Central Library, Abington Street, Northampton, NN1 2BA
Proposal for a new roof bridge and associated health and safety improvements to flat roofs

Supporting Statement

Central Library is Northamptonshire’s largest public library with over a thousand visitors per day providing books, audio books, CD’s and DVD’s for loan. Central Library specialises in drama, information and local history.

Central Library is a 3-storey, Grade 2 Listed Building with various roofs of different constructions; including flat felt/asphalt roofs and pitched slate roofs. There is an existing small bridge between two flat roofs which has been assessed by NCC as unsafe as there is an adjacent high level drop and as a temporary measure a scaffold bridge structure has been erected by NCC to maintain safe access to the library’s plant room. The flat roofs are accessed via the rear stairwell and an internal cat ladder onto the flat roof directly overlooking The Ridings from which access can be gained on to a second flat roof where there is a service plant room which requires regular access to maintain the equipment and services. The flat roofs also enable several of the pitched roofs to be inspected and maintained to prevent future deterioration of the historic building fabric. The flat roofs in question can only be viewed by those maintaining it and not from ground level.

After consulting The Communities and Local Government Planning Policy Statement 5 (Planning for the Historic Environment) although the flat roofs do have some significance to the history of the library, it is our opinion that the proposals would not materially harm the value of the building, as the true value of the library is more likely to be enjoyed by the public internally and to the front facade of the library overlooking Abington Street. It is also our opinion that under the East Midlands Regional Spatial Strategy, this managed change is necessary if the heritage assets of the Library are to be maintained in the long term.

As Northamptonshire County Council has a duty under the Management of Health and Safety at Work Regulations 1999 (in particular Working at Height), they have a responsibility to manage the risk of hazards to their staff so far as is reasonably practical. Therefore, after considering the options available, including; keeping the unsightly temporary scaffold structure in place, attempting to refurbish the small unsafe bridge or installing a new steel bridge, the only viable option is considered to be to install a new permanent bridge structure (and at the same time) removing the unsafe small bridge) between the two flat roofs to provide safe access to the flat roofs and plant rooms, fixed to the parapet walls. The fixings to the parapet wall will be at minimal intervals and the steps will rest rather than be fixed through the flat roofs to ensure that reversibility can be achieved in the future. It is proposed to address further health and safety issues due to the changes in health and safety requirements since the Library was originally constructed; namely the parapet walls to the perimeter edges of the flat roofs which are very low and the lack of emergency lighting to the area. Therefore, it is also proposed to install emergency light fittings and also install a freestanding KeyGuard Foldshield fall protection guardrailning system creating a safe pathway. These additional works will significantly improve the roof safety, limit damage to the historic building fabric and will also be reversible if required in the future.

Careful and clear documentation of the installation will be prepared to ensure if required within the future that adaption or reversibility can be achieved.
Central Library, Abington Street, Northampton, NN1 2BA
Proposed new bridge and associated health and safety improvements to flat roofs

Design and Access Statement

USE

The existing site accommodates Northampton’s Central Library which is Northamptonshire’s largest public library with over a thousand visitors per day providing books, audio books, CD’s and DVD’s for loan. Central Library specialises in drama, information and local history. There are approximately 5 No. car parking spaces to the rear of the property for staff use only. The library is accessed by the public off Abington Street.

The proposal is to construct a new fixed steel bridge walkway (to be painted black to match the existing bridge) between two flat roofs above Central Library to provide access to the flat roofs and a service plant room for maintenance personnel. The two flat roofs are sited to the South West of the building to the rear, near The Ridings road. The bridge will replace an existing unsafe structure and will be fixed to the existing parapet walls. It is also proposed to install a free standing KeeGuard Foldshield fall protection guardrailing system to provide a safe walkway away from the roof access hatch to the bridge and the plant room doors together with new emergency lighting.

The proposed new bridge construction will provide the necessary safe access for maintenance personnel to ensure the building services can continue to function and also provide safe access to maintain and inspect the flat roofs and also the surrounding pitched slate roofs.

AMOUNT

The new bridge has been kept to the minimum size whilst still complying with the requirements of the Building Regulations and will have a flat platform approximately 2.7meters in length and steps either side down to the flat roofs. There will also be free standing guardrailing totalling to approximately 25 linear meters in length (1100mm in height) to provide a safe route away from the low level parapet walls. To ensure that the roof walkway areas are illuminated in the event of an emergency, modifications will also be made to the lighting to ensure that emergency lighting is provided to ensure safe egress from the roof.

LAYOUT

The location of the new bridge walkway is fundamental in providing safe access as there is a high level drop between the two flat roofs (approximately 3 storeys high) which has to be bridged. The new bridge will be located in the same location as the existing. The free standing KeeGuard foldshield guardrailing will provide a designated pathway to prevent maintenance staff from getting close to the roof edges and will where possible be positioned away from the roof edge to reduce its visual impact. The layout of the new bridge and fall protection is identified within the attached planning application document Drawing No. 0044663-008.
SCALE

LANDSCAPING

No landscaping is deemed necessary after the installation of the new bridge pathway.

APPEARANCE

The proposed bridge will be of a steel construction to ensure structural stability, and will be painted black to match the original and now redundant bridge. The new emergency light fittings (see manufacturers literature attached to planning application) will be similar in appearance to the existing roof level light fittings to provide continuity and the KeyGuard Foldshield fall protection guardrailing will consist of galvanised steel or aluminium fittings with top and middle rails.

ACCESS

Access can only be gained to the roof via the combination of an internal staircase leading up to an internal cat ladder and the roof area can not be viewed from any surrounding areas from ground level floor level other than from surrounding roofs.
HERITAGE STATEMENT

Installation of a new bridge walkway to provide safe access to the flat roofs and plant room, with associated free standing fall protection guard railing and improvements to the emergency lighting.

The above proposed works are to be undertaken on the flat roofs above Northampton’s Central Library which is a Grade II Listed property and therefore considerable thought has been given to the design of the bridge and associated health and safety improvements in relation to the heritage of the site. This has included pre-application advice from NCC Planners and a meeting on site with Jennifer Ballinger, the Conservation Officer from Northampton Borough Council.

The main element of the scheme comprises of the introduction of a steel bridge walkway (which will be painted black to match the existing) to bridge the high level drop between two flat roofs. The new bridge has been carefully designed by a structural engineer to provide a long lasting safe form of access, as per the attached drawing C5110/1 attached to planning application. By locating the bridge in the area of the original bridge as indicated on drawing 0044663-008, we do not consider that the structure will be visible from any main roads or public footpaths. The freestanding KeeGuard Foldshield guardrailing fall protection aims to provide a safe walkway away from the low level parapet walls and where possible will be located away from the roof edge to reduce the visual impact as viewed from ‘The Ridings’ Road to the rear of the property. The emergency lighting will be of similar appearance to the existing lighting already installed to the flat roof area affected by the works to reduce the impact on the appearance of the building, although again this can not be viewed from ground level.

On the basis of the above and the attached plans we consider that we have demonstrated that the proposed bridge structure will have minimal fixings, the KeyGuard Foldshield fall protection being freestanding and the associated emergency lighting improvements replacing the existing, this will have limited impact on the setting of the Library and if required within the future, reversibility can be achieved.
Central Library, Abington Street, Northampton, NN1 2BA.
Proposed new roof bridge health and safety improvements to flat roofs
Existing roof area photographs

Photograph 1: General view of roof, existing light fittings and temporary scaffold bridge structure.

Photograph 2: General view of existing light fitting and associated cabling.
Photograph 3: General view of plant room access door.

Photograph 4: General view of roof light to be cordoned off by new freestanding guardrailing.
Photograph 5: General view of existing unsafe metal bridge structure.

Photograph 6: Second general view of existing unsafe metal bridge (to the left of photograph).
Photograph 7: General view of temporary scaffold bridge structure between two roofs.
The Safety Solution for Folding Free Standing Roof Edge Protection

- FOLDING COLLECTIVE PROTECTION SYSTEM
- COMPLIES TO EN 13374
- RECYCLED PVC FEET DO NOT PENETRATE THE ROOF MEMBRANE
- AVAILABLE IN GALVANISED STEEL OR WITH ALUMINIUM TOP AND MID RAILS

Please click on the image to see how KEEGUARD Foldshield works.
**KeeGuard® Foldshield**

When collective protection is the preferred method of providing a safe working environment but it is not desirable to have railings permanently visible on the roofline of a building, **KEEGUARD Foldshield** provides an ideal solution.

Designed for use on slopes up to 10 degrees, this folding system is suitable for use on asphalt, concrete, mineral felt or PVC sheet covered roofs and complies with the requirements of EN 13374.

Utilising a hinged version of the standard **KEEGUARD** base fitting, shown below, the guardrail can easily be lifted into place when work is in progress and then quickly folded back down when finished.

**Features**

- Folds down when not in use
- Main fitting can only pivot in one direction
- System can be raised and lowered in sections
- Complies to EN 13374.

**Benefits**

- Does not spoil building aesthetics
- No possibility of the guard rail folding the wrong way
- Saves time and increases flexibility.

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**KEEGUARD** Foldshield offers all the flexibility of standard **KEEGUARD** allowing continuous runs, fixed ends, corners, changes in direction etc, or can be installed in 6m sections with ‘D’ returns to enable it to be folded quickly and simply.

A simple locking pin is all that needs to be removed from the fitting to allow it to pivot.

With a maximum bay size of 2 metres it can be used in both restrained and unrestrained applications. In order to use the folding fitting in a restrained situation, an additional support prop is added to the uprights at six metre intervals to allow sufficient room for the fitting to pivot. A minimum roof up-stand of 250mm is required.
Vienza provides an ideal combination of function and style, offering a solution for applications requiring a tough, waterproof but aesthetically pleasing luminaire with either mains only or combined mains and emergency operation. Offering a variety of finished appearances, the smooth seamless profile of Vienza enables it to blend effortlessly into a multitude of environments. All versions are available in either square or round formats, have vandal resistant polycarbonate body and diffuser in a choice of opal or clear prismatic version with internal prisms, for a smooth, wipe clean exterior. Mounting skirt and eyelid attachments are available for the round version, making Vienza a truly versatile lighting solution.

- Matching mains only and emergency versions
- Suitable for indoor or outdoor use IP65
- Tough vandal resistant polycarbonate
- Opal or clear prismatic diffuser
- Black or white body colour
- Hinged geartray for ease of installation
- Round eyelid and mounting skirt attachments
**Lamp Options**

- 28W, 2D compact fluorescent, 3500°K - GR10q-4 cap

**Installation Notes**

- Suitable for ceiling or wall mounting
- BESA drill points on rear, and alternative drill points for screw fixing
- Round mounting skirt attachment allows flush fixing over 20mm conduit and BESA box
- Cable entry points from 3 directions, with cover caps to maintain body profile
- Geartray hinges for ease of installation
- Terminals accept 2 x 1.5mm mains cables
- Diffuser retained by captive screws, with cover caps to maintain body profile
- Supplied complete with lamp

**Dimensions**

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**Materials**

- Base and optional eyelid and mounting skirt - polycarbonate, white or black
- Diffuser - opal or clear polycarbonate with internal prisms
- Geartray - steel, powder coated white

**Options**

- High Frequency control gear
- Available as either mains only or combined mains and emergency
- Suitable for use on defined escape routes
- Choice of colour (black or white)
- Round eyelid and mounting skirt attachments

For a wider range of lamp and gear options for mains only versions, refer to mains lighting section page 439

**Specification**

To specify state: Square/Round IP65 vandal resistant compact fluorescent luminaire, black/white polycarbonate base, tough wipe clean opal/prismatic polycarbonate diffuser with internal prisms, eyelid and mounting skirt attachment, and hinged geartray as Crompton Vienza range, part no.

**Photometric Data**

**Catalogue Numbers**

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