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## 1 INTRODUCTION

- 1.1 On 16<sup>th</sup> April 2003 West Midlands Passenger Transport Executive (“Centro”) applied to the First Secretary of State for an order **[WBHSoC079]** under the Transport and Works Act 1992 (“the TWA”) to authorise an extension to the Midland Metro Line 1 from Wednesbury to Brierley Hill via Dudley town centre. Centro also submitted, on 16th April 2003, a related request for deemed planning consent **[WBHSoC080]** under section 90(2A) of the Town and Country Planning Act 1990,
- 1.2 By the expiry of the objection period on June 4th 2003 a total of 65 Objections to and 5 letters in support of, Centro’s TWA application had been submitted. A further 5 objections and 1 letter of support have been received since that date. Two of the objections received have subsequently been amended by the objectors to representations. Letters of support included one from Dudley Metropolitan Borough Council (DMBC) and one from Sandwell Metropolitan Borough Council (SMBC) and also one from Advantage West Midlands. On 1st August 2003, in accordance with the Transport and Works (Inquiries Procedure) Rules 1992 (‘the TWA Inquiries Rules’), the Secretary of State for the Environment, Transport and the Regions announced his intention to hold a public local inquiry into objections to the applications.
- 1.3 The TWA Inquiries Rules require Centro to provide a Statement of Case by 12th September 2003. This document is Centro’s Statement of Case and contains a summary of the case that Centro intends to make in support of its application mentioned above at the public inquiry.
- 1.4 Appendix 1 is a list of those documents which Centro currently intends to refer to or put in evidence at the inquiry. It is included in accordance with the TWA Inquiries Rules. These documents are available for public inspection at the locations and within the times set out in Appendix 1. Documents served on Centro in connection with the applications (for example, objectors’ statements of case) are available for inspection at the same locations. This Statement of Case can be viewed on the Centro website at [www.centro.org.uk/metrotwa](http://www.centro.org.uk/metrotwa). Subject to payment of a reasonable charge, copies of all of these documents may be obtained from Centro. Requests for copies of documentation should be made in writing to Anna Hurton at Centro, 16 Summer Lane, Birmingham B19 3SD or by telephone at 0121 236 5339.
- 1.5 In this Statement of Case references to documents included in the list in Appendix 1 are in bold, e.g. **[WBHSoC029]** is a reference to DETR Planning Policy Guidance Note PPG 15.

## **2 THE APPLICATION**

### **2.1 The Applicant - West Midlands Passenger Transport Executive - Centro**

2.1.1 Centro's primary functions are set out in section 9A of the Transport Act 1968. These provisions include power "to secure the provision of such public transport services as they consider it appropriate to secure, for meeting any public transport requirements in their area in accordance with policies formulated by the PTA".

2.1.2 Section 20 of the Transport and Works Act 1992 provides that a body which has power to promote or oppose Bills in Parliament shall also have power to apply for or as the case may be object to Orders under sections 1 and 3 of that Act. Section 10 (1) (xxix) of the Transport Act 1968 empowers Centro to promote Bills and it therefore has power to apply for an Order relating to a railway, tramway, trolley vehicle system or other guided transport system. This power can only be exercised with the approval of the PTA. This was granted on 25 November 2002 for the present application.

### **2.2 West Midlands Passenger Transport Authority (PTA)**

2.2.1 The PTA was established under the Transport Act 1968, as amended by the Transport Act 1985. The PTA comprises of elected members appointed by each of the District Councils within the West Midlands area. The PTA sets the policy framework within which the Executive operates and provides Centro with funding.

### **2.3 The Legislative Context of the Application**

2.3.1 Before 1 January 1993, statutory authorisation of major light rapid transport (LRT), tram and rail projects had to be sought by the promotion of a private Bill in Parliament. Part I of the TWA provided a replacement Order making procedure for the authorisation of this type of project.

2.3.2 At the time of the application, the procedure involved applying to the First Secretary of State, now the Secretary of State for Transport, for an Order in accordance with the requirements of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2000 ('the TWA Application Rules'). It also includes provision allowing a public local inquiry to be held prior to the determination of the application in accordance with the TWA Inquiries Rules. This is the procedure which governs the present application.

2.3.3 In contrast to the former parliamentary Bill procedure, the making of an Order under the TWA procedure does not itself automatically provide the grant of planning permission, for the development referred to in the Order, through the application of the Town and Country Planning (General Permitted Development) Order 1995. Instead, the procedure provides for the making of directions under Section 90 (2A) of the Town and Country Planning Act 1990 that deem planning permission to be granted. Centro has sought such a direction.

### **3 SCHEME OBJECTIVES AND POLICY REVIEW**

#### **3.1 Objectives of the Scheme**

3.1.1 The objectives of the Wednesbury to Brierley Hill scheme are:

- to provide a high quality public transport service
- to improve accessibility to and within this transport corridor
- to provide an alternative to private car use
- to support economic, environmental and social objectives for SMBC and DMBC

3.1.2 Centro is promoting the Wednesbury to Brierley Hill scheme that extends the Midland Metro Line 1 with the approval of the PTA and with the support of its project partners DMBC and SMBC.

3.1.3 The scheme will provide a step-change improvement in the quality of public transport services offered in the transport corridor between Wednesbury, Dudley and Brierley Hill providing faster journey times and offering new journey opportunities.

3.1.4 Midland Metro Line 1 which opened in 1999 currently operates between Birmingham Snow Hill Station and Wolverhampton City Centre via Wednesbury. The proposed extension will provide an accessible and frequent tramway service from Wednesbury (Line 1) providing access to Great Bridge, Dudley Port (including access to heavy rail services), Dudley town centre, The Waterfront, Merry Hill and terminating at Brierley Hill.

3.1.5 Much of the route of the scheme will utilise the mothballed South Staffordshire and the Oxford, Worcester and Wolverhampton Railway Lines enabling improvements to this transport corridor. The scheme also takes account of the future reintroduction of heavy rail services proposed by the Strategic Rail Authority (SRA) and Network Rail (NR). There are also other sections of the scheme outside the railway corridor providing access to attractions and facilities at Dudley town centre, Brierley Hill town centre, Merry Hill and The Waterfront. Industrial, commercial, retail and housing areas will be served by this proposed route and it will support the regeneration strategies and development proposals put forward by DMBC and SMBC and included in their Unitary Development Plans (UDP).

3.1.6 The scheme will provide interchange at key locations with bus services, for example Dudley Bus Station and Brierley Hill town centre and also connect to West Coast Main Line (WCML) heavy rail services at Dudley Port.

3.1.7 Development along the route has already taken place and Midland Metro Wednesbury to Brierley Hill will provide vital links with proposed developments which include new economic, residential, retail, and leisure complexes. By doing this, it will underpin the objectives of Advantage West Midlands, Black Country Southern and West Birmingham Regeneration Zone within which the proposed scheme runs. The West Midlands is a key region and its economic success depends on good accessibility. This scheme will play its part in enhancing public transport accessibility throughout Dudley and Sandwell boroughs.

3.1.8 The scheme will provide the opportunity for more easily accessing employment, education and leisure activities through the improved public transport facilities

linking Dudley town centre and Brierley Hill town centre with Birmingham and Wolverhampton.

- 3.1.9 Midland Metro is a state of the art electrically powered light rail system that provides fast comfortable and flexible transport that is more environmentally acceptable than heavy rail and conventional bus and is also fully compliant with the Disability Discrimination Act (DDA 1995). Metro has the qualities required to make a step change in the improvement of the quality of public transport. 30% of passengers on Line 1 have a car available for the journey. In its first year of operation about 15% of Line 1 users were attracted out of their cars to travel on the system.
- 3.1.10 The development of a light rail network in the West Midlands is in accordance with European Urban Transport policy. It is supported in principle by the Government's Transport White Paper (1998) and 10 Year Transport Plan published in 2000. The scheme meets the Government's criteria by demonstrating a good transport case. Midland Metro is also consistent with other government guidance papers described below in section 3.4.
- 3.1.11 Similarly West Midlands local guidance and transportation reports support the case for the scheme. The West Midlands Multi-Modal Study (2001) also recommends the development of a Metro network servicing the West Midlands and proposes a core network building on Line 1 and the two proposed extensions.
- 3.1.12 Draft Regional Planning Guidance (2001) supports the development of the West Midlands and promotes the development of Metro. The Transport Priorities published by Advantage West Midlands and West Midlands Regional Assembly support the development of a Midland Metro network.
- 3.1.13 Proposals for Metro network development are therefore top priority in the Local 2003 Transport Plan (LTP) and have been in previous LTP submissions.
- 3.1.14 In summary the objective for developing Midland Metro through this Black Country corridor is to improve public transport access across this area of the West Midlands encouraging a modal shift which will result in improved travel opportunities and ultimately support the economic and environmental enhancement of the region.

## 3.2 Policy Review - Introduction

- 3.2.1 The Wednesbury to Brierley Hill scheme accords with European, government, regional and local transportation and planning policies. The following sections provide a more detailed review of those policy documents.

## 3.3 European Transport Policy

### **The European Commission Transport White Paper 'European Transport Policy for 2010: Time to Decide', Sept 2001 [WBHSoC101]**

- 3.3.1 The main thrust of the paper is that the economic growth of member States will, if unchecked, lead to large increases in car use and road freight, and will ultimately lead to gridlock. The paper promotes congestion beating strategies including the promotion of freight transport by rail, distance based fees for road use and encouraging high-quality urban transport services. The development of a Midland Metro network in the West Midlands is clearly seen as helping achieve the latter.

## 3.4 Government Transport Policy & Objectives

### **A New Deal for Transport: Better for Everyone –White Paper on the Future of Transport, Cm 3950, DETR, July 1998 [WBHSoC027]**

3.4.1 The White Paper sets out the Government's commitment to creating a better, more integrated transport system to tackle the problems of congestion and pollution. Those measures advocated which have relevance to the scheme include:

- providing greater transport choices for people through, for example, the promotion of light rail schemes;
- developing a more integrated public transport system – improving the quality and reliability of public transport journeys as a better option for travel; and
- bringing streets back to people – giving priority to public transport, pedestrians and cyclists.

3.4.2 Paragraph 3.37 of the White Paper recognises the role rapid transit systems can play in delivering integrated transport in urban areas. Schemes will be supported if they represent 'good value for money and form an integral and necessary part of a strategy in a local transport plan' (para 3.38). The positive response by government to Centro's Initial Outline Business Case (IOBC) [WBHSoC075] submitted in July 2000 demonstrates that the Wednesbury to Brierley Hill scheme achieves these aims.

### **Transport 2010: The Ten-Year Plan, DETR, July 2000 [WBHSoC035]**

3.4.3 The strategy contained in the Ten Year Plan comprises a three-tiered approach, based on looking at transport as a whole, encouraging closer working between the Government and the private sector to boost investment, and modernising the transport network in ways that make it bigger, safer, cleaner and quicker. A key strand of the strategy is government support for up to 25 light rail schemes nationally.

### **Our Towns and Cities: The Future – Delivering an Urban Renaissance, Cm 4911, DETR, November 2000 [WBHSoC028]**

3.4.4 The Urban White Paper recognises the importance of tackling congestion and promoting public transport in major urban areas like the West Midlands particularly as a tool to deliver social inclusion objectives. It reaffirms its commitment to the vision for the UK transport network as set out in the Transport 2010: The Ten Year Plan.

### **Planning Policy Guidance Note 13 – Transport, March 2001 [WBHSoC032]**

3.4.5 This guidance note focuses on the Government's integrated transport strategy and promotes, amongst other things;

- more sustainable transport choices for both people and for moving freight;
- accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling; and
- reducing the need to travel, especially by car.

This scheme provide a sustainable means of transport offering people an alternative to the car and providing improved accessibility to and from those areas served by the Wednesbury to Brierley Hill scheme.

### 3.5 **Local and Regional Transport Policy & Objectives**

#### **The Transport Priorities for the West Midlands [WBH097], Advantage West Midlands and West Midlands Regional Assembly, May 2002**

3.5.1 Advantage West Midlands, the Regional Development Agency, has supported the development of Metro through the Regional Transport Policy Forum which has published 'The Transport Priorities for the West Midlands'. One of its six headline priorities is to provide a 'comprehensive public transport system in the Major Urban Areas'. This includes a commitment to extend the Midland Metro light rail system to a network of twelve lines.

#### **Draft Regional Planning Guidance (RPG 11) [WBHSoC042], West Midlands Local Government Association, November 2001**

3.5.2 A review of West Midlands Regional Planning Guidance (RPG 11) has recently taken place culminating in a draft document being subject to an Examination in Public during June and July 2002. A Panel Report was subsequently submitted to the Secretary of State.

3.5.3 The draft RPG sets out a regional vision and guiding principles for the Region which are to be achieved by satisfying the objectives of a proposed Spatial Strategy.

3.5.4 Objective 4 of the Spatial Strategy is to: 'improve significantly the Region's transport systems to a quality comparable to that of competitor Regions' (p.20). Policy T8 further states that 'the development of an integrated public transport network where all people have access to high quality and affordable public transport services across the Region is a key element of the Regional Vision' (p.117). This includes the development of a 'comprehensive Metro network' in the West Midlands Conurbation. Policy T16 outlines that the Wednesbury to Brierley Hill scheme will be a priority for investment in the conurbation, together with the Birmingham City Centre Extension and future routes in other high volume corridors (p.126).

#### **West Midlands Area Multi-Modal Study (WMAMMS) [WBHSoC103], Aspen Burrow Crocker for Government Office for the West Midlands, October 2001**

3.5.5 The WMAMMS outlines a suggested programme of transport developments for the West Midlands including public transport improvements, highway improvements and the need to achieve behavioural change. It concluded that the cost of its recommendations would be £7.5 billion over 30 years, in addition to what is already considered to be committed. Approximately 75% of this expenditure is related to public transport and, if the plan were to be implemented, would result in the majority of demand being met by public transport.

3.5.6 The Secretary of State for Transport has recently responded to the WMAMMS. This response confirms the provisional funding for the two extensions to Line 1 being promoted currently i.e. this scheme and the Birmingham City Centre Extension. There should also be sufficient funding up to 2011 for at least two further extensions to the Midland Metro network and possibly more, if funding assessment criteria are achieved.

#### **West Midlands Local Transport Plan, 2000' [WBHSoC061]**

3.5.7 The five-year LTP is based on a 20-year preferred strategy which was published in July 2000. One of the elements of the strategy is expansion of the Midland Metro into a network of lines. The LTP states that this expansion 'initially concentrates on

supporting the regeneration areas starting from the existing Metro Line 1 at Wednesbury, via Dudley town centre to Merry Hill and Brierley Hill and also from Metro Line 1 at Snow Hill Station in Birmingham city centre via New Street Station to Edgbaston Shopping Centre’.

- 3.5.8 The first Annual Progress Report on the LTP was produced in August 2001 [WBHSoC088]. The Report notes a commitment to the Wednesbury to Brierley Hill scheme and the fact that the Government had confirmed the Wednesbury to Brierley Hill scheme’s eligibility for funding. Subsequently a new seven year strategic document was published in July 2003. This document views the extensions as a key element towards the social and economic development of the conurbation.

**WMPTA/Centro 20-Year Public Transport Strategy, November 1999 [WBHSoC108]**

- 3.5.9 The WMPTA/Centro 20-Year Public Transport Strategy sets out a 20-year vision for public transport for the West Midlands. It provides the framework for achieving a step-change in the quality of public transport services and facilities. Integral to the strategy is the development of a high quality, high frequency strategic network of integrated bus, rail and Midland Metro services on main routes. This is known as ‘Network West Midlands’.
- 3.5.10 In developing the network account has been taken of current and projected demand for transport and land use developments together with social, economic and environmental factors. The network is based on providing the most appropriate mode for each route.
- 3.5.11 The 20 Year Public Transport Strategy highlights that demand for transport in the West Midlands (the biggest conurbation outside London) is considerable, and that not all of this demand can be met by bus services. It indicates that the development of Midland Metro will be required in certain corridors. The Wednesbury to Brierley Hill scheme is identified as one of the extensions proposed for Metro Line 1.
- 3.5.12 In summary, the principles of the 20-Year Public Transport Strategy have been successfully embodied in the draft West Midlands LTP 2003 and draft Regional Planning Guidance. In addition, the West Midlands Joint Committee has set out its intention to pursue a phased implementation programme for Midland Metro with the Wednesbury to Brierley Hill scheme forming part of the first phase of expansion.
- 3.5.13 The Wednesbury to Brierley Hill scheme is also necessary to implement other proposals (known as Midland Metro Phase 3) to extend the tramway beyond the Brierley Hill terminus at Cottage Street towards Stourbridge.

## **4 DEVELOPMENT AND DESCRIPTION OF THE SCHEME**

### **4.1 Introduction**

4.1.1 In the 1980's Centro and the PTA developed plans to construct a three line Midland Metro network, see plan 3. Acts of Parliament were passed during the 1990's to allow their implementation. Following the decision to proceed with the implementation of Line 1 in 1995 Centro and the PTA considered how best to develop the remainder of the three-line network.

4.1.2 Due to the high cost of construction of these routes i.e. Line 2 Five Ways to Birmingham International Airport, Line 3 The Black Country Route, and the Central Link, which included very expensive tunnelled sections, and the uncertainties over the availability of funding, the PTA decided that the expansion of the Midland Metro network should be carried out in an incremental manner. This approach led to the 'Bite Sized Chunks Initiative' (BSCI). The purpose of this exercise was to identify parts of the proposed additional network which would have a realistic chance of securing government funding and for which a strong transport and economic case could be made at an early date.

4.1.3 The BSCI identified three potential extensions. These were: -

- Birmingham City Centre Extension
- Wednesbury to Brierley Hill Extension
- Wolverhampton Town Centre Loop.

### **4.2 Route Selection**

4.2.1 A study was undertaken to identify extensions to Line 1 to inform the BSCI review work. This included an extension from Line 1 at Wednesbury through to Brierley Hill via Dudley broadly on the alignment granted in the Midland Metro Act 1992. These original powers included a tunnelled section through Dudley town centre which was abandoned at an early stage. In determining the most appropriate route alignment for this scheme a number of objectives were considered in the preparation of the study in conjunction with DMBC, SMBC and Chelsfield Plc to assess suitable alternative alignments. These included:

- engineering feasibility,
- planning policy,
- cost/benefits,
- development proposals,
- impacts on pedestrians,
- interchange with bus and rail services, and
- areas of potential constraint (e.g. highway geometry, NR structures and the need to avoid demolition of properties).
- land take
- the need to make provision for the possible introduction of heavy rail consistent with the strategies of the SRA and NR at some point in the future.

4.2.2 On 28th August 1998 Centro submitted a prospectus **[WBHSoC075]** to the then Department for the Environment, Transport and The Regions (DETR) for three Potential extensions identified through the BSCI. The purpose of the prospectus was to make an initial submission to the DETR for the three potential extensions prior to work commencing on a formal Outline Business Case (OBC)

submission. It was envisaged that the prospectus would enable Centro to formalise discussions that had taken place with the DETR and Treasury Officials, explain the position of the project at that time and provide a basis for further discussions with Government and others on the project.

4.2.3 The prospectus concluded that, based upon the work undertaken to date, there was a strong business case for both the Wednesbury to Brierley Hill scheme as well as the Birmingham City Centre Extension. It also concluded that the business case for the Wolverhampton town centre loop was very dependent upon the patronage levels on Line 1. Additionally there were no identified private sector partner contributions identified for this latter line.

4.2.4 The route alignment was subsequently developed to the level of detail required to enable an IOBC to be submitted to the DETR in June 2000. This evaluation demonstrated that there is both a financial and economic case for the scheme under Department of Transport (DfT) appraisal rules. This is described further in section 11. The approval of the IOBC provided Centro with the confidence to develop the scheme to TWA Order application stage.

#### **Preferred Mode**

4.2.5 Two alternative modes for Metro were considered, heavy rail and traditional bus with priority. An analysis of the merits of each in comparison with Metro was undertaken. Bus was less attractive due to longer journey times, congestion problems and poorer accessibility for disabled people. Heavy rail was less attractive due to its inability to serve the Merry Hill and Dudley centres as directly as light rail and the much lower frequencies and stopping patterns associated with heavy rail. As required by the then Department of Environment, Transport and the Regions a cost benefit analysis was undertaken on one option. Bus was chosen as the alternative mode with the greatest potential to address the transport needs of the area. However the level of benefits associated with the scheme was only around one fifth of that associated with the light rail option.

### **4.3 Future Network Development**

4.3.1 The next phase of Metro development in the West Midlands, known as Phase ii routes, consists of the following corridors which are illustrated on plan 2.

- Birmingham Airport via Coventry Road and Eastside to Birmingham City Centre and Hagley Road to Quinton or Halesowen, with possible spurs to Bartley Green or Oldbury
- Great Barr or Kingstanding to Selly Oak
- Wolverhampton to Wednesbury via Wednesfield, Willenhall and Walsall

4.3.2 The extensions to Metro Line 1 commencing with the Wednesbury to Brierley Hill and Birmingham City Centre schemes followed by the phase ii routes outlined above, will create a robust Metro network across the West Midlands. Centro is now undertaking route option development work for the three corridors above which, as well as engineering feasibility, will include initial environmental and economic work that will be undertaken to establish the most viable options under the Government's New Approach to Transport Appraisal (NATA) [WBHSoC038] assessment criteria. Provided the output of that work is favourable consultation will be undertaken and an IOBC for these routes will be prepared. This will involve developing the technical work for the chosen option to the next level of detail, further refining the economic case for the scheme and developing the funding

and procurement strategy for the implementation of the three extensions. It is currently envisaged that submission of the IOBC will take place in Spring 2004.

#### **4.4 Scheme Description**

4.4.1 The proposed Wednesbury to Brierley Hill scheme runs for approximately 11km. from the existing Line 1 at the Wednesbury Great Western Street Stop at Potters Lane. The alignment utilises part of the existing mothballed heavy rail corridor through Great Bridge, Dudley Port, and Coneygree Road until it reaches Tipton Road in Dudley. Here it diverges from the heavy rail corridor to pass through Dudley town centre on street, before re-joining the heavy rail corridor at Cinder Bank after running adjacent to the Dudley Southern By-Pass. The alignment then continues on the railway corridor before the lines diverge again at Harts Hill. The scheme passes through The Waterfront development complex and Merry Hill Centre before terminating at Brierley Hill. The proposed scheme is illustrated on plan 4. A more detailed description of the route is provided below.

#### **4.5 Junction with Line 1 at Wednesbury to Tipton Road**

4.5.1 This section of the scheme is located within the existing, mothballed rail corridor. The proposed alignment leaves Midland Metro Line 1 at the existing depot at Wednesbury and utilises the South Staffordshire railway line running southwest towards Dudley. A new delta junction viaduct will be required to connect Line 1 to the existing railway corridor. The proposed viaduct structure will span over the existing depot access road and heavy rail alignment. The alignment crosses the River Tame and the Tame Valley Canal. The Ocker Hill balancing ponds are located adjacent to the alignment in this area. A tram stop dependent on development in the vicinity, can be located adjacent to the Tame Valley Canal at Gold's Hill Crossing. However, this is not the subject of this TWA Order application

4.5.2 The alignment then runs parallel to the River Tame, crossing under the Black Country New Road, over the Walsall Canal and then under the reconstructed New Road Bridge. The proposed Great Bridge stop is located to the east of New Road. The route continues under Horseley Road bridge which will be reconstructed and the footpath widened. A stop is located west of Horseley Road. There is a proposed Park and Ride site at this stop and also a sub station.

4.5.3 The proposed alignment then crosses under Lower Church Lane and Park Lane East Road via two reconstructed overbridges and then under the WCML at Dudley Port Station. There is a stop at this location which will be served by a Park and Ride site located to the north west of the alignment accessed via Park Lane East Road. This stop will provide interchange with WCML heavy rail services and also bus services on Horseley Road via a reconstructed footbridge from Park Lane East Road which also links to the Metro stop.

4.5.4 Continuing west, the route crosses over Coneygree Road via an existing underbridge and over Sedgley Road East on a reconstructed overbridge, where there will be a tram stop. This stop will be accessed from the corner of Sedgley Road East/Mayfair Gardens.

4.5.5 The route then crosses over Birmingham New Road at the boundary between the metropolitan boroughs of Sandwell and Dudley. A tramstop is located north east of Birmingham New Road. The route then continues within the mothballed heavy rail corridor towards Tipton Road. The alignment leaves the heavy railway corridor to the north east of Tipton Road on embankment to cross Tipton Road at grade

utilizing a new signal-controlled crossing. The Tipton Road stop is located to the north east of Tipton Road and will serve a variety of developments at the recently completed Castle Gate site and proposed developments at the former Dudley Freightliner Terminal and Guest Hospital sites. The stop will facilitate interchange with bus services and provide an alternative mode of transport to the new developments. A substation is also located in this area.

- 4.5.6 After crossing Tipton Road the route passes through the site of the former Dudley Freightliner depot on embankment.

#### **4.6 Dudley Town Centre to Cinder Bank**

- 4.6.1 The alignment then proceeds onto Castle Hill Road at grade via a traffic-controlled junction and proceeds up the hill towards Dudley town centre occupying the central carriageway of Castle Hill. The trams are segregated from motor vehicles which will use only the outside lanes of the existing four lane highway. The alignment leaves Castle Hill at Birmingham Street (north) where there will be a traffic controlled junction. The alignment continues east into the remodelled Dudley Bus Station (a separate but coordinated scheme). A Metro stop will be built in the bus station providing a high quality interchange between the two transport modes. On leaving the bus station the alignment continues on to Birmingham Street (south) and then King Street via a signal controlled junction where it runs in a bus lane for a short section before continuing south to enter a realigned Flood Street. Other than access to the north west portion of Flood Street no traffic will run along the current alignment of the highway. However, displaced traffic will be accommodated in a new highway currently the site of Flood Street Car Park. The light rail will be segregated from motor traffic. At the bottom of Flood Street the light rail route leaves to cross the realigned New Mill Street, from where the Metro proceeds towards the Dudley Southern By-Pass where it runs parallel to the highway along a purpose built corridor with segregation from highway traffic.

- 4.6.2 A stop is located within this section of the alignment to the east of New Road. The stop will be accessed from New Road. The stop is also served by a Park and Ride site.

- 4.6.3 The alignment continues in a south westerly direction before descending to rejoin the mothballed railway corridor at Cinder Bank. There is also a stop to the east of Blowers Green Road and a Park and Ride site. This is also a substation location.

#### **4.7 Cinder Bank to Canal Street**

- 4.7.1 Between Cinder Bank and Canal Street the alignment follows the heavy rail corridor, crossing Parkhead Viaduct. There will be a stop to serve the Woodside area to the north east of Pedmore Road/Highgate Road. The alignment leaves the railway corridor once again at Canal Street.

#### **4.8 Canal Street to Brierley Hill Terminus**

- 4.8.1 The alignment deviates from the heavy rail corridor crossing over Canal Street in a southerly direction. The alignment crosses Dudley Canal on a new bridge structure before crossing the Round Oak Rail/Norish Food access road at grade and then the northern section of Waterfront Way, both via signal controlled crossings. The alignment then traverses the western side of The Waterfront development car park. A stop is located in this area adjacent to the main thoroughfare into the complex and will serve the office and leisure facilities.

- 4.8.2 The alignment re-crosses Waterfront Way via a signal controlled crossing and then turns south west to the roundabout at the junction of Level Street, Waterfront Way and The Embankment which Metro crosses at grade under signal controlled conditions. There may be a substation in this location.
- 4.8.3 Metro then ascends to run alongside Dudley Canal where a stop will be located to serve the Merry Hill Centre and other existing and proposed developments. This will necessitate making The Embankment a one-way single carriageway for a short section of its length. Metro then turns west to cross Dudley Canal on a new bridge structure to rise towards Brierley Hill passing the Fa Yue Temple and Brierley Hill Leisure Centre to terminate southeast of the junction of Cottage Street and Little Cottage Street.

## **5 DUDLEY AND SANDWELL METROPOLITAN BOROUGH COUNCILS**

### **5.1 Role as Local Authorities and Project Partners**

- 5.1.1 DMBC and SMBC serve a population of more than 600,000 who live within the boundaries of the two boroughs. They are two of the seven local authorities that administer the West Midlands conurbation. With the two adjacent boroughs of Wolverhampton and Walsall they contain one of the country's oldest industrialised areas, 'the Black Country'.
- 5.1.2 The area developed rapidly in the 18th and 19th centuries, at first through the mining of coal and the manufacture of iron, although latterly engineering, cut glass and brickworks became more prominent. The reliance on heavy industry meant that the Black Country was very vulnerable to the effects of the 1970's recession and many of the old industries have now disappeared. Over the past 30 years much has been done to attract new industry and businesses to the area but in the 21st century the local authorities in the area are facing new challenges in terms of the increasing effect of global markets on the local economy, new technology, increasing environmental concerns and major demographic changes.
- 5.1.3 DMBC and SMBC are well prepared to face the challenges ahead and fully support the provision of the Metro from Wednesbury to Brierley Hill as part of the development of an effective and efficient public transport system to support their aim of securing economic vitality in the area and providing a sustainable alternative to car travel. The councils are the planning and highway authorities for their respective areas and thus form vital partners in the design development and promotion of the Metro.
- 5.1.4 The borough councils have worked closely with Centro as project partners in the development of the scheme. The work has involved matters related to funding, strategic transport planning, traffic management, highway design, listed buildings, planning consents and major new developments. The partnership between the borough councils and Centro is longstanding and clearly demonstrates the high level of support for, and commitment to, the project. The planning processes for further extensions of the Metro within the Black Country are already receiving support and benefiting from involvement by the borough councils.
- 5.1.5 DMBC have written to the Secretary of State for Transport confirming their support for the Wednesbury to Brierley Hill scheme **[WBHSoC072]**.
- 5.1.6 SMBC have written to the Secretary of State for Transport confirming their support for the Wednesbury to Brierley Hill scheme **[WBHSoC071]**.

### **5.2 Role As Local Planning Authority**

- 5.2.1 DMBC and SMBC are responsible for the production of a Unitary Development Plan (UDP) for their boroughs in accordance with the Town and Country Planning Act 1990. There are a number of policies contained in the respective UDP relevant to the scheme and these are dealt with in more detail in section 6.
- 5.2.2 The Secretary of State will determine the request for a Planning Direction sought by Centro in connection with the Transport and Works Act Order application, however both councils will be responsible for approving matters reserved under any conditions which are attached to any Planning Direction

### **5.3 Role As Highway Authority**

- 5.3.1 SMBC is the highway authority for all the publicly adopted streets within its administrative boundary affected by the scheme.
- 5.3.2 Similarly DMBC is the highway authority for all publicly adopted streets within its administrative boundary with the exception of the A456 and A4123 Trunk Roads, but it should be noted that the A4123 is to be detrunked and the section from Burnt Tree Island to the Tipton Road/Dudley Road junction will become the responsibility of Dudley MBC. This change is programmed to take place on 1 October 2003.
- 5.3.3 The Councils' role as highway authorities includes the maintenance of existing highway infrastructure, the provision of traffic management systems, the approval of alterations to existing highways and the adoption of new streets. These roles, and their duties in connection with road safety, mean that the Councils as Highway Authorities have a considerable part to play in the successful design, construction and operation of the proposed tram system.

### **5.4 The Schemes Compliance with Development Plan Policy**

- 5.4.1 The Wednesbury to Brierley Hill scheme runs through the administrative areas of DMBC and SMBC. Consequently, the north eastern part of the scheme from Midland Metro Line 1 at Wednesbury to Birmingham New Road is covered by the Sandwell UDP and the south western part of the scheme from Birmingham New Road to the terminus in Brierley Hill by the Dudley UDP.
- 5.4.2 Although the plans are progressing on different timetables for adoption they have consistently included policies in all versions providing full support for the scheme. This is dealt with in more detail below.

## **6 REVIEW OF POLICY AND THE LOCAL PLANNING FRAMEWORK**

### **6.1 The Dudley Unitary Development Plan (UDP)**

6.1.1 The Dudley UDP was adopted in November 1993. As part of the review of this document, a Deposit Draft UDP was published in June 2000, with a revised Deposit Draft issued in February 2002. This UDP is relevant to the sections of the Midland Metro from Birmingham New Road to the terminus at Brierley Hill town centre.

#### **Dudley Unitary Development Plan – adopted 1993**

6.1.2 The Adopted UDP [WBHSoC057] contains a specific section for Midland Metro and Policy 90 provides full support and protection of a corridor between Walsall, Dudley and Brierley Hill. As with the Adopted Sandwell UDP (see below), reference was made at the time to the former Line 3 Parliamentary Bill and reiterates the importance of the need for a high quality public transport linkage between Sandwell, Dudley town centre and Brierley Hill town centre.

#### **The First Deposit Draft Unitary Development Plan for the Metropolitan Borough of Dudley, June 2000**

6.1.3 The First Deposit Draft UDP [WBHSoC064] contains a number of strategic objectives and general policies that support integrated transport and the promotion of light rail schemes.

6.1.4 Within the First Deposit Draft UDP, the strategic objectives and guiding principles of the Adopted UDP have been developed and extended. There is a commitment to sustainable development and the UDP seeks to play a more positive role in achieving wider social and economic objectives. The aim is to maintain and improve the accessibility and mobility opportunities for the entire community. This will deliver greater access to a choice of social and employment opportunities for those living and working in the borough and surrounding area. In line with the First Deposit Draft UDP emphasis on sustainability measures, Policy AM1, discusses the need to provide attractive and sustainable alternatives to car travel in the form of public transport.

6.1.5 Policy AM6 is related specifically to the Wednesbury to Brierley Hill scheme and seeks to protect the alignment from development. The policy recognises the potential for the Wednesbury to Brierley Hill scheme to maximise the opportunities for economic revitalisation and urban regeneration and enhance the accessibility to industrial, retail and commercial areas.

6.1.6 Policy AM9 supports the idea of better integration between different modes of travel, including new bus and Metro facilities and new Park and Ride schemes.

6.1.7 There are also a number of other, more specific, policies that relate to the Wednesbury to Brierley Hill scheme. Policy S4 aims to protect and conserve heritage assets and lists the borough's assets in five categories.

6.1.8 The development of the Wednesbury to Brierley Hill scheme will provide easier access to key development sites and central employment zones, as defined under Policy UR1, such as Brierley Hill, as well as to shopping and commercial centres, encouraging economic growth and regeneration. Policy UR2 considers the Cloughton Development site to be of strategic importance and is regarded as a potential site for office and light industrial use.

- 6.1.9 The Dudley Guest Hospital and former Dudley Freightliner Depot sites lie within the Tipton Road development area, which is allocated for housing in the First Deposit Draft UDP, Policy UR3 encourages the development of housing and leisure uses in this location.
- 6.1.10 The Wednesbury to Brierley Hill scheme will serve the town centres of Dudley and Brierley Hill which have suffered some decline and increased traffic congestion. Revitalising town centres is one of the First Deposit Draft UDP key objectives and improved access by public transport will make a significant contribution to achieving that policy objective. The route will assist in protecting the vitality and viability of these town centres in accordance with Policy CR1, which lists the towns as Sub-Regional Town Centres.
- 6.1.11 The Wednesbury to Brierley Hill scheme will also compliment the Urban Quarters Strategy in Dudley town centre. The First Deposit Draft UDP also states that the Wednesbury to Brierley Hill scheme will play a key role in raising the profile of Dudley town centre and improving accessibility.
- 6.1.12 A number of the First Deposit Draft UDP proposals for commercial and industrial development, tourism opportunities and accessibility will be facilitated in their implementation by the Wednesbury to Brierley Hill scheme under policies UR5, BHTC1, BHTC11, DTC1, DTC2, EE1, EE2 and EE5. The Wednesbury to Brierley Hill scheme is consistent with these objectives as it will link up with major traffic generators both existing and proposed.
- 6.1.13 Policies BHTC1 through to BHTC7 set out the strategic role of Brierley Hill town centre. These policies seek to make the town centre more accessible by public transport, connect the urban quarters and make the area a focus for social, economic and environmental regeneration. As the town centre lies within the Central Employment Zone and is a recognised retail centre, business and retail uses are promoted. New leisure, housing and community uses also form part of the strategy.
- 6.1.14 Policy BHTC10 outlines proposals for public spaces at several locations in Brierley Hill, including Station Square and Round Oak Circus. To the east of the Round Oak Rail depot and near the canal side plateau, the Wednesbury to Brierley Hill scheme will cross the Dudley Canal on new bridges. Policy BHTC11 promotes public transport and improved accessibility in Brierley Hill through the implementation of the Wednesbury to Brierley Hill scheme and integration with other forms of transport.
- 6.1.15 The First Deposit Draft UDP identifies the District Urban Quarters of Brierley Hill in Policy FK1. These include High Street, Lower Brierley, Merry Hill and The Waterfront. The UDP seeks to improve transport links to and between these Urban Quarters. There are also a number of policies protecting Dudley town centre. Policy DTC1 aims to maintain and enhance safe and convenient pedestrian movement in the thoroughfare network in Dudley town centre and improve major entrances to the town centre at Castle Hill and Flood Street roundabout.
- 6.1.16 Policy DTC2 for Castle Hill seeks to improve access to Dudley Castle and Dudley Zoo. The Wednesbury to Brierley Hill scheme will be integrated into the town centre environment to help achieve these objectives. The policy also promotes the development of tourism / refreshment outlets in the vicinity of The Broadway and Castle Hill. The First Deposit Draft UDP does not envisage large scale

redevelopment on land between Bourne Street and Castle Hill, although business and residential development in this area is promoted by the plan.

- 6.1.17 A site on Flood Street / King Street is identified as an opportunity site under Policy DTC2 with a potential mixed use development including a new food store and residential development integrated with public transport facilities including a Midland Metro stop. This section of the Wednesbury to Brierley Hill route will run through the Central Employment Zone as defined in the First Deposit Draft UDP. Within this designated area DMBC wants to encourage and support development that directly benefits local people. Additionally the First Deposit Draft UDP states that the Wednesbury to Brierley Hill scheme will play a key role in raising the profile of Dudley town centre and improving accessibility.
- 6.1.18 The alignment passes through employment and industrial land subject to policies EE1 and EE2. The route will serve the key industrial development site at Grazebrook Industrial Park and smaller sites that make an important contribution to the local economy. Policy EE5 seeks to encourage growth in the tourism industry and identifies improving the accessibility to tourist activities as a means of achieving this growth.
- 6.1.19 There are also a number of associated nature conservation and development related policies that relate to the scheme.

## **6.2 The Revised Deposit Draft Unitary Development Plan for the Metropolitan Borough of Dudley, February 2002.**

- 6.2.1 The Dudley Revised Deposit Draft UDP [**WBHSoC058**] has not yet been formally adopted by the Council. However it is being used for the purpose of making development control decisions. The Revised Deposit Draft UDP contains a number of changes to the First Deposit Draft UDP of relevance to the Wednesbury to Brierley Hill scheme. Policy CR1 now labels Dudley and Brierley Hill as strategic town centres.
- 6.2.2 Policy BHTC11 is altered to reflect the repositioning of the tram stops from Round Oak to Canal Street and Level Street and Merry Hill to The Embankment.
- 6.2.3 Policies NC2 to NC9 have changed policies to NC3 and NC10 respectively due to the addition of a new Policy NC1. However, the Plan remains fully supportive of the scheme.

## **6.3 The Sandwell Unitary Development Plan (UDP)**

- 6.3.1 The Sandwell UDP [**WBHSoC099**] is the relevant development plan for the sections of the Wednesbury to Brierley Hill route from Midland Metro Line 1, at Wednesbury Great Western Street, to Birmingham New Road. The UDP for the Metropolitan Borough of Sandwell was adopted in January 1995. The UDP is currently under review and a Revised Deposit UDP [**WBHSoC098**] was published in March 2001, following the First Deposit in July 2000. An inspector's report was published in February 2002 following the Public Inquiry into objections. SMBC consulted on the proposed modifications in response to the Inspector's Report and hope to adopt the plan formally in late 2003.

**Sandwell Unitary Development Plan – Adopted 1995**

- 6.3.2 The Adopted UDP provides full support for the development of the Metro and makes specific reference in section 5.6 to the promotion of Line 1, now constructed and operational. The Adopted UDP also makes reference to the development of a further route linking Wolverhampton to Walsall and Dudley, formerly known as Line 3 which was given Royal Assent in 1992. The current scheme remains consistent with the 1995 Adopted UDP and provides improved transport links between Dudley Sandwell and Wolverhampton.

**The First Deposit Draft Unitary Development Plan for the Metropolitan Borough of Sandwell, July 2000**

- 6.3.3 The First Deposit Draft of the UDP was produced as part of the review of the Adopted UDP in July 2000. It contained a number of strategic objectives and general policies that support integrated public transport and the promotion of light rail schemes. It has now been superseded by the Revised Deposit Draft UDP [WBHSoC098] produced in March 2001.

**6.4 The Revised Deposit Draft Unitary Development Plan for the Metropolitan Borough of Sandwell, March 2001**

- 6.4.1 Although the Sandwell Revised Deposit Draft UDP has not yet been formally adopted by the Council, it is being used for the purpose of making development control decisions. The Revised Deposit contains a number of strategic objectives and general policies that support integrated public transport and the promotion of light rail schemes.

- 6.4.2 A principal aim of the Revised Deposit Draft UDP is to reduce the need to travel, particularly by car, by integrating transport and the pattern of land use. This will reduce the environmental impact of car use and ensure members of the community without access to a car are not discriminated against. This is particularly important in the borough of Sandwell, which has an ageing population and relatively low car ownership levels. Policies T1, T4 and T6 support the idea of integration between different modes of travel. Policy T3 discusses public transport accessibility and location.

- 6.4.3 The scheme is supported by the plan in Policy T6 with paragraph 5.36 of the plan making specific reference to the need and importance of the scheme. Policy T13 promotes the development of local Park and Ride sites at Metro stops. The introduction of Park and Ride sites and other improved interchange facilities will help to further facilitate accessibility and mobility opportunities. As well as the Park and Ride facilities there will be integration with bus services along the route.

- 6.4.4 There are also a number of other associated nature conservation and development policies that relate to the scheme.

**The Inspector's Report on Objections to the Sandwell Unitary Development Plan Review (February 2002) [WBHSoC100]**

- 6.4.5 The Inspector's Report contains a number of minor changes to the First Deposit Draft UDP of relevance to the Wednesbury to Brierley Hill scheme. There are slight changes to the text of policies NC4, NC7, OS7 and T1. However, the report makes no changes to the full support for the development of Midland Metro and, in particular, the importance of this scheme to the borough's transportation network.

## **7 URBAN DESIGN PRINCIPLES**

### **7.1 Introduction**

7.1.1 The guiding principle for Midland Metro is the development of a public transport system of a quality to rival other world-class cities. Midland Metro Line 1 is regarded as one of the most accessible sensitively designed systems in the United Kingdom due to the low floor system, high quality landscape works and infrastructure. The architectural quality of the infrastructure and landscape works have received a number of awards. Centro regards the design development of the Wednesbury to Brierley Hill scheme as extremely important. The scheme will bring about a number of benefits in terms of improvements to the townscape of areas such as Dudley town centre, Brierley Hill town centre, Merry Hill and The Waterfront. There is also an opportunity where Metro is proposed to run in the heavy rail formation to retain and enhance the landscaped value of the corridor. The design development process has involved close co-operation between Centro, SMBC, DMBC and Chelsfield Plc to ensure all considerations have been included throughout, the latter being a major contributor to the scheme

7.1.2 A Design Statement, Draft 2003 **[WBHSoC074]** has been prepared for the scheme and includes system wide and site-specific recommendations for integrating the works and infrastructure into the local townscape/landscape. It sets out a statement of principles to ensure that the development of the scheme is designed to the highest standards and is an attractive, easy to use and enjoyable public transport experience. It also helps to illustrate proposed mitigation measures for the scheme, as set out in the Environmental Statement (ES) **[WBHSoC081]**.

7.1.3 The design principles for the development of the scheme infrastructure are;

Tram systems are major undertakings and are likely to be part of the urban transport network for many years to come. The design principles supporting the development of the Midland Metro network are based on:

- Simple, timeless and easily adaptable design solutions
- Components that are durable and made of high quality materials so as to reduce maintenance liability and increase the design life of the system
- A simple palette of colour and materials, developed to ensure distinction and sustainability
- A legible, easy to use and safe system
- Designs that respect the urban context / surroundings

### **7.2 General Landscape Treatment**

7.2.1 Approach to the design of the scheme will be quite different between the heavy rail and light rail shared section, and the street running sections. For example, in the shared rail section specific consideration has been given to how the scheme can retain and enhance the landscape quality of the railway corridor taking into account that it will be an operational railway. This will take many references from the landscape improvements carried out as part of Line 1.

7.2.2 When running through Dudley town centre consideration has been given to maximising accessibility within the centre and interchange with Dudley Bus Station.

7.2.3 In terms of Merry Hill and The Waterfront a detailed design code has been established by Chelsfield Plc and this sets a benchmark for the design quality of how they perceive stops and associated street furniture finishes and treatments within their land ownership.

7.2.4 In the vicinity of Parkhead Viaduct, the nature of the area will be taken into account in treatment of the general landscape

### **7.3 Stop Infrastructure**

7.3.1 The stop platforms will be approximately 350mm high and will where possible on on-street sections, be integrated into the existing streetscape. Where Metro is off-street, along the heavy rail corridor, there is the scope to use the stops as focal points along the alignment using local historic features or for Metro to influence the nature and character of the immediate stop area. High quality materials and finishes will be used. Tactile paving will be used where required to ensure compliance with the requirements of the DDA. Stops will consist of either a single island platform or two side platforms with canopies or shelters. Passenger information will be provided at the stops and facilities with help points, seating, lighting, cycle parking, CCTV and ticket machines if required.

7.3.2 Special consideration to the detailed design of canopies and street furniture will be given to the stop at Dudley Bus Station due to its close proximity to Dudley Castle and Dudley Zoo.

7.3.3 There are also four Park and Ride sites proposed along the alignment at Horseley Heath, Dudley Port, New Road and Cinder Bank stops. All of the sites will be monitored by CCTV.

7.3.4 Stop accesses will be designed to be user friendly. They will be clearly marked, well lit, and in cases where a footpath is required to access the stop from an existing highway, the footpath will be of adoptable standard.

### **7.4 Overhead Line Equipment (OHLE)**

7.4.1 The method of supporting the overhead line has been given substantial consideration by Centro.

7.4.2 The principle of attachment of building fixings for this scheme may only be possible in the vicinity of Dudley Bus Station and will also be dependant on the design of the redeveloped bus station/interchange hub. It is recommended by the Commission for Architecture and the Built Environment (formerly the Royal Art Commission) that the use of building fixings is a preferential choice when considering the impacts on buildings, even those where they have a historic value. The need for sensitive design in such areas as Dudley town centre, Brierley Hill town Centre, Merry Hill and The Waterfront has been considered. The appearance and finish of poles is also subject of a condition attached to the Planning Direction and will be subject to the approval of the Local Authority.

### **7.5 Surface Materials and Finishes**

7.5.1 The scheme will provide a number of benefits to the townscape value of areas such as Dudley town centre, Merry Hill, The Waterfront and Brierley Hill town centre and other on street areas with investment in new paving and street furniture. The works will provide fixed equipment and finishes of similar quality to the existing features

in the town centre and to similar standards of planned equipment in case of proposed development sites, such as Merry Hill. All fixed equipment and finishes will be to the approval of the planning and highway authority and Chelsfield Plc where relevant.

7.5.2 The scheme will also provide benefits to the areas surrounding the heavy rail corridor by creating a street presence through stop entrances and general enhancement of the mothballed corridor.

## 7.6 **Trees and Vegetation**

7.6.1 A number of existing trees and vegetation will be lost as a result of the construction of the scheme especially along the mothballed heavy rail corridor. Every effort will be made to minimise this loss and as part of the scheme trees and vegetation will be replaced where reasonably practicable.

## **8 TRANSPORTATION, TRAFFIC ENGINEERING AND CONSTRUCTION**

### **8.1 Integration with Public Transport**

- 8.1.1 Midland Metro Line 1 and its extension from Wednesbury to Brierley Hill will be an integral part of public transport in this area of the West Midlands.
- 8.1.2 To the north of Snow Hill Midland Metro line 1 runs beside the heavy rail line from Snow Hill Station to Stourbridge and Worcester. There are interchange facilities between the two lines at Jewellery Quarter and The Hawthorns stations together with Park and Ride facilities at the latter.
- 8.1.3 The extension of Metro from Wednesbury to Brierley Hill will provide the opportunity for interchange opportunities between heavy rail services and Metro at Dudley Port. This will provide interchange between stations along the WCML including those between Birmingham and Wolverhampton and Metro. Park and Ride facilities are also being provided at this stop as part of the Metro scheme.
- 8.1.4 During the design of this scheme Centro has made provision to accommodate the potential for the introduction of heavy rail passenger services from Stourbridge or Birmingham directions at Round Oak near to Canal Street. A provisional stop has been included at this location. If such heavy rail services were commenced, people travelling from these directions would be able to interchange with Metro at the Canal Street stop.
- 8.1.5 Interchange with bus services will be possible along the majority of the Metro route at stop locations. The redevelopment of Dudley Bus Station as a high quality transport interchange will enhance public transport journeys within the Black Country.
- 8.1.6 Joint use tickets, such as the Centrocarril, Busmaster, Daytripper and Scholar Tickets will be available for the extended route as they are today for Line 1, being valid for use on the Metro as well as other transport facilities.

### **8.2 Traffic Management Impacts**

#### **Background and Context**

- 8.2.1 Inevitably the operation of trams on streets reduces the amount of space for other road users. Trams, being on a fixed route, co-exist better with pedestrians when compared with other motor vehicles. The tram can therefore use streets otherwise available exclusively for pedestrians. Modification of the alignment of the highways will be required in some areas to provide a clear path through the street in which the tram can operate safely.

### **8.3 Traffic Management Measures**

- 8.3.1 The most significant road traffic displacement takes place at Castle Hill, Birmingham Street and Bourne Street in Dudley. With the introduction of the Metro on Castle Hill, the bus lane which is currently segregated from the general traffic in a dedicated bus lane, will become integrated with the lane for general traffic. In addition, the phasing of the traffic signals at the junction of Castle Hill, Birmingham Street (north), Bourne Street and Flood Street will be altered to facilitate Metro and an additional signal junction will be required when Metro turns from Castle Hill into Birmingham Street (north). In the case of Birmingham Street,

buses will no longer be permitted to access Dudley Bus Station, only service traffic and access into Bourne Street will be permitted. Traffic will be one-way east bound only from Birmingham Street (north) into Bourne Street with a turning head towards the centre of the highway length. The two way traffic beyond this point will have the existing through way prohibitions removed. Flood Street will be stopped up and realigned to the east. Properties fronting Flood Street will be serviced via a new access road from King Street.

8.3.2 In Brierley Hill the existing access from Cottage Street into the Leisure Centre will be stopped up and an alternative access provided from Little Cottage Street.

8.3.3 Vehicular traffic using the same streets as a tram will be controlled to allow the tram an uninterrupted passage. Traffic signals will be provided or modified to minimise any delay to the tram commensurate with the other users of the street.

#### **Servicing to Premises**

8.3.4 The route passes through the centre of Dudley and The Waterfront/Merry Hill area where premises require access for loading and waste removal. These considerations have been included in the design of the scheme and all access to servicing and parking will be maintained.

#### **Bus Provision**

8.3.5 Dudley Bus Station is being remodelled as an independent scheme to create, with Metro, an interchange hub. This will enable the smooth interchange between the two modes and also create a townscape focal point. There will also be interchange facilities at Brierley Hill.

8.3.6 Along the railway corridor tram stops will be provided to enable interchange with buses.

#### **Access for those with disability**

8.3.7 The Metro is designed to be fully compliant with the requirements of the DDA.

#### **Pedestrian Compatibility**

8.3.8 Trams are inherently compatible with pedestrian use of the streets. The trams path will be clearly marked on the road surface so that pedestrians are aware of its route. Pedestrian crossings will be optimised and new pedestrian crossings provided where traffic conditions require them. Signal controlled pedestrian crossings are not required in streets along which the tram will run where there is no general traffic.

#### **Pedal Cycles**

8.3.9 Pedal cycles will generally have unrestricted access to streets in which the Metro is not segregated from the highway. There will be signs on the approaches to the route which will warn of the presence of trams and their tracks. There will be no provision for cycles to be carried on the Metro, although cycle parking facilities will be provided where possible at stops.

### **8.4 Route Engineering**

#### **Connection with Metro Line 1**

8.4.1 The proposed extension to the existing Metro system at Wednesbury commences from the southeast of Great Western Street stop on Line 1 at Wednesbury and proceeds in a south-westerly direction via a delta viaduct structure. The connection allows the existing line to remain in operation during the construction period. The

viaduct will not require the closure of the existing access road into the Metro depot however there may be some disruption during the construction of the viaduct.

### **Segregated Section**

8.4.2 The sections of the Metro alignment running in the heavy rail corridor between Wednesbury and Tipton Road and from Cinder Bank to Canal Street, will be almost entirely segregated from any heavy rail traffic. A physical barrier in the form of a fence will be erected between the heavy rail and light rail schemes to prevent the public accidentally straying onto heavy rail lines. This will be important since the light rail system runs on line of sight principles, whereas the heavy rail does not.

8.4.3 Where Metro is on-street through Dudley town centre, it will be segregated from vehicular traffic when travelling up Castle Hill and when running parallel to the realigned Flood Street. Metro will also be segregated when running along the Dudley Southern By-Pass. The Metro alignment will be segregated from vehicular traffic but not pedestrians when crossing The Waterfront car park and along the Dudley Canal in Merry Hill

### **Street Running**

8.4.4 The Wdnesbury to Brierley Hill scheme has only a small amount of shared track running with motor vehicles. Where this occurs it is only for a very short distance. Where shared running does occur the tram's path will be clearly marked. Kerbs, pavings and street furniture will be relocated to provide a safe, suitable and enhanced operating environment.

### **Utilities Equipment**

8.4.5 It is necessary to clear land required for the tramway of buried pipes and cables that might, in the future, need to be accessed for repair or maintenance. Additional ducts underneath the tramway will be provided to allow for future installation of additional services.

### **Stops**

8.4.6 There are seventeen proposed stops, of which four (Gold's Hill, Station Drive, Flood Street and Canal Street) are dependant on development of sites adjacent to the route and, therefore are not subject to the TWA application. Construction of these latter stops will require relevant developer contributions. The platforms will be 30m long except at the Brierley Hill terminus, where there will be provision for stabling an additional tram. The stop surface will be approximately 350mm above the existing ground level in which the tram will run. The majority of the stops will have side platforms although the provisional stop at Gold's Hill and Brierley Hill terminus will be island platforms.

### **Structures**

8.4.7 The Wednesbury to Brierley Hill scheme involves work on a large number of structures, some of which require reconstruction. Eight bridge structures will be demolished and reconstructed (including two footbridges), nine will be refurbished and three are being demolished and not replaced. There are 6 new structures. The first is the viaduct structure linking the extension with Line 1 at Wednesbury, the others are at Canal Street and at Merry Hill with two across Dudley Canal in the Hart's Hill area. Two other new structures are footbridges which will be constructed on the reinstatement of the heavy rail freight route.

## **8.5 Construction**

### **Procurement**

8.5.1 Centro intend to appoint a concessionaire to carry out the detailed design, build, and maintenance of the scheme infrastructure. However the operation of the actual tram service will be a separate contract. Centro is considering letting separate contracts for the diversion of utilities services in advance of the main construction works.

### **Construction Process**

8.5.2 The work required to construct this scheme will generally consist of the processes set out below. All work will be carried out in enclosed worksites covering the minimum area required to undertake the work. Work at each site will be started in sequence and most of the activities described below will be happening at any one time, but each in different places along the route.

- The plant and equipment likely to be used will vary for the various sections of the route. In the light rail / heavy rail shared corridor, equipment that is typically associated with track laying and earthworks will be used. Where more extensive construction work is required at bridges for example, equipment typical of major civil engineering construction sites will be employed. In street sections the equipment used will generally be rubber tyred.

Both light and heavy rail share the same general process for installation, with the exception of power supplies, only needed for the light rail scheme only.

The schedule of works can be summarised as follows:

- Mitigation measures identified in the Environment Assessment
- Service diversions
- Enabling works and site clearance
- Traffic diversions to minimise congestion
- Construction of sub stations
- Reconstruction of bridges
- Remedial and new earthworks
- A drainage system
- Preparation of the formation
- Installation of continuously welded trackwork
- Installation of cable ducts
- Overhead line masts and wire, using rail mounted plant
- Communication and control equipment installation

- Tramstops installed

*In street sections the construction sequence will be as follows.*

- Mitigation measures
- Service diversions
- Enabling works
- Excavations for track foundations and for drainage
- Track slab construction
- Installation of rails and carriageway surface
- Construction of stops
- Overhead wires installed
- Commissioning including energizing, training and test running

8.5.3 It is estimated that the construction work, including the diversion of services, will take two and a half to three years.

#### **Temporary Traffic Management**

8.5.4 A draft construction strategy and programme has been developed with a view to minimising inconvenience to the public and occupiers of properties surrounding the route.

#### **Mitigation Works**

8.5.5 A Code of Construction Practice (CoCP) has been developed containing the measures that the appointed contractor will implement in order to minimise the impact of the construction work on the environment and townscape. The CoCP, which is part of the ES, deals with issues such as control of noise generated by construction activities, permitted hours of working, maintenance of access routes and protection of the public from site working areas.

#### **Construction Compounds and Work Sites**

8.5.6 A number of compounds close to the route are proposed in the TWA Order, making use of vacant land abutting the alignment or land which will become Park and Ride sites. The contractor would use these for local offices, the storage of plant and the short-term storage of materials.

#### **Power Supplies and Overhead Line Equipment (OHLE)**

8.5.7 The Metro is an electrically powered tramway conforming to European Standards in terms of traction voltage and design criteria. The system operates on direct current (dc) at a nominal voltage of 750 V, fed via traction substations. The supplies for the scheme will be taken from four new substations at Horseley Heath, Tipton Road, Thornleigh Trading Estate and Merry Hill.

- 8.5.8 The electricity supply to the overhead line will be 'reinforced' by means of underground cables run in ducts within the tramway corridor. Other ducts will carry communications cables used in connection with the Metro system.
- 8.5.9 The current-carrying element of the OHLE will be a copper contact wire over each track; the OHLE will be designed to be as light and as unobtrusive as practicable.
- 8.5.10 If required in the vicinity of the redeveloped Dudley Bus Station, the contact wires will be suspended from cross-street span-wires attached to buildings by means of simple fixings. The supports are generally at 20m – 30m spacing on straight alignments. On curves, 'pull-off' wires are used to maintain the alignment of the contact wire over the track; these are at a closer spacing than on straight sections of the route. Where suitable buildings are not available for fixings, poles will be used. In other locations, such as within the heavy rail corridor, a different form of support such as a cantilever support may be appropriate.
- 8.5.11 The support arrangements, whether of 'span-wire' or 'bracket arm' types, will use the principle of 'double insulation' or, if a synthetic rope is used, 'continuous insulation'. Hence supporting span-wires or ropes affixed to buildings are not live. This means that restrictions on building maintenance activities, while being subject to electrical safety rules governing safety clearance to the contact wires themselves, are minimised.
- 8.5.12 The rails will be embedded in an elastomer material to minimise stray current leakage. In addition, a stray current collection mat will be built into the concrete track-bed of all street-running sections.
- 8.5.13 The scheme will be constructed in accordance with the 'floating' negative return principle. The existing electrical supply system on Line 1 uses a different system known as diode bonding. It is proposed to create an electrical boundary near Wednesbury between the 'diode earthed' system of the existing Line 1 and the 'floating' system of the Wednesbury to Brierley Hill scheme.

## **8.6 Vehicles**

- 8.6.1 The existing fleet of Line 1 vehicles would be complimented by a further 15 vehicles operating on the Wednesbury to Brierley Hill extension. The new vehicles will be generally similar to those of the existing fleet.

## **9 HEAVY RAIL INTERFACE**

### **9.1 Introduction**

- 9.1.1 The proposed Wednesbury to Brierley Hill scheme runs predominately on the mothballed South Staffordshire Railway and Oxford, Worcester and Wolverhampton rail corridor and has been designed not to preclude heavy rail freight services being reintroduced.
- 9.1.2 The SRA is currently reviewing the reopening of the heavy rail freight services between Bescot and Worcester using this formation. The arrangement would not involve track sharing with Metro.
- 9.1.3 Centro have agreed to construct Metro in a way which would permit heavy rail freight traffic to be reintroduced in line with the SRA requirements. The investment by Centro in improving the formation and structures as part of the Metro works assists this. These works would not interfere with heavy rail.
- 9.1.4 Centro have developed this scheme with the full involvement of the SRA and Network Rail to ensure that the scheme meets their strategic requirements. All three parties have been involved in the joint technical work undertaken to ensure that both the light rail and the strategic heavy rail requirements can be accommodated in a cost effective way along this corridor. It is envisaged that full agreements will be put in place between Centro, SRA and NR which will be compatible with the powers being sought in this TWA application.

### **9.2 Economic Case; heavy rail and light rail.**

- 9.2.1 The SRA have stated that they require capacity along this corridor for two freight paths per hour in each direction with a further bi-directional path. Centro's scheme is compatible with this requirement.
- 9.2.2 There have been a number of studies into the Walsall to Stourbridge rail corridor all of which indicate that there is no significant demand for heavy rail passenger services.
- 9.2.3 Centro commissioned one of these studies involving NR, DMBC, SMBC, Walsall Metropolitan Borough Council, Worcestershire County Council, Staffordshire County Council and the Government Office for the West Midlands (GOWM). This study **[WBHSoC107]** of 2001 encompassed estimates of demand for services and concluded that there are significant operational constraints to a heavy rail passenger service along the corridor, including the need for new junctions at Rycroft Junction and Lichfield; capacity problems from Worcester to Stourbridge and at Wichnor Junction; the need for extensive track and signalling works and some timetable alterations of existing services.
- 9.2.4 The study concluded that the potential level of passenger demand in the rail corridor does not present a good financial case and any new rail service would need substantial financial support for its operation estimated at around £7million per annum.
- 9.2.5 The lack of demand for a passenger rail service was then endorsed by the Government sponsored West Midlands Multi Modal Study (Autumn 2001) **[WBHSoC103]**. A further Government sponsored multi-modal study (West to East

Midlands) (2003)[WBHSoC104] again looked at the case for passenger services on the line and has not identified a viable business case for such services.

9.2.6 NR has also undertaken an operational assessment of the corridor. The SRA have stated that they do not believe there is any justification for passenger services on the route and agree with NR's findings that there are major operational constraints in the corridor.

9.2.7 In conclusion, the studies undertaken by Centro and others have indicated that there is insufficient demand to justify the introduction of passenger services in the corridor. The SRA have indicated that they anticipate no requirement for a service in the foreseeable future and there has been no commercial interest in such a service from the Train Operating Companies.

### **9.3 Operational requirements**

9.3.1 Where it is proposed that Metro utilises the heavy rail corridor, and thus runs alongside heavy rail services, the majority of the corridor alignment requires three tracks. Two Metro tracks and one heavy rail track. However, between Wednesbury and Great Bridge the width of the corridor is sufficient to accommodate a two track Metro and two track heavy rail alignment. Where the formation passes under the WCML and the Birmingham Canal at Dudley Port, and on Parkhead Viaduct, width constraints can only accommodate one Metro track and one heavy rail track. These will be bi-directional.

9.3.2 Where the alignment passes under or over an existing structure, works may be required to facilitate track arrangements sufficient to accommodate both schemes.

### **9.4 Safety**

9.4.1 A security fence, where reasonably practicable, will be erected to separate the Metro system from the heavy rail system in accordance with the requirement of Her Majesty's Railway Inspectorate (HMRI). This security fence will be continuous along the shared sections of the corridor, and in addition measures will be put in place at tram stops to deter pedestrians from gaining access to the heavy rail alignment.

### **9.5 Construction / Phasing**

9.5.1 Centro has agreed with SRA / NR that the timing of the construction of Metro and reintroduction of heavy rail services will occur simultaneously or Metro will precede heavy rail services. If the latter scenario takes place, Centro will ensure that the agreement is such that the future introduction of heavy rail will be made with minimal disruption to Metro services.

9.5.2 The preferred option of both schemes being implemented together will demonstrate cost savings.

## **10 ENVIRONMENTAL EFFECTS**

### **10.1 Introduction**

- 10.1.1 From the outset, the Wednesbury to Brierley Hill scheme has been designed to maximise its beneficial effects on the environment and to minimise any negative effects that it might have.
- 10.1.2 The assessment of the environmental effects is a key component of the TWA process, which requires promoters to carry out an Environmental Impact Assessment (EIA) and to report the findings of this work in an ES. For the proposed scheme this assessment has been carried out by an independent environmental consultancy and in accordance with the TWA Rules and current best practice. It therefore presents a robust assessment of the scheme.
- 10.1.3 A summary of the main findings of the EIA is provided below. Where the potential for negative impacts to occur has been identified, measures have been developed to mitigate any adverse effects of the scheme.

### **10.2 Construction**

- 10.2.1 Experience from other projects, including the Docklands Light Railway, Croydon Tramlink and the Nottingham Express Transit (which is currently under construction), has shown that taking a proactive approach to environmental management during construction can assist in minimising the effects of construction works and result in better relations with the local community. Centro is committed to such an approach and has developed the draft CoCP for the proposed scheme.
- 10.2.2 The draft CoCP forms part of the ES and defines minimum standards of construction practice acceptable to Centro, DMBC and SMBC. The concessionaire selected by Centro to design, build and maintain the scheme will be obliged to implement it. Compliance with the CoCP will be mandatory but will not discharge the concessionaire from complying with any statutory requirements in force at the time.
- 10.2.3 The draft CoCP describes a range of measures to reduce the impact of construction works on the environment and local residents, including measures for controlling noise, vibration, dust, air and water pollution, and the protection of wildlife, archaeology and listed buildings. The management of waste, construction traffic, general good housekeeping measures and site safety are also included. The draft CoCP will also require the concessionaire to establish a Liaison Officer, responsible for communicating the project programme and acting as a focus for the scheme's external third party relations with the general public, local businesses, local residents and local authorities (such as SMBC, DMBC and the emergency services).
- 10.2.4 The scheme will, however, inevitably have a degree of impact while it is being constructed, as is the case with most major transport infrastructure projects of this type. However, any construction effects will be short-term and temporary, in that they are associated only with the duration of the construction works. Effective liaison with those likely to be affected in advance of the work commencing is expected to reduce the impact of any particular works.

### **10.3 The Operation of the Scheme**

- 10.3.1 Notwithstanding any short-term environmental impacts that may occur during construction, there is the potential for a number of environmental benefits. In particular, where the scheme is successful in attracting the users of private cars onto the system, this can in turn help to reduce levels of noise and air pollution arising from traffic. The potential benefits of the scheme accrue not just from changes in traffic movements, but also through improved accessibility for all users and through good urban design.
- 10.3.2 Modern tram vehicles produce noise levels that are comparable with modern buses, indeed they are quieter than some types of buses, and since a tram can carry more passengers than a bus, a tram system is a far quieter mode of transport, when judged on the basis of an equal number of passenger kilometres.
- 10.3.3 With noise mitigation, unacceptable noise impacts are not expected.
- 10.3.4 Predicted levels of vibration are below that which could cause damage to buildings or which could give rise to adverse comments from building occupants.
- 10.3.5 Since the scheme will be electrically powered, there will be virtually no emissions from the Metro vehicles at street level. In addition, where the operation of the scheme results in a reduction in traffic, this will have a positive effect on roadside air quality.
- 10.3.6 The proposed alignment will pass through the Parkhead Locks Conservation Area at Parkhead Viaduct. Since the scheme is on viaduct at this point, the canal will not be directly affected by the scheme. However, reconstruction works to the viaduct are required in order to accommodate the proposed alignment. The implementation of the Design Statement Draft 2003 by the concessionaire will ensure that high quality design, materials and workmanship are used.
- 10.3.7 Along the heavy rail corridor, the townscape is characterised by locally important green corridor and townscape quality of low sensitivity. The townscape quality along this corridor is tolerant to change.
- 10.3.8 Overall, the introduction of the tram when combined with the reduction of traffic in some streets will present a dynamic modern transport system.

## 11 FUNDING AND PROCUREMENT

### 11.1 Cost Estimate

11.1.1 Capital costs for the extension have been prepared by independent consultants and reflect experience gained during the construction of Midland Metro Line 1 and other recently constructed light rail schemes.

11.1.2 The 2nd Quarter 2002 capital costs, including all infrastructure required for the scheme, are summarised in the Table below.

#### Capital Costs

Element	Cost £m
Construction, Concession and Centro costs	108.92
Vehicle costs	24.03
Land costs	6.37
Total	139.32

### 11.2 Procurement Strategy

11.2.1 Centro has undertaken work to determine the suitability for funding the extensions through the Private Finance Initiative. The work has concluded that the project does indeed meet the suitability criteria.

11.2.2 It is Centro's objective to ensure that the procurement of this, plus future extensions, removes uncertainty and value for money is maximised. To achieve this objective Centro have set criteria which various procurement options have been evaluated against to assess how they deliver Centro's objectives. These are as follows;

- delivering value for money;
- developing the network as an integrated system;
- facilitating private sector participation;
- optimising risk transfer to the private sector.

11.2.3 The assessment of various procurement options to date indicates that a separation of design, build and maintenance of infrastructure from operation of the services would be the optimum structure to follow. The eventual procurement route will have to take into account the private sectors' views on the optimum structure as the procurement process progresses.

11.2.4 As explained in section 8.4.5, Centro is considering procuring the diversion of the statutory undertakers' equipment i.e. pipes, cables etc., and possibly some highway works in advance of the main contract to design and build the scheme infrastructure.

11.2.5 Approximately £41 million has been raised through locally funded contributions towards the scheme.

## 11.3 Transportation Demand Case

### **Economic Case: the (IOBC)**

- 11.3.1 Assessment of the economic performance of the project was based on the New Approach to Transport Appraisal (NATA) developed by the DETR in the late 1990s. The approach requires promoters of transport projects to demonstrate that their scheme meets all five of the Government's key objectives for transport (environment, safety, economic efficiency, accessibility and integration), including impacts which can be both valued in money terms and those which are assessed in other ways.
- 11.3.2 Within this broad appraisal framework, the financial and economic viability of a scheme remains extremely important. The key requirements are that the total benefits of the scheme should exceed its costs, and that operating revenues should exceed operating costs, so that no ongoing subsidy is required. The total economic benefits of the scheme include time savings to users, and decongestion and accident benefits to non-users due to transfer of car trips to public transport.
- 11.3.3 The IOBC submitted to DETR in June 2000 assumed an opening date of 2005, and a stream of costs and benefits over a 30-year period discounted at a rate of 6% per annum to give a Net Present Value (NPV). The IOBC indicated that in NPV terms there would be an operating surplus of £40.3 million, and a net surplus of economic benefits over costs of £19.4 million. The Benefit/Cost ratio (BCR) was 1.16. The scheme also performed well against the five transport objectives of the West Midlands LTP 2000.
- 11.3.4 The Metro option was assessed against two other options: heavy rail and conventional buses with priority measures. The Metro option reduced the need for interchange and presented a more positive image for public transport, attracting more car users and hence resulting in a greater reduction in traffic congestion and nuisance. Metro vehicles have a greater ride quality and are more accessible for the disabled. These benefits offset the higher capital costs of Metro and resulted in poor economic and financial performance for the other options.
- 11.3.5 Following discussions with the DETR, the scheme was given approval in the December 2000 Local Transport Grant settlement. The Director, Integrated and Local Transport stated that 'having consulted the Treasury, the Department is satisfied that:
- *the appraisal has been carried out in accordance with the requirements set out in the LTP Guidance;*
  - *On the basis of the work that has been undertaken and our current understanding of the new lines and their impacts, the scheme passes the Government's economic appraisal tests which are used to decide whether a project is eligible for funding.*
- 11.3.6 It was understood at the time that an updated appraisal of the scheme would need to be prepared when TWA powers were obtained. This revised appraisal would need to reflect any changes to the scheme as a result of the TWA process or any other developments.

## **11.4 Updating the Economic Case**

- 11.4.1 It is now three years since the IOBC was submitted. As indicated above, the DfT will require Centro to submit a revised Business Case if the TWA Orders are confirmed following the Inquiry.
- 11.4.2 The main changes between 2000 and 2003 are:
- an increase in infrastructure costs, partially offset by a reduction in the costs of rolling stock;
  - a delay in the planned opening date from 2005 to 2008;
  - an increase in 2001 in the fares charged on Metro Line 1 and
  - operational and infrastructure problems on Metro Line 1, which have led to a lower level of patronage at this stage than had been expected.
- 11.4.3 The economic and financial impacts of the changes (in NPV terms) for the Wednesbury to Brierley Hill scheme alone are
- capital costs increase from £111.88 million to £139.32 million;
  - operating surplus falls from £40.33million to £39.25million
  - the surplus of benefits over costs increases from £19.38million to £25.56million
  - the benefit/cost ratio increases from 1.16 to 1.21.
- 11.4.4 If the Birmingham City Centre Extension is constructed at the same time the economic performance would be even better than quoted above.
- 11.4.5 This reworking of the economic case has shown that the project remains positive in financial and economic terms.

## **12 COMPULSORY PURCHASE AND ACQUISITION OF LAND**

### **12.1 General**

- 12.1.1 Part III of the draft Midland Metro (Wednesbury to Brierley Hill and Miscellaneous Amendments) Order, if made, will give Centro the power to acquire compulsorily land and/or rights over land and/or take temporary possession of lands for the authorised works.
- 12.1.2 At the time of the application for the TWA order, the scheme, including land take, was developed to an outline engineering stage appropriate to the level of detail required for the application.
- 12.1.3 Where lands or rights are required, extensive consultation has been carried out and notices issued in accordance with the Transport and works (Applications and Objections Procedure) (England and Wales) Rules 2000. The comments of landowners who have expressed concerns over the exercise of compulsory powers have been considered.

### **12.2 Affected Properties**

- 12.2.1 Where in excess of 1000 properties directly front or are in the immediate proximity of such a development it is inevitable that landowners will raise objections or queries concerning the effect on their property. Centro has attempted to resolve these objections or queries. An analysis of this is contained in section 13.
- 12.2.2 The type of properties that will be affected are residential, commercial, office, retail, service, publicly owned and light and heavy industry together with areas of car parking. This reflects the character of the areas through which this transport scheme passes and for which it will ultimately cater.

### **12.3 Compensation**

- 12.3.1 Compensation will be paid in accordance with the Statutory Compulsory Purchase Compensation Code. If a settlement cannot be agreed the matter can be referred to the Lands Tribunal for determination on the application of either party. However, entitlement to or the amount of compensation is not a matter that will be dealt with at the Public Inquiry into the Order.

### **12.4 Summary**

- 12.4.1 Centro considers that the Wednesbury to Brierley Hill Metro scheme will have a positive effect on the local area and be of significant importance to the transport infrastructure of the West Midlands. As a result it will have a positive effect on adjacent property. However, Centro understands objectors' concerns about the exercise of compulsory purchase powers. Nevertheless these powers are necessary to ensure that the required land can be acquired to construct and operate a light rail system that will bring significant economic and other benefits locally and regionally.

## **13 OBJECTIONS SUMMARY**

### **13.1 Introduction**

13.1.1 In total 70 objections have been received following the application for the TWA Order. Centro has also received two representations, and six letters of support, one of which was a previous objector. However 15 of the objections include statements of support in principle for the scheme or recognise that it has positive benefits.

13.1.2 The following table shows the relationship of the objectors to the scheme:

<b>Objectors</b>	<b>Number</b>
Property owners/occupiers along the scheme route, no land to be taken	15
Those with land proposed to be taken	27
Interested third parties, with no local property ownership issues	8
Interest Groups	13
Statutory Undertakers	7
<b>Total</b>	<b>70</b>

13.1.3 Centro has responded to all of the objectors setting out, in detail, further information for objectors to satisfy themselves as to the effects of the scheme. The responses also detail what consideration has been given to each issue and what mitigation, where appropriate, has been proposed to lessen the anticipated effects. Meetings have also been held to help to clarify issues. The intention is to continue with this dialogue with a view to dealing with objectors' concerns. Where necessary, Centro will enter into agreements to ensure that objectors' interests are protected.

13.1.4 The statutory undertakers are generally requesting protective provisions to safeguard their undertakings. These are being dealt with in line with precedents set on other schemes.

### **13.2 General Objection Issues**

13.2.1 It is not possible to categorise the objections made into certain specific categories, as each objection generally raises a number of issues. However there are a series of general themes to the majority of objections. These are set out below, along with the generality of Centro's response to objectors in each case:

### **13.3 Use of Heavy Rail Corridor for Metro with Provision for One Possible Future Track For Heavy Rail Freight Services**

13.3.1 Some objectors are concerned that Metro, in providing for the required freight services will prejudice the introduction of passenger services on the mothballed heavy rail corridor.

13.3.2 Centro has explained the rationale behind the scheme and decisions taken in detailed responses to the points of objection raised by each objector.

#### **13.4 Access to Properties**

13.4.1 Some objectors are concerned that they will lose the ability to access their property, for servicing etc., along the proposed route whilst the works are in progress. As much of the route is along streets occupied predominantly by retailers and licensed/leisure property, these concerns extend to the ability of customers to reach shops.

13.4.2 Centro recognises the importance of the need to maintain access to properties and has considered this issue in detail. The works proposed have been planned to preserve access at all times where possible. Interference with access will generally only be out of normal business hours, for the minimum amount of time and with notice. A draft CoCP, see section 8.4.12, has also been drawn up. Details of the planned methods of working and the draft CoCP have been explained to objectors, to provide reassurance.

#### **13.5 Effects of Noise, Vibration and Dust Created by the Works and Operation of the Extension**

13.5.1 This concern has been fully assessed in the EIA carried out independently by Centro's environmental consultants, ERM. The results of this assessment have been set out in the ES that accompanied the Order application. This looks at the issues generally, and in relation to specific cases that are considered to be especially vulnerable to the adverse effects of these factors.

13.5.2 Mitigation measures are set out within the ES which shows that they will bring the expected effects down to levels recognised as being acceptable.

13.5.3 The ES also considers the environmental improvements that will be brought about by the scheme. This includes a reduction of noise and airbourne pollution due to less vehicles using the highways along the alignment of the scheme.

#### **13.6 Acquisition of Land**

13.6.1 Certain landowners are concerned about the perceived effects of the land acquisition powers sought and the need for land to be acquired. Centro, in designing the scheme, has set to minimise the land required to build and operate Metro. In many cases Centro is endeavouring to assure objectors that land which is required will not be to the detriment of their retained property. An explanation of how the TWA Order powers will be utilised has been provided. Permanent land acquisition will be limited to where it is reasonably required to facilitate the operation of the scheme.

13.6.2 A study was carried out by Centro's TWA engineers prior to the submission of the application for powers under the Transport and Works Act, to consider suitable land to be used as work sites to facilitate the construction of the whole extension. Sites shown within Order limits are therefore the minimum required and essential in order to economically construct the scheme.

### **13.7 Site-Specific Objections by Third Parties**

- 13.7.1 Certain objectors are concerned about the perceived effects of the scheme on specific sites. These include the effect the scheme will have on The Embankment road to the northwest of Merry Hill, altering it by making it a one-way single carriageway for a short section of its length between the commencement / termination of points of Work 14A indicated on Sheet Number 17 of the works plans accompanying the Order. In the light of this proposed change, the landowners Chelsfield Plc are already undertaking highway enhancements around Merry Hill to accommodate future traffic circulation patterns.
- 13.7.2 Site-specific objections have been received in relation to various car parks affected by the scheme. The sites include car parks at Dudley Zoo, Flood Street, The Waterfront and Cottage Street in Brierley Hill. Centro has responded to these objections stating the degree to which the various sites are affected and the mitigation measures proposed.
- 13.7.3 As above, Centro's rationale has been explained as has any proposed mitigation measures and safeguards.

### **13.8 Impact of the Works and Operation of Metro on Canal and Inland Waterway users**

- 13.8.1 Centro has received objections from inland waterway interests and boat owner groups in relation to the perceived effects of the construction and operation of Metro on the canals in the vicinity of the proposed alignment. During the construction of the scheme, the CoCP will govern how works are carried out and the phasing of the works and mitigation measures required. Article 28 (2) of the draft Order also requires any closure of any part of an affected waterway to be minimised.
- 13.8.2 Some of these objections specifically raise concerns regarding the proposed stop at Merry Hill alongside Dudley Canal. Boats are moored in this area and concerns have been raised with regard to noise and other effects. Once again this issue has been considered as part of the work included in the ES.

## APPENDIX 1

### APPLICANT'S LIST OF DOCUMENTS

Centro intends to refer to or put in evidence the documents or parts of documents listed below. These, together with any statement or document served on Centro under rule 7 of the Transport and Works (Inquiries Procedure) Rules 1992, may be inspected free of charge until the date of commencement of the inquiry at the following times and places:

Place	Times
Centro 4 <sup>th</sup> Floor Reception, Centro House 16 Summer Lane, Birmingham B19 3SD	8.45am to 5:15pm on Mondays to Thursdays and 8.45am to 4.45pm on Fridays.
Great Bridge Library, Sheepwash Lane, Great Bridge, Tipton DY4 7JF	9.30am to 1pm, 2pm to 7pm on Mondays and Fridays, 10.30am to 1pm, 2pm to 6pm on Wednesdays, 9.00am to 1pm Saturdays, closed Tuesday and Thursday
Dudley Library, St James Road, Dudley DY1 1HR	9.30am to 7pm on Mondays, Thursdays and Fridays 9am to 7pm Tuesdays and 9am to 5pm Wednesdays and Saturdays
Brierley Hill Library, High Street, Brierley Hill DY5 3ET	9.30am to 7pm on Mondays, 9am to 7pm on Tuesdays and Thursdays, 9am to 5pm on Fridays and Saturdays, closed Wednesday

Any person will also be able where practicable to take copies of any such statements, documents or parts of documents subject to the payment of a reasonable charge, but colour copying will only be available at the offices of Centro mentioned above.

This Statement of Case may be viewed on Centro's web site at [www.centro.org.uk/metrotwa](http://www.centro.org.uk/metrotwa)

## LIST OF DOCUMENTS

<b>Doc. No</b>	<b>Document Name</b>
WBHSoC001	Advantage West Midlands (1999) Creating Advantage
WBHSoC002	Advantage West Midlands (April, 2001) Agenda for Action
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## **APPENDIX 2**

### **PLANS**

Plan 1	West Midlands District Council Boundaries
Plan 2	Proposed Midland Metro Network
Plan 3	Former Midland Metro Network
Plan 4	Route of the scheme