A11 Improvement Options

Four options have been developed for the A11 Mildenhall study area to improve the existing congestion and safety issues.

Consideration of the need for improvement options is still at early conception stage and significant further analysis and option design will be undertaken. This will involve investigating the potential local network impacts in more detail. However at this stage, the major aim is to promote the overriding need for improvements, demonstrate the outline deliverability and early stage indicative costs, which demonstrates the strong early 'case' for improvements as part of HE's RIS2 process.

The aim of the options is to seek ways to improve the designated section of A11 to a high quality dual carriageway that utilises aspects of the emerging Expressway standard, this includes potential bypass of Fiveways, no openings in the central reserve, removing private accesses onto the A11, grade separation of major junctions (where required), limiting local accesses to left in/left out junctions and ensuring pedestrian connectivity and options for NMU (non-motorised) users are considered. This will in turn have a positive impact on the safety of this route.

Over the extent of the A11 study corridor, the horizontal alignment is generally compliant with current design standards. The potential realignment of the A11 aims to offer improved journey times and a continuous route for A11 traffic as a result of either a bypass of Fiveways, a new Grade Separated Junction at Fiveways (to replace the existing at-grade roundabout). In order to safely provide a junction improvement to the existing Fiveways roundabout a horizontal realignment of the existing A11 would be necessary.

The four options considered are: -

- Option A: Do Maximum (Bypass Option)
- Option B: Do Maximum (Fiveways Grade Separated / New Link Road)
- Option C: Do Something
- Option D: Do Minimum

The schematic drawings for each option are located at Appendix A. Following is a summary of the Options in the form of a RAG assessment, the improvements proposed for each option and an appraisal of the impact of these improvements.

Option A – Do Maximum (Bypass Option)

Option A proposes a bypass of the existing Fiveways junction crossing both Tuddenham Road and the River Lark and joining the existing A11 to the north of Fiveways. This option provides the most compliant design and would have the highest benefit to road user safety.

Location	Option A Do Maximum - Bypass Option	Option A Appraisal
A11/ Park Farm Drive	Proposed overbridge to maintain access from Park Farm Drive to land on opposite side of A11	Safer crossing point and access to A11 via Red Lodge for both NMU and vehicle, particularly slow moving farm traffic
	Existing Private Access to be stopped up	Mitigated by proposed overbridge and will provide access to A11 at Red Lodge
	Closure of central reservation gap	Mitigated by proposed overbridge
A11 / Herringswell Road / Newmarket Road	Proposed compact grade separated junction	Safer traffic movements onto and off A11. Improved signage would be required due to 7.5T weight restriction on Herringswell Road and narrow carriageway on Golf Links Road.
	Proposed overbridge	Safer traffic movements onto and off A11. Access to the existing quarry on Herringswell Road will be retained.
	Closure of central reservation gap	Improve safety at the junction and mitigated by proposed grade separated junction with overbridge
Herringswell Road to Newmarket Road (Barton Mills)	Proposed NMU footbridge	Safer crossing point over the A11 for non-motorised users. Should the existing A11 be stopped up (and depending what use the land will revert to), this footbridge may not be required, therefore costs will reduce.
	Closure of central reservation gap	Improve safety along the A11 and mitigated by the proposed NMU footbridge. Without pedestrian/cycle counts the impact of this closure cannot be assessed. Should the existing A11 be stopped up (and depending what use the land will revert to), this closure may not be required, therefore costs will reduce.
A11: Herringswell Road Junction to	Existing A11 carriageway to be stopped up	Create a safer and less congested “Fourways” junction at the Fiveways Roundabout. Land could revert to forest to help compensate for the

Newmarket Road Junction (Barton Mills)		forest lost from A11 bypass construction.
A11/ Newmarket Road	Proposed improvement of existing junction geometry	Safer traffic movements and increased capacity for vehicles manoeuvring onto and off A11
A11 / Tuddenham Road	Proposed NMU footbridge (subject to requirement / potential 'downgrading' measures implemented on existing A11 alignment).	Safer crossing point over the A11 for non-motorised users
	Proposed improvement of existing junction geometry	Safer traffic movements and increased capacity for vehicles manoeuvring onto and off A11
	Closure of central reservation gap	Proposed NMU footbridge would mitigate this closure and improve safety
Proposed Bypass of Fiveways Junction	Re-alignment of the A11 from Herringswell Road Junction to the north of Fiveways	Reduce the noise impact on Barton Mills. Maintain access to Barton Mills and local businesses. Would result in an increase in land take however this could be mitigated through potential stopping up of sections of existing A11 and reverting the carriageway to forest land, where appropriate.
	Proposed overbridge over Tuddenham Road and the River Lark	Reduce impact on existing housing development over Tuddenham Road and ensure only one crossing required over the River Lark.
	Grade Separated Junction on A1101 Mildenhall Road	Maintain connection to local roads and alleviate existing congestion issues at Fiveways junction. More detailed analysis of overall impacts on A1101 will need to be taken into consideration. This would also need to include the impact of the potential development of RAF Mildenhall which would increase the number of trips on the A1101 and A1065 to the north.
	Existing A11 carriageway to be stopped up	Create a safer and less congested "Fourways" junction at the Fiveways Roundabout. Land could revert to forest to help compensate for the forest lost from A11 bypass construction.

Table 1 Option A Appraisal

Option B – Do Maximum (Fiveways Grade Separated / New Link Road)

Option B is combined with the potential improvements to the mainline geometry. It proposes the grade separation of Fiveways junction and Herringswell Road / A11 junction as well as a new link road connecting Tuddenham Road and Mildenhall Road.

Location	Option B Do Maximum (Fiveways Grade Separated / New Link Road)	Option B Appraisal
A11/ Park Farm Drive	Proposed overbridge to maintain access from Park Farm Drive to land on opposite side of A11	Safer crossing point and access to A11 via Red Lodge for both NMU and vehicle, particularly slow moving farm traffic
	Existing Private Access to be stopped up	Mitigated by proposed overbridge, this will provide access to A11 at Red Lodge
	Closure of central reservation gap	Mitigated by proposed overbridge
A11 / Herringswell Road / Newmarket Road	Proposed compact grade separated junction with Golf Links Road	Safer traffic movements onto and off A11. Improved signage would be required due to 7.5T weight restriction on Herringswell Road and narrow carriageway on Golf Links Road.
	Proposed overbridge	Safer traffic movements onto and off A11. Access to the existing quarry on Herringswell Road will be retained.
	Closure of central reservation gap	Improve safety at the junction and mitigated by proposed grade separated junction with overbridge
Herringswell Road to Newmarket Road (Barton Mills)	Proposed NMU footbridge	Safer crossing point over the A11 for non-motorised users
	Closure of central reservation gap	Improve safety along the A11 and mitigated by the proposed NMU footbridge. Without pedestrian/cycle counts the impact of this closure cannot be assessed.
A11/ Newmarket Road	Newmarket Road to be stopped up at A11 (south of Tuddenham Road junction)	No traffic counts available to assess impact on diverting trips. Movements on and off the A11 from Newmarket Road would have to occur from the A11 / Herringswell Road / Newmarket Road junction, increasing both journey time and delay. Local residents of Barton Mills use this junction and it is important for local businesses.

	Closure of central reservation gap	Improved safety. Road users travelling from the A11 (SB) wanting to turn right onto Newmarket Road will now have to use the A11 / Herringswell Road / Newmarket Road junction. Without available traffic data the impact cannot be assessed. NMU will benefit from proposed footbridge at Tuddenham Road
A11 / Tuddenham Road	Proposed NMU footbridge	Safer crossing point over the A11 for non-motorised users
	Tuddenham Road to be stopped up at A11	There are currently 1887 vehicles over a 12 hour period turning left into Tuddenham Road from the A11 (220 in the AM and 195 in the PM). These vehicles would use the improved A11 / Herringswell Road / Newmarket Road junction or the proposed new road connecting Tuddenham Road to Mildenhall Road. Vehicles joining the A11 (SB) would also need to use these alternative routes. There are currently 1276 vehicles (12 hour count) using this turning onto the A11 with 152 and 118 vehicles in the AM and PM respectively. Local traffic could however use the proposed new Road. Local residents of Tuddenham use this junction and it is important for local businesses.
	Proposed Road to Connect Tuddenham Road to Mildenhall Road	Will maintain connection to local roads should Tuddenham Road be stopped up.
	Closure of central reservation gap	Proposed NMU footbridge would mitigate this closure and improve safety
Fiveways Junction	Existing roundabout to be upgraded to full grade separated junction. Existing accesses will be stopped up and alternative crossings will be provided via the new proposed junction.	This would mitigate existing congestion issues and improve safety due to improved capacity and better flow of traffic. The proposed grade separation of Fiveways on the existing alignment would significantly raise the level of the A11 and potentially cause noise issues for residents of Barton Mills.

Table 2 Option B Appraisal

Option C – Do Something

This option enhances the safety improvements compared to the Do Minimum, but has increased costs and slightly more impacts to existing stakeholders (longer diversions due to local road closures onto the A11).

Location	Option C Do Something	Option C Appraisal
A11/ Park Farm Drive	Park Farm Drive to be accessed via new access tracks to run parallel with A11	Safer access to the A11 via Red Lodge particularly for slow moving farm traffic. However the potential impact of the access road would need to be assessed as well as the potential use of this access in the future.
	Existing Private Access to be stopped up	This will be mitigated by the proposed access tracks, however direct access will no longer be available and vehicles would need to use the Red lodge junction to access the farmland to the north of the A11 and the A11 NB therefore increased journey times.
	Closure of central reservation gap	This will improve safety however vehicles wanting to access the A11 (NB) would need to do so via the Red Lodge junction. Without available turning counts for the Red Lodge junction, the impact cannot be assessed.
A11 / Herringswell Road / Newmarket Road	Proposed overbridge	Safer access across the A11 for both vehicles and NMU, particularly farm vehicles. Access to the existing quarry on Herringswell Road will be retained.
	Newmarket Road and Herringswell Road to be stopped up at the A11	This will have a significant impact on the number of trips being diverted along local roads and will also increase the number of vehicles using the Red Lodge junction and Fiveways. This will result in increased journey times and potentially local congestion. Therefore, there is no mitigation for this closure and without access to traffic data the impact cannot be assessed.
	Closure of central reservation gap	Restricted access will result in increased journey times and exacerbate any capacity issues at Red Lodge junction and Fiveways.
Herringswell Road to Newmarket Road (Barton Mills)	Proposed NMU footbridge	Safer crossing point over the A11 for non-motorised users
	Closure of central reservation gap	Improve safety along the A11 and mitigated by the proposed NMU footbridge. Without pedestrian/cycle counts the impact of this closure cannot be assessed.
A11/ Newmarket Road	Newmarket Road to be stopped up at A11 (south of Tuddemham Road junction)	No traffic counts available to assess impact on diverting trips. Movements on and off the A11 from Newmarket Road would have to occur from the A11 / Herringswell Road / Newmarket Road junction, increasing both journey time and delay.

	Closure of central reservation gap	Improved safety, however road users travelling from the A11 (SB) wanting to turn right onto Newmarket Road will now have to use local routes from Fiveways or travel north from Red Lodge junction, significantly increasing journey times. Without available traffic data the impact cannot be assessed. NMU will benefit from proposed footbridge at Tuddenham Road
A11 / Tuddenham Road	Proposed NMU footbridge	Safer crossing point over the A11 for non-motorised users
	Tuddenham Road to be stopped up at A11	There are currently 1887 vehicles over a 12 hour period turning left into Tuddenham Road from the A11 (220 in the AM and 195 in the PM). These vehicles would have to use the improved **A11 / Herringswell Road / Newmarket Road** junction or the proposed new road connecting **Tuddenham Road to Mildenhall Road**. Vehicles joining the A11 (SB) would also need to use this improved junction further south. There are currently 1276 vehicles (12 hour count) using this turning onto the A11 with 152 and 118 vehicles in the AM and PM respectively. Local traffic could however use the proposed new Road.
	Proposed Road to Connect Tuddenham Road to Mildenhall Road	Will maintain connection to local roads should Tuddenham Road be stopped up.
	Closure of central reservation gap	Proposed NMU footbridge would mitigate this closure and improve safety
Fiveways Junction	Existing roundabout to be upgraded to full grade separated junction. Existing accesses will be stopped up and alternative crossings will be provided via the new proposed junction.	This would mitigate existing congestion issues and improve safety. The proposed grade separation of Fiveways on the existing alignment would significantly raise the level of the A11 and potentially cause noise issues for residents of Barton Mills.

Table 3 Option C Appraisal

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Option D – Do Minimum

This option provides the lowest cost and impact to existing stakeholders and will provide some improvement to accident hotspots located at direct accesses which have substandard merge and diverges with the A11. It is anticipated that the improvements to the alignment should be incorporated into this solution. The proposed Hamburger roundabout would reduce congestion as currently 77% of traffic movements from the A11 South to A11 North in the AM Peak occur, with 47% of movements from A11 North to A11 South. Similarly in the PM peak these movements are slightly higher at 78% South to North and 57% North to South, therefore a hamburger option would relieve the existing layout of these flows and ultimately reduce congestion for other movements.

Location	Option D Do Minimum	Option D Appraisal
A11/ Park Farm Drive	Park Farm Drive to be accessed via alternative new access linking Red Lodge Junction	Safer access to A11 via Red Lodge particularly for slow moving farm traffic. Concern with the suitability of this proposed access for farm vehicles and the increased travel time
	Existing Private Access to be stopped up	This will be mitigated by the proposed access tracks, however direct access will no longer be available and vehicles would need to use the Red lodge junction to access the farmland to the north of the A11 and the A11 NB therefore increased journey times
	Closure of central reservation gap	This will improve safety, however vehicles wanting to access the A11 (NB) would need to do so via the Red Lodge junction. Without available turning counts, the impact cannot be assessed.
A11 / Herringswell Road / Newmarket Road	Proposed improvement of existing junction geometry	Safer traffic movements and increased capacity for vehicles manoeuvring onto and off A11
	Closure of central reservation gap	Restricted access will result in increased journey times and exacerbate capacity issues at Red Lodge junction and Fiveways.
Herringswell Road to Newmarket Road (Barton Mills)	Closure of central reservation gap	Improve safety along the A11 and mitigated by the proposed NMU footbridge at Tuddenham Road. Without pedestrian/cycle counts the impact of this closure cannot be assessed.
A11/ Newmarket	Proposed Improvement of existing junction geometry	Safer traffic movements and increased capacity for vehicles manoeuvring onto and off A11

Road	Closure of central reservation gap	Improved safety, however, road users travelling from the A11 (SB) wanting to turn right onto Newmarket Road will now have to use local routes from Fiveways or travel north from Red Lodge junction, significantly increasing journey times. Without available traffic data the impact cannot be assessed. NMU will benefit from proposed footbridge at Tuddenham Road
A11 / Tuddenham Road	Proposed NMU footbridge	Safer crossing point over the A11 for non-motorised users
	Proposed Improvement of existing junction geometry	Safer traffic movements and increased capacity for vehicles manoeuvring onto and off A11
	Closure of central reservation gap	Proposed NMU footbridge would mitigate this closure and improve safety
Fiveways Junction	Existing roundabout to be upgraded to at grade hamburger junction	Based on the existing congestion issues, although there would be a free flow of vehicles travelling along the A11, there would still be a high proportion of turning movements from the A11 (S) to the A1065 (420 vehicles in the AM and 452 in the PM) therefore queuing may still occur on the A11. However this layout would improve the operation of the junction compared to its current capacity.

Table 4 Option D Appraisal

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Appendix A

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PROPOSED COMPACT GRADE SEPARATED JUNCTION

PARK FARM TO BE ACCESSED VIA NEW ACCESS TRACKS TO RUN PARALLEL TO A11

GOLF LINKS ROAD

NEWMARKET ROAD

CUT LINE

A 11

ACCESS TO QUARRY TO BE MAINTAINED

1020R

PARK FARM DRIVE

HERRINGSWELL ROAD

PROPOSED OVERBRIDGE TO MAINTAIN ACCESS FROM PARK FARM DRIVE TO LAND ON OPPOSITE SIDE OF A11 (OPTIONAL, DEPENDING ON LAND OWNERSHIP)

EXISTING ROAD TO BE POTENTIALLY STOPPED UP OR CAN REVERT TO FARMLAND TO HELP TO COMPENSATE FOR THE FARMLAND LOST AND TO CREATE A MORE EASILY MANAGED FOURWAYS JUNCTION AT FIVEWAYS. LOCAL ACCESS WOULD BE RETAINED FOR BARTON MILLS AND TUDDENHAM VIA NEWMARKET ROAD AND TUDDENHAM ROAD

A 1065

PROPOSED NMU FOOTBRIDGE

THE STREET

EXISTING ROAD TO BE POTENTIALLY STOPPED UP OR CAN REVERT TO FOREST TO HELP TO COMPENSATE FOR THE FOREST LOST AND TO CREATE A MORE EASILY MANAGED FOURWAYS JUNCTION AT FIVEWAYS

A11

PROPOSED IMPROVEMENT OF EXISTING JUNCTION GEOMETRY

A 1101

6880R

TUDDENHAM ROAD

2040R

2880R

REALIGNED CARRIAGEWAY TO CONNECT A11 TO A1101

AVAILABLE TRAFFIC DATA INDICATES THAT WHEN FACTORED FOR AN ASSUMED OPENING YEAR OF 2025, AND A RESULTANT DESIGN YEAR OF 2040 THAT A DUAL THREE LANE ALL-PURPOSE ROAD MAY BE JUSTIFIED, BUT AT THIS STAGE THIS HAS NOT BEEN INCLUDED. THE REQUIREMENT FOR MAINLINE WIDENING AND ITS EXTENT, WHICH MAY EXTEND BEYOND THE CURRENT STUDY LIMITS WOULD BE SUBJECT TO THE OUTCOMES OF TRAFFIC MODELLING AND APPRAISAL.

KEY

- PROPOSED GRADE SEPARATED JUNCTION
- PROPOSED COMPACT GRADE SEPARATED JUNCTION
- PROPOSED AT GRADE "HAMBURGER" JUNCTION
- EXISTING AT GRADE JUNCTION GEOMETRY TO BE IMPROVED
- PROPOSED OVERBRIDGE/UNDERBRIDGE
- PROPOSED FOOTBRIDGE TO ACCOMMODATE NMU'S
- PROPOSED NEW ROADS TO MAINTAIN ACCESS TO STOPPED UP PRIVATE ACCESSES & ROADS
- PROPOSED DIVERSION ROUTES TO MAINTAIN ACCESS TO PRIVATE PROPERTIES VIA EXISTING ROADS
- CLOSURE OF CENTRAL RESERVATION GAPS
- EXISTING SIDE ROAD TO BE STOPPED UP
- EXISTING PRIVATE ACCESSES TO BE STOPPED UP
- PROPOSED HORIZONTAL REALIGNMENT

Revision	Amendment	Drawn/Designed	Checked	Approved	Date

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Project

A11
JUNCTION IMPROVEMENT WORKS

Drawing Title

GENERAL ARRANGEMENT
OPTION A
DO MAXIMUM (BYPASS OPTION)
Sheet 1 of 4

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1:5000	FS			
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1:5000@A1	21/10/16			

Status: OPTION IDENTIFICATION

Drawing No: Project | Originator | Volume | Location | Type | Role | Number
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Suitability: S2

Revision: P1

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by: Kyle Newman

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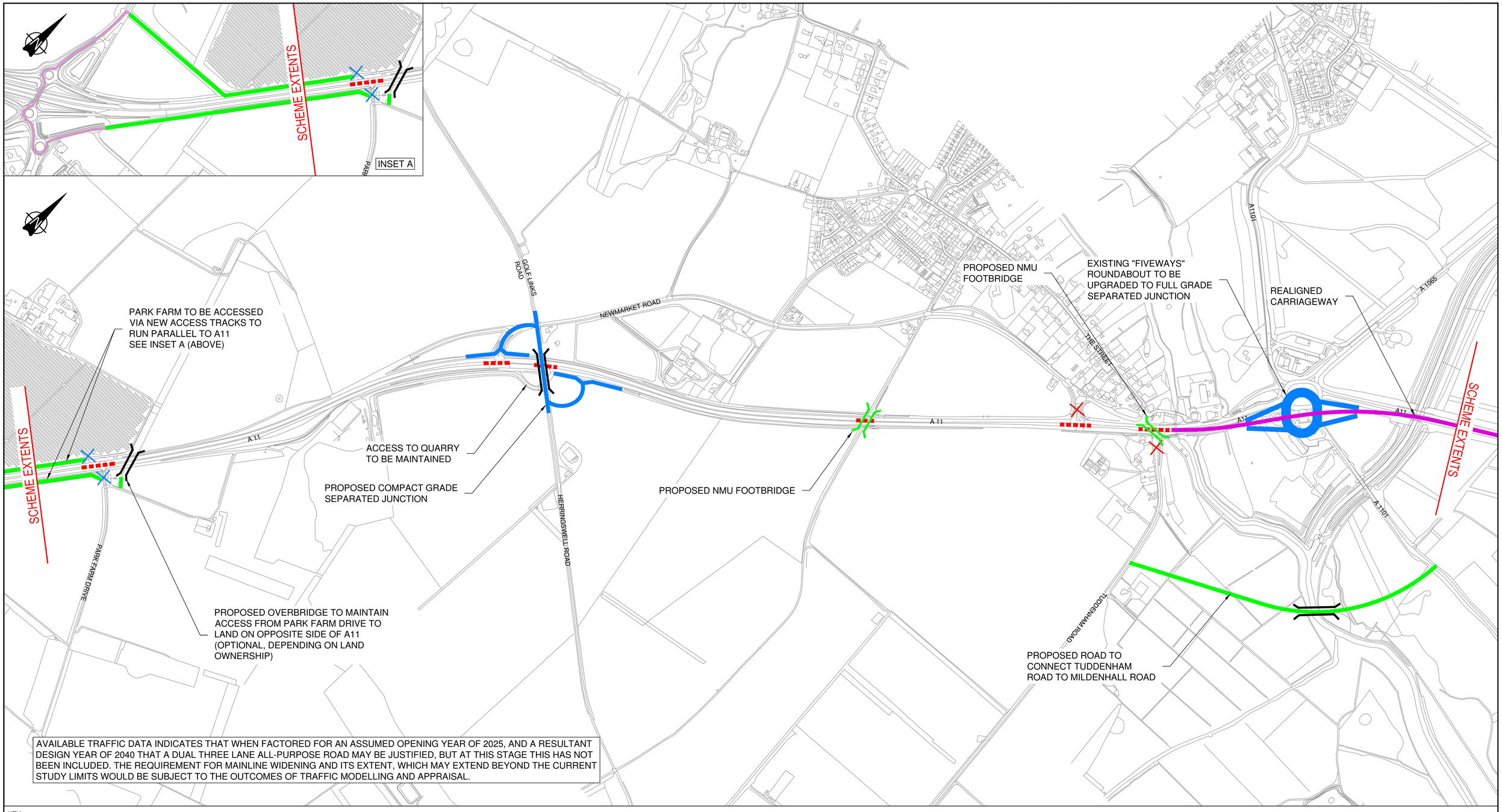

AVAILABLE TRAFFIC DATA INDICATES THAT WHEN FACTORED FOR AN ASSUMED OPENING YEAR OF 2025, AND A RESULTANT DESIGN YEAR OF 2040 THAT A DUAL THREE LANE ALL-PURPOSE ROAD MAY BE JUSTIFIED, BUT AT THIS STAGE THIS HAS NOT BEEN INCLUDED. THE REQUIREMENT FOR MAINLINE WIDENING AND ITS EXTENT, WHICH MAY EXTEND BEYOND THE CURRENT STUDY LIMITS WOULD BE SUBJECT TO THE OUTCOMES OF TRAFFIC MODELLING AND APPRAISAL.

KEY

- PROPOSED GRADE SEPARATED JUNCTION
- PROPOSED COMPACT GRADE SEPARATED JUNCTION
- PROPOSED AT GRADE "HAMBURGER" JUNCTION
- EXISTING AT GRADE JUNCTION GEOMETRY TO BE IMPROVED
- PROPOSED OVERBRIDGE/UNDERBRIDGE
- PROPOSED FOOTBRIDGE TO ACCOMMODATE NMU'S
- PROPOSED NEW ROADS TO MAINTAIN ACCESS TO STOPPED UP PRIVATE ACCESSES & ROADS
- PROPOSED DIVERSION ROUTES TO MAINTAIN ACCESS TO PRIVATE PROPERTIES VIA EXISTING ROADS
- CLOSURE OF CENTRAL RESERVATION GAPS
- EXISTING SIDE ROAD TO BE STOPPED UP
- EXISTING PRIVATE ACCESSES TO BE STOPPED UP
- PROPOSED HORIZONTAL REALIGNMENT

Revision	Amendment	Drawn/Designed	Checked	Approved	Date
P2	TEXT "ACCESS TO QUARRY TO BE MAINTAINED" ADDED	FS	JG	JG	21/10/16

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Project
A11
JUNCTION IMPROVEMENT WORKS

Drawing Title
GENERAL ARRANGEMENT
OPTION B
DO MAXIMUM (FIVEWAYS GRADE SEPARATED /NEW LINK ROAD) - Sheet 2 of 4

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1:5000	OC	FS	JA	TK
Original Size 1:5000@A1	Date 21/09/16	Date 21/09/16	Date 21/09/16	Date 21/09/16

Status: OPTION IDENTIFICATION

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1075557-MOU-00-ZZ-DR-D-0100-0002

Suitability: S2
Revision: P2

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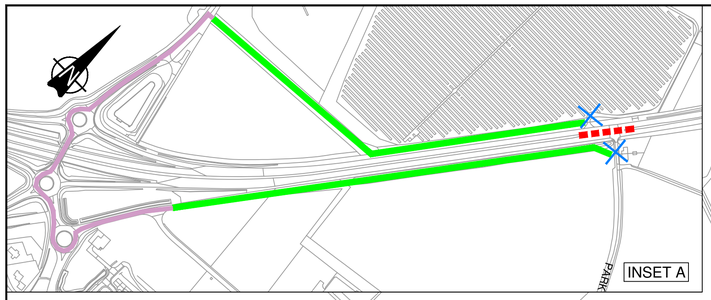
plot date: 26/10/2016 10:47:19



PROPOSED VEHICULAR OVERBRIDGE

PROPOSED NMU FOOTBRIDGE

EXISTING "FIVEWAYS" ROUNDABOUT TO BE UPGRADED TO FULL GRADE SEPARATED JUNCTION

REALIGNED CARRIAGEWAY

SCHEME EXTENTS

ACCESS TO QUARRY TO BE MAINTAINED

PROPOSED NMU FOOTBRIDGE

PARK FARM TO BE ACCESSED VIA NEW ACCESS TRACKS TO RUN PARALLEL TO A11 SEE INSET A (ABOVE)

PROPOSED ROAD TO CONNECT TUDDENHAM ROAD TO MILDENHALL ROAD

GOLF LINKS ROAD

NEWMARKET ROAD

HERRINGSWELL ROAD

PARK FARM DRIVE

THE STREET

TUDDENHAM ROAD

A 11

A 1101

A 1065

AVAILABLE TRAFFIC DATA INDICATES THAT WHEN FACTORED FOR AN ASSUMED OPENING YEAR OF 2025, AND A RESULTANT DESIGN YEAR OF 2040 THAT A DUAL THREE LANE ALL-PURPOSE ROAD MAY BE JUSTIFIED, BUT AT THIS STAGE THIS HAS NOT BEEN INCLUDED. THE REQUIREMENT FOR MAINLINE WIDENING AND ITS EXTENT, WHICH MAY EXTEND BEYOND THE CURRENT STUDY LIMITS WOULD BE SUBJECT TO THE OUTCOMES OF TRAFFIC MODELLING AND APPRAISAL.

KEY

- PROPOSED GRADE SEPARATED JUNCTION
- PROPOSED COMPACT GRADE SEPARATED JUNCTION
- PROPOSED AT GRADE "HAMBURGER" JUNCTION
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- PROPOSED FOOTBRIDGE TO ACCOMMODATE NMU'S
- PROPOSED NEW ROADS TO MAINTAIN ACCESS TO STOPPED UP PRIVATE ACCESSES & ROADS
- PROPOSED DIVERSION ROUTES TO MAINTAIN ACCESS TO PRIVATE PROPERTIES VIA EXISTING ROADS
- CLOSURE OF CENTRAL RESERVATION GAPS
- EXISTING SIDE ROAD TO BE STOPPED UP
- EXISTING PRIVATE ACCESSES TO BE STOPPED UP
- PROPOSED HORIZONTAL REALIGNMENT

Revision	Amendment	Drawn/Designed	Checked	Approved	Date
P2	TEXT "ACCESS TO QUARRY TO BE MAINTAINED" ADDED	FS	JG	JG	21/10/16

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Project
A11 JUNCTION IMPROVEMENT WORKS

Drawing Title
GENERAL ARRANGEMENT OPTION C DO SOMETHING Sheet 3 of 4

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1:5000	OC	FS	JA	TK
Original Size	Date	Date	Date	Date
1:5000@A1	21/09/16	21/09/16	21/09/16	21/09/16

Status: OPTION IDENTIFICATION

Drawing No: Project | Originator | Volume: **1075557-MOU-00-ZZ-DR-D-0100-0003**
Location | Type | Role | Number

Suitability: S2

Revision: P2

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by: Mossroor Khan
plot date: 25/10/2016 15:32:15

AVAILABLE TRAFFIC DATA INDICATES THAT WHEN FACTORED FOR AN ASSUMED OPENING YEAR OF 2025, AND A RESULTANT DESIGN YEAR OF 2040 THAT A DUAL THREE LANE ALL-PURPOSE ROAD MAY BE JUSTIFIED, BUT AT THIS STAGE THIS HAS NOT BEEN INCLUDED. THE REQUIREMENT FOR MAINLINE WIDENING AND ITS EXTENT, WHICH MAY EXTEND BEYOND THE CURRENT STUDY LIMITS WOULD BE SUBJECT TO THE OUTCOMES OF TRAFFIC MODELLING AND APPRAISAL.

SCHEME EXTENTS

PARK FARM DRIVE

INSET A

ALTERNATIVE ROUTE TO ACCESS FARM AFTER CLOSURE OF THE CENTRAL RESERVATION ON A11 SEE INSET A ABOVE

GOLF LINKS ROAD

NEWMARKET ROAD

A 11

HERRINGSWELL ROAD

PROPOSED IMPROVEMENT OF EXISTING JUNCTION GEOMETRY

PROPOSED NMU FOOTBRIDGE

EXISTING "FIVEWAYS" ROUNDABOUT TO BE UPGRADED TO AT GRADE HAMBURGER JUNCTION

THE STREET

A1101

A 1065

TUDDENHAM ROAD

PROPOSED IMPROVEMENT OF EXISTING JUNCTION GEOMETRY

PARK FARM TO BE ACCESSED VIA ALTERNATIVE ROUTE FROM RED LODGE JUNCTION TO THE SOUTH SEE INSET A (ABOVE)

KEY

- PROPOSED GRADE SEPARATED JUNCTION
- PROPOSED COMPACT GRADE SEPARATED JUNCTION
- PROPOSED AT GRADE "HAMBURGER" JUNCTION
- EXISTING AT GRADE JUNCTION GEOMETRY TO BE IMPROVED
- PROPOSED OVERBRIDGE/UNDERBRIDGE
- PROPOSED FOOTBRIDGE TO ACCOMMODATE NMU'S
- PROPOSED NEW ROADS TO MAINTAIN ACCESS TO STOPPED UP PRIVATE ACCESSES & ROADS
- PROPOSED DIVERSION ROUTES TO MAINTAIN ACCESS TO PRIVATE PROPERTIES VIA EXISTING ROADS
- CLOSURE OF CENTRAL RESERVATION GAPS
- EXISTING SIDE ROAD TO BE STOPPED UP
- EXISTING PRIVATE ACCESSES TO BE STOPPED UP
- PROPOSED HORIZONTAL REALIGNMENT

Revision	Amendment	Drawn/Designed	Checked	Approved	Date

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Project
A11
JUNCTION IMPROVEMENT WORKS

Drawing Title
GENERAL ARRANGEMENT
OPTION D
DO MINIMUM
Sheet 4 of 4

mouchel
building great relationships

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Client
Suffolk Highways
your roads, our business

Scale	Designed / Drawn	Checked	Approved	Authorised
1:5000	OC	FS	JA	TK
Original Size	Date	Date	Date	Date
1:5000@A1	21/09/16	21/09/16	21/09/16	21/09/16

Status
OPTION IDENTIFICATION

Drawing No
Project | Originator | Volume
1075557-MOU-00-
ZZ-DR-D-0100-0004
Location | Type | Role | Number

Suitability
S2

Revision
P1

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Repath: Q:\01 Projects\HAA11 & A1123 - Drawings\A11\1075557-MOU-00-ZZ-DR-D-0100-0003_A11 Do Min.dwg

by: Mosarrof Khan

plot date: 25/10/2016 15:54:31

AVAILABLE TRAFFIC DATA INDICATES THAT WHEN FACTORED FOR AN ASSUMED OPENING YEAR OF 2025, AND A RESULTANT DESIGN YEAR OF 2040 THAT A DUAL THREE LANE ALL-PURPOSE ROAD MAY BE JUSTIFIED, BUT AT THIS STAGE THIS HAS NOT BEEN INCLUDED. THE REQUIREMENT FOR MAINLINE WIDENING AND ITS EXTENT, WHICH MAY EXTEND BEYOND THE CURRENT STUDY LIMITS WOULD BE SUBJECT TO THE OUTCOMES OF TRAFFIC MODELLING AND APPRAISAL.

NOTES

1.SUGGESTED PROPOSED HORIZONTAL REALIGNMENT FOR THE A11 IS LIMITED TO THE SECTIONS SHOWN ABOVE. WHERE REASONABLE IMPROVEMENTS HAVE BEEN MADE TO SUBSTANDARD RADII ON THE EXISTING ALIGNMENT. AREAS OF THE ALIGNMENT THAT ARE 2 STEPS BELOW THE DESIRABLE MINIMUM HAVE NOT BEEN ALTERED AS IT WOULD NOT BE ECONOMICALLY JUSTIFIABLE. AS NO SURVEY DATA WAS AVAILABLE AN ASSESSMENT HAS ONLY BEEN CARRIED OUT ON THE HORIZONTAL ALIGNMENT.

KEY

PROPOSED HORIZONTAL REALIGNMENT

EXISTING HORIZONTAL ALIGNMENT

Revision	Amendment	Drawn/Designed	Checked	Approved	Date

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Project

A11
JUNCTION IMPROVEMENT WORKS

Drawing Title

PROPOSED ALIGNMENT IMPROVEMENTS - A11 SHEET 1 OF 1

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1:5000	OC	FS	JA	TK
Original Size: 1:5000@A1	Date: 21/09/16	Date: 21/09/16	Date: 21/09/16	Date: 21/09/16

Status: OPTION IDENTIFICATION

Drawing No (Project | Originator | Volume / Location | Type | Role | Number): **1075557-MOU-00-ZZ-DR-D-0100-0005**

Suitability: S2

Revision: P1

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filepath: Q:\01 Projects\HA\A11 & A12\3 - Drawings\A11\1075557-MOU-00-ZZ-DR-D-0100-0005_A11 Horizontal Improvement.dwg
by: Mossroor Khan
plot date: 25/10/2016 16:01:13