Epping Forest Local Plan

Examination Hearing Statement

Appendices

Matter 15 – Places and Sites

Prepared by Strutt & Parker on behalf of City & Country (Stakeholder ID 19LAD0020)

April 2019

Appendix A – West Ongar Illustrative masterplan

Appendix B – Pre-Application Accessibility Note prepared by Vectos

Appendix C – Proposed Site Access Review prepared by Vectos

Appendix D – Arboricultural Assessment prepared by Oakfield Arboricultural Services

Appendix E – Supplementary representations on Epping Forest District Local Plan Submission Document (Regulation 19) – Response to additional Site Assessment work

Appendix A – West Ongar Illustrative masterplan

N

Key:

- Site Boundary
- Spine Road (Primary Access Road)
- Site Entrance
- Residential development area
- Landscape Buffer
- Public Open Space
- Proposed Trees
- TPO Trees
- TPO Trees Removed
- Existing Footpath
- Foot / Cycle Path Link

0 50 100 metre

Project:-
Bowes Land,
West Ongar,
Essex

Description:-
West Ongar Illustrative Masterplan (Update)

CITY & COUNTRY

Scale:- 1-1000 @ A1

Date:- Apr 2019

Drg no:- CC007-PL-003

Revision:- B

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Appendix B – Pre-Application Accessibility Note prepared by Vectos

High Street, Ongar

Pre-Application Accessibility Note

15th September 2017

162394/N06

Introduction

1. Vectos has been commissioned by City & Country to provide initial feasibility advice for a potential development site to the west of High Street in Ongar, Essex. City & Country recently promoted the site for residential development through the Epping Forest DC Local Plan process and the site is now allocated for 135 homes in the Draft Local Plan.

2. This note summarises the potential strategy for providing vehicle access to the site, which is considered to provide safe access into the site in accordance with design standards. Vectos has undertaken pre-application scoping discussions with Essex County Council (ECC) and has attended a meeting on 17th August to discuss the approach to the planning application. This note and the proposed access arrangement reflects the outcome of these discussions.

3. It should be noted that initial investigations into the quantum of development that could be provided on the site has shown that it could accommodate circa 135 dwellings. This should be taken into account when reviewing the proposed access for the site.

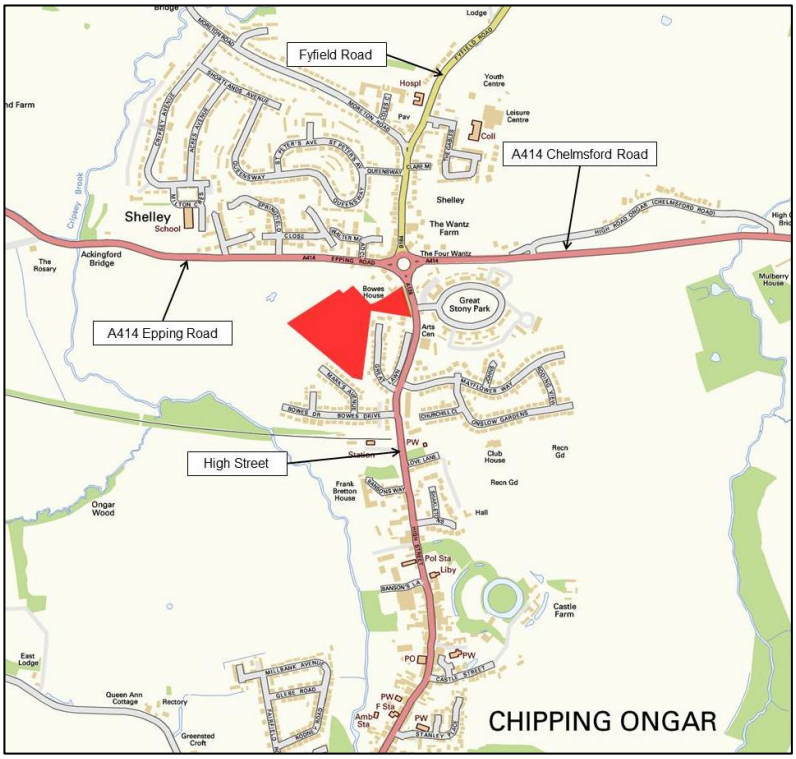
4. An initial trip generation exercise based on the provision of circa 135 dwellings has shown that the development could generate approximately 62 two-way vehicle trips in the AM peak hour and 66 two-way vehicle trips during the PM peak hour. This represents an average of circa one vehicle every minute.

5. The proposed site access will subsequently be tested against the proposed development flows using junction modelling, in order to demonstrate that it can accommodate the proposed level of traffic. However, based on the preliminary trip generation assessment described above and a site visit, it is not considered that there would be any issues associated with capacity at the proposed site access.

Site Location

6. The site is to the west of High Street in Ongar and immediately to the south of the roundabout of A414 Epping Road/High Street, which is referred to as the Four Wantz roundabout. A plan showing the location of the site in the context of the local highway network is included below at **Figure 1**.

Figure 1: Site Location



Vehicle Access

7. When considering vehicular access to the site, Vectos has taken into account the proximity of the northbound bus stop on High Street. It has been identified following a site visit that existing visibility at the potential access may be affected by hedging, as exemplified in **Figure 2** and **Figure 3**. This is within the land ownership of the developer and would be cut back or removed to enhance visibility.

Figure 2: Visibility on High Street: View Southbound

Figure 3: Visibility on High Street: View Northbound

Proposed Vehicle Access onto High Street

8. The proposed vehicle access, shown at **Drawing 162394/A/01 Rev B**, will create a priority junction at the location of the existing northbound bus stop outside the site boundary. This is the preferred option for accessing the site by ECC, as determined at the pre-application meeting.

9. It is noted that the next northbound bus stop on High Street is located approximately 400m south of the site. It is therefore noted that the bus stop would need to be relocated in the close proximity of the existing bus stop in order to maintain the bus stop spacing. **Drawing 162394/A/01 Rev B** shows the northbound bus stop relocated just to the south of the proposed site access. It is proposed to provide the bus stop on the carriageway in order to provide greater priority to buses.

10. Implementation of this junction would also include a right turn ghost island on the major arm to allow traffic to pass vehicles waiting to turn into the site.

11. The site access is designed to Manual for Streets standards and also takes into account the standards contained within the Essex Design Guide. Appropriate left and right hand visibility for the design speed of the major arm is also achieved.

Trip Generation

12. An initial trip generation assessment has been undertaken, in order to estimate how many additional vehicle trips the proposed development could generate.

13. Trip rates have been derived from the TRICS database for the land use 'Houses Privately Owned.' Only weekday surveys and sites in suburban locations of less than 300 units were included in the selection.

14. The vehicle trip rates and resultant vehicle trips generated by the proposed 135 unit development are summarised in **Table 1** below.

Table 1: Residential Vehicle Trip Rates and Trips

	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Arr	**Dep**	**Tot**	**Arr**	**Dep**	**Tot**
Vehicle Trip Rate	0.102	0.356	0.458	0.318	0.169	0.487
Vehicle Trips	14	48	62	43	23	66

15. The results above show that the proposed development could generate around 62 two-way vehicle movements in the AM peak hour and 66 in the PM peak hour. This equates to around one vehicle movement every minute, which is not considered to be significant in the context of the local highway network.

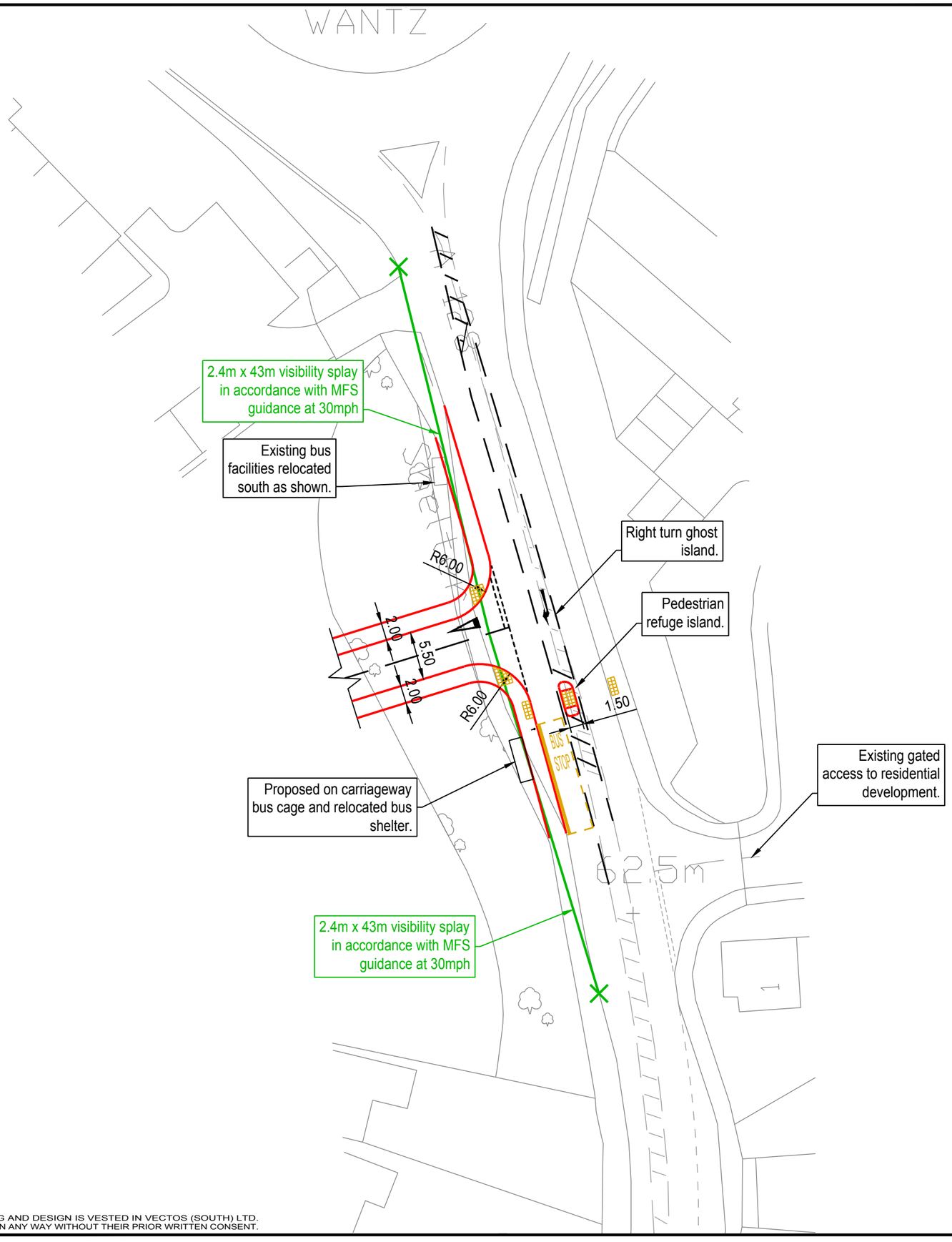
Summary

16. This note has been prepared following a pre-application meeting with ECC to discuss the proposed development of a site west of High Street, Ongar and the potential options for providing vehicular access to the site. Discussions with ECC resulted in a preferred option being chosen, which is summarised in this note.

17. The proposed access, shown at **Drawing 162394/A/01 Rev B** will create a priority junction at the location of the existing northbound bus stop outside the site boundary. A right turn ghost island on the major arm would be provided to allow traffic to pass vehicles waiting to turn into the site and the existing bus stop would be relocated. The bus stop would be reprovided immediately to the south of the proposed site access junction, therefore retaining circa 400m spacing between stops.

18. This option has been designed according to Manual for Streets and standards contained within the Essex Design Guide. Going forward, this access option would be tested using junction modelling software, to confirm that it can accommodate the anticipated level of traffic generated by the proposed development.

DRAWINGS



Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

REV.	DETAILS	DRAWN	CHECKED	DATE
C	Ped. refuge island and tactile paving.	TF	KM	25.09.2017
B	Bus lay-by removed, dims added.	TF	GS	15.09.2017
A	Bus lay-by added.	TF	KM	08.08.2016

CLIENT:

City & County Residential

PROJECT:

Great Bentley, St Osyth & Ongar

DRAWING TITLE:

Proposed Access
Ongar
Option 1

SCALES:

1:500 at A3

DRAWN:	CHECKED:	DATE:
TF	KM	19.07.2016

vectos
transport planning specialists

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DRAWING NUMBER: 162394/A/01

REVISION: C

TRICS Output

Calculation Reference: AUDIT-152301-160721-0716

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
03	SOUTH WEST		
	DV	DEVON	3 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
Actual Range: 9 to 116 (units:)
Range Selected by User: 6 to 4334 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 12/11/15

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	2 days
Wednesday	2 days
Thursday	1 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:
Suburban Area (PPS6 Out of Centre) 10

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:
Residential Zone 10

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C3	9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

1.1 to 1.5	10 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	10 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CA-03-A-04 DETACHED CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

2 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

3 DV-03-A-01 TERRACED HOUSES DEVON
BRONSHILL ROAD

TORQUAY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 37
Survey date: WEDNESDAY 30/09/15 Survey Type: MANUAL

4 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD

HONITON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 116
Survey date: FRIDAY 25/09/15 Survey Type: MANUAL

5 DV-03-A-03 TERRACED & SEMI DETACHED DEVON
LOWER BRAND LANE

HONITON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 70
Survey date: MONDAY 28/09/15 Survey Type: MANUAL

6 HC-03-A-17 HOUSES & FLATS HAMPSHIRE
CANADA WAY

LIPHOOK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: THURSDAY 12/11/15 Survey Type: MANUAL

7 NF-03-A-02 HOUSES & FLATS NORFOLK
DEREHAM ROAD

NORWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY 22/10/12 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

9 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: MONDAY 16/09/13 Survey Type: MANUAL

10 SY-03-A-01 SEMI DETACHED HOUSES SOUTH YORKSHIRE
A19 BENTLEY ROAD
BENTLEY RISE
DONCASTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 54
Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	60	0.057	10	60	0.232	10	60	0.289
08:00 - 09:00	10	60	0.102	10	60	0.356	10	60	0.458
09:00 - 10:00	10	60	0.157	10	60	0.149	10	60	0.306
10:00 - 11:00	10	60	0.152	10	60	0.166	10	60	0.318
11:00 - 12:00	10	60	0.139	10	60	0.127	10	60	0.266
12:00 - 13:00	10	60	0.162	10	60	0.156	10	60	0.318
13:00 - 14:00	10	60	0.152	10	60	0.159	10	60	0.311
14:00 - 15:00	10	60	0.132	10	60	0.161	10	60	0.293
15:00 - 16:00	10	60	0.202	10	60	0.117	10	60	0.319
16:00 - 17:00	10	60	0.231	10	60	0.154	10	60	0.385
17:00 - 18:00	10	60	0.318	10	60	0.169	10	60	0.487
18:00 - 19:00	10	60	0.182	10	60	0.135	10	60	0.317
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.986			2.081			4.067

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	9 - 116 (units:)
Survey date date range:	01/01/10 - 12/11/15
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	60	0.000	10	60	0.000	10	60	0.000
08:00 - 09:00	10	60	0.003	10	60	0.003	10	60	0.006
09:00 - 10:00	10	60	0.005	10	60	0.003	10	60	0.008
10:00 - 11:00	10	60	0.003	10	60	0.003	10	60	0.006
11:00 - 12:00	10	60	0.000	10	60	0.000	10	60	0.000
12:00 - 13:00	10	60	0.000	10	60	0.000	10	60	0.000
13:00 - 14:00	10	60	0.000	10	60	0.000	10	60	0.000
14:00 - 15:00	10	60	0.002	10	60	0.002	10	60	0.004
15:00 - 16:00	10	60	0.002	10	60	0.000	10	60	0.002
16:00 - 17:00	10	60	0.002	10	60	0.005	10	60	0.007
17:00 - 18:00	10	60	0.002	10	60	0.002	10	60	0.004
18:00 - 19:00	10	60	0.000	10	60	0.000	10	60	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.018			0.037

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	9 - 116 (units:)
Survey date date range:	01/01/10 - 12/11/15
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	60	0.000	10	60	0.000	10	60	0.000
08:00 - 09:00	10	60	0.002	10	60	0.002	10	60	0.004
09:00 - 10:00	10	60	0.002	10	60	0.002	10	60	0.004
10:00 - 11:00	10	60	0.003	10	60	0.000	10	60	0.003
11:00 - 12:00	10	60	0.005	10	60	0.003	10	60	0.008
12:00 - 13:00	10	60	0.000	10	60	0.002	10	60	0.002
13:00 - 14:00	10	60	0.002	10	60	0.002	10	60	0.004
14:00 - 15:00	10	60	0.002	10	60	0.003	10	60	0.005
15:00 - 16:00	10	60	0.002	10	60	0.003	10	60	0.005
16:00 - 17:00	10	60	0.000	10	60	0.000	10	60	0.000
17:00 - 18:00	10	60	0.002	10	60	0.002	10	60	0.004
18:00 - 19:00	10	60	0.000	10	60	0.000	10	60	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.020			0.019			0.039

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	9 - 116 (units:)
Survey date date range:	01/01/10 - 12/11/15
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	60	0.000	10	60	0.000	10	60	0.000
08:00 - 09:00	10	60	0.000	10	60	0.000	10	60	0.000
09:00 - 10:00	10	60	0.000	10	60	0.000	10	60	0.000
10:00 - 11:00	10	60	0.000	10	60	0.000	10	60	0.000
11:00 - 12:00	10	60	0.000	10	60	0.000	10	60	0.000
12:00 - 13:00	10	60	0.000	10	60	0.000	10	60	0.000
13:00 - 14:00	10	60	0.000	10	60	0.000	10	60	0.000
14:00 - 15:00	10	60	0.000	10	60	0.000	10	60	0.000
15:00 - 16:00	10	60	0.000	10	60	0.000	10	60	0.000
16:00 - 17:00	10	60	0.000	10	60	0.000	10	60	0.000
17:00 - 18:00	10	60	0.000	10	60	0.000	10	60	0.000
18:00 - 19:00	10	60	0.000	10	60	0.000	10	60	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	9 - 116 (units:)
Survey date date range:	01/01/10 - 12/11/15
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	60	0.002	10	60	0.030	10	60	0.032
08:00 - 09:00	10	60	0.005	10	60	0.020	10	60	0.025
09:00 - 10:00	10	60	0.002	10	60	0.008	10	60	0.010
10:00 - 11:00	10	60	0.005	10	60	0.007	10	60	0.012
11:00 - 12:00	10	60	0.003	10	60	0.005	10	60	0.008
12:00 - 13:00	10	60	0.007	10	60	0.008	10	60	0.015
13:00 - 14:00	10	60	0.007	10	60	0.002	10	60	0.009
14:00 - 15:00	10	60	0.003	10	60	0.007	10	60	0.010
15:00 - 16:00	10	60	0.027	10	60	0.005	10	60	0.032
16:00 - 17:00	10	60	0.017	10	60	0.005	10	60	0.022
17:00 - 18:00	10	60	0.025	10	60	0.010	10	60	0.035
18:00 - 19:00	10	60	0.012	10	60	0.007	10	60	0.019
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.115			0.114			0.229

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	9 - 116 (units:)
Survey date date range:	01/01/10 - 12/11/15
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix C – Proposed Site Access Review prepared by Vectos

Land West of High Street, Ongar

Proposed Site Access Review

25th April 2019

162394/N08

1. Vectos is retained by City & Country to provide transport advice for a potential development site to the west of High Street in Ongar, Essex. City & Country is promoting the site for residential development through the Epping Forest DC Local Plan process and the site is now allocated for approximately 135 homes in the Draft Local Plan (ONG.R2). A neighbouring site (ONG.R1), located to the northwest, is also allocated for approximately 99 homes.

2. This Note has been prepared to describe the currently proposed vehicle access and to comment on its suitability to accommodate traffic generated by both sites.

Vehicle Access Design

3. It is proposed that vehicle access will be provided via the High Street, which forms eastern boundary of the site, as shown below in **Figure 1**. A plan showing the proposed site access is included at **Appendix A.**

Figure 1: Site & Access Location

4. The proposed vehicle access will create a priority junction at the location of the existing northbound bus stop outside the site boundary. This option for accessing the site was preferred by Essex County Council, as determined at a pre-application meeting held on 17th August 2017.

5. The northbound bus stop will be relocated in close proximity of its current location to maintain the bus stop spacing. It is proposed to provide the bus stop on the carriageway in order to provide greater priority to buses.

6. Implementation of this junction would also include a right turn ghost island on the major arm to allow traffic to pass vehicles waiting to turn into the site. The right-turn lane as it is currently proposed provides a usable length of approximately 35m and can therefore accommodate 5-8 passenger car units (pcus) before queueing would affect the mainline traffic flows. This is based on a robust pcu measurement of 6.0m, to account for spacing between queued vehicles.

7. The site access is designed to Manual for Streets standards and also takes into account the standards contained within the Essex Design Guide. Appropriate left- and right-hand visibility for the design speed of the major arm is also achieved.

Capacity Assessment

8. A trip generation assessment was undertaken in September 2017 as part of initial feasibility work, in order to estimate how many additional vehicle trips the proposed development could generate.

9. Trip rates were derived from the TRICS database for the land use 'Houses Privately Owned.' Only weekday surveys and sites in suburban locations of less than 300 units were included in the selection.

10. The vehicle trip rates and resultant vehicle trips generated by the proposed 135-unit development and the total 235 units provided by both sites are summarised in **Table 1** below.

Table 1: Vehicle Trip Rates & Trip Generation

	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Arr	**Dep**	**Total**	**Arr**	**Dep**	**Total**
Vehicle Trip Rates	0.102	0.356	0.458	0.318	0.169	0.487
Vehicle Trips (135 Units)	14	48	62	43	23	66
Vehicle Trips (234 Units)	24	84	108	75	40	115

11. The results above show that the proposed development (135 units) could generate around 62 two-way vehicle movements in the AM peak hour and 66 in the PM peak hour. This equates to around one vehicle movement every minute, which is not considered to represent a material change in traffic flows at that location. If the site access were to be used by both sites (234 units) the anticipated two-way vehicle movements increase to 108 in the

AM peak hour and 115 in the PM peak hour and therefore up to around 2 vehicle movements per minute.

12. Based on our experience of designing and testing new residential accesses, it is considered unlikely that the proposed site access will experience any capacity-related issues. The provision of a right-turning lane will assist in reducing potential queueing back along the High Street to the B164 Fyfield Road / Chelmsford Road roundabout.

13. It should be noted however, that the capacity of the access junction cannot be confirmed until junction modelling is undertaken. This will require Automatic Traffic Count (ATC) surveys to be undertaken to determine existing traffic flows along High Street within the vicinity of the site. This survey data would subsequently be used to inform the junction modelling.

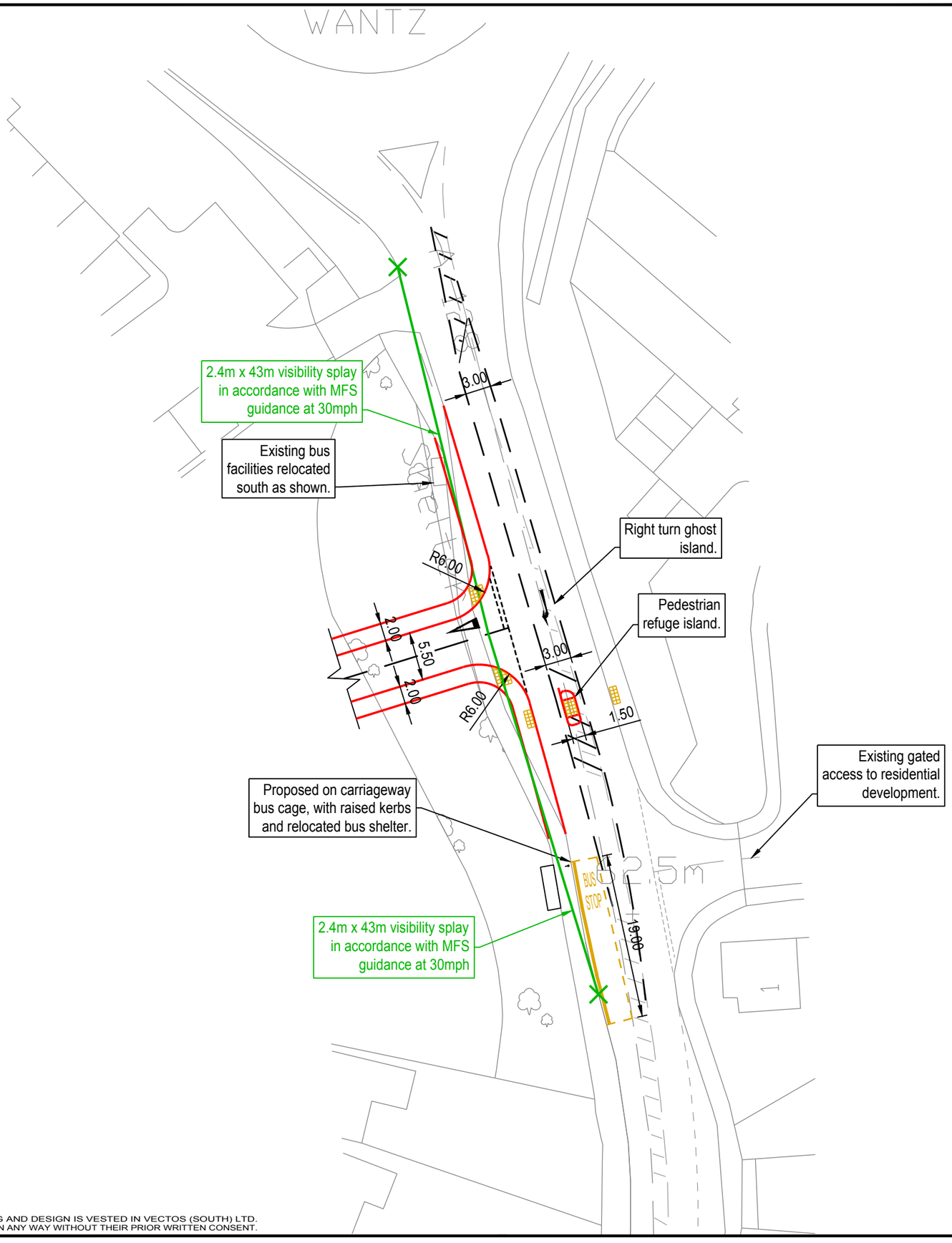
Summary

14. Vectos is retained by City & Country to provide transport advice for a potential development site to the west of High Street in Ongar, Essex. This Note has been prepared to assess the suitability of the proposed site access to accommodate the traffic generated by the development site and a neighbouring site. In total, up to 234 homes could be provided across both.

15. Following a trip generation assessment it was estimated that both sites could generate up to 115 two-way vehicle movements in the PM peak hour, equating to circa two vehicle movements per minute.

16. Based on our experience of designing and testing new residential accesses, it is considered unlikely that the proposed site access will experience any capacity-related issues. However, that the capacity of the access junction cannot be confirmed until junction modelling is undertaken.

APPENDIX A



Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

REV.	DETAILS	DRAWN	CHECKED	DATE
E	Position of ped. refuge island and tactile paving altered.	KB	KM	25.09.2017
D	Updated to suit ECC comments.	TF	KM	17.01.2018
C	Ped. refuge island and tactile paving.	TF	KM	25.09.2017
B	Bus lay-by removed, dims added.	TF	GS	15.09.2017
A	Bus lay-by added.	TF	KM	08.08.2016

CLIENT:
City & County Residential

PROJECT:
Great Bentley, St Osyth & Ongar

DRAWING TITLE:
Proposed Access
Ongar
Option 1

SCALES:
1:500 at A3

DRAWN:	CHECKED:	DATE:
TF	KM	19.07.2016

vectos
transport planning specialists
Network Building, 97 Tottenham Court Road, London W1T 4TP
t: 020 7580 7373 e: enquiries@vectos.co.uk

DRAWING NUMBER: 162394/A/01
REVISION: E

Appendix D – Arboricultural Assessment prepared by Oakfield Arboricultural Services

Arboricultural Appraisal

Land at Bowes Field, Ongar

March 2018
OAS/187-024/AR01
Stephen Milligan
info@oakfieldarb.co.uk
Tel: 01379 674711

Contents

Section 1 : Introduction

1.1 Oakfield Arboricultural Services Ltd were instructed by City & Country on to undertake an arboricultural appraisal on land known as Bowes Field in Ongar Essex.

1.2 The aim is to collect arboricultural constraints information that may exist on the site with regards to a proposed residential development of the site.

1.3 Where appropriate recommendations for tree works or removals will be made in order to facilitate the proposed redevelopment or to improve the overall condition of trees and abide by any legal ' Duty of Care' obligations that may exist.

Tree Survey

1.4 The survey was carried out in March 2018 in fair weather conditions and was carried out in accordance with BS 5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'

1.5 In accordance with the BS:5837 recommendations, the survey will include all trees within the site that are 75mm in diameter at 1.5m, the survey may also include trees adjacent to the site up to a distance of 15m from the site boundary that may be affected by the proposed development. Trees may be represented individually or as part of larger groups and will be clearly marked on any provided plans.

1.6 The survey will include the following data:

- Tree/ Group number
- Species
- Height
- Branch spread in meters at the four cardinal points (individual trees only)
- Crown clearance in meters
- Diameter at 1.5m in mm
- Age class
- General condition
- Comments on structural condition
- Estimated remaining contribution in years
- Category
- Sub category
- Work recommendations

Further clarification is given within the survey explanatory notes in Appendix 1

Tree Categorisation

1.7 The purpose of the tree categorisation method is to help identify the overall quality and value, in a non-fiscal sense, of the existing trees stock so as to allow an informed decision to be made concerning which trees should either be retained or removed in the context of the proposed development. To qualify a tree must fall into one of the four categories A, B, C and U. Categories A, B and C are trees ranging from high to low quality with category U being trees of poor overall value. Further sub categories reflect arboricultural, 1, landscape, 2, or cultural values, 3; all carry the same weight and a tree can have more than one criterion.

- Category A - Trees of high quality and value that they are considered particularly good examples of their species and or essential components of groups such as dominant trees within avenues. Trees will have a minimum of 40 years life expectancy.

- Category B - Trees of moderate quality that may have been category A but have been downgraded due to impaired features such as significant remedial defects or poor past management that make their retention unsuitable beyond 40 years. Trees will have a minimum of 20 years life expectancy

- Category C - Trees of low quality that are unremarkable and have limited merit or such impaired condition they do not qualify for higher categories. Tree will have minimum of 10 years life expectancy

- Category U - Trees of poor quality and are in such condition they have less than 10 years useful life expectancy. Trees in this category are generally recommended for removal regardless of any proposals.

Preliminary Management Recommendations

1.8 Any recommendations made for management of the trees are preliminary only and are not to be considered a detailed work specification, this is of particular note if tree works must be applied for via the relevant local council due to presence of tree preservation orders or by location are within a conservation area.

1.9 All work recommendations recommended are done so on the basis they are carried out by qualified contractors and will be carried out in accordance as per the recommendation set out in BS:3998 'Recommendations for Tree Works'.

Limitations

1.10 This is a preliminary assessment from ground level and observations have been made solely from a visual perspective for the purposes of assessment in terms relevant to planning and development. No invasive or other detailed internal decay detection devices have been used in assessing internal conditions.

1.11 Any conclusions relate to conditions found at the time of inspection. Any significant alteration to the site that may affect the trees that are present or have a bearing on planning implications (including level changes, hydrological changes, extreme

climatic events or other site works) will necessitate a re-assessment of the trees and the site and render any previous advice/ findings invalid.

1.12 It must be noted this is not a health and safety risk assessment and should not be viewed as such. The survey carried out will assess general health however it may not have been appropriate or possible to view all parts of the tree so as to fulfil the criterion of a health and safety risk assessment.

1.13 This is an arboricultural report and no such reliance must be given to comments relating to buildings, engineering, soil or ecological issues, in particular this is not a survey to comment of the effects of trees with regards to subsidence or heave.

1.14 All measurements are metric and approximate.

1.15 Any lack of comments regarding recommended work does not imply that tree poses no level of risk and similarly it should not be implied that a tree will present an acceptable level of risk if any such recommended works are carried out. Trees are living things and exposed to extreme forces and other fungal or bacteria attack that are not necessarily visible to the naked eye and as such no tree should ever be viewed as safe. It is recommended that trees by regularly surveyed to ensure that any risk is limited as much as is practically possible.

Section 2 : Survey Findings

Site description

2.1 The site is a parcel of grazing land located to the west of High Street and south of Epping Road in Ongar. No existing structures exist on the land and currently is used for equine use. Access is gained via the private dwellings to the north east of the site.

2.2 The site is bounded by residential dwellings on the north, north east, southern and south western boundaries with the High Street to the east and agricultural fields to the west.

Tree Preservation Orders

2.3 A desk top search on Epping Forest Council provides no information on Tree Preservation Orders that may be present on site. To find this information you are required to contact the council directly via phone or email.

2.4 The site does not sit within the boundary of a conservation area.

Species Composition

2.5 The species on and adjacent to the site were dominated by Sycamore, Oak, Horse Chestnut, Lime and Hawthorn a full list of species found within the site are as follows:

- Sycamore - *Acer pseudoplatanus*
- Oak English/ Turkey - *Quercus sp.*
- Lime - *Tilia sp.*
- Hawthorn - *Crataegus monogyna*
- Horse Chestnut - *Aesculus hippocastunum*
- Ash - *Fraxinus excelsior*
- False Acacia - *Robinia pseudoacacia*
- Willow Goat - *Salix sp.*
- Holly - *Ilex aquifolium*
- Silver Birch - *Betula pendula*
- Norway Maple - *Acer platanoides*
- Cherry Plum - *Prunus sp.*
- Laurel - *Lauris noblis*
- Laburnum - *Laburnum sp.*
- Leyland Cypress - *Chamaecyparis sp.*
- Blackthorn - *Prunus spinosa*
-

Tree Discussion

2.6 The surveyed vegetation was in general of native species and typical of an agricultural type landscape with vegetation found for the most part to field boundaries. For the most part management is limited with works only assumed to be carried out on an as and when basis. The only exception would be vegetation bounding High Street where more regular required works have likely been undertaken.

2.7 Overall condition of trees is generally fair with a couple of significantly damaged trees requiring works in the immediate future, T21 semi collapsed and 1 x stem close to T26 that has been windblown.

Age Class

2.8 The sites vegetation would be generally classed as mature with little to no emerging saplings or semi mature trees. A few self set trees may be found to the western vegetation boundary but given lack of formal pruning are unlikely to produce good specimens.

Category Grading

2.9 Of the vegetation recorded within the site there is a percentage split between the following categories

- Category B 41.5% - 22 individuals or groups - retention highly desirable
- Category C 54.5% - 29 individuals or groups - retention desirable
- Category U 4% - 2 individuals - remove on arboricultural grounds

Section 3: Preliminary Work Recommendations

Management Recommendations

3.1 It is clear that the sites vegetation has not undergone any major management over the years except for any necessary works required as part of any formal requests or clearance of failed stems.

3.2 At present it is recommended T21 be removed and that a fallen stem in the vicinity of T26 also be removed or felled to ground to make safe.

Section 4 : Development Implications

Proposal

3.3 A fixed development layout is not available as yet and therefore cannot be assessed as part of this report and should not therefore be viewed as a full implications assessment (AIA) ; however the following observations can be made:

- The site in general has limited overall tree constraints for the main part of the site and it is anticipated that any design can work around the trees located here and retain them within any design.
- Trees located to the east boundary and The High Street are the main constraints, it has been indicated this is where the access will come from. This has potential to affect numerous trees and its overall suitable location will depend upon the required location of the access and required highway considerations.
- Services would be recommended to be brought in via any access road to limit further loss of the eastern boundary vegetation.

- Shading is not a significant constraint but some consideration of T10- T12 and their respective shade arc should be taken into account and not position any buildings within these arcs.

3.4 Overall the main site has low arboricultural constraints and it is anticipated that the majority of the vegetation can be retained.

3.5 The eastern boundary will bring the main constraint and tree loss will depend on exact layout of the new access point. However it is assured that good quality trees, Category B, will be lost and therefore significant mitigation in the form of replacement planting will be needed as a minimum. It would be expected that the local authority tree officer would comment and possibly offers some resistance within this area

Recommendations

3.6 A formal implications assessment should be undertaken once a fixed layout is produced to inform any detailed design proposal for planning purposes on any tree issues. This should advise on any specialist construction detail required to aid tree protection and may include but not limited to foundation design, general construction activities, boundary treatments, tree protection and landscape proposals.

3.7 A method statement should also be produced to outline a methodical construction process and outline any tree protection methods that are to be utilised throughout the construction process as well as giving specific information on construction materials to be used, tree works, location of tree protection fencing, areas of hard landscaping that may affect the healthy retention of trees. This should be in conjunction with a tree protection plan showing the above in visible format.

Appendix 1 Tree Survey Schedule

			Canopy Spread													
Tree Ref. No.	Species (Common Name)	Height (m)	N	E	S	W	Grnd Clrnc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
T1	Sycamore	8	3	3	3	3	1	200	240	18.09	MA	F	Of no significance 2 x stems	20+	C	1	
T2	Holly	6	2	2	2	2	0	200	240	18.09	MA	F	Of no significance	20+	C	1	
T3	Sycamore	8	3	3	3	3	1	200	240	18.09	MA	F	Of no significance. 2 x Stems	20+	C	1	
T4	Horse Chestnut	14	5	4	6	4	2	700	840	221.56	MA	F	Offsite. No access	20+	B	1	
T5	Horse Chestnut	13	5	4	5	5	1	750	900	254.34	MA	F	Offsite. No access	20+	B	1	
T6	Hawthorn	6	2	2	2	2	1	250	300	28.26	MA	F	Of no significance	20+	C	1	
T7	Horse Chestnut	16	6	6	5	5	2	900	1080	366.25	MA	F	Fair condition. Historic lost limb with exposed heartwood	20+	B	1	

			Canopy Spread														
Tree Ref. No.	Species (Common Name)	Height (m)	N	E	S	W	Grnd Clrnc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
T8	Lime	13	4	4	4	4	3	500	600	113.04	MA	F	Normal form and condition	40+	B	1	
T9	Silver Birch	6	3	2	2	3	1	200	240	18.09	MA	F	Offsite. No access	20+	C	1	
T10	Oak	20	7	7	4	7	1	900	1080	366.25	MA	F	Normal form and condition	40+	B	1, 2	
T11	Oak	20	4	6	7	7	1	850	1020	326.69	MA	F	Heavy ivy to stem. Major deadwood	20+	B	2	
T12	Oak	18	4	7	8	7	2	1100	1320	547.11	MA	F	Topped in past.	20+	B	2	
T13	Oak	12	4	6	4	4	1	600	720	162.78	MA	F	Heavy ivy to stem.	20+	C	1	
T14	Hawthorn	4	2	2	2	2	1	200	240	18.09	MA	F	Offsite. No access	20+	C	1	
T15	Silver Birch	9	2	3	2	3	1	250	300	28.26	MA	F	Offsite. No access	20+	C	1	
T16	Hawthorn	4	2	2	2	2	1	200	240	18.09	MA	F	Topped. Offsite no access	20+	C	1	

			Canopy Spread														
Tree Ref. No.	Species (Common Name)	Height (m)	N	E	S	W	Grnd Clrnc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
T17	Sorbus	4	2	2	2	2	1	200	240	18.09	MA	F	Offsite. No access	20+	C	1	
T18	Laburnum	4	2	2	2	2	1	200	240	18.09	MA	F	Offsite. No access	20+	C	1	
T19	Cherry	6	2	3	2	2	1	200	240	18.09	MA	F	Offsite. No access	20+	C	1	
T20	Horse Chestnut	14	3	3	4	3	2	500	600	113.04	MA	F	Normal form and condition	20+	B	1	
T21	Sycamore	16	4	1	0	2	0	800	960	289.38	MA	F	Multi-stemmed. One main leader collapsed major heartwood exposure.	<10	U	1	Remove possibly unstable
T22	Robinia	7	3	2	3	2	1	250	300	28.26	MA	F	Poor form and condition	<10	U	1	Remove
T23	Ash	20	5	5	4	3	10	450	540	91.56	MA	F	Historic limb loss. Minor decay to wound areas	10+	C	1	Monitor for Ash dieback
T24	Holm Oak	11	3	3	3	2	1	350	420	55.39	MA	F	Fair condition. Suppressed by others	20+	B	1	
T25	Hawthorn	9	3	0	2	4	1	300	360	40.69	MA	F	Poor form	20+	C	1	

			Canopy Spread														
Tree Ref. No.	Species (Common Name)	Height (m)	N	E	S	W	Grnd Clrnc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
T26	Oak	20	5	9	4	7	2	850	1020	326.69	MA	F	Large tree with co dominant leaders with u shape union	20+	B	2	
T27	Robinia	13	3	4	3	3	2	450	540	91.56	MA	F	Normal form and condition	20+	B	1	
T28	Robinia	14	2	4	4	0	2	550	660	136.78	MA	F	Heavy ivy to stem. Leans towards highway	10+	C	1	
T29	Hawthorn	9	2	2	2	3	1	200	240	18.09	MA	F	X 2 stems. No significance	20+	C	1	
T30	Sycamore	18	4	4	5	7	9	520	624	122.26	MA	F	Minor helical feature to lower stem may signify internal issue/ crack.	10+	C	1	Internal investigation
T31	Sycamore	15	5	5	3	5	1	450	540	91.56	MA	F	Normal form and condition	20+	B	2	
T32	Robinia	15	2	3	2	3	11	400	480	72.35	MA	F	Poor condition	10+	C	1	
T33	Oak	10	4	2	4	4	1	250	300	28.26	MA	F	Poor form	20+	C	1	
T34	Cherry Plum	6	1	3	3	1	1	150	180	10.17	MA	F	Of no significance	10+	C	1	

			Canopy Spread														
Tree Ref. No.	Species (Common Name)	Height (m)	N	E	S	W	Grnd Clrnc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
T35	Hawthorn	9	1	2	3	2	0	300	360	40.69	MA	F	Normal form and condition	20+	B	1	
T36	Ash	17	7	3	3	6	1	700	840	221.56	MA	F	Co dominant leaders with tight union	10+	C	1	Monitor for Ash dieback
T37	Lime	15	3	4	3	2	2	500	600	113.04	MA	F	Normal form and condition	40+	B	1	
T38	Lime	11	2	3	2	3	0	250	300	28.26	MA	F	Minor decay to stem	10+	C	1	
T39	Sycamore	17	4	4	4	5	1	550	660	136.78	MA	F	Normal form and condition	20+	B	1	
T40	Lime	20	3	4	3	3	2	400	480	72.35	MA	F	Minor bark wound @ 4m with exposed heartwood.	20+	B	2	
T41	Lime	17	3	3	2	3	1	500	600	113.04	MA	F	Slender form	20+	B	1	
T42	Horse Chestnut	15	3	3	2	3	1	500	600	113.04	MA	F	Normal form and condition	20+	B	1	
T43	Sycamore	13	1	4	2	2	2	300	360	40.69	MA	F	Leans towards highway.	20+	C	1	

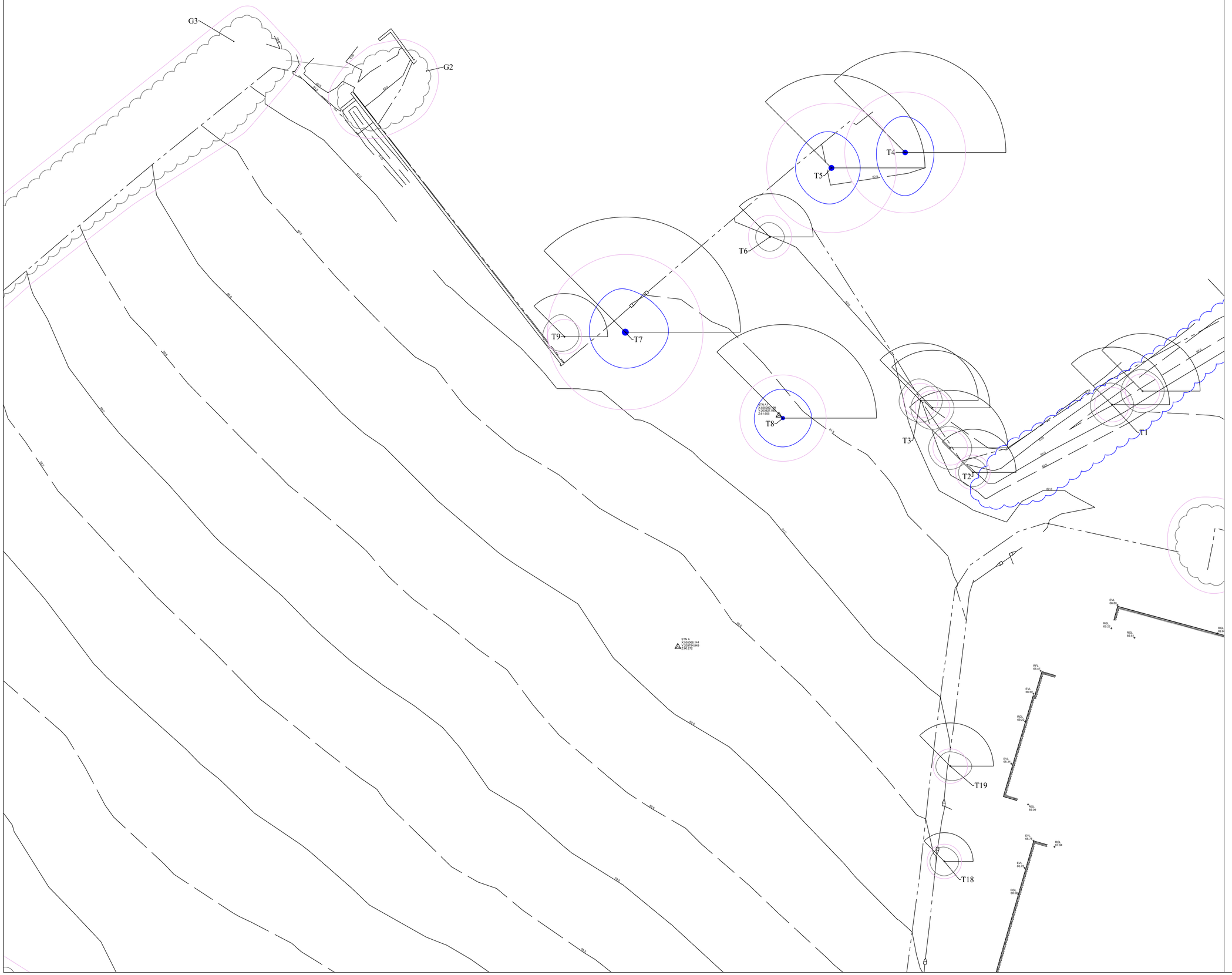
			Canopy Spread													
Tree Ref. No.	Species (Common Name)	Height (m)	N	E	S	W	Grnd Clrnc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
T44	Sycamore	18	4	6	3	3	8	500	600	113.04	MA	F	Normal form and condition	20+	B	1	
T45	Norway maple	14	3	4	3	3	2	400	480	72.35	MA	F	Normal form and condition	20+	B	1	
T46	Horse Chestnut	16	4	5	4	4	2	1200	1440	651.11	MA	F	Normal form and condition	20+	B	1	
G1	Laurel	7	As on plan				0	200	240	18.09	MA	F	Unmanaged boundary treatment. Screening value	20+	B	2	
G2	Leyland Cypress	14	As on plan				0	350	420	55.39	MA	F	Offsite. No access	20+	C	1	
G3	Hawthorn, Elder, Goat Willow, Blackthorn	6	As on plan				0	200	240	18.09	MA	F	Offsite	20+	C	1	
G4	Sycamore	7	As on plan				0	200	240	18.09	MA	F	Self set.	20+	C	1	
G5	Oak, Horse Chestnut	6	As on plan				0	200	240	18.09	MA	F	Self set small trees	40+	C	1	
G6	Leyland Cypress	12	As on plan				0	300	360	40.69	MA	F	Planted group of no significance	20+	C	2	

			Canopy Spread													
Tree Ref. No.	Species (Common Name)	Height (m)	N	E	S	W	Grnd Clrnc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
G7	Hawthorn	6	As on plan				0	200	240	18.09	MA	F	East boundary hedge/ group to High Street.	20+	C	3	

Tree Survey Explanatory Notes

- **Ref No**. Identifies trees, groups, hedgerows and woodlands on any accompanying plan
- **Species** Common Name are provided to give wider comprehension
- **Height** Tree height given in meters (approximate)
- **Canopy spread** Indicated crown spread at the four cardinal points North, East, South and West
- **Ground clearance** Height of ground clearance of the canopy from the ground
- **DBH (mm)** Diameter of stem measured at 1.5m from ground level.
- **RPR (cm)** Root protection radius. Distance to be protected measured radially from the centre of the stem
- **RPA (m^2)** Root protection area is the minimum root area which should remain undisturbed

- **Age Class** Age of tree expressed as Y- Young, EM - Early Mature, MA - Mature or OM - Over Mature
- **General Condition** Overall condition of tree expressed as Good, fair or poor
- **Comments** General comments as to structural defects or characteristics of the tree. Will include specific problems such as disease, deadwood, fungal bodies and pests
- **Estimated remaining years** Expressed in <10, 10+, 20+ and 40+ years
- **BS Category** Overall tree category A - High value, B moderate value, C low value, U poor value
- **Sub Category** Refers to retention category where 1 is arboricultural value, 2 landscape value, 3 cultural value. Trees may have more than one sub category



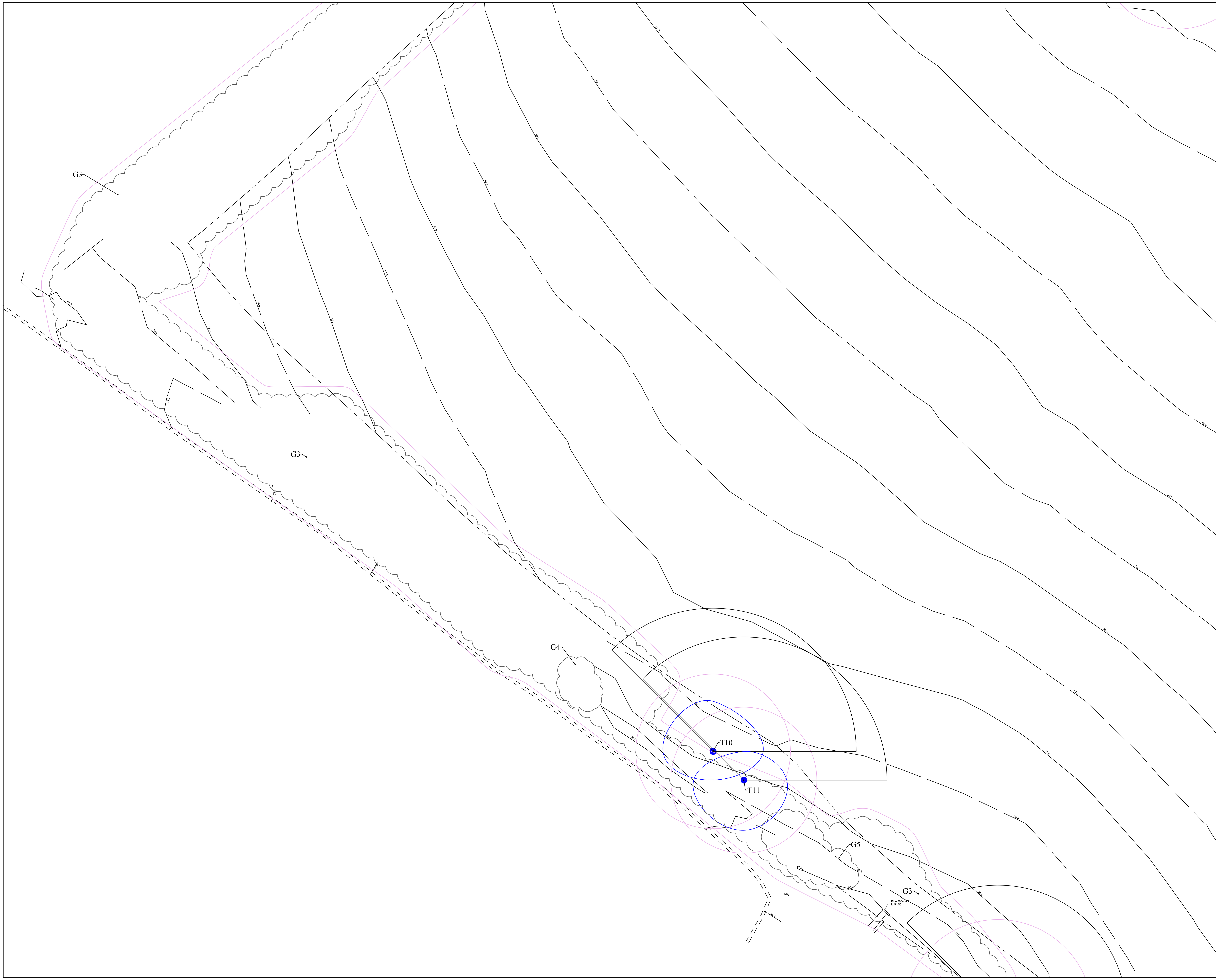
KEY

- T1 — Existing Tree colour referenced in accordance with BS 5837 2005.
- H1 — Existing hedge or group. colour coded as above in accordence with BS 5837.
- Blue – Cat B Trees of moderate quality and value
- Grey – Cat C Trees of low quality and value
- Red – Cat R Trees that are dead or showing signs of irreversible decline
- Root Protection Area as calculated in accordance with BS 5837 2005

N

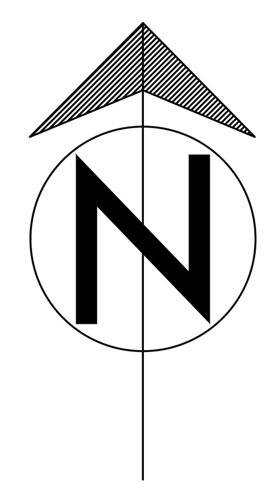
REV.	DATE	INITIALS	DETAILS
.	.	.	.

CLIENT City & Country				DWG. TITLE Tree Constraints Plan	
SITE: Bowes Field, Ongar					
DRAWN BY SPM	CHECKED BY SPM	SCALE 1:250 @A1	DATE March 2018	DWG NO. OAS 18-024-TS01	REV. -



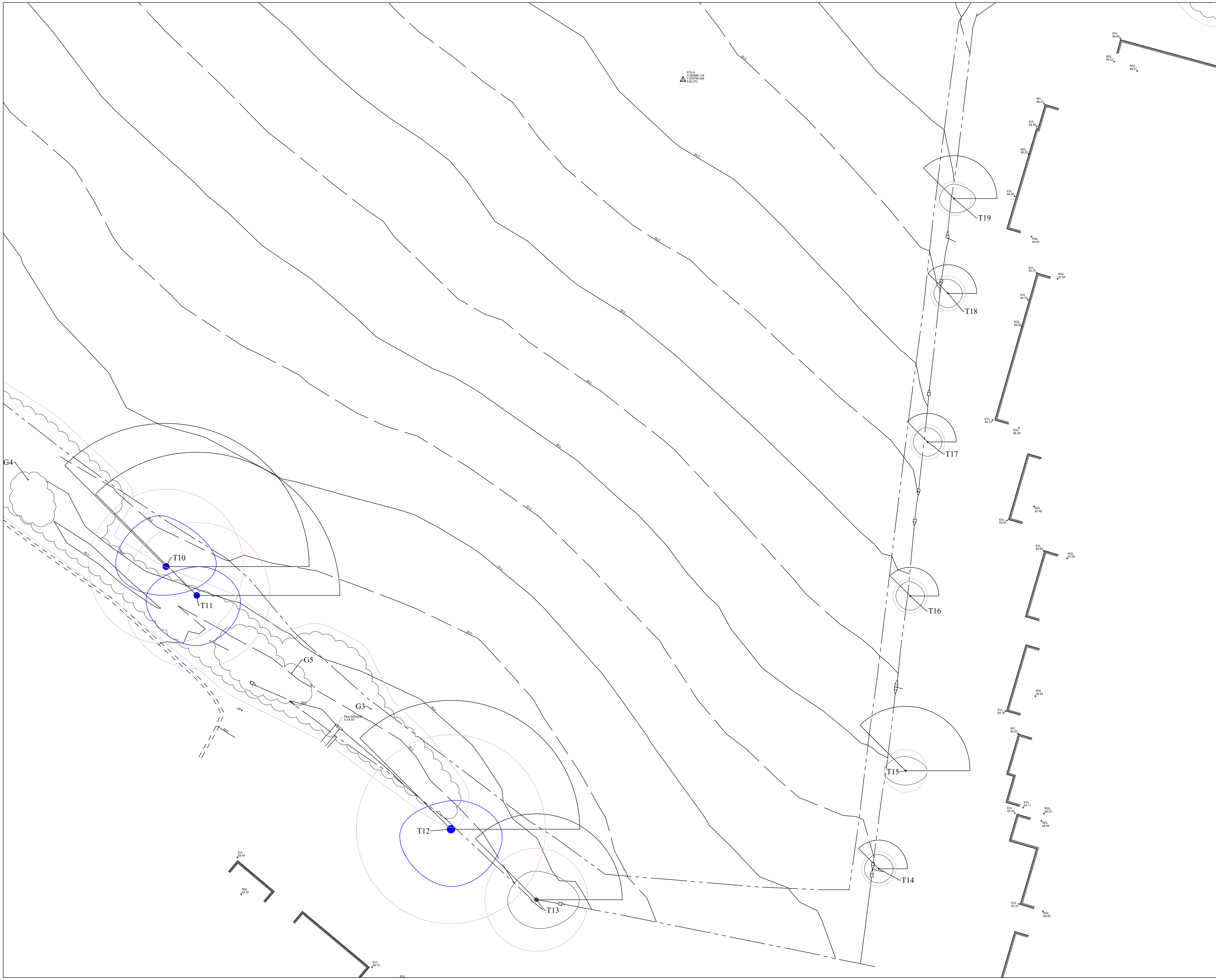
KEY

- Existing Tree colour referenced in accordance with BS 5837 2005.
- Existing hedge or group. colour coded as above in accordance with BS 5837.
- Blue – Cat B Trees of moderate quality and value
- Grey – Cat C Trees of low quality and value
- Red – Cat R Trees that are dead or showing signs of irreversible decline
- Root Protection Area as calculated in accordance with BS 5837 2005



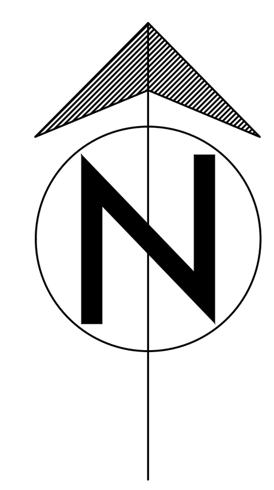
REV.	DATE	INITIALS	DETAILS
.	.	.	. .

CLIENT City & Country	DWG. TITLE Tree Constraints Plan				
SITE: Bowes Field, Ongar					
DRAWN BY SPM	CHECKED BY SPM	SCALE 1:250 @A1	DATE March 2018	DWG NO. OAS 18-024-TS02	REV. .



KEY

- Existing Tree colour referenced in accordance with BS 5837 2005.
- Existing hedge or group. colour coded as above in accordence with BS 5837.
- Blue – Cat B Trees of moderate quality and value
- Grey – Cat C Trees of low quality and value
- Red – Cat R Trees that are dead or showing signs of irreversible decline
- Root Protection Area as calculated in accordance with BS 5837 2005



REV.	DATE	INITIALS	DETAILS
.	.	.	. .

CLIENT City & Country			DWG. TITLE Tree Constraints Plan		
SITE: Bowes Field, Ongar					
DRAWN BY SPM	CHECKED BY SPM	SCALE 1:250 @A1	DATE March 2018	DWG NO. OAS 18-024-TS03	REV. .

KEY

- Existing Tree colour referenced in accordance with BS 5837 2005.
- Existing hedge or group. colour coded as above in accordence with BS 5837.
- Blue – Cat B Trees of moderate quality and value
- Grey – Cat C Trees of low quality and value
- Red – Cat R Trees that are dead or showing signs of irreversible decline
- Root Protection Area as calculated in accordance with BS 5837 2005

N

REV.	DATE	INITIALS	DETAILS
.	.	.	.

CLIENT City & Country			DWG. TITLE Tree Constraints Plan		
SITE: Bowes Field, Ongar					
DRAWN BY SPM	CHECKED BY SPM	SCALE 1:250 @A1	DATE March 2018	DWG NO. OAS 18-024-TS04	REV. -

Appendix E – Supplementary representations on Epping Forest District Local Plan Submission Document (Regulation 19) – Response to additional Site Assessment work

Supplementary Representations on Epping Forest District Local Plan Submission Document (Regulation 19)

Response to additional Site Assessment work

On behalf of City & Country

Land at Bowes Field, Ongar

April 2018

1. Background

1.1 These representations are made in response to Epping Forest District Council's (EFDC) invitation, undated but received via email on 26 March 2018, to supplement the representations that were made in response to consultation on the Epping Forest Local Plan Submission Version (2017) (Regulation 19) (LPSV) by Strutt & Parker, on behalf of City & Country, and in respect of land at Bowes Field, Ongar (site reference SR-0120 in the plan-making process).

1.2 Site SR-0120 is proposed to be allocated for residential development through Policy P4 of LPSV, as part the West Ongar Concept Framework area.

1.3 The invitation to supplement representations follows the publication of Appendices B and C to the Site Selection Report 2017.

1.4 These appendices include an assessment of the deliverability (suitability, achievability and availability) of potential sites for residential development; and provide the Council's justification for the rejection or selection of sites for allocation in the LPSV.

1.5 In addition, it should be recognised that the Sustainability Appraisal / Strategic Environmental Assessment (SA/SEA) published alongside the LPSV makes references to the Site Selection Report, in respect of the approach taken to selecting sites for residential allocation. As such, the Site Selection Report – including key appendices in which the justification for the rejection / selection of sites is set out and confirmed – is critical to the issue of the Local Plan's soundness and its legal compliance.

1.6 On 14 December 2017, EFDC agreed the publication of the LPSV for a six-week consultation period, followed by submission of the Local Plan to the Secretary of State.

1.7 Accordingly, the LPSV was published for pre-submission consultation for six-weeks over the 2017 Christmas period, with consultation closing on 29 January 2018. However, it has yet to be submitted.

1.8 Representations were made to this consultation on behalf of City & Country by Strutt & Parker in respect of site SR-0120 – land at Bowes Field, Ongar.

1.9 These supplementary representations should be read in conjuncture with the representations originally made in January 2018 in response to the Regulation 19 consultation. These representations focus solely on the Site Selection Report 2017, the publication of additional appendices to this since the close of the pre-submission consultation, and the relevance of this to the soundness / legal compliance of the Local Plan in respect of land at Bowes Field.

2. Assessment of SR-0120 (Land at Bowes Field, Ongar) through Site Selection Report 2017

2.1. Two iterations of the Site Selection Report have been published as part of the Local Plan evidence base: Site Selection Report 2016 and Site Selection Report 2017.

2.2. The Site Selection Report 2016 was published alongside the Regulation 18 consultation iteration of the Local Plan – the Draft Local Plan 2016 (DLP, 2016). The Site Selection Report 2016 had a key role in determining which sites were proposed for allocation in the DLP and which sites were rejected. It included the Council's justification for the selection and rejection of sites in the DLP.

2.3. The Site Selection Report 2016 supported the allocation of SR-0120 for residential development, identifying it as suitable for development through an iterative process through which sites were appraised through four stages: major policy constraints; quantitative and qualitative assessment (through which sites were considered against 33 assessment criteria); identification of preferred candidate sites; and deliverability. Following this, preferred candidate sites were subject to sustainability appraisal and Habitats Regulation Assessment, which considered proposed sites alone and in combination.

2.4. Similarly, it is noted that the updated Site Selection Report 2017 also supports the allocation of the site, identifying it as suitable, available and achievable to help meet the District's housing needs.

2.5. Within Appendix B1.4.2 of the Site Selection Report 2017, the site is assessed against a number of criteria, one of which is distance to the nearest primary school (criterion 3.5). Against this criterion, the site SR-0120 is assessed as having a neutral impact, with the commentary stating that it is between 1,000m and 4,000m from the nearest primary school. However, the site is less than 1km from Ongar Primary School, which the Essex County Council Commissioning School Places in Essex 2017-2022 document reports as having existing and projected capacity for additional pupils. As such, the site should be assessed as having a positive impact against this criterion.

2.6. In addition to the above, it is noted that the allocation of site SR-0120 is assessed as having a negative impact on the Green Belt by virtue of it being within the Green Belt. We suggest the Site Selection Report should acknowledge that the site can be developed without harm to the strategic purposes of including land in the Green Belt, as per paragraph 80 of the NPPF.

2.7. The Site Selection Report 2017 confirms that the site is suitable, available and achievable for residential development, and merits allocation for development. Accounting for the above points raised, it is considered that the site is even more suitable than the Site Selection Report 2017 assessment suggests.

3. Justification for allocation of site SR-0120 within the Site Selection Report 2017

3.1. The Site Selection Report 2017 also fulfils the role of setting out the reason for the selection / rejection of sites for allocation within Appendix B.

3.2. It is important that the reasons for the selection / rejection of sites for allocation is robustly set out within the plan-making process, to ensure the Local Plan is justified (and therefore sound). The issues is also relevant to the need to comply with the Environmental Assessment of Plans and Programmes Regulations (2004).

3.3. At Appendix B.1.6.6 it states that site SR-0120 is proposed for allocation for the following reason:

> "This site was identified as available within the first five years of the Plan period. It has been marketed and has no identified constraints or restrictions which would prevent it coming forward for development. The site is proposed for allocation"

3.4. Whilst the above is not incorrect, we feel that it overlooks a number of substantial benefits of allocating the site which justify its allocation through the Local Plan.

3.5. The site benefits from a very good relationship to the existing settlement boundary of Ongar and this site could be developed without a negative impact upon the linear form of the existing settlement. Further, it is located in close proximity to the town centre: a range of services and facilities will be accessible from new homes on the site; and provision of new homes here will as assist in sustaining and enhancing the vitality of the town centre.

3.6. As detailed within our representations made on the DLP, considering the site against the purposes of including land in the Green Belt as set out at paragraph 80 of the NPPF, it is evident that its development would not undermine the strategic purposes of including land in the Green Belt.

3.7. EFDF has subjected the site to quantitative and qualitative assessment as part of the Site Selection Report 2017, which considered a host of factors relating to physical constraints and the sustainability of the development of the site for housing. Through this assessment, a number of positives have been identified, with the assessment evidently considering these to outweigh any potential harm.

3.8. Having regard to all of the above, it is suggested that the Site Selection Report 2017 should acknowledge the additional factors that result in the site meriting residential allocation. These include its sustainability and deliverability, and that its development would not undermine the strategic purposes of the Green Belt.

4. Overview

4.1. Information contained within Appendix B of Site Selection Report 2017 confirms that site SR-0120 is suitable, available and achievable for residential development; and that it represents a sustainable site for housing.

4.2. Indeed, site SR-0120 is considered to be even more suitable for housing than the Site Selection Report 2017 assessment process suggests.

4.3. It is important that the justification for the selection of the site for allocation is robustly set out.

4.4. The justification for the allocation of the site set out within the Site Selection Report 2017 does not expressly refer to a number of the positive impacts allocation of the site would have (including those identified within the Site Selection Report 2017 itself). The Council has evidence that provides robust justification for the allocation of the site – evidence which confirms the site is sustainable and deliverable – and it is suggested that the justification make reference to this.