

**SPRINGBURN WINTER GARDENS TRUST
PROPOSALS FOR A LIVING RUIN DEVELOPMENT**

AT

SPRINGBURN WINTER GARDENS

FEASIBILITY COST PLAN REPORT

NOVEMBER 2021



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1.00 SUMMARY

- 1.01 Collective Architecture and David Narro Associates have been instructed by Springburn Winter Gardens Trust (SWGTT) to prepare proposals for preserving the existing dilapidated Springburn Winter Garden Building and facilitating its use as an active 'Living Ruin' by stabilising the structure and making it safe for limited public use.
- 1.02 In addition to preserving the building and making it safe for public use, SWGT have also requested Collective Architecture to consider proposals for several interventions to enhance the potential public use of the Winter Gardens.
- 1.03 Brown + Wallace have been requested by SWGT to prepare a high-level RIBA Plan of Work Stage 1 / 2 Cost for the active 'Living Ruin' option based upon the proposals prepared by Collective Architecture and David Narro Associates, and these costs may be summarised as follows: -

Description	Urgent	Necessary	Desirable	Total
Urgent Works	696,000			696,000
Necessary Works		378,000		378,000
Desirable Works			289,000	289,000
Total	£ 696,000	£ 378,000	£ 289,000	£ 1,363,000

A full breakdown of these costs is provided in Section 3 of this report.

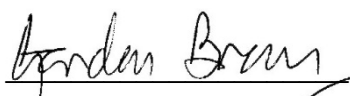
- 1.04 Brown + Wallace have also investigated the likely costs of the proposed interventions as follows: -

Description	Cost
Growing Spaces	182,000
Coffee Stall	23,200
Viewing Platform	339,900
Total	£ 363,100

A full breakdown of these costs is provided in Section 3 of this report.

- 1.05 Details of the assumptions made in the preparation of these costs, the exclusions from the costs and the basis of the costs are contained within Section 2 of this report.
- 1.06 Costs have been prepared on information currently available. Regular updates will be required throughout the ongoing development of the design and specification.
- 1.07 This report is provided for the stated purpose only and for the sole use of the named client. It is confidential to the client and their professional advisers.

Reported by



for

Brown + Wallace
22 James Morrison Street
Glasgow
G1 5PE

Date: 12 November 2021

2.00 COST COMMENTARY

2.01 *Basis of Cost Plan:* -

- a. All costs within this report have been prepared by Brown + Wallace.
- b. Costs relate to 4Q 2021 pricing levels with no allowance for future tender price inflation.
- c. The assumed contract period is approximately 40 weeks.
- d. Costs reflect tender levels likely to be obtained in a competitive tendering environment from suitable selected contractors.
- e. Contract periods and working hours will be normal for the proposed type of works and make no allowance for any acceleration on-costs.
- f. Standard conditions of contract with no allowance for onerous schedule of amendments.
- g. Works to be competitively tendered and undertaken as a single contract on a traditional procurement basis.
- h. Normal working hours apply.
- i. Costs require to be reassessed on production of Architects / M&E Engineers / Structural Engineers drawings and specifications.
- j. The contractor will be provided with clear and unrestricted access to the site for the duration of the works.

2.02 *The costs are based upon the following drawings and documents prepared by the design team:* -

- a. The Springburn winter Gardens Report (October 2021) by Collective Architecture.
- b. Drawing CN-1001 (Condition Plan) by Collective Architecture.
- c. Observations on Site Visit (September/ October 2014) by David Narro Associates.
- d. Drawing SK01 (GF Structural Repair Notes) by David Narro Associates.
- e. Drawing SK02 (Gallery Structural Repair Notes) by David Narro Associates.
- f. Drawing SK03 (Roof Level Structural Repair Notes) by David Narro Associates.
- g. Structural Appraisal and Condition Report (June 2021) by David Narro Associates.

2.05 *Exclusions from the Cost Plan*

- a. Site acquisition and all associated valuation / legal fees and stamp duty.
- b. Legal fees and expenses.
- c. Contract guarantee bond.
- d. Finance or loan charges.

- e. Ecological investigations, reports and mitigation.
- f. Archaeological investigations, reports and mitigation.
- g. Site investigations.
- h. Topographical, measured and verticality surveys.
- i. Professional fees - design team.
- j. Statutory authority fees - planning and building warrant charges.
- k. Traffic Impact Assessment.
- l. Development Impact Assessment (drainage).
- m. Local authority contributions.

2.06 *Assumptions made in the preparation of this Cost Plan: -*

- a. The specified building materials will be readily available for the duration of the project and there will not be any delays arising from protracted material lead-in times.
- b. There will be no adverse changes to the statutory restrictions as a result of the ongoing Covid-19 pandemic.
- c. Standard foundations are required for the interventions with no allowance for piling, trench-fill or similar enhanced foundation treatment.
- d. Any surplus excavated material which requires to be removed from site is classified as 'inert'.
- e. The existing services installations can be easily adapted to suit the new configuration without the requirement to replace infrastructure, plant and equipment.
- f. Works to be reassessed upon clearing site of debris and growths.

2.07 *The Cost Plan excludes allowances for the following: -*

- a. Retaining walls.
- b. Diverting or abandoning existing public utility services on or adjacent the site.

2.08 *The cost contains the following significant provisional sums: -*

- a. Provisional sums are as identified within the cost estimates.

**SPRINGBURN WINTER GARDENS
PROPOSED LIVING RUIN DEVELOPMENT
FEASIBILITY COST PLAN REPORT**



3.00 LIVING RUIN COST ESTIMATE

Item	Description	Qty	Unit	Rate	£	Urgent	Necessary	Desirable
Preparatory Works								
a	Openings which have been previously infilled with a brick of inferior quality should be taken down and rebuilt in an appropriate brick. The mortar mix and any replacement brick should be specified by a masonry conservation specialist.		Prov Sum		25,000			25,000
b	All loose debris is to be removed from site and disposed of. Prior to disposal all items are to be inspect by CA and identified for retention. Temporary storage location to be agreed prior to the start of works.	1,462	m2	5.00	7,310.00	7,310.00		
c	Remove plant and vegetation growths from inside the building and the immediate external perimeter	1,462	m2	8.00	11,696.00	11,696.00		
d	All red brick planters to be broken up and removed. All masonry to be broken up to meet standard of Type 1 hardcore and re-used on site to infill trenches. Any shortfall to be made up from new stone.	140	m2	15.00	2,106.00	2,106.00		
e	Trenches to be cleared out of any debris and growth. 1nr layer of geotextile membrane to be laid within all trenches, pinned to the upper edge and filled with crushed bricks	182	m2	30.00	5,460.00	5,460.00		
f	Install new screed to negate trip hazards (25% floor) area	115	m2	75.00	8,587.50	8,587.50		
Specific Works								
g	U1 - Junction between main wall and mild steel trussed latticework at gallery level - wall to be rebuilt to full thickness - circa 1.5sqm 750mm thick wall (at pier).	2	Nr	3,000.00	6,000.00	6,000.00		
h	U2 - install prop to SE scope.		Prov Sum		5,000	5,000.00		
i	U3 - hanging bracketry to be removed/ repaired to SE scope	1	Nr	4,000.00	4,000.00	4,000.00		
j	N1 - Large growth in wall. Cut out and remove. Build back wall in matching brick and lime mortar. 1sqm approx 400mm thick wall.	1	Nr	1,200.00	1,200.00	1,200.00		
k	N2 - Wall head to be carefully dismantled with growths removed and killed and rebuilt to a height of 700mm to the full wall width (circa 350mm thick to typical wall head - 750mm thick at piers) to lengths shown on plan.	9	Nr	1,700.00	15,300.00	7,650.00	7,650.00	
l	N3 - Temporary waterproofing to gallery and wall head - following debris and growth removal the deck is to be protected with 1nr layer of lapped felt to its full area - water shed into courtyard. Felt fixed down into joints / weighted down to SE scope - (Remove existing failed finishes and scabble any failed or spalling concrete, apply Fosroc Renderoc ST 05 patch repair/levelling screed then felt or hot applied asphalt deck finish for minimal public access works and provide a temporary waterproofing layer).	317	m2	185.00	58,645.00	58,645.00		
m	N4 - Existing timber roof structure to be retained. Allow for refixing all timbers to primary structure with stainless steel straps. All gaps to be packed with hardwood timbers and fixed back to primary structure		Prov Sum		100,000	15,000	85,000.00	

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Item	Description	Qty	Unit	Rate	£	Urgent	Necessary	Desirable
n	N4 - Remedial works to the existing shelving		Prov Sum		2,500		2,500.00	
o	N4 - Remove all gutters	1	Nr	500.00	500.00		500.00	
p	N5 - Large tree stump - to be ground out.	1	Nr	300.00	300.00		300.00	
q	N6 - Area of wall moved - to be rebuilt - circa 1500mm high.		Prov Sum		3,500		3,500.00	
r	N7 - Repair works to gallery structure - refer to SE for scope. To include; brushing down underside, repair filler joists and repair underside of soffit	317	m2	65.00	20,605.00	20,605.00		
s	N8 - protect edges of stairs with timber framing - ext grade plywood 18mm - to shield sharp corners. - to all stairs.	4	Nr	1,500.00	6,000.00		6,000.00	
t	D1 - Repair and restore timber clerestory window frames around gallery - scope of works to be defined following installation of safe access.		Prov Sum		39,900			39,900
u	D2 - rake out and repoint to a depth of 25mm repoint all brick walls inside and out in matching lime mortar.	954	m2	45.00	42,930.00			42,930
v	Clean graffiti from walls	143	m2	45.00	6,439.50			6,440
Additional Structural Engineering Works								
w	Where root growth of vegetation has taken hold and caused movement of the masonry, the outer leaf of brickwork should be carefully taken down locally (generally over the top quarter of the wall) and set aside for refurbishment and reuse. All roots within the cavity should be removed prior to reinstatement of the bricks and full pointing carried out to weatherproof the masonry. The wall should then be rebuilt with collar joint stainless steel wall ties drill fixed to the inner leaf and coursed into the outer leaf. The openings which have been previously infilled with a brick of inferior quality should be taken down and rebuilt in an appropriate brick. The mortar mix and any replacement brick should be specified by a masonry conservation specialist.		Prov Sum		42,000	21,000.00	21,000.00	
x	The brickwork perimeter wall should be taken down and repaired locally where root damage has caused instability in the form of bulging. Where any walls are taken down the original bricks should be refurbished and used in the rebuild.	24	m2	200.00	4,800.00	4,800.00		
y	Loose timbers should be removed (if small mullions) or screwed in place		Prov Sum		15,000	15,000.00		
Main Glasshouse								
z	All internal steel lintels around perimeter should be painted with rust inhibiting paint (Hammerite K-RUST or similar)	133	m	30.00	3,990.00	3,990.00		

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Item	Description	Qty	Unit	Rate	£	Urgent	Necessary	Desirable
Gallery								
aa	Steel lattice curved trusses forming main arches are formed with 2No. 3.5"x3.5" steel angles with diagonal flat bar bracing between, with minor to severe surface corrosion. Some have lost sections of bracing entirely and will need to be strengthened above gallery level. Allow for repairing with flat bars for 1.5m above gallery level throughout by welding new 50x8 flat bars to existing after wire brushing			Prov Sum	149,250	149,250		
ab	For these two stanchion bases, reinstate masonry around exposed steel stanchions at floor level and infill concrete floor using 4No. M10 dowels and re-casting the floor slab in minimum RC28/35 concrete	2	Nr	1,500.00	3,000.00	3,000.00		
ac	The existing perimeter steel cope to the timber screens should be painted with a rust inhibiting paint, as it is offering good protection to the timberwork below	132	m	25.00	3,300.00		3,300.00	
ad	Upper timber panels around the perimeter of the Gallery should have any loose timber either removed or screwed in place to remove the risk of debris fall in high winds	132	m2	50.00	6,600.00			6,600.00
ae	Check fixity of existing balustrade and remove any loose sections, otherwise paint with Hammerite K-RUST rust inhibiting paint	97	m	120.00	11,664.00	11,664.00		
af	All gallery edge steel beams to have Hammerite K-RUST rust inhibiting paint applied	108	m2	25.00	2,700.00	2,700.00		
Roof - Main								
ag	Existing corroded 8"x4" RSJ purlins on the north and south end elevations should be checked by crane basket to confirm fixity and whether they are a risk going forward for public access. Allow for replacement of the end bay purlins as part of the public access works with new 203x102x23UB sections			Prov Sum	80,000	40,000.00	40,000	
ah	All purlins to east and west sides should be investigated further by crane basket to confirm condition and fixity prior to any further works being confirmed to allow public opening. These purlins appear to be 82x4" RSJs with 8" SC bolted through and appear more robust than the north/south roof purlins			Prov Sum	74,400	74,400.00		
North Glasshouse								
ai	The north wall has partially collapsed and should be cordoned off as a minimum and loose upper brickwork taken down			Prov Sum	4,300	4,300.00		
aj	The brickwork encasement to the piers have thin bed mortar joints and a high strength mortar, therefore it is unlikely that a significant number of the bricks will be able to be salvaged. The rebuilding of the piers should allow for a specialist imperial brick to match the existing which should be advised by the project Architect or masonry specialist.			Prov Sum	7,500		7,500	

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Item	Description	Qty	Unit	Rate	£	Urgent	Necessary	Desirable
Fire & Safety								
ak	Allow for lighting, emergency lighting, signage, fire alarm and associated mains distribution boards , enclosures and incoming electrical power supply		Prov Sum		60,000		60,000	
al	Allow for access paths around the property		Prov Sum		25,000		25,000	
External Security								
am	Allow for external lighting		Prov Sum		50,000			50,000
an	Allow for boundary artwork		Prov Sum		30,000			30,000
			Works total		946,483	483,364	262,250	200,870
ao			Preliminaries		238,000	121,545	65,945	50,510
			Sub-total		1,184,483	604,909	328,195	251,380
ap			Contingency allowance		118,448	60,491	32,819	25,138
aq			Price inflation allowance		60,069	30,600	16,986	12,482
			Anticipated works cost		£ 1,363,000	£ 696,000	£ 378,000	£ 289,000

4.00 INTERVENTIONS COST ESTIMATE

Item	Description	Qty	Unit	Rate	£
	Growing Spaces				
	Approximately 1 acre	m2	4,096		
a	Security fence	256	m	150	38,400
b	Gates; vehicle	1	nr	1,200	1,200
c	Gates; pedestrian; security	2	nr	700	1,400
d	Paths/ hardstandings	410	m2	75	30,750
e	Clear site; remove vegetation	4,096	m2	3	12,288
f	Improve soil; testing	3,686	m2	10	36,860
g	Raised planters			Prov Sum	2,500
h	Water supply			Prov Sum	3,000
i	Portakabin bothy with WC and base	1	nr	7,150	7,150
j	Portakabin Chemical/ tool store with base	1	nr	3,465	3,465
k	Poly tunnels				exc
l	Imported topsoil				exc
m	Contaminated soils				exc
	Works total				137,013
n	Preliminaries				20,552
	Sub-total				157,565
o	Contingency allowance				15,756
p	Price inflation allowance				8,678
	Anticipated works cost				£ 182,000

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Item	Description	Qty	Unit	Rate	£
	Coffee Stall				
a	Concrete base	10	m2	125	1,250
b	Portakabin coffee cabin with WC	1	nr	7,150	7,150
c	Internal fit out				exc
d	Water supply			Prov Sum	3,000
e	Drainage			Prov Sum	2,000
f	Electricity			Prov Sum	2,000
g	Paths and hardstanding for table/ bench			Prov Sum	2,000
	Works total				17,400
h	Preliminaries				2,610
	Sub-total				20,010
i	Contingency allowance				2,001
j	Price inflation allowance				1,189
	Anticipated works cost				£ 23,200

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Item	Description	Qty	Unit	Rate	£
	Viewing Platform				
a	Concrete base	30	m2	450	13,500
b	Piling				exc
c	Steel frame	10	t	3,000	30,000
d	Purlins	150	m	20	3,000
e	Cladding and internal finish	250	m2	150	37,500
f	Roof	20	m2	75	1,500
g	Internal stair; metal; with balustrade	6	flights	3,500	21,000
h	Handrail to wall side	83	m	60	4,980
i	Landings	35	m2	75	2,625
j	Doors	2	nr	1,200	2,400
k	Windows and grilles	50	m2	750	37,500
l	Works to the existing structure to accommodate the viewing tower			Prov Sum	25,000
m	Lighting, emergency lighting, fire alarms and power			Prov Sum	20,000
	Works total				199,005
n	Preliminaries				69,652
	Sub-total				268,657
o	Contingency allowance				26,866
p	Price inflation allowance				44,377
	Anticipated works cost				£ 339,900