

TRANSPORT FOR LONDON

BOARD

SUBJECT: DLR EXTENSION TO DAGENHAM DOCK – TWA APPLICATION

MEETING DATE: 6 FEBRUARY 2008

1. PURPOSE AND DECISION REQUIRED

1.1. The purpose of this paper is to:

- provide the Board with an update on the proposed DLR extension to Dagenham Dock; and
- seek approval from the Board for submission of an application for an Order under the Transport & Works Act 1992 ('TWA') to authorise the construction, maintenance and operation of the Dagenham Dock extension.

2. BACKGROUND

2.1. This 6.5km extension of the DLR network would extend from Gallions Reach in the London Borough of Newham to a new terminus at Dagenham Dock in the London Borough of Barking and Dagenham ("the Boroughs"). Support for the DLR extension is included in the Mayor's Transport Strategy, London Plan and TfL Investment Programme. It is also included in the various master plans and policy documents (including recent updates of such documents) for the redevelopment of the London Riverside part of the Thames Gateway. The Boroughs too have indicated their support for the scheme in principle and Docklands Light Railway Limited ("DLRL") is working with them to ensure that their policy support for it is adequate. The proposed route of the extension is illustrated on **Figure 1**.

2.2. The extension forms a key part of the infrastructure proposals for the London part of the Thames Gateway and provides a direct connection to the Barking Riverside development area. Whilst the DLR extension does not currently have funding identified in the Investment Programme for implementation, DLRL has funding within the Investment Programme up to 2008/09 to prepare and make the TWA application and promote it, including meeting the costs of any related public inquiry into the proposed Order, once applied for.

3. KEY IMPACTS

Regeneration

3.1. The corridor between Gallions Reach and Dagenham Dock is part of London Riverside, an area of land that extends across six square kilometres on the

north bank of the Thames from Barking Creek to the eastern edge of Greater London within the Thames Gateway. London Riverside is a priority area for the Mayor of London and the London Development Agency, and a Zone of Change for the Government's Thames Gateway Strategic Partnership.

- 3.2. The master plan for Barking Riverside has now been approved and a planning consent has been granted for 10,800 homes as part of the Government's plans for the Thames Gateway. The proposed route of the DLR extension passes through the heart of the Barking Riverside development which would be served by three new DLR stations. The DLR extension is integral to the delivery of the master plan and this is reflected in the planning permission that has been granted and the related section 106 planning agreement. The aim is to deliver a sustainable community focused around public transport with high densities and mixed uses around stations.
- 3.3. The development is led by Barking Riverside Limited ('BRL'), a joint venture between English Partnerships and Bellway Homes Limited. The planning consent imposes restrictions on the developer such that no more than a total of 1,500 residential units may be occupied before the TWA Order comes into force and, further, that no more than 4,000 residential units may be occupied before the DLR extension is operational for fare paying passengers.

Accessibility and Integration

- 3.4. The corridor is currently served by limited local bus routes and C2C services with a station at Dagenham Dock. CTRL/High Speed 1 services operate through the area (but without any stopping service) and East London Transit ('ELT') Phase 1a is planned to run from Ilford to Dagenham Dock via Barking from late 2009 onwards. The area between Gallions Reach and Dagenham Dock is therefore not well served by public transport, is difficult to access and will only be subject to limited improvements without the DLR extension. The DLR extension would include up to five new stations in this corridor principally to serve sites identified for major development over the coming years but would also provide local connections to some existing communities in the area.
- 3.5. The new DLR stations would radically improve accessibility in the local area, improve access to jobs and other facilities and allow significantly greater levels of development to take place on key sites like Barking Riverside. As illustrated in **Figure 2**, this would include direct connections to Custom House (for Crossrail), the Royal Docks, Canning Town and Stratford International. This is likely to lead to significant journey time savings and the creation of new journey opportunities, such as Barking Riverside to Stratford International, that are not currently possible.
- 3.6. The extension would be planned to allow direct services to operate from Dagenham Dock through to Canning Town and Stratford International. DLR services would operate at high frequency, in the order of every 6 minutes and would be fully accessible in terms of step free access. Sample journey times are below:

DLR Journey	Journey Time with DLR	Journey Time with no DLR
Barking Riverside to Dagenham Dock	5 minutes	Approximately 20 minutes
Barking Riverside to Canning Town	19 minutes	Approximately 40 minutes
Barking Riverside to Custom House (for Crossrail)	16 minutes	Approximately 35 to 40 minutes
Barking Riverside to Stratford International	28 minutes	Approximately 50 minutes

3.7. A direct rail link between Dagenham Dock and Stratford International would enable passengers using domestic and international services from Stratford International to use the DLR as part of their onward journey to either Barking Riverside or other destinations within the Thames Gateway.

3.8. The DLR extension will also interact with the proposed East London Transit (ELT) Network Phase 1A and 1B at a number of key points. DLRL has worked closely with the promoters of ELT to ensure there is an integrated network of public transport services in the area including a phasing strategy for the delivery of both projects. Early phases of the Barking Riverside development are dependent on ELT being in place whereas latter phases are DLR-dependent. The schemes are complementary with interchanges planned at Creekmouth, Barking Riverside and Dagenham Dock. ELT provides the connection between Barking town centre and the DLR, acting as a key feeder service to the DLR for onward connections further west.

Equalities Implications

3.9. As well as serving an area of major change and regeneration, this scheme would lead to major improvements for existing communities living in the Thames Gateway. This includes pockets of high levels of social deprivation with a large proportion of black and minority ethnic residents within the population. The DLR extension will provide the opportunity for residents of these areas to have improved access to jobs elsewhere in the Docklands area and in locations such as the Royals and Stratford. The extension will also improve connectivity between the existing residential and business areas and the proposed new Barking Riverside development helping to deliver community cohesion objectives.

Crime and Disorder Implications

3.10. The new stations and infrastructure on the extension have been planned to reduce the potential for crime and disorder. Three of the new stations will be part of the Barking Riverside development and station design has drawn on best practice to eliminate crime from the outset, using urban designers that DLRL has jointly appointed with Design for London. Research on potential barriers to use and perceptions of crime from the area around existing DLR

stations has also been used to inform the layout and design of this new extension.

Sustainability and Environmental Implications

- 3.11. This new DLR extension will significantly improve local accessibility and provide an attractive and accessible public transport alternative for existing residents and future residents/businesses in the corridor. The introduction of new station structures will have some impact on the local urban environment but through careful design and appropriate mitigation, new stations have the potential to be seen as a positive impact on the local area. Consideration is also being given to the introduction of “Green Roofs” at stations and other buildings such as sub stations and the use of renewable energy such as solar and small scale wind turbines at stations, which would contribute to the sustainability of the scheme.
- 3.12. The new DLR extension will be a new rail service along this alignment, which will lead to an increase in noise levels above the current baseline. However, the design of DLR vehicles, the application of the DLR Noise and Vibration Policy and introduction of mitigation measures such as screens and barriers will ensure that this increase is kept to a minimum. As part of preparing the TWA submission, the proposals are subject to a full environmental impact assessment.

4. ALTERNATIVES

- 4.1. TfL has given a great deal of consideration to the planning of new public transport infrastructure in this part of the Thames Gateway. Phases 1A and 1B of the ELT network will be developed as part of the early phases of the Barking Riverside development providing connections to existing rail stations and town centres. However, the type and scale of residential development proposed for Barking Riverside is such that rail-based public transport is required to meet the level of growth. Extending the existing DLR network further east from the current network at Gallions Reach is a logical decision given the role the DLR can have in bringing forward the regeneration plans of an area.
- 4.2. A number of options has been considered for extending the DLR east towards Dagenham Dock serving the Barking Riverside area and several key issues were identified which had an influence on possible alignment choice:
- the presence of the Thames Water sewerage treatment plant at Beckton, which would have to be avoided by any DLR alignment;
 - the navigational requirements of the River Roding and the need to provide 33m clearance above river level for ships passing underneath;
 - the presence of pylons, utilities, contaminated land and railway infrastructure associated with the Channel Tunnel Rail Link;
 - underground utilities’ apparatus east of the River Roding; and
 - the master plan for the Barking Riverside development.
- 4.3. DLRL has worked closely with key stakeholders to ensure these issues have been fully reflected in the development of options for this extension. A number

of options has been assessed and evaluated against the overall objectives for the project including a range of economic, environmental and transport related criteria. All route options have been subject to extensive public consultation, and this is continuing in relation to local development and enhancement of route options.

- 4.4. A full appraisal has been undertaken using TfL and Government criteria for new transport schemes and the best performing option has been selected as the preferred route to go forward for statutory powers.

5. ECONOMIC EVALUATION

- 5.1. DLRL has undertaken a full cost/ benefit analysis of the scheme using TfL's Business case Development Manual. Based on current estimates, the scheme has a healthy BCR of 3.2:1 reflecting the major benefits that are derived from the new stations and journey opportunities that are created. Sensitivity tests have been considered including cost increases and a delay in development coming forward in the corridor. A 30% increase in capital costs would reduce the BCR to 2.2:1 and 30% fewer benefits would reduce the BCR to 1.8:1. The benefits are dependent on the programme of delivery of housing on Barking Riverside (see section 3 above) – if the housing is delayed or does not develop in the way that is anticipated (i.e. at lower densities or with higher car mode share) then the business case for the DLR extension would be adversely affected. This highlights the importance of ensuring that the development of the DLR extension and development of the surrounding area is well integrated.
- 5.2. In addition to this DLRL has undertaken an assessment of the wider regeneration benefits that would result from the project. Given that there is a very clear link between the project and housing delivery there are other benefits to consider which are not incorporated in a TfL standard business case. DLRL will continue to develop the business case for the project as the scheme becomes more defined and will provide regular updates on these benefits.

6. FINANCIAL IMPLICATIONS

- 6.1. The capital cost of the extension is estimated at £497m based on 2007 prices. At outturn prices, the expected cost is £750 million. The cost of construction under the earliest possible delivery programme would be incurred between 2013 and 2017, with an earliest opening for passenger service of mid 2017.
- 6.2. This expenditure is not included in the current TfL business plan and cannot be accommodated in the current funding settlement (which runs to 2017/18) without displacing significant other capital expenditure.
- 6.3. DLRL and TfL are actively exploring finance options such as PFI (similar to the successful City Airport and Woolwich Arsenal extensions) under which the requirement for TfL funding would be beyond the current funding settlement. It should be possible to absorb costs outside any PFI arrangement such as land costs and fees beyond 2008/09 within the overall TfL budget.

- 6.4. Given that the Dagenham Dock extension supports housing development, there is a strong argument for specific funding to be provided from Central Government and we will engage directly on that. There may be possibilities for additional funding sources for the project which we will continue to explore. These include Section 106 agreements with other developers, CIF and EU funding.
- 6.5. The current decision required from the Board is approval to start the application process for a TWA Order for which TfL will need to be able to demonstrate that there is a reasonable prospect that funding for the scheme will be secured.

7. RISK MANAGEMENT

- 7.1. The scheme is subject to approval via a TWA application. This involves an element of risk in terms of third party objections. However, DLRL has demonstrated its ability to manage these risks effectively with recent TWA schemes such as Stratford International, the Capacity Enhancement project (3 car) and Woolwich Arsenal. Agreements will have to be reached with Thames Water, BRL, the Port of London Authority (PLA), the Environment Agency, Network Rail, rail freight operating companies and National Grid as well as other parties holding key interests in property that would need to be acquired to implement the scheme and discussions are already underway with these parties.
- 7.2. The Boroughs and the London Thames Gateway Development Corporation (LTGDC) (which has development control functions in relation to the area through which the extension would be situated) all support the principle of the extension. In particular, the London Borough of Barking and Dagenham resolved on 11 December 2007 to support DLRL's proposals for the extension, including the route alignment detailed in the report to the Council's Executive Committee, as being central to the Council's regeneration and development plans for the area.

8. CONSULTATION

- 8.1. DLRL has undertaken extensive public and stakeholder consultation during the planning of the extension. This has included several leaflet drops to over 65,000 residents and businesses along the length of the route but also including those areas to the west of Dagenham Dock and the Royal Docks that are not directly affected by the scheme options but may use the service in future. Leaflets have been supported by exhibitions and open days along the route. The final stage of consultation is underway for local businesses along River Road in response to some changes in route alignment in this area.
- 8.2. The response to the public consultation has been positive with 95% of respondents expressing support for the extension. A new link through Barking Riverside connecting to Dagenham Dock was seen as a very positive step and indeed 23% of respondents were keen to see the extension continue beyond Dagenham Dock. Options for this have been explored and appraised but the best performing terminus option is Dagenham Dock.

8.3. Specific comments have been raised about the extension including the importance of linking into existing public transport and trying to ensure existing residents are served by the proposal. 78% of respondents said they would use the extension if built. These comments have been reviewed as part of the ongoing design process.

9. OVERALL PROGRAMME

9.1. The outline timetable for the project is summarised below:

- Detailed scheme development and design freeze – January 2008
- Transport & Works Act submission – March 2008
- Public Inquiry – Late 2008/Early 2009
- Secretary of State's Decision – Late 2009/Early 2010
- Procurement – 2010 – 2012
- Financial assessment and approval to proceed – 2012
- Earliest construction start – Early 2013
- Earliest opening date – 2017

10. PROCESS AND TIMING TOWARDS A TWA SUBMISSION

10.1. The suggested next step in terms of approvals is as follows:

- February 2008 separate Mayoral approval to submit TWA application.

11. RECOMMENDATION & NEXT STEPS

11.1. The Board is requested to:

1. NOTE the content of the above paper;
2. APPROVE the submission by DLRL of an application under the TWA to secure the necessary powers to construct, operate and maintain the extension to Dagenham Dock (the "Scheme") subject to:
 - a. the Managing Director London Rail or in his absence the Chief Operating Officer of London Rail agreeing the details of the final Scheme; and
 - b. the consent of the Mayor;
3. DELEGATE authority to any of the Managing Director London Rail or Chief Operating Officer of London Rail as directors of DLRL to:
 - a. agree the final terms of the application for an Order under the TWA for the Scheme; and
 - b. do all such further things and sign and/or seal and deliver, or authorise DLR to sign and/or seal and deliver, such further documents, agreements or notices as are required in connection with the submission of the application for an Order under the TWA for the Scheme, to respond to any objections to the Scheme and to prepare for and attend any public inquiry that made be held in relation the Scheme; and

4. CONFIRM its intention to seek and secure funding for the implementation of the Scheme beyond the TWA process in forthcoming governmental spending rounds or from other Government sources.

Figure 1: Route of proposed extension

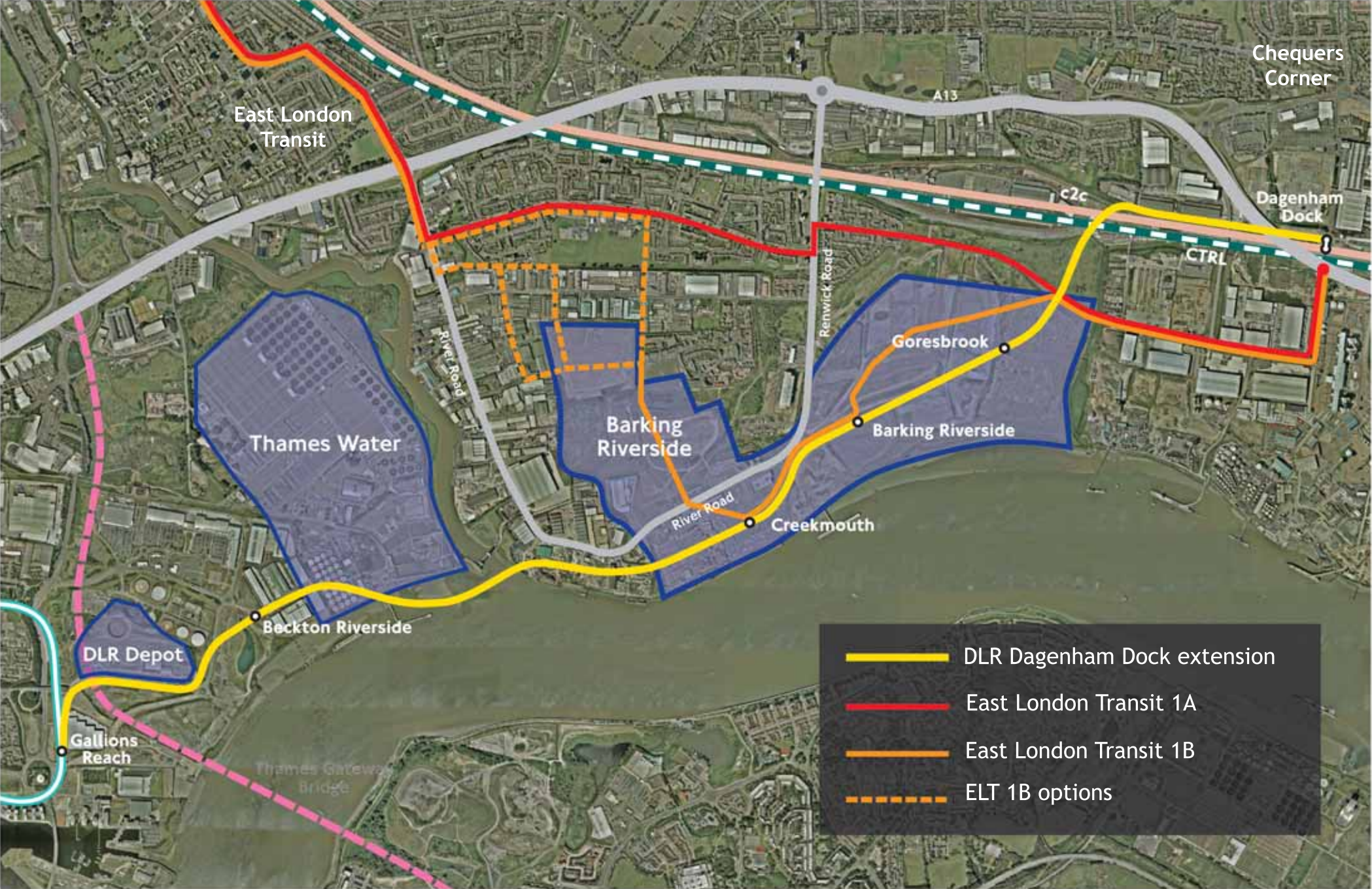


Figure 2: DLR Dagenham Dock extension and transport connections

