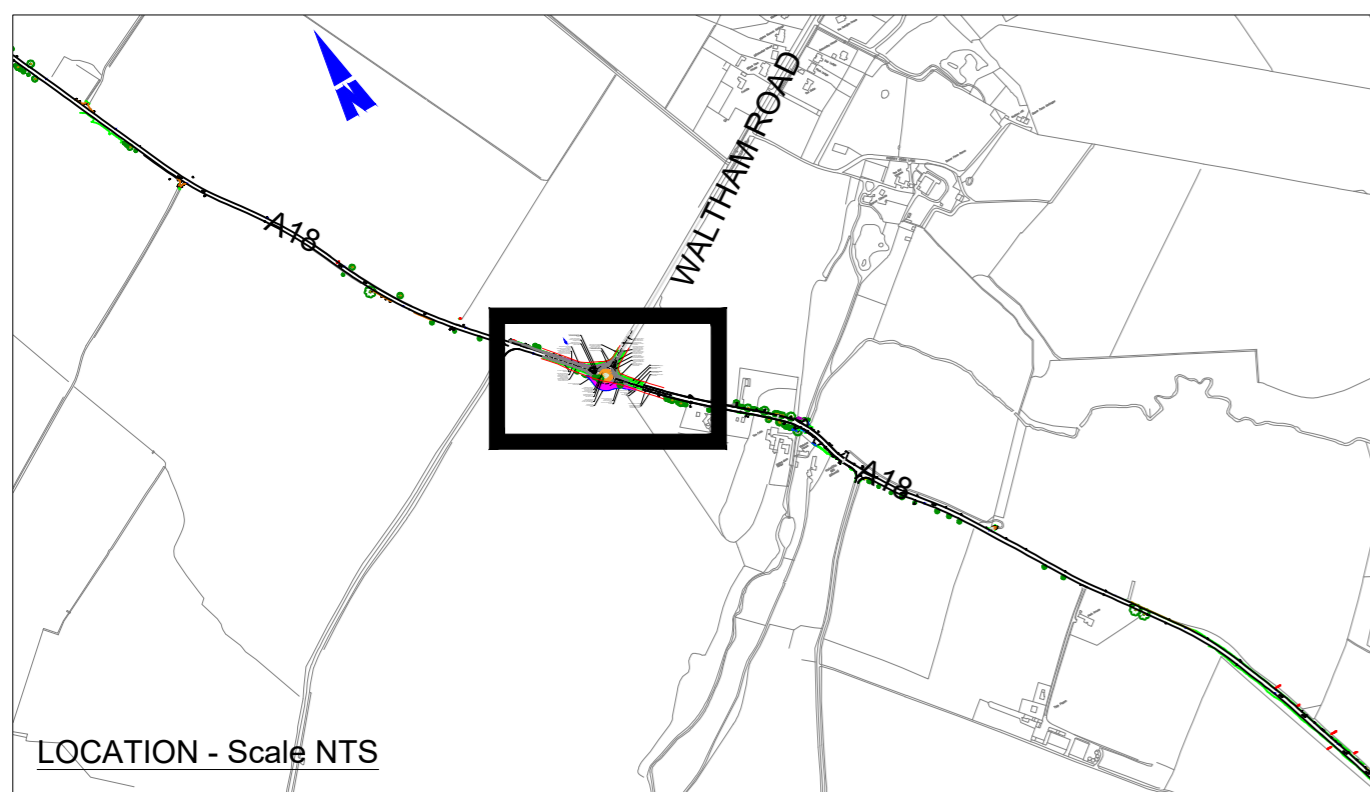


PRELIMINARY DESIGN (Scale 1:500)



Key

- Proposed carriageway resurfacing
- Proposed carriageway widening
- Proposed verge works
- Proposed cycle path
- Proposed roundabout overrun width in coloured material
- Existing highway boundary
- Land required = 532m<sup>2</sup> = 0.053ha
- New hedge forming proposed highway boundary

NOTES

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Roundabout Parameters

ICD = 38m  
Overrun width = 4m  
Central island = 14m  
Circulatory carriageway = 8.0m

	A18 Arm north	A18 arm south	Waltham Road
v = approach half width (m)	3.65	3.95	3.65
e = entry width (m)	8	7.6	7.0
l' = effective flare length (m)	8.9	8.6	6.1
s = sharpness of flare	0.78	0.66	0.88
φ = entry angle	24°	28°	41°
r = entry kerb radius (m)	57.0	50.4	32.6
a = entry path radius (m)	76.3	59.6	54.5
Exit kerb radius (m)	49	21	34

Notes

- Design speed of carriageway determined from TD9/93 as 100B.
- Under TD9/93 relaxations are permitted at the discretion of the designer to 4 steps below the desirable minimum values.
- Roundabout design in line with TD16/07, no departures or relaxations required in terms of horizontal alignment, vertical alignment yet to be designed.
- Roundabout has been designed as a normal roundabout although two way AADT only just exceeds 8000 vehicles which is the cut off between compact and normal. Approaches remain single lane and widened at give way line to provide two lane separate lanes, therefore less requirement for land take.
- Cross sections in line with TD27/05.
- In line with the requirements of TD16/07 black box 8.24 road lighting at the roundabout should be considered in accordance with DMRB 8.3.

Letter	Amendment	Drawn	Date
CLIENT <b>NORTH EAST LINCOLNSHIRE COUNCIL</b>			
PROJECT <b>A18 ROAD SAFETY SCHEME</b>			
TITLE <b>SCHEME 3 WALTHAM ROAD ROUNDABOUT PRELIMINARY DESIGN</b>			
DRAWN D Slack	DATE 04/09/18	PROJECT ID HD037	
CHECKED A Hinchcliffe	DATE 04/09/18	DRAWING No.	
ORIGINAL SIZE A2 (594 x 420)	SCALE 1:500	<b>HD037-18-P03</b>	