

# Capital Programme Review 2024-25 Project Appraisal Form

**COMMITTEE &  
PROPOSAL  
NUMBER**

Community & Wellbeing 1

**PROJECT TITLE**

Bourne Hall - Solar PV, battery storage and flat roof covering replacement with insulation upgrade.

**ACCOUNTABLE OFFICER**

Officer responsible for project planning and delivery of the scheme. Accountable officers are also responsible for post project review.

Ian Dyer

**DETAILS OF PROJECT**

Project scope, what is included/excluded in the scheme

There are three elements to this Project:

There were 7 bids put together this year for Bourne Hall, this is the number one priority as it allows for planning consultation fees and professional services in applying for all the other main works listed building consent, which will form part of a committee report requesting all the projects to be carried out at once under one budget pot with hopefully some grant funds.

The installation of Solar PV and battery storage to the South facing section of the perimeter flat roof.

Key points:  
System - 46kWp PV system on flat roof  
Shading 5% minimal shading apart from at start and end of day  
Mounting System - Solion low ballast mounting system  
Solar Panels - 120 x JA Solar 385w panels  
Inverter -1 x 40kW Solis 3phase inverter  
Battery - Included Tesla Powerwall  
Scaffolding & Access via Scaffold tower is required.  
Installation details the system would take approximately 10 days to install•  
Would cover one third of Bourne Hall's current electricity demand and reduce annual emissions by 8 tonnes of CO2.  
Payback around 4 years  
Annual electricity cost saving around £13,788.  
25-year financial benefit £267,413  
The proposed mounting system does not penetrate the roof, and we have carried out a pilot mock-up of panel support for conservation officer, which should support the case for planning permission on a listed building.  
Solar PV Budget cost £46,000.00 (payback period 4 years)

Renewal of flat roof covering - the flat roofs around the perimeter of the building are failing, felt is bubbling up and small leaks are starting to occur. The works are to take up and renew flat roof covering with upgraded insulation, with specialist high performance felt with 25 year guarantee.  
Duration 6 weeks

Roof Budget cost £230,000.00

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	<p>Listed building consent is required and as such programme dates are to be increased to allow applications. Planning fees for listed building consent added and structural engineer costs. Budget £30,000.00</p> <p><b>Financial Strategy Advisory Group comments 29 Sept 2023</b></p> <p>That the proposal could progress to the next stage of the capital programme. Members agreed if Empty Homes Council Tax funding from SCC is received in 2024/25, this would be earmarked to progress this scheme. If this funding stream is insufficient or not received, then capital receipts would be used to fund the balance.</p> <p>Members agreed the final proposal should clarify what part of Bourne Hall is listed. Also, whether the solar panel installation is dependent on the roof replacement.</p> <p>I have attached separate document detailing the listed status of the building taken from the Historic England web site.</p> <p>The existing flat roof covering where the PV panels are to be located has reached the end of its life and areas are leaking water.</p> <p>It would make very little sense to install a PV solar system then come back the following year to remove it to replace the roof covering. Therefore, yes, the roofing works should be carried out before the solar PV is installed. The current high performance systems will give us a 25 year guarantee.</p> <p><b>Risk</b> A full structural survey with calculations must be carried out prior to installation of Solar PV to ensure the roof can accommodate the weight of the panels and not collapse into the banqueting suite rooms. If this cannot be established, then the works may not proceed.</p> <p><b>Tendering</b> <b>Please note that all projects over £25k must be tendered on the procurement portal in accordance with standing orders procedure and at this stage these are budget figures. By the time we get on site this process will have been running for over a year and cost of the project can increase with inflation.</b></p>
Project outcomes and benefits	<p><b>Criteria</b> Minimum required to continue to deliver the services of Council (e.g., Minimum level of building maintenance and IT).. Where the scheme is consistent with the Council's Climate Change Action Plan.</p> <p><b>Benefits</b></p> <p><b>Roof</b> - New 25 year guaranteed roof covering, extra thermal insulation. No roof leaks where roof recovered.</p> <p><b>Solar PV</b> - Renewable energy, carbon reduction, in line with climate change action plan. 40 years minimal maintenance, battery storage so we can use any</p>

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	extra energy generated rather than giving back to the grid. Reduced revenue costs for electricity. Progressing buildings to net zero,
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### FINANCIAL SUMMARY

		Cost of Project £	Comments and detail where necessary. Provide appendices where relevant. Examples of business cases spreadsheets can be found in the Finance Handbook
a	Estimated cost of purchase, works and/or equipment	£276k	£46k Solar PV + £230k Flat roof +
b	Consultancy or other fees	£30k	£30k Consultant/planning fees
c	<b>Total Scheme Capital Costs (a+b)</b>	306K	
d	External Funding Identified (e.g. s106, grants etc.) Please give details, including any unsuccessful funding enquiries you may have made.	?	Yes, possible funding available through Climate change grants, Mark Rachwal is investigating although cannot be confirmed until nearer the installation period.
e	<b>Net Costs to Council (c-d)</b>	306k	
f	Internal Sources of Capital Funds Identified (e.g. repairs & renewals reserve etc.)	0	
g	<b>Capital Reserves Needed to Finance Proposal (e-f)</b>	<b>£306k</b>	
h	Annual Ongoing Revenue <b>Additional Savings</b> as a Direct Result of the Project	£13,788	There is an estimated saving of £13,788. per year which calculates to a payback of 4 years for the solar PV installation.
i	Annual Ongoing Revenue <b>Additional Costs</b> as a Direct Result of the Project	0	

Year	2024/25 £
<b>Spend Profile of Scheme</b> – please identify which year (s) the scheme spend will fall into	2024

### REVENUE IMPACT

Can Revenue Implications be funded from the Committee Base Budget? – Please give details	N/A
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## ENVIRONMENTAL IMPACT

Does the scheme meet any of the Council's Climate Change Action Plan targets, and if so, which ones?	Yes it meets the following action: Investigate the potential for the installation of PV panels and solar storage on Council operated assets and land. Implement where economically and technically viable
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## FOUR YEAR PLAN 2020/24

Is this investment linked to EEBC's Key Themes? If so, say which ones and evidence how. How does project fit within service objectives?	Work with partners to reduce our impact on the environment and move closer to becoming carbon neutral.
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## TIMESCALES

What is the proposed timetable for completion of the project? Give estimated start and finish dates for each stage of the project. These dates will be used as milestones during quarterly budget monitoring to assess performance of project delivery.

		Target Start Date	Target Finish Date
1	Design & Planning	February 2023	
2	Further Approvals Needed	N/A	
3	Tendering (if necessary)	March 2023	
4	Project start date	May 2023	
5	Project Finish Date	May 2023	

## BASELINE CRITERIA

All capital schemes are assessed against criteria set by the Capital Member Group annually. Proposals should meet at least one of these criteria. State which capital criteria(s) for assessing proposals are met and why. Leave blank any which are not met.

Spend to Save schemes should meet the following criteria:

- Payback of the amount capital invested within the project within 5 years (10 years for renewable energy projects).
- The return required on capital employed should be linked to the potential cost of borrowing (MRP) rather than potential loss of investment income.
- Risk of not achieving return on investment is low.
- Clear definition of financial cost/benefits of the scheme.

Members may consider schemes with longer paybacks on major spend to save projects going forward, especially those that incur borrowing.

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<p><b>Is there a guarantee of the scheme being fully externally funded and is it classed as a high priority?</b> Please give details of funding streams, including any restrictions on the funding.</p>	<p>There is a possibility of grant funding</p>
<p><b>Is the Scheme a Spend to Save Project?</b> Will investment improve service efficiency including cost savings or income generation? What is the payback in years?</p>	<p>This is a spend to save scheme</p>
<p><b>Is it mandatory for the Council to provide the scheme?</b> Is investment required to meet Health and Safety or other legislative requirements? If so state which requirements.</p>	<p>No</p>
<p><b>Is this project the minimum scheme required to continue to deliver the services of the Council?</b> - Is investment required for the business continuity of the Council? If so, say how.</p>	<p>N/A</p>

### ASSET MANAGEMENT PLAN

<p>Is investment identified in the Council's Asset Management Plan?</p>	<p>Yes</p>
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### PRIORITISATION

State which **one** of the four prioritisation categories are met and why.

<p>1</p>	<p>Investment essential to meet statutory obligation.</p>	
<p>2</p>	<p>Investment Important to achieve Key Priorities.</p>	<p>This scheme is consistent with the Council's Climate Change Action Plan, subject to affordability, supported by a robust business case and value for money can be demonstrated through a maximum payback period of 10 years</p>
<p>3</p>	<p>Investment important to secure service continuity and improvement.</p>	
<p>4</p>	<p>Investment will assist but is not required to meet one of the baseline criteria.</p>	

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## RISKS ASSOCIATED WITH SCHEME

1	Outline the risks of delivering this project to timetable and budget. (Please do not include risks to the service or asset if project is not approved.)	No risks
2	Are there any risks relating to the availability of resources internally to deliver this project	No
3	Consequences of not undertaking this project	If project does not proceed we will not continue to achieve targets in climate change action plan.
4	Alternative Solutions (Other solutions considered – cost and implications)	N/A

<b>Is consultation required for this project?</b> Please give details of the who with and when by.	No
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<b>Ward(s) affected by the scheme</b>	West Ewell
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### Accountable Officer Responsible for Delivery of the Scheme

Name and Signature

### Whole life revenue costs of capital project

Where savings or budget virements are being used to part fund a project, the relevant budget manager must sign the appraisal form.

### Accountable Officers for the revenue implications of the project

Project Manager Name and Signature ..... Date .....

Revenue Budget Holder Name and Signature ..... Date .....

Service Accountant Name and Signature ..... Date .....

Director Name and Signature ..... Date .....

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## C&W Proposal 1 – ADDITIONAL INFORMATION

Heritage Category:

**Listed Building**

Grade:

**II**

List Entry Number:

**1425772**

Date first listed:

**30-Apr-2015**

List Entry Name:

**Bourne Hall Library and Social Centre**

Statutory Address 1:

**Surrey Libraries, Ewell Library, Bournehall, Spring Street, Epsom, KT17 1UF**

### **The scope of legal protection for listed buildings**

This List entry helps identify the building designated at this address for its special architectural or historic interest.

Unless the List entry states otherwise, it includes both the structure itself and any object or structure fixed to it (whether inside or outside) as well as any object or structure within the curtilage of the building.

For these purposes, to be included within the curtilage of the building, the object or structure must have formed part of the land since before 1st July 1948.

[Understanding list entries](#)

[Corrections and minor amendments](#)

### **Location**

Statutory Address:

**Surrey Libraries, Ewell Library, Bournehall, Spring Street, Epsom, KT17 1UF**

The building or site itself may lie within the boundary of more than one authority.

County:

**Surrey**

District:

**Epsom and Ewell (District Authority)**

Parish:

**Non Civil Parish**

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National Grid Reference:  
TQ2177162705

### Summary

Public library and social centre, 1967-70 by A.G. Sheppard Fidler and Associates.

### Reasons for Designation

Bourne Hall Library and Social Centre, of 1967-70 by A. G. Sheppard Fidler and Associates, is listed at Grade II for the following principal reasons: \* Architectural interest: a striking design, notable for its space-age flair and the generous, top-lit principal interior space; \* Plan form: the circular layout is well-organised, legible and flexible; \* Historic interest: as an ambitious example of the expansion of the library service and the integration of community facilities and disabled access.

### History

The site was formerly occupied by Garbrand Hall, a country house of c.1770. It was renamed Bourne Hall when it was purchased for use as a school in 1926. In 1945 it was acquired by Epsom and Ewell Borough Council on the condition that its grounds were preserved. The house itself was in poor repair, and despite local opposition was demolished in 1962, with the intention of erecting a new public building on the site. The Borough became a library authority in 1964 and took over the facility with the intention of building a larger library. Many aspects of the brief were determined by John Dent (d.1972), the dynamic Borough Librarian. Additionally facilities such as museum and exhibition space and rooms for community use were included for an area with high post-war population growth but lacking in cultural and social facilities.

A design was commissioned from Alwyn Gwilyn Sheppard Fidler (1909-1990), previously chief architect of Crawley New Town from 1947 to 1952 and City Architect of Birmingham from 1952 to 1964. The design, one of his first commissions in private practice, was approved in April 1965. It included a suite of study rooms for evening classes, subsidised by the local educational authority in an example of 'joint provision' by different tiers of local government. The entrance ramp and lift was an early instance of designing disabled access into a public building from the start, predating official design guidance and legislation on

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the subject. Construction commenced in November 1967 and the building was officially opened on 17 April 1970 by Lord Munster, Lord Lieutenant of Surrey, as commemorated by a stainless steel plaque in the foyer.

### Details

Public library and social centre, designed from 1965 and built in 1967-70 by A. G. Sheppard Fidler and Associates, job architect B. W. Loren assisted by F. Fook; W. S. Atkins and Partners, engineers.

**MATERIALS / STRUCTURE:** the structure is of reinforced and pre-cast concrete, with aluminium windows, green Cumbrian slate copings and mosaic external finishes to the perimeter wall. The copper-clad dome with its central glassfibre rooflight is 42.6m (140') in diameter and 11.2m (37') at its highest point. 20 vertical pre-cast concrete ribs form a corona. The knuckles of the ribs are held in position by an in-situ pre-stressed, post-tensioned concrete ring beam which forms both the gutter and the eaves for the main dome. The roof construction is a sandwich of materials: the outer layer is sheet copper bonded to felt and wood wool panels on steel joints spanning between the frame. Towards the outer edges of the roof the wood wool panels are replaced by a band of lightweight 'Gunite' concrete sprayed onto permanent formwork.

**EXTERIOR:** the exterior is a curving volume with a continuous band of aluminium windows at ground and first floor. The upper floor slopes inward and is surmounted by a broad copper dome, from which emerges a corona of pre-stressed, post-tensioned concrete ribs. Single-storey volumes of varying widths project forward of the circular footprint. The windows are separated by load-bearing pre-cast white concrete mullions running between a floating plinth and fascia, and some windows have Cumbrian slate panels beneath. The elevations are designed to a 4" (c.10cm) module enabling standardised pre-cast components. The result resembles a flying saucer, and was designed to sit low within the existing mature landscape. The ribbed concrete boiler chimney is 12.8m (42') high and provides a vertical counterpart to the library's dome.

**PLAN / INTERIOR:** the building has a circular layout and is planned at three levels under a large central rooflight. The semi-open plan library occupies about half of the ground floor in a broad arc and is entered from the main foyer. It comprises a reference and a lending library and a reading room. The freestanding radial bookstacks have been replanned and the wall-mounded shelves are later replacements\* (not of special interest). The main hall, for lectures, concerts and adult classes, is sunken below ground level, and its roof forms a mezzanine museum and exhibition area overlooking the library. The interiors of the hall\* and the adjacent minor hall\* are relatively plain and have been recently refurbished; they are not of special interest. Around the perimeter project single-storey ancillary rooms,

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including a banqueting suite, catalogue area, offices and a junior library. With the exception of the junior library, the interiors of the perimeter rooms\* and the corridors that serve them\* are not of special interest.

An entrance canopy on the south side provides covered access from the car park. The entrance doors have been altered by the insertion of a revolving door\* (not of special interest). A small café and shop have been inserted into the central space, and some of the walls have been plastered and painted white for exhibitions; these alterations and additions\* are not of special interest. Ramped entrances, a lift and low bookcases are included to facilitate disabled access. There are two staircases of African hardwood: a helical one near the entrance with a polished concrete spine beam rising to the mezzanine or gallery floor and a horseshoe-shaped staircase at the far end of the foyer which descends to the main hall. Risers were added to the formerly open-tread helical stair in the 1990s. The internal walls are of 0.4m (16") thick concrete for sound insulation and are partially finished in timber panelling.

**SUBSIDIARY FEATURES:** The junior library opens onto a raised external play area, provided with brick planters and enclosed by an openwork wall of sculptural concrete blocks (the south wall has been removed). To the south a former pond has been infilled with a paved surface. Outside the footprint of the building are a number of freestanding air handling units\*; they are not of special interest.

\* Pursuant to s.1 (5A) of the Planning (Listed Buildings and Conservation Areas) Act 1990 ('the Act') it is declared that these aforementioned features are not of special architectural or historic interest.

### Sources

#### Books and journals

Worpole, K., *Contemporary Library Architecture*, (2013), pp.120-21

'Bourne Hall, Ewell, Surrey : a library and social centre' in *Architectural Design*, , Vol. 4, (March 1970), pp.101-03

'Ewell Library and Social Centre' in *Surveyor*, (13 February 1970), pp.48-49

'Circular Social Centre' in *Architect and Building News*, , Vol. 5, no.6, (19 March 1970), pp.54-55

'Library and Social Centre, Ewell' in *Building*, , Vol. 218, no.6622, (17 April 1970), pp.63-67

'Bourne Hall Library and Social Centre, Ewell' in *Library Association Record*, , Vol. 72, no. 4, (April 1970), p.161

#### Other

Harwood, E. (2014) *Introductions to Heritage Assets: The English Public Library 1945-85*

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## Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

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