

Building Norfolk on Better Data: Bats, bypasses and buildings



NORWICH NORTHERN DISTRIBUTOR ROAD



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Natural Environment Team

June 2018

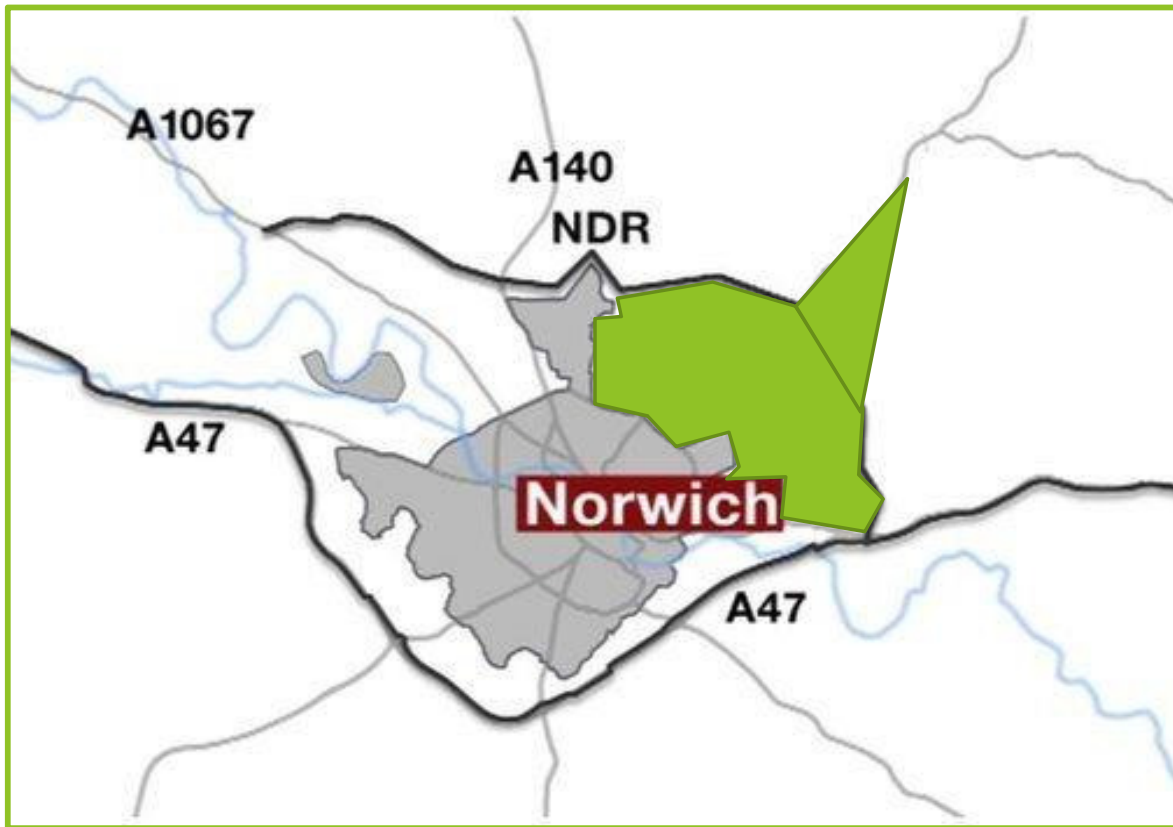


The Norwich Northern Distributor Road



26km dual carriageway

...and the “Growth Triangle”



13,500 new homes



Adopted July 2016

Two different projects, two different planning processes, two different authorities...

Project	Process	Promoting authority	Delivery
Northern Distributor Road	Nationally Significant Infrastructure Project	Norfolk County Council	Development Consent Order
Growth Triangle AAP	Local Plan examination	Broadland District Council	Development Management process

Biodiversity data: Bats

- To identify main concentrations of usage for roosting and foraging, particularly by Barbastelle Bats
- To identify the locations where commuting routes cross the line of the road and to identify and deliver effective mitigation for impacts from the **ROAD**
- To locate the housing allocations in the least harmful places and to identify and deliver effective mitigation from the **NEW HOUSING**



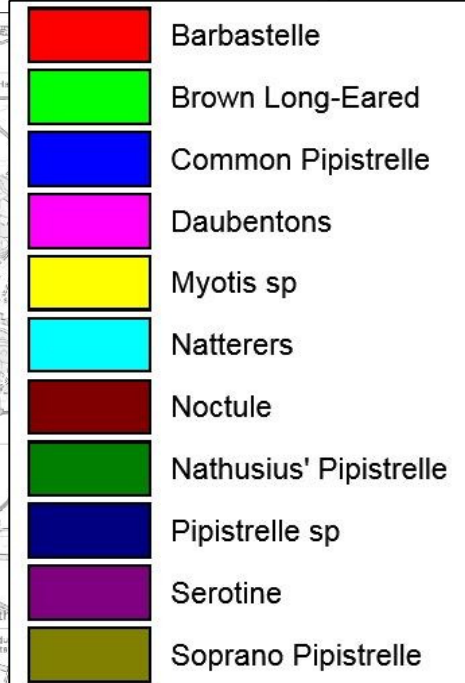
Photo credits: Malcom Fraser (NBSG)
and Lotty Packman (NBSG)

Biodiversity data: Bat Surveys

Survey methodologies	
Hibernation surveys	all structures within 2km of the new road
Building assessments	all buildings within 100m
Tree climbing inspections	all trees within 25m
Emergence/re-entry surveys	all building and trees with bat potential
Walked transect surveys	over a 10 years period
Unmanned static monitoring	over a 10 year period
Radio tracking surveys	Jun 09, Aug 09, Aug12, May 13, Aug 15

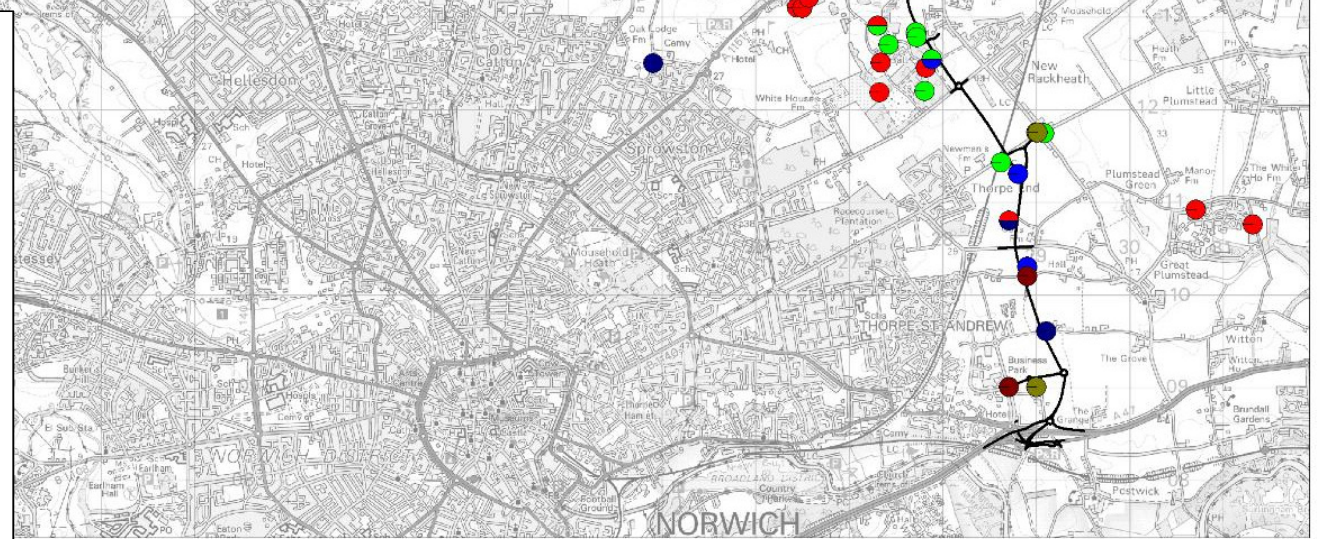


No. of roosts located



• Barbastelle	54
• Brown long-eared	29
• Pipistrelles	35
• Natterer's	5
• Daubenton's	4
• Noctule	3
• Serotine	2
• Myotis sp.	1

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Impacts from the Northern Distributor Road

- 2 Building roosts lost
 - BLE and Common Pip
- 5 tree roosts lost
 - Common Pip (2)
 - Soprano Pip (1)
 - Brown Long-eared (1)
 - Natterer's (1)



Photo credit: Evelyn Simak

Impacts from the NDR on Bat Commuting Routes

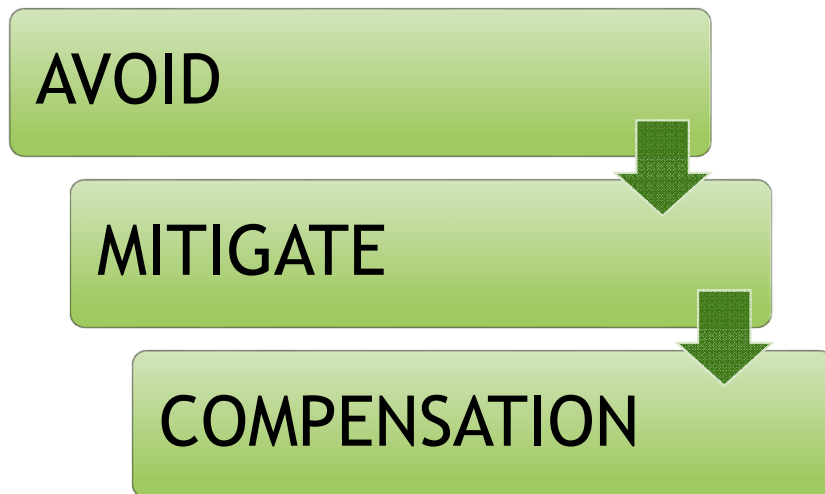
Green Bridges, Bat Gantries and Culverts



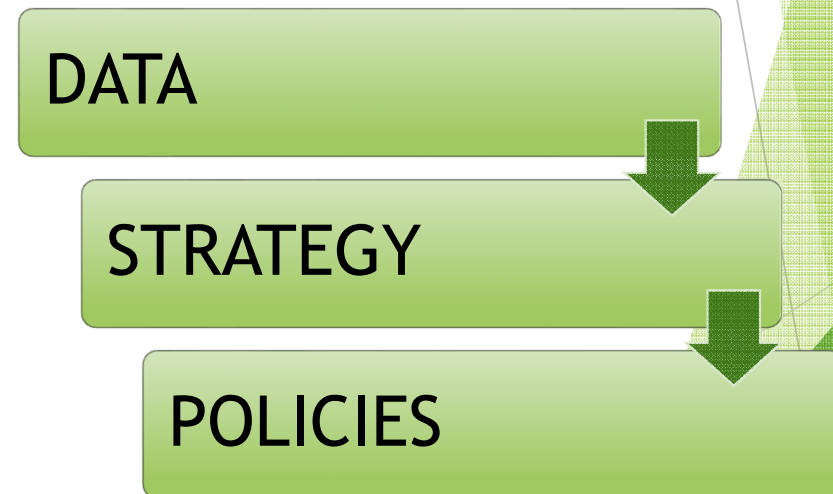
Impacts on bats from Housing

Using the bat data to inform the Area Action Plan
for the North-East Norwich Growth Triangle

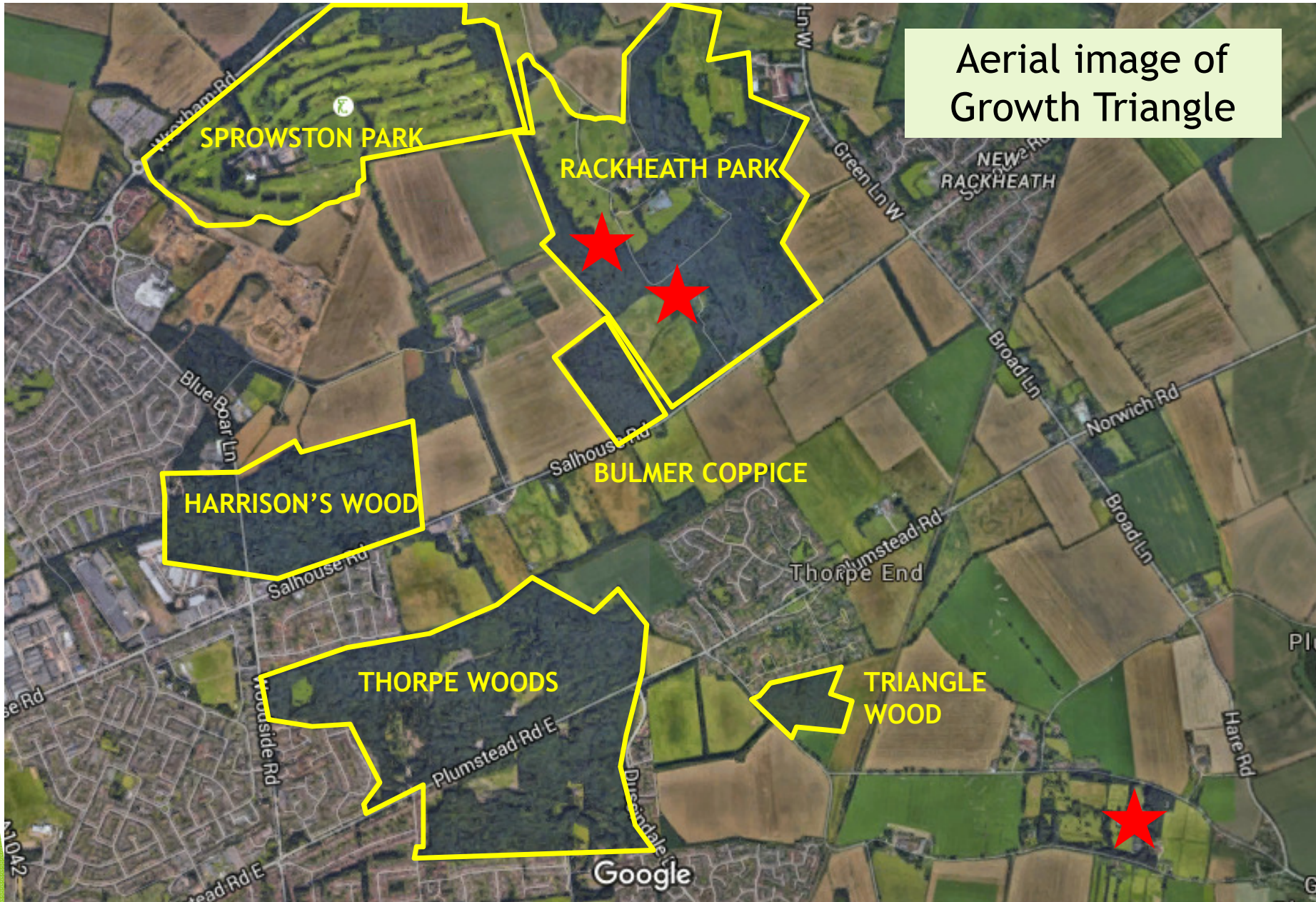
The 'Mitigation Hierarchy'



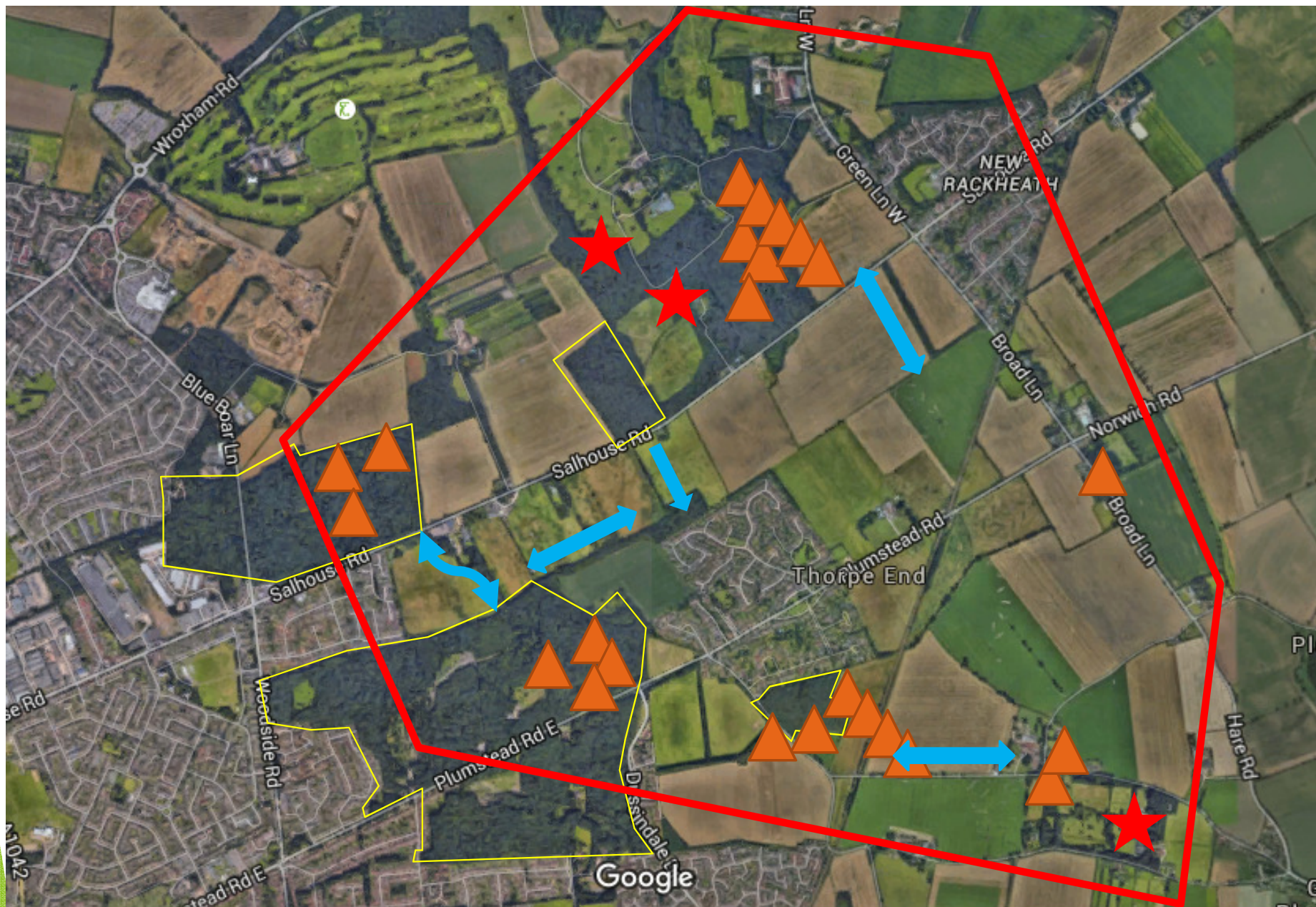
Evidence-based approach



Aerial image of
Growth Triangle



★
Barbastelle
Roost



Barbastelle
Roost



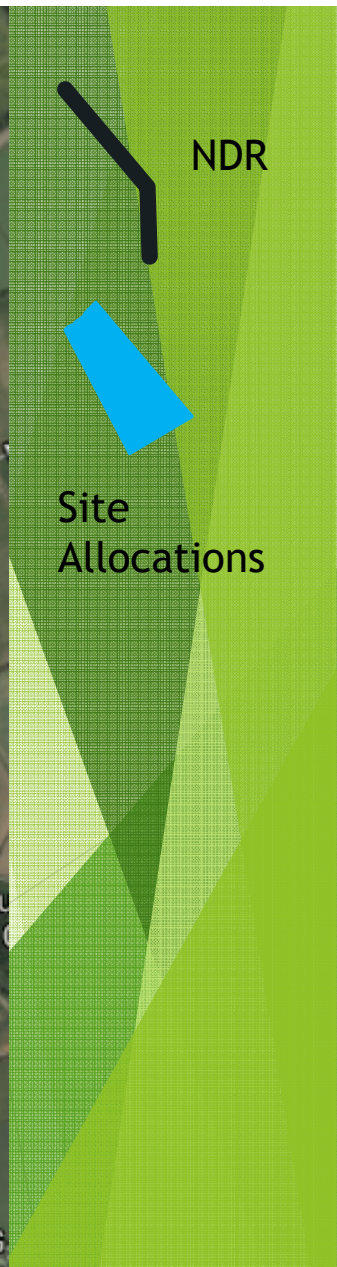
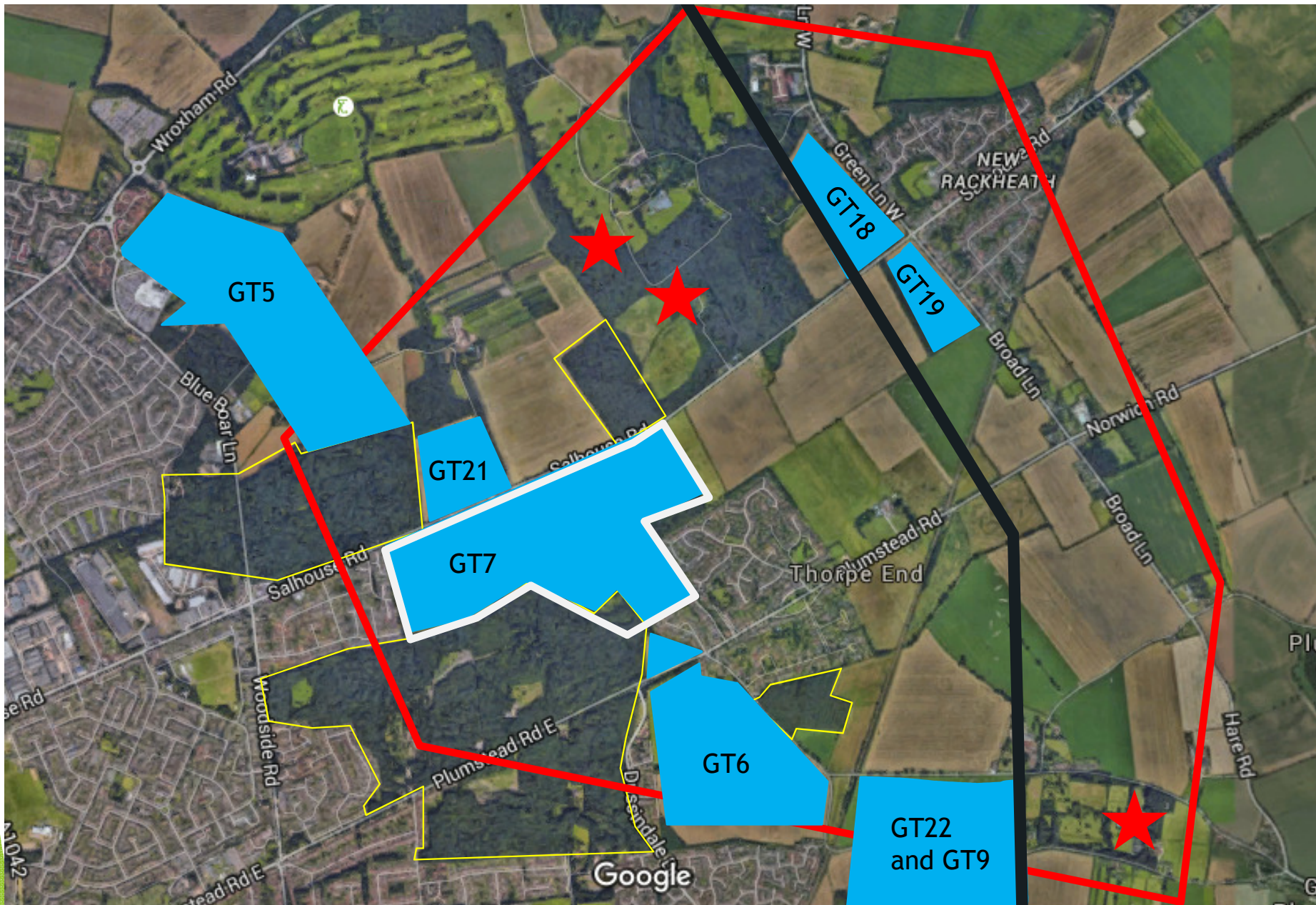
Combined
Barbastelle
Home Range



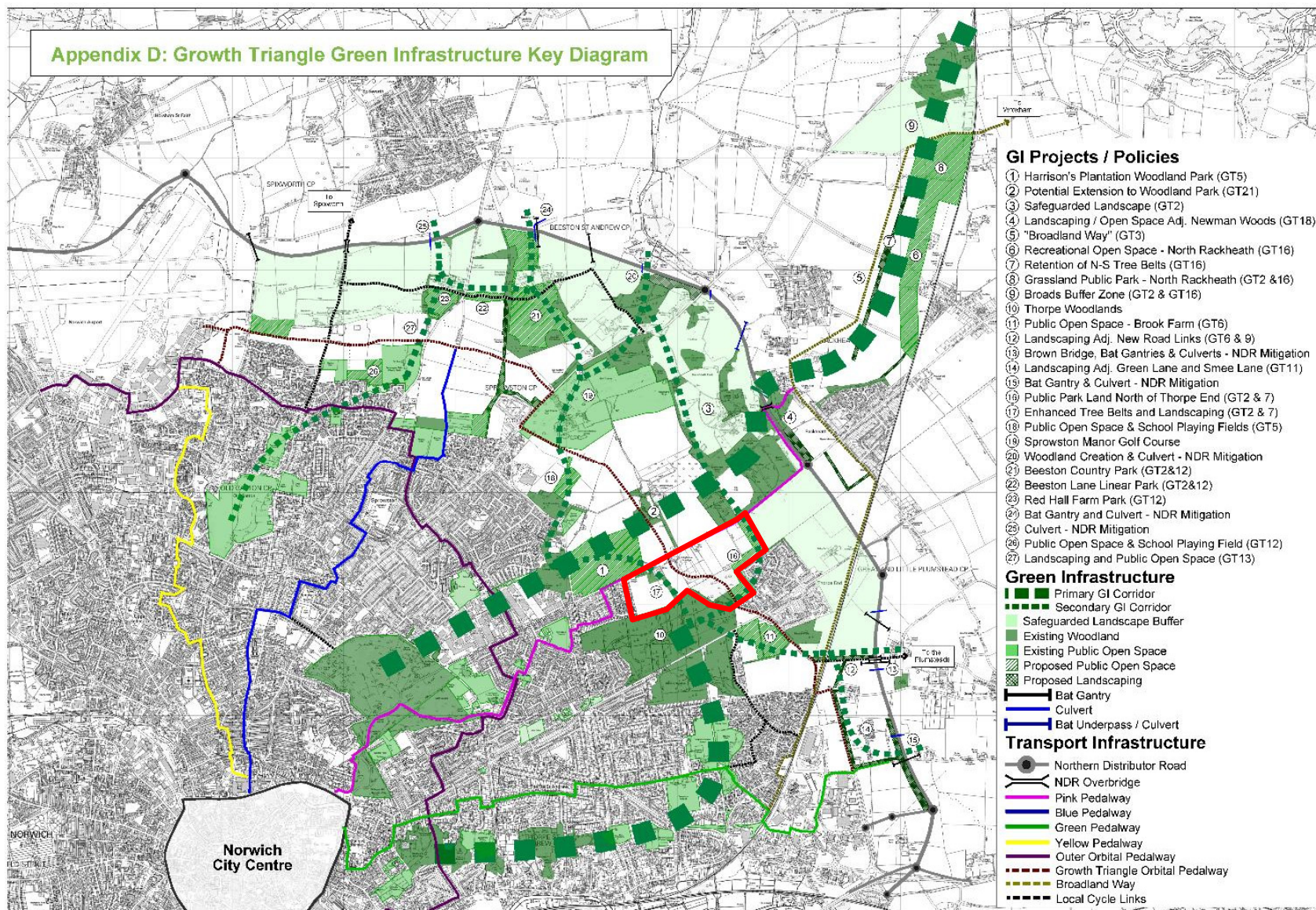
Feeding
Areas

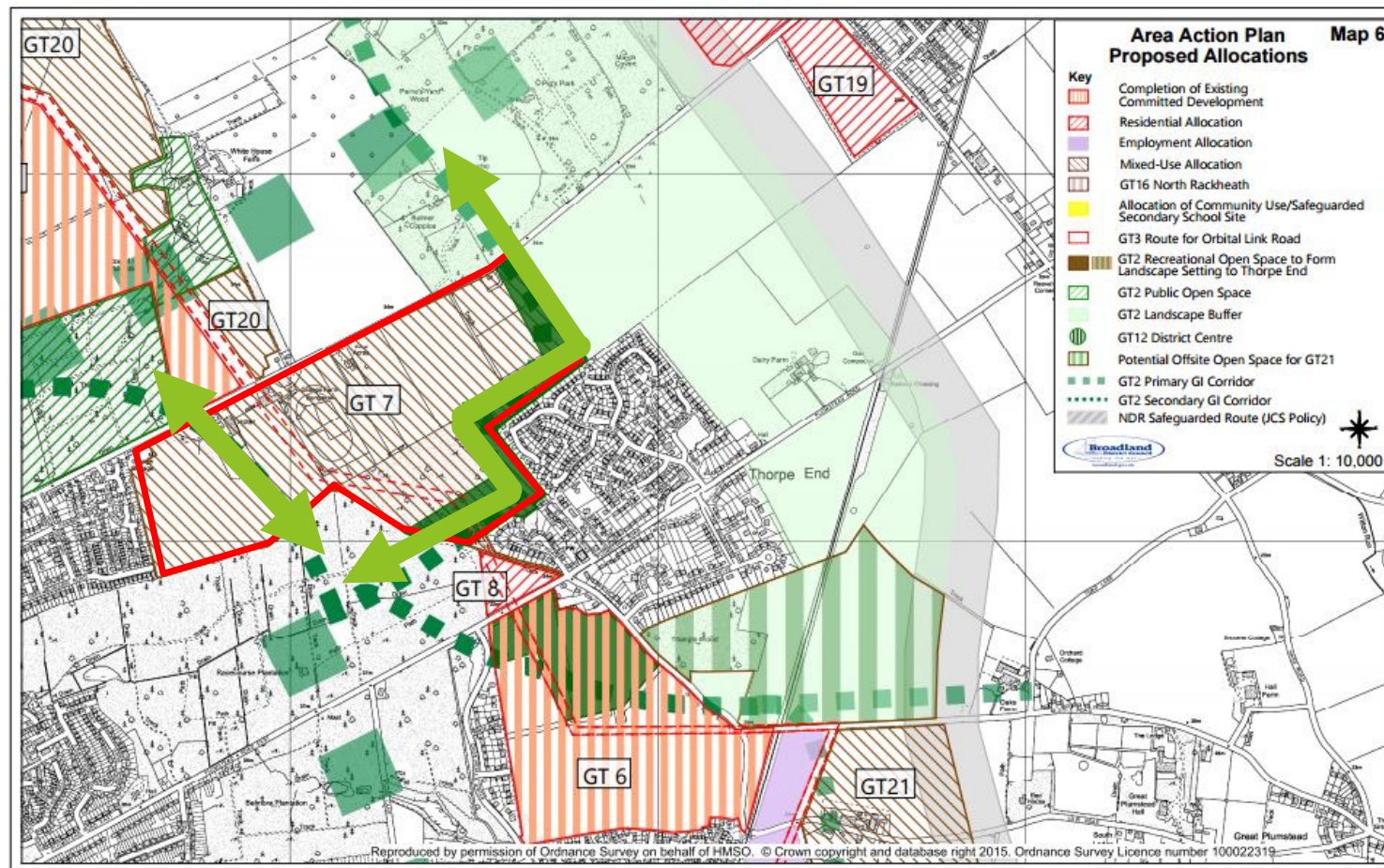


Commuting
routes



Appendix D: Growth Triangle Green Infrastructure Key Diagram

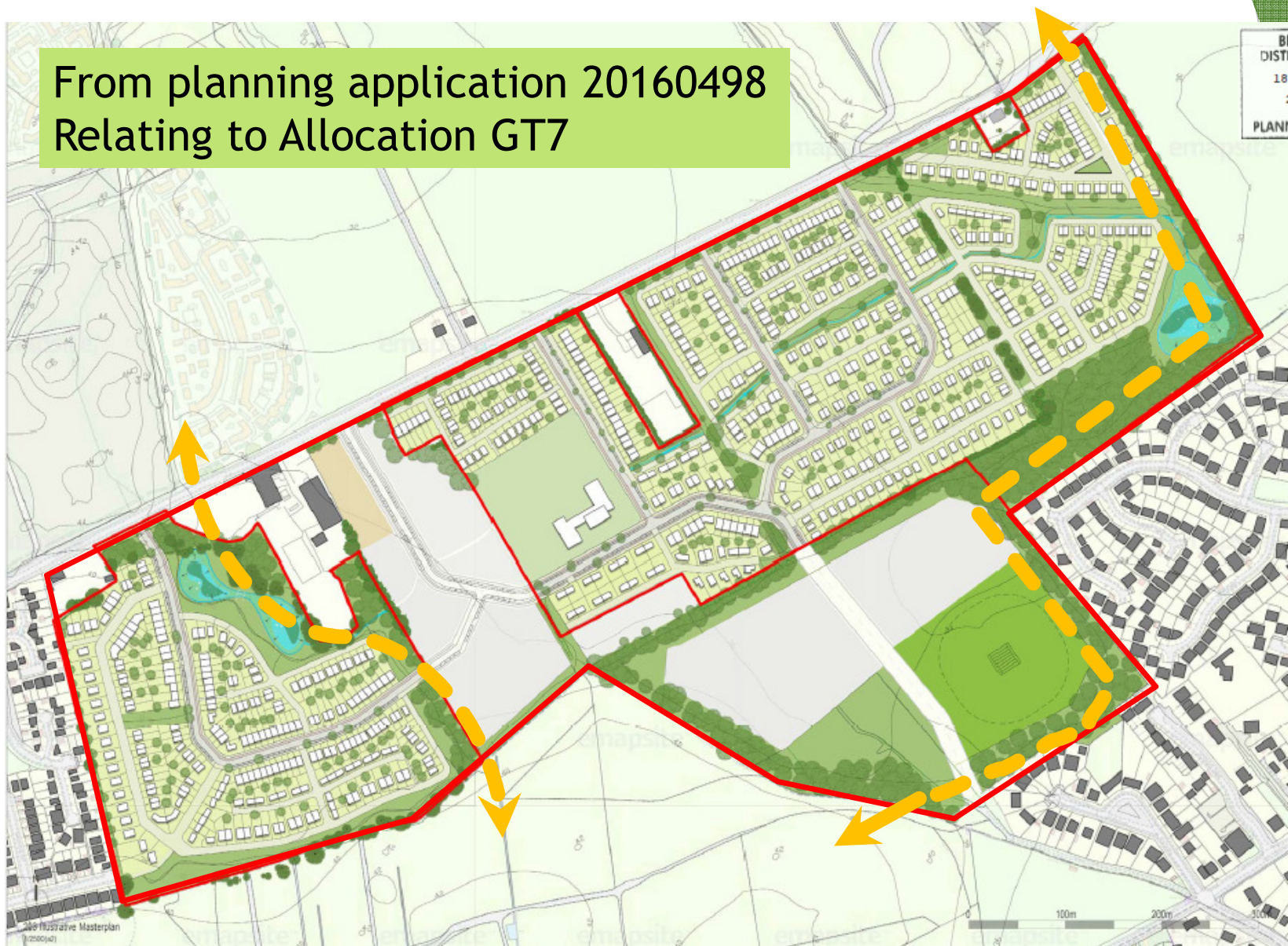




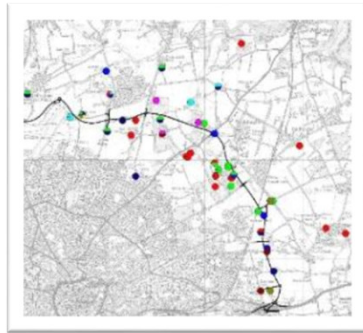
From AAP
Policy GT 7:

> THE DELIVERY OF THE GREEN INFRASTRUCTURE LINKS IN ACCORDANCE WITH POLICY GT2, WHICH SHOULD INCLUDE LINKS BETWEEN THORPE WOODLANDS, HARRISONS PLANTATION AND RACKHEATH PARK.

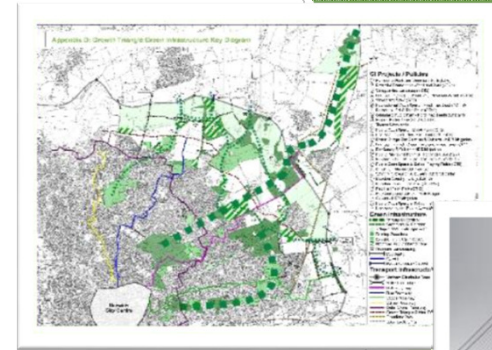
From planning application 20160498
Relating to Allocation GT7



The importance of biodiversity data



Bat Roost,
feeding &
commuting
DATA



OUTCOME:
Delivering 13,500
homes and a
26km distributor
road....

...whilst ensuring
the viability of a
population of
Barbastelles

DETERMINING
Planning
application



GI
STRATEGY

POLICIES
for
allocations

