Appendix 1 References.

Appendix 1 | References

Online Sources

Britain from Above

https://www.britainfromabove.org.uk/

George Plunkett's Photographs of Old Norwich

http://www.georgeplunkett.co.uk/Website/index.htm

Grace's Guide to British Industrial History

https://www.gracesguide.co.uk/J._and_J._Colman

https://www.gracesguide.co.uk/1914_Who's_Who_in_Business:_Company_C

https://www.gracesguide.co.uk/1926_Institution_of_Mechanical_Engineers:_Visits_to_Works

Historic England Archive, Architectural Red Box Collection

https://historicengland.org.uk/images-books/photos/englands-places/

Norfolk Historic Environment Record

Carrow Bridge: https://www.heritage.norfolk.gov.uk/record-details?MNF843-Carrow-Bridge&Index=11&RecordCount=29&SessionID=fa3ada7a-dc04-46f1-b4b6-051697f6e8c8

Carrow House: https://www.heritage.norfolk.gov.uk/record-details?MNF26478-Carrow-House&Index=14&RecordCount=29&SessionID=fa3ada7a-dc04-46f1-b4b6-051697f6e8c8

Carrow Works: https://www.heritage.norfolk.gov.uk/record-details?MNF26409-Carrow-Works

Priory of St Mary of Carrow (Carrow Priory) and Carrow Abbey house and grounds: https://www.heritage.norfolk.gov.uk/record-details?MNF296-The-Priory-of-St-Mary-of-Carrow-(Carrow-Priory)-and-Carrow-Abbey-house-and-grounds&Index=2&RecordCount=29&SessionID=fa3ada7a-dc04-46f1-b4b6-051697f6e8c8

Old Carrow Bridge: https://www.heritage.norfolk.gov.uk/record-details?MNF842-Old-Carrow-Bridge&Index=10&RecordCount=29&SessionID=fa3ada7a-dc04-46f1-b4b6-051697f6e8c8

Ruins of Carrow Priory: https://www.heritage.norfolk.gov.uk/record-details?MNF385-The-ruins-of-Carrow-Priory&Index=3&RecordCount=29&SessionID=fa3ada7a-dc04-46f1b4b6-051697f6e8c8

Archives

Norfolk Record Office

Norwich estate map: Carrow Works, undated, ca. 1870, DS 228

Plan of Carrow Works, 1880, MC 3245/3

Plan of Carrow Works, 1889, MC 3245/4

Secondary Literature

Church, Roy. 'The Colman Family', Oxford Dictionary of National Biography, https://doi.org/10.1093/ref:odnb/50409.

Norwich City Council, Bracondale Conservation Area Appraisal, 2011.

CARROW WORKS | NORWICH

CARROW WORKS NORWICH

CITYSCAPE DIGITAL С

Technical Appendix 14.1: Heritage and Townscape Visual Impact Asessment | 135 -

CARROW WORKS | NORWICH

CITYSCAPE VERIFIED VIEWS METHODOLOGY



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY

CARROW WORKS | NORWICH



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY

Appendix:

CITYSCAPE VERIFIED VIEWS METHODOLOGY

0.0		4
	0.1 Methodology overview0.2 View selection	
1.0	PHOTOGRAPHY	. 4
	 Digital photography Lenses Digital camera Position, time and date recording 	
2.0	DIGITAL IMAGE CORRECTION	6
	2.1 Raw file conversion2.2 Digital image correction	
3.0	GPS SURVEY	8
	3.1 Survey	

4.0 MODEL POSITIONING.

5.0 CAMERA MATCHING

5.4 Wireline Image

6.0 RENDERING

6.1 Rendering 6.2 Texturing

7.0 POST PRODUCTION.

7.1 Post production

5.1 Cityscape's Database 5.2 Creation of Scheme Model 5.3 Camera Matching Process

6.3 Lighting and sun direction

4.1 Height and position check

CARROW WORKS | NORWICH

JUNE 2022

 10
 12
 14
 16

Technical Appendix 14.1: Heritage and Townscape Visual Impact Asessment | 137 -

З



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY

0.0 INTRODUCTION

0.1 Methodology overview

The methodology applied by Cityscape Digital Limited to produce the verified images or views contained in this document is described below. In the drafting of quality of plate photography. this methodology and the production and presentation of the images, guidance has been taken from the Technical Guidance Note 06/19: Visual Representation 1.2 Lenses of Development Proposals from the Landscape Institute published on 17 For local views a wide angle lens of 24mm or 35mm is generally used in order to September 2019 in support of GLVIA3. The disciplines employed are of the highest possible levels of accuracy and photo-realism which are achievable with today's standards of architectural photography and computer-generated occasionally long range views may be required with lens options ranging from models.

0.2 View selection

The viewpoints have been selected through a process of consultation with relevant statutory consultees and having regard to relevant planning policy and guidance.

1.0 PHOTOGRAPHY

1.1 Digital photography

With the latest advances in Digital Photography it is now possible to match the

capture as much of the proposal and its surroundings as possible. Intermediate distance views were photographed with a lens between 35mm to 70mm and 70mm to 600mm. As a guide, the following combinations were used:

Distance to subject	View	Lens Options
0 - 800 metres	Local	24mm to 35mm
800 to 5000 metres	Intermediate	35mm to 70mm
5000+ metres	Long	70mm to 600mm

Examples of these views are shown in Figures 4 and 5.

1.3 Digital camera

Cityscape use high quality professional DSLR (Digital Single Lens Reflex) and DSLM (Digital Single Lens Mirrorless) cameras. The cameras utilise Full Frame Sensors so declared focal lengths require no conversion to be understood in line with TGN 06/19 guidelines. The quality of the lenses is matched to the resolution of the cameras to ensure high contrast and sharp rendition of the images.

1.4 Position, time and date recording

The photographer was provided with (i) an Ordnance Survey map or equivalent indicating the position of each viewpoint from which the required photographs were to be taken, and (ii) a digital photograph taken by Cityscape of the desired view. For each shot the camera was positioned at a height of 1.60 metres above the ground level which closely approximates the human eye altitude, and falls into the 1.5-1.65m range provided by TGN 06/19. If local conditions required a deviation to capture the view, the exact height used can be found in the Table of Views. A point vertically beneath the centre of the lens was marked on the ground as a survey reference point and two digital reference photographs were taken of (i) the camera/tripod location and (ii) the survey reference point (as shown in Figures 2 and 3). The date and time of the photograph were recorded by the camera.

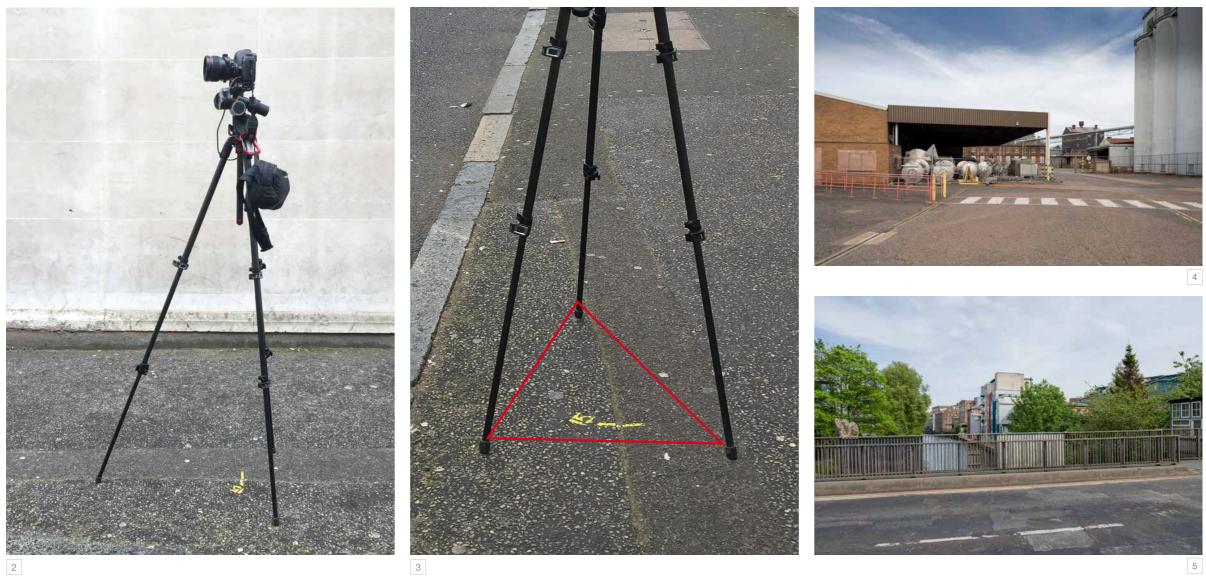
CARROW WORKS | NORWICH







CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY



1	Canon 5D MK IV Digital Camera
2	Camera Location

3 Survey reference point

4 Local view

5 Intermediate view

CARROW WORKS | NORWICH

JUNE 2022

5



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY

2.0 DIGITAL IMAGE CORRECTION

2.1 Raw file conversion

Canon cameras produce a raw file format, which is then processed digitally for both high detail and colour accuracy. The final image is outputed as a tiff¹ file.

2.2 Digital image correction

The digital images were then loaded into Cityscape's computers to prepare the digital image for the next stage of camera matching (see section 5). The image is also 'bank'² corrected which means ensuring that the horizon in each digital image is precisely horizontal.

In spite of the selection of the most advanced photographic equipment, lenses are circular which results in a degree of distortion on the perimeter of images. The outer edges of an image are therefore not taken into consideration; this eliminates the risk of inaccuracy. Figure 17 in section 5 illustrates the 'safe' or non-distortive area of an image which is marked by the red circle.

The adjusted or corrected digital image, known as the 'background plate', is then saved to the Cityscape computer system ready for the camera matching process (see section 5). In preparation for the survey (see section 4) Cityscape indicates on each background plate the safe area and priority survey points, such as corners of buildings, for survey (see Figures 6 and 7).

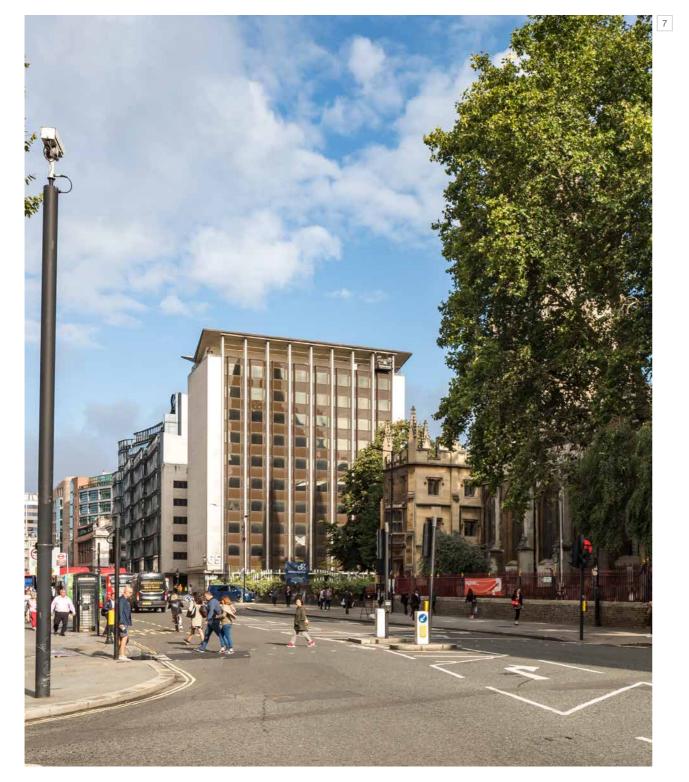
 $^{\rm t}$ TIFF is the name given to a specific format of image file stored digitally on a computer. $^{\rm 2}$ By aligning the vanishing points.



CARROW WORKS | NORWICH



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY



6 Background plate highlighting critical survey points in purple and secondary survey strings in red

7 Area of interest to be surveyed as shown in Figure 7

CARROW WORKS | NORWICH



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY

3.0 GPS SURVEY

3.1 Survey

An independent surveyor was contracted to undertake the survey of (i) each The required points on each building are surveyed using conventional survey viewpoint as marked on the ground beneath the camera at the time the photograph was taken (and recorded by way of digital photograph (see section 1 above) and (ii) all the required points on the relevant buildings within the safe zone. details, namely polar observations⁴ and intersection observations⁵. The

(OSGB36) by using Global Positioning System (GPS) equipment (see, for techniques as opposed to Real Time Kinematic, if, for example, the viewpoint is example, Figure 9) and processing software. The Ordnance Survey National in a position where GPS information cannot be received. Grid (OSGB36) was chosen as it is the most widely used and because it also allows the captured data to be incorporated into other available digital products (such as Ordnance Survey maps). The height datum used was Ordnance Survey Newlyn Datum and was also derived using the GPS. 3 GSM network: the mobile phone network.

base stations (see Figure 8). These stations are located approximately known stations. 5730 metres apart and positioned so as to optimise the results for the ⁵ Intersection observation is the co-ordination of a point using directions only from two ends of area of operation (see location map, Figure 13). The base stations are tied a baseline. into the National GPS Network and are constantly receiving and storing data which allows their position to be monitored and evaluated over long periods of operation. By using the same base stations throughout the survey the surveyor ensures the consistency of the results obtained.

Using the Real Time Kinematic method a real time correction is supplied by each base station to the rover (shown in Figure 10) (over the GSM³ network) physically undertaking the field survey. This enables the rover to determine the co-ordinates of its location instantaneously (i.e. in 'real time'). The rover receives a 'corrected' fix (co-ordinates) from each base station. If the two independent fixes are each within a certain preset tolerance, the rover then averages the two fixes received. The viewpoints are, with a few exceptions, surveyed using this technique. This method of GPS survey (Real Time Kinematic) produces results to an accuracy in plan and height of between 15mm - 50mm as outlined in the "Guidelines for the use of GPS in Land Surveying" produced by the Royal Institute of Chartered Surveyors.

techniques utilising an electronic theodolite and reflectorless laser technology (shown in Figures 11 and 12). There are two methods used to fix the building position of the theodolite is fixed by the rover as described above. In certain The survey was co-ordinated onto the Ordnance Survey National Grid circumstances, a viewpoint may need to be surveyed using conventional survey

⁴ Polar observation is the measurement of a distance and direction to a point from a known The surveyor uses a baseline consisting of two semi-permanent GPS baseline in order to obtain co-ordinates for the point. The baseline is a line between two

CARROW WORKS | NORWICH



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY





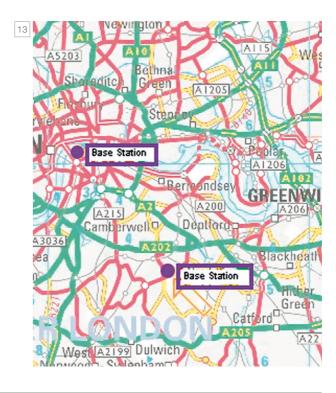
8 Marshall Survey semi-permanent GPS base station

9 GPS System

- 10 Field survey being carried out
- 11 Electronic Theodolite
- 12 Field survey being carried out
- 13 Location of Marshall Survey's GPS base stations







CARROW WORKS | NORWICH

JUNE 2022

9

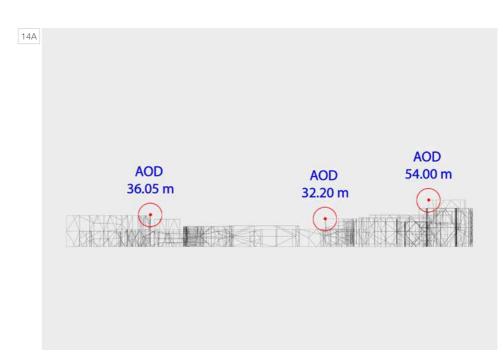


CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY

4.0 MODEL POSITIONING

4.1 Height and position check

The model is positioned using a site plan provided by the architect. This is then overlaid onto OS positioned survey from a CAD provider. Once the building has been positioned, confirmation of height and position is requested from the architect. At least two clear reference points are agreed and used to confirm the site plan and Ordnance Survey. The height is cross checked against the architects section and given in metres Above Ordnance Survey Datum (AOD).





CARROW WORKS | NORWICH

JUNE 2022

10



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY



14A Architect's Elevation Drawing

14B Cityscape's Elevation Model

15A Architect's Plan Drawing

15B Cityscape's Plan Model

CARROW WORKS | NORWICH



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY

5.0 CAMERA MATCHING

5.1 Cityscape's Database

buildings and locations in central London; the database contains both GPS survey information and information regarding the dimensions and elevations of buildings gathered from architects and other sources. Figure 16 shows a selection of GPS located models (yellow) within Cityscape's database which effectively represents a 3D verified computer 'model' of some prominent buildings in central London. The term '3D model' has been adopted with in the verification process of camera matching. caution in this methodology as it is thought to be slightly misleading because not every building in central London is included in the database although the 5.2 Creation of Scheme Model majority of those buildings which form part of the 'skyline' are included.

The outlines of buildings are created by connecting the surveyed points or from the information obtained from architects' drawings of particular buildings. By way of example of the high level of detail and accuracy, approximately 300 by the surveyor. points have been GPS surveyed on the dome of St. Paul's. The database 'view' (as shown in Figure 16) is 'verified' as each building is positioned using coordinates acquired from GPS surveys.

In many instances, the various co-ordinates of a particular building featured • The adjusted or corrected digital image i.e. the 'background plate" Cityscape has built up a comprehensive database of survey information on in one of the background plates are already held by Cityscape as part of their database of London. In such cases the survey information of buildings and locations provided by the surveyor (see section 3 above) is used to cross-check and confirm the accuracy of these buildings. Where such information is not held by Cityscape, it is, where appropriate, used to add detail to Cityscape's database. The survey information provided by the surveyor is in all cases used

A wireframe⁶ 3D model of the proposed scheme if not provided is created • The GPS surveyed co-ordinates of the site of the proposed scheme by Cityscape from plans and elevations provided by the architects and from survey information of the ground levels on site and various other points on and around the site, such as the edge of adjacent roads and bollards etc. provided • A 3D model of the proposed scheme (see section 4).

5.3 Camera Matching Process

The following information is required for the camera matching process:

• Specific details of the camera and lens used to take the photograph and therefore the field of view (see section 1);



- (see section 2);
- The GPS surveyed viewpoint co-ordinates (see section 3);
- the photograph (the background plate) (see section 3);
- Selected models from Cityscape's database (see section 3);
- (see section 3):

A background plate (the corrected digital image) is opened on computer screen (for example, Figure 17), the information listed above is then used to situate Cityscape's virtual camera such that the 3D model aligns exactly over the background plate (as shown in Figures 18 and 21) (i.e. a 'virtual viewer' within the 3D model would therefore be standing exactly on the same viewpoint from which the original photograph was taken (Figure 20). This is the camera matching process.

5.4 Wireline Image

Cityscape is then able to insert the wireframe 3D model of the proposed scheme into the view in the correct location and scale producing a verified wireline image of the proposal (shown in Figures 19 & 22).

The camera matching process is repeated for each view and a wireline image of the proposal from each viewpoint is then produced. The wireline image enables a quantitative analysis of the impact of the proposed scheme on views.

۰A۱	wireframe is a 3D model, a wireline is a single
16	Selected GPS located models (yellow) from London digital terrain model
17	Background plate & selected 3D models a highlights the safe or non-distortive area of
18	Background plate matched to the 3D GPS
19	The camera matched background plate w in red
20	Background plate: digital photograph, size
21	Camera matching: the background plate r
22	The camera matched background plate w

CARROW WORKS | NORWICH

JUNE 2022

• The GPS surveyed co-ordinates of particular points on the buildings within

line representing the outline of the building.

m Cityscape's database, situated on Cityscape's

as seen by the computer camera. Red circle of the image

S located models

with an example of a proposed scheme included

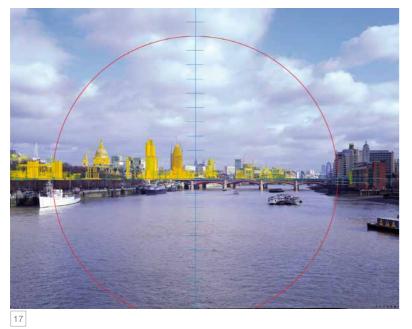
e and bank corrected as described in section 3

matched in the 3D GPS located models

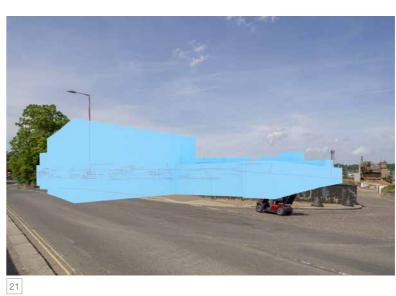
with the proposed scheme included



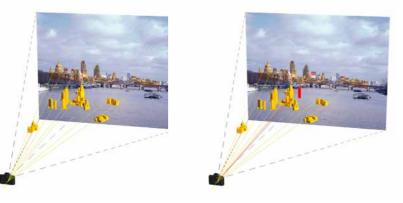
CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY













CARROW WORKS | NORWICH

JUNE 2022

13



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY

6.0 POST PRODUCTION

6.1 Post production

Finally the rendered image of the scheme model is inserted and positioned against the camera matched background plate. Once in position the rendered images are edited using Adobe Photoshop®8. Masks are created in Photoshop where the line of sight to the rendered image of the proposed scheme is interrupted by foreground buildings (as shown in Figure 24).

The result is a verified image or view of the proposed scheme (as shown in Figure 35).

 $^{\rm 8}$ Adobe Photoshop $^{\rm \otimes}$ is the industry standard image editing software.



CARROW WORKS | NORWICH

JUNE 2022

14



CARROW WORKS NORWICH - VERIFIED VIEWS METHODOLOGY



23 Background plate

24 Process Red area highlights the Photoshop mask that hides the unseen portion of the render

25 Shows a verified image of the proposed scheme

CARROW WORKS | NORWICH





Cityscape Digital 7 Bermondsey Street London, SE1 2DD

020 7566 8550

cityscapedigital.co.uk

CARROW WORKS | NORWICH

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
Scheduled M	lonuments						
Carrow Priory	List Entry Number: 1004031	Scheduled Monument	Significance is derived from the standing buried and earthwork remains, depicting the form, plan and architectural detail of the priory. Archaeological interest is derived from the stratified archaeological deposits which still carry potential to reveal evidence of building form, type, occupation and daily lives of the former female monastic complex at Carrow. The building is a rare examples of a known female religious establishment and possessed a wide range of building types associated within the priory complex including range church, prioress's house, cloister, dormitory range, chapter house and wider precincts. The priory maintains a group value and interrelationship between other listed buildings and structures within the near vicinity notably the Grade I listed building known as Carrow Abbey. Significance in relation to setting is derived through the contribution of the Schedule Monument to the aesthetic quality of the immediate townscape, the open and verdant quality of the areas surrounding the ruins and to the grouping of listed buildings which all contribution to the character and appearance of the Bracondale Conservation Area.	High	Medium	Moderate Adverse	-Bend cante of mo sensi -Alter move to cre subs of the betw
Norwich City Wall	List Entry Number: 1004023	Scheduled Monument	Significance of the structure is defined through its status as remnant portions of the medieval wall which surrounded this historic city. The masonry survives up to 4 metres in certain places and formerly held 12 gates and up to 40 towers. The walls help define the character of areas of the central portion of the historic city and define the later development that occurred beyond the city walls from the 19th century onwards.	High	Low	Minor Neutral	Char
Listed Buildir	ngs						
Carrow Abbey	List Entry Number: 1205742	Grade I	Carrow Abbey is best appreciated from its immediate frontage on its eastern side and within the ruins of the Abbey Priory on its west side, where it remains legible as part of the wider monastic complex. The more historic ranges of the building, although highly altered, remain easily appreciable. The building has some intervisibility with the surrounding Carrow Works factory buildings which may be glimpsed in views to the north above the mature treeline. The significance of the building is primarily derived from its architectural and historic interest, it additionally carries a group value with the standing remains of the adjacent Priory ruins, and nearby ancillary buildings which contribute to the legibility of the building as a former domestic residence.	High	Medium	Moderate Adverse	Chan hous bathr Chan

CARROW WORKS | NORWICH

pacts

enefit to the setting through the removal of the nteen wing and the replacement with a building more sensitive design and scale which retains the nse of enclosure

terations to above ground layout and patterns of ovement through the grounds by partial subdivision create private gardens.

verall the change will result in a low level of less than bstantial harm through disruption to the openness the Abbey and erosion of the historic connection tween the Abbey and Priory.

ange within its setting

ange to residential use, including subdivision of the use and installation of services including kitchens, throoms and Demolition of canteen building ange to the setting

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
Carrow House	List Entry Number: 1292106	Grade II	The building is listed for its historic interest as a high quality domestic residence with a good survival of internal business rooms emblematic of the association between the house and the family-run Carrow Works. Architectural interest is derived through the buildings status as fine example of a Victorian villa in the Italianate style with a well-balanced composition and well-executed classical stone dressings; * much of the work was carried out by James Minns and very probably by Edward Boardman, two Norwich-based artists whose designs and craftsmanship are notable for their high quality;the internal decorative scheme throughout the house is particularly significant for the intricate carving of the finely detailed Jacobean style joinery, including the staircase, panelling and elaborate chimneypieces; The built structures of the small formal garden have clear design quality and augment the house.	Medium	Medium	Moderate Neutral	Char
Conservatory at Carrow House	List Entry Number: 1479038	Grade II*	Works site, which contribute significantly to its architectural and historic context. Significance is derived from the buildings architectural and historic interest and group value with the other listed buildings which form the Carrow Abbey grouping.	High	Medium	Major Neutral	Char
			Architectural interest as a particularly fine example of the period, designed by one of the most important manufacturers of such buildings and indeed of buildings constructed in parts; the conservatory was illustrated in Boulton and Paul's catalogue, demonstrating that this important firm regarded it as a very significant production; the building is richly detailed using ornate patterns in different materials including ironwork, stained glass and tesserae; The building still retains a high level of well preserved surviving historic fabric.				
			It has strong group value with other designated assets on the site, particularly with the adjoining Grade II listed Carrow House and garden features, the Grade I listed Carrow Abbey, and the scheduled Carrow Priory which, along with the lodge, gardener's cottage and former cart shed; the nearby sunken garden; and the pet cemetery, all of which are Grade II listed, contribute significantly to its architectural and historic context.				

CARROW WORKS | NORWICH

pacts

nange to the setting

ange to the setting

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Imp
Receptor CarrowWorks Blocks7,7a,8,8a including metal canopyattached to block7	Number List Entry Number: 1372826	Grade II	The significance of these former factory buildings is primarily derived from their historic and architectural interest and group value with the other assets within the factory portion of the Carrow Works site. The buildings all have a well-executed external aesthetic of Victorian industrial buildings with imposing red-brick walls, polychrome brick work, regimented sash windows and blind-arcading making a strong architectural statement; the height, massing and riverside location of the group, when combined with their distinctive architectural character, has created a distinctive and powerful industrial landscape which symbolises Colman's occupation of the site for some 150 years; the buildings are relatively unaltered externally, beyond the raising of the ground level and retain distinctive features relating to their original use including timber-framed sashes and taking in doors along with a wagon entrance and metal canopy to block 7 and a lucarne to block 8; despite the introduction of secondary strengthening in the C20, the original heavy, timberfloors, with transverse beams, joists and timber and cast-iron columns survive largely intact, along with the original queen-post roof trusses to all but block 8; Historic interest is understood as representative examples of the importance of Colman's condiment-milling industry in Norwich, and confirming on a national and international scale, Norwich's high status in this business.	Medium	of Change Meclium	Effect Moderate Beneficial	Chan use. Chan
Carrow Works Block 92	List Entry Number:	Grade II	associated with Colman's development of Carrow Works in the late C19, including Carrow House, block 60 and block 92. The significance of this former factory buildings is primarily derived from their historic and architectural interest and group value with the other assets within the	Medium	Medium	Moderate Beneficial	Char
	1116888		factory portion of the Carrow Works site. Architectural interest is understood through the buildings value as a high quality building which has been little altered, and retains attractive red brick façades, polychrome detailing, sash windows, and door surrounds; it formerly served as an administrative building which commanded the north-west entrance to the former Colman's manufacturing site, and succeeded in communicating the quality of the Colman's brand to arriving employees, visitors and passers-by. Historic interest is primarily understood as the building evidences the regional,				settir
			national and international success of the Colman's brand in the mid- and late C19; and serves as a key surviving building from the earliest phase of the Colman's manufacturing site at Carrow, a significant proportion of which was affected by bomb damage in the Second World War. Group value is understood through the contribution to a cohesive group of former industrial buildings at Carrow, which includes Carrow House, Block 60 and Blocks 7, 7A, 8 and 8A, all listed at Grade II and built in the mid- to late 19th Century.				
Carrow Works Block 60	List Entry Number: 1116887	Grade II	The significance of this former factory buildings is primarily derived from their historic and architectural interest and group value with the other assets within the factory portion of the Carrow Works site. The significance of this former factory buildings is primarily derived from their historic and architectural interest and group value with the other assets within the factory portion of the Carrow Works site.	Medium	Medium	Moderate Beneficial	Char

CARROW WORKS | NORWICH

pacts

ange to restore this building and convert to a sustainable residential

angetothefactorysetting

ange to restore this building and convert to a stainable residential use. Change to the factory tting

ange to the factory setting

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
Walls Steps and paved surfaces of the sunken garden near	List Entry Number: 1478318	or of Change E y Grade II Architectural interest: it is a high-quality, harmonious composition, decorated throughout with distinctive multi-faceted ball finials; * it survives almost completely intact. Historic interest: it was created for the famous Colman family who lived at Carrow Abbey and Carrow House nearby. Group value: it has strong group value with Carrow Abbey (Grade I), Carrow Priory (scheduled monument) and the nearby pet cemetery and flint wall (Grade II). Medium Me	Moderate Beneficial	Char neart			
garaonnoar			Historic interest:				
			Group value:				
Former Mustard Seed Drying Shed	List Entry Number: 1478122	Grade II	historic and architectural interest and group value with the other assets within the	Medium	Medium	Moderate Beneficial	Chan susta build
			executed industrial building with imposing red brick walls and polychrome brickwork, which makes a strong architectural statement; with the exception of the one-and half storey addition to the roof in the early-C20, the building has been little-altered externally and retains distinctive features relating to its industrial use including a lucam on the south elevation, windows with substantial glazing bars and joins, and double-leaf panelled and half-glazed doors; * the interior retains rows of red cast-iron columns, and an exceptionally-high proportion of its fixed				
			Historic interest is understood as the building evidences the regional, national and international success of the Colman's brand since the mid-C19; and as a key surviving historic industrial building of the Colman's manufacturing site at Carrow, a significant proportion of which was affected by bomb damage in the Second World War or reordering in the mid- and late C20.				
			Group value is understood through the contextual relationship the drying shed holds with the neighbouring K6 telephone kiosk (Grade II), as well as nearby listed and unlisted former factory buildings; and the resultant contribution it makes to the historic Colman's industrial complex at Carrow, which also includes Carrow House, Blocks 7, 7A, 8 and 8A, Block 60, and Block 92, all listed at Grade II and built in the mid- to late C19 within the setting of the scheduled remains of Carrow Priory and Grade I listed Carrow Abbey				
K6 Telephone Kiosk outside the entrance to Former	List Entry Number: 1478657	Grade II	The telephone kiosk is located immediately outside the entrance of the former mustard seed drying shed. It is a standard K6 design made of cast-iron with horizontal glazing in the door and sides, painted red.	Medium	Medium	Moderate Beneficial	The of bene
Mustard Seed Drying Shed			Its significance is derived from its architectural and historic interest and its group value with the buildings within the Carrow Works site				

CARROW WORKS | NORWICH

pacts

ange to the setting with the demolition of the arby technical building

ange to restore this building and convert to a stainable use. Change to the factory setting of this ilding

e change to setting would allow a greater be of nefit to the

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
Lodge,	List Entry	Grade II	The Lodge, Garage, and Gardener's Cottage serve as a range of former of	Medium	Medium	Moderate	Conv
Gardener's Cottage and former cart shed to Carrow Abbey	Number: 1478591		ancillary service buildings to Carrow Abbey. The buildings were likely designed by the Edward Boardman and have an architectural interest as high quality			Beneficial	The c
			buildings indicative of their period, style and type. The buildings have a group value with Carrow Abbey, Carrow Priory, Carrow House and Conservatory at Carrow House, Sunken Garden and Pet Cemetery, contribute significantly to its architectural and historic context.				The o and r
			The building is best appreciated looking east at its western elevation where the symmetrical composition of the lodge is apparent. Views looking south from the carpark which take in the grouping as a three and show the yard and evident ancillary use of the building are also important.				
Flint Wall and 19 attached pet tombs	List Entry Number: 1478166	Grade II	The significance of the pet cemetery and attached walls is primarily derived from their historic and architectural interest and group value with the other assets within the Carrow Works grouping which all evidence the domestic use of the Abbey.	Medium	Medium	Moderate Beneficial	Theo
			Historic interest is primarily understood as an unusual example of a private pet cemetery spanning a period of 31 years; the tombs served as illustrative example of the attitude of the Colman family to their pets, and of social attitudes to pets in the late-C19 to early C20;				
			The adjoining wall, although much rebuilt, has medieval origins as part of the precinct wall to Carrow Priory, a scheduled monument.				
			Group value is understood through the connection with the Grade I listed Carrow Abbey and with the lodge, gardener's cottage, former cartshed, and sunken garden (all listed at Grade II).				
Eastern Air Raid Shelter at Carrow Works	List Entry Number: 1478214	Grade II	The building remains a good example of a purpose-built tunnel shelter for communal use at a factory site. The building has a group value with the with other listed buildings because of its wartime relationship with the wider at the Carrow Works site.	Medium	Low	Minor Beneficial	Theo
			Historic interest is derived from the buildings age and status as a commercial wartime shelter with a high level of original fabric and survivability.				
Grouping 1 - Trowse			The significance of the building group is primarily derived from their architectural and historic interest Trowse railway station, Late C19 engine house at Trowse Sewage Pumping Station, Early C20 engine house, boiler house and coal store at Trowse Sewage Pumping Station, all form a distinct grouping of former industrial and infrastructure buildings with a direct relationship to the railway. The significance of these buildings is expressed through their overall form, appearance which remains referential of their historic function.	Medium	Low	Minor Neutral	Chan form vicini amou
			Trowse House and Mill House are residential dwellings which date to the c.17th Century, but remain much altered with a large volume of 19th Century change to building form and the surrounding urban environment. The significance is derived from the buildings age, materiality form and appearance. They contribute to the aesthetic appeal of the Trowse-Millgate Conservation Area and status as a composite part of the historic townscape.				

CARROW WORKS | NORWICH

pacts

nversion to residential use.

- e change to setting would not amount to harm.
- e change would restore the buildings to active use d represents a heritage benefit overall.

e change to setting would not amount to harm

e change to setting would not amount to harm

ange to setting through the appearance of built m within a limited number of views from the near inity of one or more these assets. It would not nount to harm.

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
Late C19 engine house at Trowse Sewage Pumping Station	List Entry Number: 1478264	Grade II	The significance of this building is derived from its architectural and historic interest. Architectural interest is best appreciated through the form and appearance of the building as a late-C19 engine house associated with Trowse Sewage Pumping Station, and built around 1869 by Norwich Corporation, with later alterations. The building has a restrained Italianate style is accomplished and well-realised, reflecting the high value placed on its important municipal function. The building additionally serves an illustrative interest with its early-C20 replacement to the south, it acts as an architectural barometer, illustrating how different architectural solutions were required to meet advances in engine technology. Historic interest is broadly defined through the status of the building as a public response to the problems of sewage disposal caused by the rapid suburbanisation and industrialisation of Norwich in the 19th Century. As previously mentioned, the building has a group value with its early-C20	Medium	Low	Minor Neutral	The o
			replacement to the south, it forms a rare combination of two engine houses from two technological generations on one site.				
Early C20 engine house, boiler house and coal store at Trowse Sewage Pumping Station	List Entry Number: 1478662	Grade II	The significance of this building is derived from its architectural and historic interest. Architectural interest is appreciated Through the appearance of the building whose Free Renaissance style is an unusual and rare example of the idiom by a local authority for a utility building; although the building has undergone the loss of machinery, the building retains a complete exterior along with its internal layout; As above, with its late-C19 predecessor to the north, it acts as an architectural barometer, illustrating how different architectural solutions were required to meet advances in engine technology. Historic interest is understood as a public symbol of investment by Norwich Corporation in improvements to living conditions and public health. Group value is appreciated within the context of the earlier late-C19 sewage pumping station predecessor to the north, it forms a rare combination of two engine houses from two technological generations on one site.	Medium	Low	Minor Neutral	The c
MILL HOUSE	List Entry Number: 1372532	Grade II	Significance of the building is derived from its architectural and historic interest and group value with the nearby Trowse House. 17th Century core to left with 18th Century and 19th Century additions.	Medium	Low	Minor Neutral	The c

CARROW WORKS | NORWICH

pacts

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Imp
Trowse Railway Station	List Entry Number: 1478346	Grade II	Significance of the building is derived from its architectural and historic interest and association with the development of the area through the railway line.	Medium	Low	Minor Neutral	The
	1478340		Architectural interest is understood through the status of the building as an architecturally distinguished building, suitable in design and scale to its suburban location and historic use; it displays a high-quality craftsmanship and materials, which directly relate to the vernacular architectural traditions of Norfolk, rich in the quarrying and workmanship of knapped flint;				
			Historic interest is understood through the status of the building as Norwich's first, albeit temporary, railway terminus of the Norwich and Brandon Line; the connection of the Norwich and Brandon Line and Eastern Counties Railway Line in 1845 was a pivotal moment in regional railway and communications history, allowing Yarmouth and Norwich to be connected through to London by rail for the first time; Trowse Station holds a strong historic relationship with the other four principal stations of the Norwich to Brandon Line at Wymondham, Attleborough, Thetford and Brandon, each listed at Grade II.				
TROWSE HOUSE	List Entry Number: 1051767	Grade II	Significance of the building is derived from its architectural and historic interest and group value with the nearby Mill House. Architectural interest is best appreciated through the appearance of the building, which while heavily altered to suit prevailing need, still retains its historic 17th Century core and displays an appreciable pattern of change.	Medium	Low	Minor Neutral	The
Grouping 2 - Bracondale South		Grade II	Significance of the building is derived from its architectural and historic interest and group value with the nearby Mill House. Architectural interest is best appreciated through the appearance of the building, which while heavily altered to suit prevailing need, still retains its historic 17th Century core and displays an appreciable pattern of change. of similarly aged dwellings, which contributes to the architectural quality of the surrounding townscape.	Medium	Low	Minor Neutral	Chai built near
BRACONDALE COTTAGE, List Entry Number: 1051346		Grade II		Medium	Low	Minor Neutral	The
72, 72A AND 72B, BRACONDALE, List Entry Number: 1372766		Grade II		Medium	Low	Minor Neutral	The
70, BRACONDALE, List Entry Number: 1051345		Grade II		Medium	Low	Minor Neutral	The

CARROW WORKS | NORWICH

pacts

ne change to setting would not amount to harm

ne change to setting would not amount to harm

hange to setting through the appearance of new uilt form within a limited number of views from the ear vicinity of one or more of these assets.

ne change to setting would not amount to harm

ne change to setting would not amount to harm

ne change to setting would not amount to harm

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
FORECOURT WALL, GATE AND RAILINGS TO NUMBER 68,	List Entry Number: 1051344	Grade II		Medium	Low	Minor Neutral	The o
66, BRACONDALE,	List Entry Number: 1372764	Grade II		Medium	Low	Minor Neutral	Theo
66A, BRACONDALE,	List Entry Number: 1051342	Grade II		Medium	Low	Minor Neutral	Theo
62 AND 64, BRACONDALE,	List Entry Number: 1051381	Grade II		Medium	Low	Minor Neutral	The c
60, BRACONDALE,	List Entry Number: 1372744	Grade II		Medium	Low	Minor Neutral	The c
Grouping 3 - Bracondale West		Grade II-II*	 The significance of the buildings within this grouping is primarily derived from their architectural and historic interest. The buildings largely date from the 17th-18th Century and appear as typical residential dwellings with a broadly consistent sense of scale, form, height and level of architectural detailing. Buildings display a clear vertical hierarchy and contribute to the architectural quality of the townscape. The tower and adjoining retaining wall to rear of number 58, is the most significant asset within this grouping which although heavily altered still retains much of its original fabric. The building is different in form and appearance to the surrounding assets in this grouping, appearing as an outlier but remaining indicative of the historic development of Norwich in this area. Historic interest is broadly expressed through their age and as representative examples from a similar phase of development in this part of East Norwich. The buildings carry a group value with one another as a cohesive group of similarly aged dwellings, which contributes to the architectural quality of the surrounding townscape. 	Medium- High	Low	Minor- Major Neutral	Chan built near
TOWER AND ADJOINING RETAINING WALL TO REAR OF NUMBER 58,	List Entry Number: 1280541	Grade II*,		High	Low	Major Neutral	The
MANOR HOUSE,	List Entry Number: 1051379	Grade II*,		High	Low	Major Neutral	Theo

CARROW WORKS | NORWICH

pacts
change to setting would not amount to harm
change to setting would not amount to harm
change to setting would not amount to harm
change to setting would not amount to harm
e change to setting would not amount to harm
ange to setting through the appearance of new It form within a limited number of views from the r vicinity of one or more of these assets.
e change to setting would not amount to harm
e change to setting would not amount to harm

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
51-57, BRACONDALE,	List Entry Number: 1051378	Grade II		Medium	Low	Minor Neutral	The o
45 AND 47, BRACONDALE,	List Entry Number: 1205738	Grade II		Medium	Low	Minor Neutral	Theo
37-43, BRACONDALE,	List Entry Number: 1372742,	Grade II		Medium	Low	Minor Neutral	Theo
NUMBERS 33 AND 35 AND ATTACHED GARDEN WALL TO EAST OF NUMBER 35,	List Entry Number: 1205728	Grade II		Medium	Low	Minor Neutral	Theo
31, BRACONDALE,	List Entry Number: 1051377	Grade II		Medium	Low	Minor Neutral	The
29 AND 29A, BRACONDALE,	List Entry Number: 1051376	Grade II		Medium	Low	Minor Neutral	The
25 AND 27, BRACONDALE,	List Entry Number: 1205691	Grade II		Medium	Low	Minor Neutral	The
17 AND 19, BRACONDALE,	List Entry Number: 1051375	Grade II		Medium	Low	Minor Neutral	The
PEPPERS,	List Entry Number: 1051351	Grade II		Medium	Low	Minor Neutral	The
1, 1A, 8A, 1B, ICE HOUSE LANE,	List Entry Number: 1051229	Grade II		Medium	Low	Minor Neutral	The
9-12, ICE HOUSE LANE,	List Entry Number: 1210141	Grade II		Medium	Low	Minor Neutral	The
TOWER HOUSE,	List Entry Number: 1051380	Grade II		Medium	Low	Minor Neutral	The
SOUTH EAST AND SOUTH WEST BOUNDARY TO WALL TO NUMBER 54,	List Entry Number: 1280578	Grade II		Medium	Low	Minor Neutral	The

CARROW WORKS | NORWICH

pacts

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
48-52, BRACONDALE,	List Entry Number: 1205750	Grade II		Medium	Low	Minor Neutral	The
40-46, BRACONDALE,	List Entry Number: 1372743	Grade II		Medium	Low	Minor Neutral	Theo
Registered Pa	rks and Garc	lens					
Crown Point	List Entry Number: 1001480	Grade II Registered Park and Garden	Gardens designed in the mid C19 by William Broderick Thomas and altered at the beginning of the C20 by Edward Boardman, set in a late C18/early C19 park. Significance of the park is derived from its architectural and historic interest. Architectural interest is primarily understood through the listed buildings within its bounds, this includes the present Crown Point (listed grade II*), a large country mansion built of red brick and tile with stone mullioned windows, decorated with stone bands in the Elizabethan style. It was built during the 1860s to replace an earlier Crown Point House, on a different site. The three-storey entrance front to the north has gabled bays and a central porch, while the south, garden front has a complex bay system with a central Tuscan stone porch and balustraded parapet. The house was designed for Sir Robert Harvey by H E Coe and was completed for J J and R J Colman by the local firm Edward Boardman and Son who had supervised Coe's building. At the east end of the garden front is the conservatory (listed grade II*), an elaborate cast-iron and glass construction built to a symmetrical apsidal plan with aisles and decorated with scroll work, friezes, and grilles. It was probably designed by Coe, with iron work by Butterly and Co (Whitlingham Conservatory Repair Fund notes). The stable block lies to the east of the house and is contemporary with it, the service buildings between the two having been added by Boardman and Son at the beginning of the C20. During the late C20 a new single-storey hospital block was added to the north side of the mansion.	Medium	Low	Minor Neutral	The c
Locally Listed	Buildings						
Stables Cottage		Locally Listed	Significance is derived from a low level of architectural interest as a building of comparable form, scale and materiality to listed ancillary buildings within the Carrow Works complex.	Low	Medium	Minor Neutral	The
			The building has a historic interest and a group value with the other buildings within Carrow Works and remains indicative of the domestic and occupational use of the building.				

CARROW WORKS | NORWICH

pacts

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

e change to setting would not amount to harm

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
Conservation	n Areas						
Norwich City Conservation Area	Character Area 8	Conservation Area	The character of the conservation area varies within different parts of the city. 'Character areas' are identifiable because of their distinctive townscape, greater concentrations of particular uses, building types or materials, or presence of open spaces or more modern buildings.	Medium	Low	Minor Neutral	Appe this a harm
			The character of Norwich City Centre Conservation Area is also a product of almost 1000 years of historical development. This rich historical development produced many city landmarks which are now visible from vantage points located around the historic core. Some of these landmarks are considered to contribute positively to the character of the Conservation Area and has produced resulted in a varied palette of building materials which now characterise the Norwich City Centre Conservation Area. The most widespread material is red-brick. Flint can be seen on prestigious buildings in the city as this material was historically the principal building material for such buildings.				
			The significance of the conservation area overall is therefore derived from its architectural, historic and archaeological interest.				
Bracondale Conservation	Character Areas		The significance of the conservation area is primarily derived from its architectural, historic and archaeological interest.	Medium	High	Major Neutral	The r Chara
Area			Architectural and historic interest is derived from the volume and variety of designated and non-designated heritage assets within its bounds. These remain indicative of the historic development of the area and the Carrow Works site many of these are of the highest quality including the Grade I listed Carrow Abbey and the Scheduled Monument at Carrow Priory.				Build demo struct emer impro
			Additionally, mature trees and more heavily wooded areas which provide an important backdrop to many parts of the conservation area and important in understanding the isolated and detached nature of the Carrow Works site and its relationship to the surrounding townscape. Archaeological interest is primarily derived from the long period of settlement within Carrow Works and the designation of the Priory as a Scheduled				Chara chang contr carefu respe result settin
			Monument.				While the si scale impro bette overa

CARROW WORKS | NORWICH

pacts

pearance of new built form within the setting of s asset. The change to setting would not amount to rm

e redevelopment will see largescale change to aracter Areas D and E.

ildings within character area E will either molished or converted and new residential uctures will be constructed, which result in a new nergent townscape of high quality and substantial provement to public realm.

aracter area D will undergone a lesser degree of ange but will see demolition of a number of negative ntributor buildings and their replacement with refully designed residential dwelling which are more spectful of their sensitive historic context with the sultant improvements to public realm and heritage tting.

nile a low degree of harm has been identified to a significance of Carrow Abbey, considering the ale of change across the conservation area with provements to public realm and opportunities to tter reveal the significance of key assets, the change erall is considered beneficial.

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
Trowse Millgate Conservation Area		Conservation Area	The significance of the area is primarily derived from the quality of the listed buildings within its bounds which remain indicative of the historic industrial development of the area and the relationship with the railway line.	Medium	Low	Minor Neutral	Appe this a harm
			The area is typified by a mixture of building types although remains largely 19th Century in character, with Victorian terraced housing and railway infrastructure buildings apparent east of the River Yare and the railway line. Properties are typically 2-3 storeys in height with relatively restrained detailing. They are considered to form a distinct group that contrasts with the more domestic scale further north along Bracondale.				
Townscape C	haracter Area	as					
Character Area 1 - Carrow Abbey	1	HTVIA Character Area	This character area is important as a it contains the greatest concentration of heritage assets including Carrow Abbey, Carrow Priory	Medium	High	Major Neutral	Build will u numb replac dwell histor impro
Character Area 2 - 20th Century Offices and Landscape	2	HTVIA Character Area	The value of this area is primarily derived from the sunken garden and the sense of openness afforded to the west of Carrow Abbey.	Medium	Medium	Moderate Beneficial	The c towns qualit of nea The c more result public
Character Area 3 - Large-scale Industrial units and Utilities	3	HTVIA Character Area	Remnant historical factory buildings including important assets indicative of the historic and operational development of Carrow Works	Medium	Medium	Moderate Beneficial	The re this c Build new r result and s
Character Area 4 - Large- scale Modern Industrial	4	HTVIA Character Area	Modern factory warehousing of low architectural value and townscape merit	Low	High	Moderate Beneficial	The re this c Most new l along emere impro

CARROW WORKS | NORWICH

bacts

pearance of new built form within the setting of s asset. The change to setting would not amount to rm.

ildings within this character area

l undergone change with the demolition of a mber of negative contributor buildings and their placement with carefully designed residential rellings which are more respectful of their sensitive toric context. The resultant effect will see substantial provements to public realm and townscape.

e demolition of the Technical Block will benefit the vnscape character of this area by removing a poor ality building which detracts from the significance nearby heritage assets.

e development of new residential dwellings are ore respectful of their sensitive historic context. The sultant effect will see substantial improvements to blic realm and townscape.

e redevelopment will see largescale to change to character area.

ildings will be either demolished or converted, and w residential structures will be constructed, which sult in a new emergent townscape of high quality d substantial improvement to public realm.

e redevelopment will see largescale to change to character area.

ost buildings within this area will demolished, and ew low rise residential structures will be constructed ong a planned street pattern, this will result in a new nergent townscape of high quality and substantial provement to public realm.

Heritage Receptor	NHLE Number	Designation	Significance and Setting	Sensitivity	Magnitude of Change	Residual Effect	Impa
Character Area 5 - Carrow House and Landscape	5	HTVIA Character Area	High value area including Carrow House and Carrow House Conservatory and protected woodland area	Medium	Low	Minor Beneficial	New be ap area. high realm
Character Area 6 - Bracondale Residential	6	HTVIA Character Area	Residential areas along Bracondale containing a number of listed buildings including Grouping 1 and Grouping 2.	Low	Low		There appa
Character Area 7 - Industrial Riverside	7	HTVIA Character Area	Large footprint former industrial buildings and 20th century residential redevelopment occupying the southern portion of Norwich City Centre Conservation Area – King Street Character Area.	Medium	Low	Minor Beneficial	New I this c River will en poor histor emerg impro
Character Area 8 - Civic and Landscape	8	HTVIA Character Area	Open parkland surrounding County Hall, of low heritage value.	Low	Low		The p appai
Character Area 9 - Railway Industrial Character	9	HTVIA Character Area	Former industrial and railway land surrounding the railway line. Occupies portions of the Trowse Millgate Conservation Area.	Medium	Medium	Moderate Beneficial	New I this cl railwa enhar qualit of hig realm

CARROW WORKS | NORWICH

pacts

w built form within the factory portion of the site will apparent in views north from within this character ea. This will result in a new emergent townscape of ph quality and substantial improvement to public ulm.

ere will be minimal appearance of new built form parent beyond the boundary of this character area.

w built form apparent beyond the boundary of s character area in east facing views along the er Wensum. The appearance of these buildings l enhance the townscape replacing the existing or quality built form and augmenting the existing toric buildings on the site to create a new bergent townscape of high quality with substantial provement to public realm

e proposed development will not be readily parent from within this character area.

w built form apparent beyond the boundary of s character area in west facing views beyond the way bridge. The appearance of these buildings will hance the townscape replacing the existing poor ality built form creating a new emergent townscape high quality with substantial improvement to public ilm and architectural quality of the townscape.

Views	Location	AVR	Sensitivity	Susceptibility	Magnitude of Change	Residual Effect	Impa
View 1 - Carrow Priory	East side of Carrow Abbey orientated North East.	Wireline	High	High	Medium	Major-Neutral	Demo new b
View 2 - Carrow Abbey	West side of Carrow Abbey looking North West.	Wireline	High	High	Medium	Major-Neutral	Demo new b
View 3 - Industrial East - West Route	North West of the site and is orientated East along the main route through the Industrial Character Area	Wireline	Medium	Medium	Medium	Moderate Beneficial	Demo new b
View 4 - Industrial East - West Route 2	Within the industrial Character Area, orientated Eastwards.	Wireline	Low	Low	Medium	Moderate Beneficial	Demo new b
View 5 - Industrial East - West Route 3	Within the industrial Character Area, North Carrow Abbey, along the main East-West route through the site.	Wireline	Low	Low	Medium	Moderate Beneficial	Demo new b
View 6 - Carrow Priory 2	South East side of Carrow Abbey and is orientated East towards the rustic summer house	Wireline	High	High	Low	Moderate Neutral	No Ch
View 7 - Carrow House Triptych	Gardens of Carrow House, Carrow House Conservatory Steps	Wireline	High	Medium	Low	Negligible	No Ch
View 8 - Sunken Garden Triptych	Within the Sunken Garden, orientated Eastwards towards Carrow Abbey.	Wireline	High	Medium	Medium	Moderate Beneficial	Demo new b
View 9 - Carrow Bridge, River Wensum	Carrow Bridge, it is orientated East along the River Wensum	Wireline	Medium	Low	Low	Minor Beneficial	Demo new b
View 10 - Carrow Road Stadium	North of the River Wensum to the North East side of the Carrow Road Stadium close to the intersection between Carrow Road and the A1242	Wireline	Low	Low	Low	Minor Beneficial	Appea built f
View 11 - Whitlingham Broad/ Whitlingham Adventure	Whitlingham Adventure, where the Rivers Wensum and Yare meet, Orientated South West	Wireline	High	Low	Low	Negligible	Appea built f
View 12 - Wensum North Bank	River Wensum, adjacent to Riverside Heights, orientated East	Wireline	Medium	Medium	Medium	Moderate Beneficial	Demo new b
View 13 - Novi Sad Friendship Bridge	River Wensum from the Carrow Bridge, orientated East	Wireline	Low	Low	Low	Minor Neutral	Appea built f
View 14 - Bracondale	within the Bracondale Conservation Area, along Bracondale	Wireline	High	High	Low	Negligible	No Cł
View 15 - King Street, junction with Carrow Bridge	King Street, Orientated South	Wireline	Low	Low	Medium	Minor Beneficial	Appea built f
View 16 - Carrow Hill	Carrow Hill, Orientated East	Wireline	Medium	Medium	Medium	Moderate Neutral	Appea built f
View 17 - Bracondale Railway Bridge	Bracondale Bridge crossing the Railway Line Orientated North	Wireline	Low	Low	Medium	Minor Beneficial	Demo new b
View 18 -	Carrow House woodland Orientated North	Omitted	N/A	N/A	N/A	N/A	N/A
View 19 - Carrow House	Access Terrace	Wireline	Low	Low	Medium	Minor Beneficial	Demo new b

CARROW WORKS | NORWICH

oacts molition of existing buildings and appearance of w built form within the view molition of existing buildings and appearance of v built form within the view molition of existing buildings and appearance of w built form within the view molition of existing buildings and appearance of w built form within the view molition of existing buildings and appearance of w built form within the view Change Change molition of existing buildings and appearance of v built form within the view molition of existing buildings and appearance of w built form within the view. pearance of new buildings above the existing line of lt form. pearance of new buildings above the existing line of lt form. molition of existing buildings and appearance of v built form within the view. pearance of new buildings above the existing line of lt form. Change pearance of new buildings above the existing line of lt form. pearance of new buildings above the existing line of lt form.

molition of existing buildings and appearance of v built form within the view

molition of existing buildings and appearance of w built form within the view

Summary Table of Effects during Demolition and Construction

- Note 1: The narrative assessment undertaken in the HTVIA should be the basis of decision making, as set out in both the GLVIA (2013) and Historic England Guidance, rather than a statistical assessment taken from this table.
- Note 2: All of the demolition and construction effects identified are considered short-medium term, temporary and direct effects.
- Note 3: For simplicity, receptors are grouped in this table. For the full narrative assessment, reference should be made to Sections 5.0-6.0 of this HTVIA.

Receptor	Residual Effect	With Mitigation	List of
	Temporary major to moderate adverse for receptors in	Temporary moderate to minor adverse for receptors in	Carrow
	close proximity to the Site	close proximity to the Site	Carrow
			Bracono
	Temporary minor adverse or negligible effects for the	Temporary minor adverse or negligible	Carrow
	remaining built heritage receptors		Carrow
			Carrow
			Walls st near Ca
			Former
Heritage Receptors - during demolition and constructio	n		Lodge, Carrow
			Flint wa
			Eastern
			Carrow
			Carrow
			Groupir
			Groupir
			Groupir
			Crown I
			Norwich
			Trowse

CARROW WORKS | NORWICH

of Affected Receptors

w Priory,

w Abbey,

ndale Conservation Area

w Works Block 7, 7a, 8a, 8 and canopy,

w Works Block 92,

w Works Block 60,

steps and paved surfaces of the sunken garden Carrow Abbey,

er Mustard Seed Drying Shed,

e, gardener's cottage and former cart shed to w Abbey,

vall and 19 attached pet tombs,

rn air raid shelter at Carrow Works,

w House,

w House Conservatory,

ping 1 - Trowse,

oing 2 - Bracondale South,

oing 3 - Bracondale West,

Point Registered Park and Garden,

ich City Centre Conservation Area

e-Millgate Conservation Area

Receptor	Residual Effect	With Mitigation	List of
	Close-range townscape receptors: temporary moderate	Temporary moderate adverse	Charact
	to major adverse		Charact
			Charact Utilities
Townscape Receptors- during demolition and			Charact
construction	Medium-distance townscape receptors:temporary minor	Temporary minor adverse	Charact
	to moderate adverse		Charact
			Conserv
			Charact
	Long-distance townscape receptors:temporary negligible to minor adverse	Temporary minor adverse or negligible	Charact
	Close-range visual receptors: temporary moderate to major adverse	Temporary moderate adverse	View 1, View 19
Visual Receptors - during demolition and construction	Medium-distance visual receptors:temporary minor to moderateadverse	Temporary minor adverse	View 7, 17
	Long-distance visual receptors:temporary negligible to minor adverse	Temporary minor adverse or negligible	View 10

CARROW WORKS | NORWICH

of Affected Receptors

acter Area 1 - Carrow Abbey,

acter Area 2 - 20th Century Offices and Landscape

acter Area 3 - Large-scale Industrial units and es

acter Area 4 - Large-Scale Modern Industrial

acter Area 5 - Carrow House and Landscape,

acter Area 6 - Bracondale Residential (Bracondale ervation Area,

acter Area 7 - Industrial Riverside acter Area 8 - Civic and Landscape

1, View 2, View 3, View 4, View 5, View 6, View 8, 19

7, View 9, View 12, View 14, View 15, View 16, View

10, View 11, View 13,



Delivery | Design | Engagement | Heritage | Impact Management | Planning Sustainable Development | Townscape | Transport

Edinburgh : 11 Alva Street | Edinburgh | EH2 4PH Glasgow : 177 West George Street | Glasgow | G2 2LB London : Da Vinci House | 44 Saffron Hill | London | EC1N 8FH Manchester : This is The Space | 68 Quay Street | Manchester | M3 3EJ Birmingham : The Colmore Building | 20 Colmore Circus Queensway | Birmingham | B4 6AT