

## **A MAJOR CITY CENTRE PROJECT**

A major construction project in the centre of a busy city presents a variety of challenges. It is important to keep pedestrian and road access as clear as possible, to control dust and noise, and to keep the community informed on progress.

Key stakeholders will be kept informed of programme and milestone dates over the life of the scheme. This will enable them to manage any interdependency they may have to the construction works. To minimise any adverse impact on the surrounding environment, the contractors will be expected to adhere to the codes set out under the 'Considerate Constructors' scheme or equivalent schemes local to the north east. Such codes place a responsibility on the contract to be;

- Considerate
- Environmentally aware
- Clean and tidy
- A good neighbour
- Respectful
- Safe
- Responsible
- Accountable

Regular visits are undertaken by inspectors to monitor against these headings to ensure the contractors are abiding by the conditions of the code.

### **Demolition**

A particular challenge prior to the demolition phase is identifying areas which contained asbestos and then arranging the safe removal to a licensed waste disposal site by specialist contractors.

Demolition in a city centre environment is always difficult, often requiring heavy machinery and the necessity to remove large quantities of waste material, e.g. concrete, brickwork, steel, soil, timber, etc. Because of the lack of space, these items are taken to an off-site waste disposal centre and separated into their individual parts for recycling wherever possible.

Because the shopping centre is open every day of the week, usually between 9am and 6pm, most of the work has to be carried out outside these hours but still bearing in mind that local residents live nearby, buses are running until late at night and deliveries are still being made throughout the night to the shop units and neighbouring premises.

Removal of the existing gas, water, drainage, electricity, telephone and data services also brings its own problems. While many of these services are removed completely, many still serve existing units and these have to be identified, protected and isolated during the demolition to ensure that the Centre keeps trading as normal.

### **Construction**

Construction, by its very nature, is a noisy and dusty business so much forward planning is undertaken to minimise the impact on trading units and pedestrians.

Bored piling is used for the foundations to reduce the noise and vibration from driven piles and structural steelwork used for the frame to reduce the amount of concrete and steel reinforcement deliveries to the site.

The close proximity of the Haymarket and Eldon Square bus stations also means that maintenance of traffic routes has to be considered to allow the buses to operate as normally as possible and reduce any inconvenience to passengers.

In the ES South phase, several buildings are listed and therefore must be retained, as will part of the building façade on Clayton Street. This will require heavy steelwork to be erected to stabilise the wall during the demolition of the building behind it. The walls to these buildings also need to be protected from adverse weather as the new and existing structures are joined together.

### **Metro Tunnels**

The Metro tunnels from Monument to St James Park run adjacent to Old Eldon Square and ventilation shafts rise in Prudhoe Place and on the east side of Old Eldon Square. There are specific requirements for construction over/adjacent to the metro tunnels in terms of foundation proximity and zones of influence etc. The foundations and sub-structure have been designed to meet these requirements.

### **Infection**

There is a risk of infection whilst working within existing manholes and Leptospirosis due to the presence of rats and only operatives that have been fully trained in this type of work can be used. Safe methods of work need to be established and controls put in place to ensure good personnel hygiene.

### **Perimeter protection to the public**

Emergency egress and general access by the public to the remaining properties on Clayton Street and the section of Eldon Square south of Blackett Street will require protected routes.

### **New foundations**

Foundations to the new structures may interface with existing structures. These areas need to be identified and design solutions prepared.

### **Traffic management**

The site entrance and exit onto Newgate Street has to be co-ordinated with continued access for existing services to Eldon Square and the access on Clayton Street has to be maintained for pedestrians, service and emergency vehicles.

### **Existing plant and machinery**

Where existing plant has to be upgraded, altered or incorporated into the new works, any downtime must be minimised to reduce the impact on services to the Centre.

**Some Construction Statistics**

<i>Materials</i>	<i>ES North</i>	<i>ES West</i>	<i>ES South</i>
Concrete	600 tonnes	400 tonnes	48,000 tonnes
Steelwork	430 tonnes	260 tonnes	4,800 tonnes
Tower Cranes	-	-	3
Personnel on site (at any one time)	90*	50*	300

**Jobs**

During the development, it is estimated that over 2000 construction jobs will be provided.

- On ES North and West, from May 2005 to March 2007, over 850 operatives from all the various trades had a health & safety induction briefing to allow them to work on the site.

**Architecture & Design**

Two architects are working on the project;

ES West and North: Comprehensive Design Architects  
ES South: Leslie Jones Associates

Each has produced detailed design statements and these are attached.

**Comprehensive Design, Architects for ES North and West**

Comprehensive Design was founded in 1980 in Edinburgh and now has offices in London, Glasgow and Brighton. There are 14 directors and over 115 staff in the Group, including a full complement of technical, computer and support personnel. Computer aided design facilities are networked between all offices.

CDA have completed a wide range of different building types and have designed projects varying in size from town centre masterplans to small individual buildings for private clients. The practice has special expertise in the design of retail and office buildings but is increasingly involved in the residential and education sectors. Originally intended to service their in-house requirements, the 3D graphics section now provides services for many clients to illustrate buildings in the early concept stages or creating photo realistic images of the complete design.

**Leslie Jones, Architects on ES South**

Formed in 1945 Leslie Jones is a leading Architectural Practise specialising in retail led regeneration projects throughout the United Kingdom. From large scale master plans to sensitive retail infill projects Leslie Jones have successfully completed a significant number of schemes and are now embarking on a number of mixed use developments which are more often than not sited within the heart of our town and city centres. The new Urban Agenda which is being driven by Local and Central Government has led Leslie Jones to be at the forefront of the urban regeneration renaissance.

## **Connectivity**

One of the key points for the scheme was to improve the pedestrian connectivity through the City.

ES North is the main section of the project that enhances this. At present, there is no direct link from the north side of the centre at street level, into Old Eldon Square and the rest of the City centre. With the new St. Georges mall, this link, via the new bus station, is provided. Part of the scheme is to also re-create the north-south, east-west paths through the square itself.

ES West includes a new staircase from the square (adjacent the new restaurants) that links back into the Blakett Bridge mall again giving pedestrians another route out into the square.

ES South will include entrances from both Newgate Street and Clayton Street restoring the links to Grainger market and the centre. There will also be shop units on both streets as well as the Debenhams department store providing retail access at street level up into Eldon Square.

## **Signage**

Signage design falls into a number of different headings or classifications;

### **Feature Signs**

These signs provide an identity to the buildings. As the developments are in many locations, outward facing, this affords the retailers an opportunity to add feature signs to mark their own brand. As far as the shopping centre itself is concerned, feature signs are used to highlight the main points of entry. Signs on the external face of the building do generally require a separate planning permission. This is often submitted after the main scheme has received its consent.

### **Information/Directional Signs**

As the title suggests, there are a number of signs internally within the centre that direct customers to the various facilities available with the development such as customer services, bus station, toilets etc. As the malls within Eldon Square are all named 'streets' each area has its own name sign to again assist with the navigation and the location of particular shops. Private areas and areas with restricted access will also fall into this category.

### **Statutory Signs**

These signs are a requirement of the building regulations and provide emergency exit signs to lead shoppers and shop staff to places of safety in evacuation situations. These are not only required to be positioned in set locations but are also defined in terms of size, colour and content.

## **Retail Fit Out**

The process of how we work with retailers generally starts with our retail agents introducing the scheme to the traders and matching up needs with what each scheme can offer.

Heads of terms are the first documents that are produced which document in broad terms the outline elements that will form the basis of the final property deal. These will cover basic matters such as the rent, the area, the timing and the headline lease matters.

From a technical stance, there is a standard specification of the basic unit along with a plan of the shop along with any key sections. These will show the overall size, and constraints and will specify the type and level of services provided such as power, water and drainage. Any changes to the specification are agreed in advance and the formal agreement signed.

The retailers are also provided with a 'Retailers Handbook'. This document will include the following sections;

- Directory of the key companies involved with the development.
- The procedures that people need to follow during the design and construction phases.
- Design guide and technical requirements for the fit out.
- Shell construction details including services.
- Site logistics and controls.
- Operations guide.

After the agreement has been signed, the process follows the following key stages;

1. Briefing; retailer introduced to the design guides i.e. our expectations on what we require by way of quality.
2. Concept design; Tenant delivers their design to the retail delivery team for approval.
3. Detail design; Tenant develops the approved concept into a detail design, again submitting this for approval.
4. Pre-start & Unit handover; Detail design approved, all other pre-start information issued by tenant including health & safety documents. Unit inspected and handed to tenant. Tenants contractors inducted on health & safety matters.
5. Completion of Shop Fitting; Periodic inspections by retail delivery team. Tenant confirms completion and issues required documentation. Retail delivery team issues consent to trade certificate.
6. Unit opens for trade.