

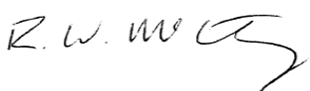




Alexandra Road Estate

Heritage Statement

Quality Management

Job No.	CS/055613	Doc No.	1
Title	Alexandra Road Estate Camden London Replacement of gas supply		
File Location	T:\National Grid Alexandra Road\Submission		
Version	Final		
Issuing Office	Carlisle		
Date	26 March 2012		
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1 Introduction

Planning Policy Statement 5 (PPS5), Planning for the Historic Environment sets out the approach local planning authorities are advised to take when determining whether to grant planning permission or other consents for a proposal that affects the significance of a heritage asset.

PPS 5 takes a holistic approach to the historic environment and the term heritage asset embraces different features including buildings, parks and gardens and buried or standing remains. A heritage asset holds meaning for society over and above its functional utility. Significance is a sum of its architectural, historic and/or artistic interest. It is this heritage significance that justifies its protection in planning decisions. (Section 3 Heritage Assets and Significance, PPS5 Historic Environment Planning Practice Guide)

Keeping a structure in the use for which it was constructed and preserving its integrity and meaning are an important aspect of conservation. Where a proposal causes harm it will be a loss of value to society, but this loss of public benefit has to be weighed against any other public benefits the proposal will bring.

The key to sound decision making is the identification and understanding of the differing and perhaps conflicting heritage impacts accruing from the proposals. Also how they are to be weighed both against each other and any other material planning considerations that would arise as a result of the development proceeding (PPS5 Planning for the Historic Environment Planning Practice Guide 2010).

There are a number of listed Post-war examples of public housing that illustrate the architecturally ambitious programme of housing schemes by Camden Council following its creation in 1965. The characteristic form was a megastructure of stepped terraces. This low rise, high density approach reflected traditional terraced housing, but provided light, privacy and private open space for all levels of accommodation. Examples of this form include the Brunswick Centre, and the estates of Fleet Road, Alexandra Road, Maiden Lane and Highgate New Town.

This combined Design and Access and Heritage Statement explains the significance of the Alexandra Road Estate, as set out in the Alexandra Road Estate Management Guidelines (Levitt Bernstein 2006) and the Conservation Area Appraisal for Alexandra Road Estate (LB Camden 2000). It describes the

proposed works to replace the gas supply to Blocks A to E Rowley Way and explains how the implementation of these works will have minimal impact on the significance/special interest of the listed structures, and has been designed in consultation with officers from the borough and English Heritage.

Finally the policies in PPS 5, specifically HE 7, and the supporting Guidance Document are used to assess the impact of the proposed refurbishment works on the significance of the Grade II* listed structures, balancing the impact of those changes with the public benefits that will accrue from installing a safe and accessible new gas supply to these dwellings.

1.1 Site History

The Alexandra and Ainsworth Estate more popularly known as Rowley Way or Alexandra Road Estate, was designed in 1968 by Neave Brown then working with Camden Councils Architects Department. Camden Council was one of the largest and most ambitious of the new London Boroughs created in Greater London in 1965. In response to pressure for new local authority housing Camden developed low rise high density housing schemes rather than the system built high rise housing built by other adjacent local authorities. The new Alexandra Road Estate was designed to be a traffic free inclusive environment, with community buildings as well as dwellings – the Tenants Hall, shops and a school, and a communal heating system. Cars were parked in a garage under the blocks, and houses were entered from the car free street.

The site is Crescent shaped, consisting of three parallel east – west blocks, the most northerly bounded by the main West Coast rail line out of Euston. The apartments of the seven storey Block A - E were constructed in a zigurat, and this acts as a noise barrier to the rest of the site (the foundations rest on rubber pads to cushion vibration). A lower four storey block runs along the other side of Rowley Way, and the two terraces face each other across this raised pedestrian street. The third row of buildings parallels this and faces Langtry Walk, with a play area and public park between the second and third row.

The main construction started in 1972 after delays over proposed road closures, and was completed in 1978, with the 520 apartments fully occupied by 1979. It is built of white board marked concrete, with areas of self colour render, and the light colour contrasted with the original dark stained external joinery. (Aluminium on the north elevation of A Block where the smaller windows face the railway tracks) The housing estate was listed Grade II* in 1993, and the conservation area was designated in 1996. The estate is still

owned by Camden Council, but day to day management is run by the South Hampstead Housing Co-operative.

1.2 Significance and Value

The Alexandra Road Estate is seen as one of the most successful examples of housing development that segregates traffic and pedestrians. The inclusion of public spaces, including a play area and park, and public facilities was part of an improvement of the area, and the care lavished in the design and construction of the Estate included the high quality internal fittings. The stepped design gave all the dwellings a sunny outdoor space, and the landscape scheme was integral to the proposed development. The Estate has gained iconic status after featuring in a number of films and television programmes, and it is still a feature of student study tours of architecture and planning.

'Alexandra Road is the most formal and visually impressive of the low rise, high density schemes developed by young architects working for the London Borough of Camden in the 1960's and 70's' (Elaine Harwood 'England – a guide to post war listed buildings' English Heritage 2000)

The Estate was designed by Neave Brown with Camden Councils Architects Department. The design has many similarities to the Brunswick Centre (1962-72), also a high density, low rise ziggurat designed concrete constructed housing scheme. Contemporary commentators described the vertical subdivision of the blocks into dwellings as reference to the 18th and early 19th century terraced houses they replaced. It can be seen as an ideal of city living, with the sum of the individual parts (the separate dwellings) contributing to a particular urban character and integrated design. Alexandra Road is also shows a development of Neave Browns earlier work, designing stacked dwellings on a smaller scale but with a similar sequence of open spaces moving from public, through semi – private to private. Similarities to the Brunswick Centre are mentioned above and Alexandra Road was been influenced by Patrick Hodgkinson design, and other theoretical designs for linear stepped sections by Leslie Martin from the 1950's, as well as the stepped designs of Atelier 5 in Switzerland.

The development is a striking example of radical new building form and urban design, and this combined with the quality of the white concrete construction fully merits the II* listing.

A Block is the tallest (7 storeys plus basement parking), and the northern elevation facing the main railway line is a mostly solid wall with small double glazed windows to block the noise from the trains passing. The south face is

more open, stepping down to Rowley Way. Metal work is painted blue in the communal areas, and red on private terraces

2. The Proposed Gas Riser Replacement

The work to replace the gas risers at Rowley Way is part of a wider initiative in which the National Grid has been working in conjunction with the Health and Safety Executive (HSE) to undertake surveys of the internal gas risers in residential buildings of 6 or more storeys. This process to set out below to demonstrate the thorough approach that has been taken before any changes in the installation were proposed.

The survey data is loaded onto the National Grid High Rise Data Base (NG HRDB), A Riser Ranking Model is produced using the data from the National Grid data base to identify those risers which would be considered to have a relatively high risk of failure, and as a result produce a high consequence explosion. The Riser Ranking Model is not a simple linear relationship between the output score and risk posed by the riser – it is based upon identifying the individual steps of the explosion process, and then considering the factors that could affect the individual steps.

The five individual steps considered for a high consequence event (such as a large explosion involving multiple fatalities) are:

- Likelihood of failure
- Likelihood of escape not detected and/or not mitigated
- Likelihood a flammable mixture produced
- Likelihood of Ignition
- Likelihood of a high consequence event

The identified factors that affect the individual steps can either increase the likelihood of a high consequence event (in which case they are termed a risk increasing factor) or reduce the likelihood (termed a mitigating factor). There is an absence of data on which to quantify the risk increasing and mitigating factors, and thus engineering judgement was applied to define these values numerically. Risk increasing factors are given a weighting value greater than one and mitigating factors are given a weighting value of under one. Some factors can apply to more than one step in the explosion process and would be weighted accordingly in each step.

The parameters that have the most influence on producing a high weighting in scoring the riser are:

- Pipe condition (severe corrosion instead of no corrosion or surface corrosion)
- Number of repairs visible
- Leakage detected during survey
- Pipe environment (damp/wet instead of dry)
- Pipe material (copper or steel with various coatings)
- Entry of riser to building (Into basement or below ground instead of above ground entry)
- Horizontal riser in basements

In applying engineering judgement, those factors associated with the potential of a large leakage (which could lead to a large explosion) or for a high consequence explosion was given a relatively high weighting (i.e. a conservative assumption is applied). If more than one factor is present, the combination of conservative assumptions can dramatically increase the relative weighting.

In order to calculate a score for an individual riser, the length of each individual riser is weighted by the risk increasing and risk mitigating factors. The scores for the individual risers are then summed to get an overall score for the risers within the building.

The existing multiple above ground gas riser pipe-work supplies to the **Alexandra Road Estate** flats were installed when the buildings were constructed. The vast majority of pipe work is inaccessible with some sections buried within the structure of the building. As a result the opportunity to carry out comprehensive inspection or any form of repair (interim or permanent) is not possible. Sections of pipe are also located within unventilated voids, and this could allow any gas leakage to build up to an explosive level resulting in a possible major incident.

In recent years five individual riser systems (to a total of 88) flats have been isolated following reported gas escapes. The gas riser pipe-work has been identified for urgent replacement within these blocks at Rowley Way following on-site investigation and evaluation of the collected data using the system outlined above.



Figure One: North elevation (Blocks A-E)



Figure Two: Block E (shop, council office and access road located under this block) showing the service ducts within the columns

2.1 Existing Services

The gas supply is currently in a shared supply duct within the columns at the rear of the northern block. These other services include the heating system and the electricity supply. (NB. The gas supply is for cooking only, as heating is supplied through a communal heating system). The existing riser pipe-work transitions from below to above ground within the concrete columns. Access doors are evident on these columns. Some of these doors have been vandalised or removed (*refer to Figure Three*). A 'sump' exists within each door which has resulted in the base of the steel gas pipe-work sitting in standing water. An electrical scheme is currently in progress to replace these doors. The enclosed environment and poor ventilation has resulted in the corrosion of the steel gas pipes and this has been aggravated by leaks from the communal heating system which runs close to the gas pipe, other electricity cables, junctions and housings exaggerate the problems of access and repair. Gas pipe-work is visible within the column doors. Missing (removable) panels above the doorways have revealed that the pipe-work diverts to within the column structure and is inaccessible not only to view but also to replace on a 'like for like basis'. Access panels to the unventilated 'shaft' within flats have, in some instances been modified by residents. As a result there is little potential to remove a panel for

shaft access. The physical restrictions in these areas also mean new pipe installation is almost impossible. The shaft is unventilated which does not comply with current practise for installing gas riser pipe-work within high rise multi-dwelling buildings, reference: IGEM - General Gas Procedures IGE/G/5. This document also states that in the design hierarchy for designing gas riser pipe-work it should be external in order to minimise risk.



Figure Three: Existing gas riser within the service duct

2.2 The Proposed Gas Supply: External Works

Meetings have been held on site between representatives of the National Grid who are responsible for the gas pipeline network, with Catherine Bond (Camden Council Conservation Officer), Richard Parrish (English Heritage) and John Stow (Camden Council Mechanical Services Manager). At the site meetings the National Grid has explained fully why it was not possible to install the new gas supply pipes within the concrete columns as a direct replacement for the existing supply. The problems and possible solutions have been fully discussed, and the way ahead agreed in principle, for the provision of a renewed gas supply through externally routed galvanised steel

pipes on the north (rear) elevation of Blocks A to E, to 346 total flats. Camden Council has asked that provision for a gas supply be made for all flats regardless of whether the resident currently uses gas for cooking to allow residents flexibility on fuel use in the future. Provision will therefore be made for future connection into these apartments. The attached plan CS/055613/MZ/ML/DWG/AR/PO2 shows the main proposed replacement gas pipe routes for each of the blocks. The following text and photographs indicate the finer detail of the proposal using a solution agreed on site as a template for the main works. .

The 1" diameter steel pipe-work will rise vertically on each side of the central supporting columns that are located in the middle of each vertical row of 10 (or 8 flats) and then distributed horizontally to supply individual apartments. At the site meeting it was agreed that this solution was preferred to a single 2" pipe attached to the outside face of the column. This configuration has previously been installed where reported gas escapes have resulted in emergency isolation and subsequent riser pipe installation as shown in *Figure Four below*



Figure Four: Block C – Building 54 External pipework installed in 2008 which is to be replaced

The proposal for locating a 1" pipe on each side of the central supporting columns was agreed to be the most aesthetically pleasing solution. A 'template' for this agreed solution has been installed at Building 115 Rowley Way serving eight flats, and is part of this application. (Emergency work was undertaken after the riser had to be isolated following a reported gas escape). Two 1" diameter steel pipes run up each side of the central supporting column. *Figures Five and Six* below show the installation preferred by the Conservation Officer and English Heritage to the alternative of a single vertical 2" pipe on the outside face of the column.

Figure Five below also shows a flexible expansion loop used for supply from the riser to the top floor flats. Due to thermal *expansion*, *flexibility within the riser system is required in order to avoid unnecessary stress on the pipe-work* (causing possible failure). Where available space is limited and a suitable 'unrestrained lateral pipe length' cannot be obtained a flexible loop will be needed to allow expansion of the pipe to occur.



Figure Five: Building 115 gas supply pipe on side of column



Figure Six: new gas supply and valve, showing standard fixing

The galvanised pipes are a similar colour to the wall finish and this will reduce visibility. Fixings are simple but secure and can easily be drilled into the concrete elevations with minimal intervention



Figure Seven Standard fixings (detail) as seen in Figure Five above

In all of the top floor flats $\frac{3}{4}$ " service pipe-work will enter the kitchen (via the building external wall & in close proximity to the central supporting column) and terminate with a meter position in the corner under the worktop or terminate at a capped meter control valve if a non-gas user in the same location..

For all other flats the vast majority of $\frac{3}{4}$ " service off-takes enter the flats in a position immediately adjacent the central supporting column. In these cases, the pipe-work passes through the external building wall and directly into the toilet. The pipe is run at low level, passes through the toilet and directly into the adjoining kitchen and existing meter location. However Riser Type R2 has extended $\frac{3}{4}$ " services which supply the higher floor of the two level flats (located on the majority of low level flats). This service type runs away from the central supporting column. It enters through the external wall into the kitchen and terminates at proposed meter position under worktop or will terminate at a capped meter control valve if a non-gas user in the same location.

Where existing gas supply replacements have taken place in the past, it is proposed, as part of this application, to replace the existing single pipe (shown in *Figure Four* above) with a supply that matches the template installation proposal of dual 1" risers rather than the thicker 2" pipe required for a single supply pipe scheme

The following list indicates where there are currently variants to the template design *in situ*, and where the design will have to be carried out with minor

alterations to access flats at the upper or lower levels. These proposals are shown on the accompanying plan CS/049490MLAR. In addition the location plan and photographs attached as Appendix A provides a high lighted illustration of the proposed installation

Building 54 (10 flats) – external gas riser installed in 2008 is to be removed and replaced with dual risers located on either side of the supporting column. This will adopt the ‘template’ installation proposal as installed at Building 115, but will need to incorporate services supplying the low level flats.

Building 82 (10 flats) – external gas riser installed in 2008 is to be removed and replaced with dual risers located on either side of the supporting column. This will adopt the ‘template’ installation but will need to incorporate services supplying the low level flats.

Building 86 (10 flats) – external gas riser installed in the recent past is to be removed and replaced with dual risers located on either side of the supporting column. This will adopt the ‘template’ installation but will need to incorporate services supplying the low level flats.

Building 96 (10 flats) – external gas riser installed in 2003 is to be removed and replaced with dual risers located on either side of the supporting column. This will adopt the ‘template’ installation but will need to incorporate services supplying the low level flats.

On Building 114 the riser configuration will need to be slightly amended from the ‘template’. This column is located at the end of the ramp. It is positioned next to a concrete cast stairway. There is not enough physical space to install in-ground pipe-work to the west facing side of the column. Therefore an approximate 0.5m long section of 1” horizontal pipe will need to be located on the outer face of the column. Due to the proximity of the stairway tubular railing, the gas pipe will be installed at a high level to avoid its use as a handrail – causing potential pipe stress. This proposal is shown in the annotated photographs in Appendix A.



Figure Seven – proposed riser base at building 114

2.3 Summary of Requirement for Works

The work to replace the existing gas supply is urgently necessary and National Grid has held a number of meetings with representatives of Camden Council and English Heritage to design a solution that will meet health and safety requirements and can be installed with minimal intervention to the historic fabric of the Grade II* listed structure. Fittings are kept to a minimum and are discrete. The main galvanised pipe work will blend into the concrete finish of the structure. The work will ensure that all residents have a fuel choice in the future.

3. Impact of the proposed works on the significance of the heritage asset

One of the main principles behind policy on the historic environment is to ‘recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term’ (PPS5 Planning for the Historic Environment. Paragraph 7)

3.1 Proposed Solution

The proposed work is required to replace the above ground (including associated in-ground works) gas riser pipe that supplies the rear of the apartments on the north side of Rowley Way. The work is urgently necessary to maintain a safe gas supply to the building. This application has been made following on site discussions to agree a solution for installation that will meet both the technical requirements and preserve the significance and special interest of the building. All work will take place at the rear elevation of the block which juts out towards the rail way line. It is not possible to continue to maintain the gas supply pipes within the columns, and external mounting of the new pipe work is therefore proposed to provide a safe gas supply to all the apartments in the blocks.

3.2 The Impact of the Proposed Works on the Significance of the Heritage Asset and Justification for the Changes

This Design and Access/Heritage Statement and the elevation plan of the building, show the extent of the works proposed, the materials and methods of fixing, and the location of the new external pipe runs. The historic and architectural significance of the building is described in the introduction and the history and construction of the building is understood and has informed the design of the proposed new gas supply routes. This design provides a uniform symmetrical solution that will offer a balance to the structure. It will also comply with current gas installation regulations.

Detailed management guidelines have been written to guide the care and maintenance of the Alexandra Road Estate. The 2nd Edition Alexandra Road Estate: Management Guidelines was produced by Levitt Bernstein Architects and published in 2006. This described the history and significance of the Estate and is for the use of those making decisions about the repair, alteration

or maintenance of the Alexandra Road estate as well as a guide to works that are an acceptable change. The guide is essentially conservation manual for the proper care of the building.

The London Borough of Camden has adopted a Core Strategy and Development Policies (8th November 2010). The Core Strategy sets out key elements of a vision for the future planning of the borough, with the Development policies setting detailed criteria by which applications for planning permission are determined. Core Strategy **CS14 Promoting High Quality Places and Conserving Our Heritage** is directly applicable to the Grade II* listed Alexandra Way Estate and Conservation Area, but so too is Core Strategy **CS6 Providing Quality Homes**. The London Borough of Camden contains some of the oldest public housing in London dating from the 19th century, and was also responsible for some of the most architectural ambitious public housing schemes in the 1960's and 1970's. Maintaining this affordable housing resource is at the heart of the boroughs future plans.

With regard to listed buildings, 'consent is required for any alterations, including some repairs, which would affect the special interest of a listed building. The matters which will be taken into consideration in an application for alterations and extensions to a listed building are those set out in Policy HE7 of PPS5'. (Paragraph 25.13 LB Camden Development Policies)

Development Policy (DP) 25 Conserving Camden's Heritage

Is applied specifically to preserve or enhance the borough's listed buildings. The Council will:

f) Only grant consent for a change of use or alterations and extensions to a listed building where it considers this would not cause harm to the special interest of the building;

The Alexandra Road Estate was designed to separate residents from vehicular traffic, and the main access road, parking entrance and service entrances are at the rear of the north building, close to the main West Coast rail line. The renewal of the gas supply will involve new fixings to the rear of the seven storey block to provide a safe and relatively accessible gas supply to each of the apartments. This is the back of the building and already houses the main utility/services for these apartments. The work will involve the external fixing of new gas pipes, rather than the replacement of the existing pipes within the unventilated service conduit housed in the concrete columns and shafts. This solution has been discussed on site with representatives of Camden Council and English Heritage and has been agreed as the best

option to meet the requirements for a safe gas supply whilst respecting the architectural significance of the Grade II* listed building.

3.3 Preserving Significance

The significance of the Alexandra Road Estate is derived from its innovative design – a low rise high density public housing scheme which separates people and vehicles, creates a succession of spaces for people and integrates public facilities within the Estate. It is also an example of high quality construction and finishes carried through to the interior of the apartments. Some change is almost inevitable through the life of a building, as normal wear and tear results in maintenance and replacement. Managing this change will ensure that the materials and position are consistent with the overall character and appearance of the Estate, and will blend in with rather than dominate the surrounding architecture.. Wherever possible repair and maintenance should use the same methods and materials that exist within the building, however where this is not practical, for example where an original detail has failed or there is an inherent fault, then the proposed intervention should avoid damaging the building and the effects of the change should be understood (See Levitt Bernstein 2006 paragraph 2.07.4).

The works to replace the gas supply to the most northerly blocks of apartments as outlined in this application will not have a detrimental affect on the overall **Architectural Significance** of the Estate. The proposals are confined to the rear of the building and will be carried out in a simple and uniform approach that has been agreed as the best option through pre application discussion between the applicant and Camden Council and English Heritage.

The new gas pipes will be in galvanised steel and no more than 1” in diameter and although they will be externally fixed they will not dominate the appearance of that elevation by reason of their colour and size. Fixing is by small clamps and will involve minimal intervention to the fabric of the building.

The implementation of this proposal will ensure that the residents of these apartments are assured of a continuing safe gas supply, and all residents will have a dual fuel option in the future to allow greater control over fuel supply bills in the future. It therefore offers significant public benefits which outweigh any concerns about the external fixing solution.

3.4 Justification Summary

The proposed refurbishment of the gas supply will be part of a managed change to the Estate informed by an understanding of the architecture of the building and the need to maintain a gas supply to several hundred dwellings.

‘HE7.2 In considering the impact of a proposal on any heritage asset, local planning authorities should take into account the particular nature of the significance of the heritage asset and the value that it holds for this and future generations. This understanding should be used by the local planning authority to avoid or minimise conflict between the heritage asset’s conservation and any aspect of the proposals.’

The underlying principle behind the renewal of the gas supply is to maintain the heritage asset in its original use and to ensure its continued use and enjoyment by the public. It will make a positive contribution to maintaining a sustainable community and the continuing sense of place and segregation of public and private, residential and service areas that is part of the original design of the Estate. The impacts on the historic fabric and appearance of the building are confined to the rear service elevation. The gas pipe replacement will be carried out according to the proposed plans with regular fittings and fixings that are applied in a way which respects the architectural form of the building and blends with the original construction and materials. It is part of the managed change of the building and as such is required to ensure the continued use and enjoyment of the building.

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London Borough of Camden December 2000 .Conservation Area Statement 31: Alexandra Road.

Levitt Bernstein/KM Heritage January 2006. Alexandra Road Estate Management Guidelines 2nd Edition

List Entry Description: Alexandra Road Estate including walls, ramps and steps Rowley Way.

APPENDICES

APPENDIX A: Riser Replacement on Building 114:

