

13 December 2022

191482

Planning Secretary
Department of Planning, Industry and Environment
4 Parramatta Square, 12 Darcy Street
Parramatta NSW 2150

Attention: Planning Secretary

Sandstone Precinct - Lands Building
Structural Design Assessment – MOD 18

Dear Planning Secretary,

We certify that we have reviewed the available structural documentation for the existing structure (refer Appendix 2 for schedule of drawings), the results of the material testing and surveys listed in Appendix 3 and have carried out inspections of the visible areas of the Lands Building at 22-33 Bridge Street, Sydney.

Based on the inspections, reviews of the existing structural documentation and results of the material testing noted above and subject to the completion of the structural works that will be shown on the TTW structural drawings, we confirm that the works nominated on the Architectural MOD 18 drawings prepared by Hassell Pty Ltd (refer Appendix 1) for the Lands Building will not impact on the structural integrity of the existing building structure and can be integrated so that the existing structure will be able to support the proposed loadings nominated in the following design standards;

- AS 1170.0 Structural design actions – General principles
- AS 1170.1 Structural design actions – Permanent, imposed and other actions

For and on behalf of,
TTW (NSW) PTY LTD



KEVIN BERRY BE, CPEng, NER 3956622
Director

Encl.

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Appendix 1

MOD 18 Architectural Drawing List

Document No	Title	Revision
SP-DA-G-3400	Demolition Sections – Lands & Education Building – Section 01	012
SP-DA-G-3401	Demolition Sections – Lands Building – Section 02	012
SP-DA-G-3402	Demolition Sections – Lands & Education Building – Section 03	02
SP-DA-G-3403	Demolition Sections – Lands & Education Building – Sections 04 & 05	02
SP-DA-G-7297	Demolition RCPs – Lands Building – Lower Ground	02
SP-DA-G-7299	Demolition RCPs – Lands Building – Ground Level	02
SP-DA-G-7300	Demolition RCPs – Lands Building – Level 01	02
SP-DA-G-7497	Proposed RCPs – Lands Building – Lower Ground	00
SP-DA-G-7499	Proposed RCPs – Lands Building – Ground Level	00
SP-DA-G-7500	Proposed RCPs – Lands Building – Level 01	00

Appendix 2

Schedule of Existing Drawings

Drawing Ref.	Title	Date
PUBLIC OFFICES – LANDS DEPARTMENT NORTH - 1876		
No.165 PB22/13	North Elevation	June 1876
No.166 PB22/1	East and West Elevations	June 1876
No.167 PB22/2	Back Elevation	June 1876
No.168 PB22/3	Transverse Section, Plan of Observatory	June 1876
No.169 PB22/4	Roof Plan & Second Floor Plan	June 1876
No.170 PB22/5	First Floor & Ground Floor Plan	June 1876
No.171 PB22/6	Basement Plan	June 1876
No.174 PB22/7	Plan of Foundations	June 1876
PUBLIC OFFICES – LANDS DEPARTMENT SOUTH - 1890		
No.1A PB22/8	Basement Plan	21 November 1890
No.2A PB22/9	Ground Floor Plan	21 November 1890
No.3A PB22/10	First Floor Plan	21 November 1890
No.4A PB22/11	Second Floor Plan	21 November 1890
No.5A PB22/12	Detail of Skylights over Stairs	21 November 1890
No.7A PB22/26	Arches of Tower Entrance	21 November 1890
PUBLIC OFFICES – LANDS DEPARTMENT – STRONG ROOM		
No.1 PB22/14	New Gallery & Fittings Strong Room First Floor	2 June 1910
No.2 PB22/15	Strong Room Fittings Old Accumulator Room	7 January 1902
PB22/16	New Fittings in Strong Room	22 March 1899
PB22/17	Proposed Fittings on Ground Floor	12 March 1904
PB22/18	Proposed Fittings on Second Floor	10 October 1893
PB22/41	Addition of Floor Area in Strong Room	16 September 1958
DEPARTMENT OF LANDS – ROOF ALTERATIONS		
PB22/19	Alterations to Roof of Photographic Gallery	30 January 1908
LANDS OFFICE – ADDITIONAL LAVATORIES		
1539-1 PB22/20	Additional Lavatories Plans and Elevations	6 June 1924
DEPARTMENT OF LANDS – LIFT INSTALLATION		
3 of 6 PB22/44	Structural Details – Plans and Beam Elevations	13 February 1957
4 of 6 PB22/45	Structural Details – Beam Elevations	13 February 1957
5 of 6 PB22/46	Structural Details – Plan of Pits and Column Details	13 February 1957
6 of 6 PB22/47	Structural Details – Lift Shaft Details	13 February 1957

Drawing Ref.	Title	Date
DEPARTMENT OF LANDS – NEW STORAGE NORTHERN LIGHTS AREA		
PB22/70	Ground Floor Plan and Beam Details	27 January 1961
PB22/71	Beam Details	2 February 1961
LANDS DEPARTMENT BUILDING – PHOTOGRAPHIC SECTION REDEVELOPMENT		
S1 PB22/236	Footing Plan and Details	March 1984
S2A PB22/237	Ground & Mezzanine Floor Slab Plan & Details	March 1984
S3A PB22/238	Mezzanine & Roof Slab Plans & Details	March 1984
S4 PB22/239	Mezzanine Floor & Roof Framing Plans & Details	March 1984
LANDS DEPARTMENT BUILDING – FIRE STAIR		
S2A PB22/289	Footing & Ground Floor Plan	26 October 1987
S3 PB22/290	Stair Wall Elevations	October 1987
S4 PB22/291	Stair Wall Sections & Details	October 1987
S5 PB22/292	Stair Details	October 1987
S7A PB22/294	Fourth Floor Details Sheet 2 of 2	26 October 1987

Appendix 3

Testing & Investigation Reports

Document Ref.	Title	Date
MAHAFFEY ASSOCIATES Pty Ltd		
JP/R02/1118	Concrete Floor Slab & Brick Arch Investigation	15 September 2017
DRM/L0/11238	Fire Testing of Sandstone	19 June 2018
DRM/L01/11238	Materials Investigation – Volume 1 – Methodology, summary of results and commentary	21 June 2018
TIMBER INSPECTION Pty Ltd		
0732a-Dec-16	Timber Inspection	3 January 2017
0979a-Jan-18	Timber inspection	4 February 2018
DOUGLAS PARTNERS Pty Ltd		
86245.01 R.001.Rev0	Geological and Geotechnical Model for Numerical Analysis	8 August 2018
82645.00 R.003.Rev1	Report on Geotechnical Investigation	17 April 2019
86245.00 R.050.dftC	Investigation Summary Report	1 November 2019
PSM Pty Ltd		
PSM4577	Preliminary design of rock face support	25 March 2022
PSM4577-0400	Results of endoscope inspection at footing cored holes	6 April 2022
WITT CONSULTING Pty Ltd		
WittC-Built-33BridgeSt-L-AD-REV1	Foundation Inspections	11 December 2019
WITT-INV-P1	WITT Combined Investigation Package	27 September 2022
AURECON AUSTRALASIA Pty Ltd		
505630 Rev 1	Lands Building Structural Condition Report	10 May 2019
BCRC Pty Ltd		
BCRC-INV-LGFJoistReport	Lower Ground Floor Joist Investigation Report	7 October 2022
BCRC-INV-GFJoistReport	Ground Floor Joist Investigation Report	30 May 2022
BCRC-INV-L1JoistReport	Level 1 Joist Investigation Report	10 October 2022
BCRC-INV-L2JoistReport	Level 2 Joist Investigation Report	10 October 2022
BCRC-INV-L3JoistReport	Level 3 Joist Investigation Report	12 August 2022