyssey Consulting Engineers on behalf of Sawkings in relation to the development of land at New Cottage, Toddington Lane, Wick, Littlehampton. The development comprises the demolition of the existing residential property on the land and the erection of six new dwellings.

1.2 This Statement deals with matters of highways and transportation and has been prepared within the context of a previous refusal of planning permission for residential development in February 2004. Three reasons for refusal were given by Arun District Council, two of which related to highway matters. The first cited the increased use of the existing access to the public highway as adding to the hazards of highway users to an unacceptable degree. The second cited inadequate provision for visibility at the junction of the access with the public highway.

1.3 Accordingly, this Statement focuses on the proposed site access arrangements with Toddington Lane. It assesses respective visibilities, both for the existing junction arrangement and that now being proposed, demonstrating how this can be improved, not only for the new residents, but also for the existing residents of the private driveway leading to existing properties adjacent to New Cottage. It also demonstrates how the new junction arrangements would operate in terms of the manoeuvrability of vehicles turning into and out of the access using the Autotrack swept path software.

1.4 It should be noted that since the previous refusal in February 2004, the Eden Park residential development has been built which has altered the configuration of the adjacent road network such that Toddington Lane is no longer a through road onto Worthing Road. Also, the development of a small terrace of new houses immediately south of the development site has allowed for a new verge area to be provided to the left of the site on exit, which it is assumed, is available for visibility purposes.

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1.5 In addition, Manual for Streets was published in March 2007. This is relevant as it gives new guidance on stopping sight distances and visibility requirements at junctions in residential streets such as Toddington Lane.

1.6 For completeness, this Statement also refers to the sustainability of the site in relation to its proximity to public transport facilities and pedestrian and cycle facilities in the vicinity, together with its accessibility to other local facilities.

1.7 This report concludes that within the context of the modest development comprising this proposal and the existing highway arrangements in the vicinity of the site, the proposed site access arrangements to serve this development are now satisfactory from a highway perspective.

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2.0 SITE ACCESS ARRANGEMENTS

2.1 Existing access to land comprising New Cottage is taken from the private driveway off Toddington Lane directly opposite White Lodge. This driveway also serves the detached properties known as Normandie and The Valentines, as well as the semi-detached Virginia Cottage. The adjacent Jasmine Cottage appears to take access directly onto Toddington Lane.

2.2 A site visit was undertaken in the preparation of this access assessment. Speed measurements were taken on site with a hand held speed gun during that site visit, which was conducted during free flow conditions on Toddington Lane. The results of this speed survey are contained at **Appendix B** to this report.

2.3 Speeds were recorded at three positions, the first being traffic travelling towards Worthing Road in the southbound direction along Toddington Lane, measured outside Jasmine Cottage. The second measured speeds of traffic travelling away from Worthing Road along Toddington Lane in the northbound direction at the junction with the private driveway to New Cottage. The third measured speeds travelling northbound on Toddington Lane on the approach to the junction between Toddington Lane and the private driveway outside no. 16 Toddington Lane.

2.4 The speed survey shows 85th percentile speeds of 21.5, 19.5 and 15.5 mph at positions 1, 2 and 3 respectively. These speeds have been used in accordance with stopping site distance guidance set out in Manual for Streets to determine the appropriate visibility splays at the proposed site access junction.

2.5 The site access assessment was also undertaken on the basis of the existing known public highway boundaries as supplied to us by West Sussex County Council on the 28th October 2009. Details of the existing public highway limits are given at **Appendix A** to this report.

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2.6 It should be noted that it is our understanding that the verge area outside the newly built properties of 12-18 Toddington Lane would be available for visibility purposes and has therefore been utilised as such within this assessment.

2.7 It is also noted that the existing vegetation at the junction of Toddington Lane and the private driveway leading to New Cottage has been allowed to become overgrown and is currently intruding onto the public highway. The junction assessment put forward in this Statement recommends, and relies upon, the cutting back of this vegetation clear of the public highway as is the duty of the Highway Authority.

2.8 It is also noted that the approximately 400 unit development at Eden Park, adjacent to the New Cottage site, has been largely built out since the previous decision. This has resulted in the closure of Toddington Lane at its junction with Worthing Road. Access to Worthing Road is now taken via Holmes Way just to the south of the proposed development site. This highway configuration would have had the effect of slowing down traffic travelling in a northbound direction on Toddington Lane towards the site which would clearly have a bearing on the Council's consideration of these latest site access proposals.

2.9 OCE drawing no. **09-110-001RevA** illustrates the existing access arrangements to New Cottage and the adjacent properties via the private driveway. It shows how visibility to the right on exit is severely restricted by existing vegetation. It also shows that the width of the driveway and its angle relative to Toddington Lane means that if a car is exiting the driveway, another car cannot enter at the same time, such that it could clear the public highway. To the left however, this drawing shows that visibility splays of 2.4 x 25m and 2.4 x 33m commensurate with 85th percentile speeds of 20mph and 25mph respectively, are achievable.

2.10 OCE drawing no. **09-110-008** shows the proposed site access arrangement to the New Cottage site relative to the existing private driveway

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serving the properties of Normandie, The Valentines and Virginia Cottage. This configuration proposes access to the New Cottage site immediately south of the existing barn on the site, such that it is effectively segregated from the existing driveway to the remaining properties.

2.11 In addition, the site boundary, shown red on the plan, has been set back along the frontage with the private driveway in order that this driveway could be widened at its junction with Toddington Lane to better serve the manoeuvring of vehicles at the junction to and from the existing dwellings.

2.12 This drawing shows that visibility splays of 2.4 x 33m (commensurate with 85th percentile speeds of 25mph) are achievable to the left both for the existing driveway and the proposed access to the New Cottage site.

2.13 Visibility to the right of 2.4 x 33m is achievable from the New Cottage site access and 2.4 x 25m from the existing private driveway, subject to existing vegetation being trimmed back. It is evident from the public highway information at **Appendix A** that this trimming back could be achieved within existing public highway limits.

2.14 The 25m splay to the right would be very slightly below the stopping sight distance for an 85th percentile speed of 21.5mph (derived from position 1 in the speed survey results) but is a significant improvement on the existing visibility to the right, which is severely sub-standard.

2.15 As such, the proposed junction arrangement would not only provide full and adequate visibility splays at the access to the proposed development site, but would also significantly improve the existing visibility arrangements for those exiting from the neighbouring dwellings along the private driveway.

2.16 It is evident from the above proposals plan that a triangular area would separate the two driveways onto Toddington Lane. It is proposed that this area would be paved in a textured and over-runnable surface that would provide guidance for vehicles turning at the junction.

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2.17 Based upon the proposed layout, OCE drawing no. **09-110-003** illustrates the swept paths of a large car turning into and out of the proposed access to the New Cottage site. It is evident from this drawing that the proposed driveway to this land would be sufficiently wide on entry to allow vehicles to turn into and out of the site at the same time.

2.18 OCE drawing no. **09-110-004** shows further tracked movements at the New Cottage access junction and illustrates that all movements could be conducted safely and within the convention of remaining on the correct side of the carriageway with minimal conflict with passing traffic on Toddington Lane. This is in sharp contrast to the existing arrangement at the junction as shown on drawing no. **09-110-001RevA**, whereby a vehicle would need to pull into the public highway before being able to see sufficiently to the right along Toddington Lane, and also would be in conflict with a vehicle wishing to turn left into the driveway at the same time.

2.19 OCE drawing no. **09-110-005** shows how a vehicle turning left into the New Cottage site could do so across a vehicle emerging from the existing private driveway without delay to existing traffic on Toddington Lane. It also illustrates that by virtue of the revised southern kerbline of the private driveway, which takes land from the frontage of the New Cottage site, a vehicle wishing to turn right out of the private driveway can do so while simultaneously allowing a vehicle to turn left into the private driveway and wait clear of the public highway.

2.20 Overall, it is evident from the plans submitted in this report that the proposed junction arrangements could be designed so as to provide adequate visibility and turning space for vehicles in and out of the New Cottage site. They would also enable improved operation of the existing access to the remaining properties served by the private driveway and would result in an overall betterment of highway conditions in this vicinity.

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2.21 It is recognised that the provision an additional five dwellings on the New Cottage site would generate limited additional traffic at this junction. However, given the existing traffic levels on Toddington Lane and the speed of this traffic, there are from observation sufficient gaps within the traffic flow to enable the modest level if additional traffic generated by the proposed development to access the public highway without detriment to the free flow of traffic or road safety. Indeed, the betterment of the existing private driveway access would in our view improve traffic conditions along Toddington Lane.

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3.0 SUSTAINABILITY

3.1 The following section of the report reviews the existing accessibility of the site in terms of its immediate locality and considering its location relative to the wider area.

Local Accessibility

3.2. Wick is a village situated less than 1.5km from Littlehampton, to the south, providing access to shopping and leisure facilities. The village has undergone extensive expansion since 2000 with recent housing development being built near to the site along Toddington Lane.

3.3 The above mentioned shopping facilities can be found on Wick Street and Horsham Road with both of these centres being within 800m of the proposed development, as shown on **Figure 2**.

3.4 Educational facilities are within 800m of the site for primary school children and within 1.25km for secondary school facilities.

3.5 There are a number of employment opportunities within fifteen minutes walk (1200m) from the site, namely Watersmead Business Park, Lineside industrial estate and retail facilities along Hawthorn Road. The presence of these would reduce the need for residents to travel to work by car.

3.6 Bus stops can be found within ten minutes walk distance from the site (800m) as shown on **Figure 1** and are served by bus services providing access to towns such as Worthing to the east, Bognor to the west and Arundel to the north of Littlehampton.

3.7 The railway station at Littlehampton is located some 1.9km from the site meaning that residents of the site could feasibly walk or cycle to the station. Littlehampton offers services to London, Brighton, Portsmouth and Bognor Regis.

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Pedestrians

3.8 In keeping with government guidance in PPG:13 states that new developments should encourage local journeys to be made by walking to reduce the impact of the car, it is noted that residents of the proposed site would have access to a number of facilities within 2km as identified on **Figure 1**.

3.9 The recently constructed housing estate in proximity to the proposed site has improved the pedestrian links to the employment and shopping facilities. A toucan crossing has been provided along Worthing Road (A259) at the former junction of Toddington Lane, which is now closed to vehicular traffic.

Cycling

3.10 The roads in the vicinity of Toddington Lane are relatively lightly trafficked, therefore providing a safe environment for cyclists.

3.11 A traffic free cycle route, interconnecting with sections of road is located some 700m from the site which continues onto Littlehampton town centre. This is shown on **Figure 2**.

3.12 It can be seen from the Plan that the majority of Wick and surrounding area is accessible by cycle. This includes the main retail areas, the railway station and a significant proportion of the employment areas.

Bus

3.13 The local bus services are illustrated on **Figure 1** and comprehensively cover the surrounding area. Bus stops are currently located within 10 minutes walk (800m) of the site. It is not clear what level of bus service improvement may have been secured from the adjacent Eden Park residential development, but this would appear to offer commercial opportunities for the local bus

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operators to route their services closer to the development which would in turn benefit the New Cottage development.

Rail

3.14 A local rail service operates in close proximity with Littlehampton station located within 2km of the site. This station offers regular services to and from London, Portsmouth and Bognor Regis as well as intermediate destinations.

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4.0 CONCLUSIONS

4.1 The previous refusal of planning permission for residential development at the New Cottage site pre-dates the introduction of Manual for Streets in March 2007. In addition, the surrounding highway network has been altered significantly since that time due to the construction of the Eden Park residential development immediately adjacent to the development site. As such, the prevailing traffic conditions and the guidance for the determination of stopping sight distances on residential streets legitimately allow a re-evaluation of the proposed site access arrangements. That evaluation has concluded that the proposed site access arrangements put forward within this Statement are acceptable on highway grounds.

4.2 Furthermore, the proposed site access arrangements would provide a betterment to those vehicles seeking access to and from the neighbouring properties of Normandie, The Valentines and Virginia Cottage via the existing private driveway, which itself would be improved as part of the development proposals.

4.3 The site is located within a ten minute walk of existing bus routes and is within the prescribed 2km walk set out in PPG:13 to the local railway station.

4.4 In addition, the site is served by new pedestrian and cycle facilities across Worthing Road in the form of a newly installed Toucan crossing, which would aid pedestrian and cycle accessibility to local facilities. These facilities include employment, leisure, recreation and educational facilities all within walking distance of the site.

4.5 It is concluded that the proposed development of a net additional five dwellings at land at New Cottage, Toddington Lane, and the proposed site access arrangements put forward in this Statement would therefore be acceptable on highways grounds.

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DRAWINGS

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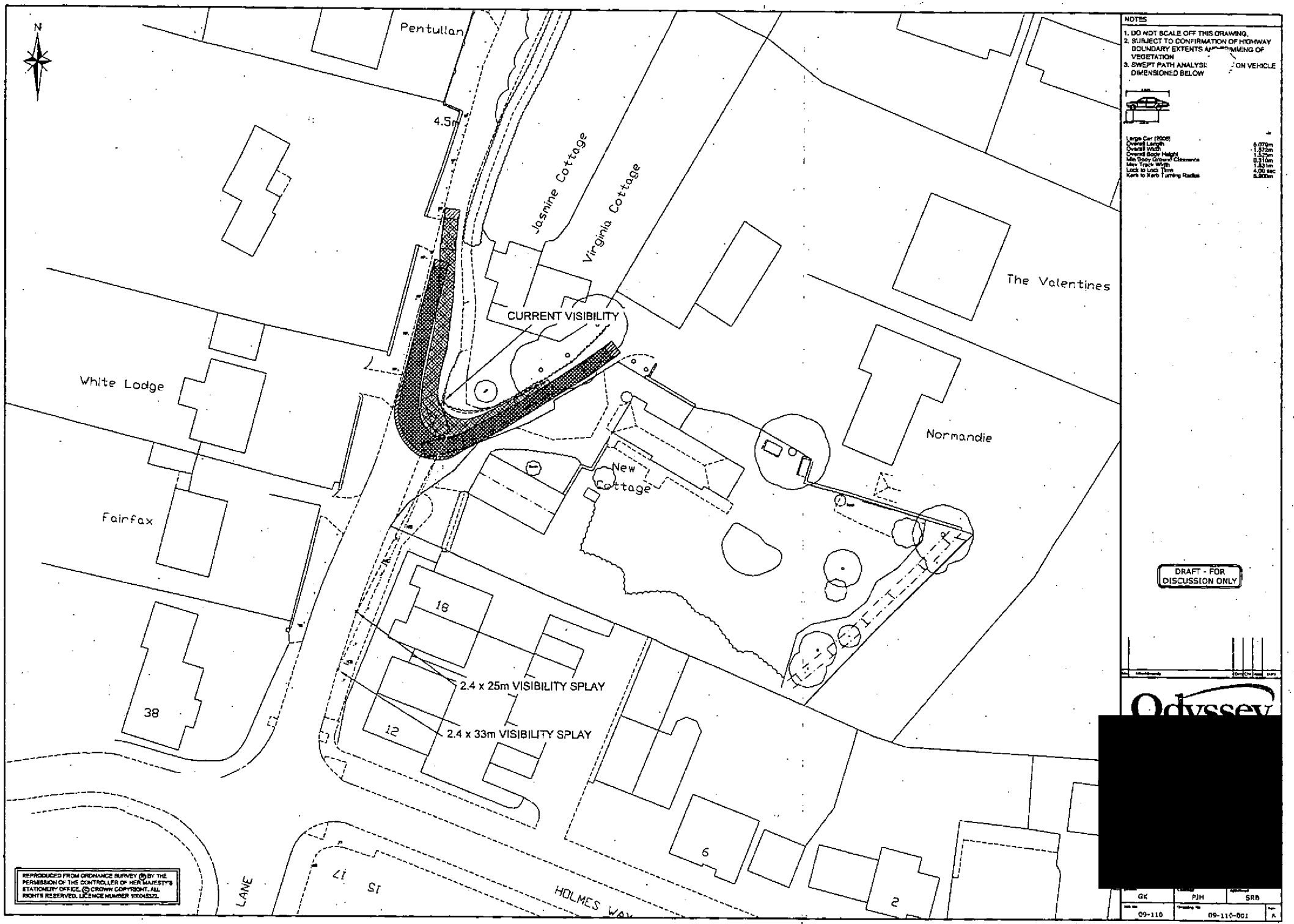

NOTES

1. DO NOT SCALE OFF THIS DRAWING.
2. SUBJECT TO CONFIRMATION OF HIGHWAY BOUNDARY EXTENTS AND TRIMMING OF VEGETATION
3. SWEPT PATH ANALYSIS ON VEHICLE DIMENSIONED BELOW

Large Car (7500)	
Overall Length	6.079m
Overall Width	1.972m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.931m
Lock to Lock Time	4.00 sec
Kerb to Kerb Turning Radius	5.800m

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Odyssey

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GK	PJH	SRB
09-110	09-110-001	A

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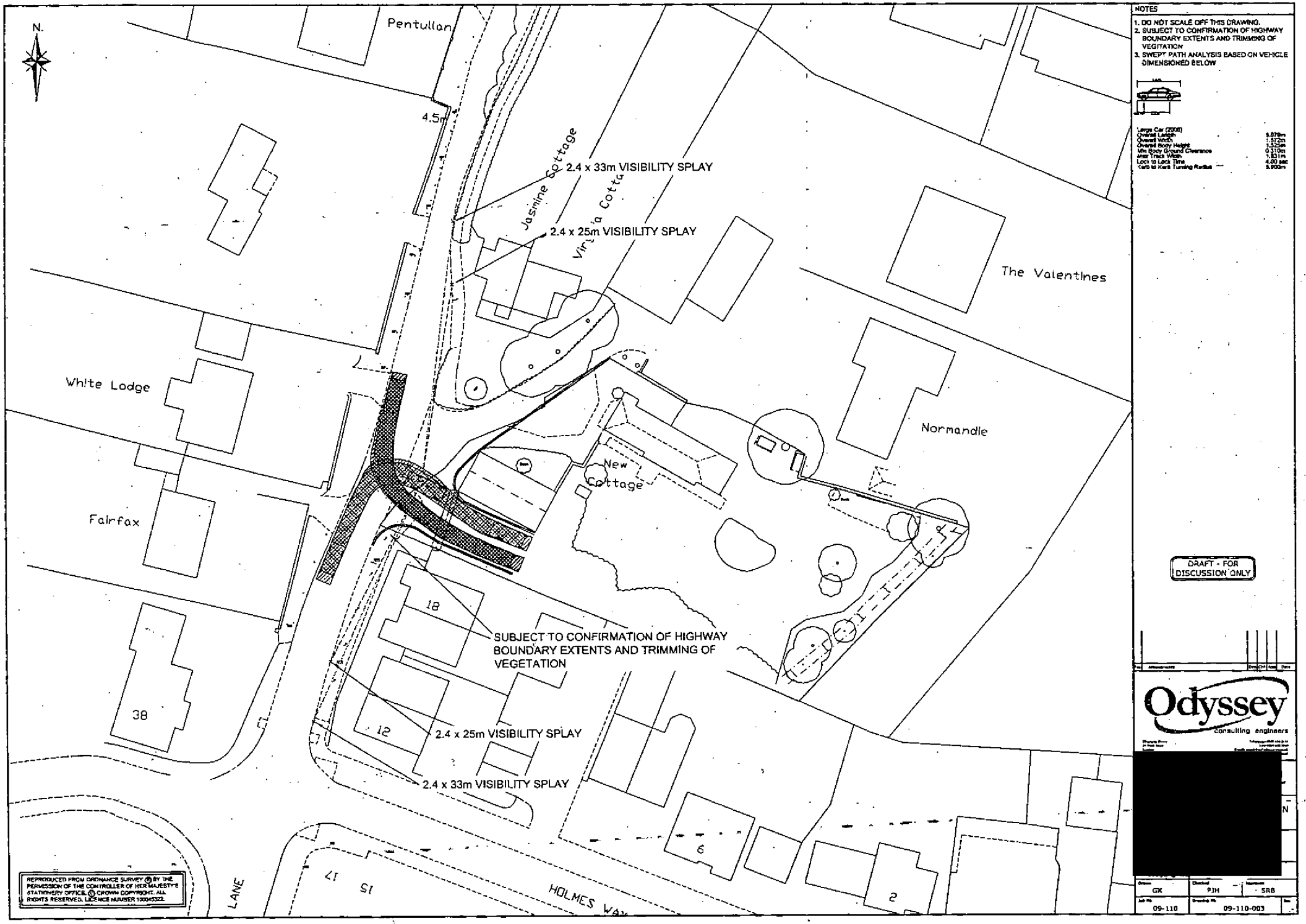

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1. DO NOT SCALE OFF THIS DRAWING.
2. SUBJECT TO CONFIRMATION OF HIGHWAY BOUNDARY EXTENTS AND TRIMMING OF VEGETATION
3. SWEPT PATH ANALYSIS BASED ON VEHICLE DIMENSIONED BELOW

Large Car (2006)	
Overall Length	5.078m
Overall Width	1.972m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.931m
Lock to Lock Time	4.00 sec
Kerb to Kerb Turning Radius	5.900m

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Job No	Drawing No	Rev
09-110	09-110-003	-

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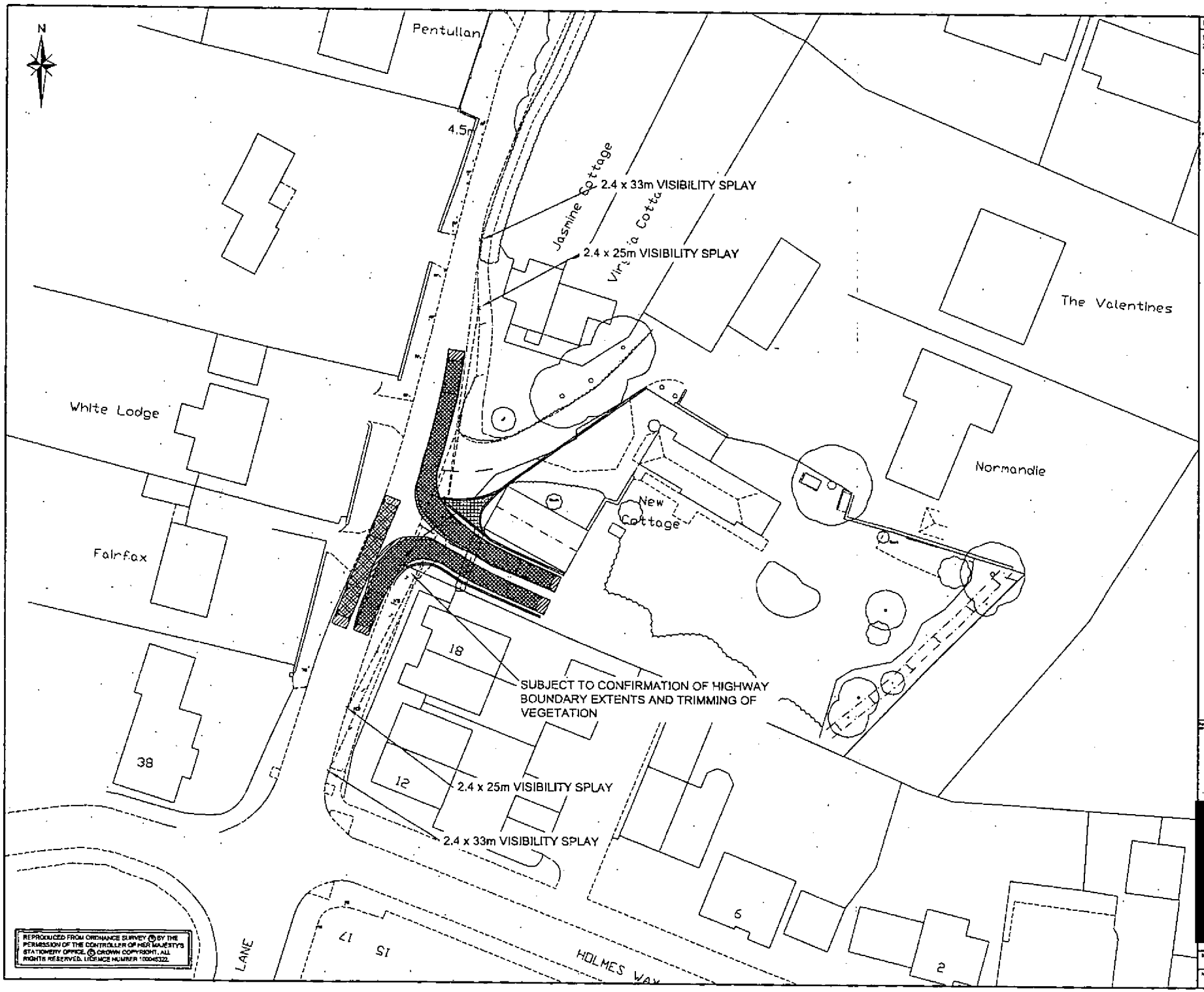

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2. SUBJECT TO CONFIRMATION OF HIGHWAY BOUNDARY EXTENTS AND TRIMMING OF VEGITATION
3. SWEPT PATH ANALYSIS ON VEHICLE DIMENSIONED BELOW

Large Car (2000)	
Overall Length	5.078m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Min Track Width	1.631m
Lock to Lock Time	4.00 sec
Kerb to Kerb Turning Radius	6.000m

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1:250 @ A1	OCT 09	GK
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Job no: 09-110	Drawing no: 09-110-004	Rev:

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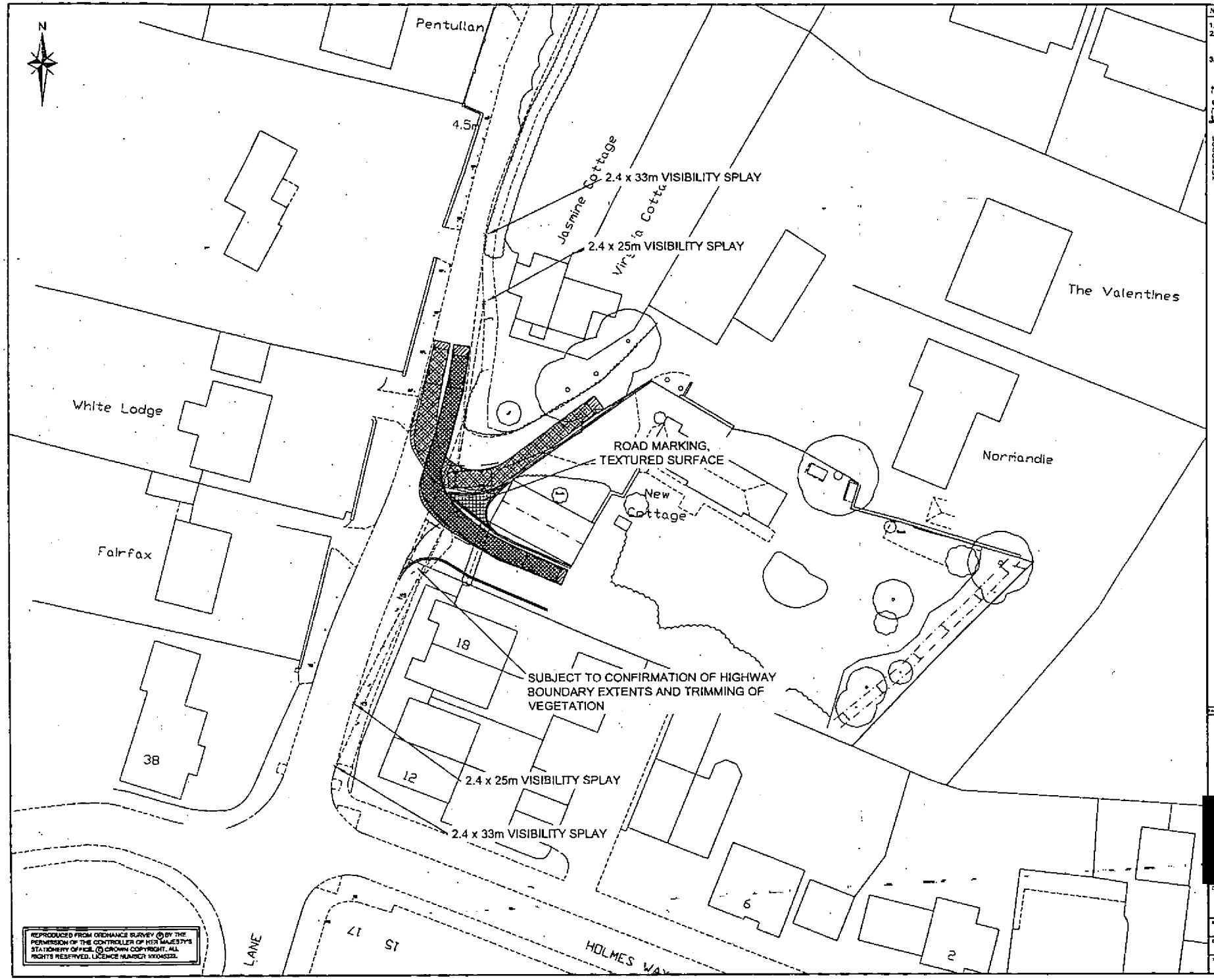

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NOTES

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2. SUBJECT TO CONFIRMATION OF HIGHWAY BOUNDARY EXTENTS AND TRIMMING OF VEGITATION
3. SWEPT PATH ANALYSIS BASED ON VEHICLE DIMENSIONED BELOW

Large Car (200m)

Overall Length	5.078m
Overall Width	1.822m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.851m
Lock to Lock Time	4.00 Secs
Kerb to Kerb Turning Radius	5.900m

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Client: SAWKINGS

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Approved: SRB
Job No: 09-110	Drawing No: 09-110-005

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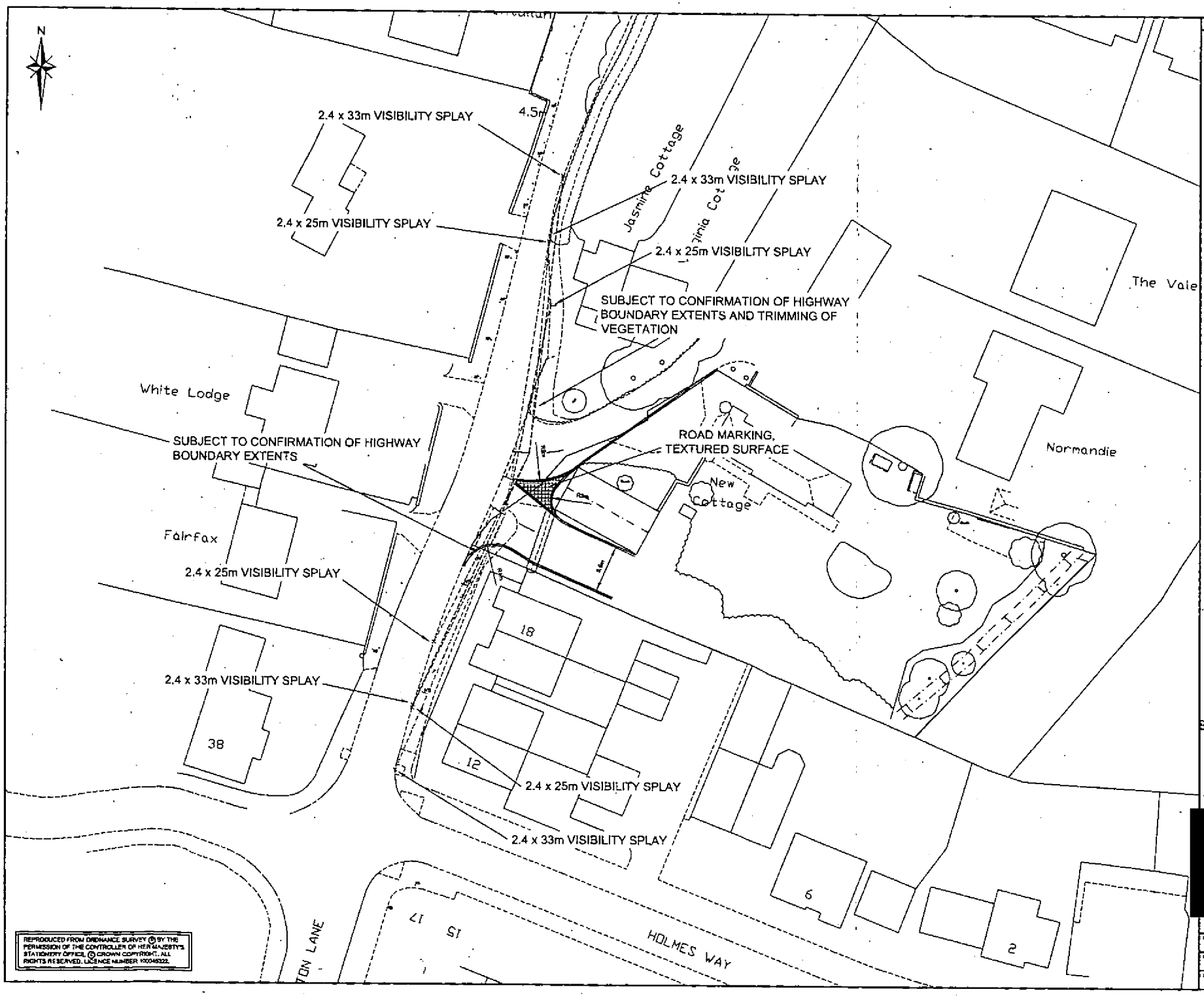

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Job No 09-110	Drawing No 09-110-003	Rev

FIGURES

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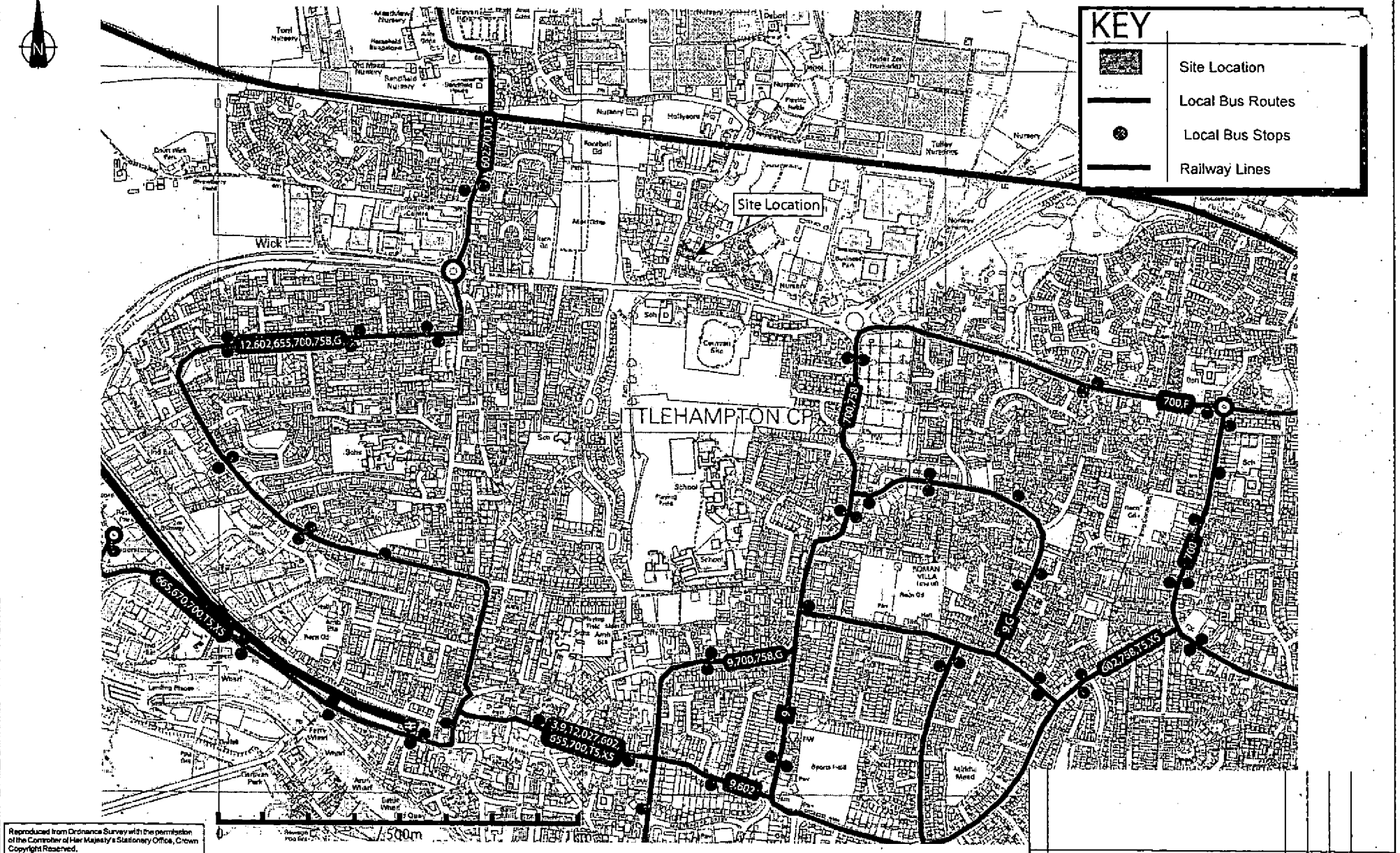

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Rev	Amendments	Dm	Chk	App	Date

Job Title: NEW COTTAGE, TODDINGTON LANE, WICK	Client: SAWKING	
Drawing Title: PUBLIC TRANSPORT ACCESSIBILITY		
Scale: 1:10,000	Date: NOV. 09	Designed: MJB
Drawn: MJB	Checked: SRB	Approved: SRB
Job No: 09-110	Figure No: FIGURE No. 1	Rev

DRAWING-NO 09-110-009

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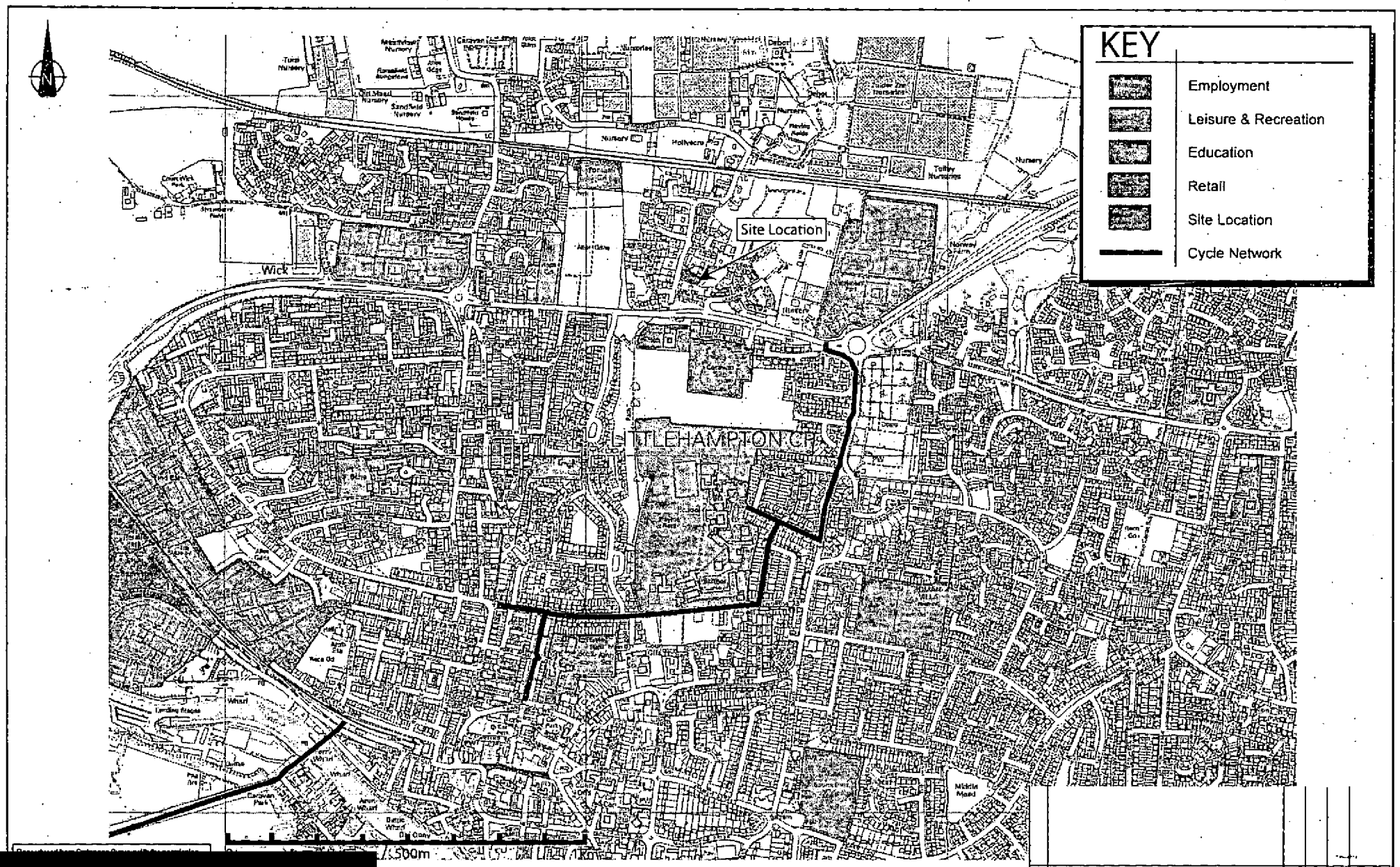

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Job Title: NEW COTTAGE, TODDINGTON LANE, WICK	Client: SAWKING		
Drawing Title: LOCAL FACILITIES PLAN			

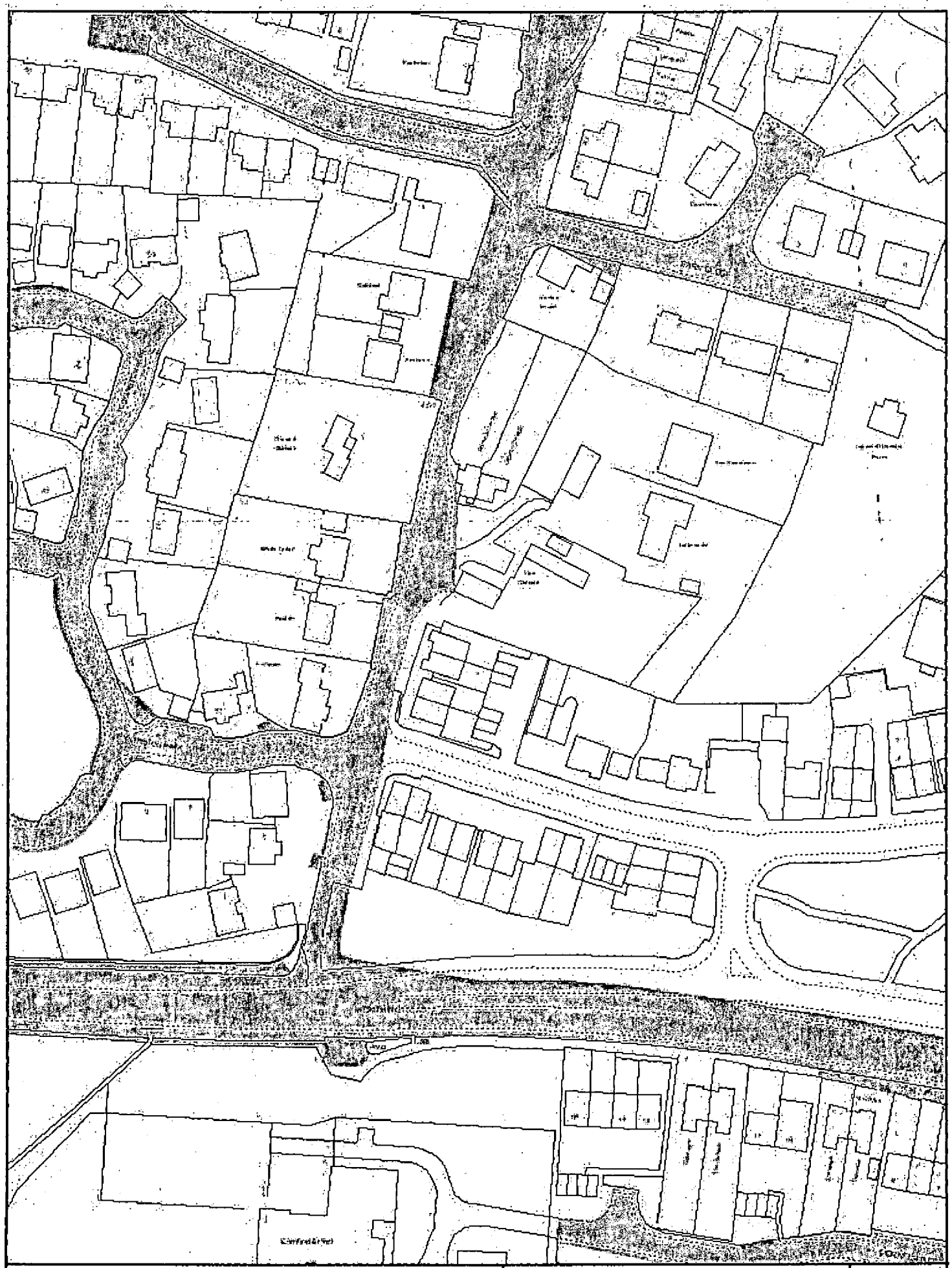
Rev	Amendments	Drn	Chk	App	Date

Scale: 1:10,000	Date: NOV. 09	Designed: MJB
Drawn: MJB	Checked: SRB	Approved: SRB
Job No: 09-110	Figure No: FIGURE No. 2	

DRAWING-NO 09-110-010

APPENDIX A

Public Highway Boundary Information



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Local Development

28/10/2009

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APPENDIX B

On Site Speed Measurements

New Cottage Toddington Lane Littlehampton			Vehicle Speed Survey
	Towards Worthing Road	Away from Worthing Road at site drive	Away from Worthing Road on approach to site drive
Cars	**Position 1**	**Position 2**	**Position 3**
1	27	17	17
2	22	20	17
3	24	18	18
4	23	21	15
5	23	20	18
6	26	18	17
7	21	18	17
8	21	20	20
9	20	19	15
10	17	22	17
11	18	20	16
12	24	21	18
13	16	19	18
14	26	20	19
15	30	22	16
16	21	23	14
17	19	21	12
18	20	18	11
19	10	20	21
20	18	13	17
21	18	23	
22	23	18	
23	18	12	
24	18	12	
25	18	22	
26		21	

Ave Speed	20.8	19.2	16.7
85 Percentile (Wet Weather Adjusted)	21.5	19.5	15.5