Building Regulations (BCA)

The central circulation stair is only 900mm wide, rather than the 1000mm required for egress, and limits the circulation of students moving between classes. It is difficult for students ascending and descending the stairs to pass each other within this constrained width. The balustrade to the lobby is only 950mm high rather than the minimum 1000mm required.

Access and Egress

The original main entry and foyer from Forbes Street incorporates a number of steps and level changes that do not allow disabled access. This entry is not used.

Access to Wilkinson is via an arrangement of narrow ramps between the south facade of the building and the neighbouring Centenary Sports Hall on each level and wayfinding is not clear.

Entry into Wilkinson House is via a narrow side entry door that has been introduced on each level.

Internal circulation comprises narrow corridors and the narrow stair that do not properly cater for the volume of students moving between classes or two-way circulation.

The main circulation stair does not incorporate handrails, contrasting nosings and tactile indicators.

Door clear opening widths are less than 850mm and circulation space around doors does not comply.

Services

Spaces within the building rely on natural ventilation, ceiling fans and wall mounted electric heaters for conditioning of spaces.

Energy Performance

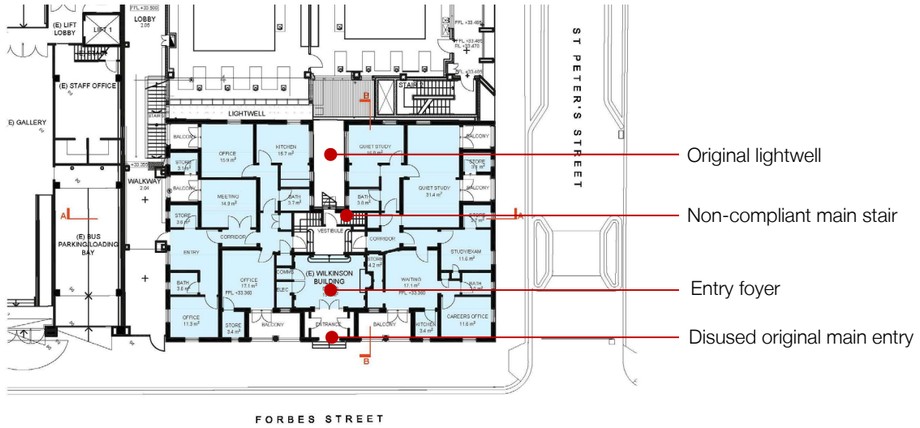
The existing double skin masonry facade is poorly insulated and has a poor thermal performance, resulting in higher levels of energy required for heating and cooling.

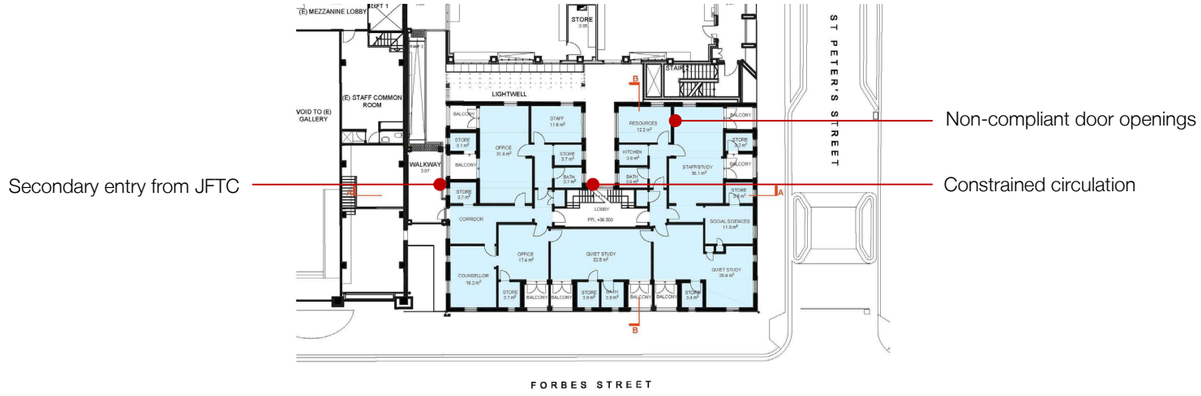
Acoustics

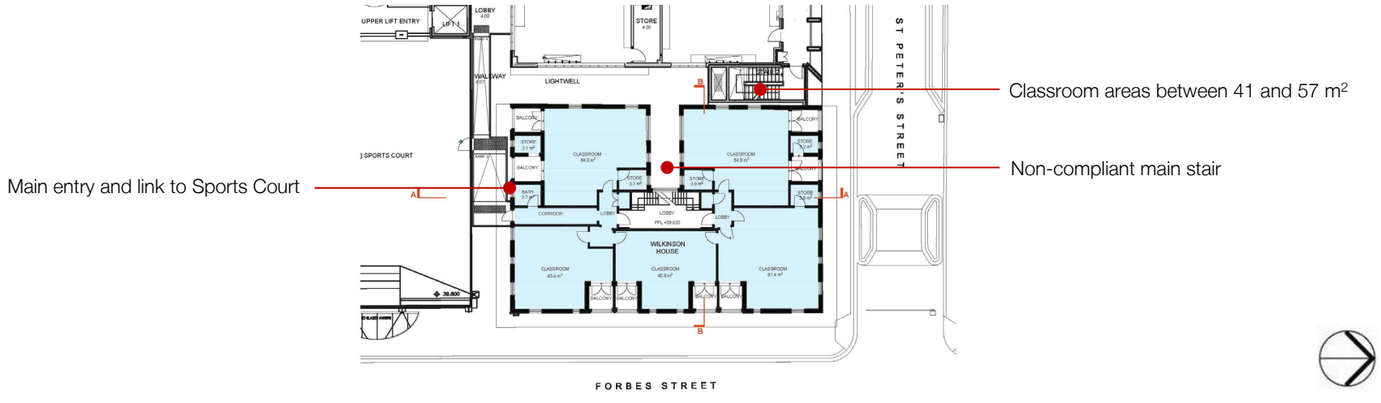
The existing timber floor provides poor acoustic separation between spaces.

Foot traffic noise on timber floor resonates to spaces below.

The floor to floor height throughout Wilkinson House ranges from 3120mm to 3150mm. The ceilings are typically 2850mm above finished floor level, providing a 270mm zone for the timber floor joists and floor structure. The ceiling height in the basement level is only 2400mm.







4 Wilkinson House Redevelopment Proposal

4.1 Masterplan and Learning Needs

The Masterplan has identified that SCEGGS Darlinghurst generally suffers from a lack of adequately sized large flexible General Learning Spaces across the campus.

Of the School's 30 learning spaces provided for secondary students, 18 are less than 60m^2 meaning that there are only 12. learning spaces over 60m^2 and able to adequately accommodate a full classroom size.

By way of comparison, the NSW Department of Education provides a minimum of 20 General Learning Spaces of 60m^2 for a school of an equivalent size (4 stream).

Presently, the building accommodates five learning spaces varying in size from 41square metres to 57 square metres. These are deficient when assessed against the NSW Department of Education minimum classroom size of 60m^2.

Because the learning spaces in Wilkinson House are undersized they present challenges in accommodating a full-size class group. This limits what subjects the school can use these spaces for, limits timetable flexibility and they are not able to be fully utilised. In practice, only the larger four are of a suitable size for use as general purpose classrooms; in 2018, their average occupancy rate was 80%. These learning spaces are poorly shaped for learning and inefficient due to the adaption of existing spaces. Small rooms and pokey areas allow for concealment and do not meet contemporary space requirements for child protection. The smallest learning room does not permit collaborative learning classes.

The rooms are also deficient with regard to technology. The limitations imposed by the retrofitting of cables, WiFi access points, data projects, smart boards restrict the use of the rooms. The bathrooms are odd shapes which aren't easily accessed by less mobile students. Further, the staff areas generally are deficient with regard to thermal comfort, acoustics and provision of fresh air.

The School's experience from using Wilkinson House since 2001 is that the learning spaces do not work well, are difficult to access, and are not conducive learning spaces. These spaces are not inspirational and the least desirable spaces in the school for learning. These spaces do not meet the school's aspirations to provide high quality contemporary flexible learning spaces.

4.2 SCEGGS Learning Requirements

SCEGGS is committed to providing an outstanding education for girls and providing facilities that will meet contemporary learning needs.

SCEGGS requires facilities that are highly functional, flexible and inspiring spaces that are conducive to future learning and working needs. The school require learning spaces that are innovative, flexible, collaborative and stimulating:

- Create flexible and stimulating spaces that are adaptable for changing needs of students and learning modes.
- Promote spaces that encourage learning for students and teachers through collaboration, social interactions, and active investigation.
- Promote flexible spaces that allow for different sized groups to engage learner self-management and self-direction.
- Support a full range of teaching strategies from explicit instruction to facilitation of inquiry and authentic project based-learning.
- Enable future-focused learning practice by the use of on-line collaborative technology to ensure students can access rich stimulus, global perspectives and have the ability to create for a wide authentic audience.
- Create learning spaces that incorporate high levels of natural light, natural ventilation and visual connections to the outside.

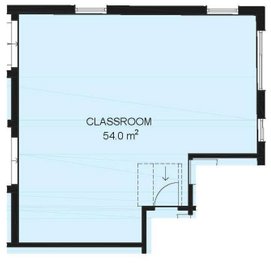
4.3 Wilkinson House Redevelopment

The proposal for Wilkinson House is to provide larger flexible spaces for learning and meeting.

The redeveloped Wilkinson House is to accommodate:

- Large flexible learning spaces (75m^2 and larger).
- Large flat flexible multi-purpose space suitable for meetings, music and drama rehearsals, examinations, etc.
- Larger flexible learning space connected to the Centenary Sports Hall, to accommodate ancillary sporting activities and functions.
- Existing administrative functions.

Existing classrooms at level 2.



5 Option A: Refurbishment of Wilkinson House

5.1 General Description

Refer to Option A architectural drawings in Appendix A.

Option A aims to retain most of the existing building but demolishes existing internal walls and the south elevation recessed balconies to rationalise the interior to form larger learning spaces.

The entry foyer and main circulation stairs are proposed to be retained and one of the ground floor apartments retained and refurbished.

New structural support required to achieve the larger spaces necessitates the removal of original walls, ceilings, cornices and skirtings. The ground floor will require localised demolition of the floor to accommodate the installation of new pad footings.

5.2 Structural Works

Refer to preliminary structural requirements in Appendix B.

Wilkinson House is a load bearing masonry building with timber framed floors and roof structure. The existing internal masonry walls support the existing timber floors and in combination brace the building.

The removal of the existing internal walls requires the following structural upgrade works:

> Timber floors are to be re-supported by a series of steel beams and columns that will be boxed in fire rated lining.
> Additional steel frames will be inserted in strategic locations to brace the masonry structure for earthquake loads.
> Additional steel columns will be required to re-support the external masonry facade.
> Localised demolition of the ground floor is required for the installation of new pad footings.
> The building will require temporary propping to allow the works to be carried out.

5.3 Services

Learning spaces will rely on natural ventilation, ceiling fans and wall mounted electric heaters for conditioning of spaces.

5.4 BCA, Access

This option does not address any of the existing access non-compliances. Access for people with a disability is not provided within the building due to the lack of a lift, doorways and access routes do not have appropriate circulation spaces or clear width and there are barriers (steps) located along the access route.

5.5 Acoustics

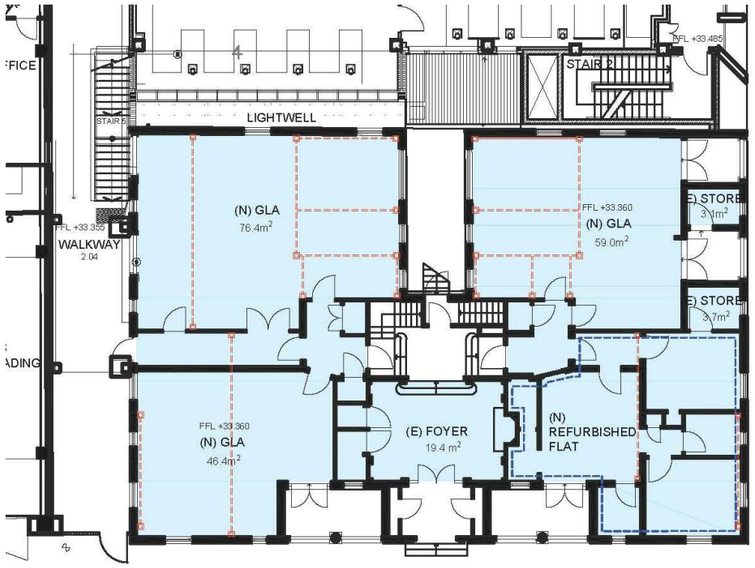
The existing timber floor provides poor acoustic separation between spaces.

Foot traffic noise on timber floor resonates to spaces below.

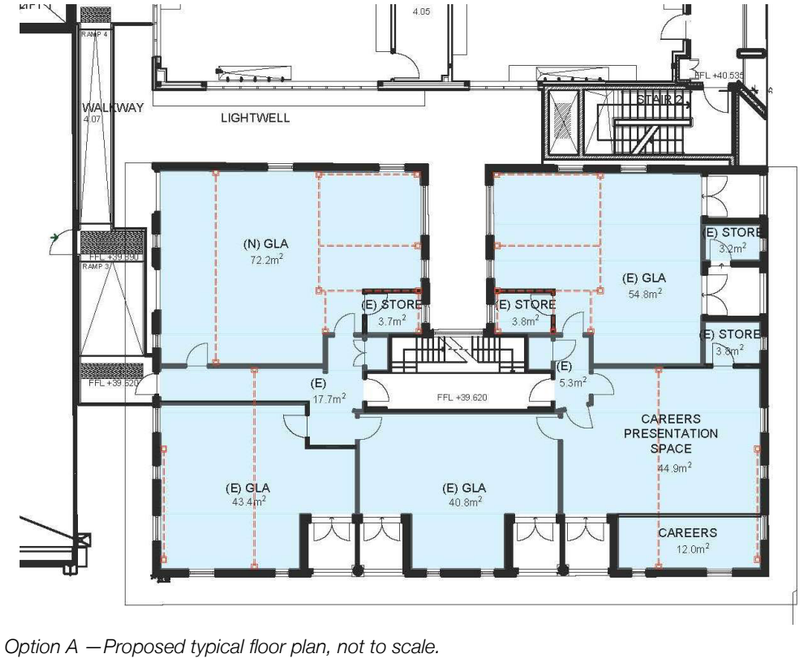
5.6 Learning Spaces

Option A results in the following potential learning space area:

Option A	**Area m²**
Learning Spaces	
Ground	
General Learning Area	46.4
GLA	76.4
GLA	59.0
Level 1	
GLA	40.8
GLA	43.4
Academic staff	—
Social staff	—
GLA	57.4
Level 2	
GLA	40.8
GLA	43.4
GLA	72.2
GLA	54.8
Careers Space	—
Total	**534.6**



Option A — proposed ground floor plan, not to scale.



Option A —Proposed typical floor plan, not to scale.

6 Option B: Principal Facades Retained

6.1 General Description

Refer to Option B architectural drawings in Appendix A.

Option B aims to retain most of the existing building facade and roof form facing the street but replaces the building interior with a new concrete floor structure, lift and circulation stair.

The new concrete floor structure will be aligned with the floor levels in the adjacent Joan Freeman Building to improve access and connections, increase ceiling heights and allow the reticulation of new building services.

The south and west elevations are demolished allowing for new full height glazing on these facades. The remaining recessed balconies are reduced to a minimum depth of 1.2m to improve the efficiency of the internal learning spaces.

An additional level to the building is also proposed. This building addition level sits within the existing roof form so that there is no visual impact to the street. The existing roof will be salvaged and rebuilt so as to allow the construction of the new concrete floor structure.

6.2 Structural Works

Refer to preliminary structural requirements in Appendix B.

The building interior will be replaced by a new reinforced concrete floor and columns supporting the existing masonry facade.

The basement level will be excavated to provide additional floor space with a connection to the Centenary Sports Hall.

The existing masonry facade will require substantial temporary propping and support to allow the demolition of the building interior and construction of the new structure.

6.3 Services

The larger flexible learning spaces will be serviced by mixed-mode air-conditioning, allowing high levels of fresh air to be distributed to the spaces. New facade areas will allow for increased levels of natural light and natural ventilation where possible.

6.4 BCA, Access

As a new building this option provides a building that is fully compliant with current BCA and standards for access. The connection between the new building and the existing Sports Hall would need to incorporate a fire wall and fire doors to ensure the Hall remains a separate fire compartment / building.

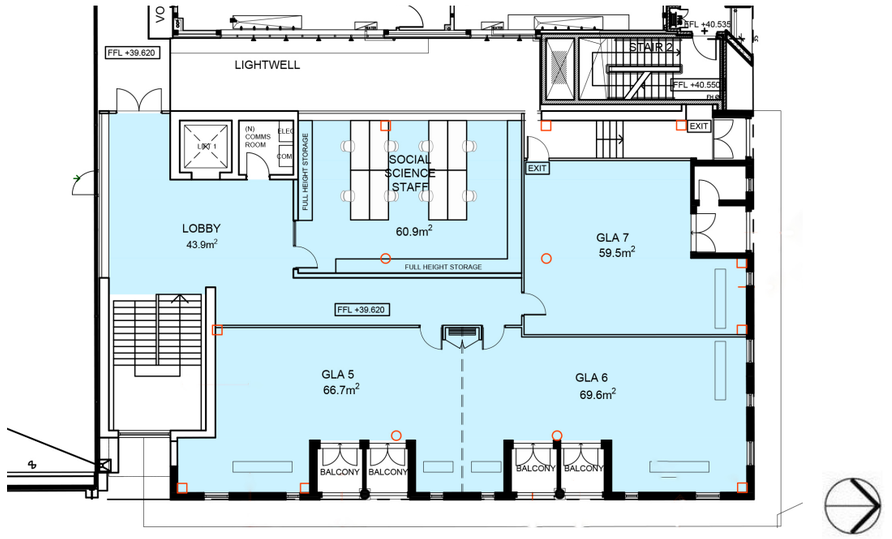
6.5 Acoustics

This option will meet current acoustic requirements for learning spaces.

6.6 Learning Spaces

Option B results in the following potential increase in learning space area:

Option B Learning Spaces	GLA area m²
Basement	
Sports	95.3
Multi-purpose GLA	170.1
Ground	
General Learning Area 1	61.4
GLA 2	61.6
GLA 3	59.7
Learning Breakout Area	66.9
Level 1	
GLA 1	74.8
Learning Breakout Area	61.9
Level 2	
GLA 1	66.7
GLA 2	59.5
GLA 3	69.6
Level 3	
Multi-purpose space	-
Total	**847.5**



Option B — typical floor plan, not to scale

Option B – Perspective view from the north-east

7 Option C: New Building

7.1 General Description

Refer to Option C architectural drawings in Appendix A.

Option C comprises the demolition of the Wilkinson House building and its replacement with a new purpose-built building.

The new building maximises the amount of useful and flexible learning space for the school. The floor levels have been amended to align with the adjacent Joan Freeman building, providing improved access and increased ceiling heights (3500mm minimum floor to floor height).

The facade is a contemporary expression of the proposed learning building, incorporating sun shading and high-performance glazing, allowing for natural ventilation. The fenestration incorporates vertical precast concrete blades that relate to the adjacent Joan Freeman building.

7.2 Structural Works

Refer to preliminary structural requirements in Appendix B.

The new building structure consists of a post tensioned concrete floors and reinforced concrete columns supporting a new light weight clad facade and aluminium framed windows. The basement level will be excavated to provide additional floor space with a connection to the Centenary Sports Hall.

7.3 Services

The larger flexible learning spaces will be serviced by mixed-mode air-conditioning, allowing high levels of fresh air to be distributed to the spaces. The proposed façade will allow for increased levels of natural light and natural ventilation where possible.

7.4 BCA and Access

As a new building this option provides a building that is fully compliant with current BCA and standards for access. The connection between the new building and sports hall would need to incorporate a fire wall and fire doors to ensure the Hall remains a separate fire compartment / building.

The building will require a new sprinkler and hydrant system to remain linked to the Joan Freeman Building.

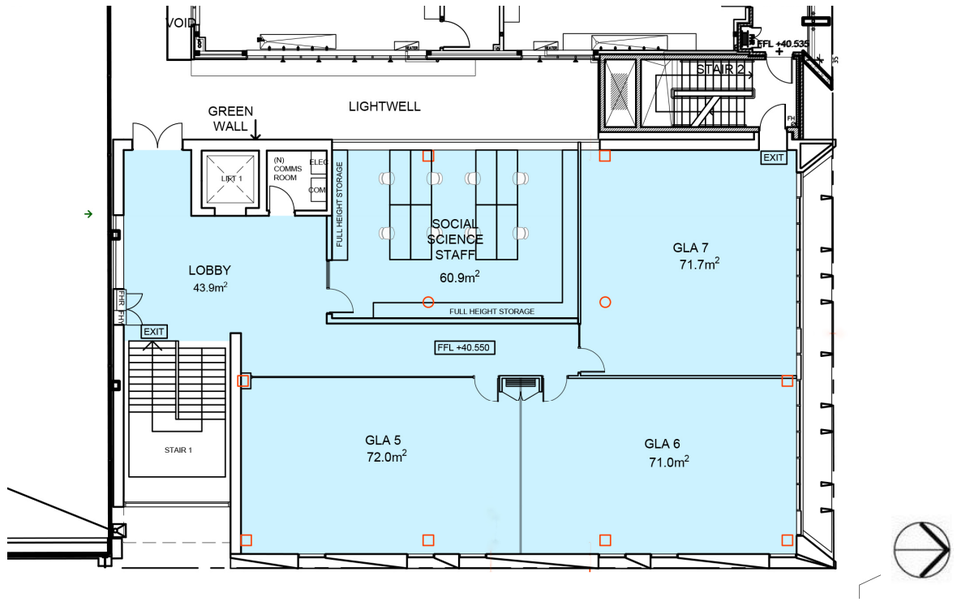
7.5 Acoustics

This option will meet current acoustic requirements for learning spaces.

7.6 Learning Spaces

Option C results in the following potential increase in learning space area:

Option C Learning Spaces	GLA area m²
Basement	
Sports GLA	95.3
Multi-purpose GLA	156.5
Ground	
GLA 1	65.0
GLA 2	64.8
GLA 3	65.0
Learning Breakout Area	71.9
Level 1	
GLA 4	69.2
Learning Breakout Area	74.0
Level 2	
GLA 5	72.0
GLA 6	71.0
GLA 7	71.7
Total	**876.4**



Option C — Perspective view from the north-east.

Option C — Proposed typical floor plan, not to scale

8 Wilkinson House Options Analysis

8.1 Comparative Review of Options

In order to determine the best outcome for the redevelopment of Wilkinson House, the three options have been assessed against the following functional, heritage and design criteria:

- Learning Needs
- Building Regulations (BCA)
- Access and Circulation
- Structural
- Civil
- Natural Light and Ventilation
- Services
- Energy Performance
- Acoustics
- Streetscape and Urban Context
- Bulk and Scale
- Overshadowing
- Visual Analysis
- Heritage
- Cost benefit

The table on the following pages provides a comparative review of the three options assessed against these criteria.

EXISTING **Existing Wilkinson House**	**OPTION A** **Refurbishment of Wilkinson House**	**OPTION B** **Principal Facades Retained**	**OPTION C** **New Building**
Learning Space Arrangement			
> The existing building contains 5 primary learning spaces ranging in size from 41m^2 to 57m^2 on Level 2.	> Option A provides a total of 10 primary learning spaces ranging in area from 41m^2 to 76m^2 over 3 levels of the building.	> Option B provides 9 large flexible learning areas over 5 levels of the building ranging in area from 59m^2 to 170m^2.	> Option C provides 9 large flexible learning areas over 4 levels of the building ranging from 64m^2 to 156m^2.
Total Potential Learning Space Area			
251m^2	534.6 m^2	847.5 m^2	876.4 m^2
Learning Needs			
> The existing learning spaces are not inspirational and do not meet the requirements of larger flexible collaborative learning spaces. > The existing learning spaces are generally undersized for the school's requirements and are not able to be fully utilised, noting that the NSW Department of Education minimum classroom size is 60m^2. > Learning spaces are poorly shaped for learning and with comparatively low ceilings, and are inefficient due to the adaption of existing spaces. > Small rooms and pokey areas allow for concealment and do not meet contemporary space requirements for child protection.	> Option A provides an additional 5 learning spaces, however these are primarily undersized and do not meet the school's requirements for large flexible collaborative learning spaces > Learning spaces are poorly shaped for learning and have comparatively low ceiling heights, and are inefficient due to the adaption of existing spaces.	> Option B provides large flexible learning areas which meets the school's requirements for large flexible collaborative learning spaces. > The retention of the recessed balconies reduces the floor area and restricts the flexibility of these spaces. > The learning spaces have comparatively low ceiling heights (owing to the need to accommodate the existing windows in the retained facades).	> Option C provides large flexible collaborative learning spaces that meet the needs of the school. > The flexible floor space can be used for a range of different learning activities and as larger meeting spaces.
Building Regulations (BCA)			
> Egress width through main stair is only 900mm (1000mm required). > The balustrade to the Lobby is only 950mm high (1000mm required).	> The refurbishment of the existing building requires it to be upgraded to current BCA and Australian Standard requirements. > An updated fire engineered solution will be required for the new work and to address any non-compliances that the existing building cannot meet.	> The adapted building will be designed to meet current BCA and Australian Standard requirements, excluding the facade which is to be retained.	> The new building will be designed to meet current BCA and Australian Standard requirements.

EXISTING **Existing Wilkinson House**	**OPTION A** **Refurbishment of Wilkinson House**	**OPTION B** **Principal Facades Retained**	**OPTION C** **New Building**
Access and Circulation			
> The original main entry and foyer from Forbes Street incorporates a number of steps and level changes that do not allow disabled access and this entry is not used. > Access to Wilkinson is via an arrangement of narrow ramps between Wilkinson House south facade and the Centenary Sports Hall on each level and wayfinding is not clear. > Entry into Wilkinson House is via a narrow side entry door that has been introduced on each level. > Access within Wilkinson House is via narrow corridors and a narrow stair that do not properly cater for the volume of students moving between classes or two-way circulation. The main stair is 900mm wide. > The main circulation stair does not incorporate handrails, contrasting nosings and tactile indicators. > Door clear opening widths are less than 850mm and circulation space around doors does not comply.	> The existing issues with access and circulation are not resolved.	> The issues identified with access and circulation are largely addressed and resolved.	> The new building will be fully accessible to meet current standards and will provide adequate means of pedestrian circulation throughout the building.
Structural			
> Wilkinson House is a load bearing masonry building with timber framed floors and roof structure. The central circulation stair and external balconies are constructed out of concrete. > The current load bearing masonry and timber floor structure does not meet current standards for earthquake loads.	> The existing building will require substantial structural modifications and intervention in order to allow the demolition of internal walls and meet requirements for earthquake loads.	> Option B proposes a new concrete structure that will be design to structural code requirements and re-support the retained masonry facade.	> Option C proposes a completely new structure and facade.
Civil			
—	> In retaining most of the existing building, there is no proposal to amend the current stormwater arrangements.	> Council will likely require a new stormwater retention tank ($6m^3$).	> Council will likely require a new stormwater retention tank ($6m^3$).
Natural Light and Ventilation			
> The existing small windows provide low levels of natural light.	> The existing small windows provide low levels of natural light.	> The existing small windows provide low levels of natural light.	> Option C provides high levels of natural light and ventilation which create favourable conditions for learning. > The new building facade incorporates operable windows to maximise natural ventilation.

EXISTING **Existing Wilkinson House**	**OPTION A** **Refurbishment of Wilkinson House**	**OPTION B** **Principal Facades Retained**	**OPTION C** **New Building**
Services			
> Spaces within the building rely on natural ventilation, ceiling fans and wall mounted electric heaters for conditioning of spaces	> Spaces within the building will rely on natural ventilation, ceiling fans and wall mounted electric heaters for conditioning of spaces	> Option B proposes a mixed-mode ventilation system that will be fully integrated into the new building. The mixed mode system will deliver fresh external air when conditions permit and air conditioning at other times to provide for user comfort. > The external plant will be accommodated within a plant area recessed into the roof so that plant is not readily visible.	> Option C proposes a mixed-mode ventilation system that will be fully integrated into the new building. The mixed mode system will deliver fresh external air when conditions permit and air conditioning at other times to provide for user comfort. > The external plant will be accommodated within a plant area recessed into the roof so that plant is not readily visible.
Energy Performance			
> The existing double skin masonry facade is poorly insulated and has a poor thermal performance, resulting in higher levels of energy required for heating and cooling. > The reuse of the existing building represents the lowest embodied energy option for the project.	> The existing double skin masonry facade is poorly insulated and has a poor thermal performance.	> The existing double skin masonry facade is poorly insulated and has a poor thermal performance.	> The new building facade incorporates sun shading, high-performance glazing and high levels of thermal insulation to maximise the energy performance of the building. > The new building represents the highest embodied energy option due to the replacement of the existing building with a new one.
Acoustics			
> The existing timber floor provides poor acoustic separation between spaces. > Foot traffic noise on timber floor resonates to spaces below.	> The existing timber floor provides poor acoustic separation between spaces. > Foot traffic noise on timber floor resonates to spaces below.	> A new concrete floor slab will provide excellent acoustic separation between spaces and eliminate foot traffic noise	> A new concrete floor slab will provide excellent acoustic separation between spaces and eliminate foot traffic noise
Streetscape and Urban Context			
> The existing streetscape and urban context is maintained.	> The existing streetscape and urban context is maintained.	> The existing streetscape and urban context is maintained. > The additional level is set back from the existing parapeted roof form so that visual impact to the street is minimised.	> Option C proposes a new building facade that sits well within the streetscape and urban context. > Option C relates to the expression of the adjacent Joan Freeman Building through the use of vertical elements and materials which respond to the St Peters Street Precinct.
Bulk and Scale			
> The existing bulk and scale is maintained.	> The existing bulk and scale are maintained.	> The existing bulk and scale are maintained.	> The bulk and scale of the new building is similar to the existing Wilkinson House building.
Over Shadowing			
> There is no change to the existing situation or additional over shadowing.	> There is no change to the existing situation or additional over shadowing.	> There is no change to the existing situation or additional over shadowing.	> There is a minor increase in over shadowing, however this does not impact residential neighbours.

EXISTING **Existing Wilkinson House**	**OPTION A** **Refurbishment of Wilkinson House**	**OPTION B** **Principal Facades Retained**	**OPTION C** **New Building**
Visual Analysis			
> There is no change to the existing situation or visual impact to neighbours.	> There is no change to the existing situation or visual impact to neighbours.	> The additional level sits just above the height of the existing roof ridge and has a minor impact on neighbours' views.	> The new building sits within the 15m height limit which projects above the height of the existing Wilkinson Building. > The visual impact to neighbours is negligible.
Heritage			
> Wilkinson House is included within the heritage listing for SCEGGS Darlinghurst campus in the City of Sydney Local Environmental Plan (item I301).	> Retention of the exterior form and fabric of Wilkinson House maintains the building's contribution to the streetscape and the conservation area. > Retention of the plan form with central stair and lightwell and interpretation of an original apartment will allow for the continued understanding of the former use and fabric of the building and is a positive heritage outcome. > Removal of the recessed balconies on the southern elevation — required to improve the interior functioning of the building — would result in a minor but acceptable heritage impact. The southern elevation is a secondary façade; overall, the building's streetscape presence would be maintained. > Much of the internal fabric has been altered or removed and the internal spaces are of low integrity. The removal of walls, ceilings, skirtings and cornices would result in a loss of original fabric and altered plan form, however the retention of the ground floor flat allows the building's original use and interior appearance to be understood. Overall a positive heritage outcome for the streetscape and conservation area and retention of an early Sodersten apartment building, whilst allowing for the adaptation of the internal spaces. The loss of some interior fabric is balanced against the continued use of the building.	> Retention of the exterior form and fabric of Wilkinson House maintains the building's contribution to the streetscape and conservation area. > Removal of original internal fabric — required in order to provide larger flexible learning spaces — would impact on the ability to understand the building's original spatial organisation. However the ability to understand the building's original residential function will remain evident in the building's retained facades. > The proposed additional level is sympathetic to the overall form of the building. Its location — set back behind the tiled roof — will ensure that visibility of the addition from street level vantage points is minimised. > The building's visual contribution to the streetscape will remain largely unchanged. Overall a positive heritage outcome for the streetscape and conservation area, and retention of an early Sodersten apartment building. The loss of interior fabric and plan form is balanced against the continued use of the building, allowing for the provision of better spaces to meet the learning requirements of the School.	> This option results in the loss of heritage fabric and building's contribution to the streetscape and conservation area. The historical, associative and aesthetic and social significance of the building would be lost. > The zero set back from street boundaries of the new building corresponds to the present boundary alignment of Wilkinson House, ensuring that the new building maintains a purposeful visual corner presence within the streetscape and the conservation area. > The footprint and overall mass, height and scale would be similar to Wilkinson House. The architectural expression of the building's exterior relates to existing buildings on the school campus and in the immediate vicinity. This option results in a loss of heritage values for the School and the heritage conservation area. Replacement of Wilkinson House will permit the development of a new purpose-designed school building which provides the required flexible learning and meeting spaces, resulting in a positive outcome for the long term functioning of the school. Potential visual impacts on the streetscape and conservation area are addressed through the scale, siting, height and architectural expression of the new building.
Cost benefit			
> Retaining the existing building unchanged requires the least capital investment. > The School's objectives for the upgrading of its learning facilities to meet contemporary educational requirements are not met.	> Option A requires significant capital investment. > This option does not fulfill the School's requirements for larger flexible learning and meeting spaces and is not feasible. The School's objectives for the upgrading of its learning facilities to meet contemporary educational requirements are not met.	> Option B requires significant capital investment. > This option partially fulfills the School's requirements for larger flexible learning and meeting spaces, however the spaces are deficient with regard to planning, ceiling heights and access to natural light and ventilation. > Retention of the façades will impose complex construction and buildability constraints, and consequent impact on cost and timing.	> Option C requires significant capital investment. > This option fully meets the School's requirements for large flexible learning and meeting spaces.

8.2 Options analysis: summary

The following provides an overview summary of the comparative analysis of the three development options for Wilkinson House, having regard for the functional, design and heritage criteria:

Option A – Refurbishment of Wilkinson House

This option creates additional learning spaces, however these do not meet the School's requirements for large flexible collaborative learning spaces. This learning spaces are generally undersized and retain the problems of those within the existing building:

- learning spaces are undersized and poorly shaped for contemporary learning space needs;
- Egress width through the man stair and the balustrade height does not meet BCA;
- pedestrian access and circulation are convoluted;
- access is non-compliant throughout the building;
- the building structure does not meet current standards for earthquake loads;
- the existing window provide low levels of natural light.
- the energy performance of the building is poor;
- the acoustic performance of the existing timber floor is poor and not ideal for learning spaces.

From a heritage perspective, the external form and fabric of Wilkinson House will be retained and the building will maintain its contribution to the streetscape and conservation area. Modification of the interior to accommodate the required learning spaces will result in some loss of original fabric and plan form.

Option B – Retention of the principal facades

Option B creates additional spaces than is presently accommodated within the building. This option also provides a BCA compliant outcome and generally meets acoustic, services and circulation requirements.

However, retention of the building's facades will necessarily compromise the quality of the learning spaces:

- owing to the retention of the recessed balconies, some of the learning spaces are undersized and poorly shaped for contemporary learning space needs;
- the existing windows provide low levels of natural light.

From a heritage perspective, this option maintains the building's contribution to the streetscape and conservation area through the retention of its principal facades. The streetscape and urban context of the building will remain largely unchanged. This option will result in the loss of the original internal fabric and plan form.

Option C – A new building

Option C replaces the Wilkinson House with a new purpose-designed building that meets the requirements of the School for large, flexible collaborative learning spaces. A new building will fully meet BCA and accessibility requirements and fulfils the other design

Necessarily, the replacement of Wilkinson House with a new building results in a loss of heritage values. The new building is purposefully designed to relate to its context – including St Peters Church, the Diana Bowman Building and Joan Freemen Science Building – through its materiality and architectural expression. The scale and siting of the building are generally similar to those of Wilkinson House.

9 Conclusions

The SCEGGS 2040 Masterplan seeks to upgrade the School's learning facilities to meet contemporary educational standards. The Masterplan has identified areas and buildings within the Darlinghurst campus which need to be fully utilised in order to efficiently optimise available space within the constrained inner-city location.

Together with other under-utilised areas of the campus, the proposed redevelopment of Wilkinson House is an integral component of the School's Masterplan.

This Options Analysis concludes that Wilkinson House does not adequately serve the School's educational objectives. The options considered for the site's redevelopment range from refurbishment of the existing building to its replacement with a new purpose-designed facility. The alternatives to replacement of the building which have been explored will not fully meet the School's requirements for the provision of larger flexible, contemporary learning spaces.

Completed in 1926 as an apartment building, the nature of the building poses a number of significant constraints. The building's residential internal planning and traditional load-bearing construction pose significant limitations on the ability to adapt the structure to contemporary learning spaces and to meet Building Code and accessibility requirements. The floor plan — comprising small rooms, bathrooms, a lightwell and small recessed balconies —cannot readily be adapted to provide contemporary learning spaces.

Accepting the limitations of the structure, the constrained nature of the inner-city site and the School's primary objective to provide educational facilities which meet contemporary standards, this analysis concludes that the replacement of Wilkinson House with a new building provides the optimum solution for redeveloping the site to meet the School's educational requirements and continued use of the site.

The replacement of the building with a purpose-built educational facility is the only option which accommodates flexible learning spaces to a contemporary standard.

The proposed replacement building is purposefully designed to relate to the historic campus, the streetscape and the wider East Sydney heritage conservation area in its mass, scale and siting. As per the present building, the proposed replacement structure extends to the street property boundaries at Forbes and St Peter's Streets, and is of a comparable scale to Wilkinson House. Externally, its architectural expression and materiality is complementary to existing buildings on the school site and buildings within the Forbes Street streetscape, including the neighbouring St Peter's Church.

Appendix A

Wilkinson House Options

SCEGGS DARLINGHURST
WILKINSON HOUSE OPTIONS ANALYSIS

DRAWING LIST

SCEGGS DARLINGHURST

T +61 2 9332 1133
F +61 2 9332 1858

PROJECT MANAGER
Sandrick Project Directions
T + 61 2 8860 9490

BCA / ACCESS
Design Confidence
T + 61 2 8399 3707

ELECTRICAL / MECHANICAL
Erbas
T + 61 2 9437 1022

STATUTORY PLANNER
Urbis
T + 61 2 8233 9900

LANDSCAPE ARCHITECT
Context
T + 61 2 8244 8900

TRAFFIC CONSULTANT
Traffix
T + 61 2 8324 9700

LAND SURVEYOR
Rygate Surveyors
T + 61 2 9262 6800

STRUCTURAL / CIVIL
Taylor Thomson Whitting
T + 61 2 9439 7288

COMMUNITY CONSULTATION
Elton Consulting
T + 61 2 9387 2600

QUANTITY SURVEYOR
Altus Group
T + 61 2 9263 1252

HYDRAULIC
Erbas
T + 61 2 9437 1022

ACOUSTIC ENGINEER
Wilkinson Murray
T + 61 2 9437 4611

ABBREVIATIONS

(E)	EXISTING
(N)	NEW
AW	ALUMINUM WINDOW
BK/F	BRICKWORK/FACE
EWC1	EXTERNAL WALL CLADDING
MRS	METAL ROOF SHEETING
PC	PRECAST CONCRETE
RT/TC	ROOF TILE/TERRACOTTA
SS	SUNSHADE
TW	TIMBER WINDOW
VB	VERTICAL BLADE

Rev	Date	Description	Checked	Auth.
A	23.11.18	ISSUE FOR SSD	IB	IB

Proj. Dir	Proj. Arch	Drawn
RD	IB	RT
Job No.	Date	Scale
160441	NOV 18	- @A1

NSW Nominated Architects:
Robert Denton Registration No. 5782
Alex Kibble Registration No. 6015

10 20 30 40 50

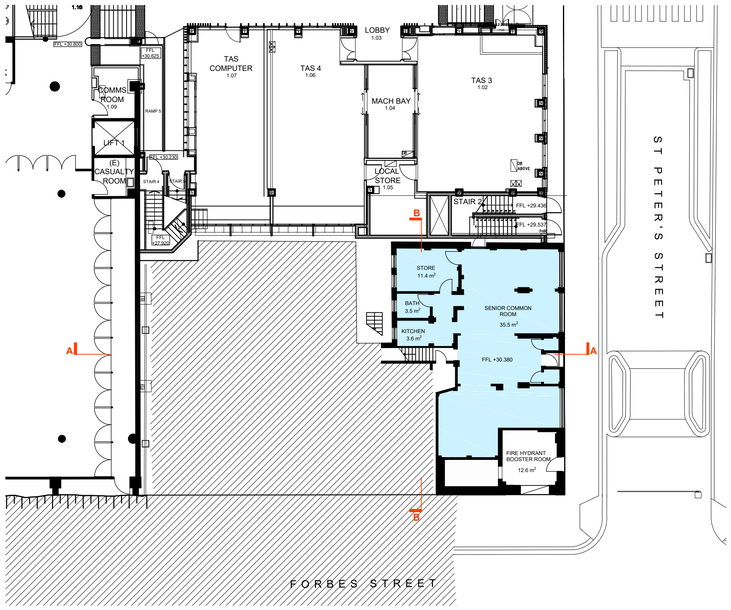
Project
WILKINSON HOUSE OPTIONS ANALYSIS

Drawing Title
COVER SHEET & DRAWING SCHEDULE

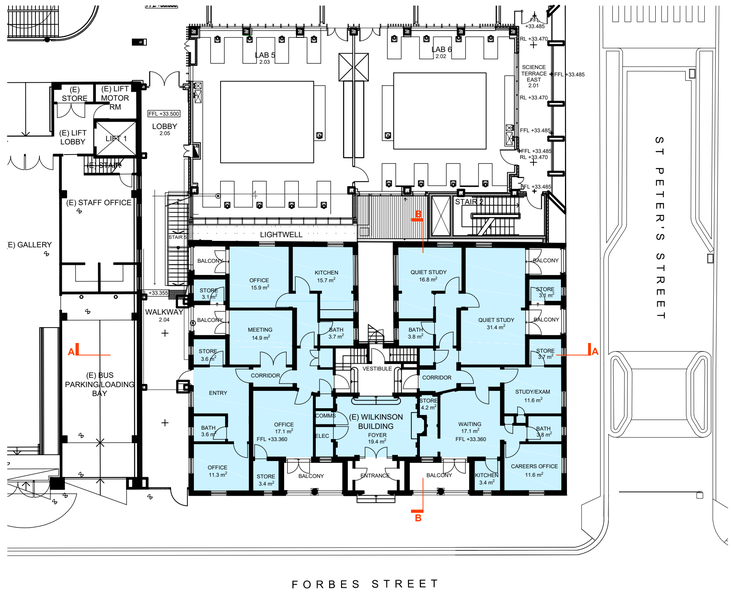
Drawing No. **AR.WH.0000** Revision **A**

Tanner Kibble Denton Architects Pty Ltd
PO Box 660 Darlinghurst NSW 1300 Australia
Level 1, 19 Foster Street, Surry Hills NSW 2010 Australia
T +61 2 9281 4399
F +61 2 9281 4337
www.tkda.com.au

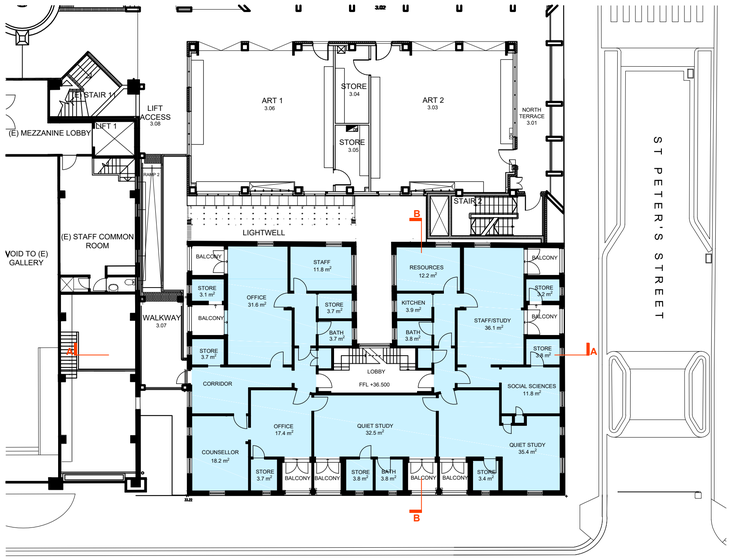
TKDArchitects
Tanner Kibble Denton



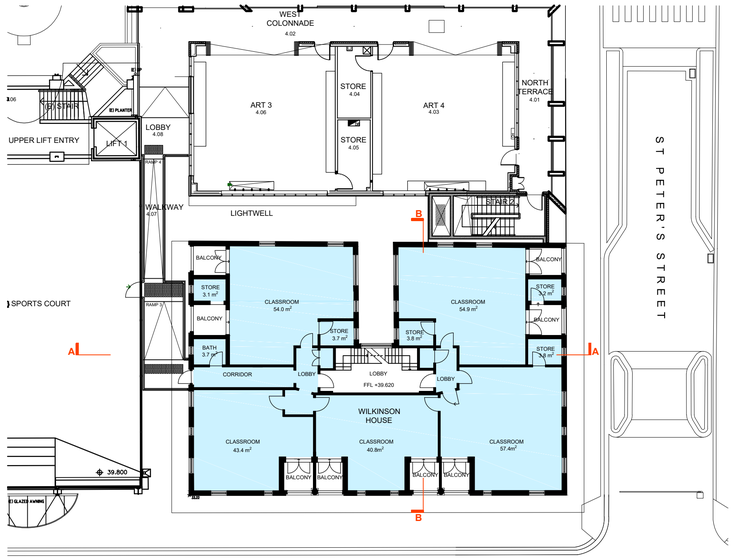
EXISTING BASEMENT FLOOR PLAN — GFA: 112.6m²



EXISTING GROUND FLOOR PLAN — GFA: 297.4m²



EXISTING LEVEL 1 FLOOR PLAN — GFA: 302.7m²



EXISTING LEVEL 2 FLOOR PLAN — GFA: 302.7m²

SCEGGS DARLINGHURST

T +61 2 9332 1133
F +61 2 9332 1858

PROJECT MANAGER
Sandrick Project Directions
T + 61 2 8860 9490

BCA / ACCESS
Design Confidence
T + 61 2 8399 3707

ELECTRICAL / MECHANICAL
Erbas
T + 61 2 9437 1022

STATUTORY PLANNER
Urbis
T + 61 2 8233 9900

LANDSCAPE ARCHITECT
Context
T + 61 2 8244 8900

TRAFFIC CONSULTANT
Traffix
T + 61 2 8324 9700

LAND SURVEYOR
Rygate Surveyors
T + 61 2 9262 6800

STRUCTURAL / CIVIL
Taylor Thomson Whitting
T + 61 2 9439 7288

COMMUNITY CONSULTATION
Elton Consulting
T + 61 2 9387 2600

QUANTITY SURVEYOR
Altus Group
T + 61 2 9263 1252

HYDRAULIC
Erbas
T + 61 2 9437 1022

ACOUSTIC ENGINEER
Wilkinson Murray
T + 61 2 9437 4611

ABBREVIATIONS

(E)	EXISTING
(N)	NEW
AW	ALUMINUM WINDOW
BK/F	BRICKWORK/FACE
EWC1	EXTERNAL WALL CLADDING
MRS	METAL ROOF SHEETING
PC	PRECAST CONCRETE
RT/TC	ROOF TILE/TERRACOTTA
SS	SUNSHADE
TW	TIMBER WINDOW
VB	VERTICAL BLADE

Rev	Date	Description	Checked	Auth.
A	23.11.18	ISSUE FOR SSD	IB	IB

Proj. Dir	Proj. Arch	Drawn
RD	IB	RT
Job No.	Date	Scale
160441	NOV 18	1:200 @A1

NSW Nominated Architects:
Robert Denton Registration No. 5782
Alex Kibble Registration No. 6015

Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

10 20 30 40 50

Project
WILKINSON HOUSE OPTIONS ANALYSIS

Drawing Title
EXISTING FLOOR PLANS

Drawing No. **AR.WH.1001** Revision **A**

Tanner Kibble Denton Architects Pty Ltd
PO Box 660 Darlinghurst NSW 1300 Australia
Level 1, 19 Foster Street, Surry Hills NSW 2010 Australia
T +61 2 9281 4399
F +61 2 9281 4337
www.tkda.com.au

TKDArchitects
Tanner Kibble Denton

EXISTING FORBES STREET (EAST) ELEVATION

EXISTING ST PETER'S STREET (NORTH) ELEVATION

SCEGGS DARLINGHURST

T +61 2 9332 1133
F +61 2 9332 1858

PROJECT MANAGER
Sandrick Project Directions
T + 61 2 8860 9490

BCA / ACCESS
Design Confidence
T + 61 2 8399 3707

ELECTRICAL / MECHANICAL
Erbas
T + 61 2 9437 1022

STATUTORY PLANNER
Urbis
T + 61 2 8233 9900

LANDSCAPE ARCHITECT
Context
T + 61 2 8244 8900

TRAFFIC CONSULTANT
Traffix
T + 61 2 8324 9700

LAND SURVEYOR
Rygate Surveyors
T + 61 2 9262 6800

STRUCTURAL / CIVIL
Taylor Thomson Whitting
T + 61 2 9439 7288

COMMUNITY CONSULTATION
Elton Consulting
T + 61 2 9387 2600

HYDRAULIC
Erbas
T + 61 2 9437 1022

ACOUSTIC ENGINEER
Wilkinson Murray
T + 61 2 9437 4611

ABBREVIATIONS

(E)	EXISTING
(N)	NEW
AW	ALUMINUM WINDOW
BK/F	BRICKWORK/FACE
EWC1	EXTERNAL WALL CLADDING
MRS	METAL ROOF SHEETING
PC	PRECAST CONCRETE
RT/TC	ROOF TILE/TERRACOTTA
SS	SUNSHADE
TW	TIMBER WINDOW
VB	VERTICAL BLADE

Rev	Date	Description	Checked	Auth.
A	23.11.18	ISSUE FOR SSD	IB	IB

Proj. Dir	Proj. Arch	Drawn
RD	IB	RT
Job No.	Date	Scale
160441	NOV 18	1:100 @A1

NSW Nominated Architects:
Robert Denton Registration No. 5782
Alex Kibble Registration No. 6015

Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

10 20 30 40 50

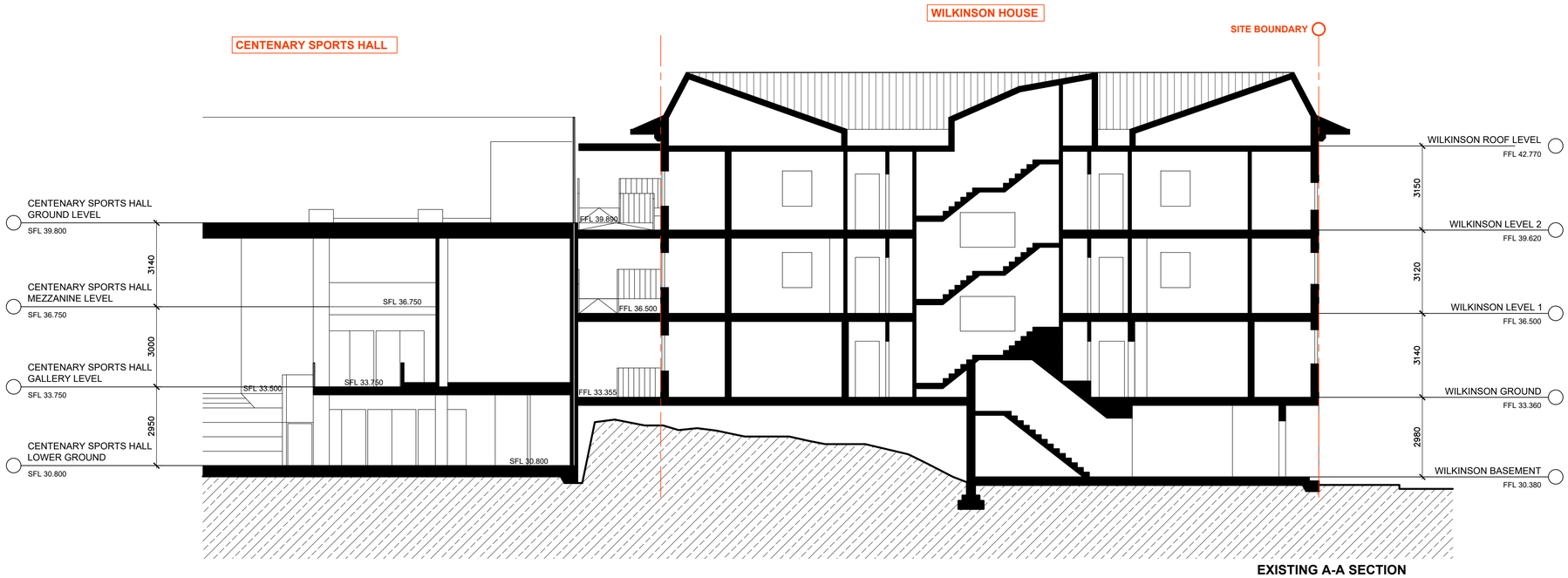
Project
WILKINSON HOUSE OPTIONS ANALYSIS

Drawing Title
EXISTING ELEVATIONS

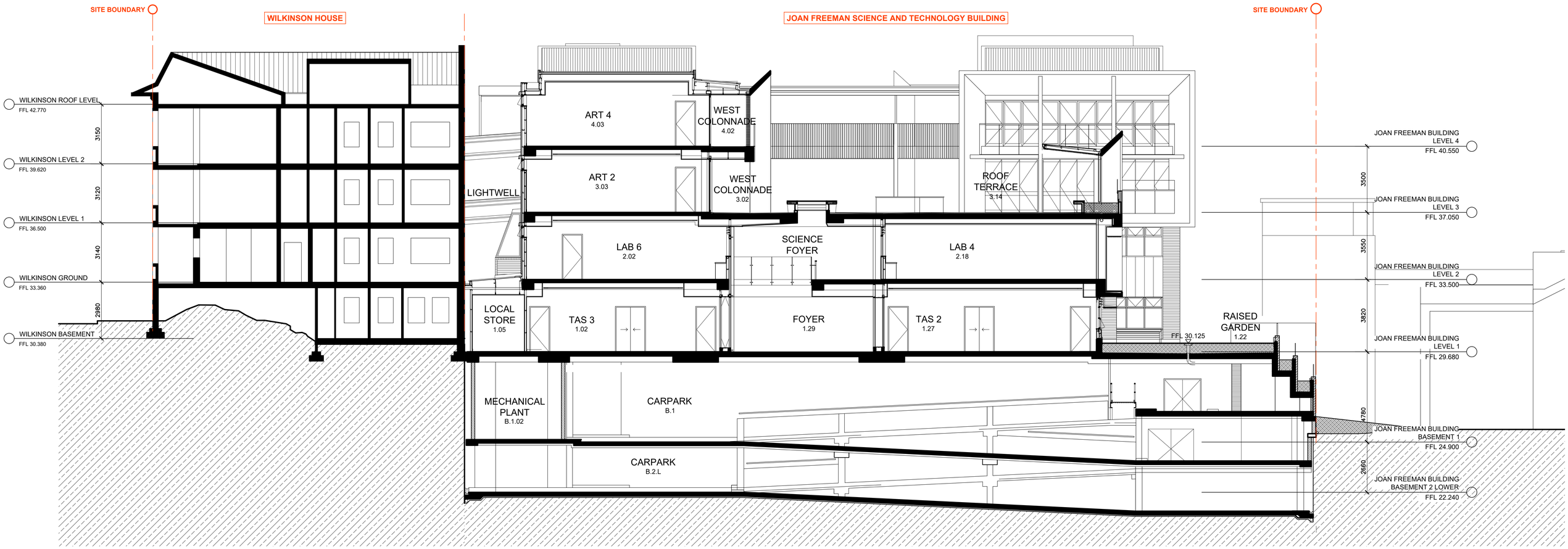
Drawing No.	Revision
AR.WH.1002	A

Tanner Kibble Denton Architects Pty Ltd
PO Box 660 Darlinghurst NSW 1300 Australia
Level 1, 19 Foster Street, Surry Hills NSW 2010 Australia
T +61 2 9281 4399
F +61 2 9281 4337
www.tkda.com.au

TKDArchitects
Tanner Kibble Denton



EXISTING A-A SECTION



EXISTING B-B SECTION

SCEGGS DARLINGHURST

T +61 2 9332 1133
F +61 2 9332 1858

PROJECT MANAGER
Sandrick Project Directions
T + 61 2 8860 9490

BCA / ACCESS
Design Confidence
T + 61 2 8399 3707

ELECTRICAL / MECHANICAL
Erbas
T + 61 2 9437 1022

STATUTORY PLANNER
Urbis
T + 61 2 8233 9900

LANDSCAPE ARCHITECT
Context
T + 61 2 8244 8900

TRAFFIC CONSULTANT
Traffix
T + 61 2 8324 9700

LAND SURVEYOR
Rygate Surveyors
T + 61 2 9262 6800

STRUCTURAL / CIVIL
Taylor Thomson Whitting
T + 61 2 9439 7288

COMMUNITY CONSULTATION
Elton Consulting
T + 61 2 9387 2600

QUANTITY SURVEYOR
Altus Group
T + 61 2 9263 1252

HYDRAULIC
Erbas
T + 61 2 9437 1022

ACOUSTIC ENGINEER
Wilkinson Murray
T + 61 2 9437 4611

ABBREVIATIONS

(E)	EXISTING
(N)	NEW
AW	ALUMINUM WINDOW
BK/F	BRICKWORK/FACE
EWC1	EXTERNAL WALL CLADDING
MRS	METAL ROOF SHEETING
PC	PRECAST CONCRETE
RT/TC	ROOF TILE/TERRACOTTA
SS	SUNSHADE
TW	TIMBER WINDOW
VB	VERTICAL BLADE

Rev	Date	Description	Checked	Auth.
A	23.11.18	ISSUE FOR SSD	IB	IB

Proj. Dir	Proj. Arch	Drawn
RD	IB	RT
Job No.	Date	Scale
160441	NOV 18	1:100 @A1

NSW Nominated Architects:
Robert Denton Registration No. 5782
Alex Kibble Registration No. 6015

Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

10 20 30 40 50

Project
WILKINSON HOUSE OPTIONS ANALYSIS

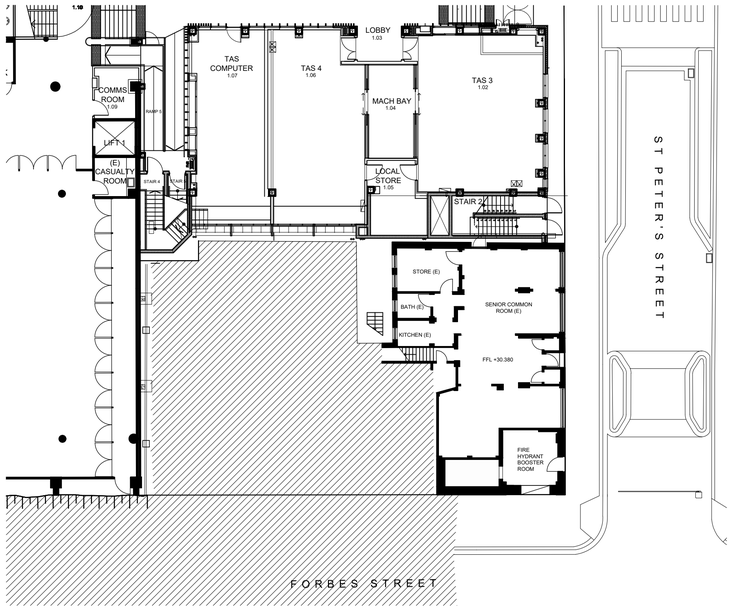
Drawing Title
EXISTING SECTIONS

Drawing No. AR.WH.1003

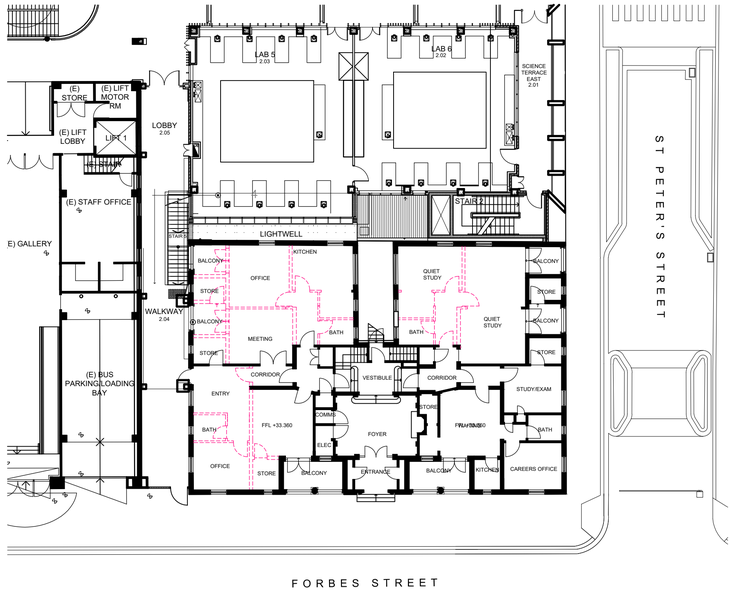
Revision A

Tanner Kibble Denton Architects Pty Ltd
PO Box 660 Darlinghurst NSW 1300 Australia
Level 1, 19 Foster Street, Surry Hills NSW 2010 Australia
T +61 2 9281 4399
F +61 2 9281 4337
www.tkda.com.au

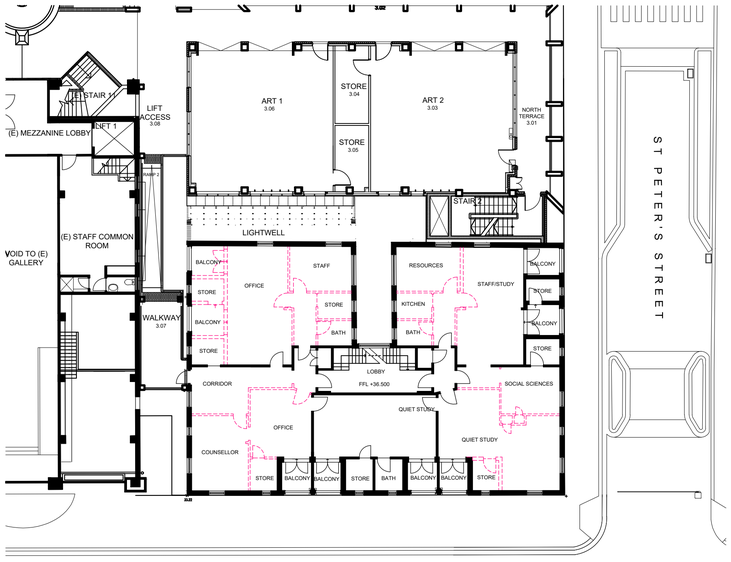
TKDArchitects
Tanner Kibble Denton



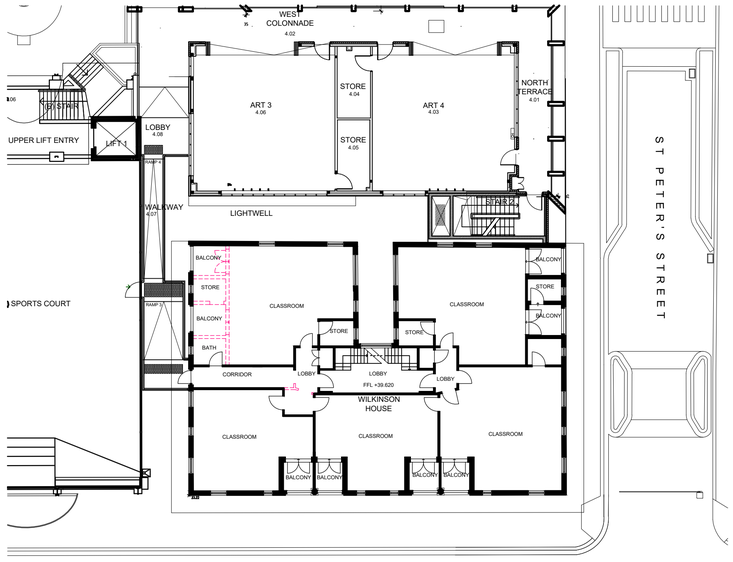
OPTION A
BASEMENT DEMOLITION PLAN



OPTION A
GROUND DEMOLITION PLAN



OPTION A
LEVEL 1 DEMOLITION PLAN



OPTION A
LEVEL 2 DEMOLITION PLAN

DEMOLISHED ITEMS

SCEGGS DARLINGHURST

T +61 2 9332 1133
F +61 2 9332 1858

PROJECT MANAGER **Sandrick Project Directions** T + 61 2 8860 9490	STATUTORY PLANNER **Urbis** T + 61 2 8233 9900	LAND SURVEYOR **Rygate Surveyors** T + 61 2 9262 6800	QUANTITY SURVEYOR **Altus Group** T + 61 2 9263 1252
BCA / ACCESS **Design Confidence** T + 61 2 8399 3707	LANDSCAPE ARCHITECT **Context** T + 61 2 8244 8900	STRUCTURAL / CIVIL **Taylor Thomson Whitting** T + 61 2 9439 7288	HYDRAULIC **Erbas** T + 61 2 9437 1022
ELECTRICAL / MECHANICAL **Erbas** T + 61 2 9437 1022	TRAFFIC CONSULTANT **Traffix** T + 61 2 8324 9700	COMMUNITY CONSULTATION **Elton Consulting** T + 61 2 9387 2600	ACOUSTIC ENGINEER **Wilkinson Murray** T + 61 2 9437 4611

ABBREVIATIONS

(E)	EXISTING
(N)	NEW
AW	ALUMINUM WINDOW
BK/F	BRICKWORK/FACE
EWC1	EXTERNAL WALL CLADDING
MRS	METAL ROOF SHEETING
PC	PRECAST CONCRETE
RT/TC	ROOF TILE/TERRACOTTA
SS	SUNSHADE
TW	TIMBER WINDOW
VB	VERTICAL BLADE

Rev	Date	Description	Checked	Auth.
A	23.11.18	ISSUE FOR SSD	IB	IB

Proj. Dir	Proj. Arch	Drawn
RD	IB	RT
Job No.	Date	Scale
160441	NOV 18	1:200 @A1

N

NSW Nominated Architects:
Robert Denton Registration No. 5782
Alex Kibble Registration No. 6015

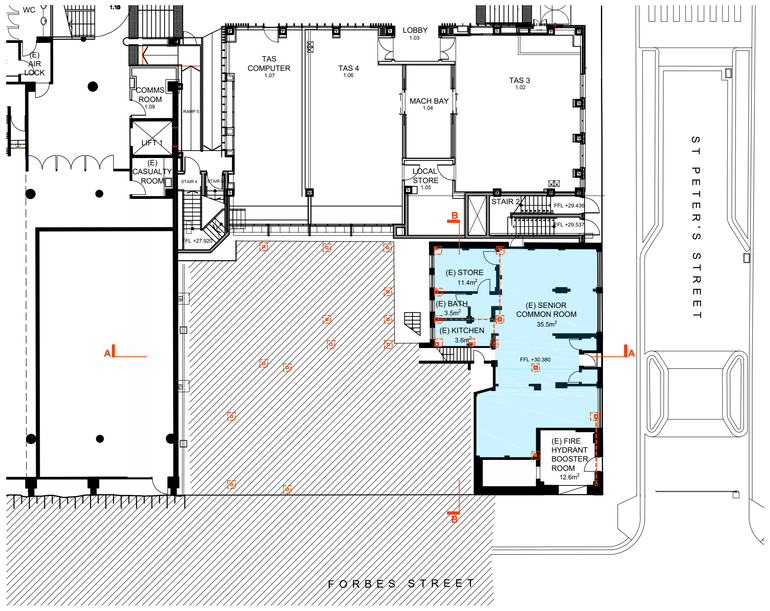
Project
WILKINSON HOUSE OPTIONS ANALYSIS

Drawing Title
OPTION A DEMOLITION PLANS

Drawing No. **AR.WH.2000** Revision **A**

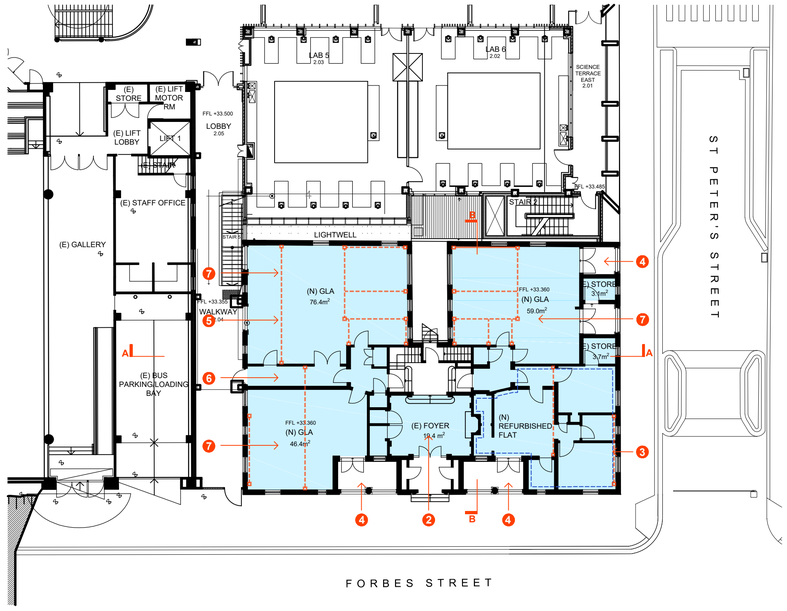
Tanner Kibble Denton Architects Pty Ltd
PO Box 660 Darlinghurst NSW 1300 Australia
Level 1, 19 Foster Street, Surry Hills NSW 2010 Australia
T +61 2 9281 4399
F +61 2 9281 4337
www.tkda.com.au

TKDArchitects
Tanner Kibble Denton



BASEMENT FLOOR PLAN

GFA: 112 m²



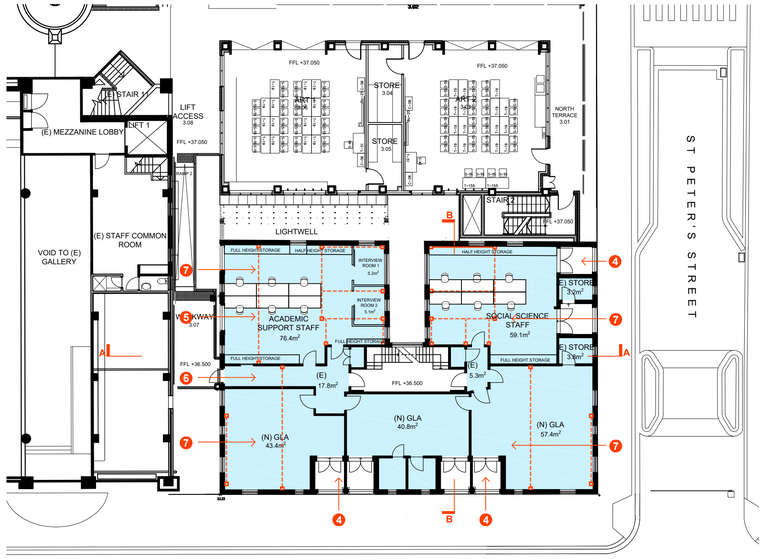
GROUND FLOOR PLAN

GFA: 328 m²

OPTION A DESCRIPTION OF WORKS

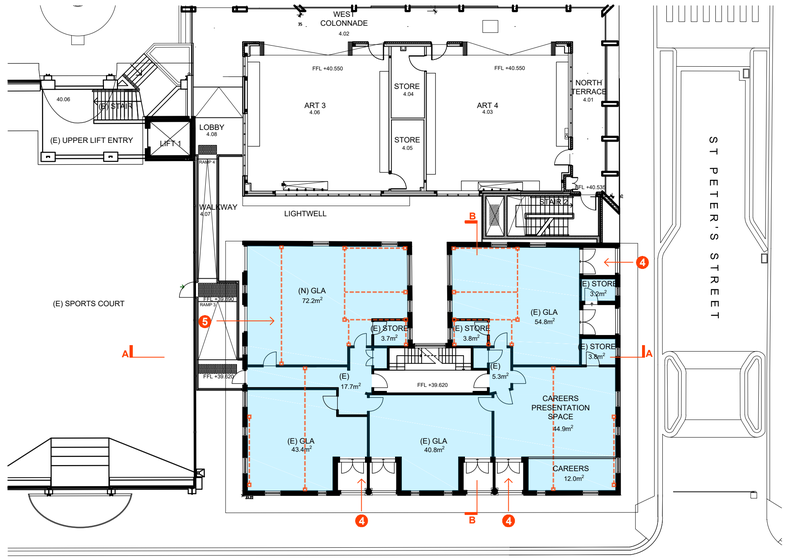
1. RETAIN EXISTING EXTERNAL FACADE AND FLOOR STRUCTURE.
2. RETAIN EXISTING ENTRY FOYER AND MAIN CIRCULATION STAIR.
3. RETAIN EXISTING LAYOUT AND REFURBISH AS A FUNCTIONING FLAT.
4. RETAIN EXISTING BALCONIES FACING FORBES STREET AND ST PETER'S STREET.
5. DEMOLISH EXISTING SOUTH ELEVATION RECESSED BALCONIES.
6. CREATE NEW ACCESS CORRIDOR.
7. DEMOLISH INTERNAL WALLS TO CREATE LARGER LEARNING SPACES.
8. PROVIDE NEW STRUCTURE TO SUPPORT EXTERNAL FACADE.

BOXED IN NEW STEEL COLUMN AND BEAM TO RESUPPORT EXISTING TIMBER FLOOR OR PROVIDE LATERAL BRACING



LEVEL 1 FLOOR PLAN

GFA: 349 m²



LEVEL 2 FLOOR PLAN

GFA: 312 m²

SCEGGS DARLINGHURST

T +61 2 9332 1133
F +61 2 9332 1858

PROJECT MANAGER
Sandrick Project Directions
T + 61 2 8860 9490

BCA / ACCESS
Design Confidence
T + 61 2 8399 3707

ELECTRICAL / MECHANICAL
Erbas
T + 61 2 9437 1022

STATUTORY PLANNER
Urbis
T + 61 2 8233 9900

LANDSCAPE ARCHITECT
Context
T + 61 2 8244 8900

TRAFFIC CONSULTANT
Traffix
T + 61 2 8324 9700

LAND SURVEYOR
Rygate Surveyors
T + 61 2 9262 6800

STRUCTURAL / CIVIL
Taylor Thomson Whitting
T + 61 2 9439 7288

COMMUNITY CONSULTATION
Elton Consulting
T + 61 2 9387 2600

QUANTITY SURVEYOR
Altus Group
T + 61 2 9263 1252

HYDRAULIC
Erbas
T + 61 2 9437 1022

ACOUSTIC ENGINEER
Wilkinson Murray
T + 61 2 9437 4611

ABBREVIATIONS

(E)	EXISTING
(N)	NEW
AW	ALUMINUM WINDOW
BK/F	BRICKWORK/FACE
EWC1	EXTERNAL WALL CLADDING
MRS	METAL ROOF SHEETING
PC	PRECAST CONCRETE
RT/TC	ROOF TILE/TERRACOTTA
SS	SUNSHADE
TW	TIMBER WINDOW
VB	VERTICAL BLADE

Rev	Date	Description	Checked	Auth.
A	23.11.18	ISSUE FOR SSD	IB	IB

Proj. Dir	Proj. Arch	Drawn
RD	IB	RT
Job No.	Date	Scale
160441	NOV 18	1:200 @A1

NSW Nominated Architects:
Robert Denton Registration No. 5782
Alex Kibble Registration No. 6015

Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

10 20 30 40 50

Project
WILKINSON HOUSE OPTIONS ANALYSIS

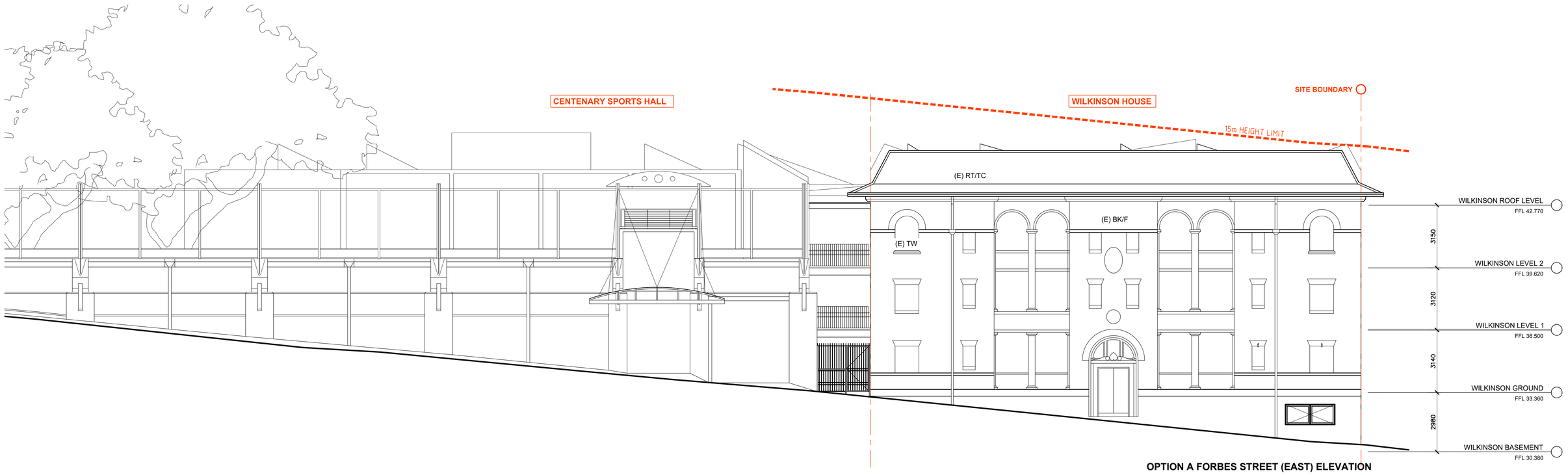
Drawing Title
OPTION A FLOOR PLANS

Drawing No. AR.WH.2001

Revision A

Tanner Kibble Denton Architects Pty Ltd
PO Box 660 Darlinghurst NSW 1300 Australia
Level 1, 19 Foster Street, Surry Hills NSW 2010 Australia
T +61 2 9281 4399
F +61 2 9281 4337
www.tkda.com.au

TKDArchitects
Tanner Kibble Denton



OPTION A FORBES STREET (EAST) ELEVATION

OPTION A ST PETER'S STREET (NORTH) ELEVATION

SCEGGS DARLINGHURST

T +61 2 9332 1133
F +61 2 9332 1858

PROJECT MANAGER
Sandrick Project Directions
T + 61 2 8860 9490

BCA / ACCESS
Design Confidence
T + 61 2 8399 3707

ELECTRICAL / MECHANICAL
Erbas
T + 61 2 9437 1022

STATUTORY PLANNER
Urbis
T + 61 2 8233 9900

LANDSCAPE ARCHITECT
Context
T + 61 2 8244 8900

TRAFFIC CONSULTANT
Traffix
T + 61 2 8324 9700

LAND SURVEYOR
Rygate Surveyors
T + 61 2 9262 6800

STRUCTURAL / CIVIL
Taylor Thomson Whitting
T + 61 2 9439 7288

COMMUNITY CONSULTATION
Elton Consulting
T + 61 2 9387 2600

HYDRAULIC
Erbas
T + 61 2 9437 1022

QUANTITY SURVEYOR
Altus Group
T + 61 2 9263 1252

ACOUSTIC ENGINEER
Wilkinson Murray
T + 61 2 9437 4611

ABBREVIATIONS

(E)	EXISTING
(N)	NEW
AW	ALUMINUM WINDOW
BK/F	BRICKWORK/FACE
EWC1	EXTERNAL WALL CLADDING
MRS	METAL ROOF SHEETING
PC	PRECAST CONCRETE
RT/TC	ROOF TILE/TERRACOTTA
SS	SUNSHADE
TW	TIMBER WINDOW
VB	VERTICAL BLADE

Rev	Date	Description	Checked	Auth.
A	23.11.18	ISSUE FOR SSD	IB	IB

Proj. Dir	Proj. Arch	Drawn
RD	IB	RT
Job No.	Date	Scale
160441	NOV 18	1:100 @A1

NSW Nominated Architects:
Robert Denton Registration No. 5782
Alex Kibble Registration No. 6015

Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

10 20 30 40 50

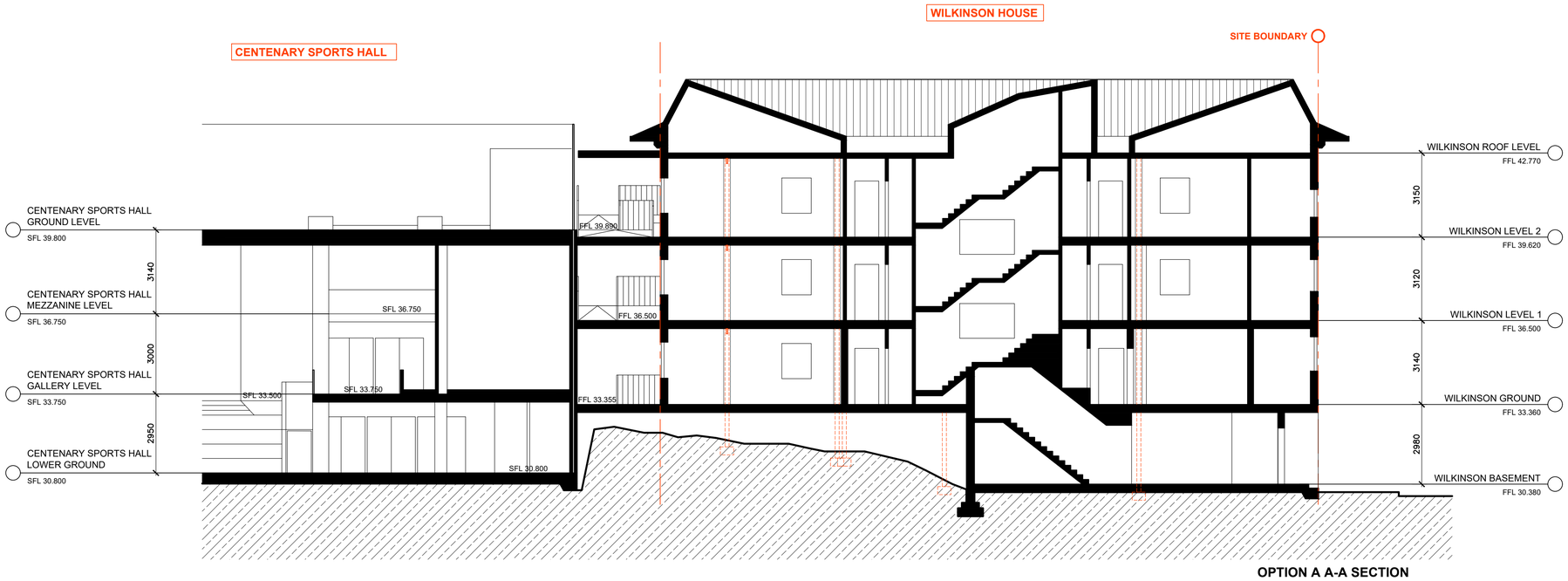
Project
WILKINSON HOUSE OPTIONS ANALYSIS

Drawing Title
OPTION A ELEVATIONS

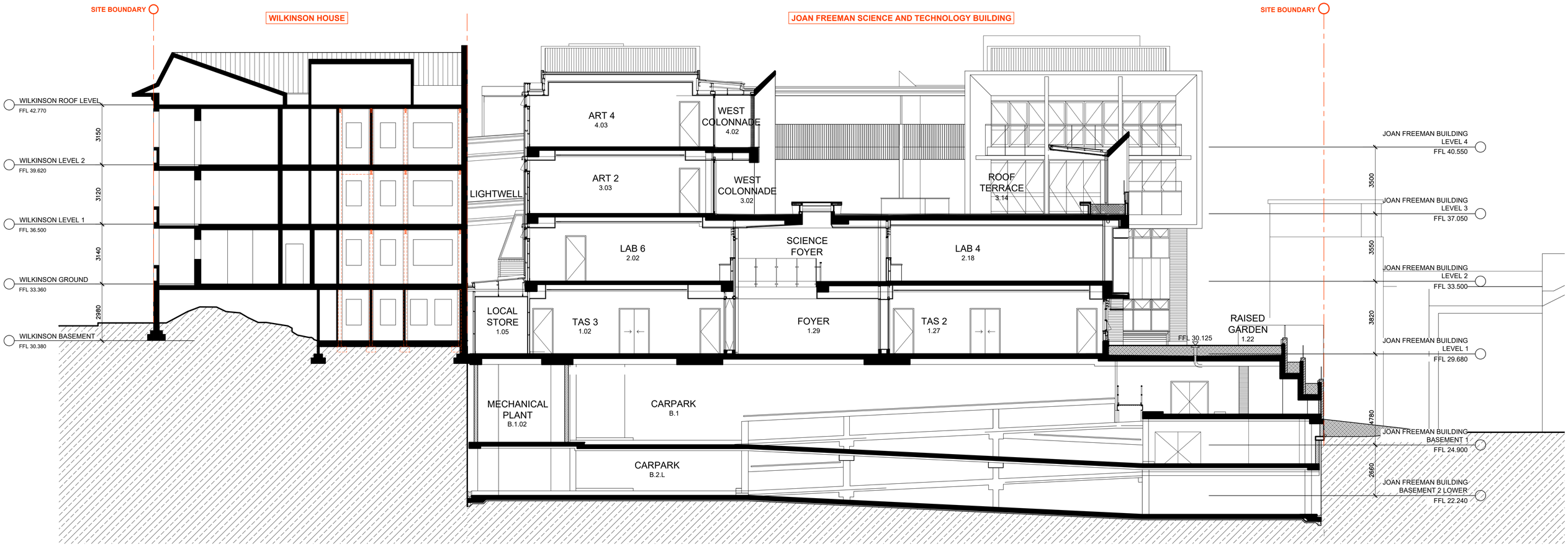
Drawing No.	Revision
AR.WH.2002	A

Tanner Kibble Denton Architects Pty Ltd
PO Box 660 Darlinghurst NSW 1300 Australia
Level 1, 19 Foster Street, Surry Hills NSW 2010 Australia
T +61 2 9281 4399
F +61 2 9281 4337
www.tkda.com.au

TKDArchitects
Tanner Kibble Denton



OPTION A A-A SECTION



OPTION A B-B SECTION

SCEGGS DARLINGHURST

T +61 2 9332 1133
F +61 2 9332 1858

PROJECT MANAGER
Sandrick Project Directions
T + 61 2 8860 9490

BCA / ACCESS
Design Confidence
T + 61 2 8399 3707

ELECTRICAL / MECHANICAL
Erbas
T + 61 2 9437 1022

STATUTORY PLANNER
Urbis
T + 61 2 8233 9900

LANDSCAPE ARCHITECT
Context
T + 61 2 8244 8900

TRAFFIC CONSULTANT
Traffix
T + 61 2 8324 9700

LAND SURVEYOR
Rygate Surveyors
T + 61 2 9262 6800

STRUCTURAL / CIVIL
Taylor Thomson Whitting
T + 61 2 9439 7288

COMMUNITY CONSULTATION
Elton Consulting
T + 61 2 9387 2600

QUANTITY SURVEYOR
Altus Group
T + 61 2 9263 1252

HYDRAULIC
Erbas
T + 61 2 9437 1022

ACOUSTIC ENGINEER
Wilkinson Murray
T + 61 2 9437 4611

ABBREVIATIONS

(E)	EXISTING
(N)	NEW
AW	ALUMINUM WINDOW
BK/F	BRICKWORK/FACE
EWC1	EXTERNAL WALL CLADDING
MRS	METAL ROOF SHEETING
PC	PRECAST CONCRETE
RT/TC	ROOF TILE/TERRACOTTA
SS	SUNSHADE
TW	TIMBER WINDOW
VB	VERTICAL BLADE

Rev	Date	Description	Checked	Auth.
A	23.11.18	ISSUE FOR SSD	IB	IB

Proj. Dir	Proj. Arch	Drawn
RD	IB	RT
Job No.	Date	Scale
160441	NOV 18	1:100 @A1

NSW Nominated Architects:
Robert Denton Registration No. 5782
Alex Kibble Registration No. 6015

Do not scale drawings. Verify all dimensions on site. Notify architect of all discrepancies

10 20 30 40 50

Project
WILKINSON HOUSE OPTIONS ANALYSIS

Drawing Title
OPTION A SECTIONS

Drawing No. AR.WH.2003
Revision A

Tanner Kibble Denton Architects Pty Ltd
PO Box 660 Darlinghurst NSW 1300 Australia
Level 1, 19 Foster Street, Surry Hills NSW 2010 Australia
T +61 2 9281 4399
F +61 2 9281 4337
www.tkda.com.au

TKDArchitects
Tanner Kibble Denton