



CG FRY AND SON LTD

Land at Nottingham Lane, Weymouth

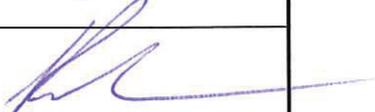
Technical Note on Transport Issues

Project Number: 1211-66
Report Number: 1211-66/TN/02
Date: June 2013

DOCUMENT SIGNATURE AND REVIEW SHEET

Project Details

Project Title:	Land at Nottingham Lane, Weymouth		
Project No.:	1211-66	Report No.:	TN/02
Client:	CG Fry & Son Limited		

-	Prepared By:	Checked By:	Approved for issue
Name:	Anthony Jones	Anthony Jones	Craig Rawlinson
Signature			
Date	June 2013	June 2013	June 2013

Issued by:

Bristol
Cambridge
Cardiff
Welwyn Garden City

Transport Planning Associates
21 Berkeley Square
Clifton
Bristol
BS8 1HP

0117 925 9400
Bristol@tpa.uk.com
www.tpa.uk.com



CONTENTS	PAGE
1 INTRODUCTION	1
2 SITE LOCATION AND HIGHWAY SAFETY	2
3 SUSTAINABLE TRAVEL AND LOCAL SERVICES	4
4 INDICATIVE TRAFFIC FORECASTS	7
5 ACCESS	8
6 INTERNAL SITE LAYOUT	9
7 POTENTIAL HIGHWAY RELATED SECTION 106 OBLIGATIONS AND SECTION 278 IMPROVEMENTS	10

FIGURES

- Figure 2.1 Local Highway Network and Services
- Figure 5.1 Potential Site Access Arrangement at Nottingham Lane
- Figure 5.2 Potential Site Access Arrangement at Dorchester Road

1. Introduction

- 1.1 This Technical Note (TN) has been prepared by Transport Planning Associates (TPA). It contains a preliminary appraisal of the key transportation issues considered at this stage to be associated with a potential development on land to the south of Nottingham Lane, Weymouth. For the purposes of this report, it is anticipated that the site would be developed for up to around 400 dwellings.
- 1.2 The preliminary appraisal of the transportation issues includes the following summarised aspects, which will need to be reviewed in further detail as the project is progressed:
- (i) the location of the site;
 - (ii) the sustainability of the site and access by non-car modes of travel;
 - (iii) vehicular access for the proposed development;
 - (iv) internal highway layout issues; and
 - (v) potential S106 transport-planning obligations.
- 1.3 The highway officer David Brown at Dorset County Council (DCC) has confirmed that the provision of a primary vehicle access on Nottingham Lane with the provision of a secondary / emergency access at Dorchester Road, including for the provision of a permeable route through the site, would be acceptable to serve the proposed scheme.
- 1.4 It is concluded that the site can accommodate the anticipated level of development in transport terms.

2 Site Location and Highway Safety

- 2.1 The site is situated at Nottingham approximately 3.5 kilometres to the northwest of Weymouth and covers an approximate area of 15.6 hectares. It is bounded by Nottingham Lane to the north, residential dwellings fronting Dorchester Road to the east, open land to the south and west and a pocket of residential dwellings to the northwest. The location of the site in the context of its local environment is shown on **Figure 2.1**.
- 2.2 The site consists of two areas, with the northern larger area of the site comprising of a mix of arable fields and vegetation which are currently accessed via an existing gated access point at Nottingham Lane and another gated access point at Nottingham Court. The southern area of the site comprises two open arable fields which are served by an existing gated access point at Dorchester Road.

Nottingham Lane

- 2.3 Nottingham Lane is a local link that runs adjacent to the northern site boundary and provides a direct connection between Dorchester Road and Nottingham to the west of the site. It has a carriageway that is generally between 5.5 and six metres wide. It is illuminated in the vicinity of the site and is subject to a 20mph speed limit which commences at a gateway feature located 20 metres to the west of Dorchester Road. The carriageway is also subject to a 7.5 tonne weight limit (except for access) Traffic Regulation Order (TRO) restriction.
- 2.4 In the vicinity of the site, physical traffic calming measures comprising speed humps, speed cushions and chicanes are in place. There are no parking restrictions on Nottingham Lane and on-street parking is not observed to be prevalent during the day.
- 2.5 Nottingham Lane connects with Dorchester Road approximately 100 metres to the east of the north-eastern site boundary, as shown on **Figure 2.1**. The junction has a ghost island right turn junction on Dorchester Road. To the west, Nottingham Lane continues through the villages of Nottingham and Buckland Ripers and connects with the B3157 approximately five kilometres from the site.

Dorchester Road

- 2.6 Dorchester Road (B3159) is an arterial route connecting the northern suburbs of Weymouth with the town centre, which is approximately 3.5 kilometres to the south of the site.
- 2.7 In the vicinity of the site, Dorchester Road is a single carriageway, approximately 12 metres wide, and is subject to a 30mph speed limit. It has active frontage with almost continuous residential properties situated along both sides of the carriageway, the majority of which have private vehicular access points.
- 2.8 Dorchester Road connects with the Manor Roundabout approximately 700 metres to the south of the site. The Manor Roundabout connects with the Weymouth Relief Road (A354). Dorchester Road also connects with the Weymouth Relief Road approximately 1.7 kilometres to the northeast of the site, via Littlemoor Road.

- 2.9 Highway improvements have recently been carried out on Dorchester Road by DCC, as part of The Dorchester Road Improvement Works.

Existing Traffic Flows

- 2.10 A Manual Turning Count (MTC) was carried out at the Nottingham Lane junction with Dorchester Road on Wednesday 5th December 2012, in order to establish the typical existing traffic flows passing through this junction.
- 2.11 During the AM peak period there were 1,253 vehicles passing through the ghost island junction and 1,149 vehicles during the PM peak period.
- 2.12 The survey data indicates that during the typical weekday AM peak period, the majority of vehicles turning out from Nottingham Lane head northbound on Dorchester Road, and during the typical weekday PM peak period the majority of vehicles turning into Nottingham Lane from the north.

Highway Safety

- 2.13 Personal Injury Accident (PIA) data obtained from Dorset County Council shows that during the last five available years of records (01/10/2007 - 30/09/2012) there were no recorded PIAs on Nottingham Lane during this period. Only one accident occurred on Dorchester Road since the Weymouth Relief Road opened in March 2011.

3 Sustainable Travel and Local Services

Local Services and Amenities

- 3.1 The Wey Valley School and Sports College is situated approximately 500 metres walking distance from the centre of the site, as shown on **Figure 2.1**, which equates to a seven minute walk or a two minute cycle ride (based on an average walking speed of 80 metres per minute¹ and an average cycling speed of 320 metres per minute based on an average speed of 19kph²). Radipole Primary School is located approximately one kilometre walking distance to the south of the site, as shown on **Figure 2.1**, which equates to a 13 minute walk or a four minute cycle ride.
- 3.2 The Redlands Sports centre is situated approximately 300 metres walk to the east of the centre of the site, as shown on **Figure 2.1**, and is served via the existing gated access point at Dorchester Road. The available facilities at the sports centre include sports halls, playing pitches, fitness suites and Astro pitches.
- 3.3 A Shell Petrol Filling Station with a small convenience store is situated approximately 500 metres walking distance from the centre of the site, via the existing access point at Dorchester Road, as shown on **Figure 2.1**.
- 3.4 Morrisons supermarket is situated to the southeast of the site, as shown on **Figure 2.1**, and is approximately a 1.2 kilometre walk, which equates to a 15 minute walk or five minute cycle ride. It is directly accessible on foot, by bicycle and by bus from Dorchester Road.
- 3.5 Policy LTP E-1 of Dorset County Council's Local Transport Plan 3 2011-2026 suggests that walking trips within two kilometres, and cycling trips within five kilometres, are the preferred maximum distances and offer the greatest potential to replace short car trips. The site is considered to be situated within an acceptable walking and cycling distance of a primary school, secondary school, leisure facilities and a supermarket.

Pedestrian Facilities

- 3.6 The nearest footways to the site at Nottingham Lane are located approximately 25 metres to the east of the eastern site boundary and are between two and 2.5 metres wide. These footways continue east and connect with footways provided on Dorchester Road.
- 3.7 A controlled pedestrian crossing is situated on Dorchester Road approximately 45 metres to the south of Nottingham Lane, as shown on **Figure 2.1**.
- 3.8 There are continuous footways approximately two to three metres wide on both sides of Dorchester Road in the vicinity of the site, and these continue towards the town centre.
- 3.9 Uncontrolled crossing points with dropped kerbs and tactile paving are generally provided at junctions with Dorchester Road. An uncontrolled pedestrian crossing point with dropped kerbs, tactile paving and a refuge island is situated 20 metres to the south of the existing access point at Dorchester Road, and there are other similar uncontrolled crossing points provided intermittently on Dorchester Road within the vicinity of the site.

¹ 'Providing for Journeys on Foot', published by the IHT in 2000.

² Transport Note 2/08 'Cycle Infrastructure Design', published by the DfT in October 2008.

Cyclist Facilities

- 3.10 National Cycle Network (NCN) Route 26 is accessible via Dorchester Road approximately 700 metres to the southeast of the site, and is also accessible in close proximity to Upwey Railway Station, approximately 1.3 kilometres to the north of the site, as shown on **Figure 2.1**.
- 3.11 The NCN Route 26 connects the site with Dorchester to the north of the site and Weymouth town centre and seafront to the south. There are also various traffic-free and on-road cycle routes in and around Weymouth town centre which connect with NCN Route 26.
- 3.12 The Dorchester Road highway improvements include road widening and footway narrowing at various locations on Dorchester Road to the south of the site to provide on-road cycle lanes.

Public Transport Facilities

- 3.13 The nearest bus stops to the site are situated on Dorchester Road in the vicinity of the junction with Nottingham Lane. The nearest northbound bus stop is situated approximately 430 metres walking distance from the centre of the site, with the nearest southbound stop situated 500 metres away, as shown on **Figure 2.1**. This equates to an approximate six to seven minute walk or two to three minute cycle. These stops comprise a flag and pole, a shelter with seating and timetable information, raised kerbs and bus clearway markings.
- 3.14 In addition there are northbound and southbound bus stops situated on Dorchester Road approximately 150 metres to the south of the southern site boundary, and are approximately 500 metres walking distance from the centre of the site (via the existing access point on Dorchester Road), as shown on **Figure 2.1**. These stops comprise a flag and pole, a shelter with seating and timetable information, raised kerbs and bus clearway markings
- 3.15 The bus stops situated on Dorchester Road are served by a number of local bus services (2, 10, 210, 211 and X10) which are operated by First in Dorset & South Somerset and South West Coaches. These services operate at a combined frequency of approximately eight to nine bus services per hour with the first and last northbound services arriving at 0538 and 2338 respectively and the first and last southbound services arriving at 0553 and 2353 respectively. Services run at similar times and frequencies on a Saturday and Sunday.
- 3.16 These services provide access to Weymouth town centre, Portland, Morrisons supermarket, Dorchester Tesco's, Dorchester South Railway Station, Dorchester town centre and Dorchester County Hospital. In addition, there are a number of services (79, 88/88A, 91 and 701) serving local schools and colleges.
- 3.17 The provision of bus services are considered to provide a viable alternative to the car for journeys to and from Weymouth town centre, and are also a suitable alternative to the 3.5 kilometre walk or cycle to the town centre.
- 3.18 Upwey Railway Station is approximately a 1.3 kilometre walk to the northeast of the site, which is equivalent to a 17 minute walk or a five minute cycle, as shown on **Figure 2.1**. It is accessible on foot or by bicycle via Dorchester Road and Springfield Road as well as via bus services provided on Dorchester Road. Cycle storage facilities are provided at the station. Rail services from Upwey Railway Station connect to local, regional and national destinations including Bath Spa, Bournemouth, Bristol Temple Meads, Dorchester South, Dorchester West, Frome, London Waterloo, Poole, Portsmouth Harbour, Southampton Central, Trowbridge and Weymouth.

4 Indicative Traffic Forecasts

- 4.1 Indicative traffic forecasts derived using the TRICS 2013(a) database suggest that a 400 unit residential development at this location could generate up to around 240 to 270 vehicles per hour (vph) in the peak periods 0800-0900 and 1700-1800, with around 2,200 trips per day.
- 4.2 It is considered that the number of vehicle trips generated by the development could be less with the preparation of a Travel Plan that will seek to influence travel behavior and reduce car usage. Highway officers at DCC have confirmed that a Travel Plan will be required for this development.
- 4.3 An indicative capacity assessment carried out by TPA for the Nottingham Lane junction with Dorchester Road shows that the junction should be able to accommodate the forecast traffic that would be generated by 400 dwellings, with no significant queues or delays in the peak periods of operation on the local highway network, as shown on **Table 4.1** below. The assessment assumes that all site development traffic would access the site of Nottingham Lane, but in reality some traffic would access the site at the secondary junction arrangement at Dorchester Road.

Table 4.1 – Capacity Assessment Results Summary

DEVELOPMENT SCENARIOS	ARM	MAX RFC	MAX QUEUE (NO. OF VEH)	DELAY (MIN/VEH)
AM Peak with Development (0800-0900)	Nottingham Lane	0.644	1.69	0.73
PM Peak with Development (1700-1800)	Dorchester Road (N) – Right Turn Lane	0.373	0.62	0.39

5 Access

Nottingham Lane

- 5.1 At this stage it is considered that the optimum primary vehicular access is at the existing gated access point serving the northern part of the site, in the form of a priority tee junction arrangement, as shown indicatively on **Figure 5.1**.
- 5.2 Dorset County Council's *Highway Guidance for Estate Roads Design Guide* (2002) sets out that for a road serving more than 300 dwellings, the carriageway would be required to be at least 6.7 metres wide, with two metre wide footways on both sides. As shown on **Figure 5.1**, a 6.7 metre wide access road with two metre wide footways on both sides (total corridor of 10.7 metres) can be accommodated at this location.
- 5.3 In accordance with guidance set out in *Manual for Streets 2*, a minimum visibility splay of 2.4 metres by 25 metres would be provided, as Nottingham Lane is subject to a 20mph speed limit. As shown on **Figure 5.1**, the required visibility splay can be provided at this location within land ownership and the adopted highway boundary.
- 5.4 Highway officers at DCC confirmed a primary vehicle access can be served by Nottingham Lane. This TN has confirmed that there are no existing highway safety issues on Nottingham Lane and it has also demonstrated that the Nottingham Lane junction with Dorchester Road can accommodate traffic generated by the development. It is therefore considered that a primary vehicle access at this location is achievable.
- 5.5 The final detailed access design would be subject to technical approval through a legal agreement. The proposed improvement works appear to be able to be provided within highway limits or on land within the developer's control. Consideration will need to be given to replacing the traffic calming measures on Nottingham Lane and replacing them with more sympathetic traffic calming measures, subject to discussions with highway officers.

Dorchester Road

- 5.6 There is potential to provide a vehicular access arrangement at the location of the existing access point on Dorchester Road, as shown on **Figure 5.2**.
- 5.7 **Figure 5.2** shows a 5.5 metre wide access road with a two metre wide footway on the southern side and a 0.5 metre wide verge on the northern side can be provided at this location, whilst the existing right-turn lane on Dorchester Road can be retained. In accordance with Dorset County Council's *Highway Guidance for Estate Roads Design Guide* (2002), a 5.5 metre wide access road with two metre footways on either side is required to serve a maximum of 300 dwellings. The arrangement is narrower than this and therefore can provide vehicular access but would be a secondary access.
- 5.8 In accordance with guidance set out in *Manual for Streets 2*, a minimum visibility splay of 2.4 metres by 43 metres would normally be expected to be provided, as Dorchester Road is subject to a 30mph speed limit. As shown on **Figure 5.2**, the anticipated visibility splay can be provided at this location within land ownership and the adopted highway boundary.
- 5.9 A capacity assessment has not been undertaken for an access at this location. However, it is considered at this stage that a material level of development traffic, associated with, say at least 50 units, could be accommodated with no material impact on the existing operation of Dorchester Road. The number of units may be constrained by the available road corridor.

- 5.10 The access point could be shown to be a vehicular crossover of a footway. It is considered that an emergency access that would also serve as a strong pedestrian and cyclist link, can be provided within the current land ownership boundary.

6 Internal Site Layout

- 6.1 It is considered that the internal layout would be designed to reflect Dorset County Council's *Highway Guidance for Estate Roads Design Guide* (2002) as well as national guidance set out in *Manual for Streets* and *Manual for Streets 2* to ensure a quality layout is provided. The internal road layout would be designed to reduce speeds and accommodate all road users. The layout will be designed to provide a permeable route through the site from Nottingham Lane to Dorchester Road.
- 6.2 Parking provision will be provided with consideration to guidance in the *Residential Car Parking Provision: Local Guidance for Dorset* (February 2011) document and local car ownership needs.

7 Potential Transport Planning Obligations

- 7.1 Highway officers have confirmed that they would expect developer contributions towards broad highway and transport improvements to be covered by the Community Infrastructure Levy (CIL).
- 7.2 The West Dorset, Weymouth & Portland Community Infrastructure Levy (CIL) Draft Charging Schedule document sets out a proposed contribution of £93 per square metre for the Gross Floor Area (GFA) of all dwellings. The CIL document is likely to be adopted in January 2014. Any affordable housing included within the development would be exempt from the contributions.
- 7.3 Specific measures may also be required, for example at the nearby junction with Dorchester Road, to include a splitter island or new bus stops. However, it is considered that measures should be minimal given that the local road infrastructure served considerably more traffic before the Weymouth Relief Road was in place.
- 7.4 Travel Plan measures are likely to be required which may include the provision of travel vouchers and Personal Travel Planning (PTP).

FIGURES

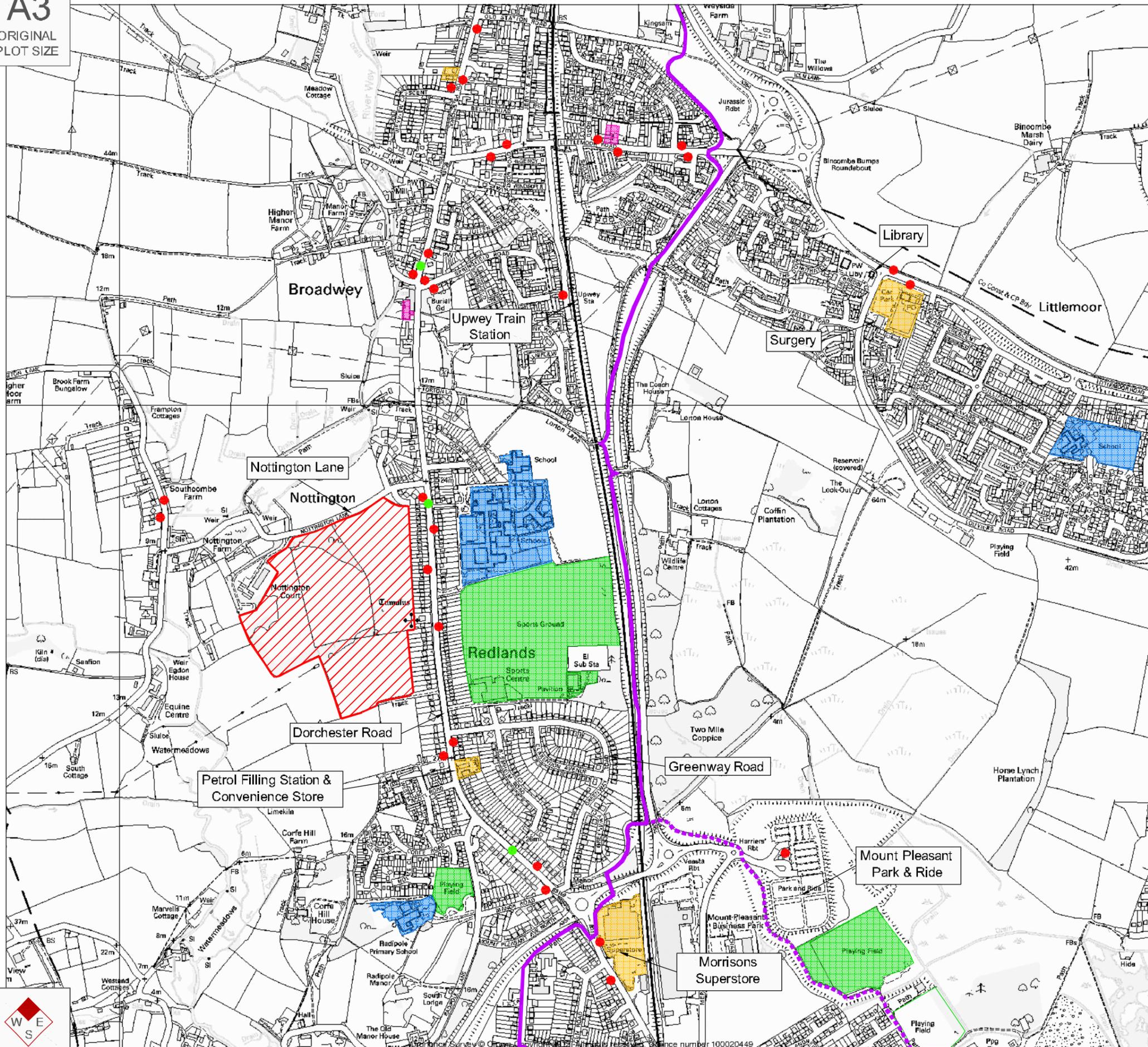
A3

ORIGINAL
PLOT SIZE

Reproduced from Ordnance Survey Superplan Data with the permission of The Controller of Her Majesty's Stationery Office. Crown Copyright - Licence No. AL100034021

NOTES:

-  Site boundary
-  Bus stop
-  Controlled pedestrian crossing
-  Shops
-  Schools
-  Recreation
-  Public houses
-  National Cycle Network (NCN) Route 26
-  Local Cycle Route



No.	Date	Details	Drawn by	Checked by	Approved by

Bristol
Cambridge
Cardiff
London
Welwyn Garden City



21 Berkeley Square
Clifton
Bristol
BS8 1HP
0117 925 9400
www.tpa.uk.com

CLIENT:
C.G. FRY & SON LTD

PROJECT:
**NOTTINGTON LANE,
WEYMOUTH**

TITLE:
**Local Highway Network
and Services**

STATUS:
INFORMATION

SCALE: 1:10000	DATE: 14.06.13	DRAWN: JAN	CHECKED: AHJ	APPROVED: CMR
JOB NO: 1211-66	DRAWING NO: Figure 2.1		REVISION:	



INDICATIVE

RESERVED COPYRIGHT

A3

ORIGINAL PLOT SIZE

Reproduced from Ordnance Survey Superplan Data with the permission of The Controller of Her Majesty's Stationery Office. Crown Copyright - Licence No. AL100034021

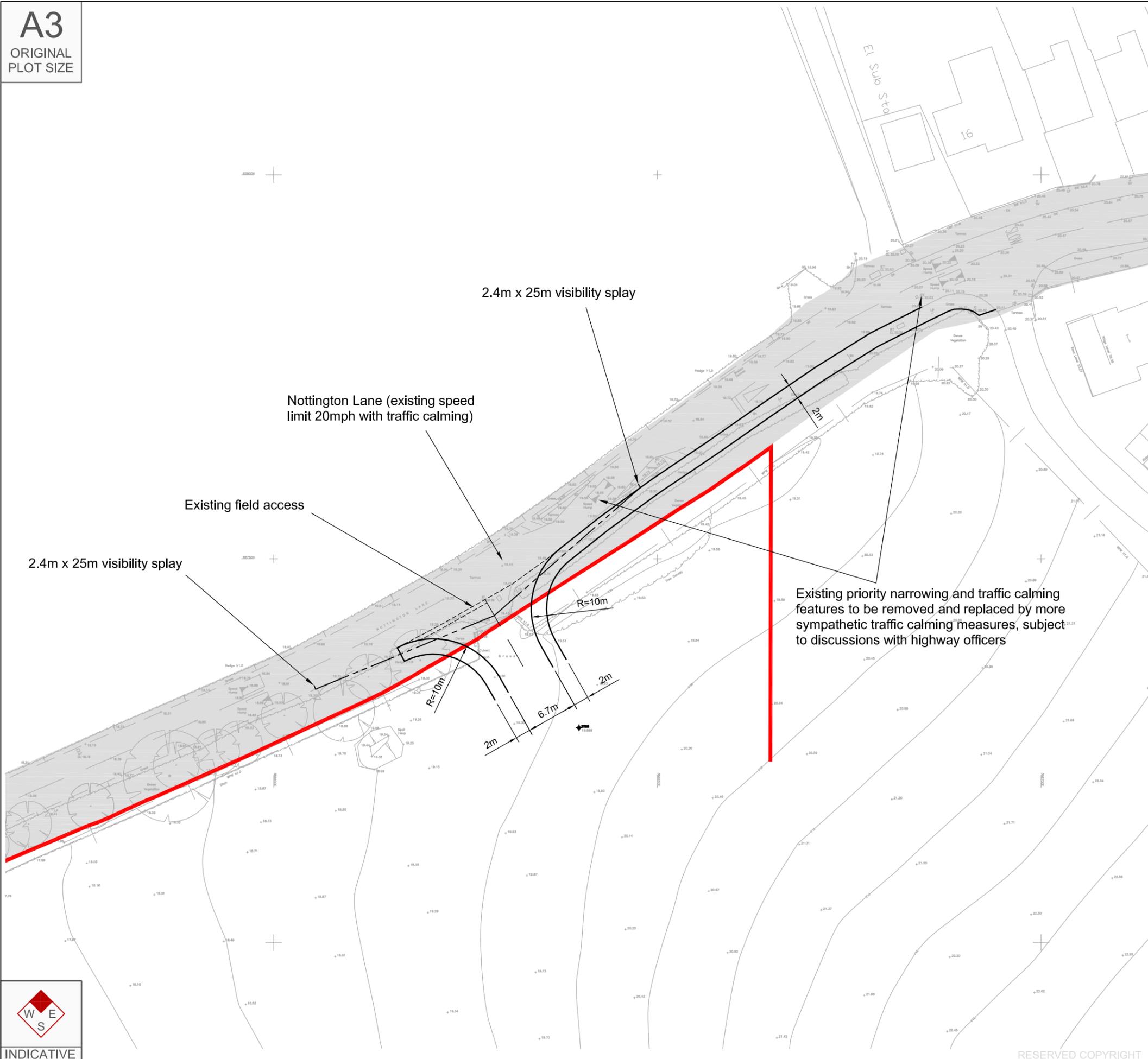
NOTES:

- 1. Extent of adopted highway has been taken from a 1:2000 scale highway record plan received from Dorset County Council on 23rd November 2012 and is based on Ordnance Survey data.
- 2. This drawing is based upon Lewis Brown Chartered Land Surveyors topographical survey drawing number U13002_SX received on 13th March 2013.

KEY

-  Approximate site boundary (based on Ordnance Survey data)
-  Approximate extent of adopted highway maintainable at public expense by Dorset County Council

Rev	Date	Details	Drawn by	Checked by	Approved by
-	-	-	-	-	-



Bristol
 Cambridge
 Cardiff
 London
 Welwyn Garden City

21 Berkeley Square
 Clifton
 Bristol
 BS8 1HP
 0117 925 9400
www.tpa.uk.com



CLIENT:
C.G. FRY & SON LTD

PROJECT:
**NOTTINGTON LANE,
 WEYMOUTH**

TITLE:
**Proposed Site Access
 At Nottingham Lane**

STATUS:
PRELIMINARY

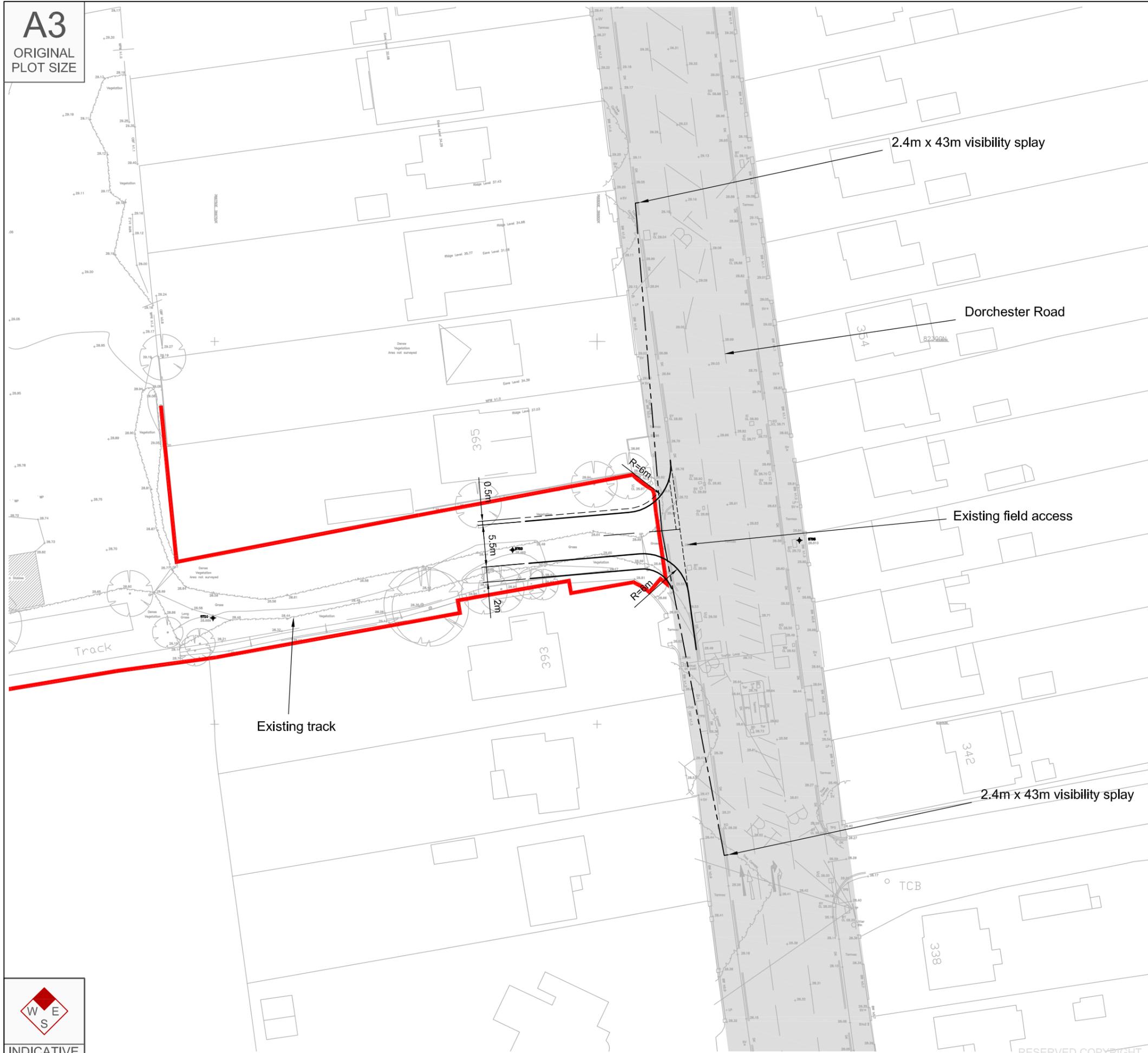
SCALE: 1:500	DATE: 14.06.13	DRAWN: PSW	CHECKED: AHJ	APPROVED: CMR
JOB NO: 1211-66		DRAWING NO: Figure 5.1		REVISION:



RESERVED COPYRIGHT

A3

ORIGINAL
PLOT SIZE



Reproduced from Ordnance Survey Superplan Data with the permission of The Controller of Her Majesty's Stationery Office. Crown Copyright - Licence No. AL100034021

NOTES:

1. Extent of adopted highway has been taken from a 1:1500 scale highway record plan received from Dorset County Council on 23rd November 2012 and is based on Ordnance Survey data.
2. This drawing is based upon Lewis Brown Chartered Land Surveyors topographical survey drawing number U13002_SX received on 13th March 2013.

KEY

- Approximate site boundary (based on Ordnance Survey data)
- Approximate extent of adopted highway maintainable at public expense by Dorset County Council

Rev	Date	Details	Drawn by	Checked by	Approved by
-	-	-	-	-	-

Bristol
Cambridge
Cardiff
London
Welwyn Garden City



21 Berkeley Square
Clifton
Bristol
BS8 1HP
0117 925 9400
www.tpa.uk.com

CLIENT:

C.G. FRY & SON LTD

PROJECT:

**NOTTINGTON LANE,
WEYMOUTH**

TITLE:

**Proposed Site Access
At Dorchester Road**

STATUS:

PRELIMINARY

SCALE: 1:500	DATE: 14.06.13	DRAWN: PSW	CHECKED: AHJ	APPROVED: CMR
JOB NO: 1211-66		DRAWING NO: Figure 5.2		REVISION:



INDICATIVE

RESERVED COPYRIGHT