

A VISION FOR EAST NORWICH

Autumn 2018



5th
studio

Commissioned by:



NORWICH
City Council



*Carrow Works incorporates a number of significant buildings available for reuse
- illustrated here are two fine brick buildings alongside the River Wensum.*

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Foreword

Councillor Alan Waters, Leader of Norwich City Council

The decision to end food production at the Carrow works which was taken by Britvic and Unilever earlier in the year was a body blow to Norwich. The loss of over 300 high quality manufacturing jobs from the local economy will have severe consequences.

The site had been in continuous use since the 1850s and the success of Colman's business had a major impact on the City as a whole and its physical development promoting significant growth outside the confines of the city walls.

The Colman's brand is associated with Norwich worldwide and the company had a fine reputation for looking after its employees, many of whom repaid this with loyalty over several generations.

Norwich is a dynamic, resilient and modern city that is adept at coping with change and skilled at using its considerable legacy of historic and natural assets to advantage in the modern day.

Nowhere is this more needed than in the East Norwich. The scale of opportunity presented by the soon to be redundant manufacturing plant at Carrow works and the adjacent longer term former industrial site at the Deal Ground and Utilities Sites cannot be overstated.

The extent of potential development land in such close proximity to a major and thriving City Centre, high quality transport links yet at the same time being on the edge of and partly within the Broads National Park gives remarkable scope for innovative redevelopment.

This potential is significantly augmented by the assets that lie within the area: the remains of the C12th Carrow Abbey, fine listed buildings, remarkable trees and gardens, extensive frontage to navigable rivers, and natural wetland habitat all provide a potentially valuable backdrop to redevelopment and the opportunity to create a new part of the city of remarkable quality.

The City Council is committed to see the opportunities presented here exploited to the full. It believes that the right growth can not only create new areas we can be proud of but can also shift perceptions and drive growth in Norwich as a whole and help address the inequalities that are so evident in our society.

There will be challenges in delivering the vision outlined in this document and we will need to work with partners to tackle these. There are a number of ways in which this may be tackled but I hope you find this vision prepared by 5th Studio for us a helpful starting point in doing this.



The Carrow Works site incorporates the remains of Carrow Abbey and a historic factory complex, as well as a remarkable mature landscape.

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The Chance of a Lifetime

Transforming Constraints into Opportunities

The decision to close and vacate the Carrow Works site presents a challenge: the Colman's firm has been associated with Norwich since the mid-nineteenth century and the departure of the factory means the loss of a significant number of skilled jobs and potential reputational damage to the city brand.

However the release of this site opens a once in a generation transformational opportunity: Carrow Works joins an accumulation of sites on the Eastern edge of the city, bordering the River Wensum between Norwich station and the Broads. Each of these sites, in their current isolation, face challenging barriers to development, but taken together the potential exists to address these issues strategically and to create a new productive quarter for the future growth of the city.

A Project of National Significance

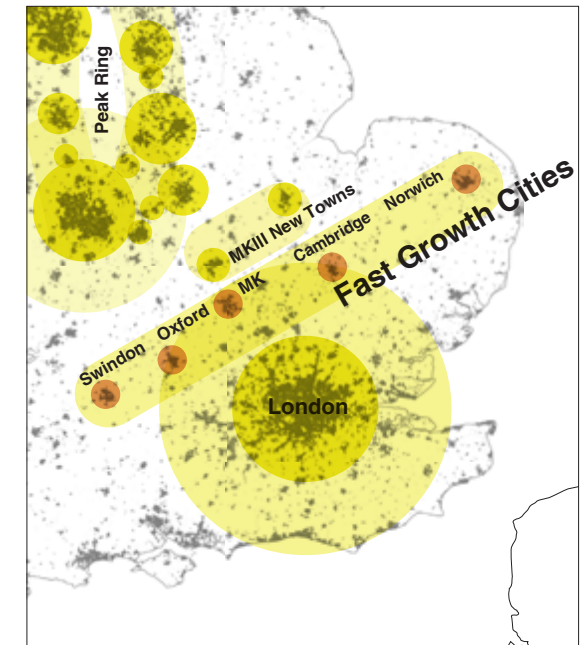
This land area of approximately 50 hectares is within a 15 minute walk from the train station. Such a set of contiguous central sites is a rare opportunity for a city to address and it is critical that the strategic

opportunity is grasped to allow the outcome to be **greater than the sum of the parts**: a comprehensive urban transformation that sets the agenda for the twenty-first century, establishing Norwich firmly as one of the UK's most forward-thinking cities.

By 2030 this quarter could provide up to 4,000 dwellings and 100,000m² of employment space, accommodating up to 6,000 jobs.

To enable this vision some key investment in infrastructure is required, with a focus on the Trowse rail bridge, already identified as being in need of replacement.

This study illustrates the opportunity, exploring how three key land parcels can be used to achieve three critical outcomes for Norwich: to create space for the city to grow, to achieve this in a sustainable way and to form a stronger bond with the landscapes beyond the city.



Above: Norwich is part of the Fast Growth Cities Network - a line of high productivity cities beyond London, linked by East-West Rail. It is critical for Norwich to identify where good growth may be accommodated to support the city's economic & cultural development.

Opposite: The three key land parcels, looking east from above the railway station.

A.

UTILITIES
SITE

B.

DEAL
GROUND

C.

CARROW WORKS &
CARROW HOUSE



An Overview

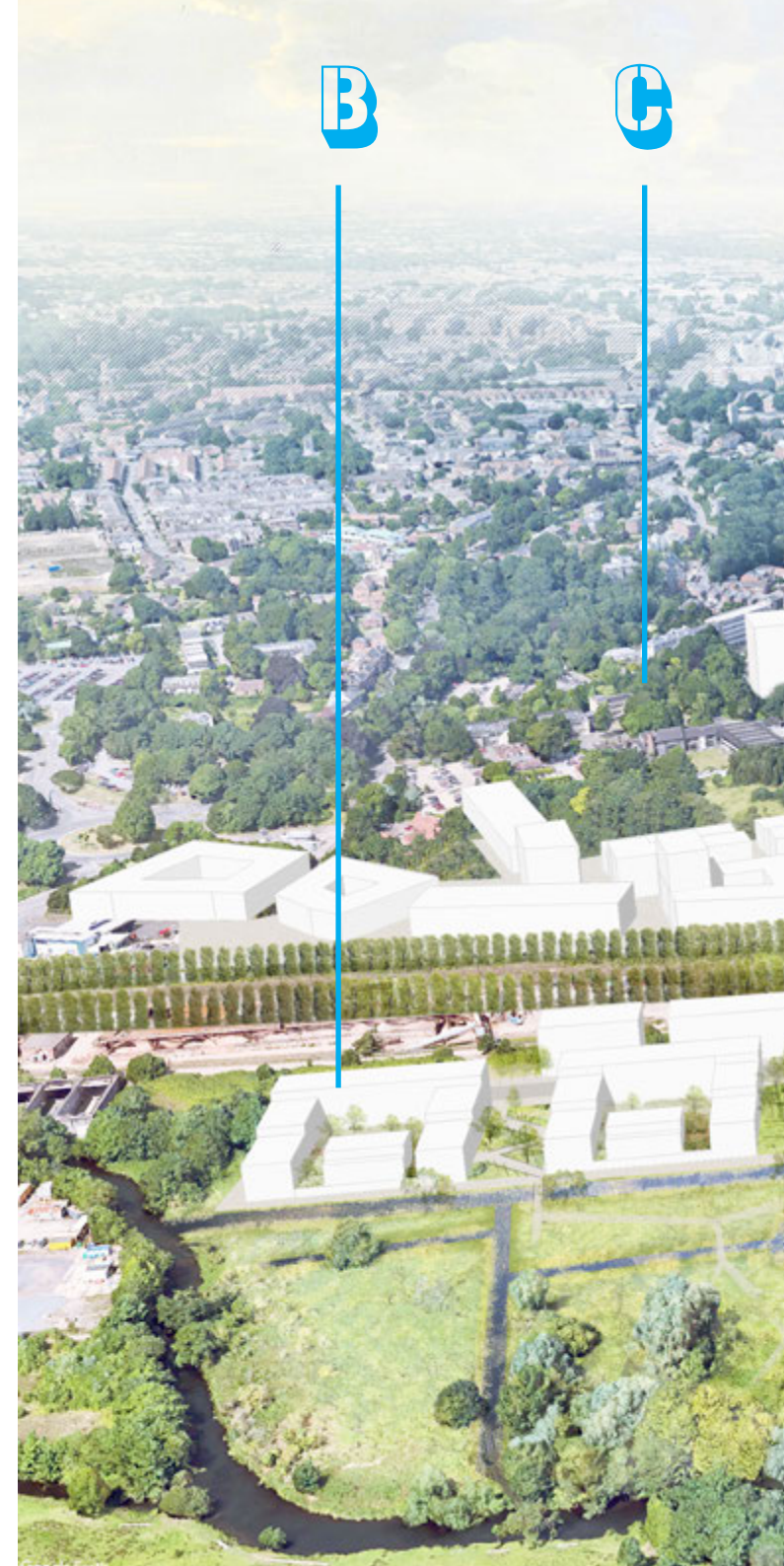
Looking towards the City Centre from the East

The Three key sites:

- A. The Utilities Site
- B. The Deal Ground
- C. Carrow Works + Carrow House

Orientation:

- T. The Cathedral of St John the Baptist
- U. Norwich City Hall, Market & Castle
- V. Norwich Cathedral
- W. Railway Station
- X. Whitlingham Broad
- Y. The River Yare
- Z. The River Wensum



T Y Z U

W V

A

X



1. City to the Broads

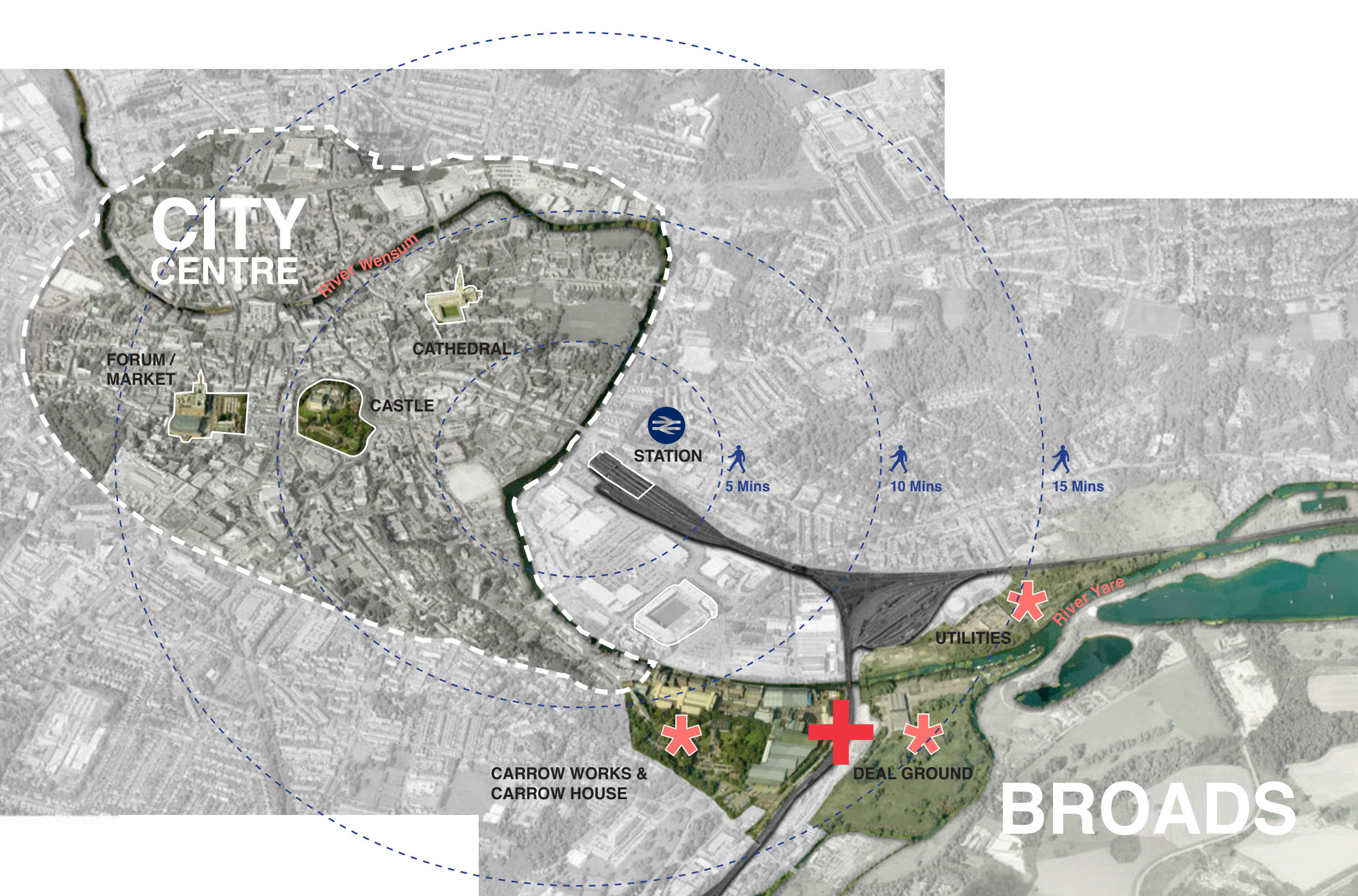
Central Norwich is arrayed around the Castle, the Market and the Cathedral: The railway station is on the Eastern edge of the City Centre, beyond the River Wensum, surrounded by relatively low-intensity land uses.

This project would consolidate the railway station at the centre of a new quarter of the city on its eastern edge. Regeneration of the three key sites allows the creation of a highly connective network, opening up and enhancing the existing biodiversity in the River Wensum and establishing a 'green grid' of characterful landscape spaces, integrating existing pockets of significant green space and introducing new areas, to create a sequence of gardens that lead from city to the Broads National Park.

This fine grained and porous network will create a walkable neighbourhood, 10 to 15 minutes walk from the station, prioritising walking and cycling and connecting citizens of Norwich to the remarkable natural environments and leisure opportunities of the Broads.



The project presents the opportunity to connect the city to the Broads, while recentring Norwich's railway station at the heart of a sustainable urban quarter



2. A Diverse City Quarter

From the *2040 City Vision* work we know that Norwich is a culturally vibrant city with a strong, independent character. As a city it has a rich heritage while remaining forward-looking and progressive.

A diverse new quarter will make the most of existing building stock on the Carrow Works site (including a number of fine listed buildings) either for permanent reuse or as interim spaces that promote interim or meanwhile uses of the site. This ready-made diversity, together with high-quality new architecture, can accommodate a wide cultural mix, from university research through to homes for families.

Together with the opportunity to construct bespoke new buildings at various scales, this new quarter can accommodate institutional uses, professional services, advanced manufacturing and maker spaces. This rich culture of living, retail and leisure spaces extends Norwich's

independent spirit, while supporting the development of skilled jobs and economic development.

The creation of a dense low-car quarter with cutting edge sustainable urban transport will contribute to ensuring bright minds stay in the city and generate good quality sustained investment in people and jobs.



Above: Carrow Works today looking east.

Opposite: This view of existing and new buildings fronting a street connecting through to the Broads illustrates the potential of mixed urban setting with a diverse range of buildings and dwellings for all.



3. Cutting Edge Sustainability

Norwich is a progressive city with a commitment to sustainable development. At the heart of this comprehensive vision for the city's growth to the east is the close proximity of development to the rail station with enhanced and fully electrified services, connecting both cross country and to London.

The strategic nature of the vision opens the possibility of a rapid transit connection between the key trip generating locations in the city, reducing car use within Norwich.

The close proximity of the east Norwich sites to the city centre and to the station allow the establishment of car-free development, supported by an excellent walking and cycling network that connects the city to the Broads. The development will promote healthy streets principles, working with Norwich's reputation as a happy and healthy city in which to live.

Development will maximise the reuse of existing built fabric to reduce carbon generated through demolition and construction. In turn, this diversity of building scale and type will allow a wide range of accommodation, tenures and uses.

A 'green grid' approach to landscape will integrate existing under used open spaces, restored gardens and newly created landscapes to enhance connectivity and biodiversity.

Integrated sustainable urban drainage and flood plain remodelling will be used to create 'room for the river' - including storm water storage and wetlands around the river Yare.

A site-wide approach to infrastructure allows the introduction of a low-carbon shared heating, cooling and power network, as well as excellent digital connectivity.



Unlocking Infrastructure...

The intersection of the railway and the River Wensum creates significant severance on the eastern side of Norwich, isolating the Utilities site and the Deal Ground in terms of connectivity. This constraint has fettered development on these two sites, and if left unaddressed, will also limit the capacity of the Carrow Works site. If the Carrow works site is developed in isolation it is unlikely to have the scale to support rapid transit solutions - so its capacity may be heavily constrained by the existing road network.

The Railway

The upgrading of the railway required to achieve Network Rail's Norwich in Ninety ambition will, in practice, require the replacement of the Trowse swing bridge with a fixed bridge, allowing a twin-track approach to the station, removing the speed and capacity restriction imposed by the present single-track bridge. The resulting improvements in capacity and speed are critical to both the Norwich in Ninety and to the third phase of East-West Rail, linking Norwich with Cambridge & Oxford as well as Birmingham and Stansted airport.

Trowse bridge is the key focus for investment in infrastructure to enable the comprehensive vision described here. To optimise the value from the bridge replacement we have illustrated the benefit of a bridge that plays multiple roles - introducing a longer span which enables riverside connections on each bank, as well as highway-standard connections between the Carrow Works and Deal Ground sites and between Hardy Road and the Utilities site.

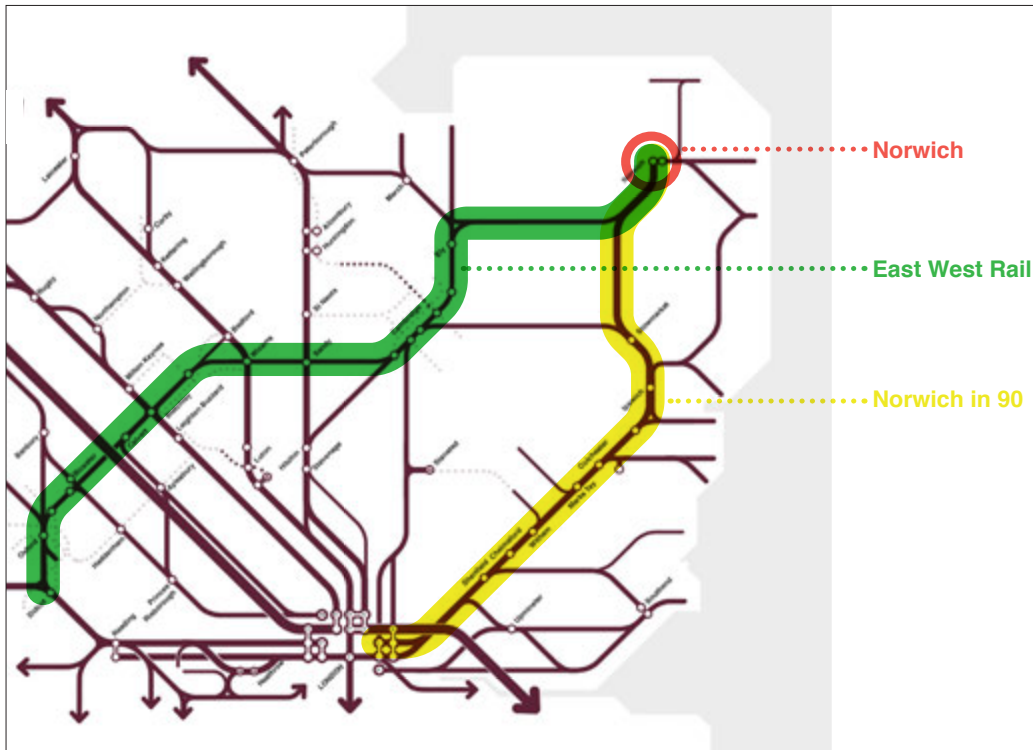
The Port & Rivers

A fixed bridge will restrict the navigation of the River Wensum, preventing access for vessels of any size to the Port of Norwich, as established by Act of Parliament. To address this - and to allow the maintenance of a port connected to the city - a new marina would be required downstream of the bridge. This vision integrates the marina and other activity on the river as part of an opening up of the waterways to the east.

Comprehensive regeneration of the key sites will also allow a strategic approach to flood remodelling which affects the development potential of the Deal Ground in particular.

Norwich Orbital

The *National Infrastructure Assessment* recommends as a key priority that cities develop integrated plans for urban transport to connect housing and jobs in order to facilitate growth and improve the quality of life for citizens. *"Space in cities should be used effectively, with room allocated for fast, frequent public transport systems, well-connected and affordable housing, and pleasant public spaces. This will require a new approach to governance, strategy and funding for urban transport."* These proposals identify the potential of an option to complete the city's orbital road - to date frustrated by the river and the railway. With careful integration with plans for a rapid transport system this connectivity offers greater accessibility between key trip generators in the city.



Above: The context of planned rail connectivity improvements, including East-West Rail and 'Norwich in Ninety' upgrades to the Great Eastern Mainline.

Above Right: The Trowse Swingbridge across the Wensum - the county's largest opening electrified railbridge - will need to be replaced to allow the planned rail upgrades.

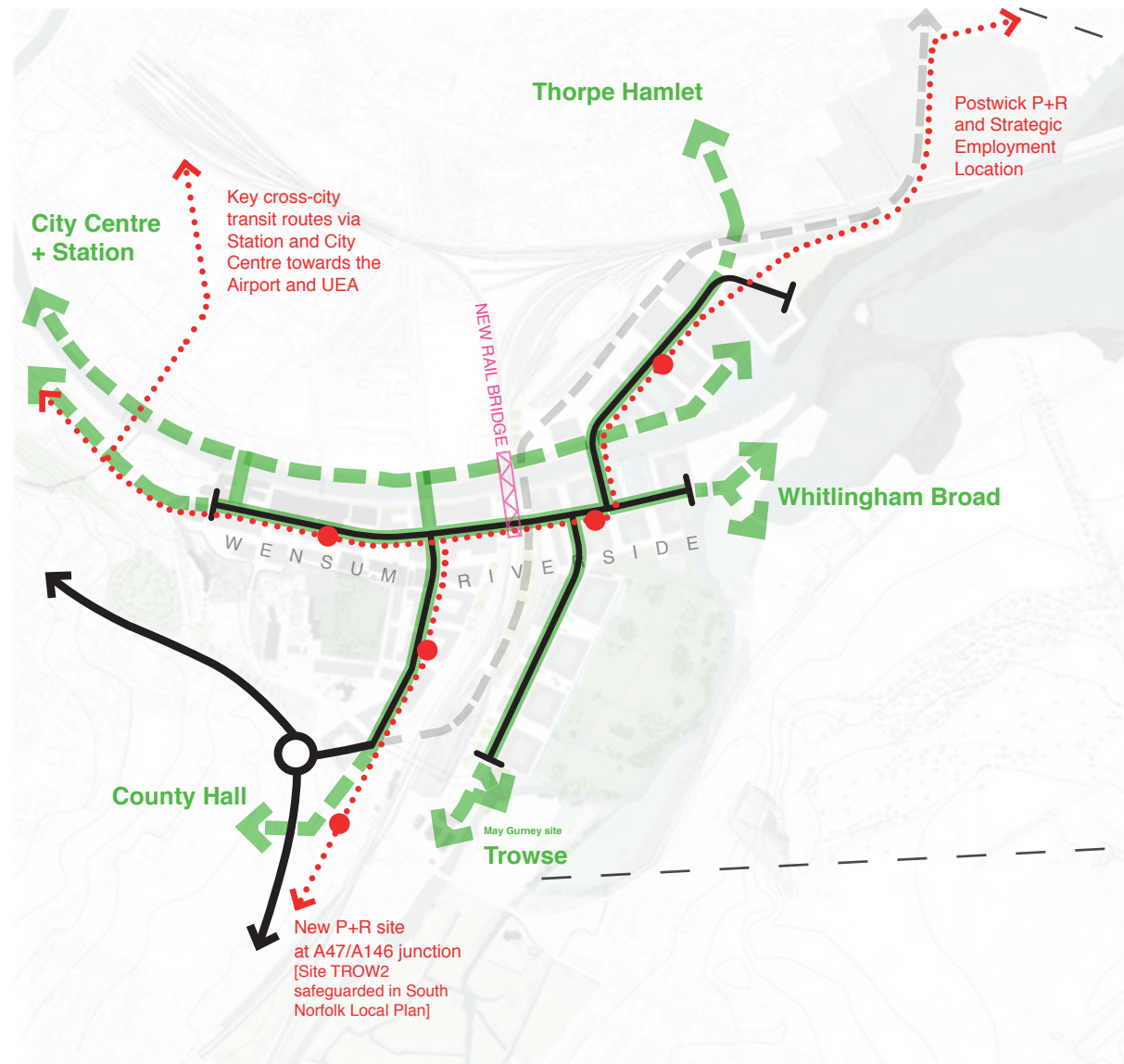
Bottom Right: An enhanced Trowse Bridge Replacement would unlock connectivity around what is currently a major severance.



...at the scale of the City

Comprehensive development and investment in infrastructure has the potential to address a gap in the city's development, arrested by the river and the railway which have frustrated attempts to integrate this quarter of Norwich, despite multiple ring roads encircling the city.

Overcoming this city-scaled gap could support ambitions for modal shift and the creation of an integrated rapid public transport system.



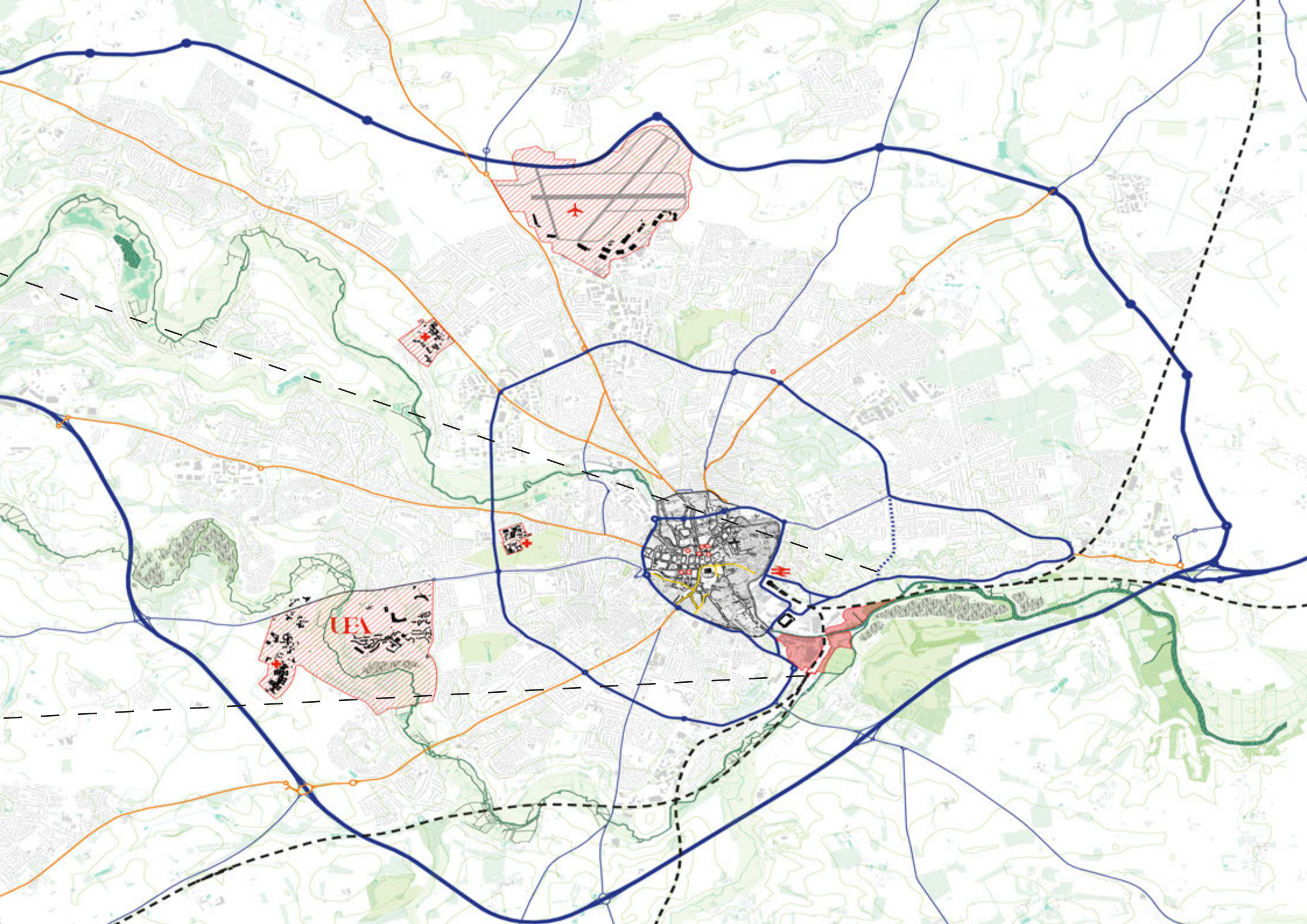
Proposed Western Link - currently being examined by Norfolk County Council

Key walking and cycling routes

Priority rapid transit routes

Vehicular access

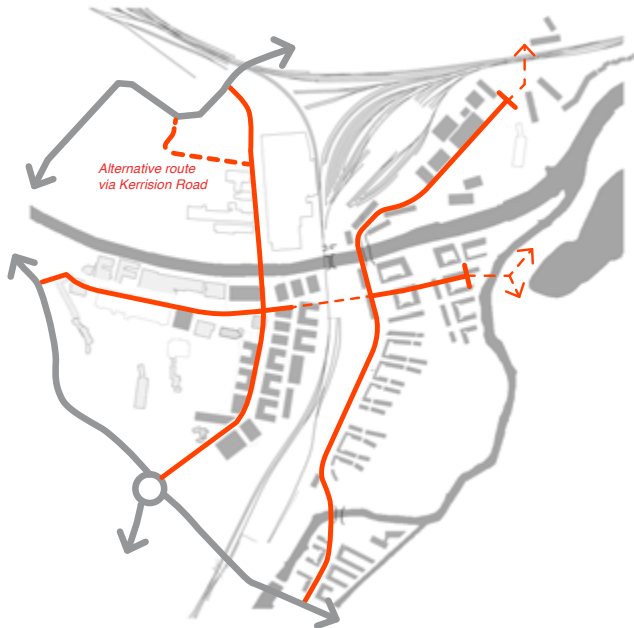
Potential orbital route (to replace Koblenz Avenue)



...& the scale of the Site

In addition to current site access conditions, three scenarios for site access and connectivity were tested. A hybrid of the two most successful scenarios has been adopted for this vision, with wider orbital connectivity safeguarded. Option 1 explored a river crossing on the Carrow Works site:

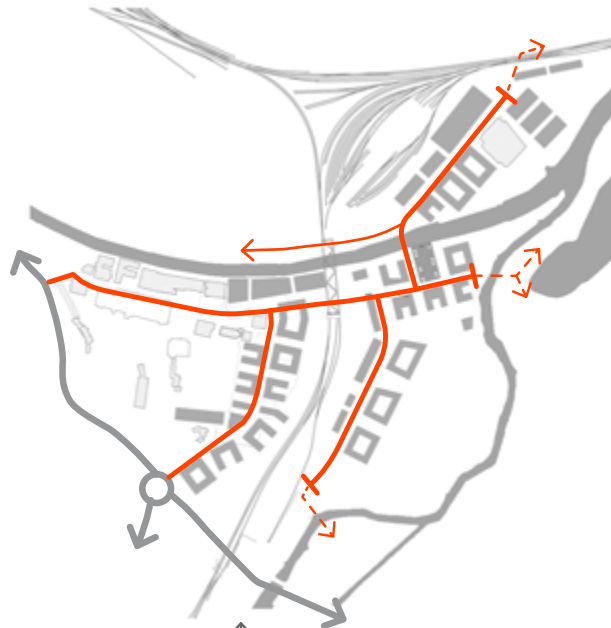
1. Orbital connection via Hardy Road



X

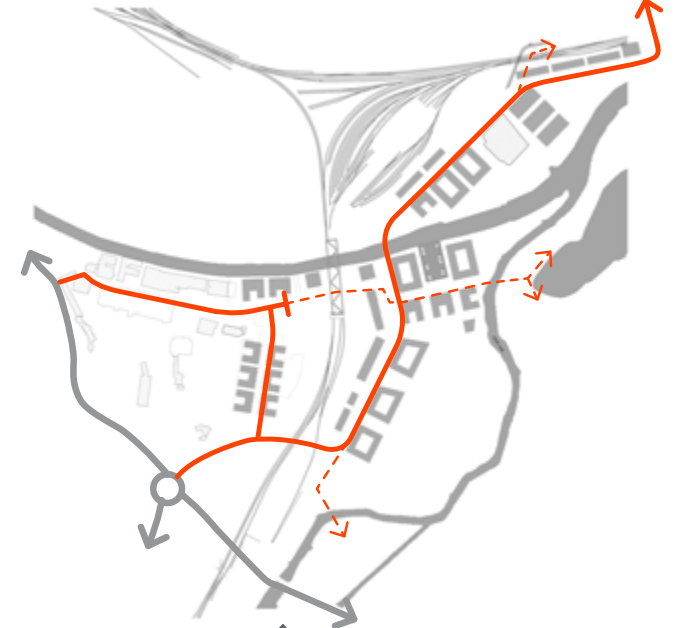
this does little to improve orbital connections while having a significant impact on Carrow Works and Hardy Road. Option 2 proposes stitching together the key sites with a route beneath the railway as part of the renewal of Trowse Bridge and a new cross-river connection between the Deal Ground &

2. Trowse Rail Bridge enhancement allowing access beneath railway on both riverbanks



Utilities site. Option 3 establishes a high level crossing over the railway to link the Carrow Works site with Deal Ground, together with a new river bridge and potential further crossing of the railway and Carey's Meadows to deliver an orbital link.

3. Orbital connectivity established by a rail crossing by Trowse station & a connection across Carey's Meadow



hybrid



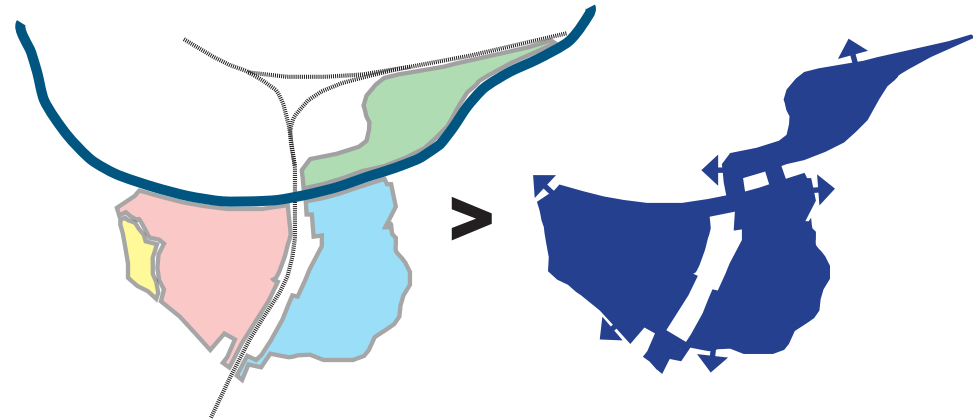
Who needs to be involved?

This study supports the creation of a public sector-led development agency to realise the optimal use of the opportunity and to promote the land for the good of the city as a whole.

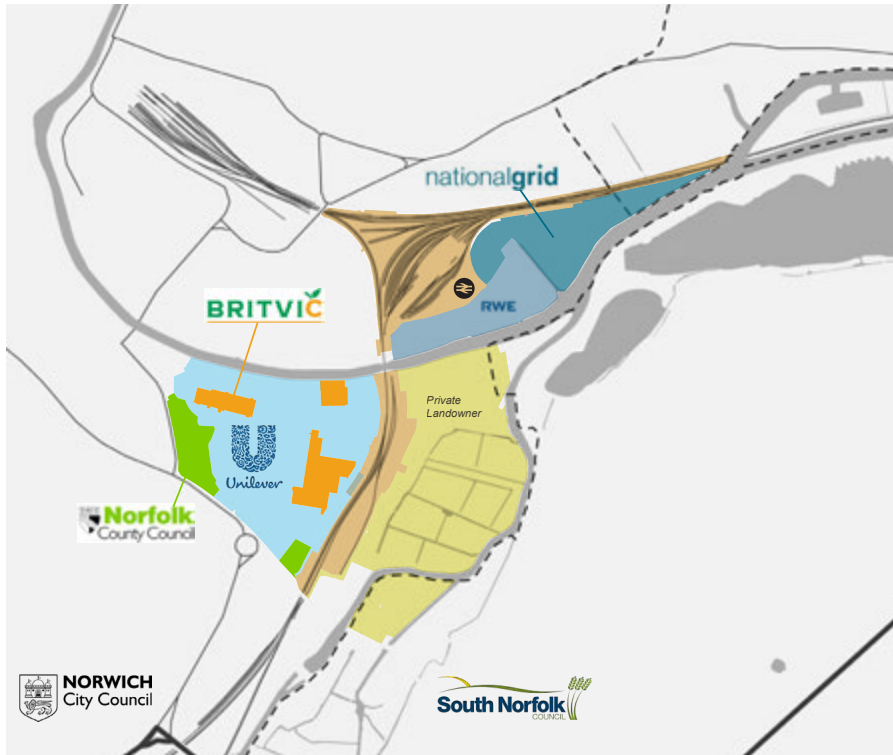
The three key sites - with a combined area of around 40 Hectares - are largely in private ownership. Unilever & Britvic, owners of the Carrow Works site have indicated their willingness to release the land in a way that achieves optimal outcomes for the city. The County Council own the Carrow House site.

The Utilities and Deal Ground sites have previously been promoted in development plans, but each carry a high infrastructure cost to realise and addressed singularly are relatively isolated and marginal in terms of location. Issues of flooding and access infrastructure have led to market failure to bring these sites forward.

As a central landowner and steward of the central unlocking infrastructure of the project - Trowse Swing Bridge - it is critical that Network Rail supports the aims and objectives of the project.



From isolated 'archipelago' to a coherent, connected city quarter.



Land Ownership

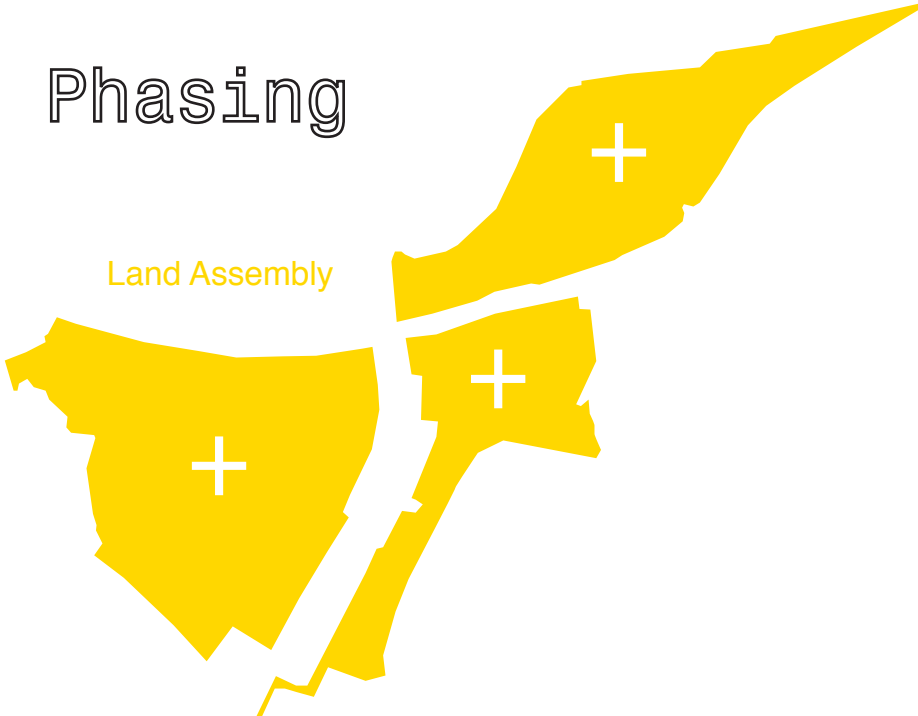


Constraints

- KEY**
- Site Boundaries
 - Statutory Listed Buildings
 - Locally Listed Buildings
 - Buildings of interest
 - Conservation area
 - Scheduled Monument area
 - County Wildlife Sites
 - Flood Zone 2
 - Flood Zone 3A
 - Flood Zone 3B
 - TPO site
 - Environmentally Sensitive Areas
 - Woodland
 - Local Nature Reserve
 - Parks and Gardens

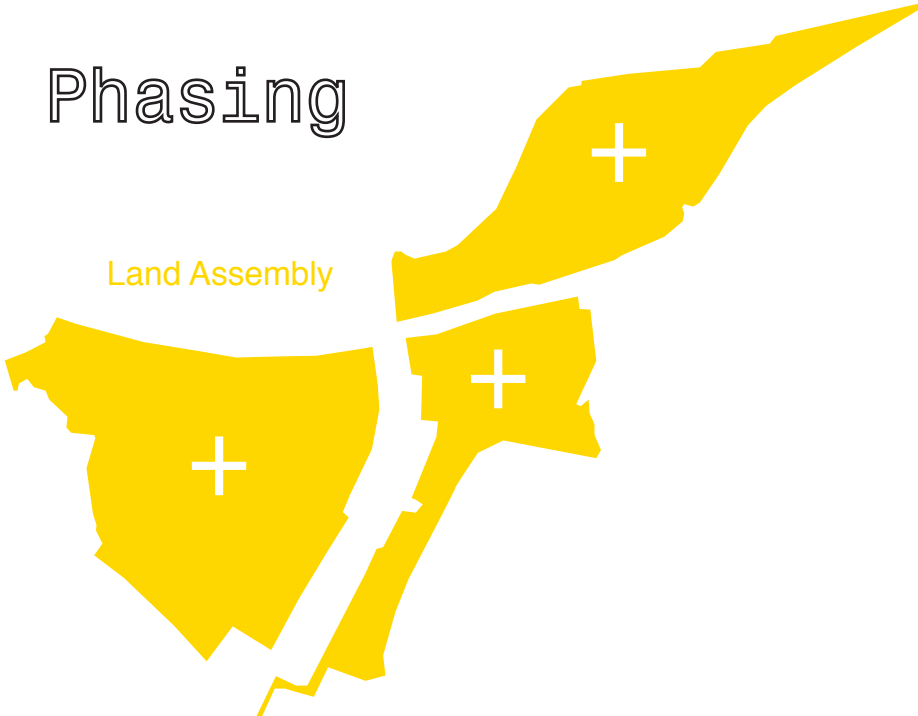
Phasing

Land Assembly

A yellow map of a land area, possibly a river delta or a coastal region, divided into three distinct sections by a network of white lines representing roads or waterways. Each of the three sections contains a white plus sign (+), indicating a specific phase or area of land assembly. The sections are located in the upper right, lower left, and lower right areas of the map. The text 'Phasing' is written in a large, black, outlined font at the top left, and 'Land Assembly' is written in a smaller, solid black font below it.

Phasing

Land Assembly

A yellow map of a land area, possibly a river delta or coastal region, divided into three distinct sections by a network of white lines representing waterways or roads. Each of the three sections contains a white plus sign (+), indicating the phasing of a land assembly project. The word "Phasing" is written in a large, black, outlined font at the top left, and "Land Assembly" is written in a smaller, solid black font below it.

- Overall Masterplan adopted
- Complete land assembly of Carrow Works and Carrow House site
- Complete land assembly of Deal Ground river frontage
- Continue land assembly of Utilities and Deal ground sites
- Agreements / design work on Trowse Bridge replacement

- All land assembly complete
- Detailed planning consents for Phase 2 construction

- Detailed planning consents lodged for Phase 3 construction



1. Open new street, with connections to Kings Street
2. New footbridge over Wensum
3. commence construction of new harbour and quay
4. Reopen underpass beneath railway
5. Establish site heating & energy network from the Utilities Site
6. New footbridge to Whitlingham Broads & Country Park

7. Complete site audit and demolish unwanted buildings, retaining some buildings for interim / meanwhile use
8. Commence restoration works to Carrow House
9. Construct new street-side buildings for anchor tenants
10. Clear land ready for Trowse bridge replacement
- Early-phase community facilities
- Short term commercial meanwhile use plots

11. Commence restoration works to the Wilderness, Grove and Carrow House gardens
12. Establish tree nursery to supply site
13. Plant new woodland alongside rail corridor
- Plant street trees along new street



Infrastructure

1. Construct Trowse rail bridge with utilities spine connection
- Rolling extension of primary access roads, SUDS and carbon-neutral utility grid
2. Optional Pedestrian / cycle bridge connection to Utility Site

Construction

3. Construct buildings along Avenue
4. Construct Quayside buildings on Deal Ground including new school
5. Construct main street in Deal Ground
6. Construct flood attenuation measures and canal - Deal Ground

Landscape

7. Landscape restoration works on Deal Ground
8. Tree nursery run down



Infrastructure

1. Optional road bridge connection to Utility Site
2. Potential orbital connection for rapid transit established

Construction

- Phase 3 development underway
- [district feels 'complete' even at interim stages and adaptive masterplan allows incorporation of emerging opportunities]

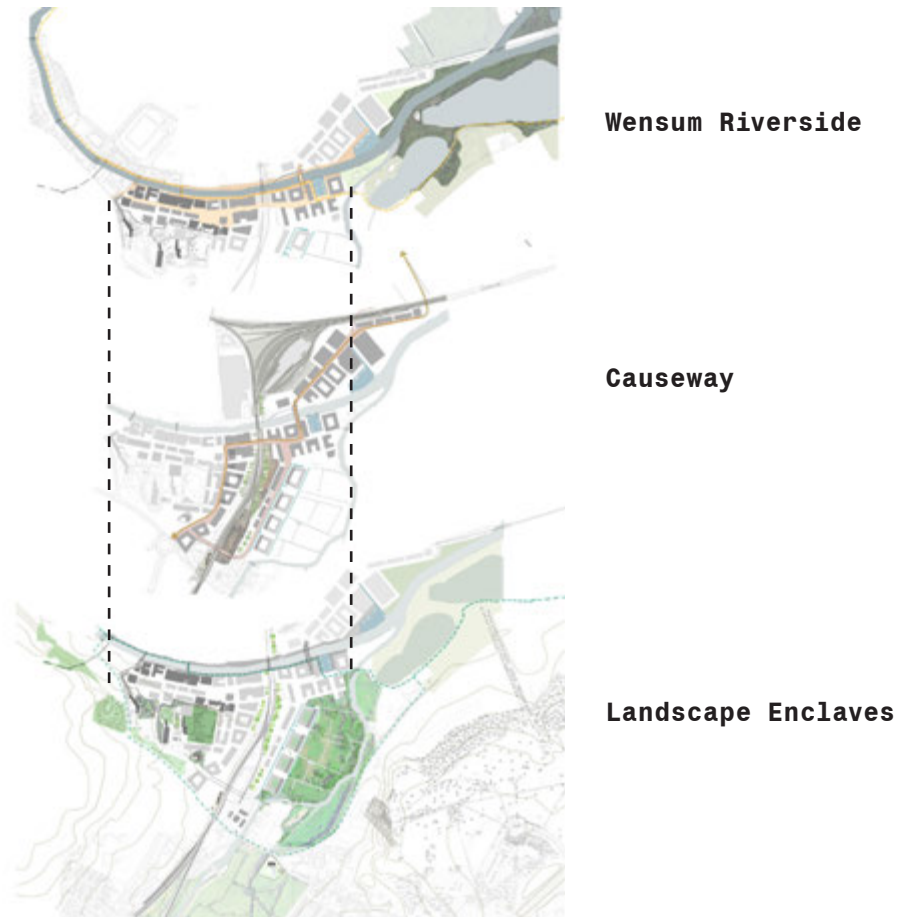
3. Commence construction on Utilities Site
4. Commence Buildings along street in Deal Ground

Landscape

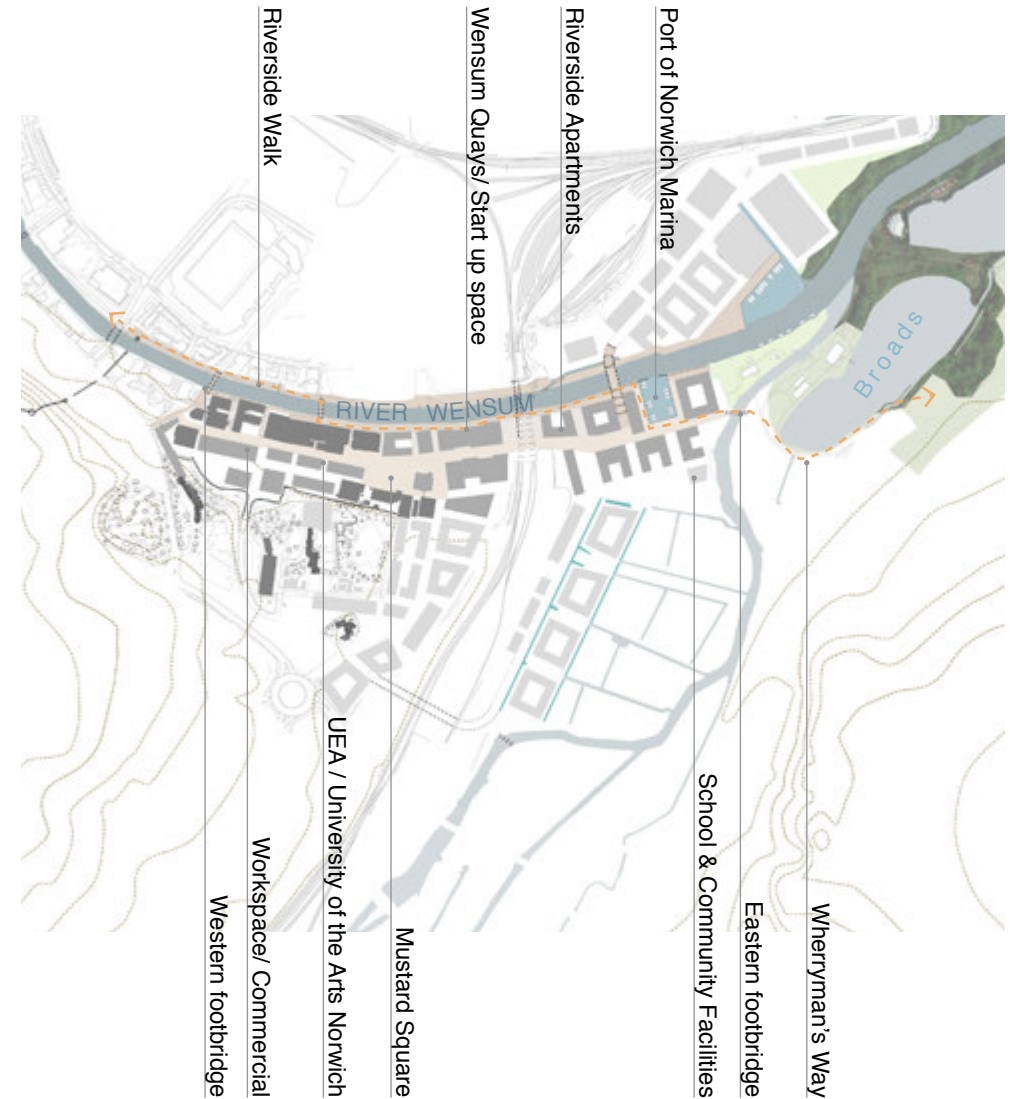
5. Utilities site landscape restoration
6. Footpath connection alongside River Yare to UEA

Character Areas

Three clear areas of distinct character emerge across the site that in turn allow a diverse set of uses and building typologies to co-exist with a clear set of organising principles.



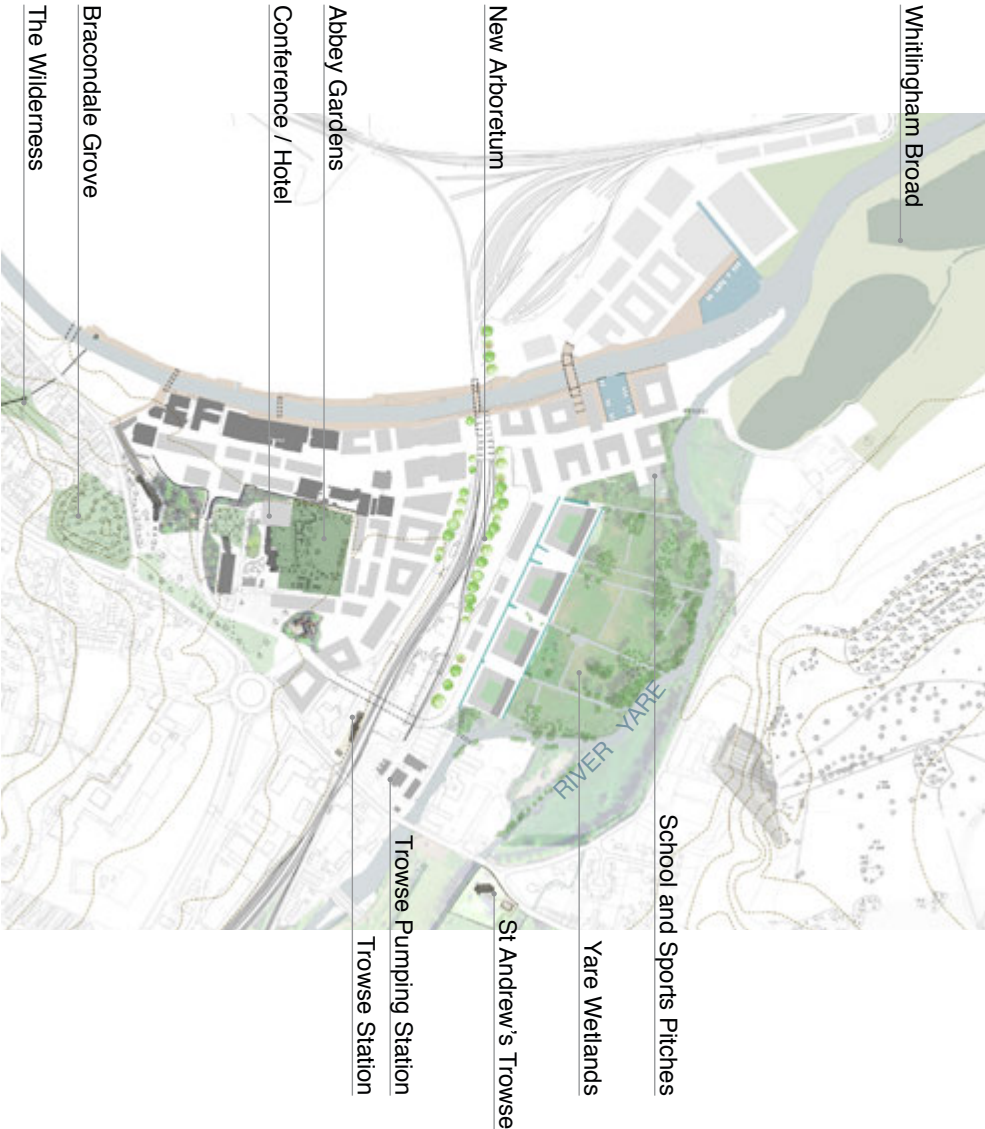
Wensum Riverside - Connecting the City To The Broads



Causeway - Two New Streets and a Connective Urban Grain



Landscape Enclaves - Amazing Landscapes & Gardens



Where has this been done well?

Examples from around the world illustrate how the components of the vision for east Norwich can be realised.

Hammarby Sjöstad in Stockholm is an excellent example of how dense urban blocks (5-8 storeys) can be integrated with a waterfront landscape. The Quayside buildings at Royal William Yard in Plymouth surround the marina in a similar way to how development might be arranged around the new Port of Norwich marina.

Hafencity, also with quays and promenades, is a fine-grained mixed use development in Hamburg. It establishes an exemplary sustainable urban development project, with economic, social and cultural aspects.

The Palo Alto Project in Barcelona has transformed a former factory into a space that brings studios and creative professionals' workshops together, and has now become the most popular street market in Barcelona. The Wharf Flea Market and the SESC Pompeia have also successfully converted redundant factory and wharf spaces to create inspiring creative and social settings.



Hammarby Sjöstad, Stockholm



Royal William Yard Harbour, Plymouth



Palo Alto Market, Barcelona



SESC Pompeia, São Paulo



Hafencity, Hamburg



NDSM Wharf Flea Market, Amsterdam

Quantum

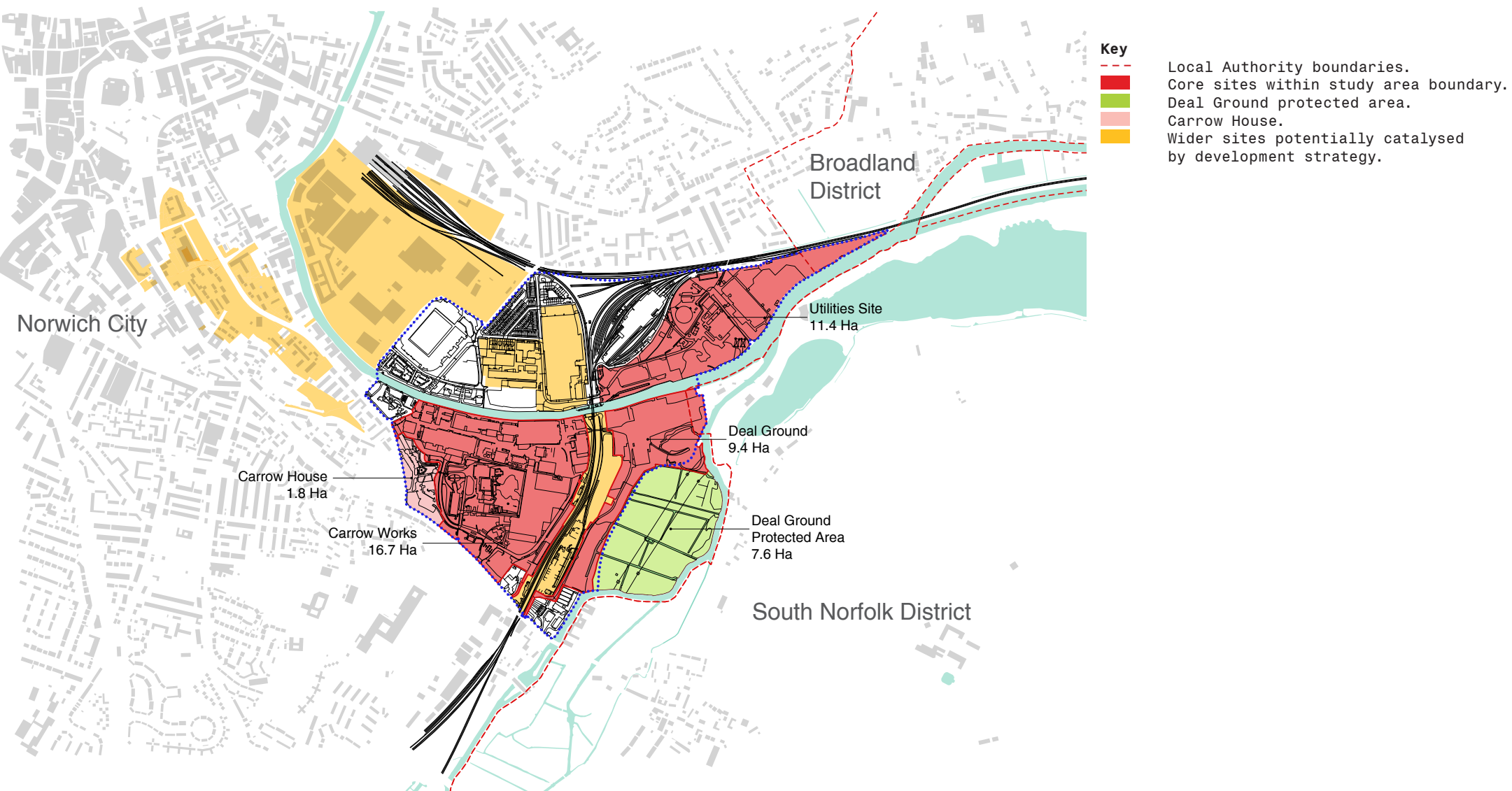
By 2030, supported by the right infrastructure, this quarter of Norwich could support up to 4,000 new homes and 100,000m² of employment space, located in a diverse range of spaces from re-used historic buildings through to bespoke new structures.

Adjacent to the core sites, there are a number of additional underused land holdings that could further extend these numbers where more productive land uses could be catalysed.

To give some sense of the scale of the opportunity, the diagrams on the right compare the core sites at the same scale as the campus at UEA and the Media City complex in Salford.



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