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ALE DOCUMENT TRANSMITTAL
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ALE Project no. AA0971: TRANSPORTATION of B75 TURBINE BLADE
from ABP Alexandra Dock
to Hull City Centre

THE FOLLOWING DOCUMENT IS SUBMITTED BY E-MAIL TO SIEMENS AND IS TRANSMITTED FOR INFORMATION:

INFORMATION APPROVAL REQUEST FOR INFORMATION CONSTRUCTION

SUBJECT: Route Survey for Road Transportation of B75 Turbine Blade

1 x ELECTRONIC COPY SUBMITTED TO SIEMENS

PROOF OF RECEIPT REQUIRED – PLEASE ACKNOWLEDGE RECEIPT OF THIS DOCUMENT BY SIGNING THIS DOCUMENT TRANSMITTAL, SCANNING AND RETURNING TO ALE BY E-MAIL FOR RECORD PURPOSES.

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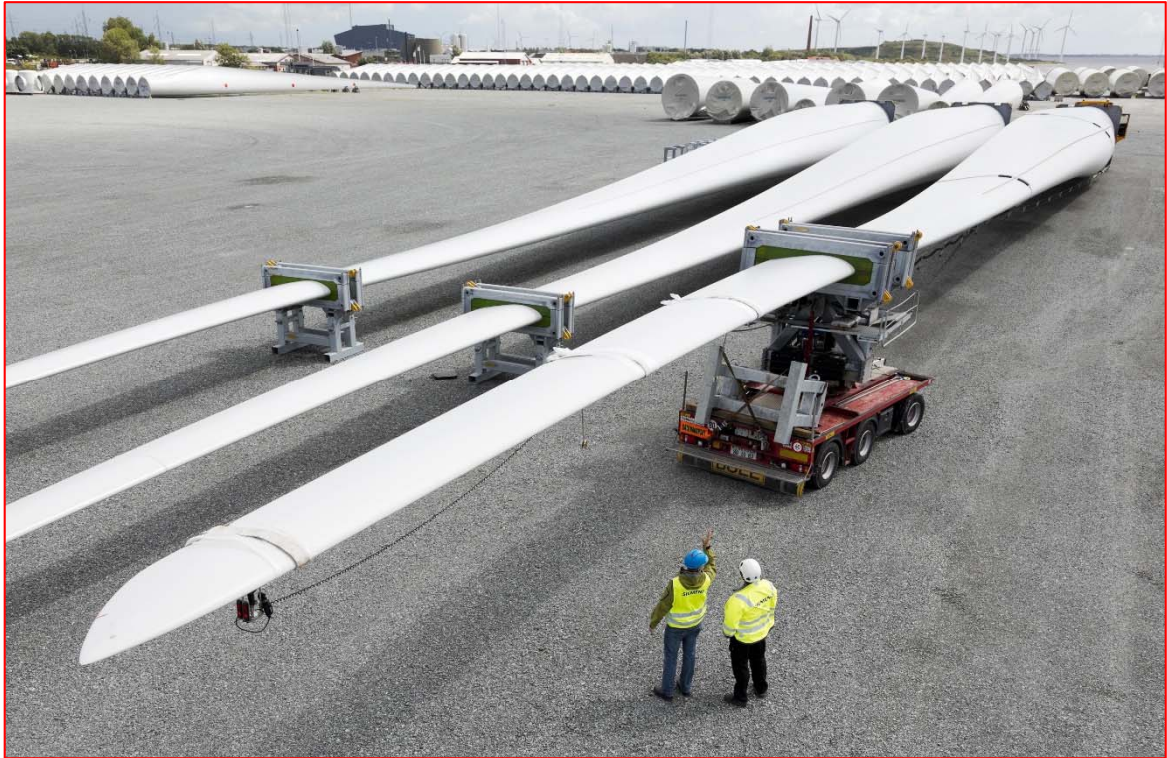
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ABNORMAL LOAD ENGINEERING LTD
Worldwide Transportation & Installation Specialists



ROUTE SURVEY FOR ROAD TRANSPORTATION OF B75 TURBINE BLADE

from

ABP ALEXANDRA DOCK, HULL

to

HULL CITY CENTRE

CLIENT	SIEMENS WIND POWER
PROJECT NAME	TRANSPORTATION OF B75 TURBINE BLADE
REPORT DETAILS	ROUTE SURVEY FOR ROAD TRANSPORTATION OF B75 TURBINE BLADE
ALE CONTRACT	AA0971
FROM	ABP ALEXANDRA DOCK, HULL
TO	QUEEN VICTORIA PLACE, HULL CITY CENTRE
VIA	VARIOUS ROUTES: 'A', 'B' 'D', 'E' & 'G'

SUMMARY

The following photographs follow guidance provided to ALE by SIEMENS on routes identified as 'A', 'B', 'D', 'E' and 'G'.

These routes are now identified in turn.

Note that given the time available to conduct the survey, this report can be considered as a high level overview.

ALE understand the transport height of the B75 Turbine Blade (excluding transport equipment) is approximately 4.6 metres

The overall dimensions of the B75 Turbine Blade are taken from SIEMENS drawing number D3179302 revision 003 and taken as:

Length = 75.422 metres
Width = 6.378 metres
Height = 4.6 metres (approximate)

The transport weight of the B75 Turbine Blade is understood to be in the region of 30 tonnes.

- Route A has a height restriction of 5.4 metres due to a bridge structure.
- Route B is feasible with a large amount of street furniture removal.
- **Route D is considered the most feasible** due to its short length and being the most direct route.
- Route E has a 5.85 metre height restriction of 5.85 metres due to a bridge structure.
- Route F is subject to further study (this is a slight variation to Route D).
- Route G has a 4.3 metre height restriction due to a bridge structure.

ALE suggest that Route D is the route that is most likely to be feasible. Overview maps are included as part of this report to identify the transport route. A further detailed survey and study is recommended to identify all pinch points, conduct swept path analysis and identify every item of street furniture required, should the project agree in principle on Route D.

Note that early agreement on the route is required to enable discussions to take place with Highways England and the various local authorities to obtain the transport permit to move and make local arrangements with respect to identification of street furniture removal, traffic management etc.

Photographic References – Alexandra Dock to Hull City Centre



Photo Reference 1 – Exit from Alexandra Dock via Security Gate



Photo Reference 2 – Lamppost to be removed

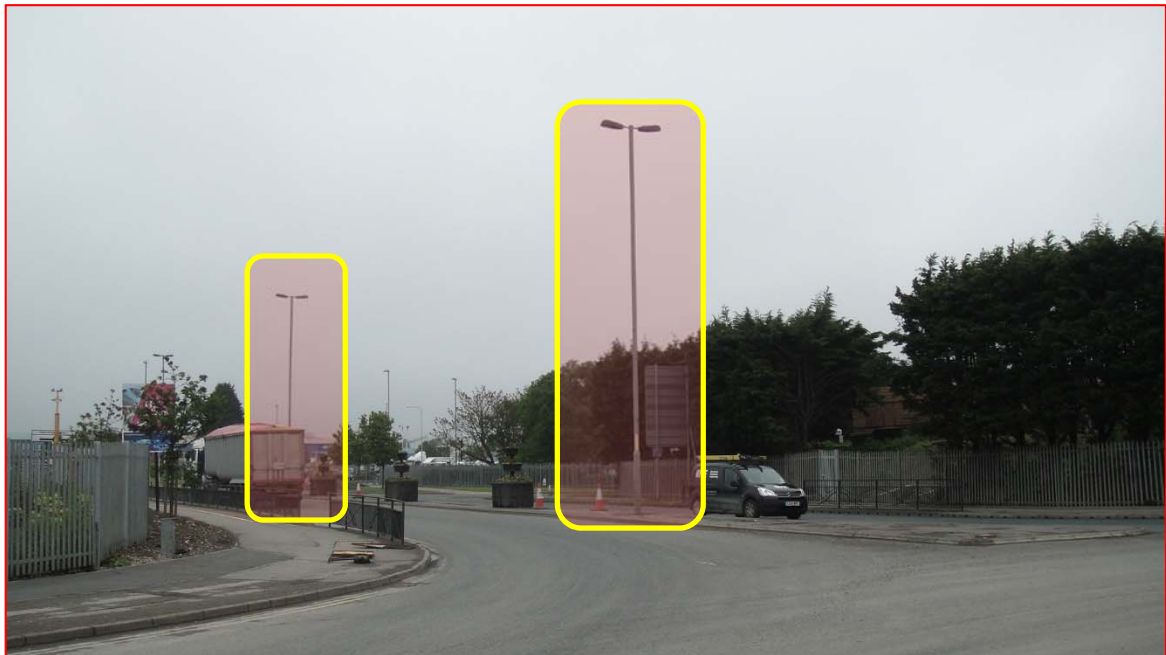


Photo Reference 3 – Lamposts on central reservation to be removed

Proceed from ABP Alexandra Dock exit gate, turn left onto Northern Gateway, join A1033 Hedon Road by turning left at roundabout and proceed westbound to join A63 towards Hull.

ROUTE OPTION 'A' – A63 Hessle Road onto Rawling Way



Photo Reference 7 - Bridge height 5.4 metres above road surface - height restriction



Photo Reference 8 – Approaching Rawling Way 'wrongside' of carriageway to avoid bridge height restriction. View looking back towards A63



Photo Reference 9 – Hesse Road – all street furniture to be removed at exit from roundabout



Photo Reference 10 – Rawling Way– all street furniture to be removed at exit from roundabout

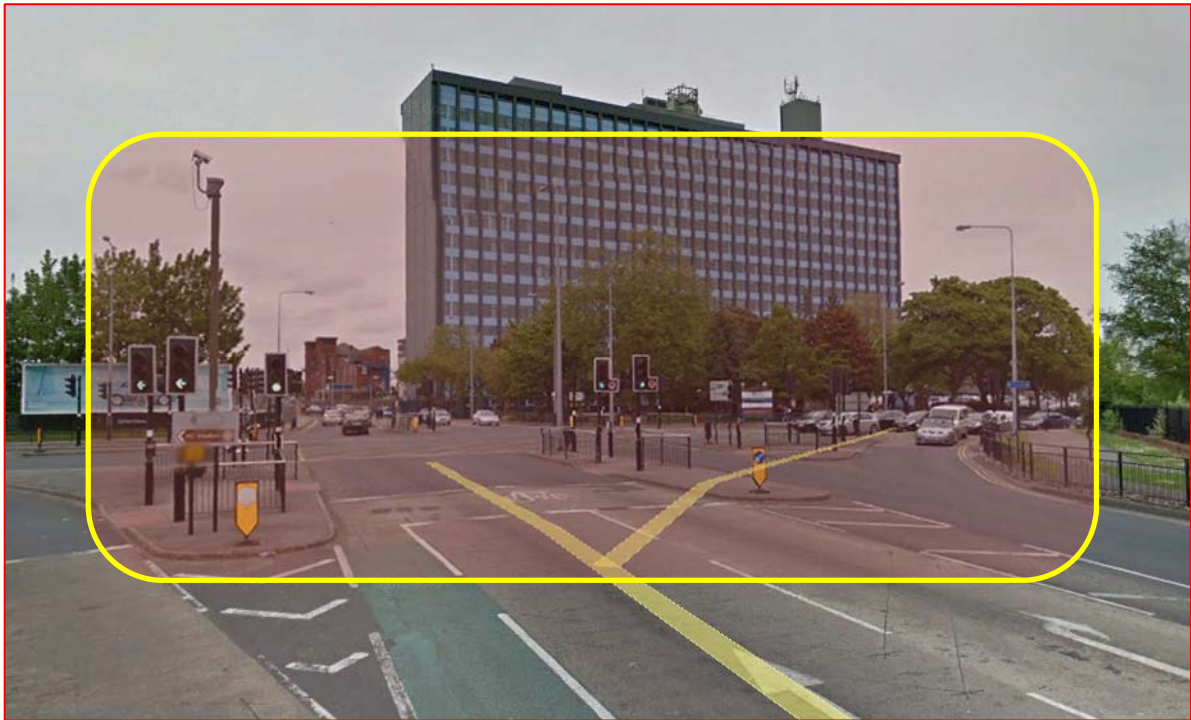


Photo Reference 12 – Rawling Way junction with A1185 – Anlaby Road – all street furniture to be removed at intersection of both roads

ROUTE OPTION 'B' – A63 Hessle Road onto A1079 Ferensway



Photo Reference 13 – view from Ferensway looking back towards junction with A63 Hessle Road – all street furniture to be removed from central part of intersection of both roads



Photo Reference 14 – junction of Ferensway with Prospect Street. View looking from Prospect Street – all street furniture to be removed from central part of intersection of both roads



Photo Reference 14 – junction of Ferensway with Prospect Street. View looking from Ferensway towards Prospect Street – all street furniture to be removed from central part of intersection of both roads



Photo Reference 15 – junction of Ferensway with Prospect Street. View looking from Ferensway towards Prospect Street – note no roadway, pedestrianised pathway to be used for trailer path



Photo Reference 16 – junction of Prospect Street and Spencer Street – street furniture to be removed



Photo Reference 17 – junction of Prospect Street and Albion Street – street furniture to be removed.



Photo Reference 18 – junction of King Edward Street and Jameson Street. Proceed through pedestrianised area to King Edward Street. Street furniture to be removed. Note trees. Potential tree surgery to be carried out.



Photo Reference 19 – junction of King Edward Street and Paragon Street. Note extensive groundworks in progress at date of survey. Recommend further survey on completion of works.

ROUTE OPTION 'D' – A63 to Market Place, Lowgate, Alfred Gelder Street, Queen Victoria Place



Photo Reference - view looking back showing A63 exit from bridge over River Hull approaching Market Place. Note street furniture to be removed.



Photo Reference - view looking back from Market Place showing A63 exit from bridge over River Hull approaching Market Place.



Photo Reference showing right turn into Market Place. Note street furniture to be removed.

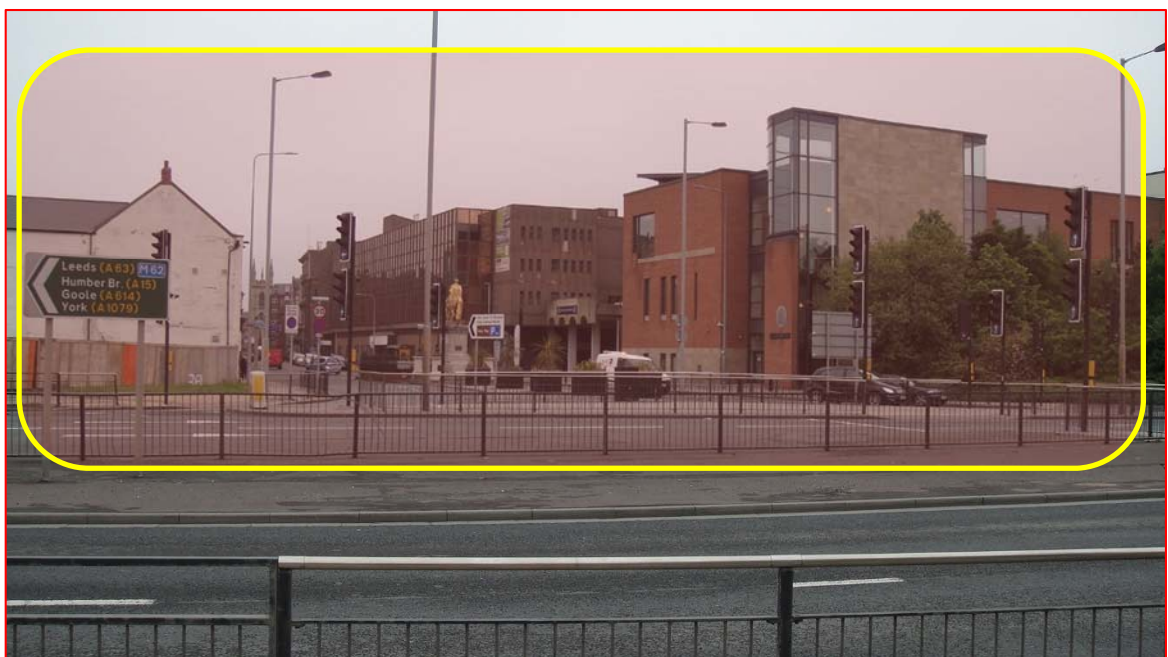


Photo Reference Alternative view showing turn into Market Place in front of Magistrates Court. Note street furniture to be removed.



Photo Reference Alternative view showing turn into Market Place. To accommodate the oversail of the Blade tip, this view shows the extent of street furniture to be removed.



Photo Reference View showing turn into Market Place.



Photo Reference Exit from Lowgate at junction with Alfred Gelder Street. Turn in an easterly direction, avoiding Charles Henry Wilson statue. Absolute maximum 80 metres length available at this junction. Note street furniture to be removed.

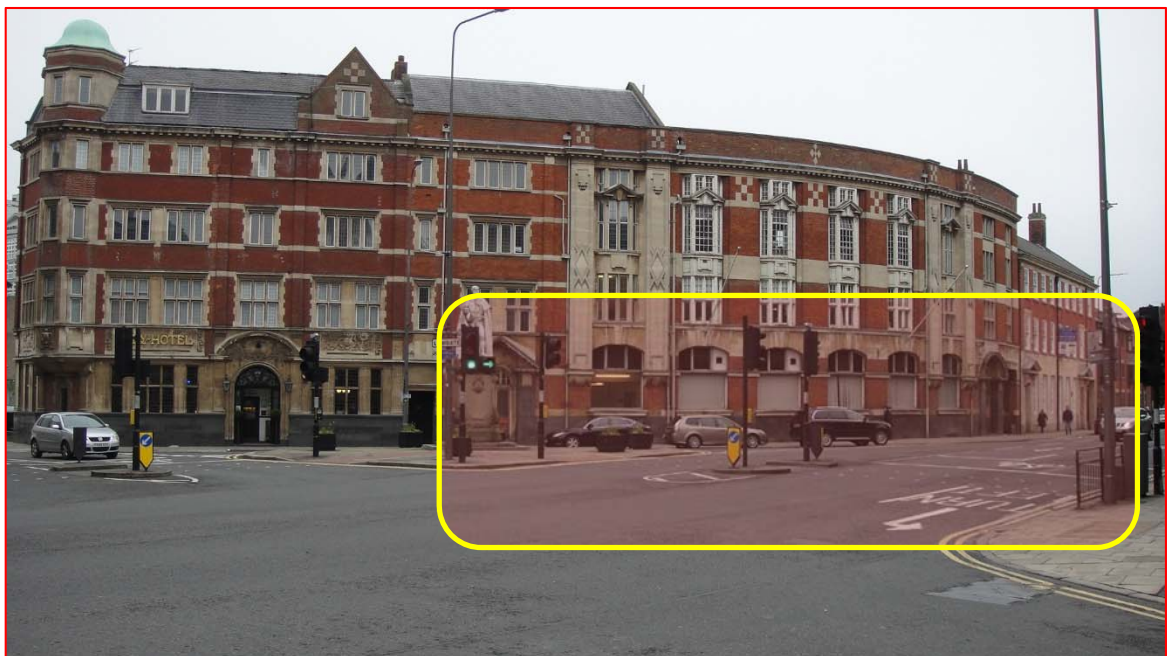


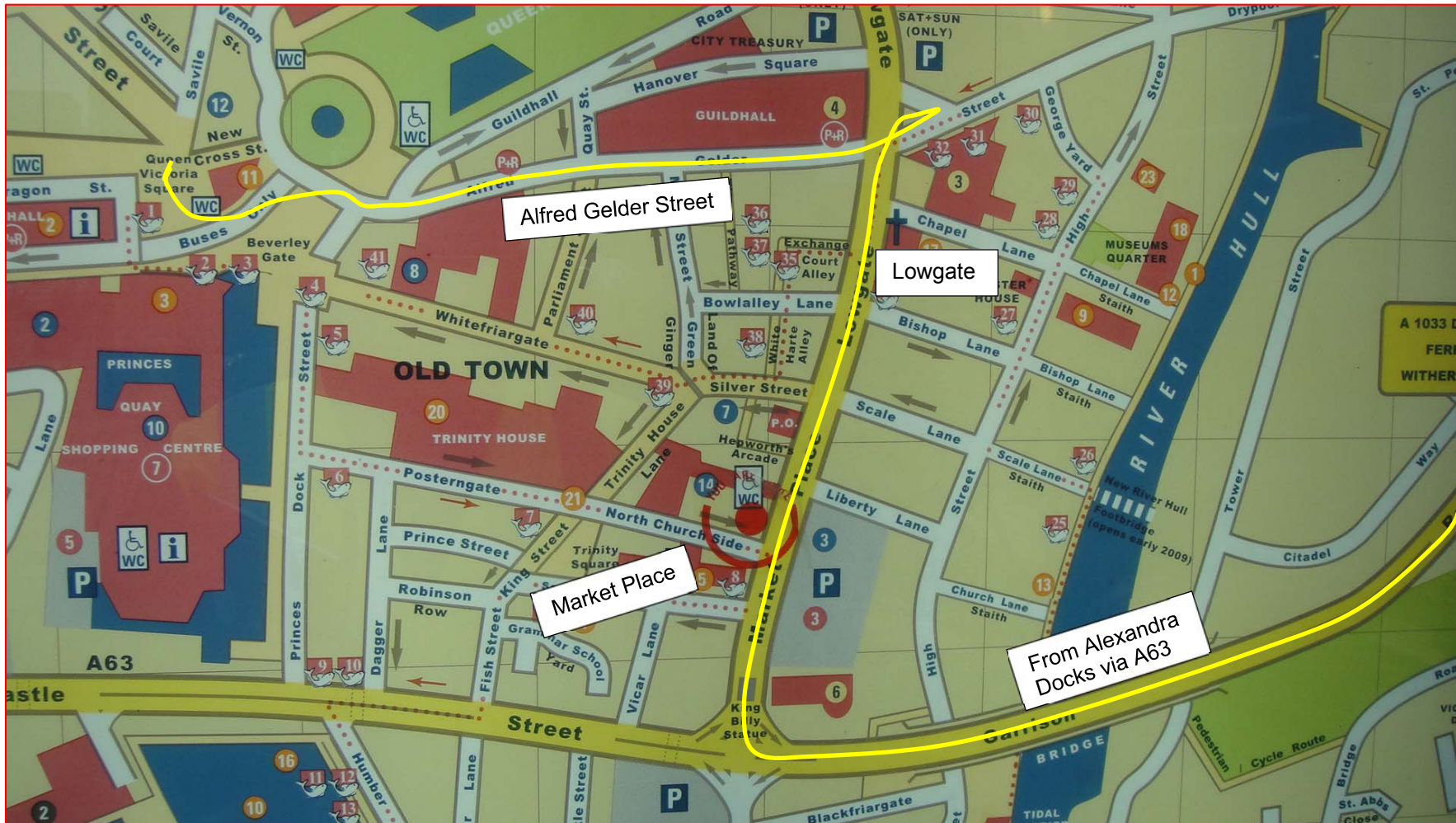
Photo Reference Exit from Lowgate at junction with Alfred Gelder Street. Turn in an easterly direction, avoiding Charles Henry Wilson statue. Absolute maximum 80 metres length available at this junction. Note street furniture to be removed.

ROUTE 'D' - Overview Map 1 – from Alexandra Dock to Hull City Centre



Preferred route – via A63 (Garrison Road), turn right into Market Place.
Proceed from Market Place into Lowgate, turning right into Alfred Gelder Street
From Alfred Gelder Street proceed in a westerly direction along Alfred Gelder Street
Enter Queen Victoria Square and manoeuvre into offloading position

ROUTE 'D' - Overview Map 2 – from A63 Garrison Road, Market Place, Lowgate, Alfred Gelder St. to Queen Victoria Square in Hull City Centre



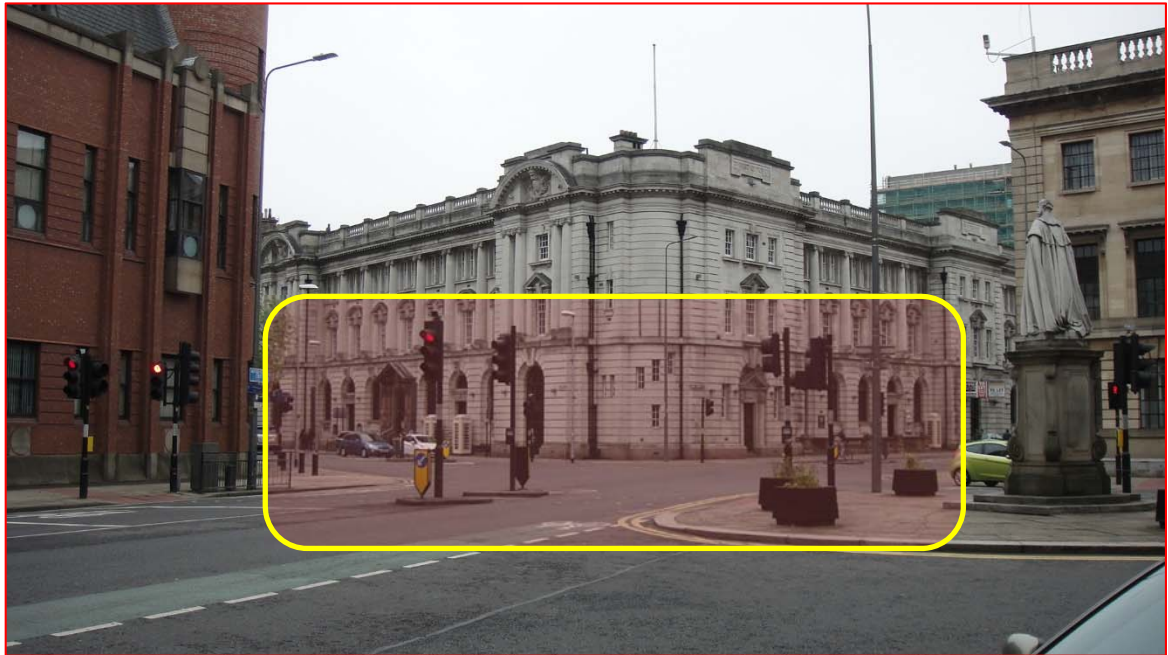


Photo Reference Alternative view of exit from Lowgate at junction with Alfred Gelder Street. View looking back towards Lowgate. Blade will turn towards camera position. Turn in an easterly direction, avoiding Charles Henry Wilson statue on right hand side of photo. Absolute maximum 80 metres length available at this junction. Note street furniture to be removed. Parking restrictions to be put in place to prevent vehicles blocking the trailer path.

ROUTE OPTION 'E' – Clarence Street across River Hull leading to Alfred Gelder Street



Photo Reference 6 - Bridge height 5.85 metres above road surface – height restriction

ROUTE OPTION 'G' – A165 leading to George Street across River Hull



Photo Reference 4 – Bridge height 4.3 metres (14'-3") above road surface – height restriction



Photo Reference 5 – Bridge height 4.3 metres (14'-3") above road surface – height restriction