

New Street: New Start

The Birmingham Gateway Project

Birmingham New Street Gateway Project

Reserved Matters Design and Access Statement



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1. Introduction

This Design and Access Statement has been prepared in support of the application for approval of reserved matters for the Birmingham Gateway proposal (centred on improvements to the New Street railway station) permitted under the outline planning consent, application ref 2006/05066/PA in July 2007, as varied by the permission granted on 1 October 2009 under Section 73 of the Town and Country Planning Act (1990) ref 2009/03086/PA on 1 October 2009.

The Section 73 consent allows the variation of conditions to permit phasing of detailed submissions as reserved matters and conditions in respect of two phases of the development – the Gateway project and the development of two tall buildings. The Section 73 consent also included minor amendments to the access arrangements for vehicles and pedestrians to the site.

This Design and Access Statement supports the application for reserved matters in respect of the first phase, the Birmingham Gateway project, the redevelopment of New Street Station and its public realm, including a proposal for the interim development of the public open space to the south of the site in lieu of the tall buildings. Phase 1 is designed to accommodate the operational brief for the station as well as 'future proofing' for the southern development site for the two tall buildings.

[Refer Fig 1 Indicative Masterplan.](#)

This statement details the background to the project, the design process and highlights factors influencing the development of the design subsequent to the outline planning consent in 2007. The report outlines the physical assessments of site and context as well as the wider non-physical aspects of and drivers behind the project.

The statement then develops the assessment of and response to the site, the proposed USE; the AMOUNT of development on the site; the LAYOUT of the development; the SCALE of the development; the LANDSCAPING (PUBLIC REALM) of the development; and the APPEARANCE of the development. Vehicle and transport links and the design response to Inclusive Access are outlined in ACCESS.

2.0 The Design Process

2.1 Project Background

New Street Station is situated at the heart of Birmingham's city centre, and is a primary gateway to the city. It is surrounded by a variety of city districts and mixed urban uses, a fusion of squares, modern shopping arcades, restaurants, museums and galleries. Large areas of the city centre have been redeveloped in the last 15 years, and as such the surrounding urban environment ranges from small-scale heritage buildings to very large and modern residential, and commercial developments.

The current Birmingham New Street Station was opened in 1967 under a very different economic climate to today, designed to accommodate 640 train movements a day, at a time when rail use was in decline and forecast trends were indicating continuing decline. The air rights above the station were sold and a shopping centre, car park and offices built above.

The station opened against an economic background where the Midlands had been an industrial powerhouse with its strength in manufacturing continuing well into the 1970s. Birmingham was building motor vehicles for the World; Birmingham people were proud of the fruits of their labour and this was reflected in the high incidence of car ownership. Post-war, in the rebuilding of the city's infrastructure, City Fathers and driving force City Engineer Herbert Manzoni, highly influenced by the American urban model, shaped the city for the motor vehicle.

By the mid-eighties the course of several recessions had had a significant effect: the city had lost 29% of its employment in the traditional metal-working industries that had given the city its identity and self-confidence. The urban motorways built close-in around the city centre during the economic good times had created tracts of wasteland and were stifling expansion and growth in the city centre. Birmingham had to adapt to a changing economic landscape.

With pressure from the business community, city leaders confronted the need for fundamental change in the city's economy and physical fabric. They drew inspiration again from across the Atlantic looking towards Baltimore for ideas in kick-starting the regional economy and then turned their vision towards repairing the urban fabric. The 'Highbury Initiative' in 1988 has been noted as a defining moment in the history of Birmingham visioning a new city through public and private partnerships and sowing the seeds for regeneration of the city as we know it today.

The city set about renewing its global connections with an international exhibition and conference business facilitated through Birmingham International Airport, a new regional gateway strategically sited at Elmdon

adjacent the National Exhibition Centre on the national motorway network and the main west coast line between London and Birmingham. Urban planning during this period, in the city concentrated on developing distinctive quarters and repairing the city grain.

Major city centre developments followed which included a world class concert hall and new home for the City of Birmingham's Symphony Orchestra - the Brindleyplace development off Broad Street - and the new Bullring shopping centre. Public expectations in terms of urban quality were raised. The most lasting legacies of this period have been the pedestrianisation of the main city centre streets of New Street and High Street, the restoration of physical connections across the city, the radical overhaul of the city's public realm and preparing the framework for the regeneration of areas previously constrained by the concrete collar of the inner ring road.

The promotion of the pedestrian environment as part of the revitalisation of the city centre was accompanied by a concerted effort to improve access within the city centre by all modes of transport. In terms of heavy rail services, projects included the electrification of the principal north-south commuter services, the Cross City Line, and the reopening of Moor Street and Snow Hill Stations.

Together with a growth in the use of the railways nationally, improvements to local services over the 1990's has meant that current passenger movements, particularly during peak periods at New Street have exceeded the design capacity of the existing station. Today, the station sees 1,240 train movements and 140,000 passengers each day, more than twice the number of passengers using the station when it first opened and with a 14 percent growth between 2005 and 2007. With uncertainty over the availability and cost of crude oil, passenger growth is currently forecast to continue to grow by 150% over the next 20 years and expected to continue to increase up to the design year of 2035.

With the significant increase in passenger usage has come overcrowding at concourse and platform levels offering a poor passenger environment and reduced level of service. Passengers travelling through at platform level are presented with a dismal city image, and for visitors to the city the arrival experience through a tired shopping centre is both unwelcoming and confusing.

The redevelopment of the station to meet current and future demand has been under consideration for some time. In October 2002, Network Rail took over the running of Britain's rail infrastructure with the responsibility for running, maintaining, and developing Britain's rail infrastructure and the seventeen major stations of which Birmingham New Street is part of their major station portfolio. Network Rail inherited a tired infrastructure that had been starved of investment for many years. With New Street they inherited a tired building that was working beyond capacity and requiring extensive remodelling to meet future demand.

Network Rail first commissioned a Station Capacity Enhancement Report in 2003 and this proposal has been extended to include a wider regeneration of the site. On the completion of the 2003 Capacity Report, Network Rail sought the views of Birmingham City Council, Advantage West Midlands and Centro (its funding partners) on the proposed changes. Strategic planning work together with public opinion and pressures from the local business community challenged the scope of the report. The wider opportunity has been under development since 2005 with the submission of an outline planning application in 2006.

The permeability, visual appearance and image of the station and its immediate environs had become a major constraint upon the ongoing regeneration of the city centre both economically and physically. Its location in the city and physical configuration has increased the isolation of key development opportunities to the south and east of the centre. The scheme was felt not to reflect the wider city and regional brief and a broader transportation and regeneration project involving the key stakeholders was established to address gateway aspirations in a strategic way.

These broader aspirations are being led by the funding partners and key stakeholders and include improved connectivity between the station, city and region, and multi-modal interconnections within the city and regional transport infrastructure. The project which includes extensive remodelling of the existing station is perceived as a critical building block in the economic regeneration of more remote parts of the city, particularly to the south of the station. There are high aspirations across both public and private sectors for a landmark Gateway building to serve Birmingham and the West Midlands conurbation.

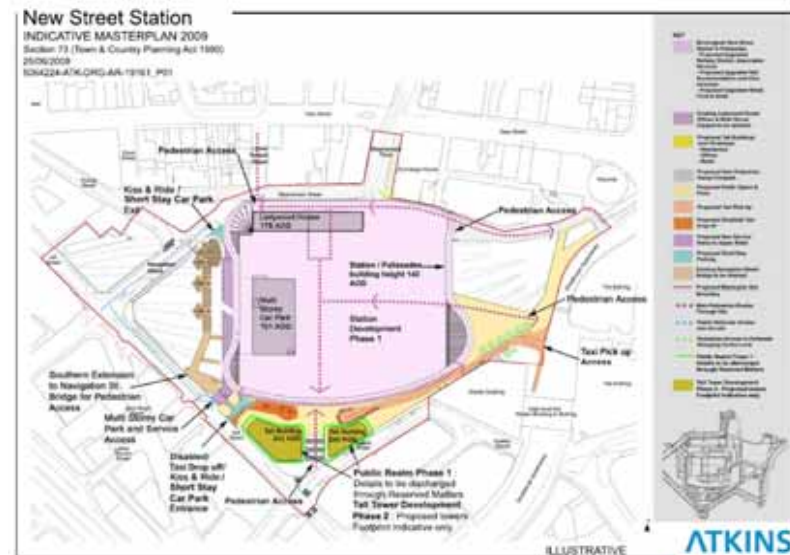


Fig. 1 Indicative Masterplan

2.2 Birmingham Gateway

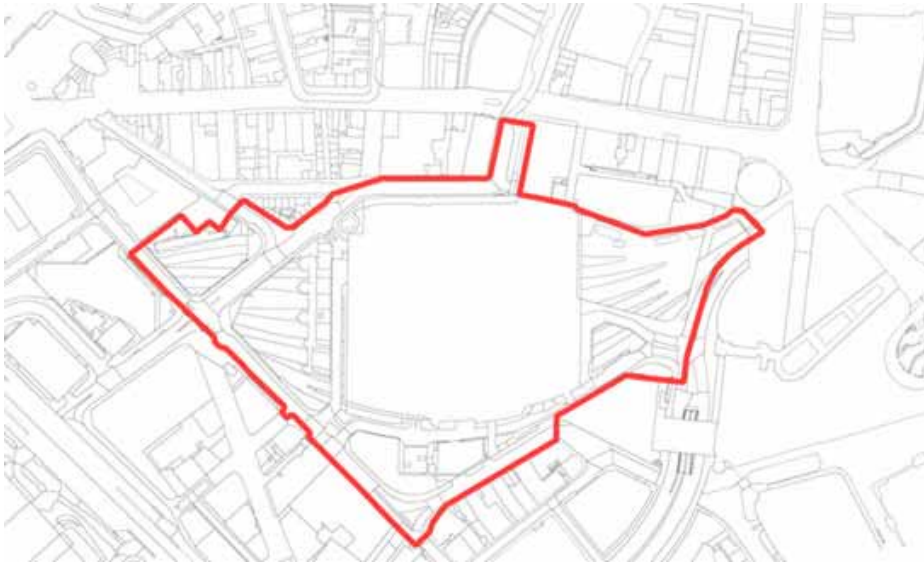


Fig. 2 Site plan

Birmingham New Street Station is the one of the busiest rail interchanges in Europe, serving over 40 million people each year and over 80% of the daily total rail services to Birmingham. The station is the hub of the local, regional and national rail network in the West Midlands conurbation and region.

Network Rail holds the freehold to the New Street Station site including the buildings over the station and within the property boundary as identified in Fig 2. Site Plan. Network Rail is involved as key project stakeholder and as owner of the station building and has a responsibility to ensure smooth running of the operational railway. Because Birmingham New Street Station is of local, regional and strategic significance Network Rail is in close partnership with the Department of Transport, Birmingham City Council, Advantage West Midlands and Centro.

Birmingham City Council is the largest local authority in the country serving a population of one million people. It plays a key role in ensuring the continuing regeneration of Birmingham and the prosperity of the city. The improvement of New Street station is seen as vital to the future development of both city and region.

Advantage West Midlands (AWM) was established in 1999 by the Government and is the Regional Development Agency for the west Midlands. It works with a range of public sector partners, voluntary and community organisations and the private sector to develop strategies and support projects that sustain and develop the West Midlands economy. AWM's main objectives are to further economic development and regeneration, to promote employment and within the project it is also promoting a sustainable approach to the redevelopment.

Centro is publicly funded and has responsibility for promoting and developing all forms of transport in the West Midlands. Policy is set by elected members of the West Midlands Passenger Transport Authority and although it does not manage train operations has achieved significant growth in rail passenger numbers by encouraging new timetables and improved levels of services for passengers.

The operational design brief for the project includes the objectives to improve passenger capacity, enhance public, operational, and retail areas in the station and to upgrade the 1960s station to twenty first century standards. Key to the brief is the enhancement of the passenger experience and level of service, with the view to improving existing access arrangements for all sectors of the community. In addition to the requirements of Network Rail, the Gateway design addresses stakeholder objectives and aspirations for improved connectivity and a gateway building of iconic standing.

The evolution of the project to September 2006 and the draft business case is detailed in the supporting Design and Access Statement (August 2006) to the Outline Planning Application. With outline planning consent in July 2007, aspirations for connectivity with the city were challenged further and feasibility work in respect of the extension of the Navigation Street footbridge to the south, and an additional entrance to the east were initiated.

The feasibility work in respect of the eastern entrance involved a high-level review of access to platforms and reassessment of the operational management of passengers at concourse. The east-west orientation of the platforms requires a north-south dispersal bridge access arrangement to platforms from concourse. The October 2007 study was a defining moment in the current plan with the development of the three passenger lounges at concourse level. The western lounge serves all 12 platforms and provides for interchange. The eastern entrance splits the eastern concourse in two between west coast main-line in the north and regional /commuter traffic in the south.

The government announced funding for the Birmingham Gateway project in February 2008. The lead consultant team and delivery partner were appointed mid 2008 to develop the strategic objectives at a detailed design level for construction.

Design aspirations were also raised and a RIBA competition was launched in January 2008, to find an internationally renowned architect to deliver an iconic gateway for Birmingham. The architect, Foreign Office Architects, was appointed in September 2008 to develop the architectural concept for the Gateway project.

The 2007 feasibility study was developed to a GRIP 4 single option scheme design in November 2008 with Foreign Office Architects reporting in early 2009. The single option work included a high level validation of the capability of the existing building both structurally and of its services, assessments of operational capability, pedestrian capacity modelling, maintenance strategies and environmental assessments.

Development of the Birmingham Gateway project has been the result of a lengthy design process, incorporating the views, needs and aspirations of a range of stakeholders, including the funding bodies, statutory consultees, interest groups rail passengers and the general public.

Prior to the submission of the outline planning application, consultation on the project was undertaken as part of the design process on an ongoing basis dating back to 2003 with a number of stakeholders including the Train Operating Companies, British Transport Police and Birmingham City Council's Transport Strategy and Highways. These consultations were led by Network Rail and supported by Birmingham City Council.

Consultation also included local focus groups and forums, Access Committee for Birmingham, Birmingham Chamber of Commerce, Birmingham Forward, City Centre Retail Partnership, RNIB, Black and Asian Business Group, Passenger Focus, Birmingham City Council Ladywood Ward Committee and City Neighbourhood Forum. A series of public meetings were held with the tenants of the Pallasades shopping centre, the residents of Stephenson Tower and the Taxi Operators' Association.

Design development continued through 2009 in consultation with key stakeholders on the station, including partners, Network Rail operational and commercial teams, the Train Operating Companies, British Transport Police, West Midlands Fire Service and access focus groups. Consultation with the tenants of the Pallasades Shopping Centre and Stephenson Tower has been challenged through the processes of the Compulsory Purchase Order.

The design team have been engaging with key stakeholders to refine the outline scheme through the identification of key issues, constraints and opportunities with the proposal reviewed by the Commission for Architecture and Built Environment (CABE) in September 2009 with encouraging comment.

Formal public consultation took place in October 2009 consisting of an information stand in the station, media advertising, promotion of the interactive "New Street New Start" web-site, and distribution of

comment cards with a postal return slip. A full commentary on consultation and public engagement is contained within the Statement of Consultation.

2.3 Site Appraisal

The 2006 Design and Access Statement appraised the station's historical and urban context with a full analysis of the poor performance of the existing station in terms of a piece of architecture and as a public building in its tenuous connection with the city, the quality and legibility of its entrances and their relationship to key areas of the city.

The existing building section takes advantage of the topography of the site presenting two levels of retail to the city in the north and tucking the hinterland service areas underneath the concourse level to the south adjacent the platforms (Refer fig. 14). The main entrance and vehicular access is from the east connecting directly to the inner ring road. Access to the service areas of the Pallasades shopping centre are from the west via access ramps, consideration being given at the strategic level to the segregation of traffic.

However at the detailed level the station fails to make effective connections for people to the city to the north and west of the station. This can probably be explained by the focus at the time of planning on the development of the inner ring road. Areas to the north-west of the city were in manufacturing decline, the redevelopment of areas like Brindleyplace being kick-started by the Convention Centre project in the late 1980s. The main access to the station from the civic, commercial and retail areas to the north was directed through the Pallasades shopping centre. A multi-storey car park was provided for shoppers visiting the Pallasades by car.

The design of 1960s station did not consider at street level the route around the building, particularly in the north-east corner. With the level difference north-south across the site, the railway tracks in this corner about a retaining wall holding up the backs of buildings fronting New Street. The 1960s reinforced concrete frame structure runs along the old Victorian retaining wall to maximise the capacity at platform but leaves little room for a route around this corner at street level. In this proposal a pedestrian route is achieved by the demolition of an existing public house at concourse level and a cantilevered ramp, known in the Gateway project as the Odeon Ramp, is proposed over Platform 1.

[Refer Fig. 7](#)

A new entrance to the concourse from Stephenson Street is provided in the Gateway project renewing the station's connections with the city's Victorian grain. The cladding treatment to this northern elevation preserves the scale of the Stephenson Street, replacing the 1960s framed elevation with reflections of the more ornamented buildings in the conservation area opposite. At street level the existing retail elements

are retained but refaced to present an active street frontage. A media eye feature gives legibility to the new entrance from both Navigation Street and Lower Temple Street



Fig. 3 Existing view Stephenson Street



Fig. 5 Existing view from Station Street



Fig. 4 Proposed view Stephenson Street

The spaghetti of access ramps to the west of the station is cloaked in a seamless flow of the stainless steel cladding rising up to wrap the dated multi-storey car park, giving a much improved aspect of the station from the tall buildings to the north-west of the site. Access to the vehicular ramps from the south-east will be defined between the new southern entrance to Navigation Street footbridge and the sculpted base to the new southern plaza.

Refer Fig. 8.

Working around to Station Street from Hill Street, the siting of the existing service area to the station in the southern hinterland takes advantage of the topography of the site. However the architectural handling of the 1960s elevations is brutal and unsympathetic to the scale and grain of the smaller buildings to the south side of Hill Street. The existing general arrangement fails to take advantage of the elevated southern aspect across the city.



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Fig. 6 Proposed view from Station Street (Southern Entrance)

The Gateway proposal articulates between the mass of the station and the southern hinterland area with a new area of public realm that provides opportunity for activity at station concourse level with a vantage point over the south of the city. A new set of external steps of a grand proportion provides access from street level to the plaza as well as improving sightlines between station and street.

To the east the entrance to the station is given improved legibility. A new public space acts as a forecourt to the station, creating a more pedestrian friendly environment between the station and the new Bullring shopping centre.



Fig. 7 Odeon Ramp view towards station



Fig. 8 Proposed view of south-west corner of station



3.0 Design

3.1 Use

The outline permission grants the following, with all matters reserved except for access:

“Outline planning application, including the approval of access, for the major refurbishment and associated development of New Street Station and adjoining land, in connection with alterations and reconfiguration of the station facilities and comprising changes to the Pallasades Shopping Centre, the demolition of Stephenson’s Tower (Use Class C3), construction of two tall buildings, associated highway works, public spaces and infrastructure works (including uses A1 (retail), A3 (restaurants and cafes), A4 (drinking establishments), A5 (hot food take-away), A2 (financial and professional services), B1 (business uses including offices), C3 (residential), of the Use Classes Order (England) April 2005.”

A subsequent application (ref: 2009/03086/PA) made under Section 73 of the Town and Country Planning Act (1990) to allow the reserved matters and conditions attached to the original outline application to be discharged on a phased basis was approved on 1 October 2009, granting the following:

“Application made under S73 of the Town and Country Planning Act 1990 to vary conditions attached to outline planning permission C/05066/06/OUT to allow the development to be progressed in phases, and minor amendments including: New Eastern access and alterations to the passenger drop-off/short stay car park access.”

This planning permission permits the submission of detailed reserved matters and material required in order to discharge conditions in separate phases, as such allowing the redevelopment of the station to be brought forward, de-coupling these works from the development of the two tall buildings. The tall buildings will be delivered in a separate phase, and subject to a separate application for approval of detailed reserved matters.

The above planning permission also deals with minor amendments to the access arrangements made to the station, which have been introduced as the detailed design has progressed in response to passenger and stakeholder needs.

The headline project design objectives of Network Rail and the Stakeholders include:

- Passenger capacity to meet both short term and forecast longer term needs
- Improved passenger facilities and the environment within the station – maximising daylight, etc
- Improve access to/from/in the station for all multi-modal users
- Improve pedestrian access routes to/from across the City
- Transform the appearance of the station and the facilities it offers

The design brief has included an ongoing dialogue involving all key project stakeholders and is shaped by a number of specific factors:

- The need to maintain operational continuity at all times
- The need to accommodate existing tenancies and leases
- The need to acknowledge overall project commercial responsibility and public accountability

The redevelopment of the station will see the significant upgrade of the existing building infrastructure. The station building and Pallasades shopping centre above are retained but upgraded to meet project objectives. Ladywood House is retained, although it is modified at lower levels to improve the northern entry to the station and at basement levels to accommodate operational areas displaced in improvement works to concourse areas of the station.

A level by level overview of the masterplan proposal, sufficient to outline key site strategies and uses for reserved matters approval:

3.1.1 Sub Platform Level

Minor modifications to the east and western subways to maintain services access to and to enhance emergency egress from platforms.

[Refer Drawing 5064224-ATK-DRG-PL-00022](#)

3.1.2 Platform Level

The accessibility and overall environment of the platforms will be improved. Platforms will be opened up and will include 21 new vertical circulation links, including staircases, 26 escalators and 14 lifts to the concourse above. Platform capacity, passenger movement and train operational flexibility will be enhanced to meet future demands. The scheme includes for in the infilling of the existing west dock for additional capacity on Platform 12 b and future proofing for and extension to the existing east dock.

[Refer Drawing 5064224-ATK-DRG-PL-00023](#)

To the south of the station platforms, the southern hinterland will be remodelled. Stephenson’s Tower will be demolished and a new suspended concrete deck installed to provide a new concourse level plaza above whilst enclosing station servicing, plant and operational accommodation facilities below. New retail

units (513 sq. m.) will be provided along Hill Street and Station Street, enlivening the street frontages and enhancing the quality of the public domain.

3.1.3 Concourse Level

The existing Concourse will be enlarged by extending into the lower levels of the NCP car park to the west of the site and extensively remodelled. The new public concourse will play an important role in improving accessibility of the station facilities and their integration with the wider city environment.

The public concourse will be flanked either sides by paid concourses and retail units which will be primarily taken up by existing concessions within the station. The concourse will be naturally lit from above via a new atrium penetration connecting station concourse and Pallasades shopping centre.

Retail units will be located around the periphery of the station on the northern, western and eastern sides to activate adjoining streetscape. A new area of retail will be available in an extension to the south-east of the station with a direct interface with the new eastern square ideal for a lively restaurant/ café use. The total area of retail provided at this level is 555 m² existing retail and 3227 m² proposed retail.

Operational accommodation is located for train operators in the north-east corner and a new reception and station management suite adjacent the southern entrance. Public facilities to the concourse are to be upgraded and will include left luggage facilities, a multi-faith prayer room and fully inclusive conveniences. [Refer Drawing 5064224-ATK-DRG-PL-00025](#)

3.1.4 Concourse Mezzanine Level

A mezzanine level is provided in parts over the concourse to accommodate station plant areas and operational accommodation for staff.

Part of the car park floor plate is retained to the west to accommodate the new short stay car park for the station. 38 spaces will be provided for cars together with facilities for 5 motorcycles (marked area rather than individually marked spaces). 9 'kiss and ride' spaces and 4 drop off spaces for customers with disabilities will be provided to the south-west of the station alongside the taxi-drop off area. This facility is adjacent the southern entrance and special assistance reception point at concourse level in the refurbished station. [Refer Drawing 5064224-ATK-DRG-PL-00026](#)

3.1.5 Lower Retail Level (Pallasades shopping centre)

The central retail zone will be demolished to create a new void through the building. The void will form a central atrium space providing natural light to the shopping centre and station concourse below and will

have two new escalators and a pair of lifts connecting the two levels. The existing ramp linkage to New Street and Corporation Street will be resurfaced and the northern entry into the Pallasades shopping centre will have a direct sight-line to the central atrium. A new circulation core will provide access from the north-west corner.

The existing bridge link from the south-east corner of the Pallasades to the Bullring is to be retained. The existing balcony that runs round the building at this level will be retained for emergency evacuation from the Pallasades shopping centre. This balcony gives safe access to stairs which exit to street level and the new public realm around the station. [Refer Drawing 5064224-ATK-DRG-PL-00027](#)

3.1.6 Upper Retail Level

The Upper Retail Level will remain largely unchanged with exception of the removal of the central retail unit to create the new atrium void. Existing clerestory lights to Pallasades mall areas will be remodelled to accommodate an updated fire strategy. Service access will be via the existing ramp from Hill Street with a right of access maintained to Exchange House in the north-east corner [Refer Drawing 5064224-ATK-DRG-PL-00028](#)

3.1.7 Roof

The roof will remain largely unchanged except for areas that will be strengthened to accommodate plant and the equipment rail for cleaning the new façade. Areas of plant will be accommodated behind the façade upstand. [Refer Drawing 5064224-ATK-DRG-PL-00029](#)

3.1.8 Multi-storey car park

The existing car park located on the western side of the station remains and provides public car parking (approximately 500 spaces) for the shopping centre and Ladywood House.

3.1.9 Taxi drop off

The existing taxi drop off and pick up locations will be removed and relocated to accommodate the new eastern access and south-eastern extension. New taxi drop-off and pick-up will be located to the south of the station at concourse level with access to the drop-off from Hill Street and Pick-up from Smallbrook Queensway. The segregated facilities will be a significant improvement to the facility.

3.1.10 Navigation Street footbridge

The footbridge will be retained and extended with a new entrance from the south with additional stairs to access Platforms 1 and 12. It will also serve as a fire-fighting access to platforms. It is to be noted that

these proposals do not form part of the Reserved Matters application and are to be progressed under a separate “No prior approval application”.

3.1.11 Tall Buildings

The proposed sites for the two tall building will be to the south of the station, each site flanking the new southern staircase to the east and west. These proposals do not form part of this Reserved Matters application. However it is to be noted that although the exact size and shape of the tall building footprints is not known and cannot yet be determined considerations in respect of the structure and foundations have been taken into account in the remodelling and planning of the southern hinterland.

Refer Fig. 1 Indicative Masterplan & Fig 9 Phase 2 Proposed southern site for tall buildings

An interim public realm proposal for the Southern Plaza also is included in this design statement for consideration as part of the Reserved Matters submission.

Refer Fig. 10



Fig. 9 Phase 2 Proposed southern site for tall buildings



Fig. 10 Southern Plaza Proposed Interim Public Realm

3.2 Amount of Development

The proposed changes to the internal environment and public realm will not result in a significant net change in the amount of development on the site. This Design and Access Statement articulates the amount of proposed development within the application boundary. This includes detailed descriptions of the proposed changes at each level within the existing station building and Pallasades shopping centre above it.

To the south of the station the existing residential tower Stephenson House (20 storeys) will be demolished to make way for a future phase which will comprise two tall buildings as a landmark gateway to the new southern entrance of the station. The tall buildings development does not form part of these proposals and will be subject to a separate Reserved Matters application.

The proposed phasing of the Gateway scheme will result in the interim development of public open space in lieu of the tall buildings, designed to be consistent with the proposed landscaping and public realm strategy. The proposed changes to the internal environment and public realm will not result in a significant net change in the amount of development on the site.

3.3 Layout

3.3.1 Existing

The application site (contained within the red line application boundary) is located within the core of Birmingham city centre. The site comprises an area of approximately 7.3 hectares, of that approximately 4.5 hectares is built development.

Refer Fig. 2 Site Plan

The proposed development area is currently occupied by New Street Station, the Pallasades shopping centre, the NCP multi-storey car park, Stephenson Tower (a residential tower block), and Ladywood House (an office block). These existing buildings contain a mix of uses including retail, offices, food and drink, residential flats and car parking.



Fig. 11 Birmingham New Street Station – massing of building blocks

The existing buildings on the site vary in form, height and scale, but are all in today's terms considered to be of generally low architectural quality and none are statutorily or locally listed. The station buildings,

Pallasades shopping centre and NCP car park are relatively low rise but of significant massing; their block form making a negative contribution to the City Centre.

Refer Fig. 11 Massing of Building Blocks

Stephenson Tower (20 storeys) and Ladywood House (9 storeys above the height of the Pallasades shopping centre roofline) provide variation to the built environment but contribute little to the quality of the wider City Centre.

The station is located to the south of the Colmore Row and Environs Conservation Area. It is bounded by Stephenson Street and Navigation Street to the north, Hill Street to the west, Station Street to the south and Smallbrook Queensway to the east. To the south Queens Drive, built on an elevated deck at concourse level, provides access from Hill Street for private cars to the multi-storey car parks and for taxis to the eastern entrance and passenger drop-off and pick-up areas.

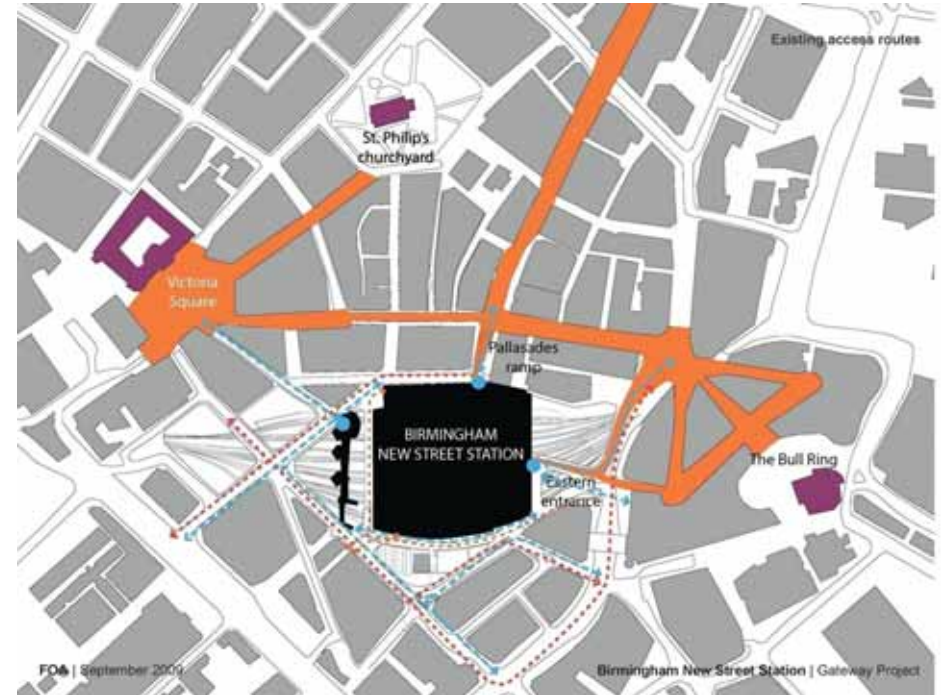


Fig. 12 Birmingham New Street existing linkages to other parts of the city

In terms of wider orientation to the city, the civic and convention areas are to the north-west of the station. The core retail comprises New Street, Corporation Street, High Street and their adjoining streets to the north together with the new Bullring shopping centre to the east. Further east, lies the 127 acre "Eastside" regeneration area with prime redevelopment sites including Optima lying to the south. The iconic Rotunda building towers above the station to the east.

The station is set into the southern slope of a ridge of Bromsgrove sandstone that runs east-west through the city, a topography that shapes the street pattern of central Birmingham. The existing concourse is approximately 1.2m below Stephenson Street but at grade with its main entrance to the east and concourse providing access to platforms orientated north-south. The main concourse is located to the east of the site with private NCP car parking located at the same level to the west. The station at platform level is sub-surface with platforms running west-east.

Refer Fig. 14 Existing section

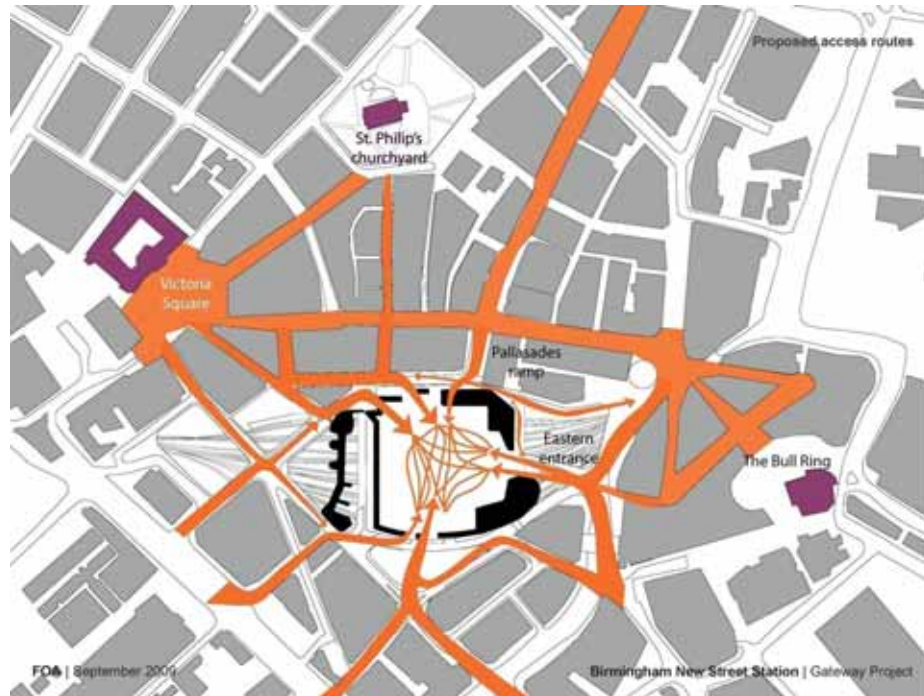


Fig. 13 Birmingham New Street proposed linkages to other parts of the city

Access for pedestrians to and from the main civic, commercial and retail areas of the city to the north of the station is currently provided by a pedestrian ramp from New Street, a tortuous route through the Pallasades shopping centre and via a vertical circulation core to the station concourse in the east. Commuters prefer to access the platforms directly from the northern entrance of Navigation Bridge which was built for fire evacuation purposes in the 1990s as it provides a more direct access to Platforms 2-11.

Operational and service access to the station is at platform level, currently via the southern hinterland which is at grade with Station Street to the south of the site. Service access to the Pallasades shopping centre is provided via a vehicular ramp to Upper Retail level. This ramp also provides access to the upper levels of Exchange House to the north of the station. This service ramp will remain as a means of access to this Upper Retail service level in the redeveloped scheme.



Fig. 14 Existing section through Birmingham New Street indicating topography and access

3.3.2 Proposed

It is proposed that the redevelopment will take place in two phases. The first phase comprises the redevelopment of the station and the second and separate phase will include the development of two tall buildings to the south of the station. This Design and Access Statement details the first phase of development. The impact of the phasing of the development proposals will not impact on the layout of the station and Pallasades shopping centre.

South of the station, the phasing will result in an interim alteration to the layout of the public realm to the south of the station. This part of the site will be laid out to create an area of public realm spilling out of the

new southern entrance and flanking a new feature staircase down from the concourse deck to Station Street. The masterplan layout of the development including the locations of the two tall buildings and the interim public realm is shown on the Masterplan drawing.

[Refer Fig 1 Indicative Masterplan](#)

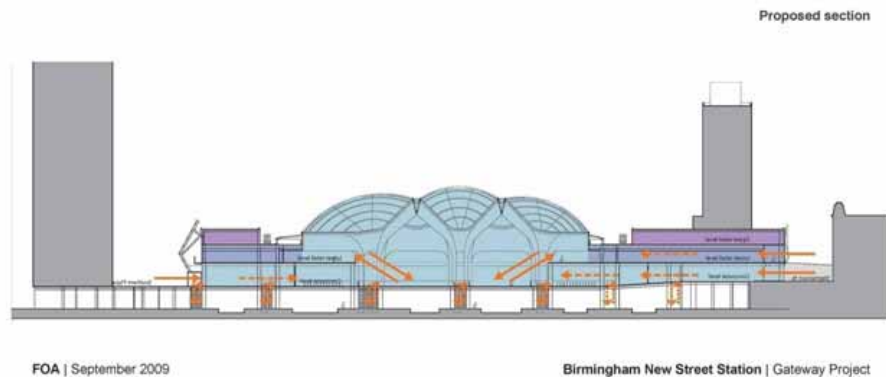


Fig. 15 Proposed section through Birmingham New Street indicating topography and access

The existing station concourse is single facing in terms of accessibility and calculated for substantially lower traffic loads. Over time, the location of the station in the city centre has demanded the development of more interfaces with the city centre, resulting in the high usage of Navigation Street Bridge and of the northern ramp but this has been insufficient to turn the envelope of the station into an active urban interface, which is one of the main targets of the redevelopment project.

Likewise, the typology of the urban railway terminal has been evolving from a purely transport-driven infrastructure, to one which provides retail and leisure facilities for passengers and public alike, to become a centre of urban activity. Within the physical constraints existing in the project, the design and arrangement of the new concourse focuses on a central public atrium area, a new public space in Birmingham, accessible from all sides of the Station except from the West, where the voids over the railway tracks do not allow for access.

It is proposed that the new station concourse is laid out east-west across the footprint of the existing station concourse and adjoining NCP car park. At the centre of the new concourse will be a soaring new

atrium space bringing in natural light to the station concourse and providing a new focus and legibility to the internal planning of the concourse.



Fig 16 Proposed new atrium at heart of concourse

The new Atrium, cut into the fabric of the existing building will become the new core of the public realm, located in the centre of the Station mass, lighting the concourse system. This central space connects the new East, South, North and North-West entrances to the station through a series of concourse branches that structure the primary system of public access into the concourse.

[Refer Fig 16 Proposed Atrium.](#)

The Atrium will provide an orientation point for all users of the station and shopping centre above. It will provide strong visual connectivity between the two. The station Customer Information System boards will be located in this area, directing passengers to their waiting lounge and platform. The station's new Ticket Office will have a prominent location in the concourse and accessed directly from the atrium space. From this urban square, visitors to the city will be orientated to their destinations.

From this primary system of open concourse, a circular loop of access to the ticketed areas of the concourse with a series of turnstiles regulate access into the three waiting lounges and vertical circulation cores which lead to the platforms. The overlap between the radial branches of the concourse towards the new entrances into the building form a system that is future-proofed and will work both in the current system of paid/unpaid concourses, or with future advances in technology the eventual disappearance of the turnstiles as a control device.



Fig. 17 Concourse Activities

There are three passenger lounges, the western lounge serves all 12 platforms and will function also as a primary lounge for interchange, the north-east lounge provides access to and from the eastern 'a' end of Platforms 1-5, and the south-eastern lounge to platforms 6-12. The lounges will be supported by retail and catering facilities for passenger convenience. These offers will be located to the periphery of the main concourse space to maintain the sightlines across the atrium and main public space.

Refer Fig 17 Concourse Activities.

The new concourse is designed with forecast passenger flow origins and destinations, enabling north-south and east-west movements across the site and the city centre. In addition, the design enables efficient multi-modal interchange for the planned Metro extension, improved management of taxis,

facilitates interchange with bus services and segregated provision for private cars. Access to, from, in and around the station is improved for all users including those with impaired mobility.



Fig. 18 Axonometric view of Concourse plan viewed from south-west

The new concourse provides improved connectivity to the Pallasades Shopping Centre above and improved accessibility to platform level through additional pedestrian routes. The existing pedestrian link between the Pallasades and the Bullring is retained and a new north-west entrance is created to improve access. Urban connectivity is improved with new public squares to the south and east of the station.

Refer Fig. 19 Station concourse linkages to Pallasades shopping centre.

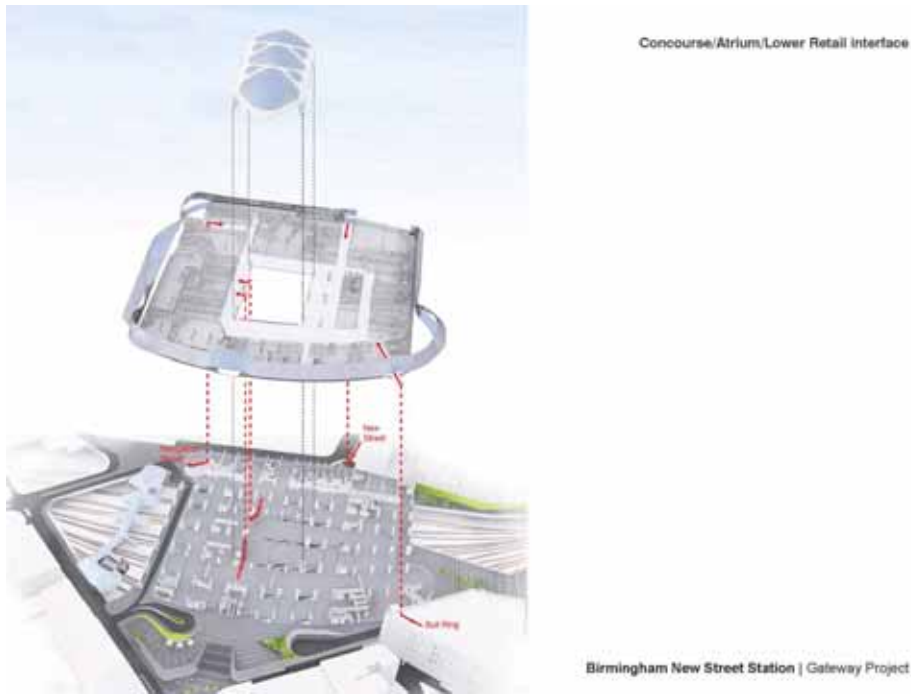


Fig. 19 Station concourse linkages to Pallasades shopping centre

Vehicular access to the station is provided via a new passenger drop-off and pick-up lane running south to north along the side of the new concourse. This also provides access to a new short stay car-park for the station located at an intermediate level between the station concourse and the shopping centre. The design also provides for additional facilities for cyclists using the station. Through improved interchange and accessibility the design facilitates modal shift to rail and other forms of public transport and will help to reduce highway congestion and improve the wider performance of the transport system.

The project provides for an extension to the south of the existing Navigation Street Bridge together with a new entrance, including new staircases to Platforms 1, 10, 11 and 12, improving accessibility from the south of the city. Although Navigation Street Bridge is currently used by commuters as a convenient route to the platforms, pedestrian flow modelling is showing that the concourse performs well to 2035 and provides a strong alternative for commuters alleviating current congestion on the bridge. This element of the work is to be progressed under a separate "No prior approval application".

The station is currently served by 12 platforms which provide capacity within their length for access up to 25 trains – 'a' platforms at the eastern end and 'b' platforms at the western end. Each platform is served by three vertical circulation cores from the waiting lounges at concourse level, including two sets of seven lifts, one serving the eastern end and the second set the western end, and 26 new escalators.

Refer Fig 20 Arrangement of Vertical Cores between concourse and Platform.

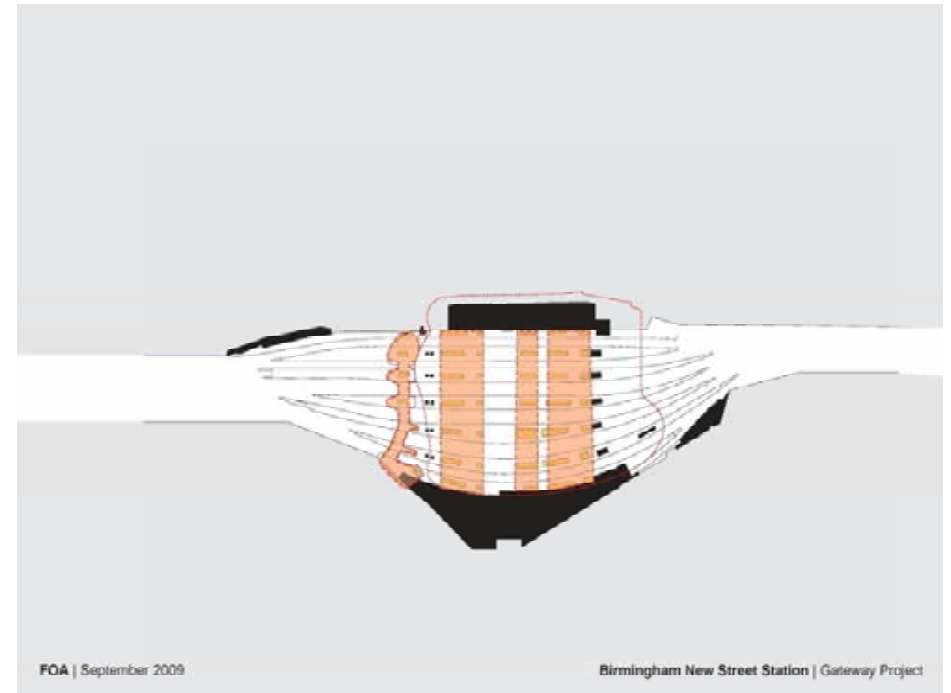


Fig 20 Arrangement of Vertical Cores from Concourse to Platform

Key operational staff will be accommodated at concourse level within the Station Management suite located adjacent the new Southern entrance. The suite will also provide a new reception desk facility for mobility impaired passengers to the station and network. A mezzanine level over part of the concourse will provide facilities for new plant and operational accommodation and offices for the Train Operating Companies.

The existing southern hinterland will be remodelled to provide an active retail frontage to Hill and Station Streets on either side of the new southern steps. Behind the scenes the area will continue as a facility for service access to the station at platform level and accommodation for operational staff. It will also

accommodate plant areas and a facility for waste management. The existing access gate to this area will be re-sited to accommodate the southern steps. The master planning will prepare for the sites for the two tall towers which will flank the southern steps.

Refer Fig 21 Southern plaza and hinterland area.



Fig. 21 The southern plaza and hinterland area with towers

The advertising strategy at Birmingham New Street Station is being carefully developed at both Platform and Concourse levels. Currently advertising at the station has been located wherever space is available, with different sizes and methods of display, without full consideration to pedestrian flow or optimal viewing potential.

In the new design, advertising will be considered in conjunction with entrances and exits, primary and secondary pedestrian flow routes, paid lounges and dwell areas. Careful consideration will be given to where advertising can be located, so it doesn't confuse or conflict with way finding and emergency signage, strategically placed not just 'fitted in' where possible.

Methods of display will also be coordinated. Future proofing as much as possible by using digital media and providing power points within advertising locations that may not 'currently' be digital so it can be replaced by digital screens at a later date.

Digital screens are to be located at longer dwell areas and high footfall areas. These allow complete flexibility with moving images and animated content and can be tailored to the mood and mindset of the local area, ideal for advertising and promotional events within Birmingham.

Overall the advertising at Birmingham New Street will be coordinated and strategically planned, early on in the project rather than an 'after thought', this will produce a clean and carefully considered strategy complementing the design instead of detracting from it.

The environmental impacts of the project are being managed through a project Environmental Management Plan. For the design stage this consists of a stakeholder driven Environmental Sustainability Strategy, which defines the design environmental sustainability objectives, and a Sustainability Schedule, which defines the specific design targets, as directed by the objectives. A linking document has been produced to detail how the stakeholder requirements and the sustainability objectives are addressed in the Schedule. The Schedule has been developed using BREEAM as the framework and to inform the technical content. Carbon emissions and energy use are both specified as specific performance criteria in BREEAM, both of which are included in the Schedule.

In order to contribute to both the BREEAM assessment and the wider sustainability requirements of the scheme, the current design proposals include:

- Promotion of the use of natural ventilation to the atrium
- A natural ventilation strategy for the smoke ventilation
- Facilitation of the strategy of grey water harvesting by the drainage to the atrium
- Enhancement of natural daylight and extensive use of low energy lighting.
- Good lighting control to limit the unnecessary use of lighting in unoccupied areas
- The use of materials with low embodied energy such as stainless steel produced from recycled steel stocks and recycled aggregates from the demolition of parts of the existing station.

3.4 Scale

New Street Station and the Pallasades shopping centre with Ladywood House and multi-storey car park are a collection of large scale building blocks in the heart of Birmingham city. On the map the complex occupies a large proportion of the city and appears as a large block within a much finer urban grain of plot sizes and city streets. Physically the building complex is a fortress like block impenetrable to the public and remote from city life.

The opening up of the concourse with a new internal public square will draw the city closer and bring the station nearer to city activity. The new north-south and east-west streets will help repair the old city grain

and remap this area of the city. As happened with the Bullring, Birmingham people will be able to rediscover an area of city grain lost in the 1960s to the motorcar and comprehensive reconstruction.

The existing scale of the building blocks is a product of the 1960s. The challenge has been very much how to redress the size of the station and Pallasades building structure to be more acceptable visually in scale to the city. The design proposes a re-cladding of the existing building with a reflective mirror polished stainless steel. The refurbishment of Ladywood House does not form part of this project and the building will remain as a separately articulated building block above the shopping centre.

The concept aims to spark a new public awareness of the station's setting in the city. The warping reflective surface producing reflections of the changing sky and light, neighbouring buildings, activity in the adjacent streets and new station plazas, crowds of passengers, and the trains arriving and departing from the lower platform level. A cloak of stainless steel giving the old building a new dynamic form, but agreeable in size by taking on the more familiar scale of buildings and objects adjacent.

The shape of the cladding to the north preserves the proportions and intimate nature of Stephenson Street and to the east and south with a more expansive public realm adopts a more fluid form, punctuated by two large eyes at the entrances. To the west the cladding shapes up to cloak the mess of vehicular ramps and multi-storey car parks. The scale of this façade is broken up by the undulating treatment of Navigation Street footbridge at street level.

At the junction of Hill Street and Station Street the topography of site and size of building currently combine with menacing effect at street level. Rather than opting for disguising the difficulties of the site, the proposed architectural treatment of the southern hinterland service area plays on a familiar language of the relationship of a citadel to its supporting outcrop. The cornice line aims to provide reassuring sightlines to the station. The converging design from bottom to top of the grand Spanish steps further emphasizes the perspective of the view from street level. Retail units at street level provide an active frontage and further reassurance.

[Refer Figs. 5 and 6 Station Street](#)

[Refer Fig. 22 Southern elevation with steps from Station Street](#)



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[Fig. 22 Southern elevation with steps from Station Street](#)



Each approach and entry to the station will offer a different experience. At the portals to the station the ceiling heights will reduce to frame the entry route before opening out to the internal square emphasizing the scale of the atrium. When first built by the Victorians in 1854 New Street station had a spectacular single arched roof which for 14 years was the largest glazed roof of its age. The size of this new atrium space will restore New Street as an iconic gateway to Birmingham.

3.5 Public Realm

The public realm of the new station is conceived as a continuum with the interior concourse with a similar appearance of paving running throughout these areas. The paving pattern is designed to accentuate the curved shape of the building and to emphasise the convergence of routes under the central atrium of the building.

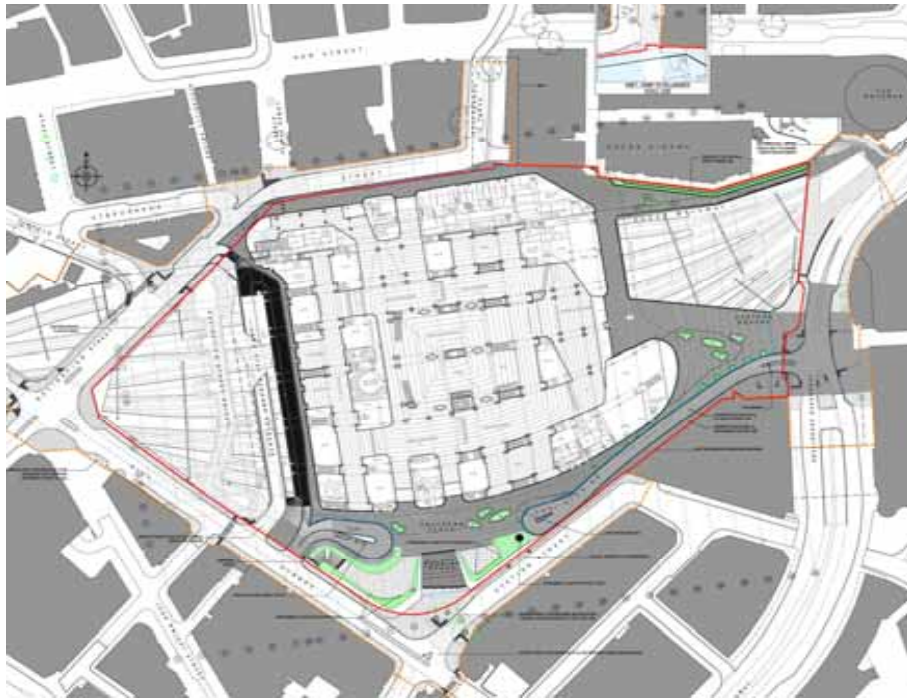


Fig. 23 Concourse and Public Realm Strategy Masterplan

Two main public external spaces will be created as part of the scheme – the Eastern Square and the Southern Plaza. These are major new public spaces for Birmingham city centre and are designed to flow seamlessly into the surrounding public realm of the city. In addition, the other spaces which make up the 'system' of the station public realm are the Odeon walkway which provides a new link in the city centre street network by connecting Stephenson Street to High Street; the North-West corner which interfaces with Stephenson Street and Navigation Street; and the 'Kiss and Ride' drop off which is a partly internal 'street' providing a facility for the public to drop off and pick up passengers by private car and also provides cycle parking for the station.

The Eastern Square will be a new public square facing the Bullring shopping centre, created by infilling the existing void over the station platforms. The square and new eastern access to the station will provide space for pedestrian movement and connectivity to the Bullring shopping centre, and to Moor Street Station. The eastern elevation of the station building will be glazed and house a vibrant mix of retail and food and drink outlets creating an active and social area.



Fig 24 Proposed Eastern Square



To the south, a new area of public realm will flank the grand staircase - the 'Spanish Steps' - opening up the station to Station Street and Hill Street. This Southern Plaza incorporates two new open areas to either side of the top of the steps with generous seating offering opportunities as small auditoria and also the possibility of use as spill out space associated with a food and drink 'kiosk'. These two areas are designed to provide clear views to the 'eye' over the station entrance and also viewing points southwards out into the city. Refer Fig. 25 Southern Plaza



Fig 25 Southern Plaza



Vehicular routes form part of the continuum of paving but are clearly demarcated and positioned to maximise the space for the pedestrian.

In addition to hard paving, soft landscape planting will be incorporated into the scheme. Bespoke raised planters incorporating seating have been designed to complement the station building design and sit above the raised deck of the paved public realm. Planting of these will incorporate trees; shrubs, groundcover, and herbaceous material selected on the basis of their visual appearance including seasonal characteristics, suitability to site conditions, and durability in a people dominated environment and maintainability. In addition a vertical planted element - a green wall - is proposed along the Odeon walkway to the northern edge of the site. This will help to screen buildings to the north and provide a significant landscape feature in this location.

The public realm design incorporates sensitively designed security barrier elements which prevent vehicle access to the station building. The amount and obtrusiveness of these features has been minimised as far as possible. This has been achieved through the combined use of bespoke designed features including reinforced raised planters and wall/sculptural block features together with a minimal use of bollards. All these features follow a coherent design language which is consistent with the scheme as a whole and to a large extent are multi-functional by providing opportunities for informal seating or as planting elements.

The public realm including both hard and soft landscape elements will require a long term management and maintenance strategy to ensure that the features continue to provide a high quality environment and setting for the station building into the future. This strategy will set quality standards and objectives for the following aspects of the public realm:

- Cleansing and litter clearance
- Repair and renewal of hard landscape elements
- Establishment care and replacement of planting elements
- Long term care and replacement of planting elements including periodic checks and reviews by specialists
- Management and maintenance of irrigation systems

For the specialist feature of the green wall, Network Rail will consider if the most appropriate method of long term maintenance would be to enter into an agreement with the supplier of this feature for this service.

The lighting strategy for the public realm is divided into three functional zones:

- Slow-moving vehicular traffic & pedestrians
- Pedestrian only areas used for lingering and meeting
- Pedestrian routes

The technical lighting requirements for the external station areas come from two main sources:

- Network Rail Managed Stations Guide
- BS 5489-1 2003 & BS EN 13201-2 2003

The Network Rail Managed Stations Guide gives limited recommendations for external areas, stipulating 20-40 lux for "station forecourts". The British Standards use a classification system, giving a requirement for 30 lux in areas which are used by traffic and pedestrians, and 20 lux for areas which are used by pedestrians only. It also gives a uniformity requirement of 0.4 for both types of area.

Therefore, the design will be to achieve levels of 30 lux in slow-moving traffic zones, and 20 lux for pedestrian routes and lingering/waiting zones. The uniformity requirements will be met where appropriate. These levels should be sufficient to allow safe passage for pedestrians and vehicular traffic. It should also be noted that the building will give out a significant amount of light spill to the surrounding areas which will contribute to the ambient lighting levels.



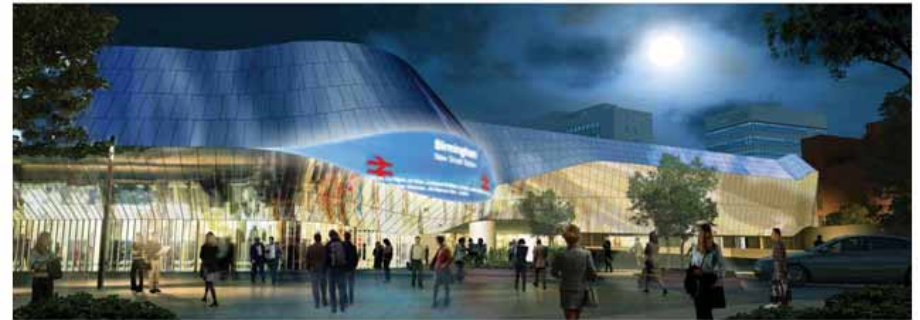
Fig 26 Eastern Entrance



In addition to the horizontal illuminance requirements, the design will ensure that vertical surfaces are well illuminated, using a combination of sources which provide light from different directions, e.g. ground-mounted uplight, under-seat lighting and vertical “light sticks”. This will aid facial recognition and enable pedestrians to read the intentions of others more easily.

The light sources specified will be a combination of high-pressure discharge, LED and fluorescent. The sources which provide the main functional lighting will have colour rendering values in excess of Ra 80, improving the ability of pedestrians to recognise individuals and objects, and promoting a sense of safety and security. This will also be helpful in relation to CCTV.

The lighting scheme will ensure that any potential “dark spots” are eliminated whilst still maintaining visual interest with variances in lighting levels and colour. For example, planting will be illuminated to ensure that it does not provide a harbouring ground for ill-intentioned individuals.



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Fig 27 Eastern Entrance Night View



Fig 28 South Elevation night view

3.6 Appearance

The 1960s structure of the building was built for a very different performance, passenger demand and economic times to today. The project seeks to enhance the life of the building to meet much higher environmental aspirations and passenger forecast demand to 2035. The design has developed in response to site and context and the constraints imposed by a structure well-worn in its 50 years of use.

The design concept seeks to achieve an iconic architecture that, as well as leaving a lasting impression will communicate the function of the building and the character of its location in the heart of the city centre. The concept has drawn from the dynamic nature of the railway theme.

The architectural expression has been inspired by the geometry of motion and the distortion of perception produced by movement. The form and geometry of the building has derived from the exploration and study of the alignment of railway tracks, sections both smooth and bifurcate to convey its character as a transport hub in a city historically overlaid with generations of transportation systems – canals, railways, roads.

It is proposed that the rain screen cladding will be mirror polished stainless steel. The reflective quality of the design aims to trigger a new perception of the urban setting around the station, by reflecting in its surfaces the varying quality of light from the sky, selected areas of the urban landscape around the station and the movement of trains and people in and out of the station.

Consideration has been given to the glare effect on surrounding buildings. Preliminary tests on both a summer and winter scenario have been carried out. The scenarios have been subjectively selected at locations and times where a direct solar reflection is present and conditions synonymous with glare exist. Neither scenario has found a level of glare that will cause discomfort.

The lighting effects shown in the visualisation are indicative of the proposed night-time views of the station; the full lighting details will be included for submission with the lighting condition attached to the outline consent.

[Ref Fig 28](#)

The rain screen cladding will cloak the Pallasades shopping centre, levels of multi-storey car park above the station, plant at roof level and the extended Navigation Street footbridge. Large eye-shaped media screens, inserted within the cladding plane, will highlight and from a distance give legibility to the three main access points to the station, the southern entrance, eastern square and the north-west corner. The existing pedestrian ramp from New Street to the Pallasades will be defined by an eyebrow shape in the stainless steel cladding to the Stephenson Street façade.

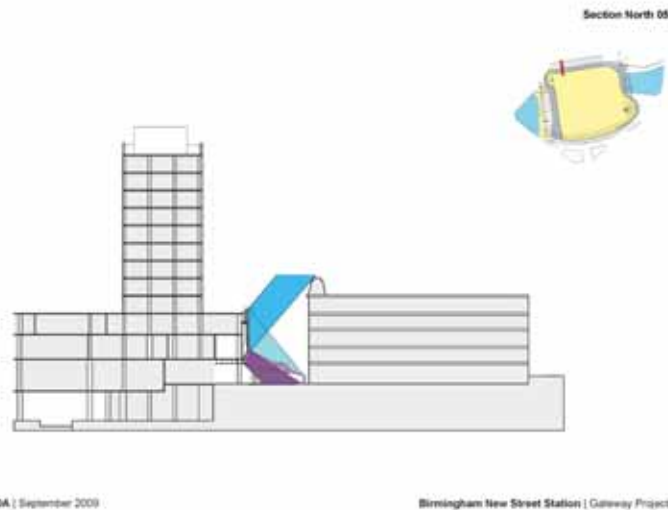


Fig 29 Extract from glare study on Stephenson Street

A report has been commissioned to study the risk of glare posed by the façade to train drivers and also the potential effect on surrounding buildings. The possible sources of visual impairment to the train drivers have been reviewed and it has been identified that there are no signalling issues affecting the drivers on their approach to the station.

[Refer Fig 29 Glare Study](#)

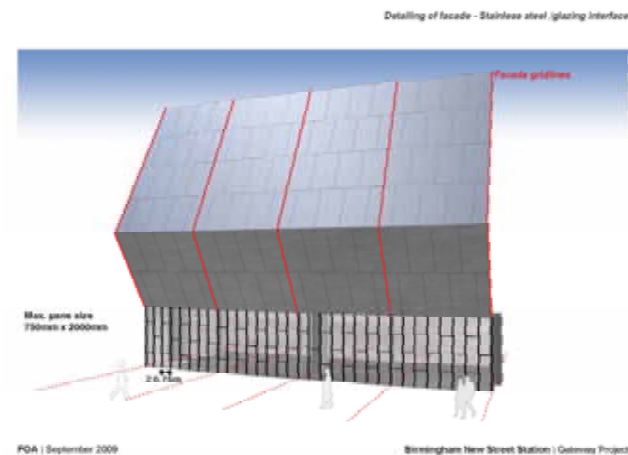


Fig 30 Cladding and glazing panel arrangement

At concourse level the exterior envelope will be a system of high performance curtain walling providing visual connectivity between areas of the public concourse, waiting lounges and external public realm. The glazing to the south will be tinted to reduce solar glare to the concourse. Areas of new retail activity to Hill Street, Station Street, North-West Corner and the Eastern Square will present a frontage designed within

the framework of the proposed Shop Front Strategy. Existing shop fronts to Stephenson Street will be redeveloped in a phased manner in line with the design framework.

[Refer Fig 30 Cladding and glazing arrangement.](#)

An atrium feature, 45 m across east–west, carved out of the centre of the existing structure will flood natural light into the centre of the building. Its architectural form makes the same geometrical references to railway tracks, smooth and bifurcate lines springing from concourse in soaring arches of some 26 m high. This large light area will naturally draw and act as a focus to activity in the station concourse and Pallasades shopping centre above. It will become a new public covered space, with a pleasant environment to congregate, an extension of the public realm.

New skylights in the floor of the concourse will allow some of this natural light to flow down to the platforms below, strengthening the link between the concourse and the platforms and increasing the legibility of the station from the point of view of users at platform level.



Fig 31 Platform visualisation

The vertical elements of the concourse that structure the form of the atrium will be clad to provide a smooth continuity across surfaces to create a consistency across the different planes of alignment in the existing structure. This philosophy will extend to the detailing of shop facades, with the alignment of branded signage carefully controlled within a signage zone and plane of the glazed shop fronts.

At night-time the drama of the atrium will be accentuated by the artificial lighting. The lighting in the atrium will be made up of three layers: background/functional lighting, feature lighting to the structure and feature lighting to the ETFE pillows. The background lighting will be provided by indirect mirror projection units mounted at high level, and will provide lighting levels in accordance with Network Rail guidance. The feature lighting of the structure will highlight the sculptural form of the columns and roof members using focussed beams of white light. The ETFE pillows will be illuminated using coloured light from LED units mounted at high level. The white highlighting of the structure ensures that this coloured lighting is contained within the ETFE pillows and does not “bleed” and dominate the atrium.

Detailed consideration has been given to cleaning of both stainless steel cladding and ETFE fabric to the atrium roof. The lower levels of cladding will be cleaned by a series of MUPES at street and plaza levels and from a high level track at roof level. Cleaning walkways will provide access to the ETFE atrium roof from Upper Retail Level. From the inside cherry pickers will provide elevated height to the underside of the atrium roof. Doorways and lifts have been sized to give access around the concourse space.

Though the structural limitations of the existing concourse floor plate require considerations in respect of reduced loadings, a suitable flooring material has been identified to allow for colour and module of the exterior granite paving to be closely matched for continuity though exterior and interior spaces. A subtle variation in colour and texture in the pattern will ripple out from the atrium in the centre of the building.

Cladding finishes to the concourse area will be impact resistant and light in colour to enhance the quality of natural light in concourse areas away from the atrium. The proposed ceiling to concourse is an open system based on a profiled fin, the profile design providing an additional visual path to enhance way-finding.

Vertical circulation cores from concourse to platform will have low-level glazed enclosures for reasons of light enhancement and sight-lines. Platform numbers in supergraphics will provide way-finding reinforcement at landings. These enclosures also perform a function in fire compartmentation between the sub-surface station and its concourse.

At platform level, existing platform clutter is cleared to improve future passenger flow capacity but also improves site-lines across the platforms and a much more open feel. Floor and wall finishes continued from concourse level present a seamless journey experience for the passenger. Proposed ceilings are a

closed metal grid, profiled in the centre of the platform to accommodate either light wells from the atrium area of the concourse above or artificial light features replicating the light wells.

Navigation Street bridge will be extended and refurbished with stainless steel cladding to the outside giving it new character. Internally, finishes will be upgraded inline with the main station refurbishment.

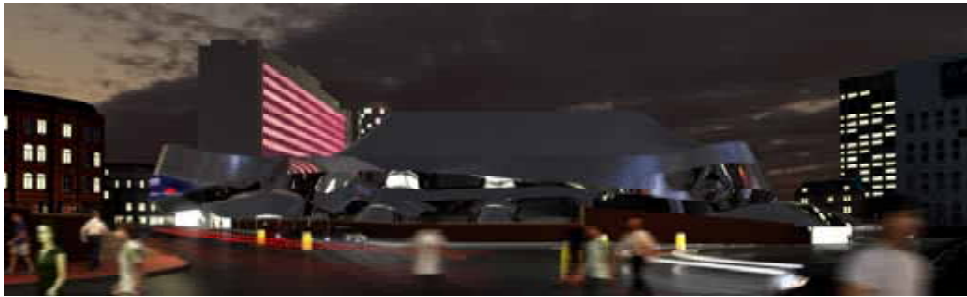


Fig 32 Perspective night view of the station from Navigation Street

4.0 Access

The access arrangements to the application were submitted and approved under the outline planning permission 2006/05066/PA. The Masterplan has evolved since the scheme was approved in July 2007, with minor changes to the site access to improve permeability and circulation around and within the site.

The amendments highlighted in the application made under Section 73 of the Town and Country Planning Act 1990 (approved 1 October 2009) ref 2009/03086/PA to vary conditions attached to the outline planning permission to allow a phased development included the new Eastern entrance and alterations to the access for the passenger drop-off and short stay car park.

The central location of New Street Station gives it excellent accessibility to a range of services and facilities within the city centre. It is well placed for transport links. It is situated at the heart of the national rail network and has good local commuter services. It is unique in its relationship with Birmingham International station providing an international gateway to the City and region. Birmingham's Snowhill and Moor Street stations are within walking distance.

There are a number of bus stops in the immediate vicinity serving other areas of the city and parts of the conurbation. Improved taxi facilities will be delivered as part of the redevelopment. The proposal to

introduce a new Metro tram system within the city has also been considered in the station design in the planning of the new entrance to the concourse from Stephenson Street.

Within the 1960s station the public areas are provided on two levels; the main concourse and platform level. The concourse presents to the east of the city with its main pedestrian and vehicular access. The concourse straddles the 12 platforms and acts as a dispersal bridge with poor and outdated circulation in between. Connectivity to the north of the city is poor with a tortuous access through the Pallasades shopping centre, commuters preferring to access to the platforms through Navigation Street footbridge.

The Design and Access Statement which accompanied the 2007 application detailed the problems of the existing access points to the station. It also made note of the sombre and uninviting quality of the existing building and its public realm. Solid walls and bleak frontages enclose much of the building limiting visual and physically connectivity. Overall permeability of the site is limited with general movement around rather than through the site.

Access to the existing station for users with impaired mobility or with children in buggies is difficult. Building entries are generally mean, of poor legibility and uninviting. Street level access to the concourse is only available through the eastern entrance. This entrance is congested, serving also as a vehicular access for both private cars and taxis, and short stay car park.

From the north the entry via the Pallasades shopping centre is via a ramp from New Street and the escalator link within the Pallasades. To the south a stepped entry is provided from Station Street to Pallasades level. This is also a Public Right of Way through the Pallasades and down the ramp to New Street to the north. A key station entry on Navigation Street provides stepped access via a footbridge to Platforms 2-11.

The redevelopment of the station will include a reconfiguration of the vehicular junctions and access points to the site. The taxi drop-off, passenger 'kiss and ride', disabled parking and short stay car park will be accessed from Hill Street with the egress for the passenger drop-off and short stay car park on to Navigation Street.

For drop off and pick up and short stay car parking for mobility impaired passengers dedicated spaces will be provided in the 'kiss and ride'. In addition, for overweight adapted vehicles for mobility impaired passengers (i.e. those which cannot use the 'kiss and ride') a drop off and pick up space will be provided as part of the taxi-drop-off area accessed from Hill Street. This area will provide direct access through the new southern entrance to the reception and special assistance area.

Facilities for the dropping off or picking up of mobility impaired passengers will be provided alongside the taxi-drop-off area accessed from Hill Street. This area will provide direct access through the new southern entrance to the reception and special assistance area.



Fig 33 Public realm – Provision for disabled passengers

New cycle parking facilities will be provided in a secure area of the 'passenger kiss and ride'. An initial provision will be made for 52 bicycles with expansion space alongside. A Cycling Strategy Report details the provision and covers access points and facilities for cyclists in the scheme.

The multi-storey car park and service access and egress will be via a separate and existing entrance and ramp from Hill Street. The taxi rank and pick-up access will be from Smallbrook Queensway. Vehicular access to the southern hinterland service area will be from Station Street.

Provision has been made for access by the Fire and Rescue service to the southern entrance with either and approach from the east via Smallbrook Queensway or from the west via Hill Street. Reception will be via the southern entrance with the main control sited at the northern entrance with access via Stephenson Street. Fire-fighting access will be available via the eastern sub-way and the Navigation Street footbridge bridge. Areas of safety for passengers and public will be provided in accordance with the station management protocol.

The station redevelopment will bring significant improvements in pedestrian access to the station. Two new public external spaces will be created as part of the scheme. To the east will be a new square facing the Bullring shopping centre, created by infilling one of the existing voids over the station. This square will provide space for pedestrian movement between the station, the Bullring shopping centre and Birmingham Moor Street station. To the south, a new area of public realm – the Southern Plaza - will lie to the top of the 'Spanish Steps' thus opening up the station concourse to Station Street and Hill Street. An external lift will be sited to one side of the steps to provide step free access for the 6 metre height difference between Station Street and the Southern Plaza. An alternative ramped route will be provided alongside the taxi drop off, thus providing a step free access alternative to the external lift.

A new entrance from the north-west will provide direct access for the most heavily trafficked pedestrian route from Navigation Street/ Stephenson Street down a gentle ramp into the new concourse. This entrance replaces an existing spiral ramp to the shopping centre with a new approach that includes two new escalators, stairs and lift.

Refer Fig 34 North-West Entrance



Fig 34 Visualisation of proposed North-West Entrance to the station and Pallasades shopping centre.

A new North-South public pedestrian route through the concourse will be open 24 hours a day, 7 days a week, facilitating access to the station and enhancing connectivity between different areas of the city. A new access from the east, which will open during the station's operational hours will provide a direct connection across the atrium to the North-South route further enhancing the stations permeability and inclusive access to the station.

The existing right of way running from the Stephenson Street ramp through the Pallasades shopping centre, across the pedestrian bridge and down the southern external staircase will be redirected so that the shopping centre may close out of hours.

A new southern entrance will be formed to an extended Navigation Street footbridge with new access arrangements to Platforms 1 and 12. Due to existing site and physical constraints these improvements will not provide step free access.

A new walkway to the north-east of the site and abutting the retaining wall to the Odeon site will form an important pedestrian link between New Street and Moor Street stations. A section of the existing station will be demolished in the north-east corner to form a new pedestrian route around the station providing a link between the High Street and Stephenson Street. The public realm around the station will be improved to provide a well lit and secure environment for pedestrians, linking station entrances and connecting parts of the city.

[Refer fig 7](#)

The station redevelopment will comprise significant enhancement through refurbishment at both platform and concourse levels, both in terms of the station's capacity and accessibility. With exception of Navigation Street footbridge, step free access will be achieved to all public levels of the station from sub-platform level to concourse and between concourse and the Pallasades shopping centre.

At sub-platform level, new lifts will be inserted to provide emergency access from platforms to the east and west subways for mobility impaired passengers. This is an improvement on existing protocols where mobility impaired passengers are evacuated to the open-air ends of platforms as a refuge to await guided assistance.

At platform level 26 new escalators and 14 new lifts will be installed providing improved connectivity with the concourse and city above. Each platform will have a special assistance area with a variety of seats to cater for different needs. Platform numbers will be signed at landing positions with supergraphics which will have good legibility from other platforms. Landing areas to vertical cores will be denoted by a contrast colour in the floor finish. Edges of platform will be denoted by a contrasting tactile strip.

At concourse level, the existing area will be enlarged to three and a half times the size of the existing concourse. Access will be fully inclusive with a new reception and special assistance facility for mobility impaired passengers. The reception area will be supported by information points throughout the new concourse. Other amenities that have been included as a direct response to focus groups and forums include a multi-faith prayer room, a 'Changing Places' facility and a provision for guide dogs.

There are three waiting lounges for which call forward for boarding will be by the Customer Information Signage boards located in the Atrium and Eastern Entrance and summary information boards in other public dwell areas. Each lounge will have areas of seating for waiting passengers, refreshment facilities and inclusive access to station conveniences. Acoustic loops will be provided in areas of waiting and where distinction in communication, for example the Ticket office, is critical.

The wayfinding strategy will be developed with reference to Network Rail's Managed Station guidance and the wider aspirations of the funding partners and operational teams for the public realm and connections within the city. A hierarchy and legibility of information will be key to the strategy. The system will integrate with the Customer Information Signage in the station.

Connection between station concourse and Pallasades shopping centre will be provided by a pair of escalators strategically placed on the western side of the concourse adjacent the large customer information screens. The public lifts between these two levels are situated adjacent the station reception and the special assistance area.

The performance of the station at concourse and platform level has been modelled for the peak am and the peak pm periods for 2035 with PAXPOT and LEGION software. In terms of future capacity and pedestrian/ passenger flow the concourse performs well. At platform level, the improvements the opening up of the existing platforms and the new vertical cores improve capacity to 2035 with some localised periods of congestion associated with the boarding and particularly alighting of trains in the peak period. The model shows a quick dispersal of the congestion

As a transport hub in the centre of a large city the station will be accessible to all those who use it and travel around it regardless of mobility in all aspects of the design.

5.0 Conclusion



Fig. 35 New Atrium to Station and Pallasades shopping centre

5.1 Requirements

Birmingham New Street Station is one of the busiest rail interchange in Europe, situated at the heart of Birmingham's city centre, and is perhaps the primary gateway to the city.

A growth in the use of the railways nationally has meant that current passenger movements have exceeded the capacity of the existing station, seeing 1,240 train movements and 140,000 passengers each day, more than twice the number of passengers using the station then when it first opened. Network Rail inherited a tired building, working beyond capacity and requiring extensive remodelling to meet future demand.

The strategic gateway aspirations for New Street are based on broad transportation and regeneration needs involving the key stakeholders and include improved connectivity between the station, city and region. Network Rail as key project stakeholder and owner of the building has worked in close partnership with the Department of Transport, Birmingham City Council, Advantage West Midlands and Centro. The improvement of New Street station is vital to the future development of both city and region, with objectives to further economic development and regeneration, to promote employment and a sustainable approach to the redevelopment.

The headline objectives of the project include:

- Passenger capacity to meet both short term and forecast longer term needs
- Improved passenger and retail facilities and the environment within the station
- Improve access to/from/in the station for all multi-modal users
- Improve pedestrian access routes to/from and across the City
- Transform the appearance of the station, to provide a 21st century passenger experience
- The need to maintain operational continuity at all times and improve the level of service
- The need to accommodate existing tenancies and leases
- The need to acknowledge overall project commercial responsibility and public accountability

Development of the project has resulted from a lengthy design process, incorporating the views, needs and aspirations the stakeholders, including the funding bodies, statutory consultees, interest groups rail passengers and the general public.

5.2 Proposals

The existing buildings on the site vary in form, height and scale, and are considered to be of generally low architectural quality. The buildings are relatively low rise but of significant massing; their block form making a negative contribution to the City Centre. They takes advantage of the topography of the site presenting two levels of retail to the city in the north, however at the detailed level the station fails to make effective connections for the people to the city.

The proposals create new pedestrian routes with connections to the Odeon Ramp and Moor Street Station and a new entrance from Stephenson Street. The Gateway proposal articulates between the mass of the station and the southern area with a new area of public realm generating activity at station concourse level with a vantage point over the south of the city. The buildings forming the station and shopping centre above are upgraded. Ladywood House is modified to provide the northern entry to the station. A new Atrium is cut into the existing fabric becoming the core of the public realm, located in the centre of the Station mass. This opening up of the concourse with a new internal public square draws the city and station closer and with linked activity.

The design enables efficient multi-modal interchange for the planned Metro extension, improved management of and facilities for taxis, facilitates interchange with bus services and segregated provision for private cars. Access to, from, in and around the station is improved for all users including those with impaired mobility, with a new passenger drop-off area, 'kiss and ride', a new short stay car-park, additional facilities for cyclists and an extension of the existing Navigation Street Bridge together with a new

entrance. Each approach and entry to the station will offer a different experience, an iconic gateway to Birmingham.

Linking into the city, the Eastern Square will be a new public area; this eastern access to the station will provide space for pedestrian movement and connectivity to the Bullring shopping centre, and to Moor Street Station. The Hill Street Southern Plaza incorporates two new open areas to either side of the top of the steps with generous seating offering opportunities as small auditoria and as spill out space associated with the station operation. Step free access is provided by external lifts

Internally key operational staff will be accommodated at concourse level and within the remodelled Hinterland area, behind new active retail frontages onto Hill and Station Streets.

5.3 Form

The architectural expression has been inspired by the geometry of motion and the distortion of perception produced by movement. The form and geometry of the building has derived from the exploration and study of the alignment of railway tracks, sections both smooth and bifurcate to convey its character as a transport hub in a city historically overlaid with generations of transportation systems – canals, railways, roads.

To provide the existing fabric with the aspirational quality it is overlaid with mirror polished stainless steel rain screen. The reflective quality of the design aims to trigger a new perception of the urban setting around the station. This cloak gives the old building a new dynamic form which is also agreeable in size. The shape of the cladding to the north preserves the proportions and intimate nature of Stephenson Street and to the east and south with a more expansive public realm adopts a more fluid form, punctuated by two large eyes at the entrances. To the west the cladding shapes up to cloak the mess of vehicular ramps and multi-storey car parks. The scale of this façade is broken up by the undulating treatment of Navigation Street footbridge at street level.

The atrium feature, 45 m across, will naturally draw and act as a focus to activity in the station concourse and Pallasades shopping centre above, becoming a new public covered space, a pleasant environment to congregate, an extension of the public realm. At night-time the drama of the atrium will be accentuated by the artificial lighting.

At platform level, existing platform clutter is cleared to improve passenger flow and improve site-lines to present a much more open feel. Floor and wall finishes continued from concourse level present a seamless journey experience for the passenger. 26 new escalators and 14 new lifts provide connectivity with the concourse and city above.

The lighting design will ensure that vertical surfaces are well illuminated, using a combination of sources which provide light from different directions, ground-mounted up lighters, under-seat lighting and vertical “light sticks”, aiding facial recognition and enable pedestrians to read the intentions of others more easily.

Environmental features will include

- Use of natural ventilation to the atrium
- Grey water harvesting
- Extensive use of low energy lighting well controlled
- Materials with low embodied energy, such as recycled steel stocks aggregates

The proposed sites for the two tall building will be to the south of the station, each site flanking the new southern staircase to the east and west. These will be delivered in a separate phase, and subject to a separate application for approval of detailed reserved matters.

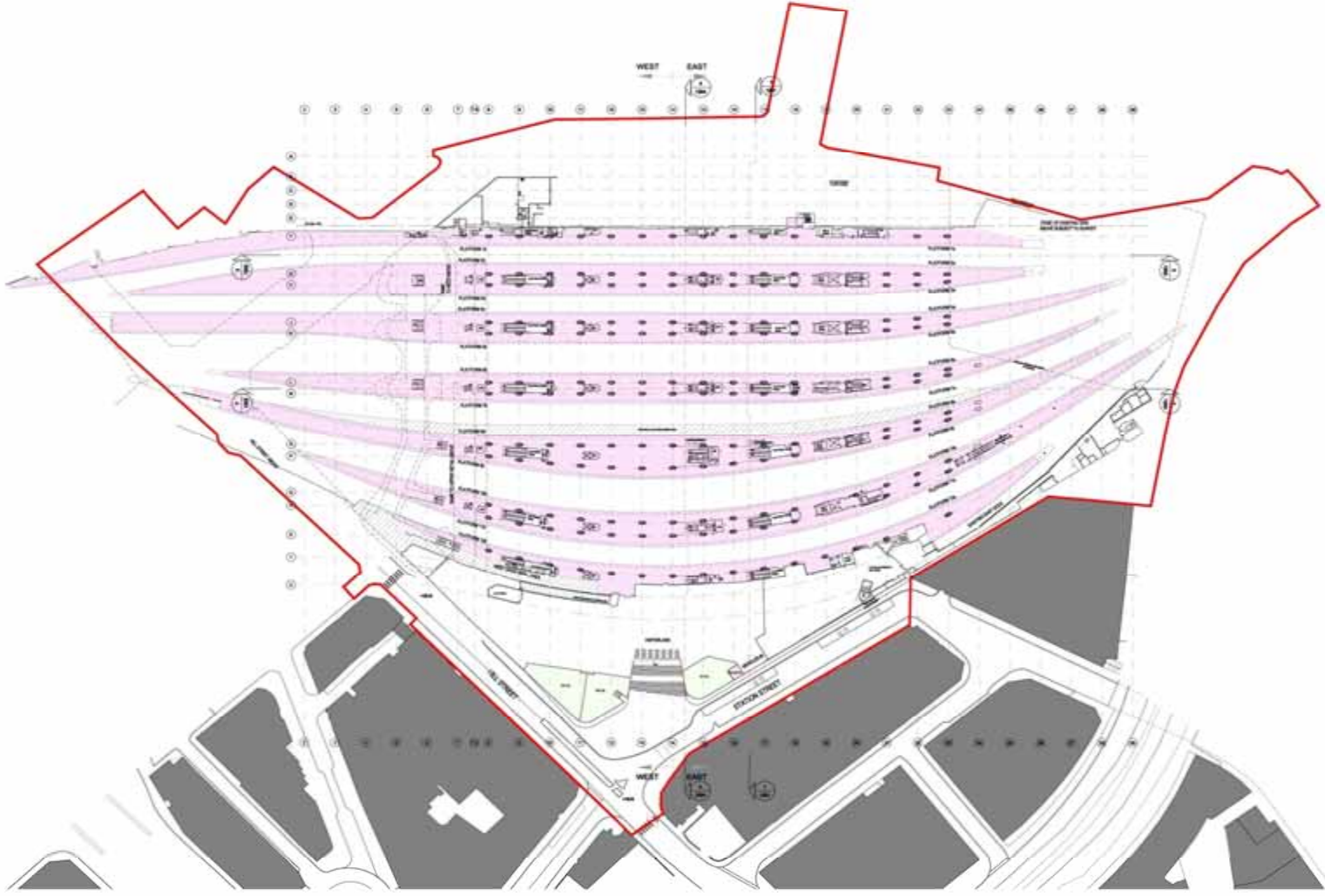
5.4 Summary

The project has been in development for a period of time, during which extensive consultation has taken place. Design development work has been underpinned by a broad range of studies which have tested design assumptions throughout and refined the scheme to the design detailed in this statement.

The existing site and building have offered and are continuing to present many challenges to the design team. The design team will continue to remain focussed on the headline project objectives of improved passenger environment and capacity, improved access and links to the city and other modes of transport within the city and region and uplifting the image of station and public realm – a true Gateway for Birmingham.

6 Drawing appendices

- 5064224-ATK-DRG-PL-00022 General Arrangement Sub Platform Level
- 5064224-ATK-DRG-PL-00023 General Arrangement Platform Level
- 5064224-ATK-DRG-PL-00024 General Arrangement Lower Mezzanine Level
- 5064224-ATK-DRG-PL-00025 General Arrangement Concourse Level
- 5064224-ATK-DRG-PL-00026 General Arrangement Concourse Mezzanine Level
- 5064224-ATK-DRG-PL-00027 General Arrangement Lower Retail Level - Pallasades
- 5064224-ATK-DRG-PL-00028 General Arrangement Upper Retail
- 5064224-ATK-DRG-PL-00029 General Arrangement Roof



Legend

Planning Application Boundary Line

- All Platforms
- All Buildings

PLANNING APPLICATION			
Network Rail			
ATKINS FOA			
BIRMINGHAM NEW STREET STATION GATEWAY			
PLATFORM LEVEL GENERAL ARRANGEMENT PROPOSED FLOOR PLAN B20			
Scale:	1:500 @ A0	1:1000 @ A1	1:2000 @ A2
Author:	5064224		
50644224-ATK-DRG-PL-00023 A01			

