



Lincolnshire County Council

NORTH HYKEHAM RELIEF ROAD

Appendix J – Initial Sift





Lincolnshire County **Council**

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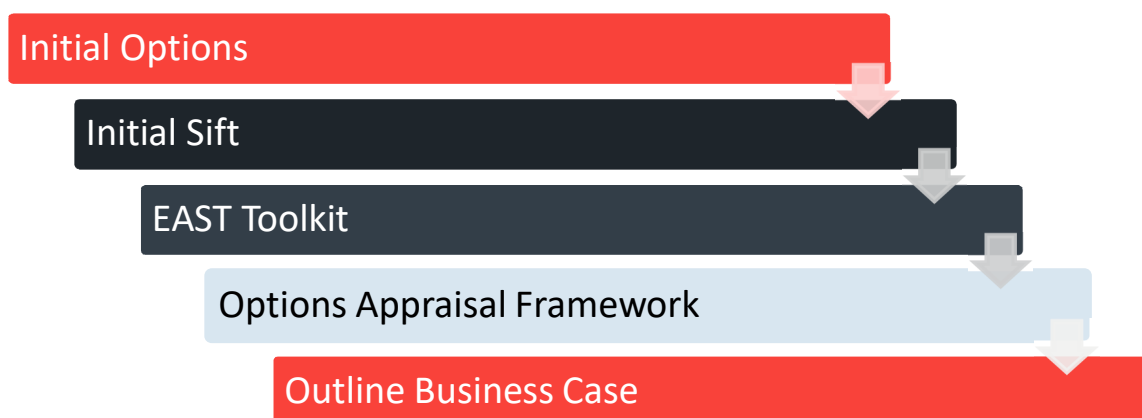
1 INITIAL SIFT

1.1 OVERVIEW

In order to determine the better performing options for the North Hykeham Relief Road (NHRR), a structured sifting process has been followed which is closely aligned with the DfT's Transport Appraisal Process Guidance (2014).

Figure 1 highlights the adopted process for this assessment. At each sifting stage options will be discounted if appropriate, with each subsequent sifting stage requiring a greater detail of analysis resulting in only the better performing options taken forward to the next stage.

Figure 1 – Option sifting process



1.2 PURPOSE OF THIS APPENDIX

The purpose of this appendix is to present the results for the initial sifting. A summary of these results can be found within **Section 8.2** within the main body of the Option Assessment Report. This is one of three Appendix which presents the results for the sifting process. These include:

- **Initial sifting (Appendix J);**
- EAST toolkit (Appendix K); and
- Option Assessment Framework (Appendix M).

1.3 METHODOLOGY

An initial sifting of options has been undertaken where options are rated against a number of criteria which are presented within the table below.

Table 1 – Sifting criteria

Category	Criteria
Objectives	<p>Specific Objectives: The ability of each option to achieve the following objectives:</p> <ul style="list-style-type: none"> • To improve east west connectivity in the South of Lincoln for strategic and local traffic; • To reduce traffic levels on local urban and rural roads in the South of Lincoln through the transfer of strategic traffic to appropriate routes; • To reduce NMU severance in South Lincoln caused by high levels of traffic on the local road network and lack of east west connectivity; • To support the delivery of the Sustainable Urban Extensions by improving access to the identified sites; • To support the delivery of the South West quadrant through the provision of additional network capacity and non-motorised user infrastructure necessary for the delivery of new housing; • To reduce traffic levels and congestion around Lincoln and on key routes through the city to support: <ul style="list-style-type: none"> • Improved access to central Lincoln; • The improvement of access to the Humber Ports and Airport; and • The improvement of access to the Lincolnshire Coast. • To improve the resilience of the orbital and key route network through and around Lincoln and reduce the impact of major incidents.
Deliverability	<p>The deliverability of the option was assessed against the following criteria:</p> <ol style="list-style-type: none"> 1. Acceptability: <ul style="list-style-type: none"> ■ Level of stakeholder/political support for the option under consideration. ■ Level of public support for the option under consideration. ■ Significant environmental impacts resulting from the option under consideration. 2. Planning: <ul style="list-style-type: none"> ■ Is the option acceptable in planning terms and in relation to planning policy? ■ Are there any significant impacts that will require mitigation or could result in the scheme being rejected at planning? ■ Are there any legal issues/risks? 3. Implementation timescales/funding likelihood <ul style="list-style-type: none"> ■ What are the likely funding sources? Are they time-dependent? Is there likely to be a funding gap? ■ Are there likely to be significant mitigation costs over and above the cost of the option itself? 4. Third Party Issues <ul style="list-style-type: none"> ■ Is Third Party land required? Are there any legal issues e.g. CPO?
Feasibility	<p>The feasibility of each option has also considerations used in assessing feasibility include the following:</p> <ol style="list-style-type: none"> 1. Physical constraints: Are there any significant physical or environmental constraints that could have a direct impact on the costs and risks associated with the option under consideration e.g. existing structures (viaducts, bridges, retaining walls etc) or structures required within option design? 2. Land ownership / availability: Are there any significant issues relating to land assembly? Will CPO be required? 3. Design standards: Is the option under consideration technically possible from an engineering perspective? Is the option under consideration technically appropriate when considering future demand?

The aim of the spreadsheet based sifting is to quickly reduce the initial list of options by removing the options that are not likely to make significant contributions to meeting scheme objectives, or are not deliverable or feasible in accordance to Table 1. This helps to provide a useful audit trail for the options considered and discounted at an early stage.

The options assessed are:

- Option 1: This option would provide a single carriageway link between the A46 and the A15.
- Option 2: This option would provide a single carriageway link between the A46 and the A15 but would include enlarged junctions.
- Option 3: This option would provide a dual carriageway link between the A46 and the A15.
- Option 4: This option would provide a single carriageway link between the A46 and South Hykeham Road. This shorter option would support the development of the South West Quadrant.
- Option 5: This would provide a dual carriageway link between the A46 and South Hykeham Road and would support the development of the South West Quadrant.
- Option 6: This option would provide a single carriageway link between the A46 and Brant Road. This shorter option would support the development of the South West Quadrant and provide traffic relief to South Hykeham.
- Option 7: This would provide a dual carriageway link between the A46 and Brant Road and would support the development of the South West Quadrant and provide traffic relief to South Hykeham.

The scoring for sifting the options is based on:

Table 2 – scoring system

Criteria	Scoring
Objectives	<ul style="list-style-type: none"> ■ Ranked according to score (large beneficial impact scores 2; beneficial impact scores 1; neutral/marginal impact scores 0; adverse impact scores -1; and large adverse impact scores -2)
Deliverability	<ul style="list-style-type: none"> ■ Ranked according to score (deliverable in theory scores 2; feasible with challenges scores 0; and not feasible/significant challenges scores -2) ■ If the option is deemed to be very difficult to deliver for any sub-criteria it will be discounted
Feasibility	<ul style="list-style-type: none"> ■ Ranked according to score (feasible in theory scores 2; deliverable with challenges scores 0; and very difficult to deliver scores -2) ■ If the option is deemed not feasible or has significant challenges for any sub-criteria it will be discounted

1.4 RESULTS

The full set of results are presented within tables 4 to 10.

Table 3 provides a summary of the scoring for each option and their ranking.

Table 3 – Summary of results for initial sifting

Option	Objectives score (out of 20)	Ranking based on objectives	Deliverability score (out of 18)	Ranking based on deliverability	Feasibility score (out of 8)	Ranking based on feasibility
1	20	=1 st	10	=1 st	8	=1 st
2	20	=1 st	10	=1 st	8	=1 st
3	20	=1 st	10	=1 st	8	=1 st
4	3	=6 th	4	=4 th	4	=4 th
5	3	=6 th	4	=4 th	4	=4 th

6	9	=4 th	4	=4 th	4	=4 th
7	9	=4 th	4	=4 th	4	=4 th

As shown in tables 3 to 9, options 4 to 7 score poorly when assessed against scheme objectives. This is due to the options not forming a complete route from the A46 to the A15, which together with the LEB will form a complete orbital route to the east of Lincoln. In the case of options 4 and 5, the carriageway link is between the A46 and South Hykeham Road resulting in only a marginal/neutral impact on a number of objectives. Options 6 and 7 offer a slightly longer alignment from the A46 to Brant Road and is reflected in a slightly higher score. Despite this, options 4 to 7 generally score poorly due to a lack of connectivity when compared to the complete orbital route of options 1 to 3.

Furthermore, options 4 to 7 have been deemed very difficult to deliver in terms of level of stakeholder/political support. This is because the NHRR has been a long-term aspiration within the LITS and so delivering only a section of the intended scheme is deemed not acceptable both politically and to stakeholders. As a result, options 4 to 7 have been discounted at this stage regardless of the scores they achieved.

Options 4 to 7 are also very difficult to deliver when assessed against being technically appropriate when considering the future demand on the network. Amongst other issues, they do not provide an alternative strategic route to the existing A46 orbital route resulting in existing problems on this route being exacerbated in the future.

In summary options 4 to 7 have been discounted at this stage due to:

- Scoring poorly against scheme objectives;
- Not deemed deliverable on the ground that it does not align with long term policy aspirations of a bypass to the south of Lincoln as stated within the LITS; and
- Not deemed feasible as the options are not technically appropriate when considering future demand.

The options which will progress to the EAST assessment are:

- Option 1: This option would provide a single carriageway link between the A46 and the A15;
- Option 2: This option would provide a single carriageway link between the A46 and the A15 but would include enlarged junctions; and
- Option 3: This option would provide a dual carriageway link between the A46 and the A15.

Table 4 – Objectives early sifting for options 1, 2 & 3

Criteria: Objectives		
<p>Option 1: This option would provide a single carriageway link between the A46 and the A15.</p> <p>Option 2: This option would provide a single carriageway link between the A46 and the A15 but would include enlarged junctions.</p> <p>Option 3: This option would provide a dual carriageway link between the A46 and the A15.</p>		
Sub-criteria	Score	Comments
Specific objective: To improve east west connectivity in the South of Lincoln for strategic and local traffic	2	This option will provide a missing link between the A46 and A15 resulting in improved east west connectivity to the south of Lincoln. Furthermore, in conjunction with the LEB it will provide a complete orbital route from the A46 via the eastern side of Lincoln. This orbital route will benefit local traffic by better connecting villages in the east and west of Lincoln and also benefit strategic traffic by providing an alternative orbital route to the A46 (which currently carries a high volume of strategic traffic).
Specific objective: To reduce traffic levels on local urban and rural roads in the South of Lincoln through the transfer of strategic traffic to appropriate routes	2	This option will provide a missing link between the A46 and A15 resulting in strategic traffic to the south of Lincoln transferring from inappropriate local roads to this route.
Specific objective: To reduce NMU severance in South Lincoln caused by high levels of traffic on the local road network and lack of east west connectivity	2	This option will provide a missing link between the A46 and A15 resulting in traffic transferring from local roads on to this route. This results in reduced levels of traffic on the local road network therefore reducing NMU severance.
Specific objective: To support the delivery of the Sustainable Urban Extension by improving access to the identified sites	2	This option will provide direct access to the South West Quadrant. In addition, in conjunction with the LEB it will provide a complete orbital route from the A46 via the eastern side of Lincoln and therefore providing improved access to Sustainable Urban Extensions to the east of Lincoln.
Specific objective: To support the delivery of the South West Quadrant through the provision of additional network capacity and non-motorised user infrastructure necessary for the delivery of new housing	2	This option will provide direct access to the South West Quadrant and in doing so have the capacity to be designed to facilitate NMU infrastructure.
Specific objective: To reduce traffic levels and congestion on the existing orbital road network around Lincoln and on key routes through the city to support: - improved access to central Lincoln - the improvement of access to the Humber Ports and Airports - the improvement of access to the Lincolnshire Coast.	2	In conjunction with the LEB it will provide a complete orbital route from the A46 via the eastern side of Lincoln. This orbital route will benefit strategic traffic by providing an alternative orbital route to the A46 (which currently carries a high volume of strategic traffic) and in doing so provide strategic access to the Humber ports and airports; Lincolnshire Coast; and a more attractive route for through traffic using radial routes via the centre of Lincoln.
Specific objective: To improve the resilience of the orbital and key route network through and around Lincoln and reduce the impact of major incidents	2	In conjunction with the LEB it will provide a complete orbital route from the A46 via the eastern side of Lincoln. As a result if an incident were to occur on the A46 traffic could use the new complete orbital route from the A46 via the east of Lincoln.
Outcomes: Development of an effective and efficient transport network	2	This option will provide a missing link between the A46 and A15 resulting in improved east west connectivity to the south of Lincoln. Furthermore, in conjunction with the LEB it will provide a complete orbital route from the A46 via the eastern side of Lincoln. This orbital route will benefit local traffic by better connecting villages in the east and west of Lincoln and also benefit strategic traffic by providing an alternative orbital route to the A46 (which currently carries a high volume of strategic traffic) resulting in a more effective and efficient transport network.
Outcomes: Delivery of housing	2	South West Quadrant is dependent on the delivery of part of this route. In addition, in conjunction with the LEB it will provide a complete orbital route from the A46 via the eastern side of Lincoln and therefore providing improved access to Sustainable Urban Extensions to the east of Lincoln.
Outcomes: Sustainable economic growth	2	The option will provide a number of benefits including: <ul style="list-style-type: none"> ■ Help deliver housing ■ Improve strategic connectivity to the Humber ports and airports ■ Improve access to the Lincolnshire Coast ■ Reduce through traffic on radial routes in to the city centre ■ Provide an alternate orbital route other than the A46 which currently carries a high volume of strategic traffic
Total (out of a maximum of 20)	20	

Table 5 - Deliverability early sifting for options 1, 2 & 3

Criteria: Deliverability Option 1: This option would provide a single carriageway link between the A46 and the A15. Option 2: This option would provide a single carriageway link between the A46 and the A15 but would include enlarged junctions. Option 3: This option would provide a dual carriageway link between the A46 and the A15.		
Sub-criteria	Score	Comments
Acceptability: Level of stakeholder/political support for the option under consideration	2	This option will deliver a bypass to the south of Lincoln which has been a long-term aspiration for Lincolnshire County Council as stated within the Lincoln Integrated Transport Strategy.
Acceptability: Level of public support for the option under consideration	2	Historic public consultation undertaken in 2006 suggests that there is an overwhelming support for a bypass to the south of Lincoln.
Acceptability: Significant environmental impacts resulting from the option under consideration	0	No significant challenges have been identified to date. However, given the project is at the early stage of planning, there is potential for environmental challenges to be identified as part of a more detailed upcoming study.
Planning: How far through the planning process is the option under consideration (e.g. not started, part-way through, nearing completion)?	0	The option is at the early stage of planning.
Planning: Are there any legal issues/risks e.g. CPO?	2	Land has been safeguarded along the potential alignment of the NHRR. Land ownership review will highlight remaining land required and it is anticipated early negotiation will minimise the need for a CPO.
Implementation timescales / funding likelihood: What are the likely funding sources? Are they time-dependent? Is there likely to be a funding gap	0	Funding source is yet to be identified but is expected to be a combination of central government funding, local funding and contributions from third parties (e.g. developers).
Implementation timescales / funding likelihood: Are there likely to be significant mitigation costs over and above the cost of the option itself?	0	Funding source is yet to be identified but is expected to be a combination of central government funding, local funding and contributions from third parties (e.g. developers). Furthermore initial costing of this option has not been undertaken.
Third party issues: Is Third Party land required?	2	Land has been safeguarded along the potential alignment of the NHRR. Land ownership review will highlight remaining land required and it is anticipated early negotiation will minimise the need for a CPO.
Third party issues: Are there any legal issues e.g. CPO?	2	Land has been safeguarded along the potential alignment of the NHRR. Land ownership review will highlight remaining land required and it is anticipated early negotiation will minimise the need for a CPO.
Total (out of a maximum of 18)	10	

Table 6 - Feasibility early sifting for options 1, 2 & 3

Criteria: Feasibility Option 1: This option would provide a single carriageway link between the A46 and the A15. Option 2: This option would provide a single carriageway link between the A46 and the A15 but would include enlarged junctions. Option 3: This option would provide a dual carriageway link between the A46 and the A15.		
Sub-criteria	Score	Comments
Physical constraints: Are there any significant physical constraints that could have a direct impact on the costs and risks associated with the option under consideration e.g. existing structures (viaducts, bridges, retaining walls etc) or structures required within option design?	2	No significant physical constraints have been identified which could have a direct impact on costs and/or risk.
Land ownership / availability: Will CPO be required?	2	Land has been safeguarded along the potential alignment of the NHRR. Land ownership review will highlight remaining land required and it is anticipated early negotiation will minimise the need for a CPO.
Design standards: Is the option under consideration technically possible from an engineering perspective?	2	From an engineering perspective this option is deemed feasible.
Design standards: Is the option under consideration technically appropriate when considering future demand?	2	The design standard is considered appropriate given the forecasted increase in demand on strategic, local and rural roads within the study area.
Total (out of a maximum of 8)	8	

Table 7 - Objectives early sifting for options 4 & 5

Criteria: Objectives		
<p>Option 4: This option would provide a single carriageway link between the A46 and South Hykeham Road. This shorter option would support the development of the South West Quadrant.</p> <p>Option 5: This would provide a dual carriageway link between the A46 and South Hykeham Road and would support the development of the South West Quadrant.</p>		
Sub-criteria	Score	Comments
Specific objective: To improve east west connectivity in the South of Lincoln for strategic and local traffic	0	This option will provide a link between the A46 and South Hykeham Road. Given the length of the proposed carriageway, this will have a neutral impact on improving east west connectivity.
Specific objective: To reduce traffic levels on local urban and rural roads in the South of Lincoln through the transfer of strategic traffic to appropriate routes	0	This option will provide a link between the A46 and South Hykeham Road. Given the length of the proposed carriageway, this will have a neutral impact on reducing traffic levels on local urban and rural roads.
Specific objective: To reduce NMU severance in South Lincoln caused by high levels of traffic on the local road network and lack of east west connectivity	0	This option will provide a link between the A46 and South Hykeham Road. Given the length of the proposed carriageway, this will have a neutral impact on reducing traffic levels on local urban and rural roads and therefore a minimal impact on reducing NMU severance.
Specific objective: To support the delivery of the Sustainable Urban Extension by improving access to the identified sites	0	With the exception of providing access to the SWQ, this option would not provide improved access to any other Sustainable Urban Extension.
Specific objective: To support the delivery of the South West Quadrant through the provision of additional network capacity and non-motorised user infrastructure necessary for the delivery of new housing	2	This option will provide direct access to the South West Quadrant and in doing so have the capacity to be designed to facilitate NMU infrastructure.
Specific objective: To reduce traffic levels and congestion on the existing orbital road network around Lincoln and on key routes through the city to support: - improved access to central Lincoln - the improvement of access to the Humber Ports and Airports - the improvement of access to the Lincolnshire Coast.	0	This option will provide a link between the A46 and South Hykeham Road. Given the length of the proposed carriageway, this will have a neutral impact on reducing traffic levels and congestion on the existing orbital road network.
Specific objective: To improve the resilience of the orbital and key route network through and around Lincoln and reduce the impact of major incidents	0	This option will provide a link between the A46 and South Hykeham Road. Given the length of the proposed carriageway, it will have a neutral impact on improving the resilience of the network.
Outcomes: Development of an effective and efficient transport network	0	This option will provide a link between the A46 and South Hykeham Road. Given the length of the proposed carriageway, it will have a minimal impact in providing an effective and efficient transport network.
Outcomes: Delivery of housing	1	South West Quadrant is dependent on the delivery of part of this route. However, given the length of the proposed route it will not support or improve access to any other proposed housing sites.
Outcomes: Sustainable economic growth	0	This option will provide a link between the A46 and South Hykeham Road. Given the length of the proposed carriageway, it will have a neutral impact on achieving sustainable economic growth
Total (out of a maximum of 20)	3	

Table 8 - Objectives early sifting for options 6 & 7

Criteria: Objectives		
<p>Option 6: This option would provide a single carriageway link between the A46 and Brant Road. This shorter option would support the development of the South West Quadrant and provide traffic relief to South Hykeham.</p> <p>Option 7: This would provide a dual carriageway link between the A46 and Brant Road and would support the development of the South West Quadrant and provide traffic relief to South Hykeham.</p>		
Sub-criteria	Score	Comments
Specific objective: To improve east west connectivity in the South of Lincoln for strategic and local traffic	1	This option will provide a link between the A46 and Brant Road and in doing so a partial bypass to the south of Lincoln. This will provide some benefit to east west connectivity. However, between Brant Road and the A15 traffic will take existing routes.
Specific objective: To reduce traffic levels on local urban and rural roads in the South of Lincoln through the transfer of strategic traffic to appropriate routes	1	This option will provide a link between the A46 and Brant Road and in doing so a partial bypass to the south of Lincoln. This will result in traffic transferring onto this route between these points but between Brant Road and the A15 traffic will continue to take existing routes.
Specific objective: To reduce NMU severance in South Lincoln caused by high levels of traffic on the local road network and lack of east west connectivity	1	This option will provide a link between the A46 and Brant Road and in doing so a partial bypass to the south of Lincoln. This will reduce traffic levels on local urban and rural roads and therefore reduce NMU severance. However, it will not improve NMU severance between Brant Road and the A15 in the South of Lincoln.
Specific objective: To support the delivery of the Sustainable Urban Extension by improving access to the identified sites	1	A partial bypass to the south of Lincoln will provide improved access to SUE sites.
Specific objective: To support the delivery of the South West Quadrant through the provision of additional network capacity and non-motorised user infrastructure necessary for the delivery of new housing	2	This option will provide direct access to the South West Quadrant and in doing so have the capacity to be designed to facilitate NMU infrastructure.
Specific objective: To reduce traffic levels and congestion on the existing orbital road network around Lincoln and on key routes through the city to support: - improved access to central Lincoln - the improvement of access to the Humber Ports and Airports - the improvement of access to the Lincolnshire Coast.	0	This option will provide a partial bypass to the south of Lincoln. However due to the incomplete nature of the orbital route it is unlikely traffic will transfer from the existing A46 orbital route to the partial bypass.
Specific objective: To improve the resilience of the orbital and key route network through and around Lincoln and reduce the impact of major incidents	1	A partial bypass to the south of Lincoln will benefit network resilience by providing an additional east west route to the south of Lincoln and an alternative route to the A46 when an incident occurs, albeit a partial orbital route.
Outcomes: Development of an effective and efficient transport network	1	A partial bypass to the south of bypass will provide some benefit by transferring some traffic from local and rural roads and improving connectivity between villages in the south of Lincoln resulting in a more effective and efficient transport network.
Outcomes: Delivery of housing	1	South West Quadrant is dependent on the delivery of part of this route. However, given that it will only form a partial bypass to the south of Lincoln it will not maximise the potential for access to other SUEs and in doing so support their development.
Outcomes: Sustainable economic growth	0	A partial bypass to the south of Lincoln will not support the objectives of providing strategic connectivity to the Humber Ports, airports and reduce through traffic on radial routes into the city centre. As a result, this option will have minimal impact on sustainable economic growth.
Total (out of a maximum of 20)	9	

Table 9 - Deliverability early sifting for options 4, 5, 6 & 7

Criteria: Deliverability		
<p>Option 4: This option would provide a single carriageway link between the A46 and South Hykeham Road. This shorter option would support the development of the South West Quadrant.</p> <p>Option 5: This would provide a dual carriageway link between the A46 and South Hykeham Road and would support the development of the South West Quadrant.</p> <p>Option 6: This option would provide a single carriageway link between the A46 and Brant Road. This shorter option would support the development of the South West Quadrant and provide traffic relief to South Hykeham.</p> <p>Option 7: This would provide a dual carriageway link between the A46 and Brant Road and would support the development of the South West Quadrant and provide traffic relief to South Hykeham.</p>		
Sub-criteria	Score	Comments
Acceptability: Level of stakeholder/political support for the option under consideration	-2	The delivery of a bypass to the south of Lincoln has been a long-term aspiration for Lincolnshire County Council as stated within the Lincoln Integrated Transport Strategy. The assessed options fail to deliver this long-term aspiration and as a result the options assessed will be discounted at this stage and not progress to the EAST assessment.
Acceptability: Level of public support for the option under consideration	0	Public consultation has not been undertaken for any of the options.
Acceptability: Significant environmental impacts resulting from the option under consideration	0	No significant challenges have been identified to date. However, given the project is at the early stage of planning, there is potential for environmental challenges to be identified as part of a more detailed upcoming study.
Planning: How far through the planning process is the option under consideration (e.g. not started, part-way through, nearing completion)?	0	The options are at an early stage of planning.
Planning: Are there any legal issues/risks e.g. CPO?	2	Land has been safeguarded along the potential alignment of the NHRR. Land ownership review will highlight remaining land required and it is anticipated early negotiation will minimise the need for a CPO.
Implementation timescales / funding likelihood: What are the likely funding sources? Are they time-dependent? Is there likely to be a funding gap	0	Funding source is yet to be identified but is expected to be a combination of central government funding, local funding and contributions from third parties (e.g. developers).
Implementation timescales / funding likelihood: Are there likely to be significant mitigation costs over and above the cost of the option itself?	0	Funding source is yet to be identified but is expected to be a combination of central government funding, local funding and contributions from third parties (e.g. developers). Furthermore, initial costing of this option has not been undertaken.
Third party issues: Is Third Party land required?	2	Land has been safeguarded along the potential alignment of the NHRR. Land ownership review will highlight remaining land required and it is anticipated early negotiation will minimise the need for a CPO.
Third party issues: Are there any legal issues e.g. CPO?	2	Land has been safeguarded along the potential alignment of the NHRR. Land ownership review will highlight remaining land required and it is anticipated early negotiation will minimise the need for a CPO.
Total (out of a maximum of 18)	4	

Table 10 - Feasibility early sifting for options 4, 5, 6 & 7

Criteria: Feasibility		
<p>Option 4: This option would provide a single carriageway link between the A46 and South Hykeham Road. This shorter option would support the development of the South West Quadrant.</p> <p>Option 5: This would provide a dual carriageway link between the A46 and South Hykeham Road and would support the development of the South West Quadrant.</p> <p>Option 6: This option would provide a single carriageway link between the A46 and Brant Road. This shorter option would support the development of the South West Quadrant and provide traffic relief to South Hykeham.</p> <p>Option 7: This would provide a dual carriageway link between the A46 and Brant Road and would support the development of the South West Quadrant and provide traffic relief to South Hykeham.</p>		
Sub-criteria	Score	Comments
Physical constraints: Are there any significant physical constraints that could have a direct impact on the costs and risks associated with the option under consideration e.g. existing structures (viaducts, bridges, retaining walls etc) or structures required within option design?	2	No significant physical constraints have been identified which could have a direct impact on costs and/or risk.
Land ownership / availability: Will CPO be required?	2	Land has been safeguarded along the potential alignment of the NHRR. Land ownership review will highlight remaining land required and it is anticipated early negotiation will minimise the need for a CPO.
Design standards: Is the option under consideration technically possible from an engineering perspective?	2	From an engineering perspective this option is deemed feasible.
Design standards: Is the option under consideration technically appropriate when considering future demand?	-2	No option is considered sufficient when considering future demand on the network. Amongst other issues, they do not provide an alternative strategic route to the existing A46 orbital route resulting in existing problems on this route being exacerbated in the future. As a result, the options assessed will be discounted and will not be progressed to the EAST assessment.
Total (out of a maximum of 8)	4	



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