






INNER WEST

DEVELOPMENT ASSESSMENT REPORT

Application No.	DA/2023/0989
Address	50 Glassop Street BALMAIN
Proposal	Installation of solar tiles on front roof plane. Remainder of roof to have existing tiles removed and replaced with standard tiles.
Date of Lodgement	26 November 2023
Applicant	Mr Richard J Paoloni
Owner	Mr Richard J Paoloni
Number of Submissions	Two (2)
Value of works	\$50,000.00
Reason for determination at Planning Panel	Recommended refusal on a site containing a heritage Item
Main Issues	<ul style="list-style-type: none"> • Non-compliance with heritage controls • Incompatibility with the streetscape and desired future character controls
Recommendation	Refusal
Attachment A	Reasons for refusal
Attachment B	Draft conditions of consent (in the event the Panel resolves to approve the application)
Attachment C	Plans of proposed development
Attachment D	Statement of Heritage Impact
Attachment E	Applicant Response to Council Withdrawal Request



LOCALITY MAP

Subject Site		Objectors		 N
Notified Area		Supporters		

1. Executive Summary

This report is an assessment of the application submitted to Council for the installation of solar tiles on the front roof plane of a heritage item and the replacement of the remainder of roof with standard tiles at 50 Glassop Street Balmain.

The application was notified to surrounding properties and two (2) submissions were received in response to the initial notification. One submission was in objection and one was in support.

The main issues that have arisen from the application include:

- Non-compliance with 5.10 of the IWLEP 2022 – Heritage Conservation
- Incompatibility with the streetscape and character of surrounding development.
- Non-compliance with the desired future character of the area.

The non-compliances are considered unacceptable for reasons discussed in this report, the proposal is recommended for refusal.

2. Proposal

The proposal involves the following works:

- The demolition of the roof tiles on the whole roof and removal of existing solar panels on the rear roof planes of the dwelling house.
- The installation of Goodwe™ Sunshine Series solar tiles on the front facing roof plane in a terracotta colour,
- The installation of standard tiles in terracotta colour on the remaining extent of the roof.

3. Site Description

The subject site is located on the south-eastern side of Glassop Street between Young Street and Hampton Street and is opposite Elkington Park. The site is legally described as lot 2 in DP 923768, is generally rectangular shaped with a total area of 219.4 sqm — see figure 1 for aerial view.

The site has a frontage to Glassop Street of 6.9 metres.

The site supports a two-storey attached dwelling house, the adjoining properties are mostly two-storey attached dwelling houses.

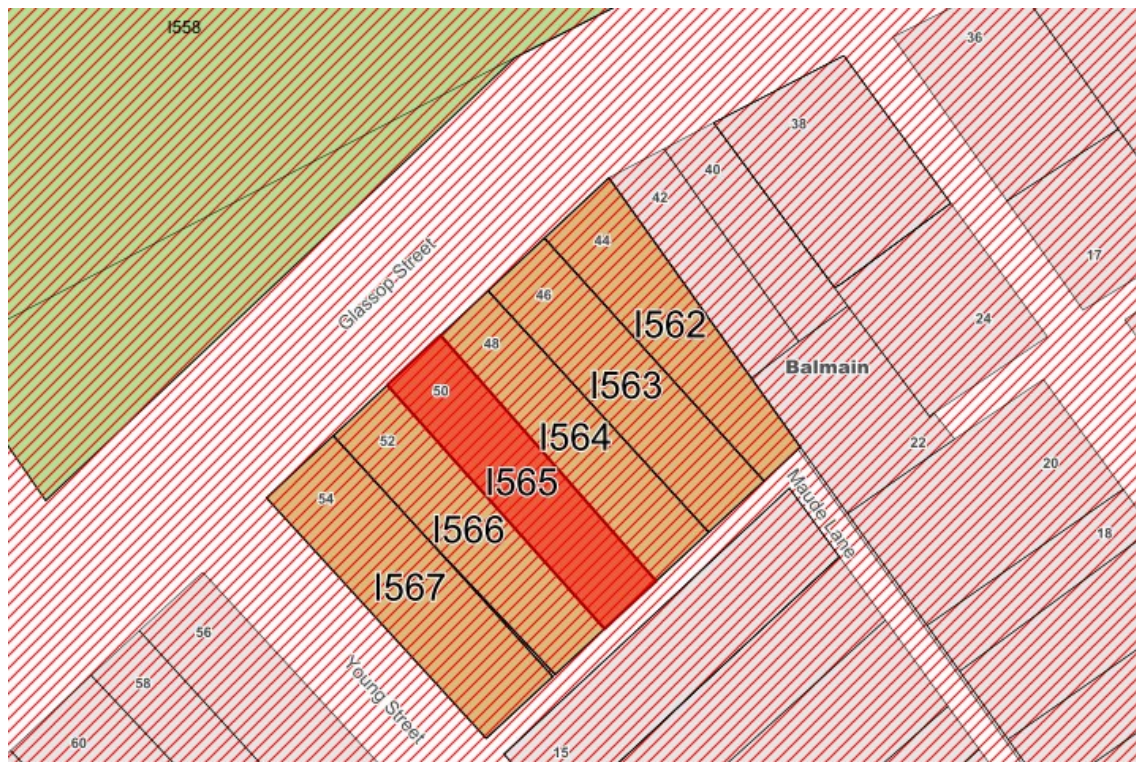
The subject site is listed as a local heritage item (item I565) and is part of a group of six heritage listed terraces including numbers 44, 46, 48, 52, and 54 Glassop Street – see figure 2. The subject site is opposite the heritage listed Elkington Park and located within The Iron Cove Heritage Conservation Area (HCA).

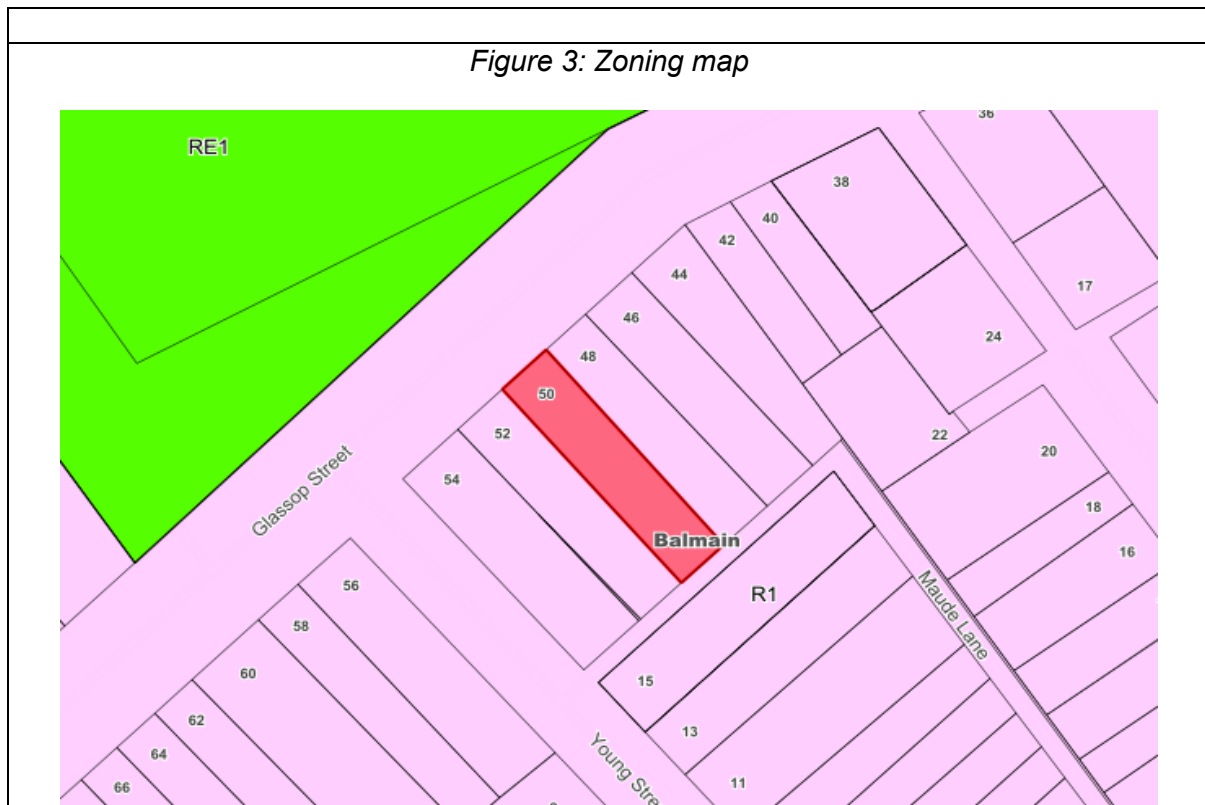
The site is zoned R1 General Residential under the Inner West LEP 2022 – See figure 3

Figure 1: subject property outlined in green



Figure 2: Heritage Map with the subject site in red, heritage items in brown, heritage listed park in green and HCA hatched in red.





4. Background

4(a) Site history

The following application outlines the relevant development history of the subject site and any relevant applications on surrounding properties.

Subject Site

Application	Proposal	Decision & Date
HEC/2021/0149	Replacement of balustrades to Nos. 48 and 50 Glassop Street with wrought iron balustrades	Approved – 28/01/2022

Surrounding properties

Application	Proposal	Decision & Date
DA/2021/0088	No.54 Glassop Street – Installation of solar panels on rear roof planes	Withdrawn as works exempt
HEC/2021/0016	No.54 Glassop Street – repairs to timber work, repaint exterior and replace broken roof tiles	Approved – 17/02/2021

4(b) Application history

The following table outlines the relevant history of the subject application.

Date	Discussion / Letter / Additional Information
22/12/2023	Withdrawal letter sent to applicant explaining the application is unsupportable and requesting withdrawal of the application. Withdrawal was recommended based on the proposal being contrary to heritage and streetscape character controls. The application was considered unsupportable as changes to materials and finishes on front facing roof planes of heritage Items is contrary to the heritage objectives and only like-for-like replacement of cladding is encouraged.
17/01/2024	Letter provided by the applicant in response to the withdrawal request letter.
29/01/2024	Discussion with the applicant about next steps and confirmation the application will be considered by the Local Planning Panel with a recommendation of refusal.

5. Assessment

The following is a summary of the assessment of the application in accordance with Section 4.15 of the *Environmental Planning and Assessment Act 1979 (EPA Act 1979)*.

5(a) Environmental Planning Instruments

The application has been assessed against the relevant Environmental Planning Instruments listed below:

- *State Environmental Planning Policy (Transport and Infrastructure) 2021*
- *Inner West Local Environmental Plan 2022*

The following provides further discussion of the relevant issues:

5(a)(i) *State Environmental Planning Policy (Transport and Infrastructure) 2021*

The application is permitted with consent under Clause 2.36 *Development permitted with consent*:

(9) Solar energy systems Development for the purpose of a solar energy system may be carried out by any person with consent on any land.

Hence, the proposal is permissible with consent on the subject site. However, as demonstrated in the assessment below, the proposal does not satisfy all matters for consideration in accordance with Section 4.15 of the EPA Act 1979 and is recommended for refusal.

5(a)(ii) *Inner West Local Environmental Plan 2022 (IWLEP 2022)*

The application was assessed against the following relevant sections of the *Inner West Local Environmental Plan 2022*:

- Section 1.2 - Aims of Plan
- Section 2.3 - Land Use Table and Zone Objectives
- Section 5.10 – Heritage conservation

Section 1.2 Aims of the Plan

As discussed later in this report, the proposal:

- Will have an adverse impact on the streetscape and Distinctive Neighborhood in which the site is located, particularly due to the development being inconsistent with the heritage controls and materials.

Therefore, the proposal is contrary to the following objectives under clause 1.2 of the *IWLEP 2022*:

- (b) to conserve and maintain the natural, built and cultural heritage of Inner West,*
- (h) to prevent adverse social, economic and environmental impacts on the local character of Inner West*

As discussed in further detail in this report, the proposal is considered to compromise the heritage significance of the subject dwelling and diminishes the character of the adjoining heritage listed terraces through the use of unsympathetic materials.

Section 2.3 Land Use Table and Zone Objectives

R1 – General Residential

Zone Objectives:

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To provide residential development that maintains the character of built and natural features in the surrounding area.*

The proposal fails to satisfy objective 4 as it does not maintain the character of built features of the surrounding area as the application seeks to modify the material/finish of the front facing roof plane in a row of identical terrace houses, putting it at odds with the adjoining heritage items.

Section 5.10 Heritage Conservation

It is considered the development does not satisfy the objectives under section 5.10 Heritage Conservation of the *IWLEP 2022* as listed below:

- a) to conserve the environmental heritage of Inner West,*
- b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,*
- c) to conserve archaeological sites,*
- d) to conserve Aboriginal objects and Aboriginal places of heritage significance.*

For development consent to be granted for the demolition and alteration of exterior features and finishes of a heritage item, the above objectives must be met. The proposed alteration of the material finish of the front facing roof place of the heritage item is contrary to (b) and will impact the aesthetic significance of the individual house and its relationship with the adjoining heritage items as viewed from the streetscape, adjacent park, and waterway (See images 3-6 below).

The statement of significance for 50 Glassop street describes the subject property as being of

“historic and aesthetic significance as part of a fine and largely intact example of a c. 1890s, free standing row of residential terraces constructed in the federation style... Together with Nos. 54-44 the building makes a positive contribution to the Glassop Street streetscape”.

The Statement of Heritage Impact (Attachment D) prepared by the applicant is brief with no historic information being provided about the terrace house itself. There is an assumption made in this statement that the roof was originally clad in grey slate which is unlikely to be correct given the age of the house and State Heritage Listing description identifying terracotta tiles as characteristic of the terraces. Nonetheless, the terrace and group of terraces as a whole, are substantially intact, and changes to the front roof slope will impact the overall heritage significance of the group, as well as impacting the significance of the individual item.

The heritage objectives and controls under the Leichhardt Development Control Plan 2013 (LDCP) (see assessment below) seek the retention of the main roof slopes of heritage item buildings, hence the preservation or like-for-like replacement of the terracotta tile roof is required. The proposed “standard tiles” (as depicted in Image 1) are not the same style as the existing tiles and do not match the pattern, profile, or colour of the Terracotta Marseille roof tiles on the terraces in the group, so the proposed tiles are not supported on the front roof plane of the heritage item as it will jeopardise the relationship of this terrace to the group of houses (See image 2).



Image 1: Marseille Terracotta Roof Tiles as seen on No. 56 Glassop Street (left), proposed roof tile to be colour-matched terracotta (right)



Image 2: Aerial image of No.44 – 54 Glassop Street and matching terracotta roof cladding. Note the solar panels and hot water systems installed on the rear roof planes of Nos. 54, 52, 50, 48 and 44.



Image 3: row of heritage houses from the streetscape (south vantage point), subject property in red.



Image 4: subject property (blue railing) from streetscape (north vantage point)



Image 5: subject site from streetscape

The LDCP provisions do allow alterations to roof slopes confined to the rear to limit visual impacts from the streetscape. The aesthetic value of the Glassop Street streetscape has been largely preserved due to these provisions and it is evident from a survey of the subject street, that solar panels have been installed on the rear roof planes on numerous dwellings.

The subject property itself has 21 solar panels installed on the rear roof planes (Image 2) and is encouraged to explore different arrays on these roof planes which can be installed as exempt development (see 5(a)(i) above) as there is more than sufficient room on the rear planes, Council is willing to support solar installations of this nature in the locality on the rear roof plane.

The proposal is not supported on heritage grounds and would be detrimental to the significance of the individual item and the group as a whole. Alternative options should be pursued, including increasing the capacity of the solar array to the rear roof slope.

5(b) Development Control Plans

The application has been assessed and the following provides a summary of the relevant provisions of Leichhardt Development Control Plan 2013.

LDCP2013	Compliance
Part A: Introductions	
Section 3 – Notification of Applications	Yes
Part C	
C1.0 General Provisions	No – see discussion
C1.3 Alterations and additions	No – see discussion
C1.4 Heritage Conservation Areas and Heritage Items	No – see discussion
Part C: Place – Section 2 Urban Character	
C2.2.2.6 Birchgrove Distinctive Neighbourhood	No – see discussion
Part C: Place – Section 3 – Residential Provisions	
C3.3 Elevation and Materials	No – see discussion
C3.7 Environmental Performance	Yes
Appendix B: Building Typologies	
Section 7 – Two and Three Storey Terraces	No – see discussion

The following provides discussion of the relevant issues:

C1.0 General Provisions

Due to the streetscape, pattern of development and visibility concerns raised in this report, the proposal does not satisfy and has not demonstrated compliance with the following objectives of Part C1.0:

- *O6 Compatible: places and spaces contain or respond to the essential elements that make up the character of the surrounding area and the desired future character. Building heights, setbacks, landscaping, and architectural style respond to the desired*

future character. Development within Heritage Conservation Areas or to Heritage Items must be responsive to the heritage significance of the item and locality.

The proposal does not reflect the pattern of development in the locality and is not responsive to the character of the HCA and heritage item itself. Alterations to the main roof slope will impact on the significance of the individual heritage listed terrace house, its contribution to the streetscape and the overall conservation of the HCA. Any solar array should continue to be located on the rear roof slopes where the installation is not visible from the streetscape. The subject site forms part of the group of near identical heritage items and the proposed changes will be highly notable within the streetscape and a stark contrast from the current heritage setting.

C1.3 Alterations and Additions

The proposal does not satisfy section C1.3 (a), (b), (c), (f) and (h) outlined below, as the change to the roof is visible from the public domain and is not considered sympathetic or complimentary to the heritage item, adjoining items and neighbourhood character, and the change in material and fabric will be visible from the streetscape and surrounding viewpoints in the public and private domain (see images 6 and 7 below)

(a) complements the scale, form and materials of the streetscape including wall height and roof form;

(b) where an alteration or addition is visible from the public domain it should appear as a sympathetic addition to the existing building;

(c) makes a positive contribution to the desired future character of the streetscape and any heritage values associated with it;

(f) maintains views and glimpses from the public domain to natural and built elements that contribute to local character and sense of place;

(h) retains existing fabric wherever possible and maintains and repairs, where necessary, rather than replaces the fabric.



Image 6: View from the public park (Elkington Park), subject site in red box.



Image 7: Zoomed in view from public park, roof plane subject to the proposal in red.

As the original fabric is identical across the row of terrace houses, the proposal will disrupt the harmony the preservation of this roof fabric has created. All the terrace houses in the group have a Marseille terracotta tile roof, some of which have replacement tiles and some which have been maintained as original, but all complement each other and create a significant pattern as seen from the streetscape and surrounding viewpoints (see images above). The proposed installation of the flat solar tiles and standard tiles will vastly contrast to the finish of the Marseille style tiles (Image 1) as the finish will be smooth and reflective compared to the texture the existing tiles create. Hence, the proposal is considered contrary to the above objectives.

C1.4 Heritage Conservation areas and Heritage Items

The application was accompanied by a Statement of Heritage Significance which identified the sites listing on the NSW State Heritage Register but lacked a substantial assessment into the impacts of the proposal on the significance of the site and surrounds. The local heritage listing of the site notes that the building is a fine example of an original two storey Federation style of terrace and identifies the terracotta tile roofing as original which is supported by photographs in the local studies collection.

The State Heritage Inventory Listing contains a Management Strategy for the building which notes that:

the existing two storey scale, character and detail of the building including facebrick front facade and details, colonnaded front verandah and balcony above with associated decorative elements, roof form and chimneys and pattern of openings should be retained and conserved

any further works could include the removal of the vines on the lower ground stone wall and ground floor colonnaded verandah. Other alterations and additions should be confined to the rear of the building and not detract from the original form and character of the building and main roof form as it presents to Glassop Street.

The proposal does not provide for the conservation of the existing roof and includes changes to the character and materiality that are not confined to the rear. Additionally, the proposed replacement tiles for the extent of the roof (Attachment C) is flat tile which does not match the shape or style of the existing tiles on the subject site and adjoining roofs in the group of attached heritage listed terrace's. The proposed tiles match the size of the solar tiles and while this will be a better outcome in visually integrating the solar tiles into the cladding, these tiles are incompatible with the materials and finishes of the attached adjoining roofs and will have a substantial visual amenity impact on the significant heritage fabric and visual unity of the row of terraces (see image 2).

Under this section of the DCP, the proposal is considered contrary to the following objectives:

- a. *does not represent an unsympathetic alteration or addition to a building;*
- (d) *is compatible with the setting or relationship of the building with the Heritage Conservation Area in terms of scale, form, roof form, materials, detailing and colour of the building and conforms with the Burra Charter (Refer to: <http://australia.icomos.org/publications/charters/>)*
- (e) *conserves and enhances the fabric and detail of a building that contributes to the cultural significance of the building in its setting;*

(f) maintains the visual unity of groups of buildings, in particular semi-detached and attached terraces;

(h) protects and enhances views of the existing building from the public domain.

Additionally, the proposal doesn't satisfy the following controls:

- *C2 The fabric of an existing building is to be the subject of appropriate conservation practices including:*

(d) retention of the original cladding material of original roofs where viable;

(e) consideration of suitable replacement materials should be based on original material, and where a property is part of a group or row, replacement materials should have regard to the integrity of the group.

- *C5 Consideration of roofing materials for additions should have regard for compatibility with the original roof, as well as for the context of the setting (such as if a dwelling is part of a group of similar dwellings).*

C2.2.2.6 Birchgrove Distinctive Neighbourhood

The Birchgrove distinctive neighbourhood slopes down towards the waterfront with the existing character including mostly residential dwellings with Victorian Style terrace houses on the upper slopes built in the late 1800's. This group of terrace houses is a pocket of well preserved and maintained two-storey Victorian terrace houses which face towards the waterway and over Elkington Park. The desired future character of the distinctive neighbourhood focuses on preservation and consistency of elements and styles characteristic of the area. The proposal to alter the materials of the roof plane as visible from the streetscape has not demonstrated compliance with the following desired future character controls:

- *C5 Conserve the single and double storey, freestanding form, style and materials characteristic to each street.*
- *C16 Changes to the front façades of existing dwellings shall be kept to a minimum with additions to the rear of dwellings preferred.*
- *C19 Building materials used shall be consistent with the existing character of the streetscape, including rendered and painted surfaces and roof materials such as corrugated iron as well as timber windows.*

C3.3 Elevation and Materials

The purpose of this section of the DCP is to ensure the elevation design and materials of a building is compatible with neighbouring buildings and the character of the streetscape. In areas of homogenous character particularly with heritage items and HCAs, the selection of materials and finishes requires greater sensitivity.

In this scenario, where the building is part of a group of attached heritage listed dwellings, the materiality of the roof is one consistent entity across the front facing plane of all six dwellings. While the exact shade of terracotta varies slightly between each dwelling due to varying levels of care and replacement tiles (image 2), when viewed from the public domain, the roofs form a harmonious face which creates a significant example of the heritage character of the area

(image 7). The finish of the solar tiles proposed, while terracotta in colour, will be highly reflective and a flat surface which varies significantly from the texture of the existing terracotta tiles across the group of terraces.

Hence, the proposal is considered contrary to the following objectives and has not demonstrated compliance with the identified controls of this section:

- *O1 Building elevation and materials visible from the public domain:
(a) complement the prevailing or desired future character of the neighbourhood, in particular responding to the vertical and horizontal rhythm of the streetscape.*
- *C4 Residential development in a Heritage Conservation Area is compatible with the Building Typologies contained in Appendix B – Building Typologies of this Development Control Plan, (See controls below)*
- *C11 Materials and finishes are compatible with those prevailing in the streetscape and the period of construction of the dwelling.*



Image 7: front elevation of No. 44 (left) to 50 (right) Glassop Street.

Appendix B: Section 7 – Two and Three Storey Terraces

Development at the subject site is recommended to meet the controls within this section to ensure it is compatible with the characteristics typical of two storey terraces in the locality. As raised previously in this report, the proposal does not satisfy the following controls of this part of the DCP:

- *C1 Development shall:*
 - (a) retain the integrity of the original building and the character of consistent terrace groups and rows;*
 - (b) maintain the relative importance, in scale and detailing of the main (front) part of the building;*
 - (c) retain streetscape and skyline character;*
 - (f) maintain the amenity of the terrace and adjoining properties;*

5(c) The Likely Impacts

The assessment of the Development Application demonstrates that the proposal will have an adverse impact on the locality in the following way:

- Will result in a development that is incompatible with the predominant materials and finishes of roof cladding across the group of heritage items and the HCA;
- Will result in a development that is incompatible with the desired future character of the area;
- Will result in adverse visual amenity impacts as viewed from the streetscape and public domain.

5(d) The suitability of the site for the development

It is considered that the proposal will have an adverse impact on the adjoining properties and existing streetscape, the proposed materials and finishes are not complimentary nor sympathetic to the existing development, and therefore it is considered that the site is unsuitable to accommodate the proposal.

5(e) Any submissions

The application was notified in accordance with the Community Engagement Framework for a period of 14 days to surrounding properties.

2 submissions were received in response to the initial notification, 1 in opposition and 1 in support of the proposal.

The following issue raised in objection to the proposal been discussed in this report:

- The solar tiles compromising the federation features of the house and the group of houses as seen from the public domain – see the body of the report

5(f) The Public Interest

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by Council ensuring that any adverse effects on the surrounding area and the environment are appropriately managed.

The proposal is contrary to the public interest.

6 Referrals

6(a) Internal

The application was referred to the following internal officer and issues raised in that referral have been discussed in section 5 above.

- Heritage officer

7. Section 7.11 Contributions/7.12 Levy

Section 7.11 contributions/7.12 levies are not payable for the proposal.

8. Conclusion

The proposal generally does not comply with the aims, objectives and design parameters contained in *Inner West Local Environmental Plan 2022* and *Leichhardt Development Control Plan 2013*.

The development would result in significant adverse impacts to the heritage item, and to the adjoining properties and the streetscape diminishing the quality/aesthetic value of the heritage item/s and is not considered to be in the public interest.

The application is considered unsupportable and in view of the circumstances, refusal of the application is recommended.

9. Recommendation

- A. That the Inner West Local Planning Panel exercising the functions of the Council as the consent authority, pursuant to s4.16 of the *Environmental Planning and Assessment Act 1979*, refuse Development Application No. DA/2023/0989 for the installation of solar tiles on the front roof plane and replacement of the rest of the roof cladding with standard tiles at 50 Glassop Street Balmain for the following reasons.

Attachment A – Reasons for Refusal

1. Pursuant to section 4.15(1)(a)(i) of the Environmental Planning and Assessment Act 1979, the proposed development is inconsistent with the following sections of *Inner West Local Environmental Plan 2022*:
 - a. *Section 1.2 – Aims of the Plan*: the proposed development does not conserve the built heritage of the Inner West.
 - b. *Section 5.10 – Heritage Conservation*: the proposed development would cause an adverse impact upon the heritage significance of the heritage item on the subject site, the heritage items on neighbouring sites, and the Iron Cove Heritage Conservation Area
2. Pursuant to section 4.15(1)(a)(iii) of the Environmental Planning and Assessment Act 1979, the proposed development is inconsistent with the following parts of Leichhardt Development Control Plan 2013:
 - a. C1.0 - General Provisions: Objective O6, as it does not respond the existing and desired future character of the surrounding area.
 - b. C1.1 - Site and Context Analysis: Objectives O1 (c) and (f), as the existing site conditions on the site, adjoining properties, and heritage characteristics have not been adequately taken into consideration.
 - c. C1.3 - Alterations and Additions: Objectives O1 (a)-(c), (f) and (h) as it does not preserve the character of the streetscape, will not be compatible with its setting, nor the desired future character of the distinctive neighbourhood.
 - d. C1.4 - Heritage Conservation areas and Heritage Items – Objectives O1 (a), (b), (d)-(f), and (h), and Controls C2 (d) and (e), and C5, as the proposed development does not preserve the heritage features, significant to the site or propose materials and finishes which are typical of the heritage item or heritage conservation area.
 - e. C2.2.2.6 - Birchgrove Distinctive Neighbourhood: Controls C5, C16, and C19, as the proposal is not considered to be consistent with the desired future character controls as it does not conserve the materials significant to the character of the neighbourhood or building typology, or confine the changes to the character and materiality to the rear of the dwelling.
 - f. C3.3 - Elevation and Materials: Objectives O1 (a), and controls C4 and C11, as proposed materials visible from the public domain do not complement the existing character of neighbouring dwellings as viewed from the streetscape.
3. The proposal has not demonstrated that it will not result in significant impacts on the built environment, particularly with respect to establishing an undesirable streetscape impact, pursuant to section 4.15(1)(b) of the Environmental Planning and Assessment Act 1979.
4. The proposal has not demonstrated that the site is suitable for the development pursuant to section 4.15(1)(c) of the Environmental Planning and Assessment Act 1979.

5. The application fails to take into consideration the concerns raised in the submissions that were received following the notification of the application, pursuant to section 4.15(1)(d) of the Environmental Planning and Assessment Act 1979.
6. In view of the extent of non-compliances with the planning provisions and the matters raised within the submissions, the proposal is not considered to be in the public interest, contrary to section 4.15(1)(e) Environmental Planning and Assessment Act 1979.

Attachment B – Draft conditions of consent (in the event the Panel resolves to approve the application)

CONDITIONS OF CONSENT

DOCUMENTS RELATED TO THE CONSENT

1. Documents related to the consent

The development must be carried out in accordance with plans and documents listed below:

Plan, Revision and Issue No.	Plan Name	Date accepted	Prepared by
01	Roof Demolition Plan	27/11/2023	Richard Paoloni
02	Front Roof Plane Dimensions	27/11/2023	Richard Paoloni
03	Proposed solar tile area on front roof plane	27/11/2023	Richard Paoloni
04	Proposed array of solar tiles on the front roof plane	27/11/2023	Richard Paoloni
	Materials & finishes - Solar Tile (terracotta colour)	27/11/2023	Richard Paoloni
	Materials & Finishes - Standard Tile (Terracotta finish)	27/11/2023	Richard Paoloni

As amended by the conditions of consent.

DESIGN CHANGE

2. Design Change

Prior to the issue of a Construction Certificate, the Certifying Authority must be provided with amended plans demonstrating the following:

- a. The replacement roof tiles are to match the pattern, profile and colours of the Terracotta Marseille roof tiles of the terraces in the group, including Nos. 44 to 54.

GENERAL CONDITIONS

3. Standard Street Tree Protection

Prior to the commencement of any work, the Certifying Authority must be provided with details of the methods of protection of all street trees adjacent to the site during demolition and construction.

4. Works Outside the Property Boundary

This development consent does not authorise works outside the property boundaries on adjoining lands.

5. Waste Management Plan

Prior to the commencement of any works (including any demolition works), the Certifying Authority is required to be provided with a Recycling and Waste Management Plan (RWMP) in accordance with the relevant Development Control Plan.

PRIOR TO ANY DEMOLITION

6. Dilapidation Report

Prior to any works commencing (including demolition), the Certifying Authority and owners of identified properties, must be provided with a colour copy of a dilapidation report prepared by a suitably qualified person. The report is required to include colour photographs of all the adjoining properties to the Certifying Authority's satisfaction. In the event that the consent of the adjoining property owner cannot be obtained to undertake the report, copies of the letter/s that have been sent via registered mail and any responses received must be forwarded to the Certifying Authority before work commences.

PRIOR TO CONSTRUCTION CERTIFICATE**7. Structural Certificate for retained elements of the building**

Prior to the issue of a Construction Certificate, the Certifying Authority is required to be provided with a Structural Certificate prepared by a practising structural engineer, certifying the structural adequacy of the property and its ability to withstand the proposed additional, or altered structural loads during all stages of construction. The certificate must also include all details of the methodology to be employed in construction phases to achieve the above requirements without result in demolition of elements marked on the approved plans for retention.

DURING DEMOLITION AND CONSTRUCTION**8. Construction Hours – Class 1 and 10**

Unless otherwise approved by Council, excavation, demolition, construction or subdivision work are only permitted between the hours of 7:00am to 5:00pm, Mondays to Saturdays (inclusive) with no works permitted on, Sundays or Public Holidays.

9. Stormwater Drainage System

Stormwater runoff from all roof and paved areas within the property must be collected in a system of gutters, pits and pipelines discharged by gravity to the kerb and gutter of a public road.

Any existing component of the stormwater system that is to be retained, including any absorption trench or rubble pit drainage system, must be checked and certified by a Licensed Plumber or qualified practising Civil Engineer to be in good condition and operating satisfactorily.

If any component of the existing system is not in good condition and /or not operating satisfactorily and/or impacted by the works and/or legal rights for drainage do not exist, the drainage system must be upgraded to discharge legally by gravity to the kerb and gutter of a public road. Minor roof or paved areas that cannot reasonably be drained by gravity to a public road may be disposed on site subject to ensure no concentration of flows or nuisance to other properties.

ADVISORY NOTES**Prescribed Conditions**

This consent is subject to the prescribed conditions of consent within Sections 69-86 of the *Environmental Planning and Assessment Regulations 2021*.

Notification of commencement of works

At least 7 days before any demolition work commences:

- a. The Council must be notified of the following particulars:
 - i. the name, address, telephone contact details and licence number of the person responsible for carrying out the work; and
 - ii. the date the work is due to commence and the expected completion date; and
- b. A written notice must be placed in the letter box of each directly adjoining property identified advising of the date the work is due to commence.

Storage of Materials on public property

The placing of any materials on Council's footpath or roadway is prohibited, without the prior consent of Council.

Toilet Facilities

The following facilities must be provided on the site:

- a. Toilet facilities in accordance with WorkCover NSW requirements, at a ratio of one toilet per every 20 employees; and
- b. A garbage receptacle for food scraps and papers, with a tight fitting lid.

Facilities must be located so that they will not cause a nuisance.

Other Approvals may be needed

Approvals under other acts and regulations may be required to carry out the development. It is the responsibility of property owners to ensure that they comply with all relevant legislation. Council takes no responsibility for informing applicants of any separate approvals required.

Infrastructure

The developer must liaise with the Sydney Water Corporation, Ausgrid, AGL and Telstra concerning the provision of water and sewerage, electricity, natural gas and telephones respectively to the property. Any adjustment or augmentation of any public utility services including Gas, Water, Sewer, Electricity, Street lighting and Telecommunications required as a result of the development must be undertaken before occupation of the site.

Failure to comply with conditions

Failure to comply with the relevant provisions of the *Environmental Planning and Assessment Act 1979* and/or the conditions of this consent may result in the serving of penalty notices or legal action.

Other works

Works or activities other than those approved by this Development Consent will require the submission of a new Development Application or an application to modify the consent under Section 4.55 of the *Environmental Planning and Assessment Act 1979*.

Obtaining Relevant Certification

This development consent does not remove the need to obtain any other statutory consent or approval necessary under any other Act, such as (if necessary):

- a. Application for any activity under that Act, including any erection of a hoarding;
- b. Application for a Construction Certificate under the *Environmental Planning and Assessment Act 1979*;
- c. Application for an Occupation Certificate under the *Environmental Planning and Assessment Act 1979*;
- d. Application for a Subdivision Certificate under the *Environmental Planning and Assessment Act 1979* if land (including stratum) subdivision of the development site is proposed;
- e. Application for Strata Title Subdivision if strata title subdivision of the development is proposed;
- f. Development Application for demolition if demolition is not approved by this consent;
or
- g. Development Application for subdivision if consent for subdivision is not granted by this consent.

National Construction Code (Building Code of Australia)

A complete assessment of the application under the provisions of the National Construction Code (Building Code of Australia) has not been carried out. All building works approved by

this consent must be carried out in accordance with the requirements of the National Construction Code.

Notification of commencement of works

Residential building work within the meaning of the *Home Building Act 1989* must not be carried out unless the PCA (not being the council) has given the Council written notice of the following information:

- a. In the case of work for which a principal contractor is required to be appointed:
 - i. The name and licence number of the principal contractor; and
 - ii. The name of the insurer by which the work is insured under Part 6 of that Act.
- b. In the case of work to be done by an owner-builder:
 - i. The name of the owner-builder; and
 - ii. If the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.

Dividing Fences Act

The person acting on this consent must comply with the requirements of the *Dividing Fences Act 1991* in respect to the alterations and additions to the boundary fences.

Permits from Council under Other Acts

Where it is proposed to occupy or carry out works on public roads or Council controlled lands, the person acting on this consent must obtain all applicable Permits from Council in accordance with Section 68 (Approvals) of the *Local Government Act 1993* and/or Section 138 of the *Roads Act 1993*. Permits are required for the following activities:

- a. Work zone (designated parking for construction vehicles). Note that a minimum of 2 months should be allowed for the processing of a Work Zone application;
- b. A concrete pump across the roadway/footpath;
- c. Mobile crane or any standing plant;
- d. Skip bins;
- e. Scaffolding/Hoardings (fencing on public land);
- f. Public domain works including vehicle crossing, kerb & guttering, footpath, stormwater, etc.;
- g. Awning or street verandah over footpath;
- h. Partial or full road closure; and
- i. Installation or replacement of private stormwater drain, utility service or water supply.

Contact Council's Road Access team to ensure the correct Permit applications are made for the various activities. A lease fee is payable for all occupations.

Noise

Noise arising from the works must be controlled in accordance with the requirements of the *Protection of the Environment Operations Act 1997*.

Dial before you dig

Contact "Dial Prior to You Dig" prior to commencing any building activity on the site.

Useful Contacts

BASIX Information	1300 650 908 weekdays 2:00pm - 5:00pm
	www.basix.nsw.gov.au
Department of Fair Trading	13 32 20
	www.fairtrading.nsw.gov.au
	Enquiries relating to Owner Builder Permits and Home Warranty Insurance.
Dial Prior to You Dig	1100
	www.dialprior toyoudig.com.au
Landcom	9841 8660
	To purchase copies of Volume One of "Soils and Construction"
Long Service Payments Corporation	131441
	www.lspc.nsw.gov.au
NSW Food Authority	1300 552 406
	www.foodnotify.nsw.gov.au
NSW Government	www.nsw.gov.au/fibro
	www.diyasafe.nsw.gov.au
	Information on asbestos and safe work practices.

NSW Office of Environment and Heritage	131 555	www.environment.nsw.gov.au
Sydney Water	13 20 92	www.sydneywater.com.au
Waste Service - SITA Environmental Solutions	1300 651 116	www.wasteservice.nsw.gov.au
Water Efficiency Labelling and Standards (VELS)		www.waterrating.gov.au
WorkCover Authority of NSW	13 10 50	www.workcover.nsw.gov.au

Enquiries relating to work safety and asbestos removal and disposal.

Asbestos Removal

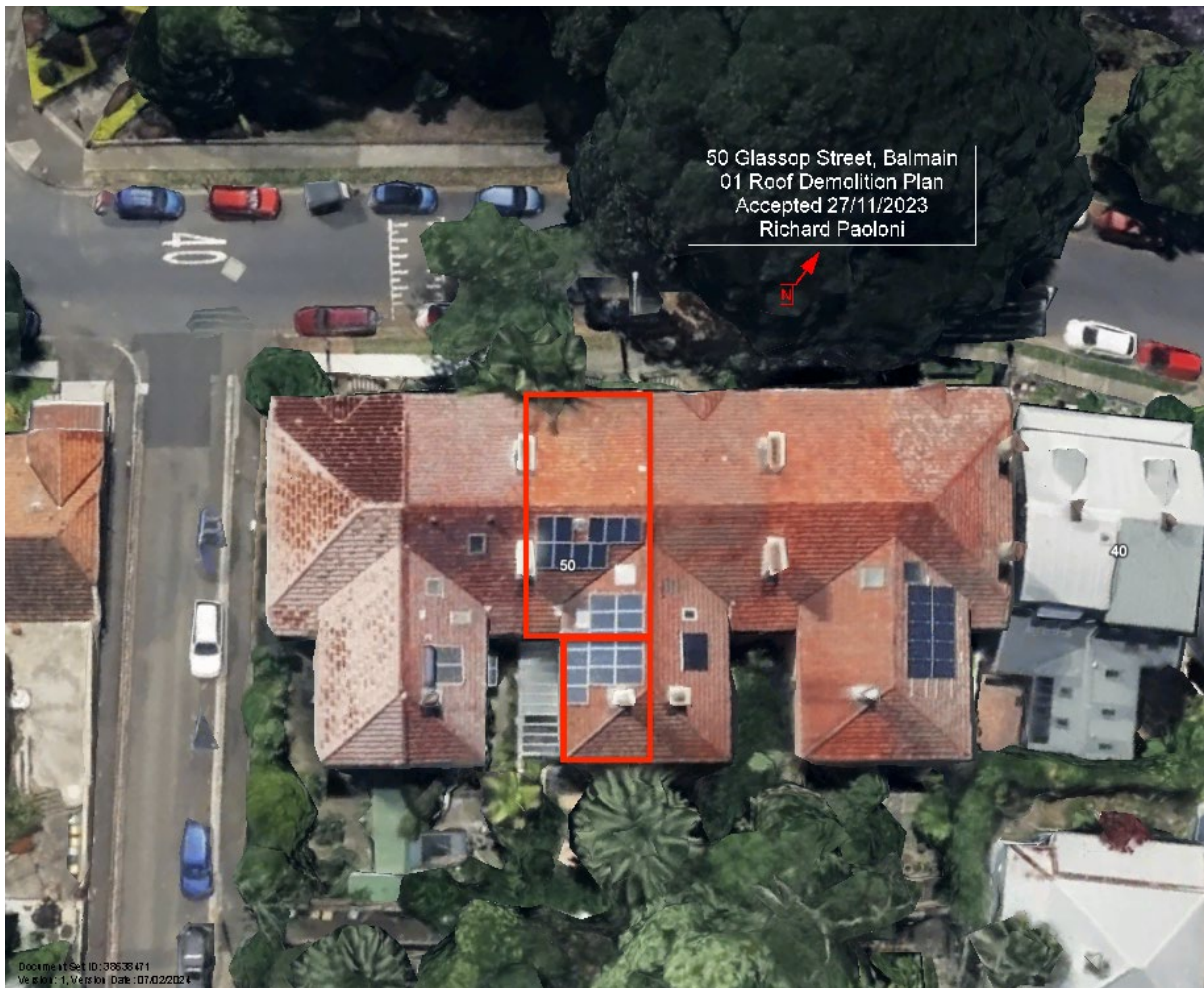
A demolition or asbestos removal contractor licensed under the Work Health and Safety Regulations 2011 must undertake removal of more than 10m² of bonded asbestos (or otherwise specified by WorkCover or relevant legislation).

Removal of friable asbestos material must only be undertaken by a contractor that holds a current Class A Friable Asbestos Removal Licence.

Demolition sites that involve the removal of asbestos must display a standard commercially manufactured sign containing the words 'DANGER ASBESTOS REMOVAL IN PROGRESS' measuring not less than 400mm x 300mm is to be erected in a prominent visible position on the site to the satisfaction of Council's officers. The sign is to be erected prior to demolition work commencing and is to remain in place until such time as all asbestos has been removed from the site to an approved waste facility.

All asbestos waste must be stored, transported and disposed of in compliance with the Protection of the Environment Operations (Waste) Regulation 2014. All receipts detailing method and location of disposal must be submitted to Council as evidence of correct disposal.

Attachment C- Plans of the proposed development





50 Glassop Street, Balmain
02 Front Roof Plane Dimensions
Accepted 27/11/2023
Richard Paoloni



50 Glassop Street, Balmain
03 Proposed solar tile area on front roof plane
Accepted 27/11/2023
Richard Paoloni



50 Glassop Street, Balmain
04 Proposed array of solar tiles on front roof plane
Accepted 27/11/2023
Richard Paoloni



Attachment D – Statement of Heritage Impact

Statement of Heritage Impact statement

Site

50 Glassop Street, Balmain NSW 2041

Significance assessment:

See listing on NSW State Heritage Register

In relation to recommendations pertaining to the roof of the building, the register only makes comment on the “form” (ie. shape) of the roof. There are no recommendations that relate to colour, sheen, type of materials, etc.

This is likely because the original roofing material would have been slate tile, likely gray in colour, as commonly used at the time and as seen in a photograph of the building from 1919.

Proposed works

Replacement of the current terracotta tiles on the front facing roof, with a combination of solar and standard tiles in a terracotta colour (similar to the colour of the adjacent terrace roofs). The works would not alter the form of the roof and would be sympathetic to the adjacent roofing materials.

Please note that any new tiles would likely not provide an exact colour match with the older tiles on adjacent roofs and may vary in relation to their sheen as well.

Heritage impact assessment

It is my contention that the current proposal does not have significant impact on the heritage status of the property. The proposal pertains only to the front facing roofing material, which is neither original nor the reason for the heritage status of the building.

The proposal will not change the form of the roof and will be colour compatible with adjacent terraces. The alteration to the appearance of the building from the street, particularly given the height of the building from the street, and the abundant tall trees limiting angles of viewing of this roof, will be minimal.

The roofing material is not / barely visible from the footpath on the opposite side of Glassop street, nor from the (western) corner of Glassop and White street. The maximum observability is from approximately 20 metres down White Street which is still limited and at a distance of approximately 50 metres (See photos which I have included under the ‘Visual impact assessment report’ category). The site is the terrace with the light blue

railings. Please also note the existing differences in colouration of the tiles on each terrace due to colour discrepancies and weathering effects.

Attachment E – Applicant Response to Council Withdrawal Request

Response to Council DA letter of 21st December 2023
Application number DA/2023/0989

17th January 2024

Ms Zoe Van Druten
Student Planner
Inner West Council

Dear Zoe,

Thank you for your letter of 21st December 2023. The finding of the council that this application is “unsupportable” and “not acceptable on heritage and planning grounds” is unreasonable in my opinion. In particular, as almost all of the quoted legislative and planning items on which this opinion are based are quite subjective and therefore open to interpretation, I would consider the response should read that the Council is “unwilling” to support the application.

The response provides no detail as to the reasoning of the council or any detail as to its interpretation of these clauses, and hence no guidance to the applicant as to the issues that potentially might be addressed. I therefore take issue with the statement that “Council is committed to working with you toward a proposal that can be supported” as I see no evidence of this intention in the letter and it is not consistent with the Council recommendation to withdraw the application. To submit a subsequent DA with any prospect of success would be difficult given the lack of detail relating to Council feedback or their interpretation of the regulations.

The Council is also, in my opinion, overstating their case by suggesting that there are reasons on “planning grounds” as all the stated regulations are based on heritage status.

I note that, despite my application containing detailed information as to the minimal observability of the roof, there is no mention of this having been considered. When weighing the subjective factors affecting the “consistency and character of the streetscape” the ability to see the roof from public pedestrian areas is a very relevant factor. As an extreme example, if the roof could not be seen from any public pedestrian areas, the consistency and character of the roof on the streetscape would be irrelevant. In summary, the Council response shows no consideration of the balance of factors in the application.

There is also an inherent contradiction in the position being taken by the Council in this response. The Council is using heritage preservation requirement to enforce a non-heritage outcome. The original (heritage) roofing material of this property, and the adjacent terraces, was slate. There is photographic evidence from 1919 of our property consistent with this statement. Slate is grey in colour and has a flat, relatively reflective surface. Solar tiles can be obtained in grey as can flat standard tiles. If I was to lodge such an application for roofing that is considerably closer in appearance to the original (heritage) roofing material than current tiles, would the position of Council be to support restoration of a heritage appearance (gray, flat, reflective surface) or to use Heritage provisions to enforce a non-heritage (terracotta) roofing material?

In a couple of months, I will have owned this property for 20 years. I have consistently restored the property according to heritage values, both the façade of the house which is under the Heritage plan, but also internal and external parts of the house that are not under the Heritage plan. The restorations come at a considerably higher monetary cost than non-heritage restorations but I consider important to preserve the history and heritage of the property. I do not see that modernising a non-heritage part of the property in a manner that is sympathetic to the nature of the house and the adjacent terraces should be opposed.

Comments in relation to specific legislative and planning documents cited in Council response

Inner West Local Environmental Plan 2022, clause 5.10, objective 1:

5.10 Heritage conservation

Note—

Heritage items (if any) are listed and described in Schedule 5. Heritage conservation areas (if any) are shown on the [Heritage Map](#) as well as being described in Schedule 5.

(1) Objectives The objectives of this clause are as follows—

- (a) to conserve the environmental heritage of Inner West,*
- (b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,*
- (c) to conserve archaeological sites,*
- (d) to conserve Aboriginal objects and Aboriginal places of heritage significance.*

The relevant part of this objective is (1)(b). Please detail the grounds on which the proposed solar tiles fail to “conserve the heritage significance” of this property and the block of terraces, particularly in relation to the substantial variability in the existing roofing material appearances of the terraces (this variability being greater than the difference between the proposed solar tiles and the adjacent roof materials) and the non-heritage nature of the existing and proposed roofing materials.

Google earth image of Glassop Street terrace roofs showing substantial visual (colour and light reflectiveness) variability of current roof materials



Leichhardt Development Control Plan 2013

C1.4 HERITAGE CONSERVATION AREAS AND HERITAGE ITEMS

Background

This element outlines objectives and controls for the development and conservation of buildings within Heritage Conservation Areas and Heritage Items.

Objectives

O1 Development:

- a. does not represent an unsympathetic alteration or addition to a building;*
- d. is compatible with the setting or relationship of the building with the Heritage Conservation Area in terms of scale, form, roof form, materials, detailing and colour of the building and conforms with the Burra Charter (Refer to: <http://australia.icomos.org/publications/charters/>);*
- e. conserves and enhances the fabric and detail of a building that contributes to the cultural significance of the building in its setting;*
- f. maintains the visual unity of groups of buildings, in particular semi-detached and attached terraces;*
- h. protects and enhances views of the existing building from the public domain; and*

C2 The fabric of an existing building is to be the subject of appropriate conservation practices including:

- e. consideration of suitable replacement materials should be based on original material, and where a property is part of a group or row, replacement materials should have regard to the integrity of the group.*

C5 Roof forms and materials

Consideration of roofing materials for additions should have regard for compatibility with the original roof, as well as for the context of the setting (such as if a dwelling is part of a group of similar dwellings).

O1a:

Please detail the grounds on which the proposed solar tiles “represent an unsympathetic alteration” of this property and the block of terraces, particularly in relation to the substantial variability in the existing roofing material appearances of the terraces (this variability being greater than the difference between the proposed solar tiles and the

adjacent roof materials) and the non-heritage nature of the existing and proposed roofing materials.

O1d:

This clause relates the proposed alteration to the “setting or relationship of the building”. It specifically mentions “scale, form, roof form” which is not being altered. It mentions “materials” but in relation to the Building as a whole, rather than specifically to the roof, and presumably the end result of selection of materials is the visual compatibility of the building to its setting. “Detail and colour of the building” is mentioned. The proposed roof alterations do not change the colour and have minimal impact on the ‘detail of the building’, particularly given the low observability. Again, the use of heritage clauses to enforce non-heritage alterations is questionable.

O1e:

Again this relates to the building as a whole, rather than specifically to the roof. The proposed roof material alteration has no impact on the “cultural significance of the building in its setting”. I feel this clause is not relevant to the application.

O1h:

As stated above, the impact of minimal visual changes between the proposed roofing material and existing roofing material are relatively small. To decline the application on these grounds would also require an assessment of the ability to view the roof from the public domain, which appears not to have been considered despite being included in the application. The relative impacts of visual changes versus visibility would then need to be balanced / considered.

C2 and C5:

Criteria C5 relates to “roofing material for additions” which is not directly relevant to the current proposal. As stated above the original roof material was gray slate. The “context of the setting” requires similar considerations as those for objective O1h.

All of these objectives and controls are extremely subjective, particularly when considering compatibility / sympathetic nature to existing adjacent non-heritage roof structures.

SECTION 7 – TWO AND THREE STOREY TERRACES

Background

The defining characteristics of Two and Three Storey Terraces:

- 1880s – c. 1915

Objectives

To facilitate development that is compatible with this Building Typology.

Controls

C1 Development shall:

- retain the integrity of the original building and the character of consistent terrace groups and rows;*
- maintain the relative importance, in scale and detailing of the main (front) part of the building;*
- retain streetscape and skyline character;*
- retain the rhythm of roofs and chimneys on the skyline and maintain the integrity of common ridge lines and parapet lines when viewed from the street;*
- maintain the amenity of the terrace and adjoining properties;*

C8 Original detailing, and materials, including chimneys, balustrades, render and wrought iron palisade fencing are to be retained/reconstructed and restored.

“Building typology” is the objective of this section and is a classification system used to classify buildings on their function, form and construction. There is no proposal to change the function of the building. Form is the three dimensional medium (shape, size, proportions and profile) – none of these are proposed to be changed. The proposal does not affect the “construction” of the building. It is therefore unclear to me how this Section is relevant to the application.

C1a – gray slate would maintain the integrity of the original building. The current proposal does not materially impact the “character of consistent terrace groups and rows” given the existing substantial variability and the lack of visibility of the roof area.

C1B – the current proposal has minimal impact on the overall “relative importance .. of the main (front) part of the building”. The recently installed heritage-style stair and verandah balustrades, together with maintenance of the existing brickwork and arches, as well as removal of the ivy growing over the building, vastly outweigh any “relative importance” of a minor variation to non-Heritage roofing with limited visibility.

C1c – no impact on skyline, minimal impact on streetscape.

C1e – no change to rhythm of roofs and chimneys on the skyline and no change to common ridge lines and parapet lines. This criteria is not relevant to this application.

C1f – “Amenity” is the ‘livability’ of a place. This criteria is not relevant to this application.

Criteria C8 speaks to restoration of original detailing and materials. That is neither relevant to this application or mentioned in the Council response.

State Environmental Planning Policy (Transport and Infrastructure) 2021

(4) Development for the purpose of a solar energy system is exempt development if—

- *(f) in the case of a system that is not ground-mounted—*
 - *(iv) if the land contains a State or local heritage item or is in a heritage conservation area—*
 - *(A) the system is not attached to any wall or roof of a building facing a primary road, and*
 - *(B) the system does not protrude more than 0.5m from any building to which it is attached (as measured from the point of attachment),*

The proposed solar tiles are the roofing material. There are not attached to the roof, and they do not protrude more than 0.5m from the building. This clause is clearly made in relation to solar panels being mounted on a roof and the attempted use of this clause to prohibit solar tiles is not consistent with the wording of the clause.

State Heritage Inventory Listing for 50 Glassop Street

which notes the following:

- *the existing two storey scale, character and detail of the building including facebrick front facade and details, colonnaded front verandah and balcony above with associated decorative elements, roof form and chimneys and pattern of openings should be retained and conserved;*
- *no new openings should be made in the street facing facades;*
- *the verandah and balcony should remain open and elements repaired and replaced to match as required;*
- *any further works could include the removal of the vines on the lower ground*
- *stone wall and ground floor colonnaded verandah. Other alterations and additions should be confined to the rear of the building and not detract from the original form and character of the building and main roof form as it presents to Glassop Street*

In relation to the roof of the property this heritage management plan only makes mention of the roof form, chimneys and pattern of openings. This is presumably as the roof is not in original (Heritage) condition. The current proposal does not affect any of these aspects. The management plan of the State Heritage Inventory Listing is not being affected by this application.

Observability considerations

As per photographs provided with the original application, the roof of our property is minimally observable from public pedestrian spaces due to placement and size of nearby plants including a massive fig tree in the park opposite number 48 Glassop St (which screens visibility from the north east and east), two palm trees in our front garden taller than the roof (which screen visibility from the North West), as well as a tree in the nature strip outside 52 Glassop Street and multiple trees in the upper part of Elkington Park which screen visibility from the north (footpath and path areas of the park). In short, all of the public pedestrian areas near to the house have minimal visibility of our roof area.

There is visibility of the eastern half of our roof from White Street about 20 metres down from the western corner with Glassop Street. However, this is not a commonly used footpath and is about 50 metres from the roof so the ability to resolve smaller details (such as the contour of the roof material, etc) is quite limited.

I have obtained additional data on the number of pedestrians using these public paths through use of a closed circuit camera on my front upper verandah. Over a continuous 5 day period (10-14th January 2024 inclusive) there were approximately 210 pedestrians who used the footpath opposite the row of terraces. This does not include children, neighbours, or those on bicycles/scooters as these groups are less likely to focus on the buildings. Many of these pedestrians used the footpath more than once (eg. going to and from the park, couriers taking items to / from nearby houses, etc) so the number of individual persons is considerably less. Given that four of five of these days were sunny and hot, and this is a period of school holidays, it is likely this is above average use of these walkways for the large number of people using the Dawn Fraser pool on such days. I have saved all video clips of these pedestrians and can provide these to Council on request if they wish to verify the above information.

Of all these pedestrians only one stopped and looked in the direction of the terraces during that period – this was an older man with a toddler (?his grandchild) who sat on the park wall opposite the house and was mainly involved in talking / watching the child.

This data, in addition to the previously provided information on limited visibility from public pedestrian places, further indicates that the visual impact of any small degree of inconsistency between roof materials will – at worst – be potentially noticed by an extremely small number of people.

Profile and light reflection considerations

The flat, reflective nature of the solar tiles will not match the texture of the existing tiles and will detract from the character which groups these six heritage items together.

In the vertical direction the solar tiles will step down in rows in a manner similar to normal roof tiles. It is correct that across that row the profile of the solar tiles is flat, rather than the more undulating profile of adjacent terracotta tiles. If this is a major determinant of Council's objection to this proposal, it would be possible to overlay a clear contoured surface to the solar tiles and flat tiles so as to approximately match the contour of tiles on adjacent rooves. Such a covering would likely provide some reduction in the efficiency of the solar cells but hopefully this would be minimal.

In relation to the reflective nature of the solar tiles, this is an interesting issue. The key factor on the visual impact is the return of light from the tiles to the observer. Evidence on reflectivity of solar panels (which are likely similar to reflectivity values for solar tiles, as the materials and functionality of the light receiving surface and energy absorbing mechanism are very similar) is that it ranges between 2% and 30%. [Reference: <https://www.pagerpower.com/news/global-solar-capacity-to-double-solar-reflection-receptor/#:~:text=Reflectivity,to%20a%20variety%20of%20receptors> .]

Of the reflected light from the solar tiles, the vast majority of the reflected light will be directed at an angle determined by the incident angle of the light on the tile (specular reflection). The highest altitude of the sun occurs in summer and is approximately 79 degrees in Sydney. The tiles are angled at approximately 45 degrees, making an incident angle of approximately 34 degrees to the perpendicular of the tile (specular reflection). The vast majority of reflected light will therefore leave the tile at approximately 12 degrees above the horizontal (well above the top of the trees in Elkington Park). This reflected light will not be appreciated by observers on ground level who will only appreciate a small amount of scattered light from solar tile edges. The reflected light visible from ground level would be even less at other times of the year.

The following reference cited several real life examples of domestic solar panels causing 'glint and glare' effects on neighbours, but in all of these the effect was via house windows (mainly upper storey but one lower story) but not at ground level. In our circumstance, the pedestrian areas are considerably lower than even the ground level of our terrace, so is even more unlikely to produce 'glint and glare' issues. [Ref: <https://www.pagerpower.com/news/real-examples-of-glint-glare-issues-residential-dwellings-2015>]. No adjacent dwellings are located such that they would be in any way likely to get 'glint' or 'glare' effects.

Of note, unglazed red terra cotta is the most reflective type of clay tile roofing, estimated to reflect up to 33% of all sun rays. Below is the Monier roof tile range with the light reflective value for each terracotta tile. The colours that potentially match those of the colour of tiles currently on the adjacent terraces (ie. earth, sunset, and mars) have light reflectivity of between 15% and 21%. The irregularity of the surface and the undulating contours of the

tiles will substantially increase the scatter of light (diffuse reflection) and likely match or increase the amount of observable reflected light at pedestrian ground level.

TERRACOTTA TILE COLOURS

Luxe Collection

Titan	Titan Gloss	Bedrock	Peak	Mystic Grey	Ravine	Pottery Brown
SA: 88.20% SRI: 4.44% LRV: 5.12% N & U	SA: 88.30% SRI: 3.53% LRV: 4.79% M	SA: 86.60% SRI: 9.01% LRV: 5.81% M, N & U	SA: 83.40% SRI: 13.48% LRV: 7.59% M, N & U	SA: 83.20% SRI: 11.80% LRV: 10.03% M	SA: 73.40% SRI: 24.49% LRV: 10.58% N & U	SA: 84.30% SRI: 10.42% LRV: 5.86% M
Comet	Delta Sands	Riverstone	Florence Red	Cottage Red	Mars	Sunset
SA: 78.70% SRI: 20.50% LRV: 14.60% M & N	SA: 73.50% SRI: 27.57% LRV: 10.75% M	SA: 67.10% SRI: 32.41% LRV: 19.12% M & N	SA: 77.90% SRI: 21.28% LRV: 9.22% M	SA: 82.30% SRI: 25.56% LRV: 9.97% M	SA: 56.90% SRI: 47.09% LRV: 21.16% M & N	SA: 64.60% SRI: 45.17% LRV: 14.69% M
Earth	Aurora	Tanbark	Burgundy	Bungalow	Not all colours are available for Marseille, Nouveau & Urban Shingle. Please refer to key M Marseille, N Nouveau & U Urban Shingle.	
SA: 56.90% SRI: 45.58% LRV: 17.77% M, N & U	SA: 85.10% SRI: 21.56% LRV: 11.59% M	SA: 84.70% SRI: 12.62% LRV: 5.69% M	SA: n/a SRI: 16.51% LRV: 5.73% M	SA: n/a SRI: 5.74% LRV: 12.50% M		

The above data strongly suggests that pedestrians on adjacent public areas (all of which are well below the ground level of the terraces) are highly unlikely to experience glint or glare effects from the solar tiles. It is quite likely that the light reflectance of solar tiles, which are designed to absorb the solar energy, is below that of terracotta tiles.

Rear roof slopes

In relation to the rear roof slopes the letter states that the current application does not provide sufficient detail of the replacement tiles to be installed. I would intend to use tiles of a terracotta colour and standard profile. Please advise whether there is a requirement for me to provide more specific details of tiles on the rear roof slopes given that this area is neither part of the Heritage management plan of this property nor facing the primary street.

Please also detail any limitations relating to solar panels and associated infrastructure on rear roof slopes (neither part of the Heritage management plan of this property nor facing the primary street) to ensure I am aware of these if required to plan for replacement solar panels on the rear roof.

Summary

The unresponsive Council response to the proposed DA to install solar tiles on the front roof of our property relies on subjective interpretation of relatively vague heritage provisions in a number of regulations. The Council has presented their rejection of support for this DA as definitive, but failed to provide details as to the rationale for this decision. Council has also listed a number of regulation sections to support their conclusion that do not relate to the proposed DA. There is no indication that Council has considered the limited visibility of the roof in question, despite significant information on this being provided in the DA.

In the above response I have had to guess at the reasons for the negative position of the Council response. This is what I surmise:

- (a) No mention is made of colour of the solar tiles, therefore I am assuming that this is not a criteria for concern
- (b) Mention is made of the solar tiles being flat, not contoured like adjacent terrace tiles. A possible solution to improve contour matching is provided above but may have some adverse effects on the efficiency of the solar tiles in terms of generating energy, so is not my preferred outcome
- (c) Mention is made of the reflective nature of the solar tiles which I am guessing is suggested to produce 'glint' or 'glare' issues for the general public. Above I have provided data that strongly suggests that the solar tiles most likely reflect less light, and in particular less scattered light, than unglazed terracotta tiles which cover adjacent terraces.

I have provided data to support my contention that our roof has very limited observability from public pedestrian areas, but additionally that the number of pedestrians per day in these public areas are relatively small and that essentially none of those people stopped and looked at the terrace buildings in that five day period. Small visual differences between the solar tiles and adjacent roof materials is highly unlikely to have meaningful impact on the general public. The original non-roof façade features of the terraces have a much higher heritage value (being original and well maintained across an intact group of terraces) than non-heritage roof coverings, and have been consistently maintained / enhanced during my period of ownership of this terrace.

The current response is vague, uninformative and unhelpful to the applicant. It provides little guidance as to the rationale for the decision. I request that the Council review the information in this letter and re-consider their decision. If the Council is still unwilling to support the DA application, I request that Council provide specific information on their reasoning and to which regulation that specific concern relates. If Council is sincere in its statement that it wishes to work with me to achieve a successful outcome, these requests should not be problematic.

Kind regards

Richard