



Norwich - Northern Distributor Road

Major Scheme Business Case
Sensitivity Tests for DfT

Dependent Development

Volume 3 – Appendices
(Appendix E Part 1)

December 2009
Norfolk County Council

Norwich - Northern Distributor Road

Major Scheme Business Case
Sensitivity Tests for DfT

Dependent Development

Volume 3 – Appendices
(Appendix E Part 1)

December 2009

Norfolk County Council

Issue and revision record

Revision	Date	Originator	Checker	Approver	Description
01	03/12/2009	Mo Shahkarami	Brian Witten Chris White	Gerry Kelly	Final

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Content

Chapter	Title	Page
Appendix A.	List of Joint Core Strategy Housing and Business Developments and Their Location Maps _____	8
Appendix B.	Maps Showing Location of Dependent Housing & Business Development Rev A Model Zones _____	9
Appendix C.	Vehicle Queues, Link Cruise Time and Travel Time _____	10
Appendix D.	Trip Totals by User Class _____	11
Appendix E.	Junction Delays _____	12
Appendix F.	Vehicle over Capacity Ratio _____	33
Appendix G.	Traffic Flows (PCUs) _____	34
Appendix H.	Trip Totals (PCUs) _____	35
Appendix I.	PCU Kilometres _____	36

Figures

Figure E.1:	2006 Base Year Junction Delays – AM Peak _____	12
Figure E.2:	2006 Base Year Junction Delays - IP _____	13
Figure E.3:	2006 Base Year Junction Delays – PM Peak _____	14
Figure E.4:	2012 TEMPRO 5.4 Do Minimum Junction Delays – AM Peak _____	15
Figure E.5:	2012 TEMPRO 5.4 Do Minimum Junction Delays - IP _____	16
Figure E.6:	2012 TEMPRO 5.4 Do Minimum Junction Delays – PM Peak _____	17
Figure E.7:	2027 TEMPRO 5.4 Do Minimum Junction Delays – AM Peak _____	18
Figure E.8:	2027 TEMPRO 5.4 Do Minimum Junction Delays - IP _____	19
Figure E.9:	2027 TEMPRO 5.4 Do Minimum Junction Delays – PM Peak _____	20
Figure E.10:	2012 Scenario 1 Do Minimum Junction Delays – AM Peak _____	21
Figure E.11:	2012 Scenario 1 Do Minimum Junction Delays - IP _____	22
Figure E.12:	2012 Scenario 1 Do Minimum Junction Delays – PM Peak _____	23
Figure E.13:	2027 Scenario 1 Do Minimum Junction Delays – AM Peak _____	24
Figure E.14:	2027 Scenario 1 Do Minimum Junction Delays - IP _____	25
Figure E.15:	2027 Scenario 1 Do Minimum Junction Delays – PM Peak _____	26
Figure E.16:	2012 Scenario 2 Do Minimum Junction Delays – AM Peak _____	27
Figure E.17:	2012 Scenario 2 Do Minimum Junction Delays - IP _____	28
Figure E.18:	2012 Scenario 2 Do Minimum Junction Delays – PM Peak _____	29
Figure E.19:	2027 Scenario 2 Do Minimum Junction Delays – AM Peak _____	30
Figure E.20:	2027 Scenario 2 Do Minimum Junction Delays - IP _____	31

Appendix A. List of Joint Core Strategy Housing and Business Developments and Their Location Maps

Please see Appendix Volume 2.

Appendix B. Maps Showing Location of Dependent Housing & Business Development Rev A Model Zones

Please see Appendix Volume 2.

Appendix C. Vehicle Queues, Link Cruise Time and Travel

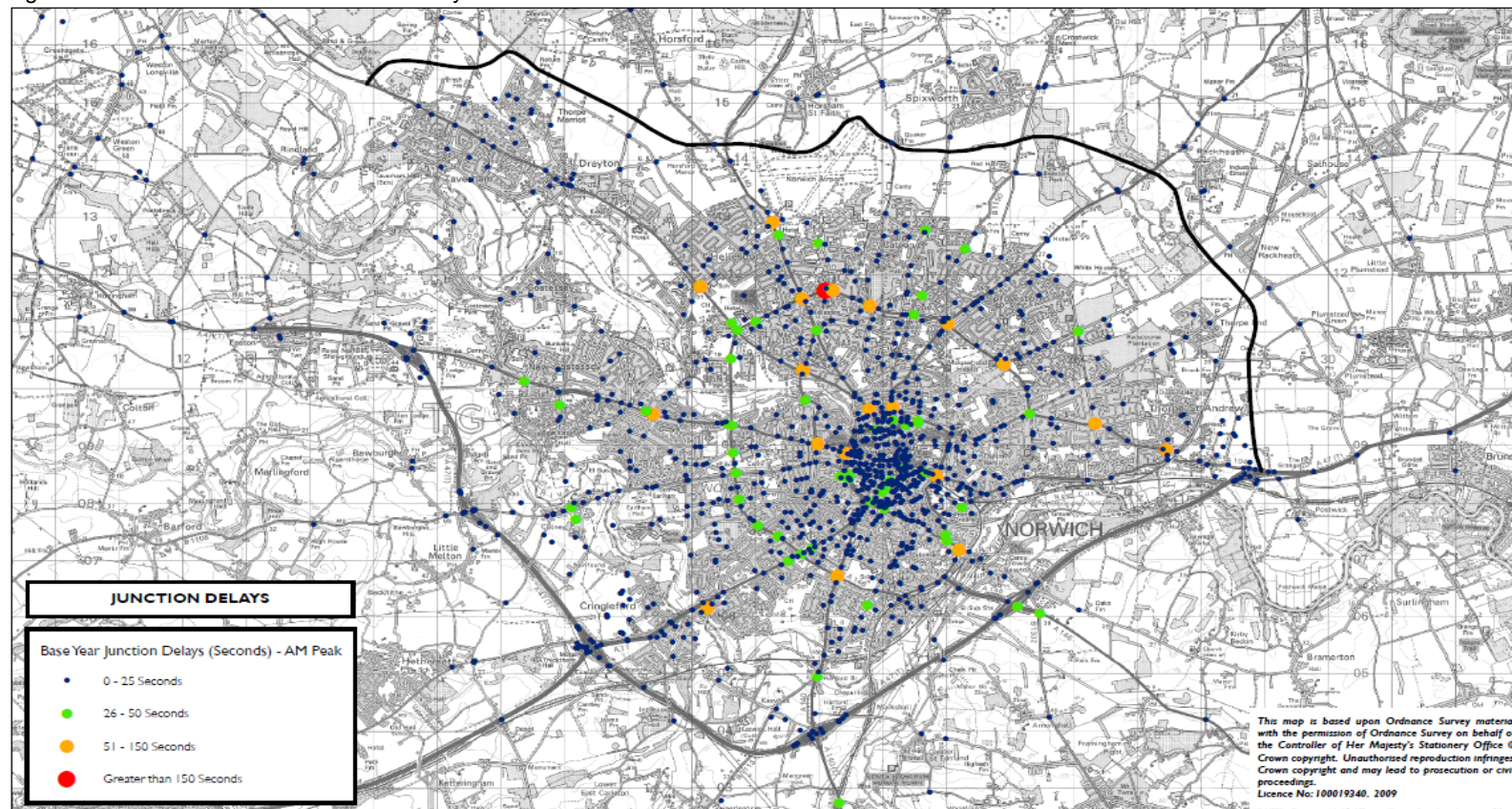
Please see Appendix Volume 2.

Appendix D. Trip Totals by User Class



Please see Appendix Volume 2.

Appendix E. Junction Delays

Figure E.1: 2006 Base Year Junction Delays – AM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned. Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

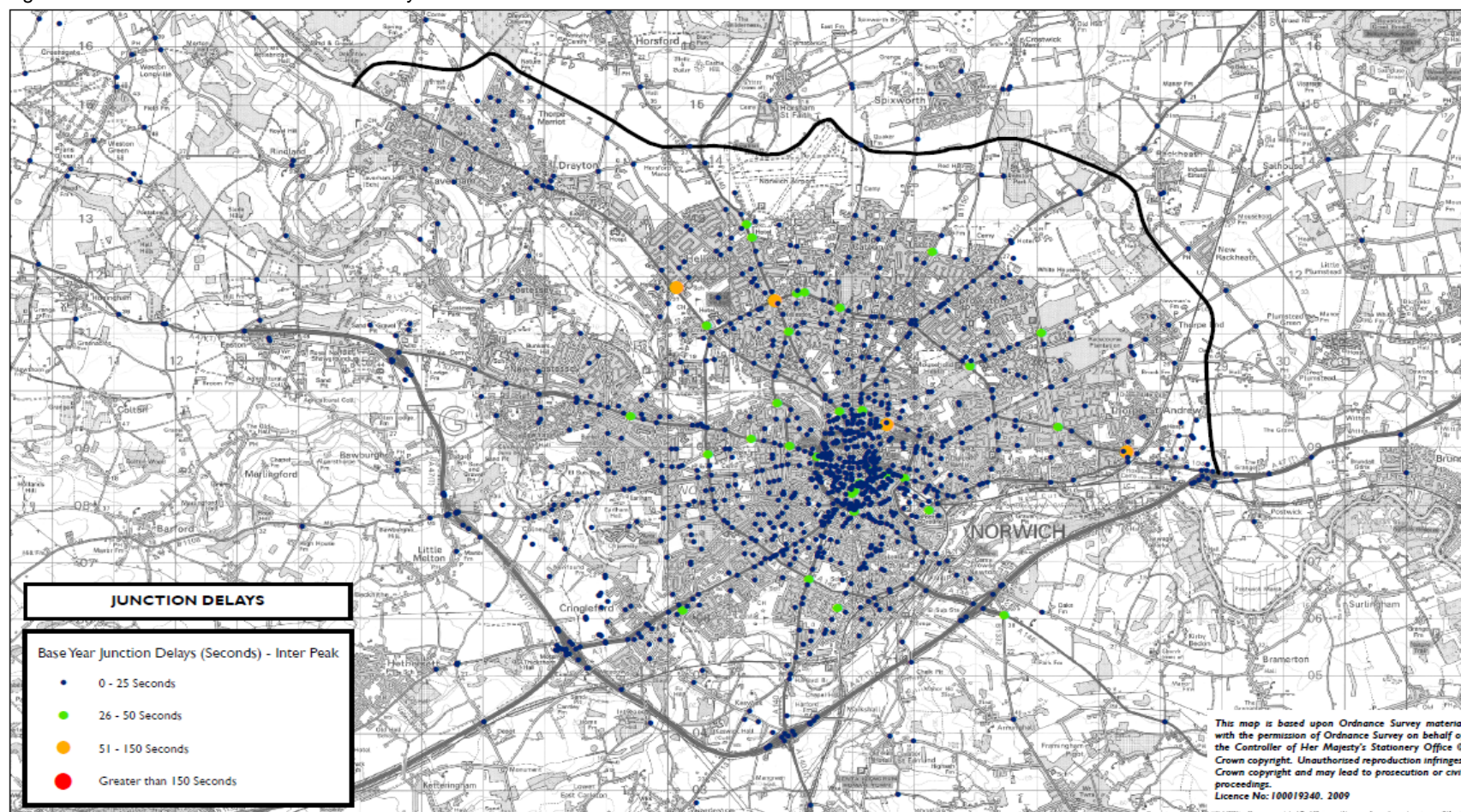
 <p>Norfolk County Council working with  MAY GURNEY</p>	<p>Mike Jackson Director of Planning and Transportation Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG</p>	<p>Mott MacDonald County Hall Martineau Lane Norwich NR1 2US Tel: 01603 767530 Fax: 01603 767463 Web: www.mottmac.com</p>	<p>NNDR MSBC SENSITIVITY TESTS</p> <p>Junction Delay Range Plots</p> <p>BASEYEAR (2006) - AM Peak</p>	<table><tr><th>REV.</th><th>DESCRIPTION</th><th>CHK'D</th><th>DATE</th></tr><tr><td>A</td><td>DRAFT</td><td>GW</td><td>28/10/09</td></tr><tr><td>B</td><td>---</td><td>---</td><td>---</td></tr><tr><td>C</td><td>---</td><td>---</td><td>---</td></tr><tr><td>D</td><td>---</td><td>---</td><td>---</td></tr></table>	REV.	DESCRIPTION	CHK'D	DATE	A	DRAFT	GW	28/10/09	B	---	---	---	C	---	---	---	D	---	---	---	<table><tr><td>INIT.</td><td>DATE</td><td>REF.</td><td>NAT2.06.16.26.v1</td></tr><tr><td>DRAWN BY</td><td>SWC</td><td>28/10/09</td><td>SCALE</td><td>FILE No.</td></tr><tr><td>CHECKED BY</td><td>BW</td><td>28/10/09</td><td>Next To Scale</td><td>---</td></tr><tr><td colspan="5">PROJECT TITLE</td></tr><tr><td colspan="5">NNDR MSBC</td></tr></table>	INIT.	DATE	REF.	NAT2.06.16.26.v1	DRAWN BY	SWC	28/10/09	SCALE	FILE No.	CHECKED BY	BW	28/10/09	Next To Scale	---	PROJECT TITLE					NNDR MSBC				
				REV.	DESCRIPTION	CHK'D	DATE																																										
				A	DRAFT	GW	28/10/09																																										
				B	---	---	---																																										
				C	---	---	---																																										
D	---	---	---																																														
INIT.	DATE	REF.	NAT2.06.16.26.v1																																														
DRAWN BY	SWC	28/10/09	SCALE	FILE No.																																													
CHECKED BY	BW	28/10/09	Next To Scale	---																																													
PROJECT TITLE																																																	
NNDR MSBC																																																	

233906/BSE/NOR/10/A 03 December 2009


P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NNDR MSBC Sensitivity Test Reports\For Issue\20091201\Dependent Development\Appendices\Appendices - Volume 3
Rev 01.doc

Norwich - Northern Distributor Road Volume 3 - Appendices for Dependent Development

Figure E.2: 2006 Base Year Junction Delays - IP




This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.



Norfolk

County Council

working with



MAY GURNEY

Mike Jackson

Director of Planning and Transportation

Norfolk County Council

County Hall

Martineau Lane

Norwich NR1 2SG

Mott MacDonald

County Hall

Martineau Lane

Norwich NR1 2US

Tel: 01603 767530

Fax: 01603 767463

Web: www.mottmac.com

NDR MSBC SENSITIVITY TESTS

Junction Delay Range Plots

BASEYEAR (2006) - Inter Peak

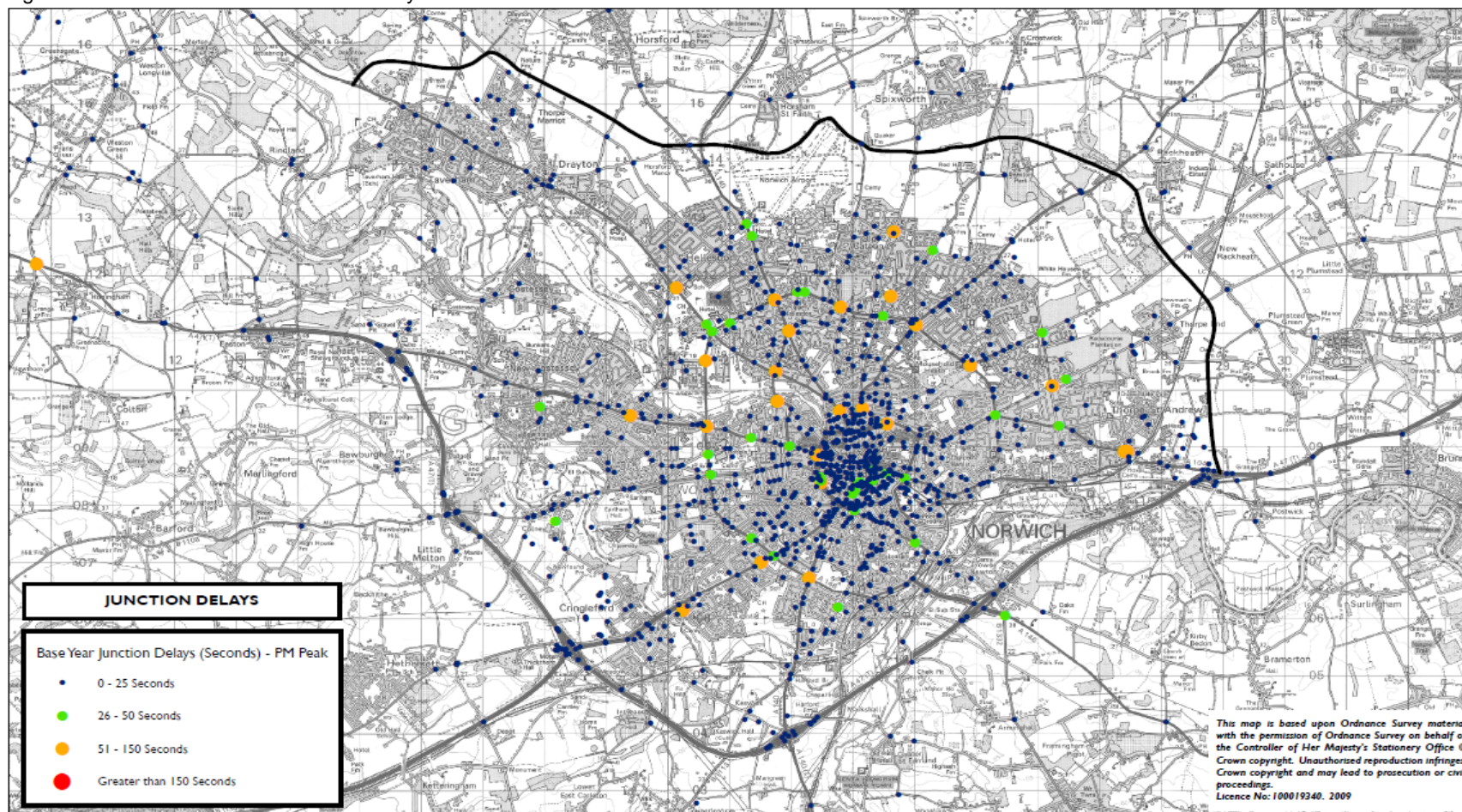
REV.	DESCRIPTION	CH'D	DATE
A	DRAFT	GW	28/10/09
B	---	---	---
C	---	---	---
D	---	---	---

	INIT.	DATE	REF:	NATS_06_16_26_v1	
DRAWN BY	SWC	28/10/09	SCALE	FILE No.	
CHECKED BY	BW	28/10/09	Not To Scale	---	
PROJECT TITLE					
NDR MSBC					


233906/BSE/NOR/10/A 03 December 2009

P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NDR MSBC Sensitivity Test Reports\For Issue\20091201\Dependent Development\Appendices\Appendices - Volume 3
Rev 01.doc


Figure E.3: 2006 Base Year Junction Delays – PM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.



Norfolk County Council
working with



MAY GURNEY

Mike Jackson
Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

Mott MacDonald
County Hall
Martineau Lane
Norwich NR1 2US
Tel: 01603 767530
Fax: 01603 767463
Web: www.mottmac.com

NNDR MSBC SENSITIVITY TESTS

Junction Delay Range Plots

BASEYEAR (2006) - PM Peak

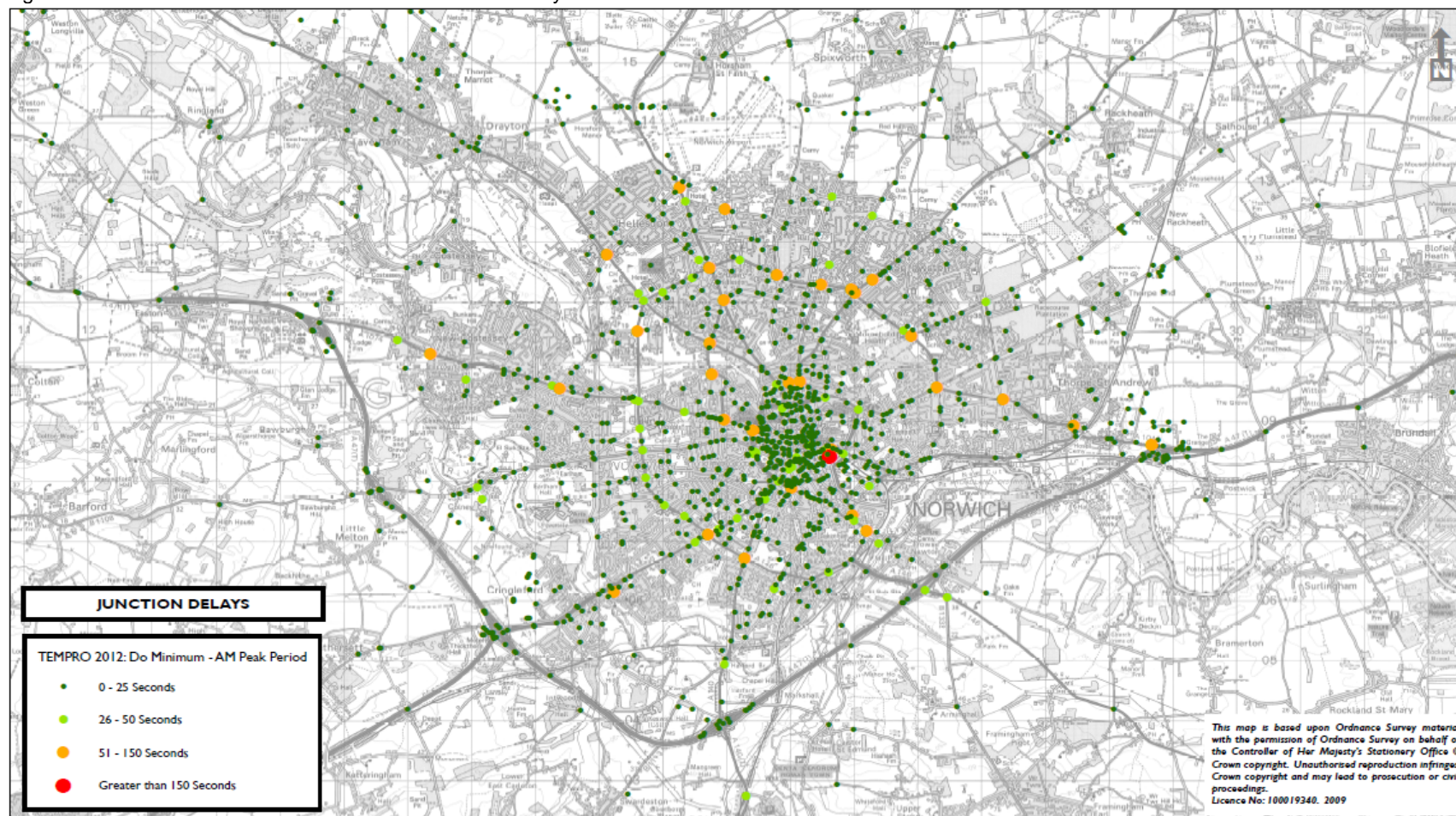
REV.	DESCRIPTION	CH'K'D	DATE
A	DRAFT	GW	28/10/09
B	---	---	---
C	---	---	---
D	---	---	---

	INIT.	DATE	REF:
	SWC	28/10/09	NATS.06.16.26.v1
DRAWN BY	SWC	28/10/09	SCALE
CHECKED BY	BW	28/10/09	File No
PROJECT TITLE			
NNDR MSBC			


233906/BSE/NOR/10/A 03 December 2009



P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NNDR MSBC Sensitivity Test Reports\For Issue\20091201\Dependent Development\Appendices\Appendices - Volume 3
Rev 01.doc

Figure E.4: 2012 TEMPRO 5.4 Do Minimum Junction Delays – AM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.



Norfolk County Council
working with
 

Mike Jackson
Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

Mott MacDonald
County Hall
Martineau Lane
Norwich NR1 2US
Tel: 01603 767530
Fax: 01603 767463
Web: www.mottmac.com

NNDR MSBC SENSITIVITY TESTS

Junction Delay Range Plots

TEMPRO 5.4

Do Minimum 2012 - AM Peak

REV.	DESCRIPTION	CH'K'D	DATE
A	DRAFT	GW	18/10/09
B	-----	-----	-----
C	-----	-----	-----
D	-----	-----	-----

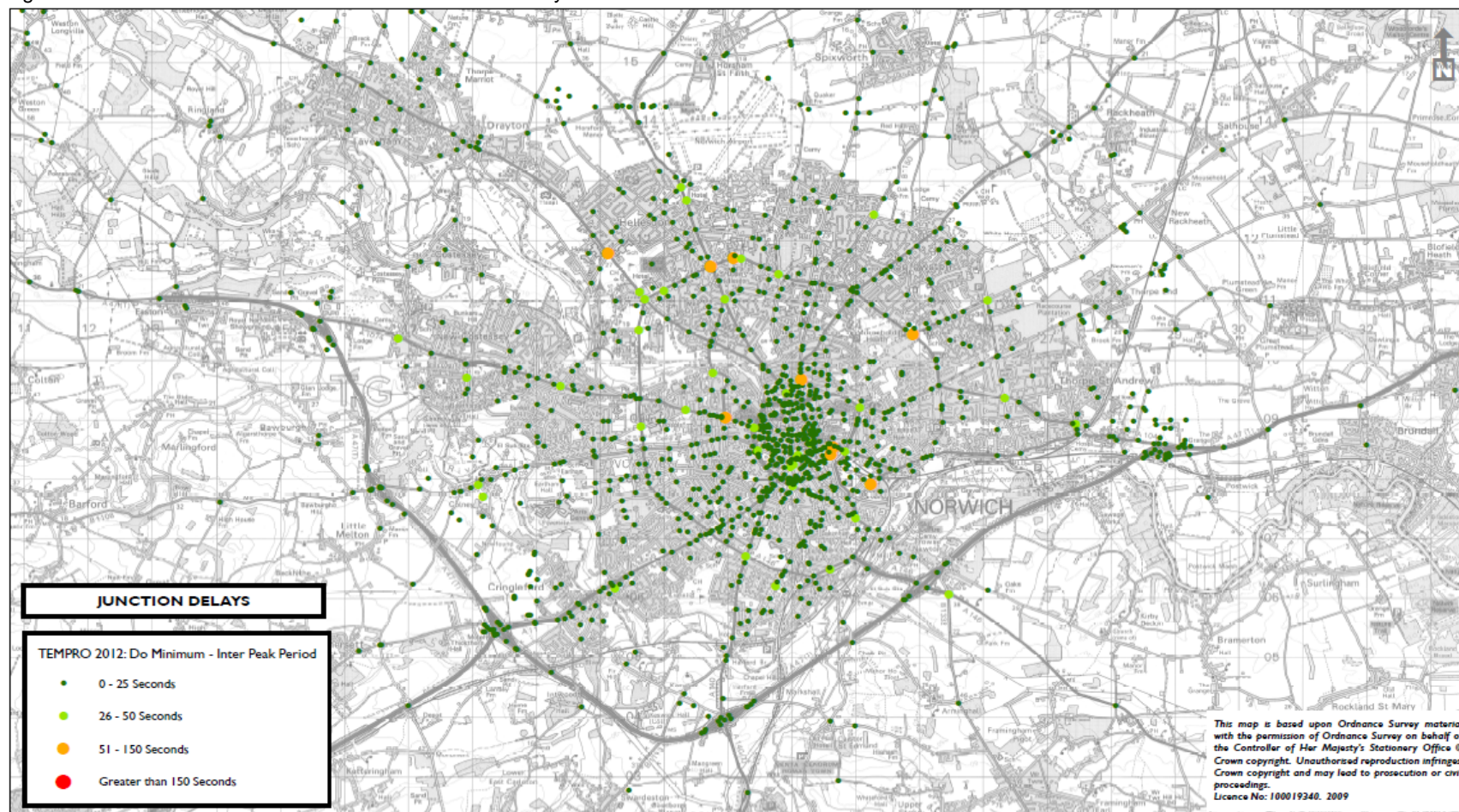
	INIT.	DATE	REF: NNDR, MSBC, Junction D	
DRAWN BY	DWC	18/10/09	SCALE	FILE No.
CHECKED BY	BW	18/10/09	Not To Scale	----
PROJECT TITLE				
NNDR MSBC				

233906/BSE/NOR/10/A 03 December 2009

P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NNDR MSBC Sensitivity Test Reports\For Issue\2009\1201\Dependent Development\Appendices\Appendices - Volume 3
Rev 01.doc

Norwich - Northern Distributor Road Volume 3 - Appendices for Dependent Development

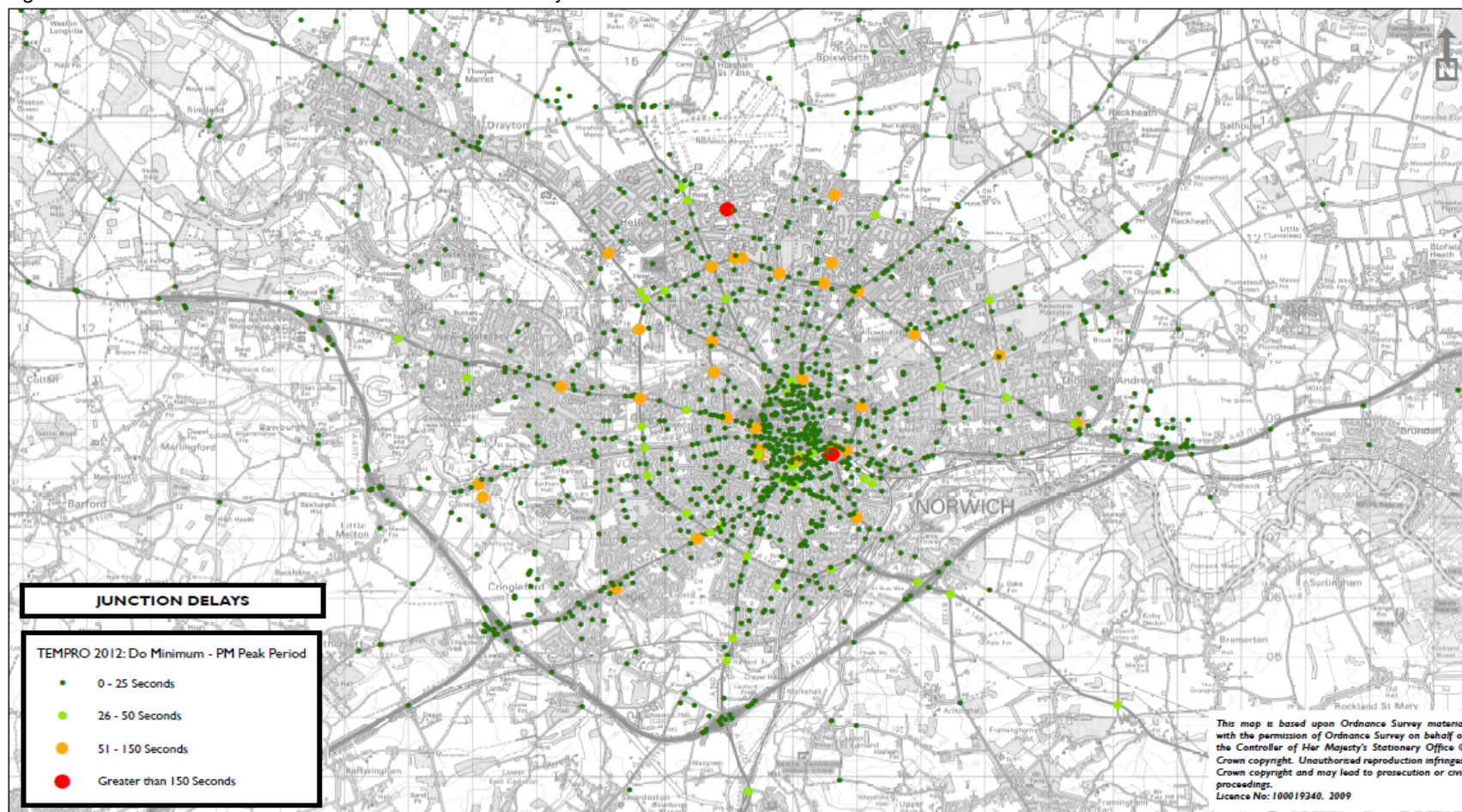
Figure E.5: 2012 TEMPRO 5.4 Do Minimum Junction Delays - IP



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

Norwich - Northern Distributor Road Volume 3 - Appendices for Dependent Development

Figure E.6: 2012 TEMPRO 5.4 Do Minimum Junction Delays – PM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned. Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.



Mike Jackson
Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

Mott MacDonald
County Hall
Martineau Lane
Norwich NR1 2US
Tel: 01603 767530
Fax: 01603 767463
Web: www.mottmac.com

NNDR MSBC SENSITIVITY TESTS

Junction Delay Range Plots

TEMPRO 5.4

Do Minimum 2012 - PM Peak

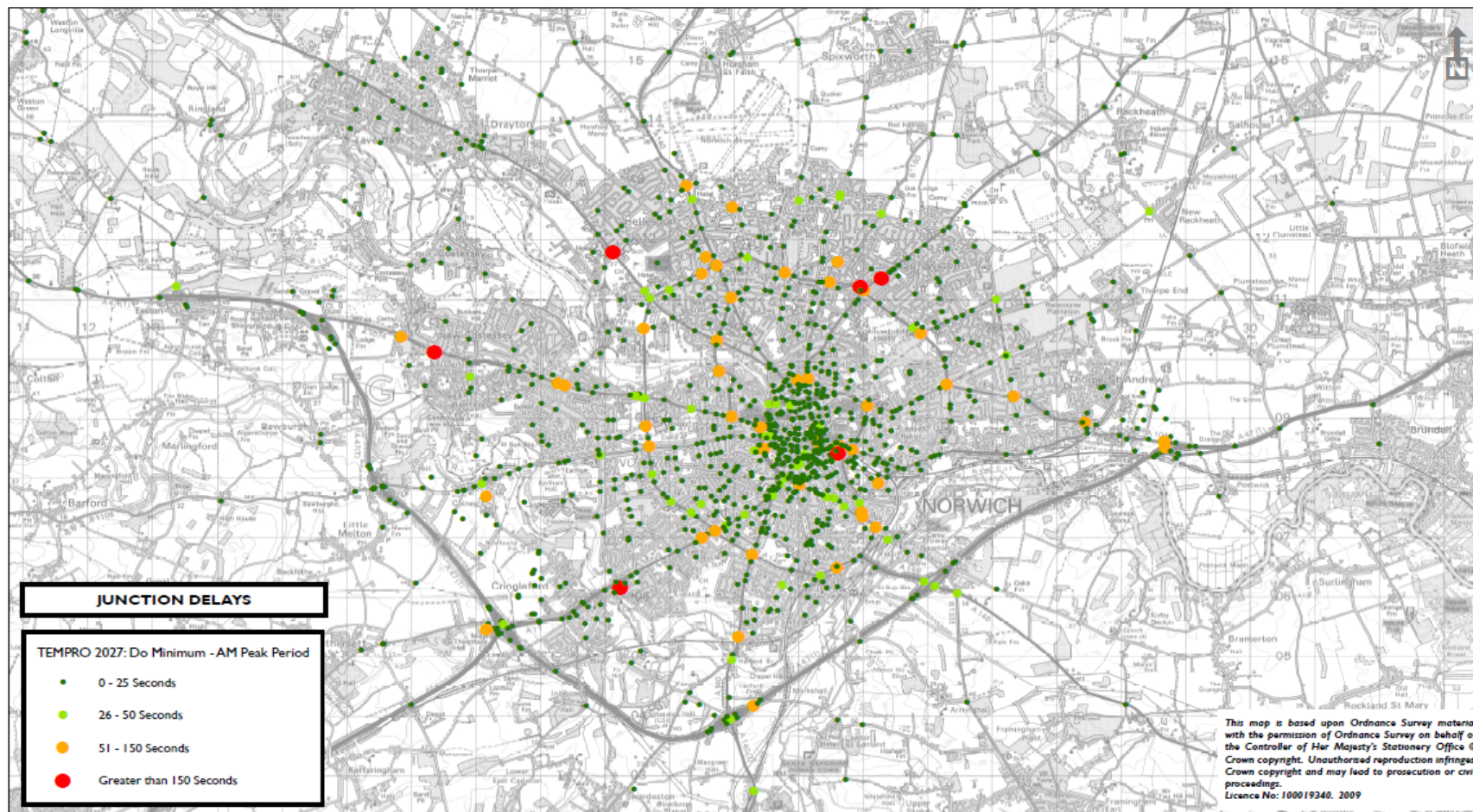
REV.	DESCRIPTION	CH'K'D	DATE
A	DRAFT	GW	18/10/09
B	.....	.....	.....
C	.....	.....	.....
D	.....	.....	.....

DRAWN BY	INIT.	DATE	REF: NNDR MSBC Junction Delays
SWC	SWC	18/10/09	SCALE
CHECKED BY	.....	18/10/09	FILE No.
PROJECT TITLE	NNDR MSBC		

233906/BSE/NOR/10/A 03 December 2009

P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NNDR MSBC Sensitivity Test Reports\For Issue\2009\1201\Dependent Development\Appendices\Appendices - Volume 3 Rev 01.doc

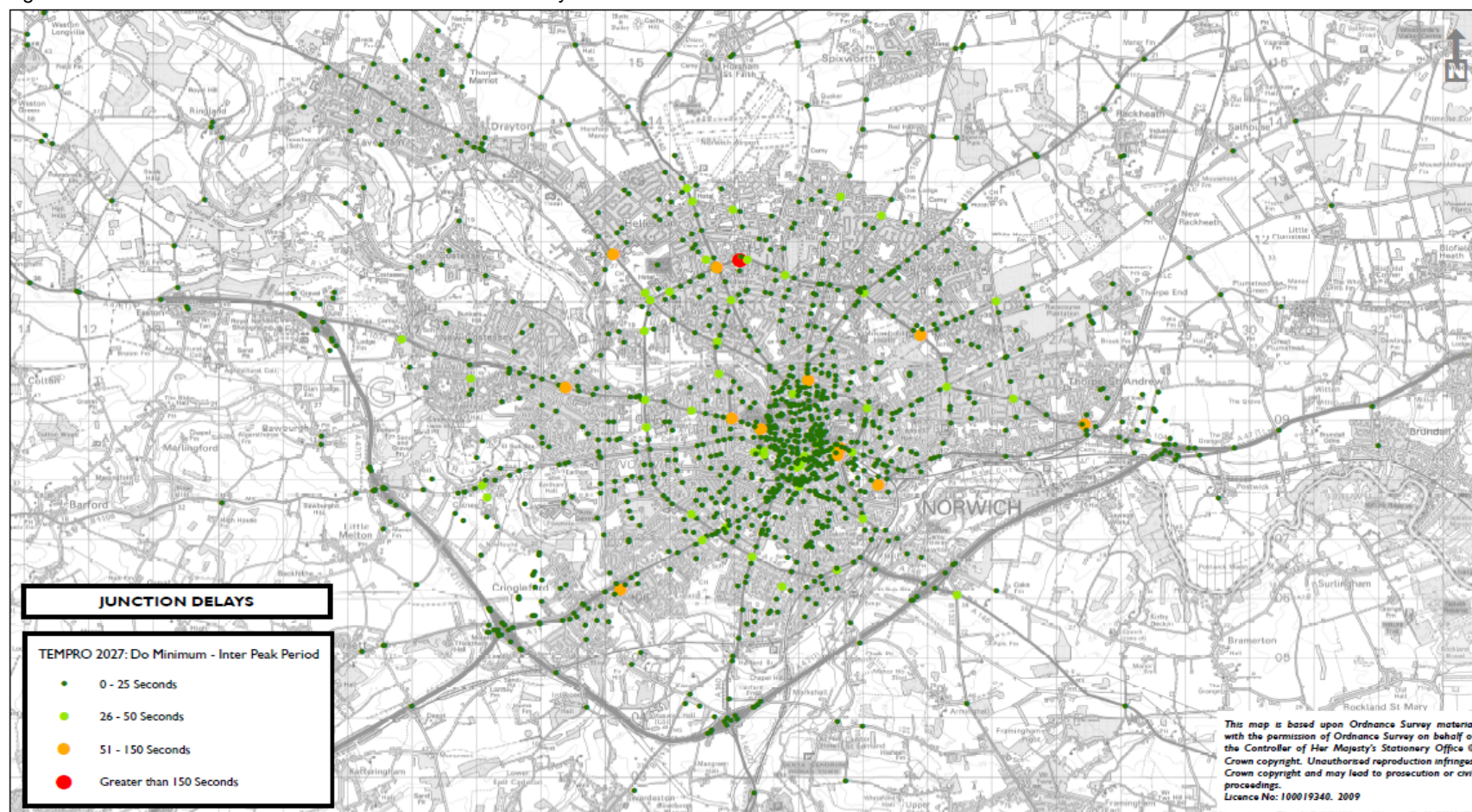
Figure E.7: 2027 TEMPRO 5.4 Do Minimum Junction Delays – AM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned. Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

Norwich - Northern Distributor Road Volume 3 - Appendices for Dependent Development

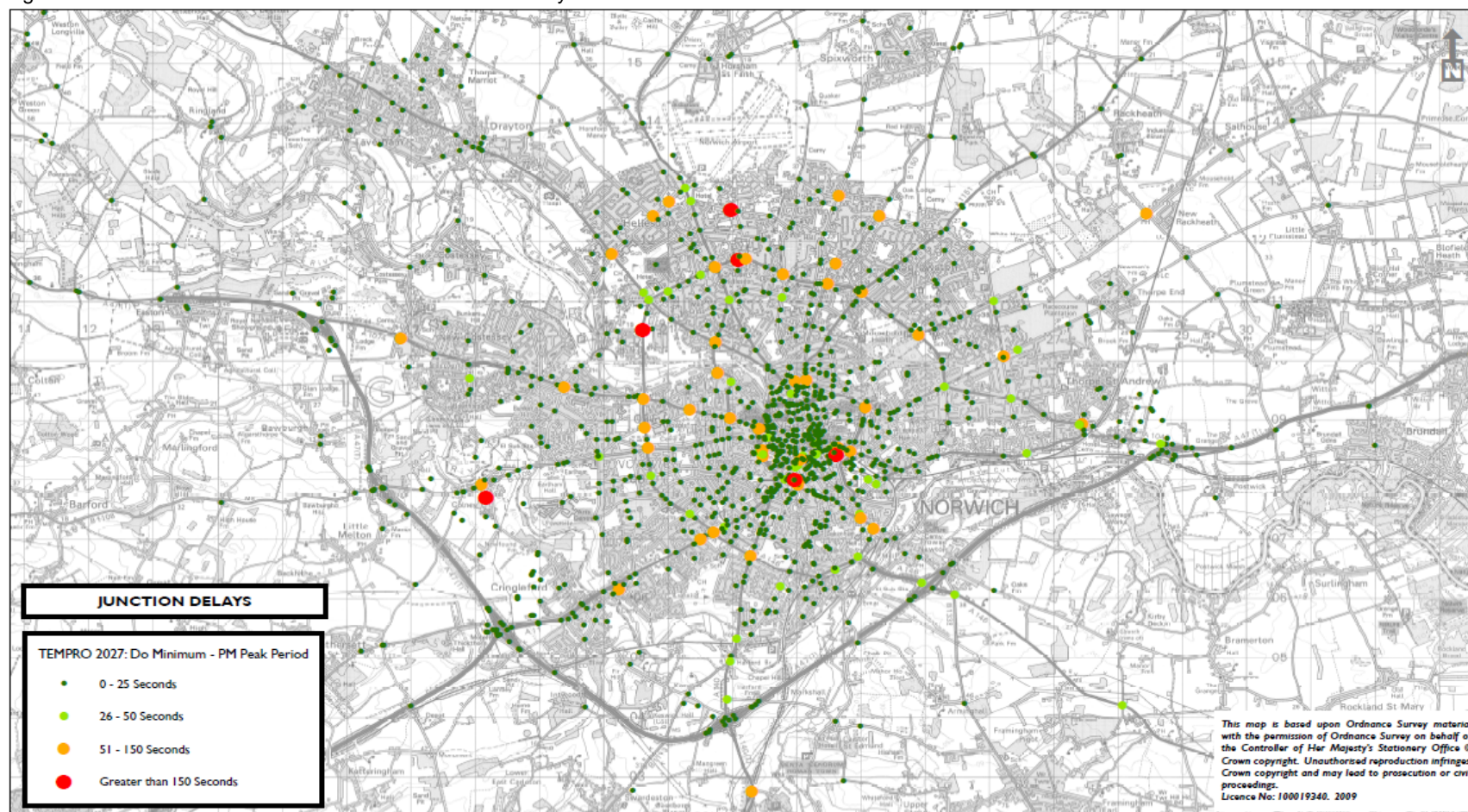
Figure E.8: 2027 TEMPRO 5.4 Do Minimum Junction Delays - IP



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

Norwich - Northern Distributor Road Volume 3 - Appendices for Dependent Development

Figure E.9: 2027 TEMPRO 5.4 Do Minimum Junction Delays – PM Peak

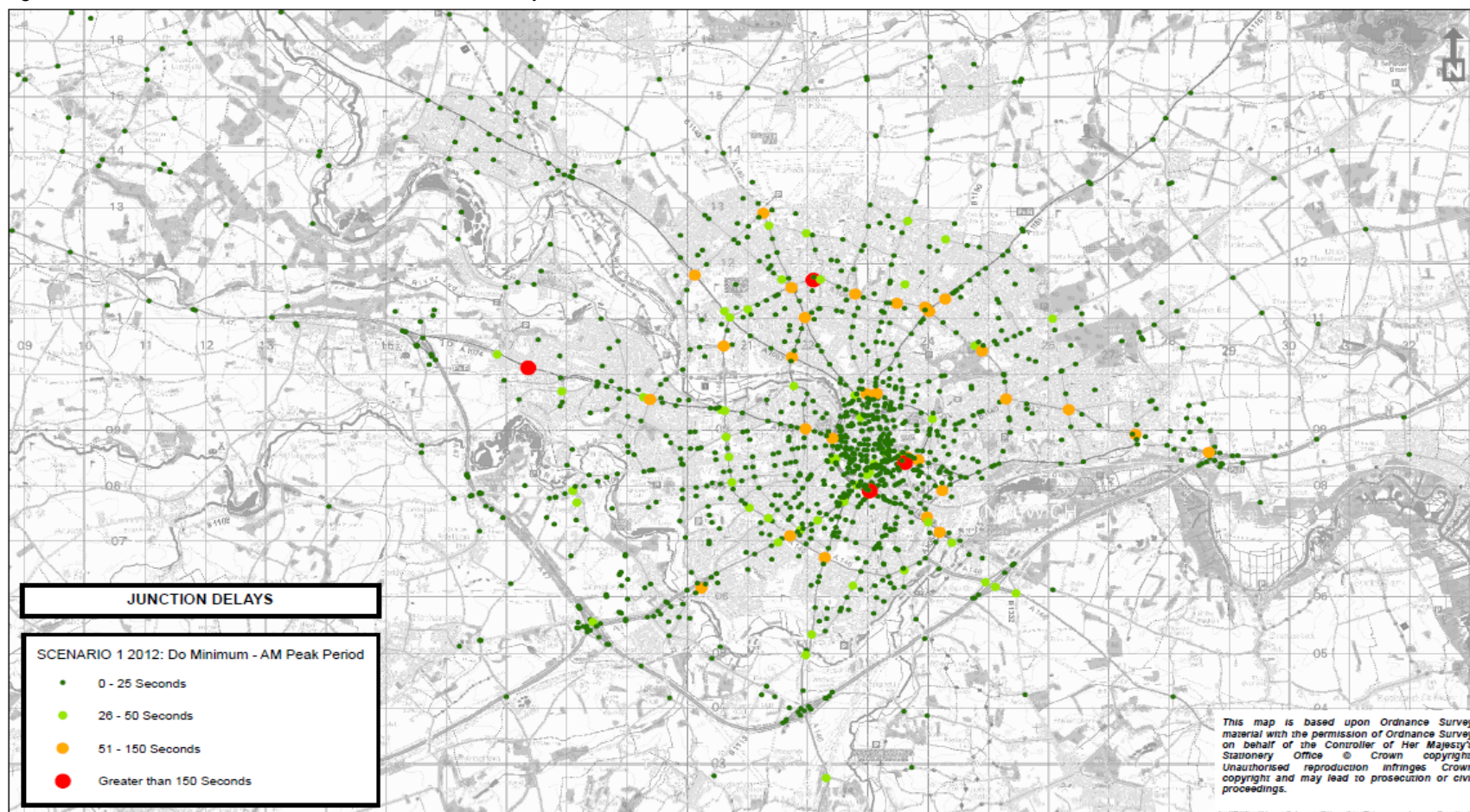


This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

REV.	DESCRIPTION	CH'D	DATE
A	DRAFT	GW	18/10/09
B	----	----	----
C	----	----	----
D	----	----	----

INIT.	DATE	REF:	INIT.	DATE	REF:
DRAWN BY	DWC	18/10/09	SCALE		FILE No.
CHECKED BY	BW	18/10/09	Next To Scale		----
PROJECT TITLE					
NNDR MSBC					

Figure E.10: 2012 Scenario 1 Do Minimum Junction Delays – AM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

Norfolk County Council
working with
Mott MacDonald MAY GURNEY

Mike Jackson
Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

Mott MacDonald
County Hall
Martineau Lane
Norwich NR1 2US
Tel: 01603 767530
Fax: 01603 767463
Web: www.mottmac.com

NNDR MSBC SENSITIVITY TESTS
Junction Delay Range Plots
SCENARIO 1 (exc. Dependent Development A)
Do Minimum 2012 - AM Peak

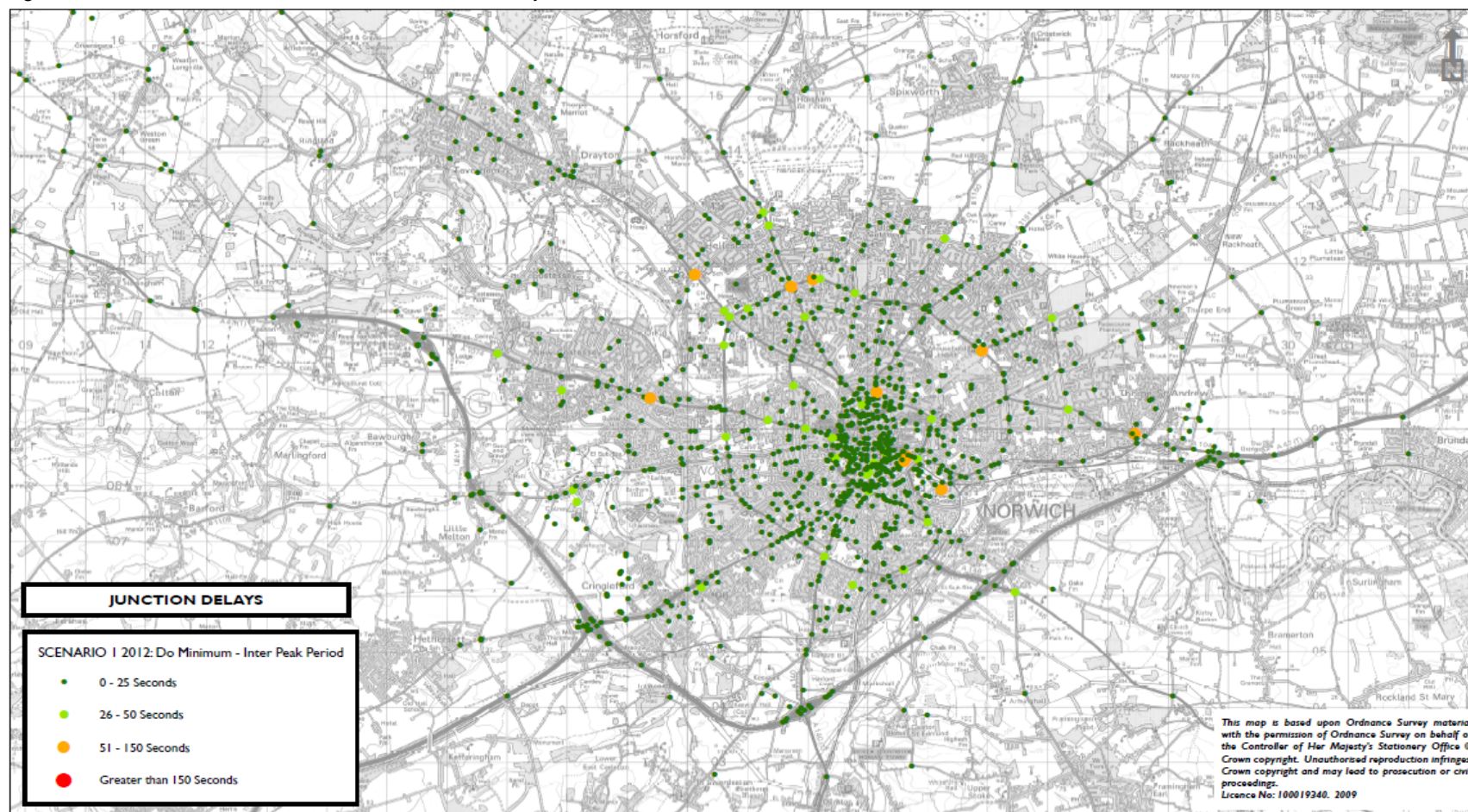
REV.	DESCRIPTION	CH'K'D	DATE
A	DRAFT	GW	18/10/09
B	.....	.....	.....
C	.....	.....	.....
D	.....	.....	.....

INIT.	DATE	REF	INIT.	DATE	REF	INIT.	DATE	REF
DRAWN BY	SWC	18/10/09	SCALE	FILE No.				
CHECKED BY	BW	18/10/09	Not To Scale					
PROJECT TITLE								
NNDR MSBC								

233906/BSE/NOR/10/A 03 December 2009

P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NNDR MSBC Sensitivity Test Reports\For Issue\2009\1201\Dependent Development\Appendices\Appendices - Volume 3
Rev 01.doc

Figure E.11: 2012 Scenario 1 Do Minimum Junction Delays - IP

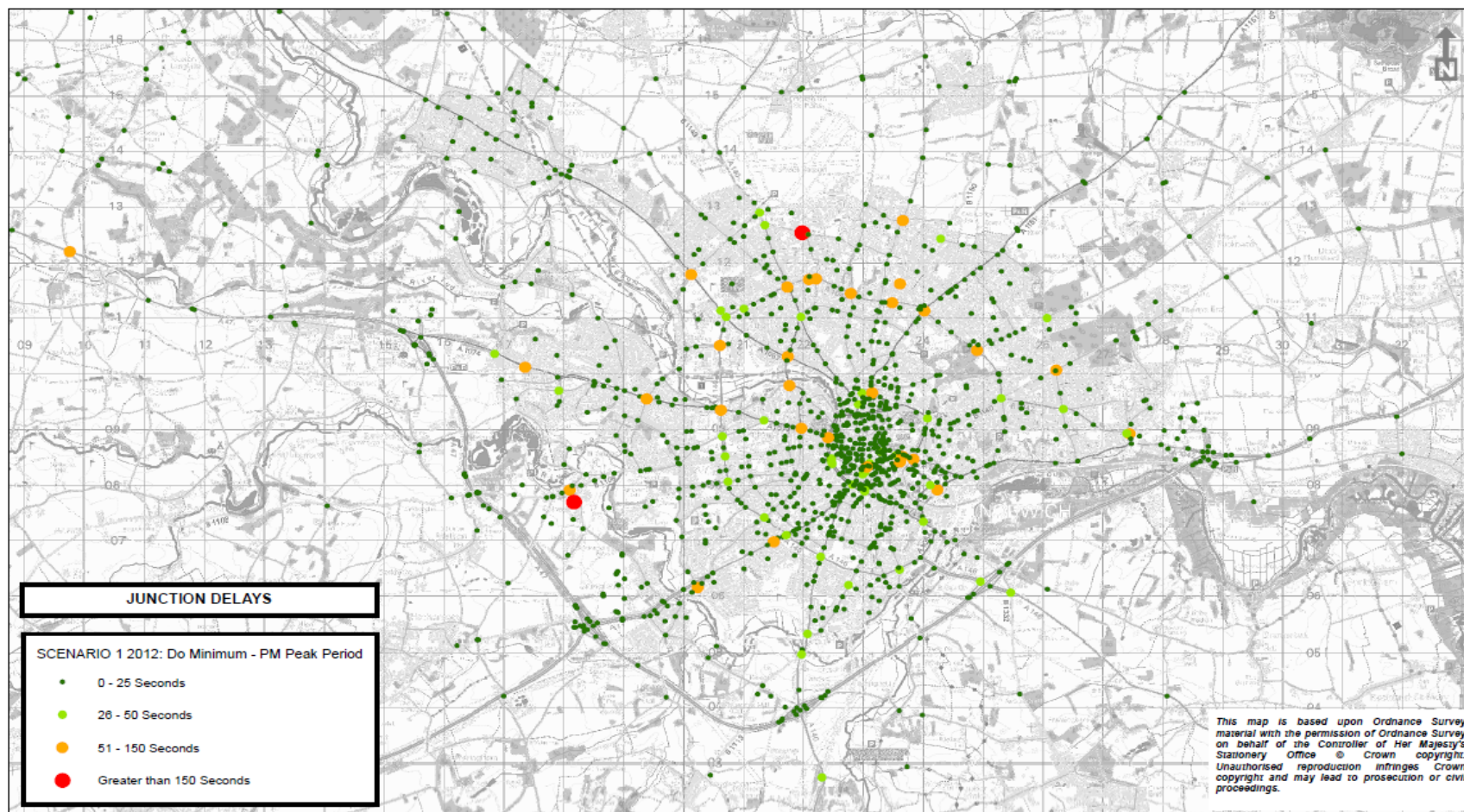


This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

REV.	DESCRIPTION	CH'D	DATE
A	DRAFT	GW	18/10/09
B	----	----	----
C	----	----	----
D	----	----	----

INIT.	DATE	REF: NNDR_MSBC Junction Delays
DRAWN BY	DWC	18/10/09
CHECKED BY	BW	18/10/09
PROJECT TITLE	----	----
FILE No.	----	----

Figure E.12: 2012 Scenario 1 Do Minimum Junction Delays – PM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned. Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

 **Norfolk County Council**
working with  MAY GURNEY

Mike Jackson
Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

Mott MacDonald
County Hall
Martineau Lane
Norwich NR1 2US
Tel: 01603 767530
Fax: 01603 767463
Web: www.mottmac.com

NNDR MSBC SENSITIVITY TESTS
Junction Delay Range Plots
SCENARIO 1 (exc. Dependent Development A)
Do Minimum 2012 - PM Peak

REV.	DESCRIPTION	CHK'D	DATE
A	DRAFT	GW	18/10/09
B	.....	.....	.....
C	.....	.....	.....
D	.....	.....	.....

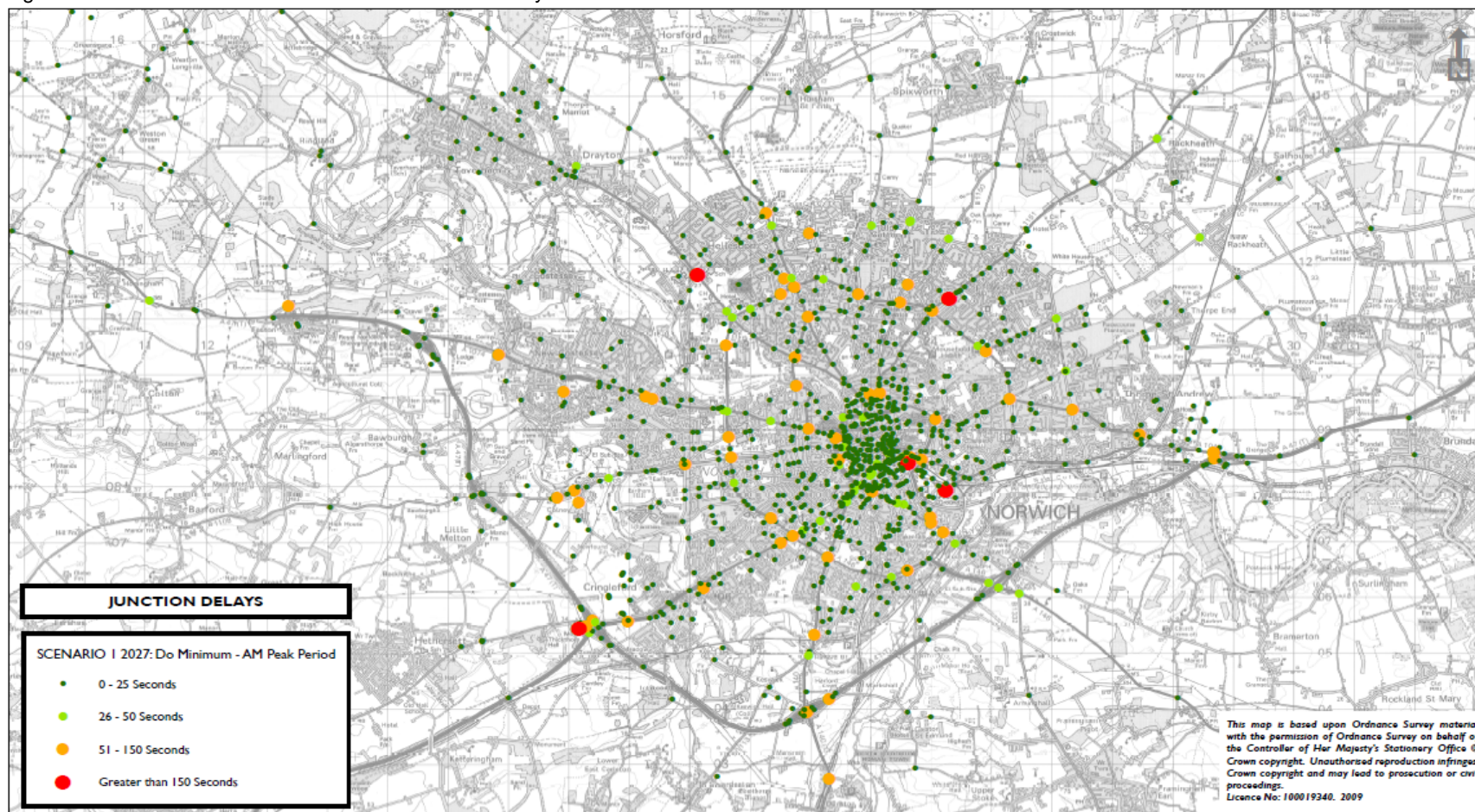
	INIT.	DATE	REF	NOR_MSBC_Junction Delay
DRAWN BY	SWC	18/10/09	SCALE	FILE No.
CHECKED BY	BW	18/10/09	Not To Scale	.....
PROJECT TITLE				
NNDR MSBC				

233906/BSE/NOR/10/A 03 December 2009

P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NNDR MSBC Sensitivity Test Reports\For Issue\20091201\Dependent Development\Appendices\Appendices - Volume 3 Rev 01.doc

Norwich - Northern Distributor Road Volume 3 - Appendices for Dependent Development

Figure E.13: 2027 Scenario 1 Do Minimum Junction Delays – AM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

Norfolk County Council
working with
Mott MacDonald MAY GURNEY

Mike Jackson
Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

Mott MacDonald
County Hall
Martineau Lane
Norwich NR1 2US
Tel: 01603 767530
Fax: 01603 767463
Web: www.mottmac.com

NNDR MSBC SENSITIVITY TESTS
Junction Delay Range Plots
SCENARIO 1 (exc. Dependent Development A)
Do Minimum 2027 - AM Peak

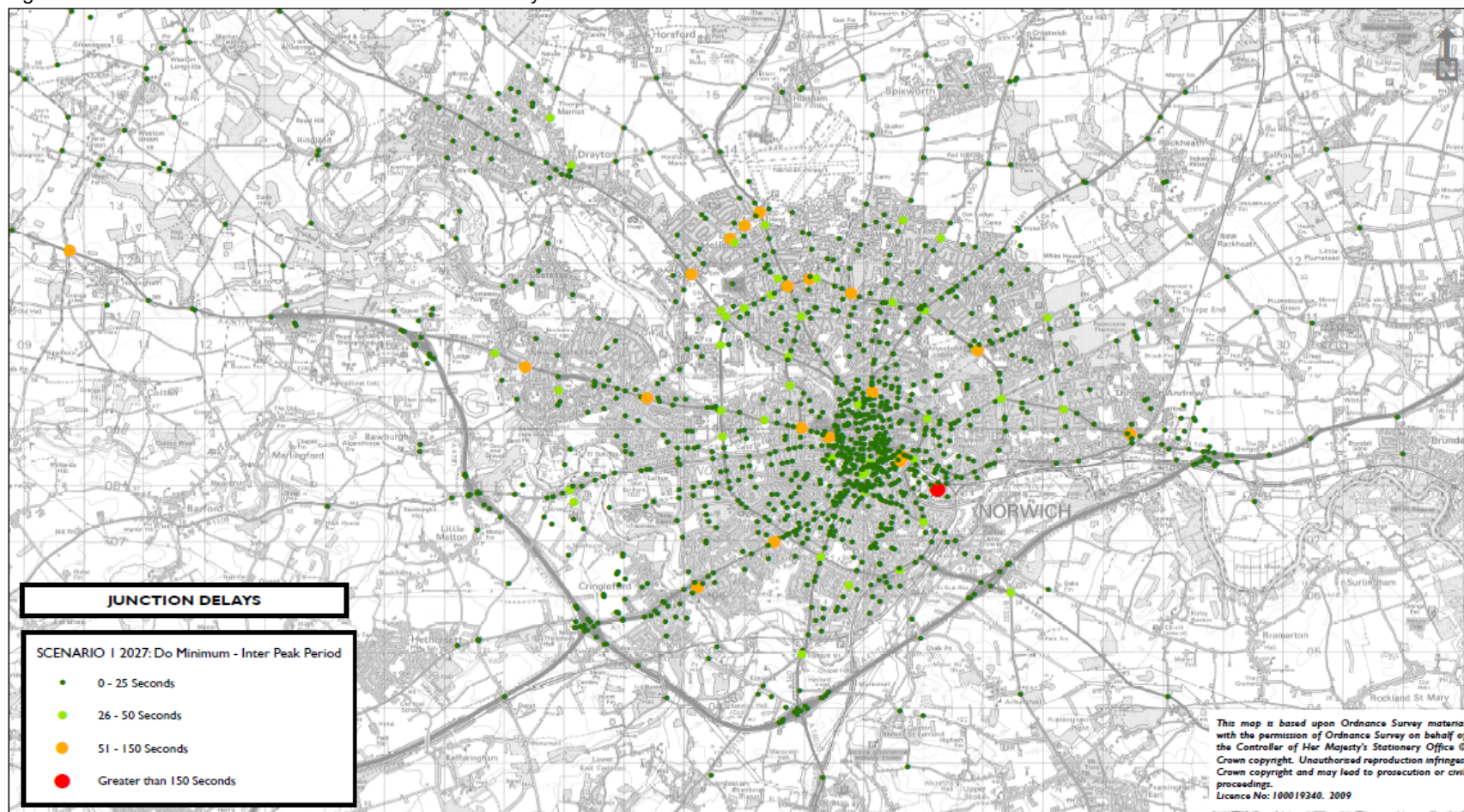
REV.	DESCRIPTION	CH'K'D	DATE
A	DRAFT	GW	18/10/09
B	----	----	----
C	----	----	----
D	----	----	----

INIT.	DATE	REF: NNDR MSBC Junction Delays
DRAWN BY	DWC	18/10/09
CHECKED BY	BW	18/10/09
PROJECT TITLE	NNDR MSBC	
SCALE	Next To Scale	FILE No.

233906/BSE/NOR/10/A 03 December 2009

P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NNDR MSBC Sensitivity Test Reports\For Issue\2009\1201\Dependent Development\Appendices\Appendices - Volume 3
Rev 01.doc

Figure E.14: 2027 Scenario 1 Do Minimum Junction Delays - IP



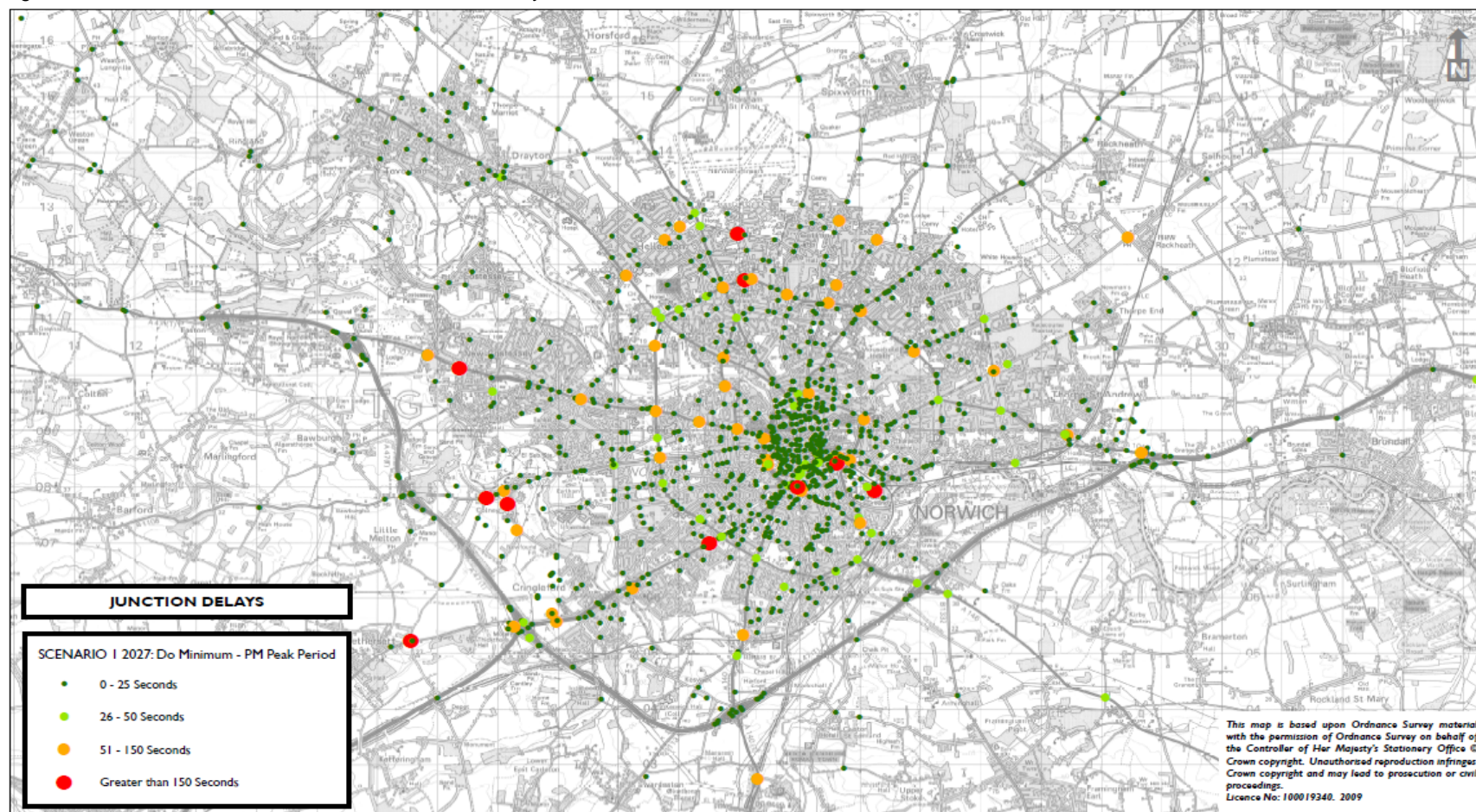
This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

REV.	DESCRIPTION	CH'K'D	DATE
A	DRAFT	GW	18/10/09
B	----	----	----
C	----	----	----
D	----	----	----

	INIT.	DATE	REF: NNDR_MSBC Junction Delays
DRAWN BY	SWC	18/10/09	SCALE
CHECKED BY	BW	18/10/09	File To Scale
PROJECT TITLE			
NNDR MSBC			

Norwich - Northern Distributor Road Volume 3 - Appendices for Dependent Development

Figure E.15: 2027 Scenario 1 Do Minimum Junction Delays – PM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

Norfolk County Council
working with
Mott MacDonald **MAY GURNEY**

Mike Jackson
Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

Mott MacDonald
County Hall
Martineau Lane
Norwich NR1 2BS
Tel: 01603 767530
Fax: 01603 767463
Web: www.mottmac.com

NNDR MSBC SENSITIVITY TESTS
Junction Delay Range Plots
SCENARIO 1 (exc. Dependent Development A)
Do Minimum 2027 - PM Peak

REV.	DESCRIPTION	CH'K'D	DATE
A	DRAFT	GW	18/10/09
B	----	----	----
C	----	----	----
D	----	----	----

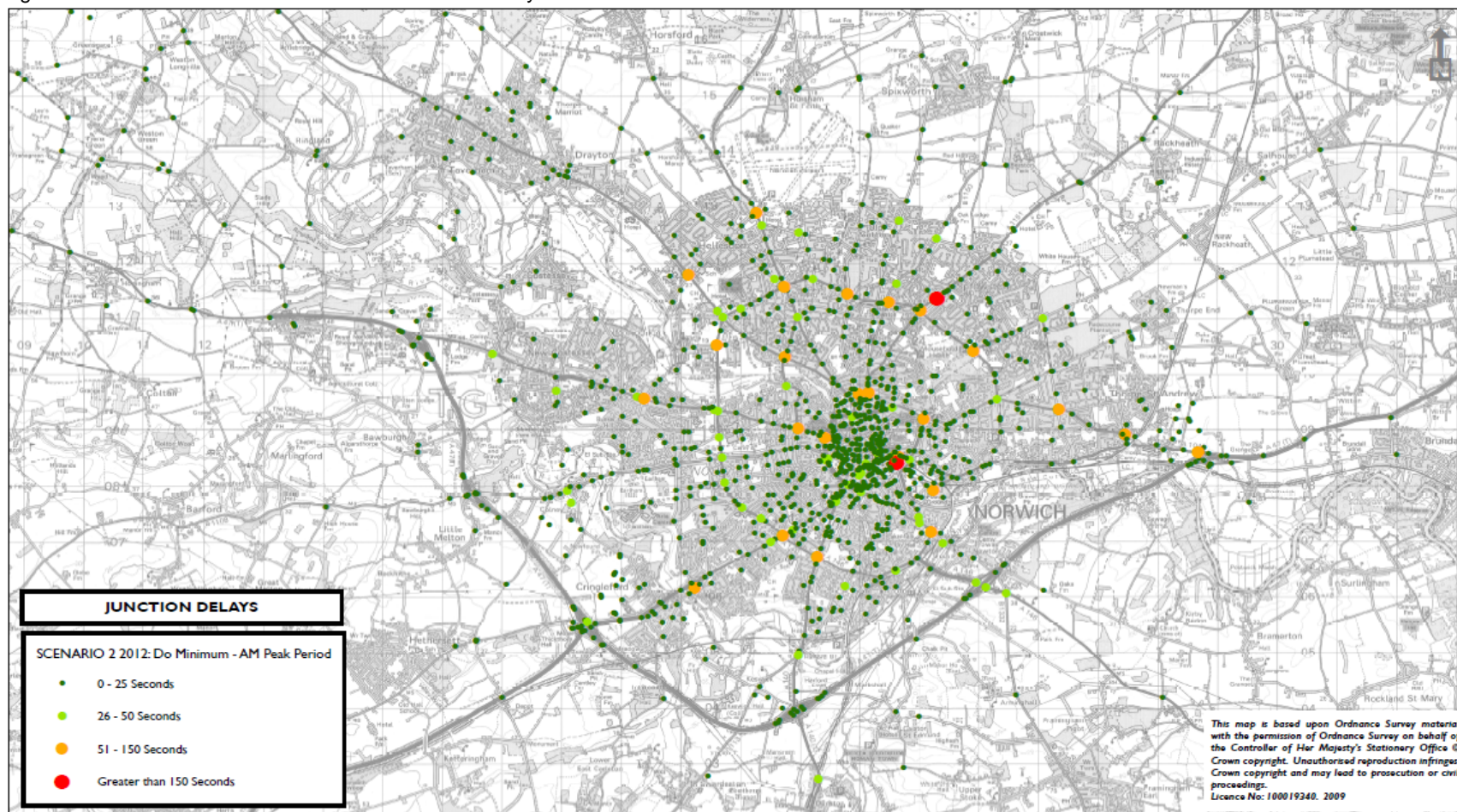
INIT.	DATE	REF:	INIT.	DATE	REF:
DRAWN BY	DWC	18/10/09	SCALE	File No.	----
CHECKED BY	BW	18/10/09	Next To Scale	----	----
PROJECT TITLE					
NNDR MSBC					

233906/BSE/NOR/10/A 03 December 2009

P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NNDR MSBC Sensitivity Test Reports\For Issue\20091201\Dependent Development\Appendices\Appendices - Volume 3
Rev 01.doc

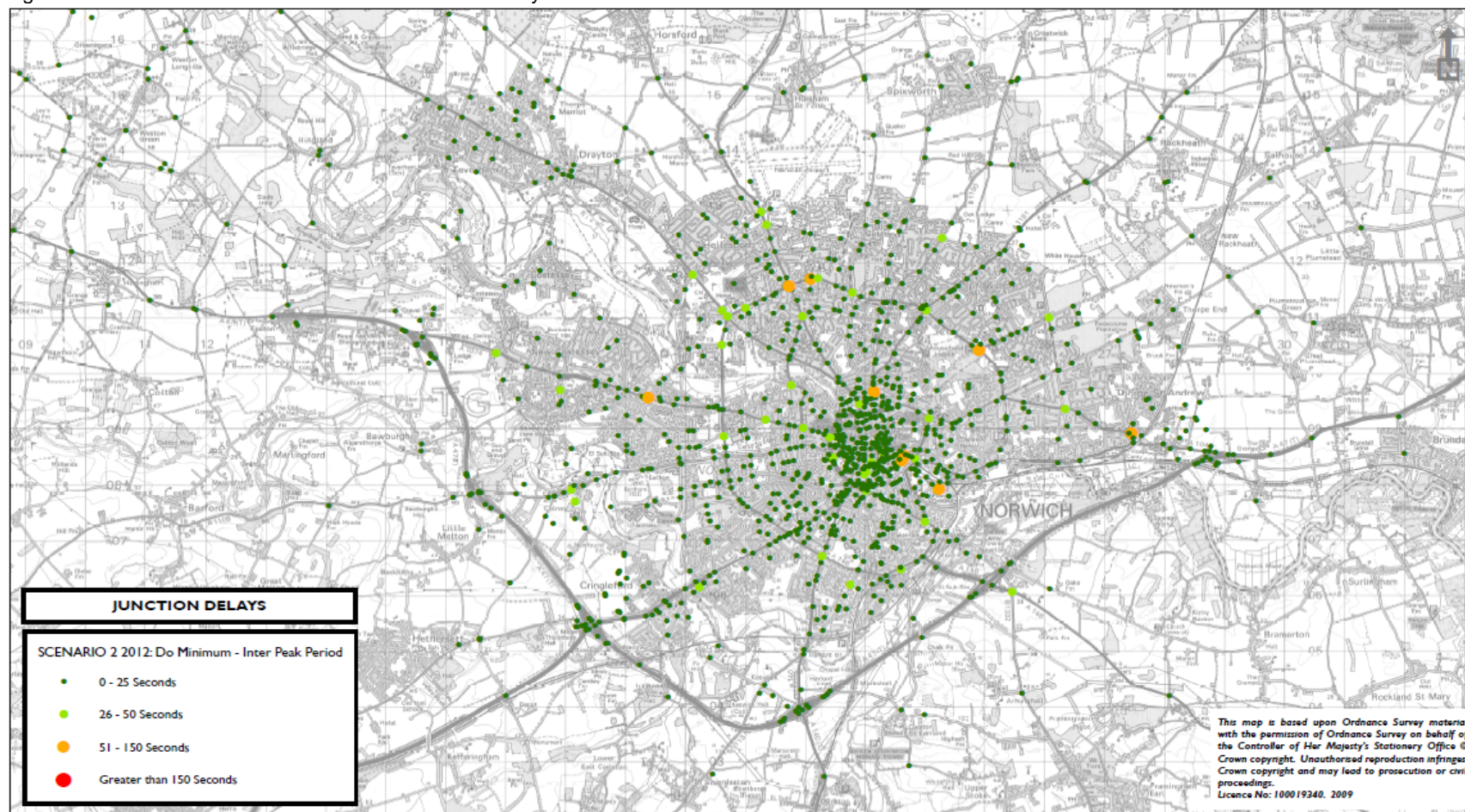
Norwich - Northern Distributor Road Volume 3 - Appendices for Dependent Development

Figure E.16: 2012 Scenario 2 Do Minimum Junction Delays – AM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

Figure E.17: 2012 Scenario 2 Do Minimum Junction Delays - IP

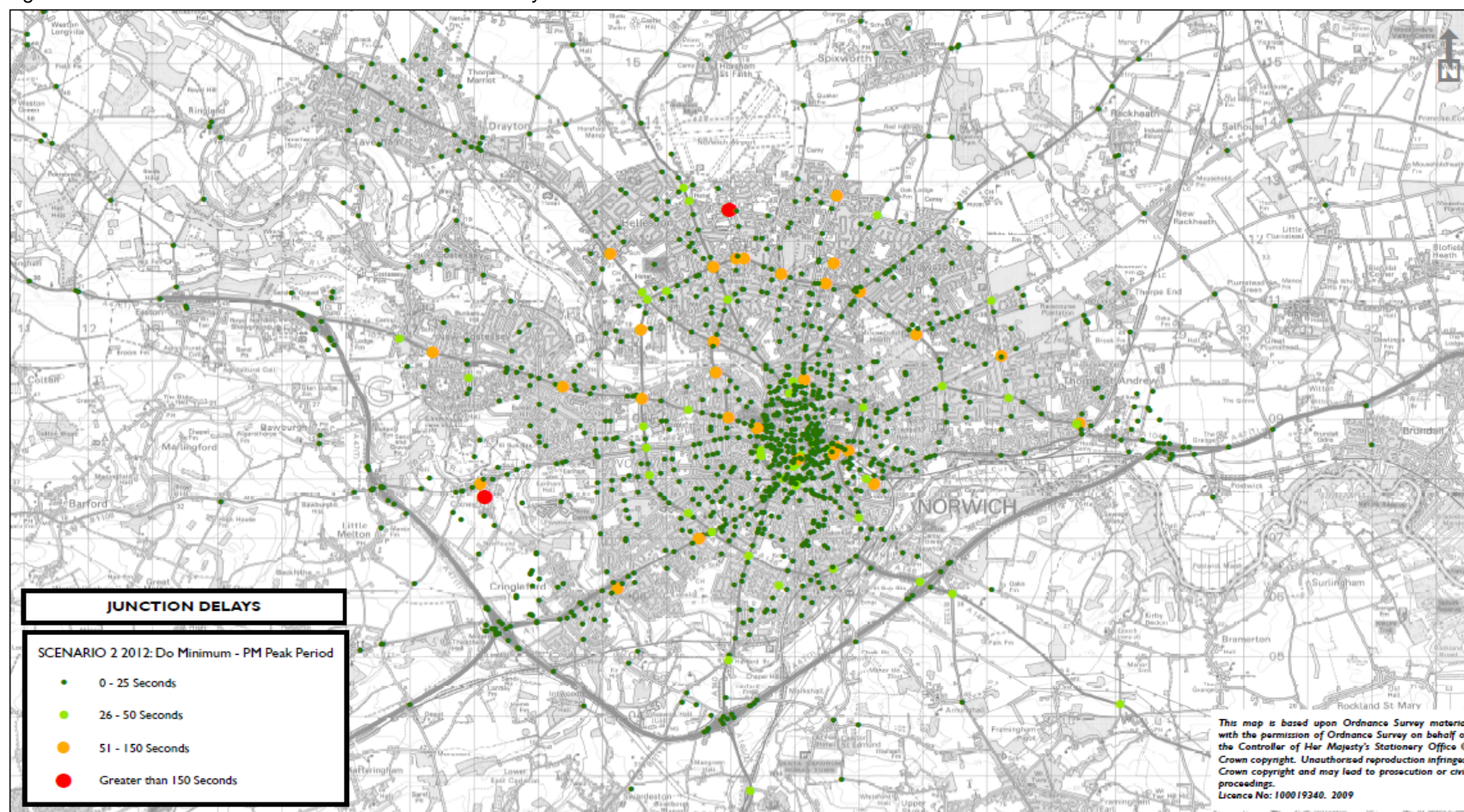


This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

REV.	DESCRIPTION	CH'K'D	DATE
A	DRAFT	GW	18/10/09
B			
C			
D			

INIT.	DATE	REF: NDR MSBC Junction Delays
DRAWN BY	DWC	18/10/09
CHECKED BY	BW	18/10/09
PROJECT TITLE		
		NDR MSBC

Figure E.18: 2012 Scenario 2 Do Minimum Junction Delays – PM Peak

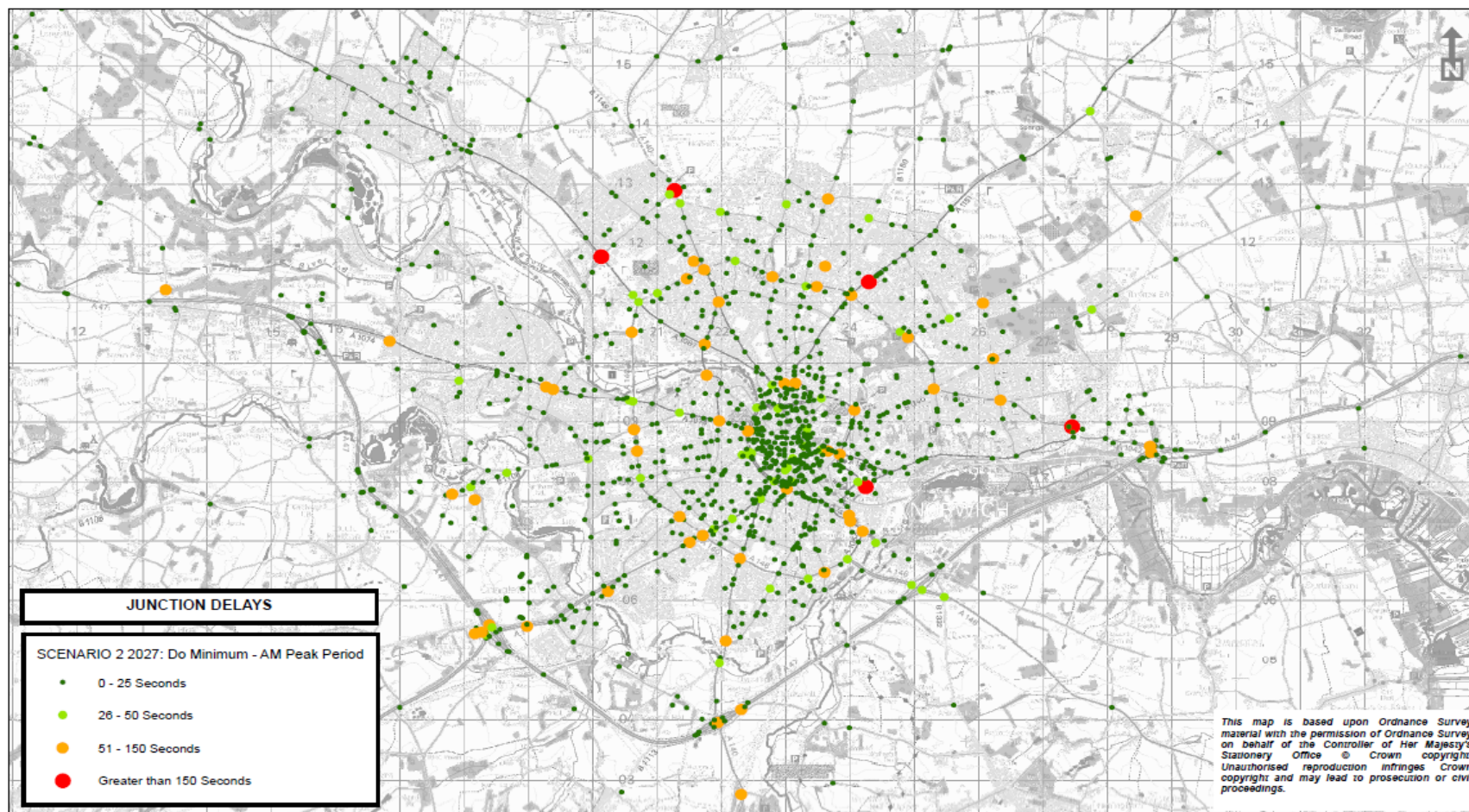


This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.

REV.	DESCRIPTION	CH'D	DATE
A	DRAFT	GW	18/10/09
B	----	----	----
C	----	----	----
D	----	----	----

INIT.	DATE	REF:	NDR MSBC Junction Delays
DRAWN BY	SWC	18/10/09	SCALE
CHECKED BY	BW	18/10/09	File No.
PROJECT TITLE			
NDR MSBC			

Figure E.19: 2027 Scenario 2 Do Minimum Junction Delays – AM Peak



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned.
Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.



Mike Jackson
Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

Mott MacDonald
County Hall
Martineau Lane
Norwich NR1 2US
Tel: 01603 767530
Fax: 01603 767453
Web: www.mottmac.com

NDR MSBC SENSITIVITY TESTS
Junction Delay Range Plots
SCENARIO 2 (all JCS Development)
Do Minimum 2027 - AM Peak

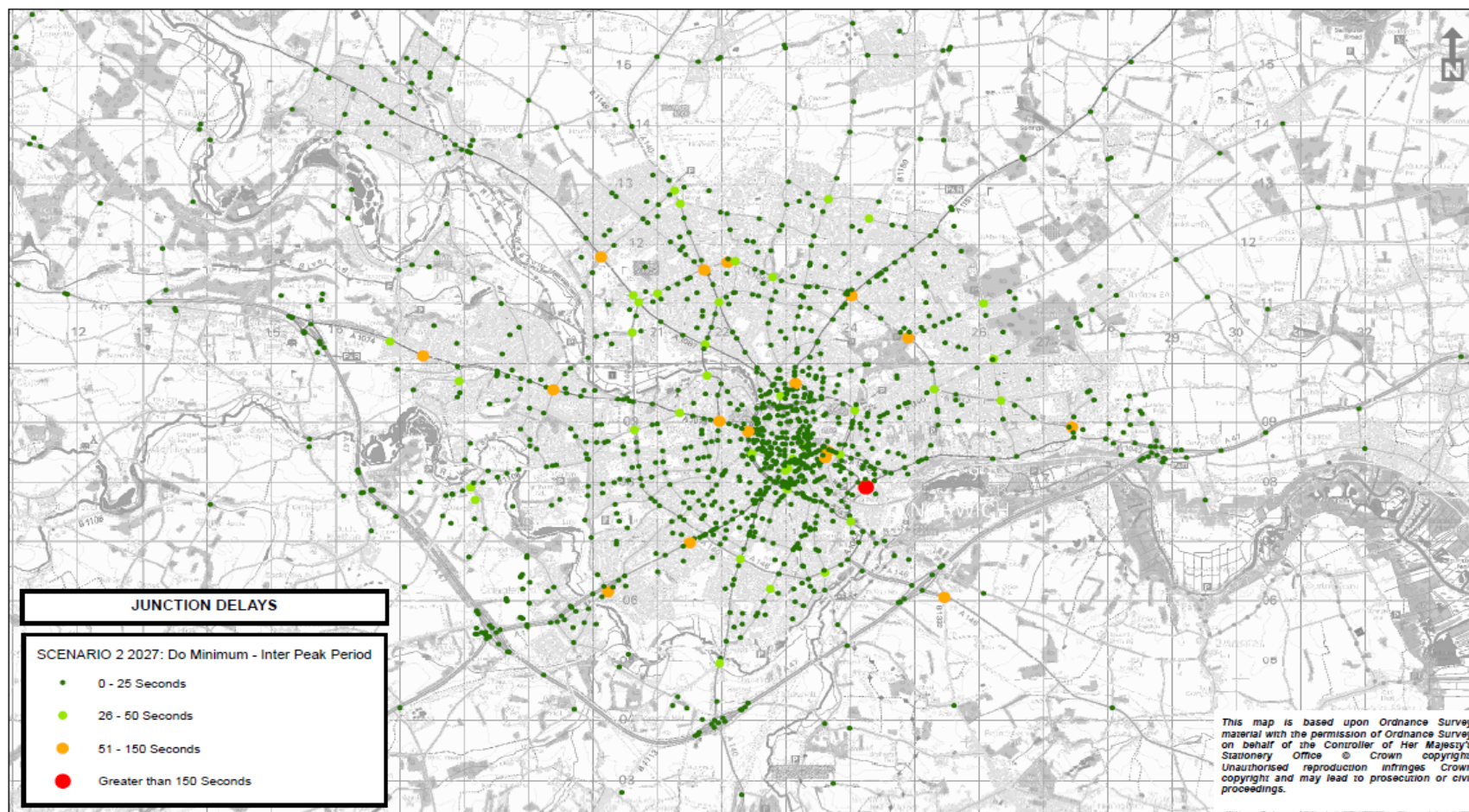
REV.	DESCRIPTION	CH'K'D	DATE
A	DRAFT	GW	18/10/09
B	----	----	----
C	----	----	----
D	----	----	----

	INIT.	DATE	REF:NDR_MSBC_Junction Delays
DRAWN BY	SWC	18/10/09	SCALE
CHECKED BY	EW	18/10/09	Not To Scale
PROJECT TITLE			
NDR MSBC			

233906/BSE/NOR/10/A 03 December 2009

P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NDR MSBC Sensitivity Test Reports\For Issue\20091201\Dependent Development\Appendices\Appendices - Volume 3
Rev 01.doc

Figure E.20: 2027 Scenario 2 Do Minimum Junction Delays - IP



This document should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Ltd was commissioned. Mott MacDonald Ltd accepts no responsibility for this document to any other party other than the person by whom it was commissioned.



Mike Jackson
Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

Mott MacDonald
County Hall
Martineau Lane
Norwich NR1 2US
Tel: 01603 767530
Fax: 01603 767453
Web: www.mottmac.com

NDR MSBC SENSITIVITY TESTS
Junction Delay Range Plots
SCENARIO 2 (all JCS Development)
Do Minimum 2027 - Inter Peak

REV.	DESCRIPTION	CHK'D	DATE
A	DRAFT	GW	18/10/09
B	.....	.....	.....
C	.....	.....	.....
D	.....	.....	.....

	INIT.	DATE	REF/NDR_MSBC_Junction Delays	
DRAWN BY	SWC	18/10/09	SCALE	FILE No.
CHECKED BY	BW	18/10/09	Not To Scale	.....
PROJECT TITLE				
NDR MSBC				

233906/BSE/NOR/10/A 03 December 2009

P:\Norwich\MM Projects\233906 - NDR 2007\233906-BC MSBC Agreement\NDR MSBC Sensitivity Test Reports\For Issue\20091201\Dependent Development\Appendices\Appendices - Volume 3
Rev 01.doc

For Figures E.21 to E. 39, please see Appendix Volume 4

Appendix F. Vehicle over Capacity Ratio

Please see Appendices Volumes 5 & 6.

Appendix G. Traffic Flows (PCUs)

Please see Appendix Volume 2.

Appendix H. Trip Totals (PCUs)

Please see Appendix Volume 2.

Appendix I. PCU Kilometres

Please see Appendix Volume 2.