

North Walsham Western Urban Extension Transport Overview

North Walsham Members Briefing

**Bevin Carey BE Hons (Civil) CEng MIEI,
Regional Director**

Local Plan Transport Evidence – Approach

- Partnership Approach with Norfolk County Council and North Norfolk District Council.
 - Previous evidence and studies shared;
 - Feedback from NNDC & BDC;
 - Scope developed together;
 - Regular meetings;
 - On site walkover;
 - Mitigation developed with input from NCC Road Safety and Development Management team.

- Robust Assessment
 - Extensive baseline data gathered;
 - Conservative assumptions;
 - Bespoke microsimulation model for North Walsham & Coltishall Towns, highly calibrated models, ideal for modelling non-standard arrangements and allowing for route choice;
 - Evidence led transport strategy.

Local Plan Transport Evidence – Current Position

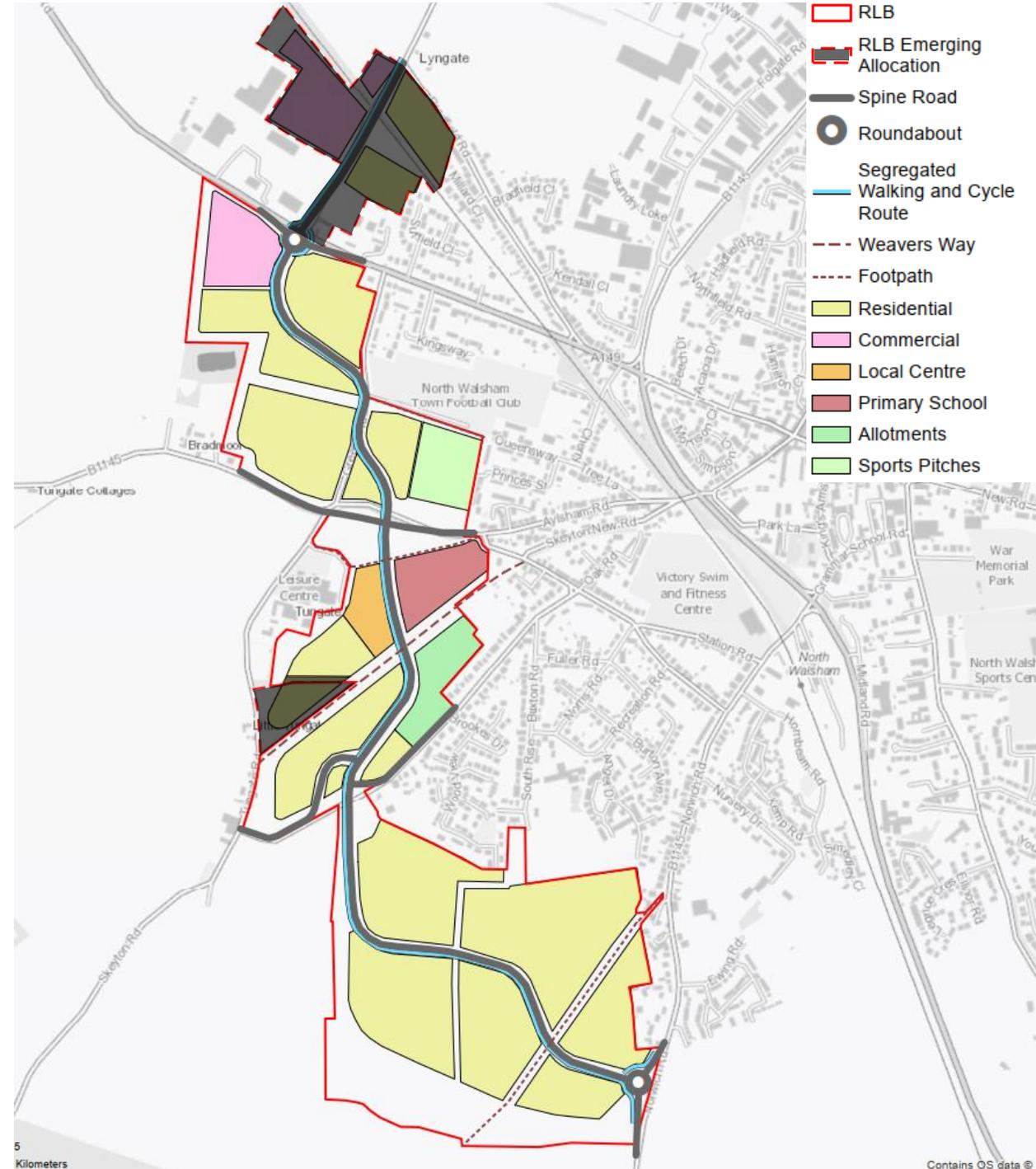
- ✓ Modelling of Development Impacts completed and agreed in principal with Norfolk County Council.
 - ✓ Walking and Cycling Strategy (on and off-site) identified and reviewed together on site with NCC.
 - ✓ Public Transport Strategy identified and integrated within masterplan, supported by NCC.
 - ✓ Offsite highway mitigation needs identified and agreed in principal for North Walsham and Coltishall.
 - ✓ All proposals reviewed in terms of ability to mitigate impacts and deliverability.
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- Design refinement of offsite mitigation;
 - Transport Assessment currently being finalised;
 - Road Safety Audit for off site proposals to be completed.



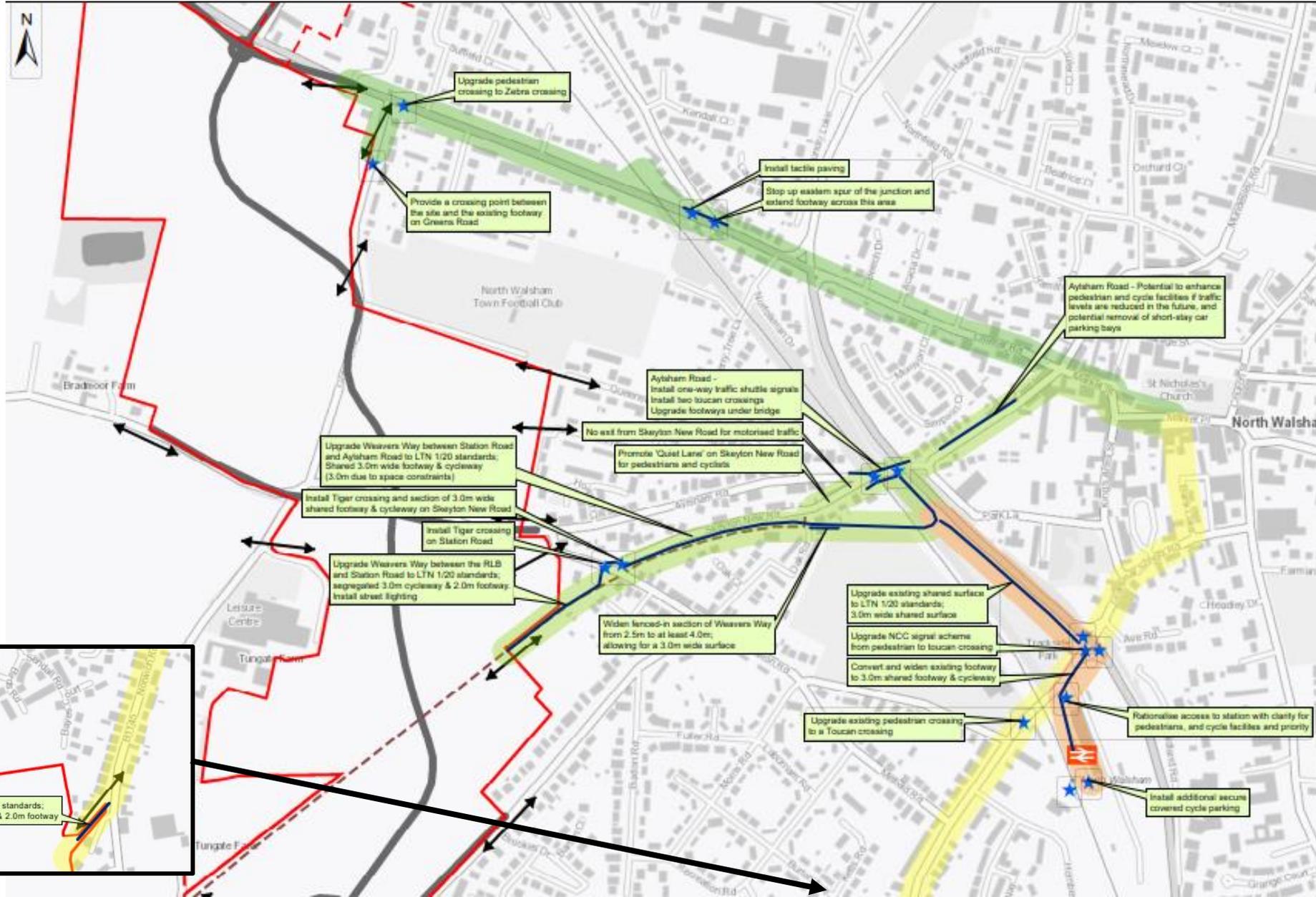
What will the Allocation Deliver?

For Pedestrians and Cyclists

- ✓ A local centre, on site facilities and access to nearby facilities in line with 20 minute neighbourhood ethos.
- ✓ A network of interconnected streets, squares, green corridors, and public spaces which prioritise moving around on foot and by cycle over use of private motor vehicles;
- ✓ Attractive and convenient connections for walking and cycling to adjacent areas;
- ✓ Enhancements of existing PROWS through the site, including Weavers Way;
- ✓ Defined street hierarchy considering how each of the modes will interact, ensuring the access road is not a barrier to permeability.
- ✓ Pedestrian and cyclist facilities integrated with bus routes through and adjacent to the site;
- ✓ Safe active travel routes to the railway station;
- ✓ Increased cycle parking at NW Railway Station, on site Travel Hub and at all public spaces.
- ✓ Enhanced site frontage on existing routes through reduced speed limit, gateway features and pedestrian and cyclist crossings.



Off Site Pedestrian & Cycle Improvements

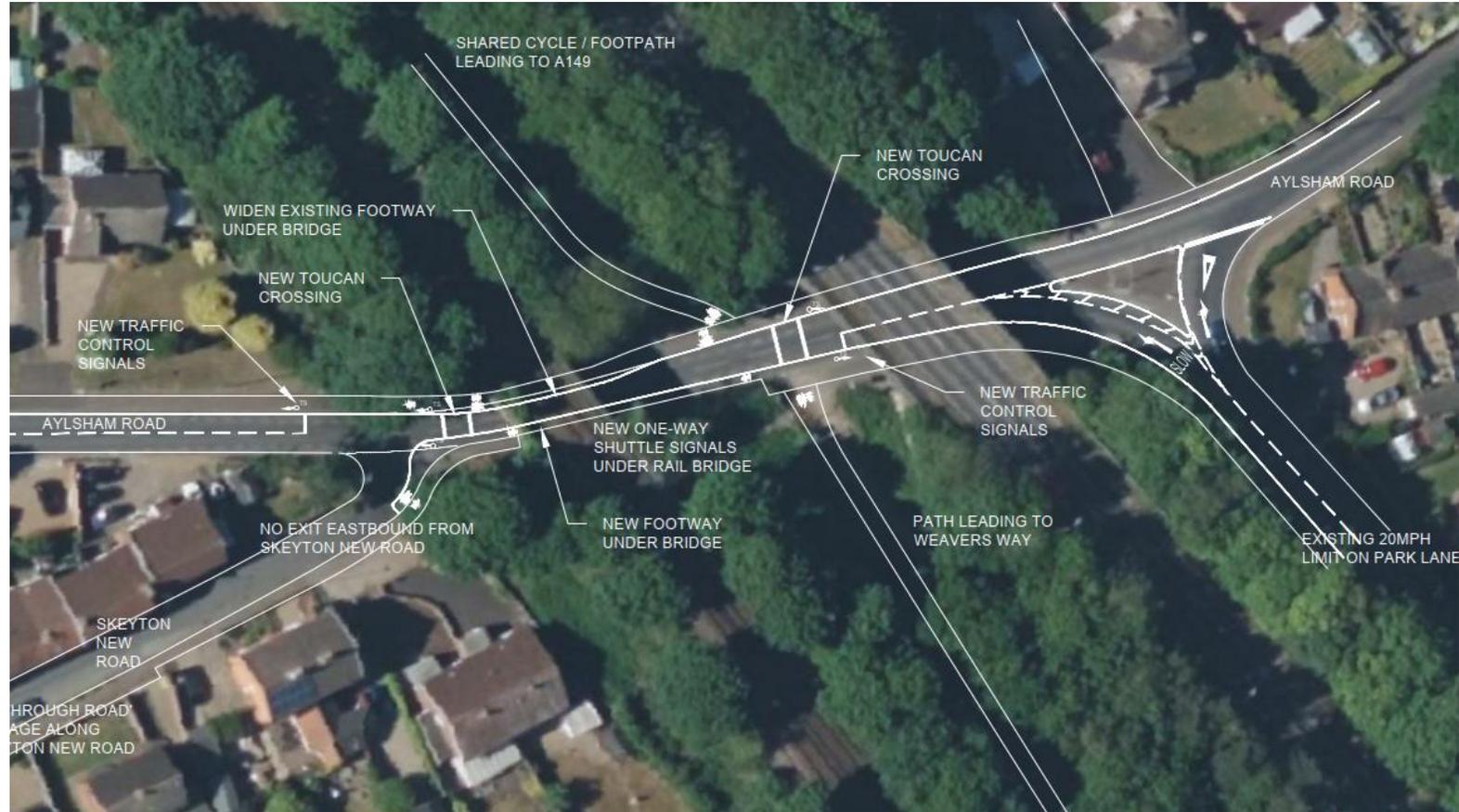


LEGEND	
★	Proposed Improvement
—	Proposed Improvement
Light Green Area	Mobility Corridor 1 (2m wide footway; on-road cycling)
Medium Green Area	Mobility Corridor 2 (including off-carriageway cycling)
Yellow Area	Mobility Corridor 3 (2m wide footway; on-road cycling)
Orange Area	Mobility Corridor Rail Extension (including off-carriageway cycle)
↔	Walk and Cycle RLB Connection
- - -	Weavers Way
Grey Line	Link Road
Red Line	RLB
Dashed Red Line	RLB Emerging Allocation



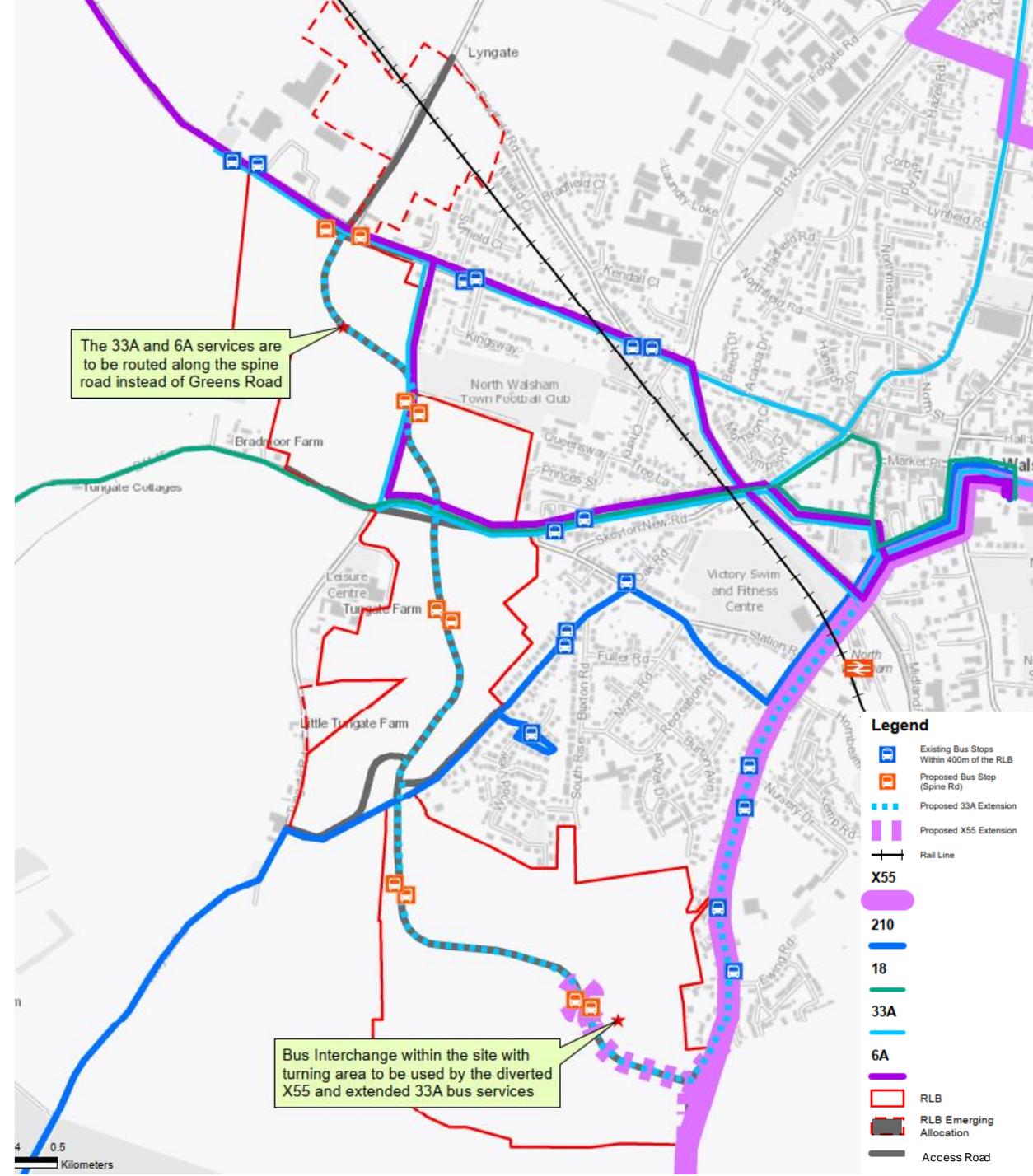
Aylsham Rd – Signalised Alternating One Way Use under bridges

- ✓ Proposed One-way System at Aylsham Rd railway Bridge;
- ✓ Allows for higher side vehicles to continue to access North Walsham but will discourage non-essential through traffic on Aylsham Rd;
- ✓ Proposed closure of Skeyton Rd to through traffic;
- ✓ Allows provision of a footway on the southern side under the bridge;
- ✓ Includes Toucan Crossing from PROW either side of the bridge;
- ✓ Allows widening of existing northern footway under bridge, where pinchpoint exists.



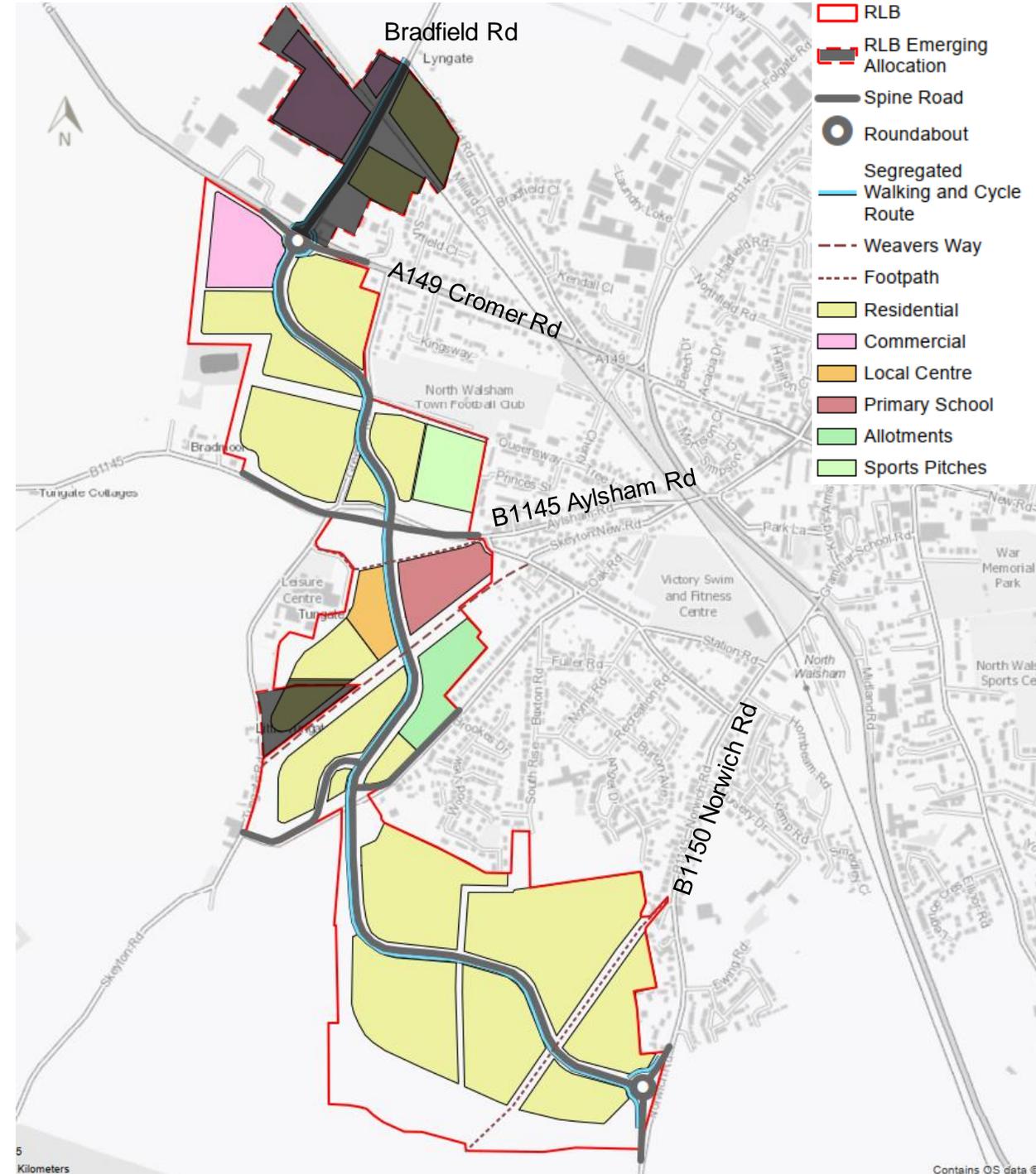
For Public Transport Users

- ✓ Public transport measures on site providing facilities and regular services to/from the town and key services including:
- ✓ On-site travel hub for bus/ travel interchange, to attract express services into the site;
- ✓ Permeability of the site to bus services along the development Access Road;
- ✓ Provision of bus stops along development frontage and within the site with high quality facilities;
- ✓ Proposed bus service enhancements for the local bus services and express services to Norwich; and
- ✓ Access to rail supported through 'Mobility Corridor' cycle improvements and enhanced station cycle parking



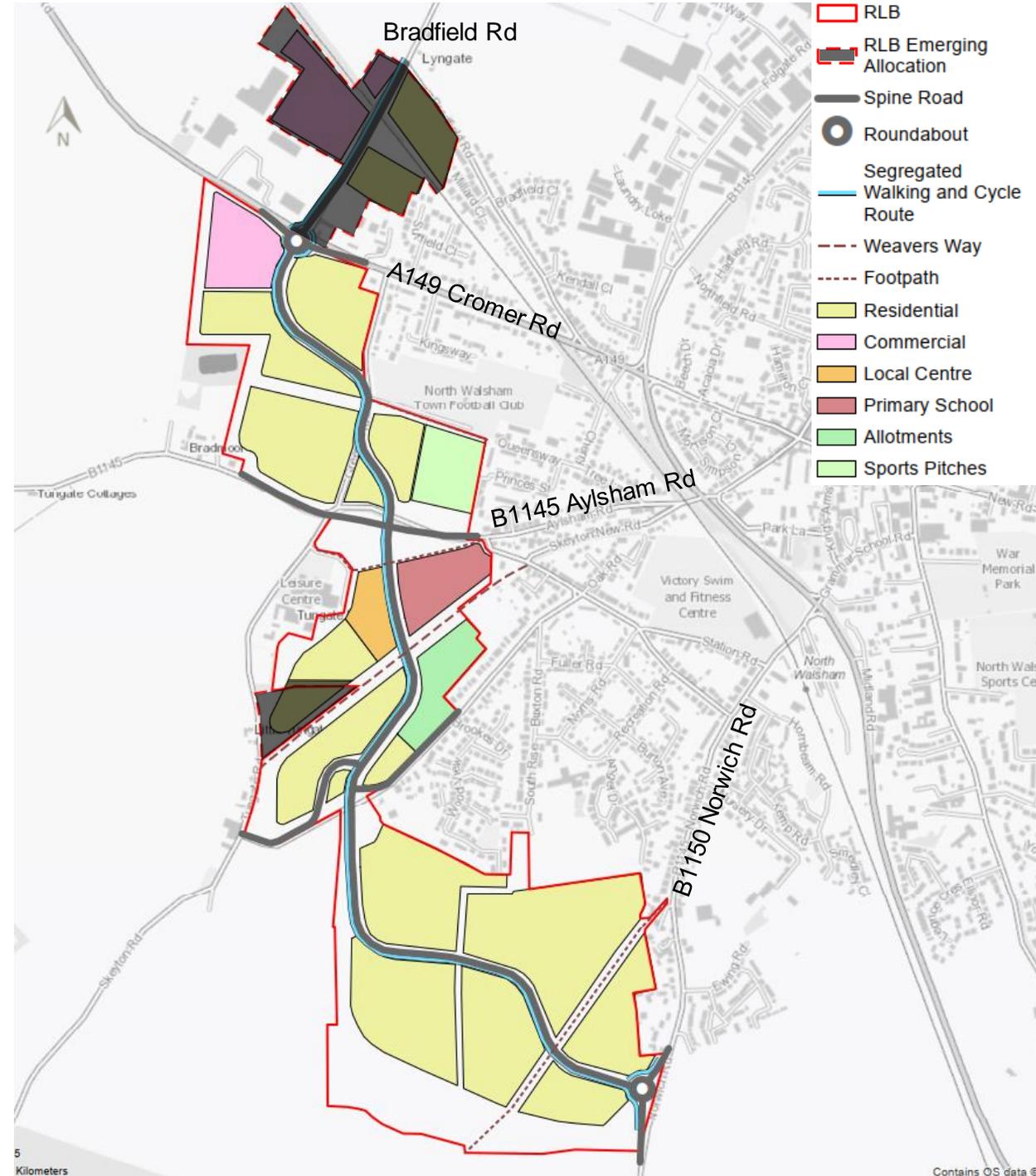
North Walsham Western Urban Extension (WUE) : Access Road

- ✓ Delivers an attractive primary residential street through the development with mixed-use frontage usages and segregated cycle paths and footways;
- ✓ Provides access for all transport modes to and through the development site between Norwich Road, Aylsham Rd and Cromer Road, including high-sided vehicles;
- ✓ Delivers greater network resilience in North Walsham;
- ✓ Provides a new route for local traffic to mitigate development impacts;
- ✓ Leads to no significant increase in traffic on Bradfield Road, north of the railway, with only the residential uses north of the railway adding light vehicles;
- ✓ Green Rd will be stopped up and access to the Football Club will be improved; and,
- ✓ Potential to close Skeyton Road as a through route through site.



North Walsham Western Urban Extension (WUE) : Access Road

- ✓ Will mitigate the development impacts;
- ✓ Leads to a substantial reduction in traffic on Station Rd, Aylsham Rd, Green Rd and Tungate Rd of between 10-30%;
- ✓ Results in traffic reductions on the A149 between Norwich Rd and Cromer Rd;
- ✓ Accommodate more efficient HGV routing, reducing HGV traffic on Station Road and Aylsham Rd;
- ✓ Helps manage the use of Aylsham Rd with traffic signals;
- ✓ Reduces traffic on Aylsham Rd by 20-30%, with AM HGV movements predicted to reduce by 50%;
- ✓ Will be delivered in phases, and delivered in full sometime between 350 dwellings and 1000 dwellings.





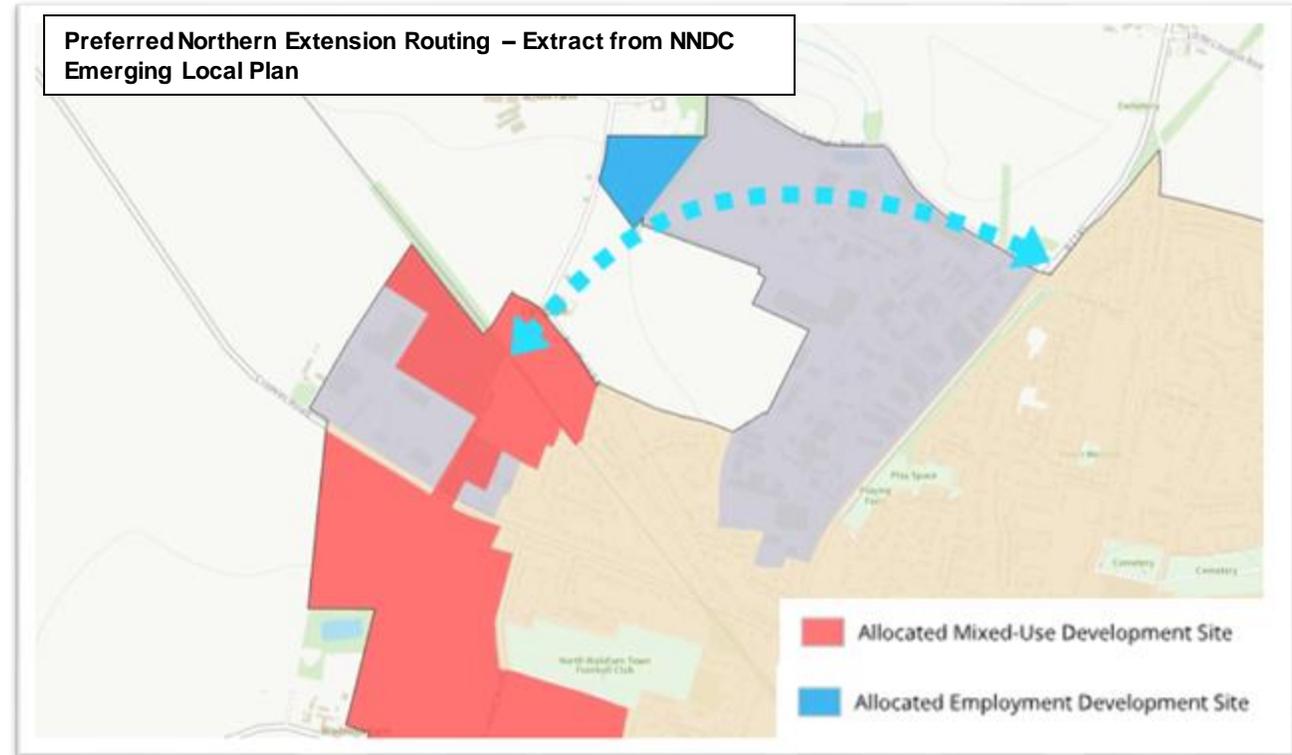
Highway Mitigation – North Walsham

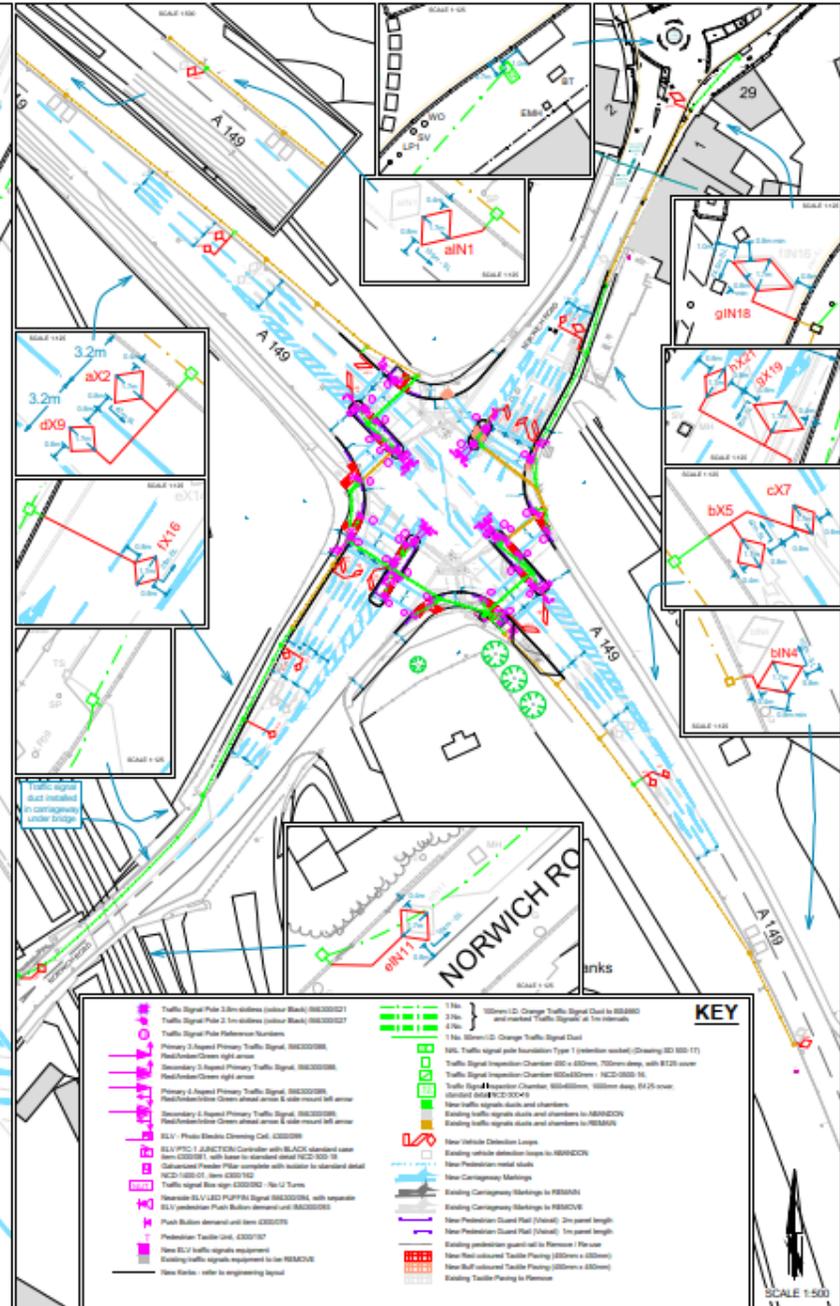
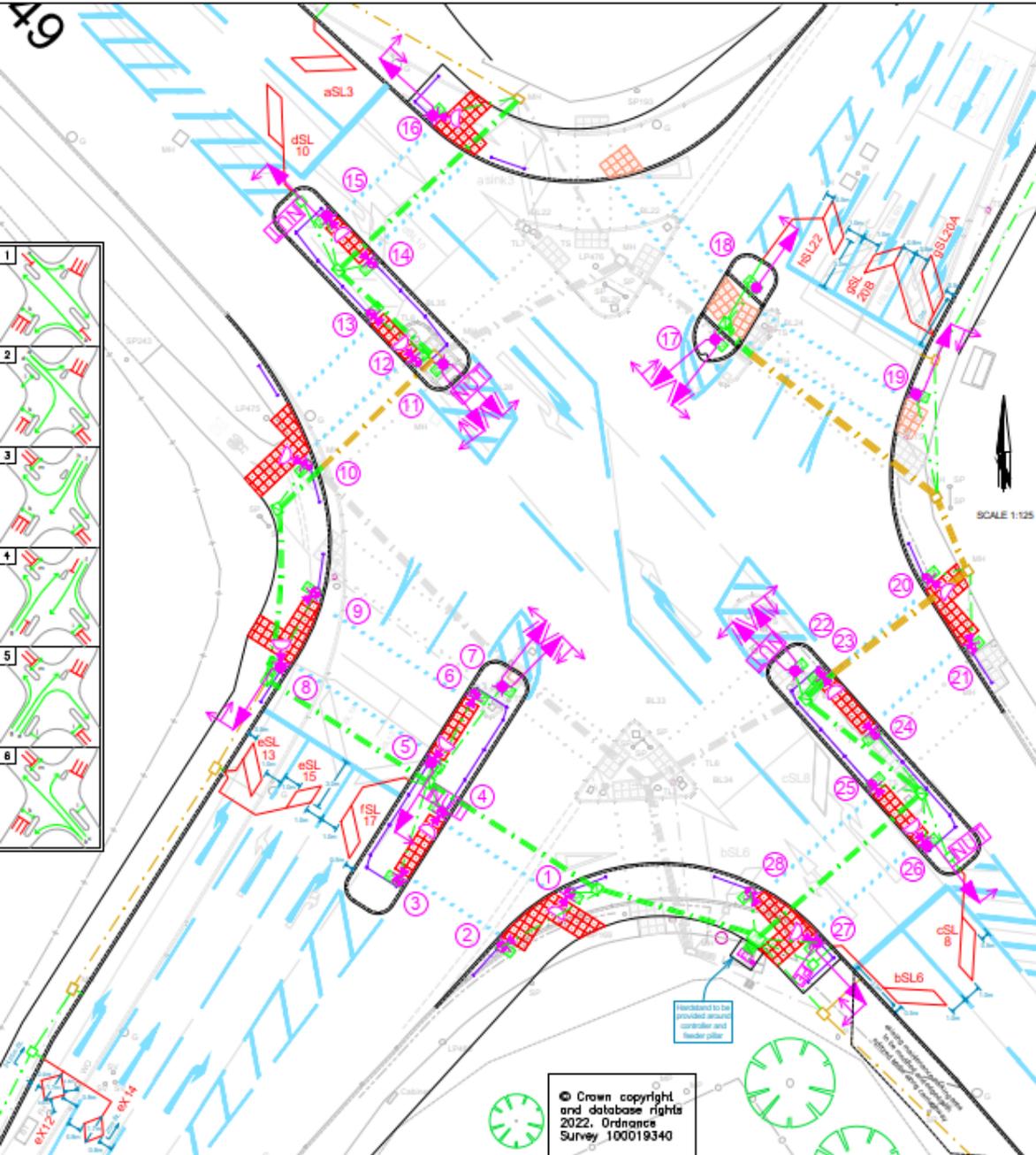
Western Access Road Northern Extension

- Cannot be delivered as part of allocation as it sits outside of the allocation/ highway boundary and requires land outside of Consortium control.
- Benefits of proposed Northern Extension will not justify high cost of current preferred scheme (approximately £19.8M), (5% of development traffic, and up to 32 HGVs in peak hours).

The proposed allocation can and will:

- ✓ Facilitate future delivery of a Northern Extension through the Design Brief and masterplan design;
- ✓ Enhance pedestrian and cycle connections to the North Walsham Industrial Estate;
- ✓ Deliver additional bridge strike mitigation on railway bridge approaches;
- ✓ Deliver traffic management measures on Aylsham Rd to reduce traffic levels, but preserving this route for higher sided vehicles.





Committed Norwich Rd/ A149 Traffic Signal Scheme

Hopkins and Persimmon scheme designed for delivery by NCC. Scheme includes unfunded pedestrian crossings.

Proposals tested to identify if it operates within capacity with allocation land.

No further capacity improvements required.

Unfunded signalled crossings proposed to be funded.

Further pedestrian and cycle improvements identified to improve connectivity to Town Centre and Railway Station

Notes: 1. This drawing is for Traffic Signals PRELIMINARY DESIGN purposes only. Please refer to the latest engineering & bring layout drawing(s) for details of tests, other civil elements and bring details. 2. Temporary signs to TSGCD, appropriate version of diagram 7014 are to be installed on all junction approaches from when the signals become operational for a period of 3 months.



Tom McCabe
Executive Director of
Community and Environmental Services
Norfolk County Council
County Hall, Martineau Lane
Norwich NR1 2SG

DRAWING TITLE
Traffic Signal Layout
Junction modifications to Norwich Road north and south approaches
& improved pedestrian facilities with controlled crossings on 3 arms

REV	DESCRIPTION	CHECKED	DATE

27/10/2022 DRAFT TARGET COST

SURVEYED BY	INITIALS	DATE
OSAT		2015
DESIGNED BY		
MC		2022
DRAWN BY		
MC		2022
CHECKED BY		
MJC		2022

DRAWING No. PR3626-TS-008
PROJECT TITLE
North Walkway, Norwich Road (A149)
Former HL Foods site, S278 HA08A
SCALE
1:500 & 1:125 @ A1
FILE No.
PR3626-TS

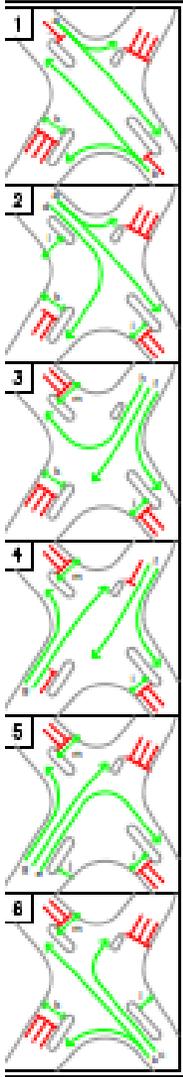


Committed Norwich Rd / A149 Traffic Signals - LinSig Results

Scenario	Arm	AM Peak Hour		PM Peak Hour	
		MMQ (pcu)	Max DoS	MMQ (pcu)	Max DoS
2036 Do Something Demand Traffic Flows	Norwich Road NE	6.6	73%	7.4	75%
	A149 SE	8.4	75%	12.7	78%
	Norwich Road SW	12.5	73%	12.7	78%
	A149 NW	10.0	73%	11.2	79%

Conclusions:

- Proposed Scheme operates well within desirable minimum limits, with surplus capacity to cater for the proposed development.
- Scope to improve scheme design for cyclists.
- Scope for junction to accommodate traffic displaced from elsewhere, eg Aylsham Road.



Conclusions – North Walsham

- Traffic Impact Analysis identifies that with the proposed new link road (Cromer Rd to Norwich Rd and committed capacity improvements at the Norwich Rd/ A149 traffic signals, residual traffic impacts are not severe.
- The proposed Link Rd accommodates HGV and general traffic encouraging greater use of Cromer Rd, reducing reliance on Aylsham Rd.
- Targeted improvements have been identified to address key gaps/ shortfalls on pedestrian and cycle facilities on Cromer Rd, Aylsham Rd, Skeyton Road, Weaver's Way, A149 and Norwich Rd. Improvements identified have been reviewed on site and are viewed as being deliverable, within highway land and site constraints.
- A one-way traffic signal scheme incorporated toucan crossings at Aylsham Rd railway bridge will improve pedestrian and cycle provision and discourage through traffic on Aylsham Rd.

VISSIM Modelling Results – North Walsham

2036 PM Peak DM



2036 AM Peak DS



2036 AM Peak DS Mit



Mitigation - Coltishall

VISSIM– Coltishall Mitigation



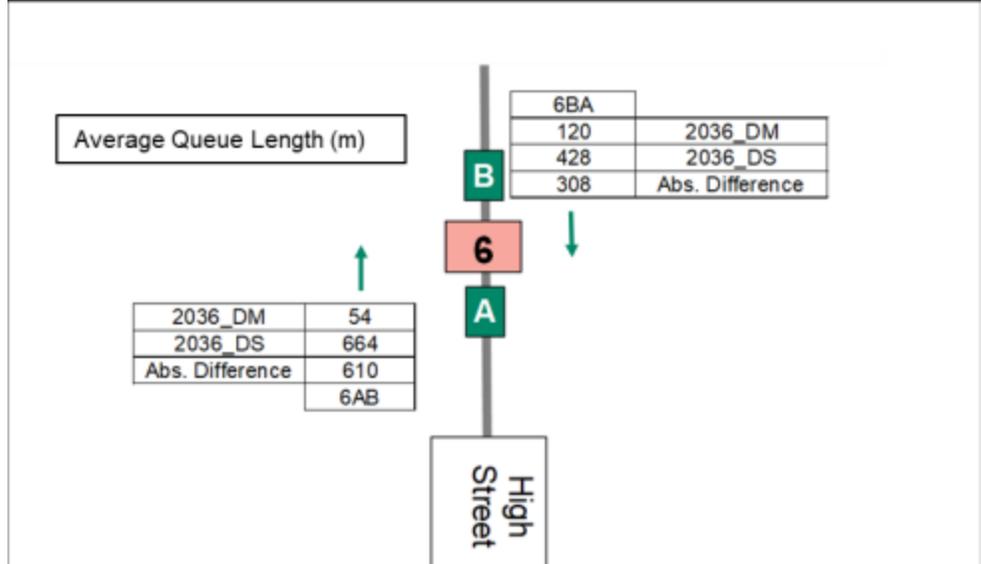
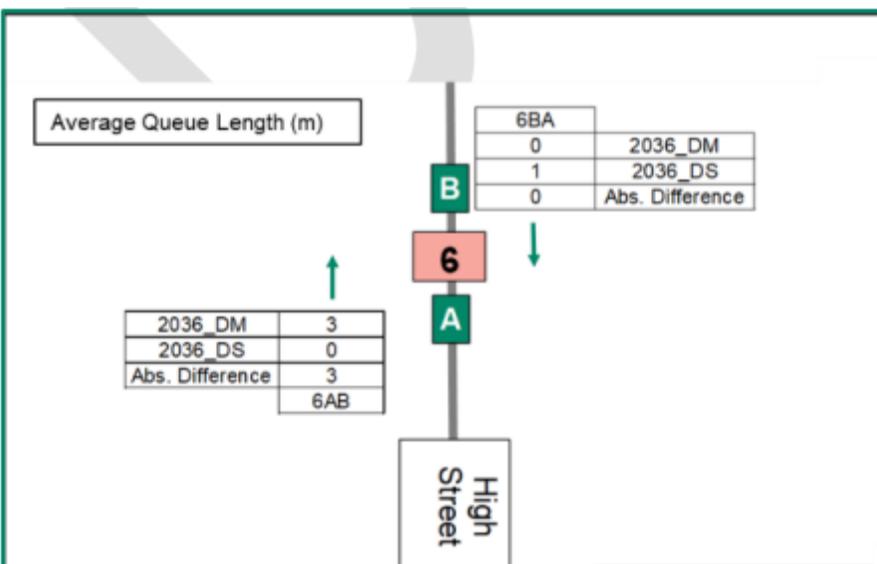
Obstructive parking

Norwich Rd / B1354



- New right turn lane for three vehicles required
- Crossing Point to be relocated

Results from VISSIM Modelling – Provision of Bus Stop Cage in place of parking



2036 Do Something with Mitigation				
Link	AM		PM	
	Queue Length Average (m)	Vehicle Delay Average (s)	Queue Length Average (m)	Vehicle Delay Average (s)
106-34 (High Street Southbound)	0.52	3.41	0.29	2.99
106-15 (High Street Northbound)	0.02	1.33	0.54	2.83

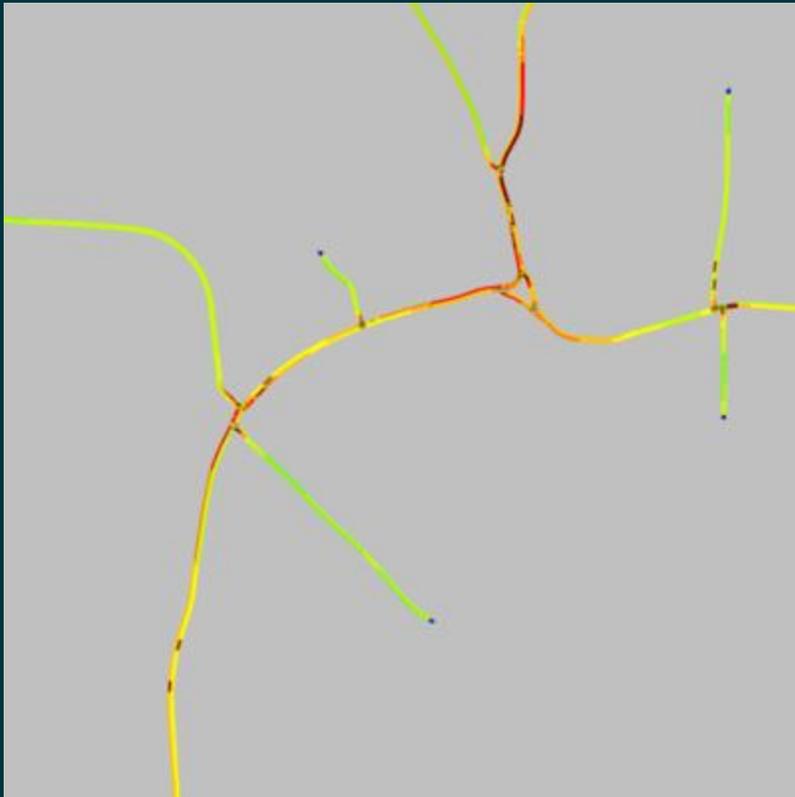
Removal of parking removes the queuing on High Street in both the DM and DS scenarios

Conclusions – Coltishall

- Traffic Impact Analysis identifies that with the proposed right turn lane into B1354, and provision for formalising bus stop and preventing parking at the War Memorial, residual traffic impacts are not severe.
- The proposed physical improvements are deliverable within available land, subject to checking against topo survey.

VISSIM Modelling Results – Coltishall

2036 PM Peak DM



2036 PM Peak DS



2036 PM Peak DS Mit



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