

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
For room numbers see 2013 floor plans in Section 7.34 pp.193-200.				(See also Section 5: Heritage Management Policies & Guidelines)

7.18 FIREPLACES



Room 107

One interesting feature of the office area decor is the different fire place surrounds. They are different in design (although some are similar) and colour and are of the various types of New South Wales marbles used at the time. The cast iron register grates are also of considerable value and detail. Generally the offices are graded in importance and the fireplaces and finishes within the rooms are graded accordingly. Offices of greater importance generally occupy the north east and north west corners of the building.

Exceptional

Good / Excellent

Clean and retain all fire places and equipment. When possible open up fire places that have been blocked over to reveal the original cast iron registers. Reinstall the hearth if it has been concealed under carpet or other finishes. Fire places are generally non-functioning within the building with chimneys capped off. Any future use of chimneys should be part of an approved engineered approach to fire safety. Only reinstall missing detail if sufficient evidence is available.

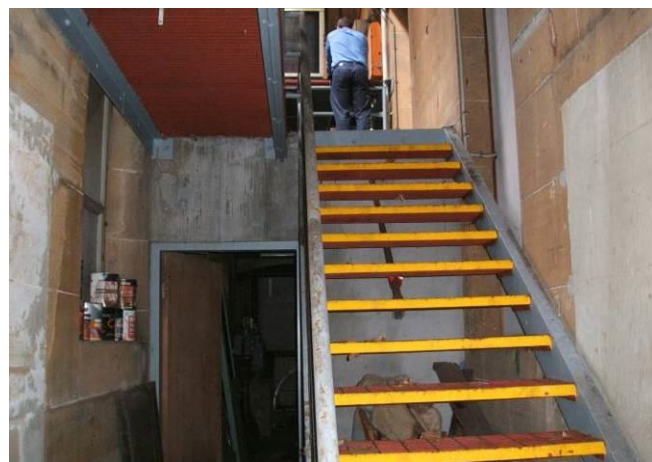


Room 207

Unfortunately, some of the fireplace surrounds have been removed in the past "to make more space". Some of the fireplaces have been blocked over in the registers. At roof level some of the chimneys have been removed above roof level and capped off in the roof space.

7.19 MEZZANINES

MEZZANINE LEVELS BETWEEN GROUND AND LEVEL 1



View of plant rooms in Room G31 with mezzanines. This area was the previous caretaker's work rooms with evidence of stored original windows, doors and other material.

Several mezzanine rooms have been placed between the ground and first floors. This was possible due to the 19 foot approx. floor heights between the original floors. The mezzanine floors are generally reinforced concrete and have been supported on steel framing. The slab edges are supported on an additional 230 mm thick brick wall placed internally within rooms. These walls are un-rendered, rough finished and painted. Some original windows have been blocked up / covered over. Corridor door lights have been painted to hide the mezzanine floor / wall above. The mezzanine floors appear to have been added for storage / file rooms and for additional toilet / change rooms. Generally these levels can be removed to reinstate the original layout without affecting the structure.

Original floor layouts:
High

Fair

Mezzanine floors:
Intrusive

Many compliance issues exist in these areas such as fire egress, fire ratings, stairs, step heights and storage of flammable material under stairs. Fire engineered approach for building is required to assess these areas in relation to their intended use. Reinstall the original floor layout where possible by removing intrusive mezzanine floors. Minor alterations to the Lands Building, particularly those that recover significance, can be undertaken as long as the original internal configuration, external character and significant fabric (particularly that of Exceptional and High significance) are retained, as these are integral to the heritage significance of the place. Retain the original pattern of internal spaces without further subdivision or demolishing walls to increase the size of spaces. Do not insert false ceilings for services such as lighting and air conditioning. When next upgrading services do so with the intent to

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
----------------	--------------------------	--------------	-----------	-----------------

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

(See also Section 5: Heritage Management Policies & Guidelines)



Steel supports for mezzanine slab room G17b



View of room G16 with steel framing and reinforced concrete mezzanine floor slab

increase the efficiency and reduce the size of service equipment and its impact on the heritage in the building. Use smaller and more efficient fire services equipment. Reduce pipe and cable diameters and place in concealed runs. Run new service in already altered or damaged fabric and reduce opening up, drilling through and damaging original fabric.

7.20 PLANT & SERVICE AREAS

GENERALLY



Service corridor at Level 4

Plant rooms and service areas are located throughout the building however the greatest concentration is found on the ground floor in the central core and in the roof void above the third floor.

Generally service lines are routed through the building in the service tunnels found between the corridor ceilings and corridor floors.

These tunnels may have originally served a different purpose such as ventilation supply for the building further research is required.

Generally the ground floor service rooms are recent alterations to the building such as mezzanine rooms or infill between original walls. Openings have been made in some original walls and some original windows have been boarded over.

Generally the roof space above the third floor has been used for A/C plant. This space with its steel beam and concrete floor / ceiling provides an excellent platform for plant and has been successful in concealing these services within this large space and off the roof areas. This has allowed the building to retain its exceptional external appearance without the clutter of roof top services often found on heritage buildings.

Room G31 and other service rooms contain some original building fabric which may be utilised in any future reinstatement works.



Room G31

Original walls and spaces
High

Infill walls and spaces
Intrusive

Some spaces are well maintained and in good condition

Some spaces are poorly finished with holes and voids compromising fire ratings and degrading heritage fabric.

Spaces vary from poor to Good

Recommend the continued use of the roof void for services and prohibit use of any A/C or other services on the roof areas to maintain the heritage significance of the building.

Minor alterations to the Lands Building, particularly those that recover significance, can be undertaken as long as the original internal configuration, external character and significant fabric (particularly that of Exceptional and High significance) are retained, as these are integral to the heritage significance of the place.



Retain original building fabric held on site for potential reinstatement in to the building.

Undertake a fire engineered assessment of the building and determine and implement appropriate and sympathetic methods of fire rating between service areas in heritage fabric.


When next upgrading services do so with the intent to increase the efficiency and reduce the size of service equipment and its impact on the heritage in the building. Use small floor mounted A/C units in lieu of large ducted systems. Reduce pipe and cable diameters and place in concealed runs. Run new service in already altered or damaged fabric and reduce opening up, drilling through and damaging original fabric.

Engage a competent heritage professional to manage new services design, heritage approval application and installations.

Repaint deteriorated wall in the short term.

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
<p>For room numbers see 2013 floor plans in Section 7.34 pp.193-200.</p> <p>LOADING DOCK</p>  <p>Room G26</p>	<p>In some areas of the cart dock / loading dock bituminous paving blocks still exist, dating from the 1890's. These were used in the cart dock area and internal courtyards.</p> <p>The space is substantially unaltered with the original gates opening onto Gresham Street. This area contains fire services equipment which is considered non-compliant; refer to Hydraulic services in this report. The ceiling was not accessible but appears to have a spray on fire rated treatment to prevent spread of fire through the iron beams and timber floor above. The adequacy of this treatment will need to be assessed in a fire engineered assessment of the building.</p>  <p>Original paving portion Room G26</p>	<p>The former cart dock zone High</p> <p>The original paving blocks High</p> <p>Fire service equipment in room Intrusive</p> <p>Old redundant gas meter Little</p>	<p>The room is in fair condition the walls require repainting some windows are broken. Fair</p>	<p>(See also Section 5: Heritage Management Policies & Guidelines)</p> <p>Undertake a fire engineered assessment of the building and determine and implement appropriate and sympathetic methods of fire rating between service areas in heritage fabric.</p> <p>When next upgrading services do so with the intent to increase the efficiency and reduce the size of service equipment and its impact on the heritage in the building. Use smaller and more efficient fire services equipment. Reduce pipe and cable diameters and place in concealed runs. Run new service in already altered or damaged fabric and reduce opening up, drilling through and damaging original fabric.</p> <p>Do not add new elements where they will negatively impact significance</p> <p>Retain the remnant portions of the original floor</p> <p>Retain the existing pattern of internal spaces without further subdivision or demolishing walls to increase the size of spaces.</p> <p>Engage a competent heritage professional to manage new services design, heritage approval application and installations.</p> <p>Repaint walls in the short term; replace broken window glass with new compliant glass.</p>

7.21 MAIN ENTRANCE LOBBIES & CORRIDORS

 <p>Bridge Street Entry Ground Floor</p>	<p>The main entrance lobbies and the corridors are essential components to the original interior architecture of the Lands Building. They are also in relatively intact condition with the exception of:</p> <ul style="list-style-type: none"> - The impacts of changes on the main Bridge Street entrance in the 1970s (much of which has been "reconstructed" - Installation of partitioning, false flooring and lift in the Loftus Street Entry - Carpet to the corridors on First, Second and Third levels. 	<p>Exceptional</p>	<p>Good</p>	<p>Retain the four main entrances and entrance lobbies.</p> <p>Review accessible entrance under the BCA (e.g. Gresham Street entrance is nearly at grade and would much more easily adapted as an accessible entrance).</p> <p>Review Loftus Street entrance to more sympathetically accommodate accessible entrance requirements.</p>
---	---	--------------------	-------------	--

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
----------------	--------------------------	--------------	-----------	-----------------

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

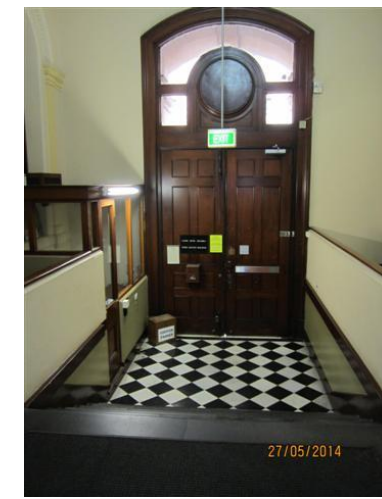
(See also Section 5: Heritage Management Policies & Guidelines)



Typical corridor Ground Floor



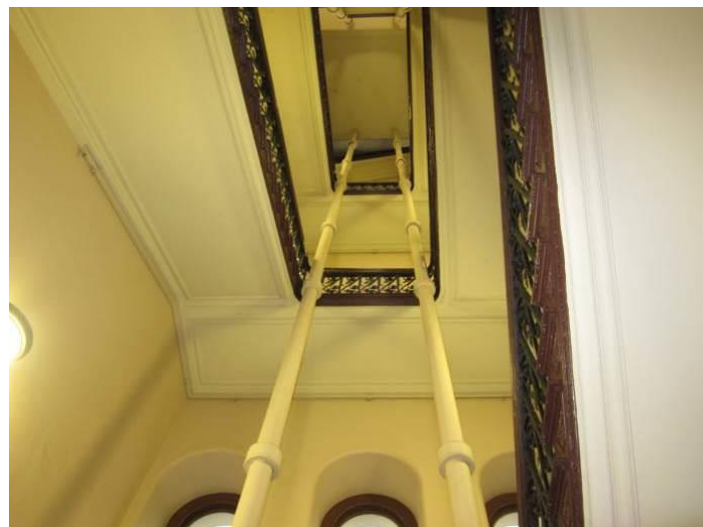
Typical corridor Upper Floors



Loftus St Entry

7.22 STAIRS

STAIRS SHAFTS OFF BENT STREET ENTRANCE



Stair with remnant of lift structure

The staircases are constructed of cast iron, with a curved tread detail. An extra handrail has been erected over the original handrail to increase the height of the balustrade however this is not fully compliant. The stair flights are quite long since the building has approx. 18'0" high floors, almost the equivalent of two storeys in modern office buildings.

This stairwell is the only one displaying the four steel lift columns where the lift was once installed. The staircase is constructed of cast iron similarly to the Gresham and Loftus Street staircases. Over the centre of the stairwell is the lift motor room. It is accessible from the staircase by a narrow flight of stairs from the third floor.

The ground floor paving is missing a portion of the marble tiles where the original lift structure one occupied.

Exceptional

The stair is not compliant, walls and stairs require attention
Fair to Good

Undertake a fire engineered assessment of the stairs within the context of the future building use. Determine and implement appropriate and sympathetic methods of upgrading the stair / stair shaft without causing loss of significance.

Upgrade the stair balustrade in the immediate term by adding an extra continuous brass handrail similar to the existing and in accord with an approved fire engineered assessment. Assess the untagged fire doors / frame for fire resistance rating. Drawings are available from NSW Public Works plan room.

Upgrade and repair the fire doors (assess & tag), automatic door closing systems and control measures on the primary fire egress routes from the Bridge, Bent, Loftus and Gresham Street stairs and remove stored combustible materials in the immediate term. This is to be done in conjunction with the fire engineered approach.

Engage a competent heritage professional to manage new design, heritage approval application and installations.

Repaint walls and underside of stair landings and flights in the short term.

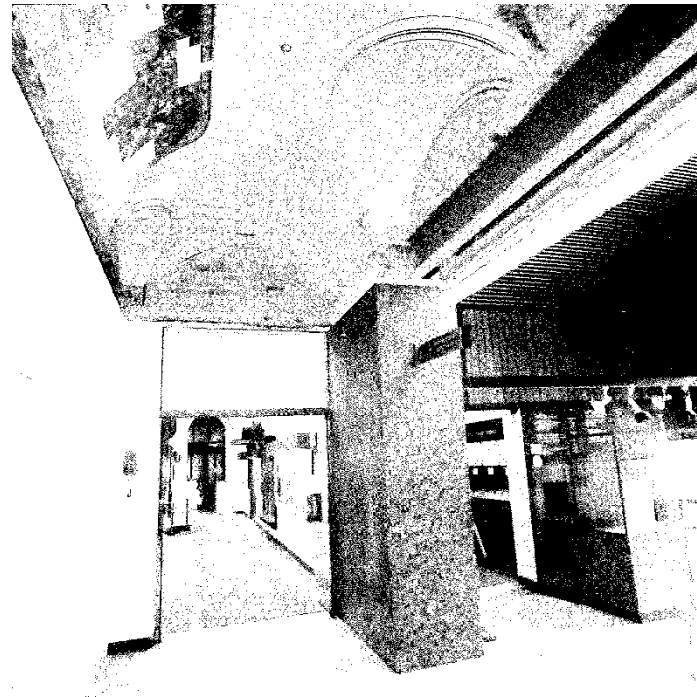
Remove stored combustible material from under the stair flight at ground floor level stairs generally in the

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
----------------	--------------------------	--------------	-----------	-----------------

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

(See also Section 5: Heritage Management Policies & Guidelines)

STAIRS OFF BRIDGE STREET ENTRANCE



Bridge Street Foyer in 1986

A lift was initially installed in the Bridge Street stairwell. The Bridge Street entrance was demolished and "modernised" in the mid 1950's. The staircase and lift located in this area were removed and the area substantially altered to make way for the present lifts. Between 1977 - 1983 work was carried out to increase the fire-rating in this part of the building, to make it safer for the occupants and to attempt to incorporate the fire precaution requirements of the Board of Fire Commissioners into this historically important building, significantly altering the area.

The original entrance foyer was reinstated to the Bridge Street entrance at this time. Fortunately, sufficient details survived to enable this work to be undertaken. A fire rated stair was erected in the foyer in front of the lifts accessing floors up into the Northern dome.

The original walls, ceilings and decorations.
High

The reinstated elements of the entrance in new materials to match the original based on known details.
Little

New elements added to the entrance of a sympathetic construction not based on original known details
Neutral

Existing lifts and lift motor room
Intrusive

Building fabric
Good

immediate term.

Undertake a fire engineered assessment of the stairs within the context of the future building use. Determine and implement appropriate and sympathetic methods of upgrading fire safety / egress without causing loss of significance.

Upgrade and repair the fire doors (assess & tag), automatic door closing systems and control measures on the primary fire egress routes from the Bridge, Bent, Loftus and Gresham Street stairs and remove stored combustible materials in the immediate term. This is to be done in conjunction with the fire engineered approach.

Engage a competent heritage professional to manage new design, heritage approval application and installations.

Lifts located at the southern end of the lobby are assessed as non-compliant with current standards. Refer to lift engineer's report. Note change in use, ownership or major works to the building may trigger the necessity to upgrade the lift system.

If future alterations are required to the lift shaft and lift motor room consideration should be given to create a less intrusive lift system.

The costing has an allowance for the removal of the existing lift system and the provision of a new lift system installed in a sympathetic manner using current technology in the short term. With the aim to lessen the impact of the existing lift on the heritage significance of the place and to be compliant with current standards and in conjunction with the fire engineered approach.

Refer to Trevor R Howse & Associates report 1993.

STAIRS SHAFT OFF GRESHAM STREET ENTRANCE

The staircases are constructed of cast iron, with a curved tread detail. An extra handrail has been erected over the original handrail to increase the height of the balustrade however this is not fully compliant. The stair flights are quite long since the building has approx. 18'0" high floors, almost the equivalent of two storeys in modern office buildings.

One of the main features of the stairwells is the elegantly decorated lanterns over the centre of the wells. Both are different. Note the decorative frieze. It is perforated cast iron. Originally, the stairwell windows were glazed with acid etched glass. Many original panes still exist

Exceptional

The stair is not compliant, walls and stairs require attention
Fair to Good

Undertake a fire engineered assessment of the stairs within the context of the future building use. Determine and implement appropriate and sympathetic methods of upgrading the stair / stair shaft without causing loss of significance.

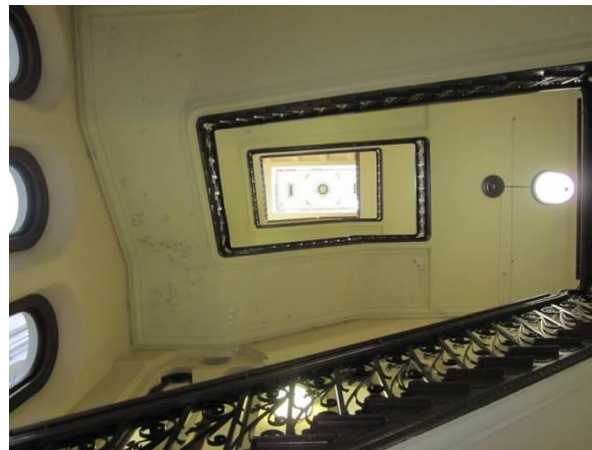
Consider upgrading the extra handrail to be continuous. Assess the untagged fire doors / frame for fire resistance rating. Drawings are available from NSW Public Works plan room.

Engage a competent heritage professional to manage new design, heritage approval application and installations.

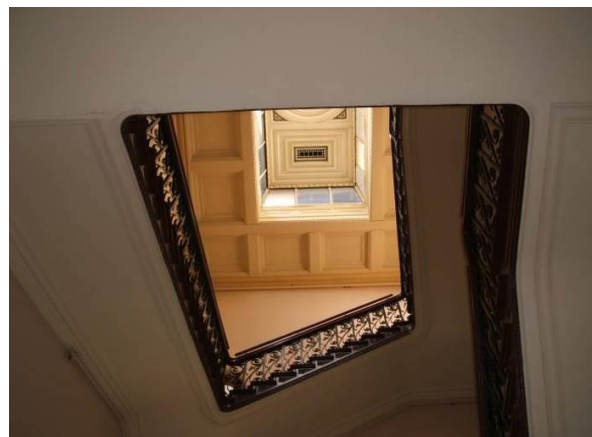
ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
----------------	--------------------------	--------------	-----------	-----------------

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

(See also Section 5: Heritage Management Policies & Guidelines)



Western stair



Western stair

There were no lifts located in this well.

Repaint walls and underside of stair landings and flights in the short term. Undertake a fire engineered assessment of the stairs within the context of the future building use. Determine and implement appropriate and sympathetic methods of upgrading the stair / stair shaft without causing loss of significance.

Upgrade the stair balustrade in the immediate term by adding an extra continuous brass handrail similar to the existing and in accord with an approved fire engineered assessment. Assess the untagged fire doors / frame for fire resistance rating. Drawings are available from NSW Public Works plan room.

Upgrade and repair the fire doors (assess & tag), automatic door closing systems and control measures on the primary fire egress routes from the Bridge, Bent, Loftus and Gresham Street stairs and remove stored combustible materials in the immediate term. This is to be done in conjunction with the fire engineered approach.

Engage a competent heritage professional to manage new design, heritage approval application and installations.

Repaint walls and underside of stair landings and flights in the short term.

STAIRS SHAFT OFF LOFTUS STREET ENTRANCE

The staircases are constructed of cast iron, with a curved tread detail. An extra handrail has been erected over the original handrail to increase the height of the balustrade however this is not fully compliant. The stair flights are quite long since the building has approx. 18'0" high floors, almost the equivalent of two storeys in modern office buildings.

One of the main features of the stairwell is the elegantly decorated lanterns over the centre of the wells. Both are different. Note the decorative frieze. It is perforated cast iron. Originally, the stairwell windows were glazed with acid etched glass. Many original panes still exist

Floors to each level are of black and white Belgian Marble tiles laid alternately in a lozenge pattern.

There were no lifts located in this well

Exceptional





The stair is not compliant, walls and stairs require attention
Fair to Good

Undertake a fire engineered assessment of the stairs within the context of the future building use. Determine and implement appropriate and sympathetic methods of upgrading the stair / stair shaft without causing loss of significance.

Consider upgrading the extra handrail to be continuous. Assess the untagged fire doors / frame for fire resistance rating. Drawings are available from NSW Public Works plan room.

Engage a competent heritage professional to manage new design, heritage approval application and installations.

Repaint walls and underside of stair landings and flights in the short term. Undertake a fire engineered assessment of the stairs within the context of the future building use. Determine and implement appropriate and sympathetic methods of upgrading the stair / stair shaft without causing loss of significance.

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
<p>For room numbers see 2013 floor plans in Section 7.34 pp.193-200.</p>				<p>(See also Section 5: Heritage Management Policies & Guidelines)</p>
 <p>Ground Level</p>	 <p>Top ceiling and lantern</p>  <p>Wrought iron balustrade, cast iron treads</p>			<p>Upgrade the stair balustrade in the immediate term by adding an extra continuous brass handrail similar to the existing and in accord with an approved fire engineered assessment. Assess the untagged fire doors / frame for fire resistance rating. Drawings are available from NSW Public Works plan room.</p> <p>Upgrade and repair the fire doors (assess & tag), automatic door closing systems and control measures on the primary fire egress routes from the Bridge, Bent, Loftus and Gresham Street stairs and remove stored combustible materials in the immediate term. This is to be done in conjunction with the fire engineered approach.</p> <p>Engage a competent heritage professional to manage new design, heritage approval application and installations.</p> <p>Repaint walls and underside of stair landings and flights in the short term.</p>
<p>STAIRS IN NORTHERN DOME</p>  <p>Timber stair between level 4 & 5</p>	<p>Several original timber stairs of exceptional significance are located at the top levels of the Northern dome. These stairs are the only means of access to the upper levels. The upper levels are to be assessed with a fire engineered approach to determine their safety and subsequently if they can be occupied as a habitable space.</p> <p>This determination will need to take into account the intended use of the spaces.</p>	<p>Exceptional</p>	<p>The stair is not compliant, stair in good condition.</p> <p>Good</p>	<p>Undertake a fire engineered assessment of the stairs within the context of the future building use. Determine and implement appropriate and sympathetic methods of upgrading the stair / stair shaft without causing loss of significance.</p> <p>Engage a competent heritage professional to manage new design, heritage approval application and installations.</p>
<p>SPIRAL STAIRS BETWEEN GROUND AND LEVEL 2</p>	<p>Located at either end of the Bridge Street corridor and rising from the ground floor to the second floor, are two elegant cast iron spiral staircases. They are not shown in the early plans but appear to be quite early. Indeed it is by these stairs that the only access is obtained into the original duct</p>	<p>High</p>	<p>Good</p>	<p>Retain and restrict access to the stairs due to OH&S considerations.</p> <p>Maintain with regular cyclic maintenance</p>

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
----------------	--------------------------	--------------	-----------	-----------------

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

(See also Section 5: Heritage Management Policies & Guidelines)



Termination at Level 2: Spiral stairs between Ground and level 2

spaces between the corridor ceiling and the floor structure over. The handrail to the upper level of the one giving access to the Minister for Lands suite is not original. This is because when two Ministries were housed in the building above each other on the First and Second Floors in the 1950's the stair between the two upper levels was sealed off. When it was again opened the original handrail which had been taken away could not be found and was replicated. It should be noted that under present fire code conditions these stair wells are considered a potential fire hazard because they are continuous through three floors.

These stairs form an alternate back access / egress from the Former Ministers room and other corner offices.

The Western stair also has an alternate entry / exit off Gresham Street which was a later alteration to the building.

A similar back escape / entry was thought to have existed from the Sir Henry Parks room in the Chief Secretaries Building.

Given the heritage significance of the building assess these stairs and other non-compliance issues with a site specific fire engineered strategy. This strategy will need to consider the buildings intended future use.



Typical cast iron treads to stair

STAIRS IN EASTERN AND WESTERN DOMES BELOW PAVILIONS



Timber stair eastern dome

Several original timber stairs of exceptional significance are located at the top levels of the Eastern and Western domes. These stairs are the only means of access to the upper levels. The upper levels are to be assessed with a fire engineered approach to determine their safety and subsequently if they can be occupied as a habitable space.

This determination will need to take into account the intended use of the spaces.

High

The stair is not compliant, stair in good condition.
Good

Undertake a fire engineered assessment of the stairs within the context of the future building use. Determine and implement appropriate and sympathetic methods of upgrading the stair without causing loss of significance. Determine if this area can be occupied as an office / habitable area.

Engage a competent heritage professional to manage new design, heritage approval application and installations.

ELEMENT / ZONE

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

DESCRIPTION / BACKGROUND

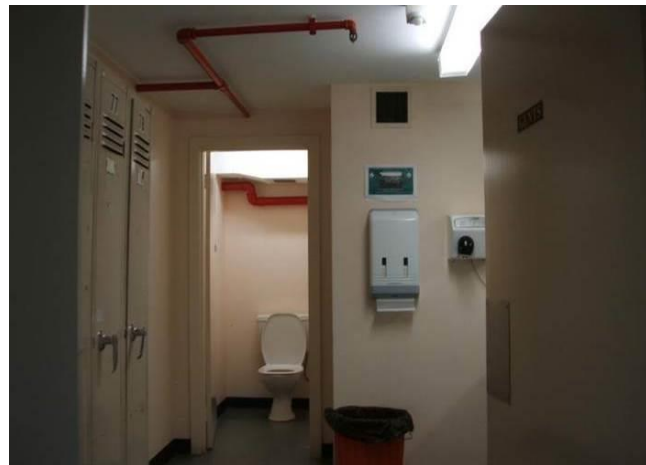
SIGNIFICANCE

CONDITION

RECOMMENDATIONS

(See also Section 5: Heritage Management Policies & Guidelines)

7.23 TOILETS & WET AREAS



Mezzanine Room above G16



Typical Male Central core toilets



Typical Female central core toilets

The building has a combination of external male and female toilets and internal male and female toilets, bathrooms and internal staff tea rooms. Staff tea rooms are located throughout the building in various locations on each floor generally containing under bench hot water units and over bench boiling water units. Some tea rooms have chilled drinking fountains. Male and female Shower and toilet areas are located on the Mezzanine floor (between Ground Floor and Level 1) and on Level 4, and in two separate bathrooms on level 1.

The building underwent a refurbishment in 1994 during which all the male and female internal and external toilets and staff tea rooms were refurbished. It does not appear that Thermostatic mixing valves have been installed on any of the staff hand washing basins.

Since that time approximately 80% of the WCs in the building have had cisterns replaced as required with compliant dual flush cisterns due to the existing original larger 13 litre cisterns failing. Generally all of the original basins and tapware, wall hung urinal stalls and cisterns and tea room sinks are the original fixtures and fittings installed during the 1994 refurbishment.

Generally the existing hydraulic services are currently reported to be functioning well with some items replaced over the years as a part of the buildings ongoing maintenance.

Most basin taps tested were full flows which are no longer acceptable to meet WELS requirements.

Any future upgrade work would require that the tapware and fixtures comply with the WELS Act and Thermostatic mixing valves throughout for water temperature regulation

Hot water is provided via localised electric hot water units concealed in ceiling spaces, cupboards or under sink benches. Many of the units located below benches have no ventilation through the cupboard door causing heat to build up inside cupboards. These units require a ventilation grill. HW units located at high level on walls and in ceiling spaces are no longer compliant from an OH&S perspective. Any future upgrade work would require locating all hot water units in accessible locations for compliance and ease of maintenance

The accessible toilet does not comply with the current BCA or AS 1428.1-2009 as follows:

- The size of the compartment is too small and all features and fittings are incorrectly installed. A sanitary facility should be provided on each level of the building.
- Compliant signage incorporating Braille and tactile signage has not been provided.

While some of the toilet areas are located within their original room locations all original walls, floor, ceiling and sanitary fittings have been removed and recent replacements installed. These new elements have no heritage significance. It is however acknowledged that the building requires compliant toilets and wet areas. These areas are considered Neutral

The male and female multi-level toilet blocks in the internal lightwells although original in their external appearance are also internally altered with no internal heritage significance. These toilets do not and are unlikely to ever meet the new standards. This is due to the insufficient size of each toilet compartment within the block. With each compartment being structural brick construction. These areas are considered Neutral

Areas such as mezzanine toilets and change rooms are considered intrusive they are damaging to the overall character and significance of those

Generally toilets, change room, kitchenettes and their services are now approx. 20 years old. In some locations the cabinets have deteriorated surfaces, loose doors, lifting and stained sheeting. Taps and services are not compliant with current codes.

Layouts and provisions for toilets and facilities under the BCA & DDA are not compliant with current codes.

Overall the facilities are considered

Poor

When designing new facilities upgrade to the new code requirements in a way that does not diminish the heritage significance of the building.

New facilities must be installed in a reversible manner where possible with as little damage to significant fabric as possible.

Do not add new elements where they will negatively impact significance

Engage a competent heritage professional to manage new design, heritage approval application and installations



Typical male toilet cubical to lightwells.



Ensuite room 206a

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
----------------	--------------------------	--------------	-----------	-----------------

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

(See also Section 5: Heritage Management Policies & Guidelines)



Ensuite room 107b

- There are no separate facilities for persons with ambulant disabilities.

The new Standards apply to all new buildings, and in the case of existing buildings (including heritage buildings) it applies to any extension or modified part of a building. Under the Premises Standards (refer to 6.12), new work or modification to an existing building does not require the application of the Standards to the entire building unless modifications are being undertaken to the whole building. However an accessible path of travel from the principal public entrance to the new or modified part of a building may also be required.

Any major upgrade work would only be required if over 50% of the building was to be refurbished, or if the building was to be converted to a different use such as for residential purposes.

locations. Intrusive

Areas such as en-suites and kitchenettes located within and enclosing original verandahs are considered intrusive they are damaging to the overall character and significance of those locations.

Intrusive

7.24 VERANDAHS



Verandah off Gresham Street

The verandahs are a significant feature of the building.

Some of the verandahs were enclosed in 1919 to provide additional space within the building. This was achieved by closing off arched the openings with metal framed windows. The attached image shows markings on the columns from the former steel windows.

Generally these intrusive verandah enclosures have been removed, the latest removal taking place following approval in 2004.

Remaining enclosed verandahs can be seen on the Bridge Street Elevation. These verandahs currently house kitchenettes and en-suites. Some of these areas are currently causing damage to the external stone wall. Located by the large white salt bloom on the external wall face caused by leaking drainage.

<p>Exceptional</p> <p>Verandah enclosures are considered intrusive.</p> <p>Intrusive</p>	<p>The previously opened up verandahs</p> <p>Good</p> <p>Currently enclosed verandahs are in a poor condition with leaking drainage causing damage to the significant fabric.</p> <p>Poor</p>	<p>Where possible open up the remaining verandahs.</p> <p>Repair the leaking drainage in the short term.</p> <p>Repair the damage to the stonework in the short term.</p> <p>Desalinate stonework and monitor for future re-occurrence.</p>
--	---	---

ELEMENT / ZONE

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

DESCRIPTION / BACKGROUND

SIGNIFICANCE

CONDITION

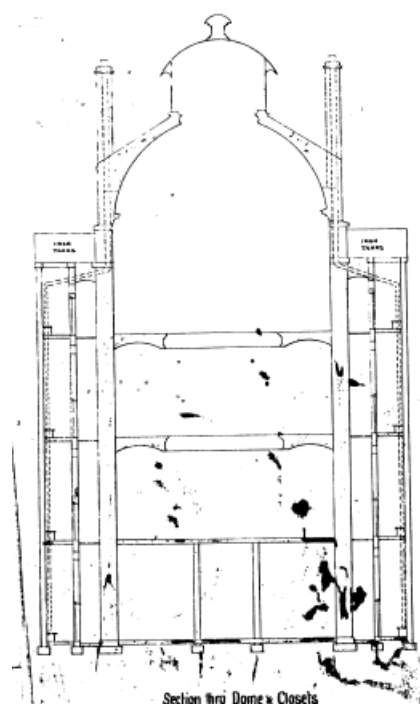
RECOMMENDATIONS

(See also Section 5: Heritage Management Policies & Guidelines)

7.25 CENTRAL RECORDS STRONGROOM



Room 316 Shelving and tubes with Interpretive Potential.



PWD Drawing PB22/25 November 1883 section through central strongroom

Located in the middle of the building is the central records room. This room was one of the primary spaces within the building holding records of land ownership throughout New South Wales. The central records room was designed as one large multi storied strong room. Initially, it consisted of one large open domed space with mezzanine floors and catwalks. It was designed with the major objective being to store files and plans etc. in a fire-rated and fire isolated area. Square in plan, it culminates in a lofty octagonal based dome. It is isolated from the rest of the building by large, thick "safe doors", and by large steel plated fire covers on the outside of the windows, poised to drop down over the windows at the first warning of fire. The covers appear to be controlled by an elaborate pulley wheel mechanism which can still be seen from the roof catwalks. The metal filing shelves date from the mid 1890's and are still in operation. These are examples of the first use of metal shelving in lieu of the cumbersome space eating timber shelves, to store papers, and in a better fire rated situation. In the centre of the room and extending up through all floors is the early sheet metal ventilation duct, complete with its shutters and operable levers. This was used for circulating warm air for heating purposes in winter.

At the top of the dome is adjustable steel "umbrella" which once opened to allow the natural light into the strong room by day and closed to secure and fireproof the area at night. The mechanism has been partly removed and the device is currently in the closed position.

The cast iron mezzanine floor system and the cast iron steps are believed to be quite early (1890's) and show the ingenious structural flooring system adopted in what is an early example of prefabricated construction.

The strong room doors on each of the levels are of significance they are Milners 212 patented & improved fire and thief resisting doors. These appear to have been manufactured from the 1850's to the late 1800's. The "212" on most Milners safes appears to reference the boiling point of water at which it becomes a vapour. This moisture was a key ingredient in many safes during this time. During a fire the moisture would turn to steam protecting the documents from fire. These fire-resistant doors were developed by adding an inner body and filling the space in between with a compound which would insulate the contents and emit moisture which lowered the flash point of any paper contents

Steel stanchions and R.S.J.'s were inserted into the middle of the rooms to take infill floors in 1954. This provided additional floor space but divided the space and cut off the natural light from the top of the dome light. This infill has been inserted in a reversible manner.

Some modern office partitions have been installed within the levels.

The structure and internal space is a rare example of a purpose built and intact records / strong room: Exceptional

The internal records shelves, cast iron stairs, cast iron walkways, plan shelves and fittings are of High.

The strong room safe doors, window shutters and operating system are Exceptional

The adjustable steel "umbrella" and its control mechanism for light control, security and fireproofing is Exceptional

The movable heritage within this space such as plan tubes, documents, signage, furniture and referencing equipment and documents are High because of their interpretive potential.

The internal infill of the space in 1954 is considered Intrusive

The infill of the space with recent office partitions is

Some minor cracking in masonry / concrete dome, paint finishes generally in fair condition.

Building compliance issues need to be resolved within this space

Generally condition Fair / Good

- Consider the removal of intrusive fabric within the space.
- Consider repairing the roof light umbrella and window shutters and make operable.
- Repaint the dome and repair minor cracking in the short term
- Monitor the cracks with "tell-tale" indicators (or similar) once every 2 years (short term).
- New lighting and services must be installed in a reversible and sympathetic manner with as little damage to significant fabric as possible.
- Undertake a fire engineered assessment of the space within the context of the future building use. Determine and implement appropriate and sympathetic methods of upgrading the space without causing loss of significance. Determine if this area can be occupied as an office / habitable area.
- Do not add new elements where they will negatively impact significance
- Retain the existing original pattern of internal spaces without further subdivision or demolishing walls to increase the size of spaces.
- Do not insert false ceilings for services such as lighting and air conditioning.
- Minor alterations to the Lands Building, particularly those that recover significance, can be undertaken as long as the original internal configuration, external character and significant fabric (particularly that of Exceptional and High significance) are retained, as these are integral to the heritage significance of the place.
- Undertake minor alterations in materials, forms and details, which respect and complement the existing fabric. Ensure that new work does not stand out visually from existing work
- Engage a competent heritage professional to manage new design, heritage approval application and installations.
- Incorporate interpretation of space with future use.
- Refer to the Movable Heritage Management Strategy at Appendix B.
- Monitor cracking using "tell-tale" indicators (or similar) every two years.

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
----------------	--------------------------	--------------	-----------	-----------------

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

(See also Section 5: Heritage Management Policies & Guidelines)



Room 316 cracking to corner transition to dome

Some minor cracking has occurred in the upper concrete dome which has been assessed as requiring minor patching and monitoring at this stage. Refer to structural engineers report.

considered Intrusive



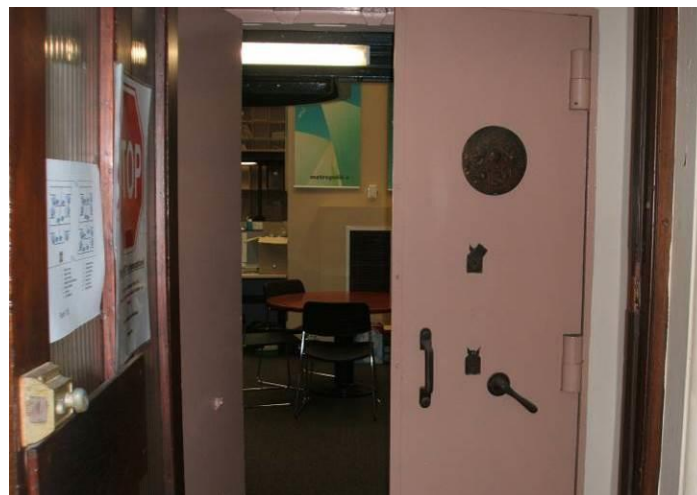
Room316 internal view of top of dome



Adjustable steel umbrella at top of dome in domed roof light. View between steel dome and copper roof dome.



Adjustable steel umbrella at top of dome in domed roof light



Typical strong room doors on levels 1, 2, & 3



Manufacturers plate for milners 212 patent thief resisting strongroom doors



Spiral stair within strongroom: Exceptional



Plan shelves & brackets in strongroom: Exceptional

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
For room numbers see 2013 floor plans in Section 7.34 pp.193-200. (See also Section 5: Heritage Management Policies & Guidelines)				

7.26 EXTERNAL SIGNAGE



Bridge Street entrance

The external cast and wrought iron gates with Department of Lands are a prominent and significant feature of the building



Brass Department of Lands plaque on Bent Street entrance

Exceptional

Good

External signage must be retained on the building in the event of a change in ownership or use, these items are significant
Do not add new signage elements where they will negatively impact significance

7.27 THE 'MOAT'

THE MOAT



Entrance into moat on east side room G31 a

The moat or sub-street level tunnel is located at ground floor level, outside the external walls of the building, on all sides. It is a continuous semi-vaulted tunnel section broken by brick transom ribs. It extends the full length of the building beneath the Loftus and Bent street pavements and for at least half the length of Bridge Street and Gresham street pavements. The moat varies in height from 5 metres in the Loftus and Bent Street corner, down to crawl space under the Gresham Street entrance, and the corner of Bridge and Loftus Streets.

At regular intervals along the top of the vault, cast iron grilles at pavement level permit light and ventilation into the moat area, which in turn acts as a light and ventilation shaft for the rooms below ground level. The moat works particularly well for the ventilation beneath the timber flooring of the sub-ground level rooms. Room G16 exhausts the sub floor into the moat. It also provides an open continuous perimeter drain for any excessive water below ground level. The one metre wide air space provided by the moat acts as a damp barrier between the ground and the building structure. The walls of the moat are lime washed, and generally this is in good condition. The moat contains an early disused cast iron stormwater pipe. Examples of fretting stone can be seen at certain window locations in the tunnel.

The moat is an original element developed by the designer to control water and ventilation issues for the structure. This system is similar to that in the Chief Secretaries Building.

High

This space was not entered during this inspection
Considered
Fair / Good

Inspect this confined space to assess if it requires cleaning in the short term.
Moat is required to be cleaned out on a cyclic basis.
Do not add new elements where they will negatively impact significance
The moat is an original element that functions adequately to protect the building fabric. Do not alter or remove this element

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
----------------	--------------------------	--------------	-----------	-----------------

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

(See also Section 5: Heritage Management Policies & Guidelines)



View of footpath grates into moat

7.28 MOVABLE HERITAGE ITEMS



Strong room

The building is one of the most intact Government heritage items in New South Wales and contains many exceptional items of movable heritage.

Refer to Lands Building Movable *Heritage Management Strategy* (MUSEcape 2013).

Good / Excellent

Refer to Lands Building Movable *Heritage Management Strategy* (MUSEcape 2013).
It is recommended that a new Strategy be prepared alongside an Interpretation Strategy when a new use and owner has been determined.

7.29 HISTORIC SERVICES

HISTORIC SERVICES

Few original historic services remain in the building. The central core toilets are substantially altered with only the original wall configuration and some cast iron piping remaining. Some remnants of original services remain such as old light fixing points on ceilings, gas metres and concealed service pipes.

Moderate / Little

Fair

Engage a competent heritage professional to manage new design, heritage approval application and installations
Competent heritage professional to assess each item to determine if the retention of old services and remnants of former services adds to the significance of the building and adds to the interpretation of its prior use. Redundant elements that do not meet these criteria may be removed.

7.30 MECHANICAL SERVICES

AIR CONDITIONING GENERALLY

The air conditioning system at the Lands Building is a mixture of different chilled/heating water and refrigerant systems. The central chilled water system is currently in urgent need of replacement and upgrade to meet the new demands of the ground, 1st and 2nd floors. The chiller, which is over 30 years

Neutral / Intrusive

Poor

Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability including allowing future change as new

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
For room numbers see 2013 floor plans in Section 7.34 pp.193-200.				(See also Section 5: Heritage Management Policies & Guidelines)
	old, is nearing the end of its serviceable life, while the cooling tower is currently undersized for the load of the building.			technology is developed.
CENTRAL CHILLED WATER PLANT	The chilled water plant comprises of two York R22 chillers, a single cooling tower and two Ajax chilled water pumps. These are all contained in the chiller/boiler plantroom located on the ground floor. The chillers are over 30 years old, and are past their economic life, and are nearing the end of their serviceable life. The chillers are only able to be run one at a time, due to limitations in the cooling tower. The chillers, during warm weather, are operating at full load.	Neutral / Intrusive	Needs to be upgraded	Chilled water system needs to be upgraded, with new replacement chillers and additional cooling tower. With the new chillers and cooling tower, new chilled and condenser water pumps will need to be installed to meet the new water flow demands. This work should be completed as soon as possible.
CONDENSER WATER PLANT	The condenser water plant comprises of a BAC VXT105 cooling tower, located in the Level 4 south roof space (room number 407) and two condenser water pumps located in the chiller/boiler plantroom on the ground floor. The existing cooling tower is insufficient for the existing cooling load of the building.	Neutral / Intrusive	Needs to be upgraded	Additional cooling tower(s) need to be installed to suit the cooling load of the building. This work to be completed in conjunction with the chiller replacement works.
HEATING WATER PLANT	The heating water plant consists of a Ferroli NLR 140 gas fired boiler (163kW) and a heating water pump. The boiler is serviceable condition, while the pump is nearing the end of its serviceable life.	Neutral / Intrusive	Needs to be upgraded	The boiler maintained with a preventative maintenance program should have 7-12 year remaining serviceable life. Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.
CENTRE CORE AIR CONDITIONING	A ducted Fan Coil Industries FCV300 air handling unit (3060L/s) provides conditioned air to the centre core rooms 126, 227 and 316, as well as the associated mezzanines to these rooms. The fan coil unit is located on the ground floor, adjacent to the chiller/boiler plant room. Each of the rooms is served by a run of exposed spiral wound duct (two runs on levels 1 and 3 where there is a mezzanine). Air is returned through the central riser in each room.	Neutral / Intrusive	Good	Estimated serviceable life remaining is 10-15 years. Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.
SUPPLEMENTARY CHILLER	A 20kW Airwell air cooled chiller is installed on the north-eastern veranda, outside rooms G22 and G23. The unit serves the chilled water fan coil units in rooms 124 and 125. There is a small chilled water pump to circulate the chilled water.	Intrusive	Good	Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.
ROOM AIR CONDITIONING (GROUND FLOOR AND GROUND MEZZANINE)	All habitable spaces on the ground floor, except rooms G1-G4, and mezzanine rooms G16i, G20i, G20ii, G25i, G26i and habitable areas above the central plant rooms, are serviced by ducted water cooled/heated fan coil units, located within the space. The ducts are rigid rectangular duct, and are mounted within the space for which they serve. Some units are no longer in operation.	Intrusive	Rating between Very Poor and Fair	Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.
SUPPLEMENTARY ROOM AIR CONDITIONING (GROUND FLOOR NORTH-EAST)	A 25kW APAC split ducted air handling unit is located in the north-eastern veranda, outside rooms G22 and G23. The condensing unit is also located in the veranda. The air handling unit serves G1-G4. Refrigerant used is R22, which is	Intrusive	Fair	Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
For room numbers see 2013 floor plans in Section 7.34 pp.193-200.				(See also Section 5: Heritage Management Policies & Guidelines)
	part of an international phase-out program.			
OUTSIDE AIR (LEVEL G-2)	Two ducted chilled water air handling units, located on the ground floor mezzanine above G28 and G30, serve tempered outside air to all rooms on ground floor, first and second floor (except for rooms recently converted from store rooms to office space). One unit is a Fan Coil Industries FC200S (1620L/s) and the other is an Airite Industries AS27H (2345L/s). The units are ducted through cavity spaces, and are diffused into each space at high level.	Neutral / Intrusive	Fair (Airite Industries unit) Good (Fan Coil Industries unit)	Estimated serviceable life remaining on the Airite Industries unit is 8-12 years. Estimated serviceable life remaining on the Fan Coil Industries unit is 12-16 years. Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.
ROOM AIR CONDITIONING (FIRST AND SECOND FLOOR PERIMETER)	All habitable perimeter rooms on the first and second floor are served by New Super-Aire Equipment floor mounted fan coil units. All units are served by chilled and heating water. The rooms contain a mixture of 4.8kW and 5.7kW units. The units were installed in 2007.	Neutral / Intrusive	Excellent	Estimated serviceable life remaining is 12-16 years. Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.
ROOM AIR CONDITIONING (THIRD FLOOR NORTH)	Rooms 301, 302, 303, 322 and 323 are all served by split ducted air handling units. The air handling units are located in 322i (mezzanine level above room 322) and are three APAC air handling units. The one serving the north perimeter is 32kW, the one serving the western interior part of the open space is 26kW and the one serving the eastern interior part is 19kW. All three areas are served by exposed spiral wound ducts. The associated condensing unit for each unit is located in the roof space between rooms 401 and 402. Refrigerant used is R22, which is part of an international phase-out program. Regassing the units may become more costly over time, and replacement should be considered in the medium term.	Neutral / Intrusive	Fair	Estimated serviceable life remaining is 5-8 years. Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.
ROOM AIR CONDITIONING (THIRD FLOOR SOUTH, EAST & WEST PERIMETER)	Perimeter rooms, apart from those listed above, are served by a number of 7.1kW Mitsubishi Electric floor mounted fan coil units. They are connected to a variable refrigerant flow system, with the VRF condensing units located on the south wall of roof space 407.	Neutral / Intrusive	Excellent	Estimated serviceable life remaining is 12-16 years.
OUTSIDE AIR (LEVEL 3, EXCLUDING NORTH)	Outside air is supplied to the perimeter spaces, aside from the northern perimeter, on level 3 by three Fantech fans. The air is supplied through exposed spiral wound ductwork in the spaces they serve. Each fan serves one side of the building – eastern perimeter, southern perimeter and western perimeter. The fans for the eastern and southern perimeter are located in roof space 407, while the fan for the western perimeter is located in roof space between rooms 402 and 403.	Neutral / Intrusive	Good	Estimated serviceable life remaining is 12-16 years.
ROOM AIR CONDITIONING (LEVEL 4 AND 5)	There are three roof package units serving levels 4 and 5. The areas served by each unit are: <ul style="list-style-type: none"> - Rooms 401 and 505 – APAC package unit located in roof space 407. - Rooms 402, 501, 502, 503 and mezzanine space above 501 – 36kW APAC package unit, located in roof space between rooms 402 and 403. 	Intrusive	Fair	Estimated serviceable life remaining is 5-8 years. Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
For room numbers see 2013 floor plans in Section 7.34 pp.193-200.	<ul style="list-style-type: none"> - Rooms 403 and 504 – 42kW APAC package unit, located in roof space between rooms 402 and 403. - All ducting is exposed spiral wound ducting, except for the mezzanine above room 501, which is served by floor mounted grilles. <p>Refrigerant used is R22, which is part of an international phase-out program. Regassing the units may become more costly over time, and replacement should be considered in the medium term.</p>			(See also Section 5: Heritage Management Policies & Guidelines)
SUPPLEMENTARY SPLIT AIR CONDITIONING	<p>For rooms on the internal part of floors 1-3, the rooms are conditioned by either supplementary single split wall mounted fan coil units or window mounted package units. The below listed rooms have supplementary split air conditioners serving the space:</p> <ul style="list-style-type: none"> - 123 (Fujitsu 7.5kW) - 128 (Fujitsu 8kW) - 227 mezzanine (4 off Fujitsu 7.4kW) <p>Room 227 mezzanine is also served by the centre core air conditioner.</p>	Intrusive	Good	<p>Estimated serviceable life remaining is 10-13 years.</p> <p>Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.</p>
SUPPLEMENTARY WINDOW MOUNTED PACKAGE UNITS	<p>The below listed rooms are conditioned by supplementary window mounted package units, and the units are generally in fair condition.</p> <ul style="list-style-type: none"> - 224 (LG 4.5kW) - 225 (LG 5.4kW) - 223 (Carrier) - 226 (Toshiba 3kW) - 317 (Kelvinator 5.6kW) - 318 (Kelvinator) <p>It is noted that window mounted package units have significantly lower efficiency than single split air conditioners.</p>	Intrusive	Poor to Fair	<p>Estimated serviceable life remaining is 4-5 years.</p> <p>Replace as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.</p>
SERVER ROOM (PART OF ROOM 227)	<p>The server room is served by two Liebert Atlas 128FA precision cooling air conditioning units. One unit is switched off, due to the heat load of the room being reduced by the users. The units are run by refrigerant and each have a remote air cooled condenser on the roof.</p> <p>Refrigerant used is R22, which is part of an international phase-out program. Re-gassing the units may become more costly over time, and replacement should be considered in the medium term.</p> <p>The room has a Halon gas fire suppression system installed. The system was last regassed in October 1998. Assessment to be made as to whether the system is still required, due to most of the servers being moved out of the room. Has not been maintained in over 10 years. Thought to be part of a system to protect valuable Lands Department documents proposed to be removed from this space.</p>	Intrusive	Fair	<p>AC: Estimated serviceable life remaining is 5-8 years.</p> <p>Gas suppression system: To be assessed as part of the fire engineered approach to the building and its proposed use. Urgent maintenance will be required to test whether the system is still operational.</p> <p>Replace all as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.</p>

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
For room numbers see 2013 floor plans in Section 7.34 pp.193-200. (See also Section 5: Heritage Management Policies & Guidelines)				
PABX ROOM	The PABX room is currently served by a Carrier window mounted package unit, and by a Samsung wall mounted split fan coil unit. Both units are in poor condition, and combined, are unable to maintain design temperature (generally 22-24o), and both are required to maintain a temperature of 26-28o.	Intrusive	Very poor	Schedule for replacement within the next year. Replace all as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.
EXHAUST SYSTEMS	All toilets and kitchenettes located within the building (excluding the toilets located in the courtyards) are mechanically ventilated, except as noted below. They are ducted to the roof, and air exhausted above the roof. All the toilets located within the courtyards are naturally ventilated, through louvers. The toilet in G34 has been subdivided to include a disabled toilet, with separate entrance. During the subdivision works, the mechanical exhaust was not extended to the disabled toilet. There is no current ventilation to this toilet.	Neutral / Intrusive	Fair	Monitor the mechanical components of the systems. Provide preventative maintenance to the fan and any dampers. Replace all as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability.

7.31 FIRE SUPPRESSION AND PROTECTION SERVICES



Fire

Hydrant pump

The buildings fire services consists of a sprinkler system and combined fire hydrant and combined fire hose reel service which were installed during the major upgrade work circa 1987. The systems generally do comply with Ordinance 70, which was the code at that time; however, it no longer complies with current relevant codes. If the building was to undergo a more than 50% refurbishment or a change of use for residential purposes, for example, an upgrade to bring the existing systems to current standards would be required. An overview of how the existing systems do not comply with current codes is as follows;

The current water supply does not comply with AS2419.1-2005.

The current water supply may not comply with AS2118.1-1999. A full inspection including all concealed spaces would be required to determine compliance.

As the building has an effective height of more than 25m to comply with AS2419.1-2005

There is no block plan as required by AS2419.1-2005.

Neutral / Intrusive	Very poor	The whole fire suppression and protection system needs review. A block plan complying with AS2419.1-2005 Clause 7.11 is required and shall be fixed within the booster cabinet, enclosure, recess, fire control room and pump room where it can be readily seen. Replace all as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability. Consider an alternative fire engineered solution be developed in-conjunction with Fire & Rescue NSW. See more detailed Condition Survey in 2013 HAMP.
---------------------	-----------	--

7.32 HYDRAULIC SERVICES

GENERALLY	The current water supply may not comply with AS2118.1-1999. As the building has an effective height of more than 25m to comply with AS2118.1-1999 a Grade 1 water supply is required. Currently the fire sprinkler appears to be connected to two town's mains. The	Neutral / Intrusive	Poor	The whole hydraulic system in the building needs review. The new system can be more sympathetically installed. See more detailed Condition Survey in 2013 HAMP. Replace all as part of major adaptation of the building in manner that is sympathetic to heritage values and
-----------	---	---------------------	------	---

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
----------------	--------------------------	--------------	-----------	-----------------

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

(See also Section 5: Heritage Management Policies & Guidelines)



PLUMBING IN CELING OF ROOM G.16

towns mains should be confirmed to comply with the following

The current pump set does not comply with AS2419.1-2005.

Property water meter. Connects to Sydney Water main in Gresham St:
Approximate date of installation 1985

Electric Hydrant booster Pump and FH and FHR system in building: Approximate date of installation 1985.

Fire Brigade Fire Hydrant dual booster valve assemblies: Approximate date of installation 1985.

Redundant gas meter connection to Gresham St: Date of installation unknown.
New gas meter near room G.31.

sustainability.

COURTYARD	Grated stormwater pits (x 4) Approximate date of installation 1987	Neutral	Fair	Replace all lids with new heel proof type grated lids set flush with courtyard finished ground level to prevent tripping or heels being caught in the grates.
COURTYARD	Sewer inspection pit Approximate date of installation 1987	Neutral	Fair	Lids have tile infill to match surrounding material. Some lids are not flush with FGL and are a trip hazard.

7.33 ELECTRICAL SERVICES

GENERAL LIGHTING



Uni strut / chain Suspended 2x65W T12 luminaires with prismatic diffusers.

The general lighting varies slightly throughout the building. The majority of lighting is by twin 65watt T12 linear fluorescent lamps, with different mounting types in each area. The T12 linear fluorescent lamps are at the end of economic life and should be replaced with the more efficient T5, 28w linear fluorescent fittings in the short term, Period style lighting in the general areas, walk ways and stair ways require a clean a re-lamp, but otherwise are in good general working order, and provide sufficient light output levels.

Accessories such as socket outlets, light switches and voice/data outlets are generally satisfactory although in many cases the cover plates are quite old and it would be advisable to replace with new in the short term. It is recommended that the location, distribution and quantity of socket outlets be re-assessed based on usage in each area.

Exit lights generally comply with AS2293 at the time of installation, although the spacing of the existing exit lights will need to be reassessed against the current revision of the standard. Also replaced and with new exit lights consisting of "running man" symbol if any upgrade works are carried out which will allow it to comply with the most recent revision of Australian Standards AS2293. There is a lack of emergency lighting throughout the building, which needs to be addressed immediately to insure it complies with the BCA and AS1670.4. The

Neutral / Intrusive

Poor

Replace all as part of major adaptation of the building in manner that is sympathetic to heritage values and sustainability. Consider retention of the reproduction period style fittings but with new energy efficient lamps.

The T12 linear fluorescent lamps are at the end of economic life and should be replaced with the more efficient T5, 28w linear fluorescent fittings in the short term.

All fire safety lighting is in need of review.

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
----------------	--------------------------	--------------	-----------	-----------------

For room numbers see 2013 floor plans in Section 7.34 pp.193-200.

(See also Section 5: Heritage Management Policies & Guidelines)

building has a EWIS and Visual Warning System which is in satisfactory condition although the spacing of speakers needs to be checked against current standards.

ACCESS / HALLWAY LIGHTING



Period style lighting, in all hallways and general use staircases, in good condition

Neutral / Intrusive

Good

Period style lighting in the general areas, walk ways and stair ways require a clean a re-lamp, but otherwise are in good general working order, and provide sufficient light output levels.

Maintain, clean and re-lamp as required.

Retain luminaires as condition seems to be adequate with adequate lighting levels.

MAIN SWITCHBOARD



In central core area, ground floor, Main Switch Room. The main switchboard is a Quicklag board and is past its economic life. There is also no service protection device. Fire rating of this room needs to be checked, and water proofing due to numerous penetrations.

Neutral / Intrusive

Fair

Since their installation, AS3000 has been amended to make it mandatory to provide Residual Current Devices (RCD's) on switchboards to protect all sub-circuits supplying lighting and socket outlets. Whilst not retrospective, other legislation has been passed to make it mandatory for all socket outlets in all workplaces to have RCD protection installed by February 2015. It is recommended to replace all electrical boards before that time. The electricity metering panel should be relocated to an out-of-hours accessible area, if or when any upgrade works are carried out.

Main switchboard should be replaced if or when there are any upgrade works at the site. The Local Distribution section of the board does not have any RCD protection and will require to be upgraded prior to 2015, if Main Switch Board is not changed as a whole.

ELECTRICAL METERING PANEL



The electrical authority metering panel is located adjacent to the main switchroom on the ground floor in the Main Switch room , adjacent to the Main Switchboard

Neutral / Intrusive




Fair

The supply authority meters with GSM wireless mobile data connections, are located on the metering panel.

The location of the metering panel and supply authority meters does not comply with the requirements of the NSW Service and Installation Rules, as it pertains that meters are to be located at an accessible area out of hours. The location is currently inside a locked building.

The metering panel contains asbestos, so caution should be taken when working on or near this panel.

If any upgrade works are planned, the metering panel and meters should be relocated to an out of hours accessible area, such as on an external building wall. This may not be possible within the heritage constraints for the building and an engineered solution may be required.

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
For room numbers see 2013 floor plans in Section 7.34 pp.193-200.				(See also Section 5: Heritage Management Policies & Guidelines)
DISTRIBUTION BOARDS 	Sub-mains from the main switchboard supply distribution boards at all four corners of the central core with risers to all main floors.	Neutral / Intrusive	Poor	Replace Distribution boards with new by February 2015, complete with RCD protection to all socket and lighting circuits. Insure Distribution Board enclosures meet BCA code in reference to smoke detection, fire seals and fire ratings.
GENERAL POWER 	Socket outlets throughout the building	Neutral / Intrusive	Generally Good Some older units Poor	Accessories such as socket outlets, light switches and voice/data outlets are generally satisfactory although in many cases the cover plates are quite old and it would be advisable to replace with new in the short term. It is recommended that the location, distribution and quantity of socket outlets be re-assessed based on usage in each area.
EXIT LIGHTS 	Exit lights located throughout the building, comprise cold cathode tubes with "EXIT" wording.	Neutral / Intrusive	Generally Good	An electrical consultant should review the location and placement of exit signs and identify any defects this review should be in conjunction with an engineered alternative solution to be developed to address this non-compliance in the Immediate to Short term.

ELEMENT / ZONE	DESCRIPTION / BACKGROUND	SIGNIFICANCE	CONDITION	RECOMMENDATIONS
For room numbers see 2013 floor plans in Section 7.34 pp.193-200.				
SOUND SYSTEM AND INTERCOM SYSTEM (SSIS) FOR EMERGENCY PURPOSES	The building has an older EWIS type system. The current BCA clause E4.9 requires a building with an Effective Height of more than 25m to have a SSIS installed to comply with AS 16704.-2004.	Neutral / Intrusive	Poor	(See also Section 5: Heritage Management Policies & Guidelines) Review the existing EWIS system and upgraded to be a compliant SSIS installed in accordance with AS 1670.4-2004, This should be in conjunction with an engineered alternative solution to be developed to address this non-compliance in the Immediate to Short term.
EMERGENCY LIGHTS	Lack of emergency lighting throughout the building.	Neutral / Intrusive	Poor	Emergency lighting requirements need to be checked to comply with current BCA and Australian Standards AS1670.4 & AS2293.1 An electrical consultant should review the emergency lighting system and identify any defects this review should be in conjunction with an engineered alternative solution to be developed to address this non-compliance in the Immediate to Short term.

7.34 CURRENT PLANS

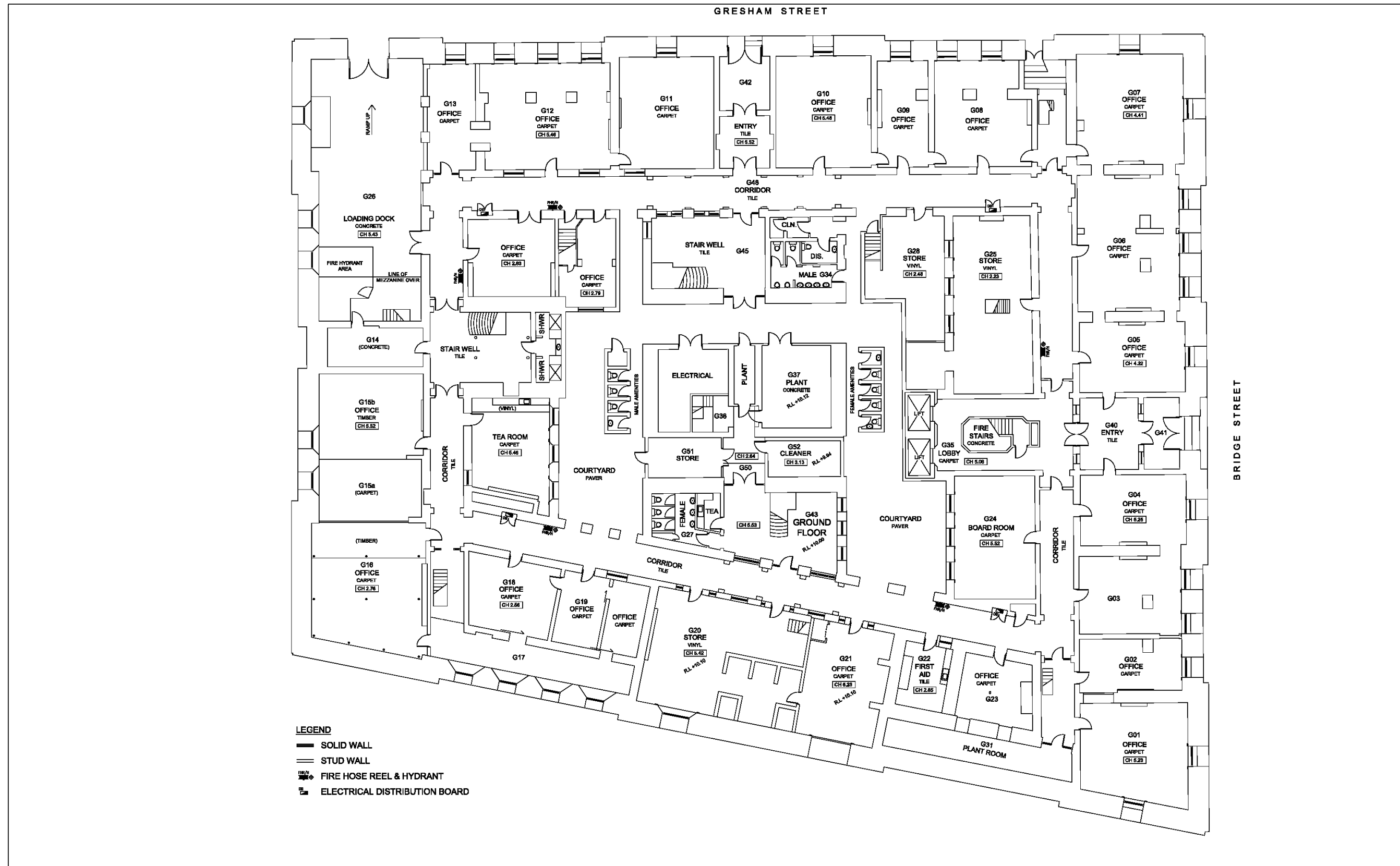


Figure 51: Ground Floor

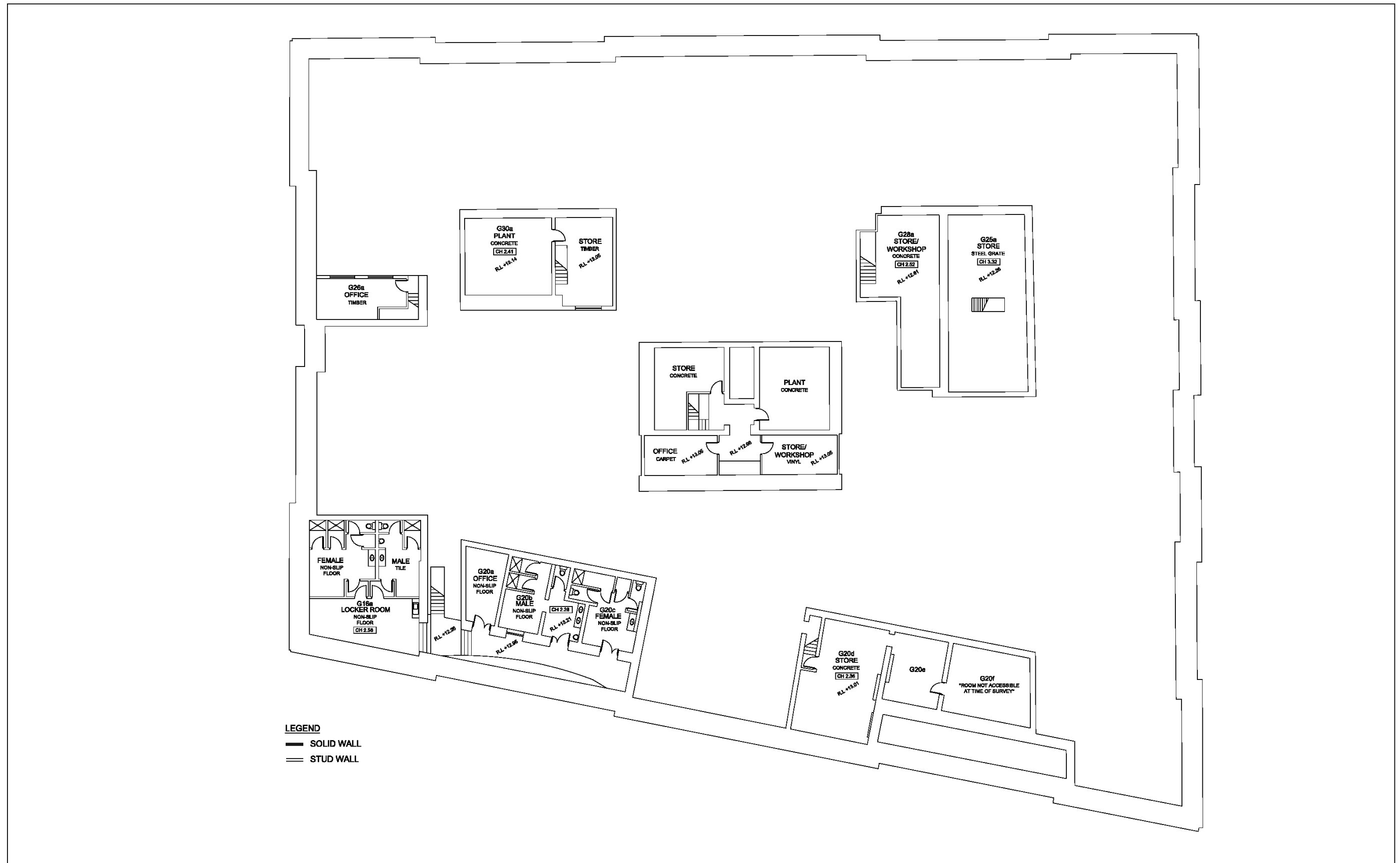


Figure 52: Ground Floor Mezzanine

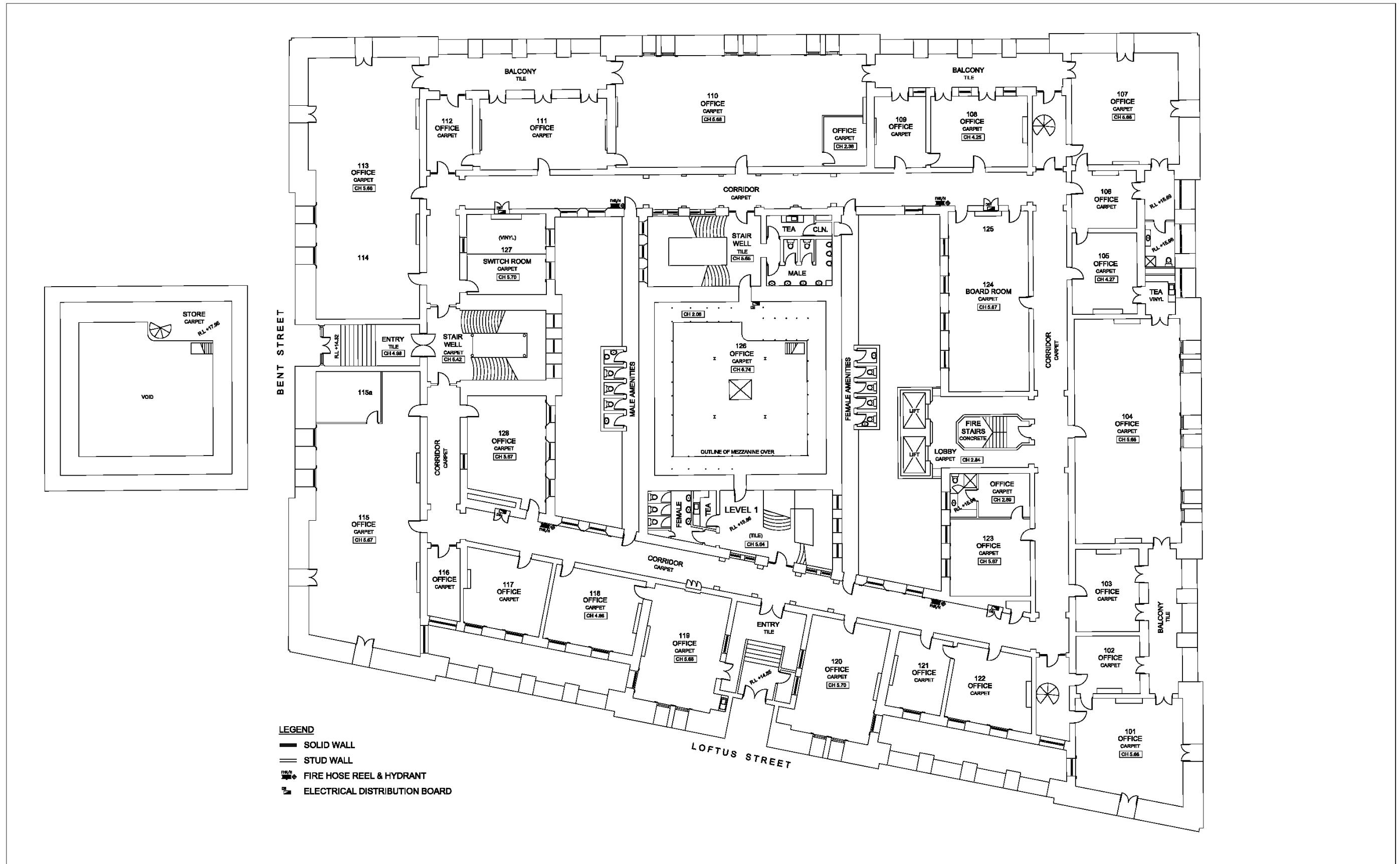


Figure 53: First Floor

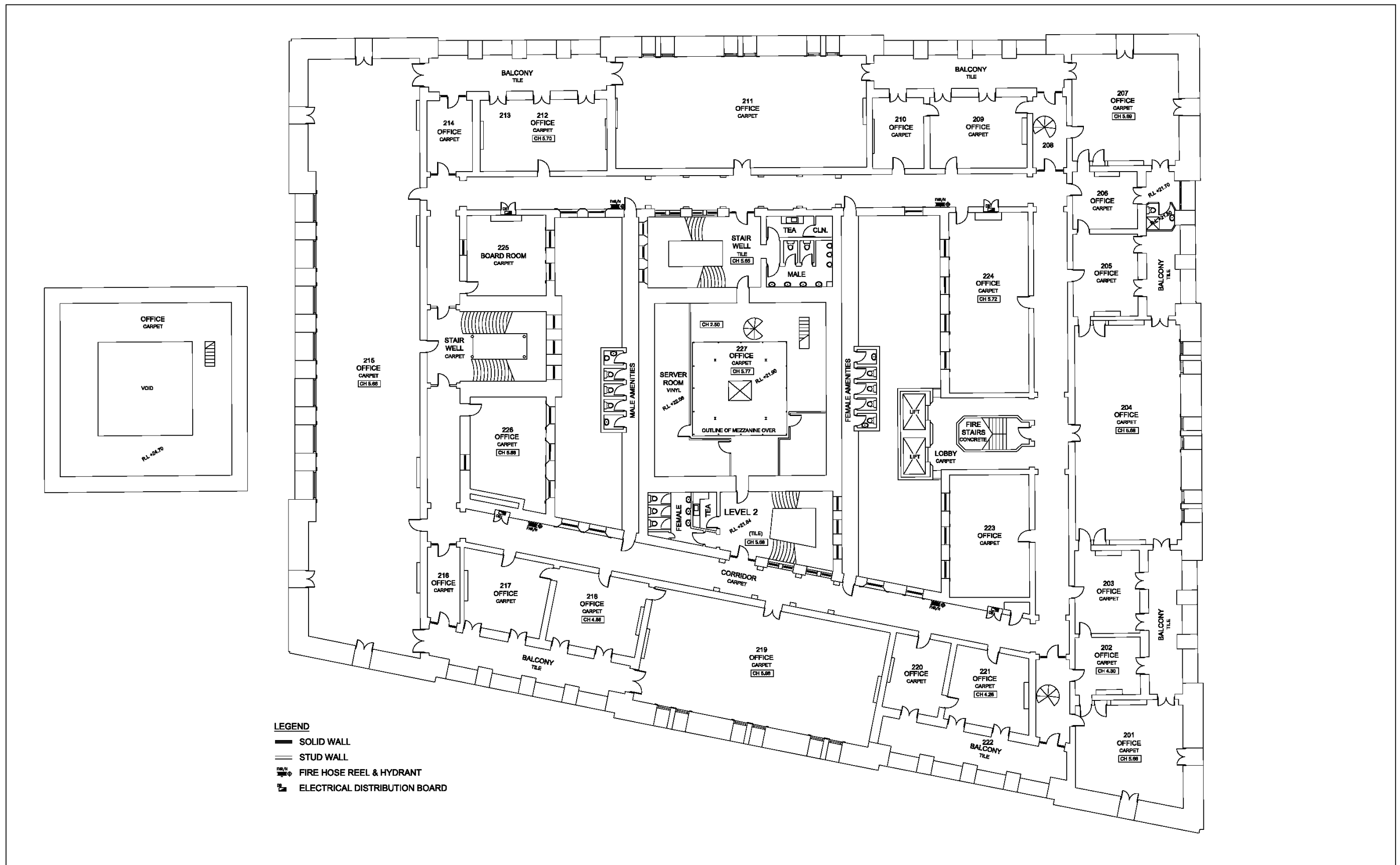


Figure 54: Second Floor

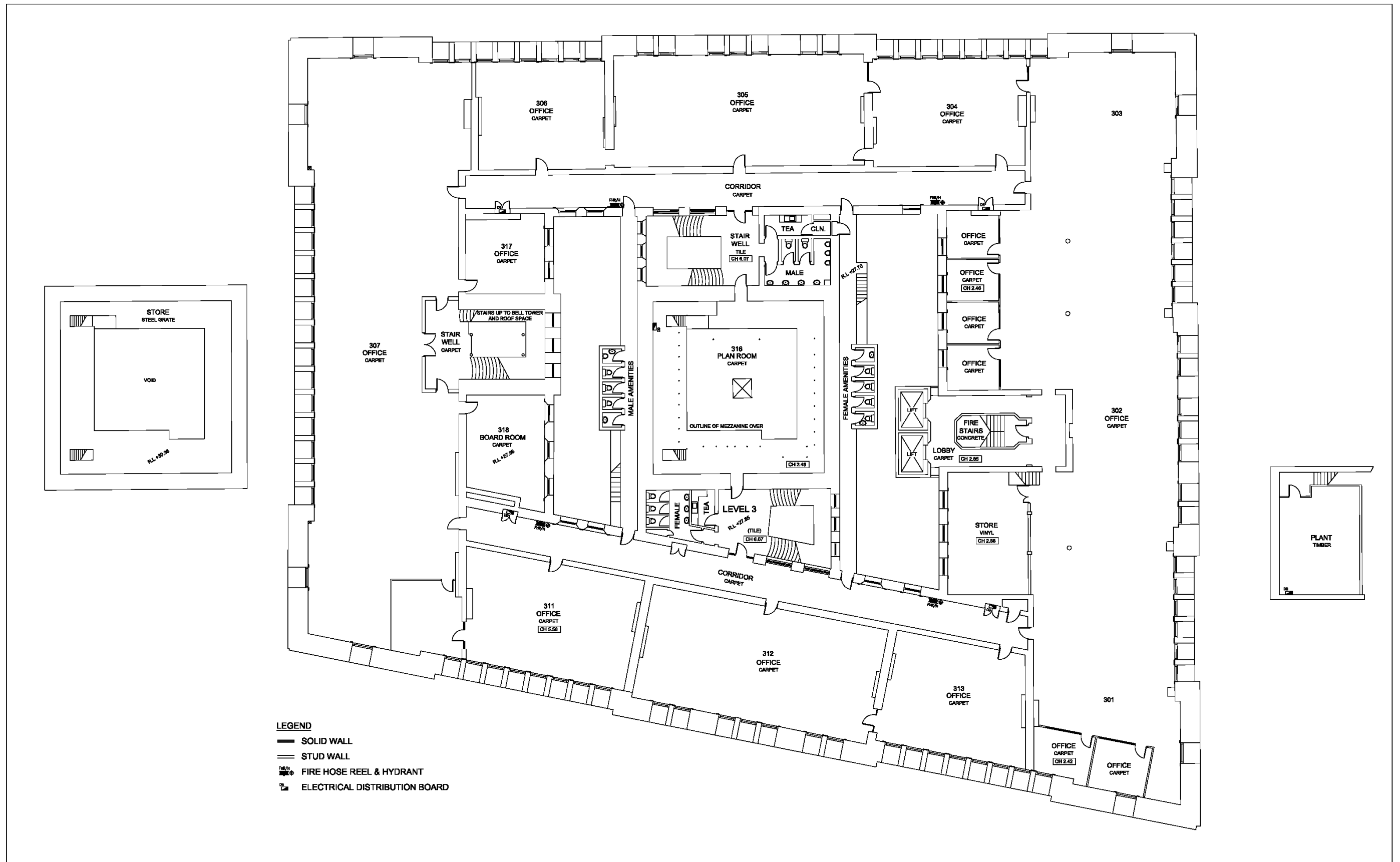


Figure 55: Third Floor

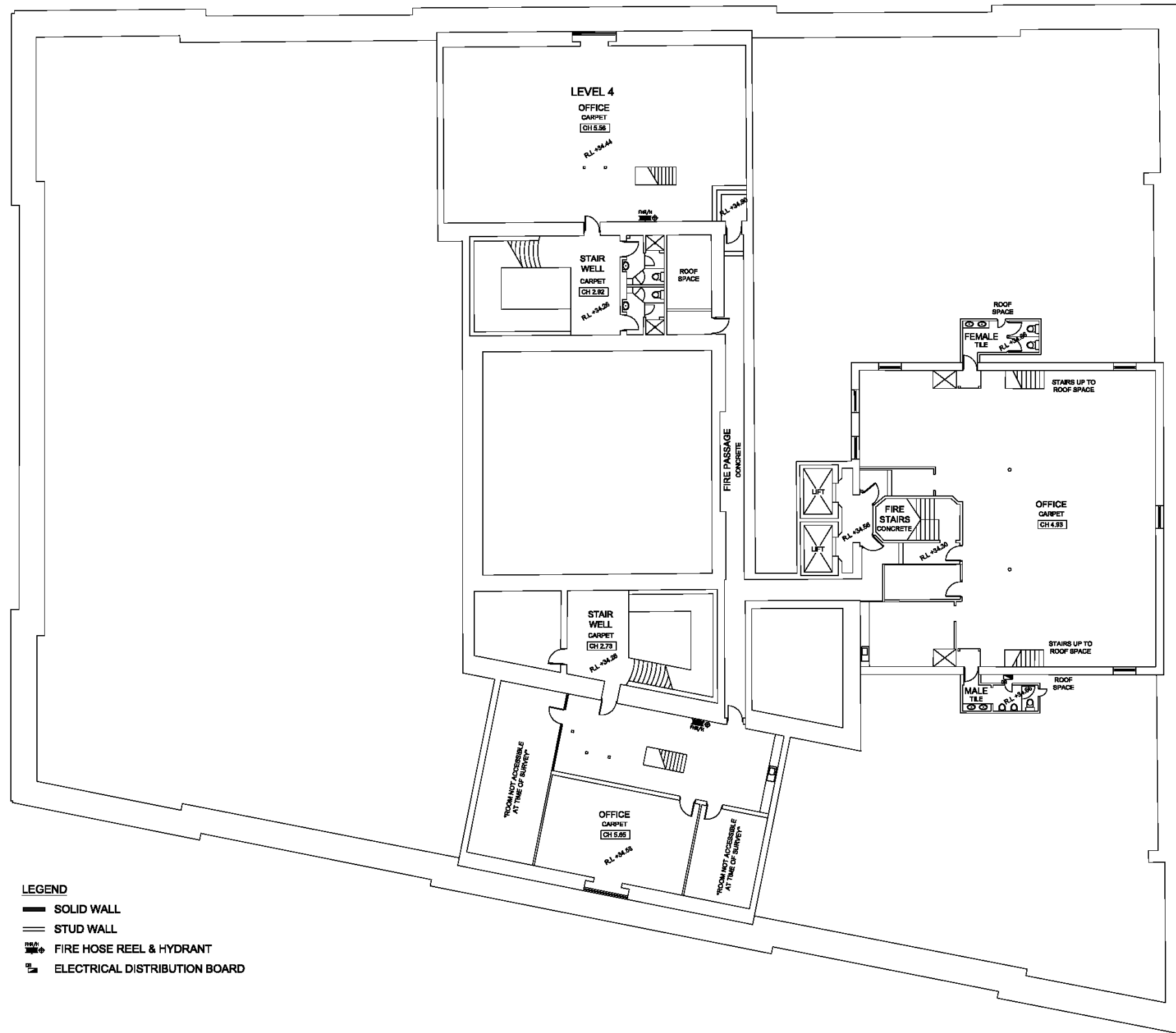


Figure 56: Fourth Floor

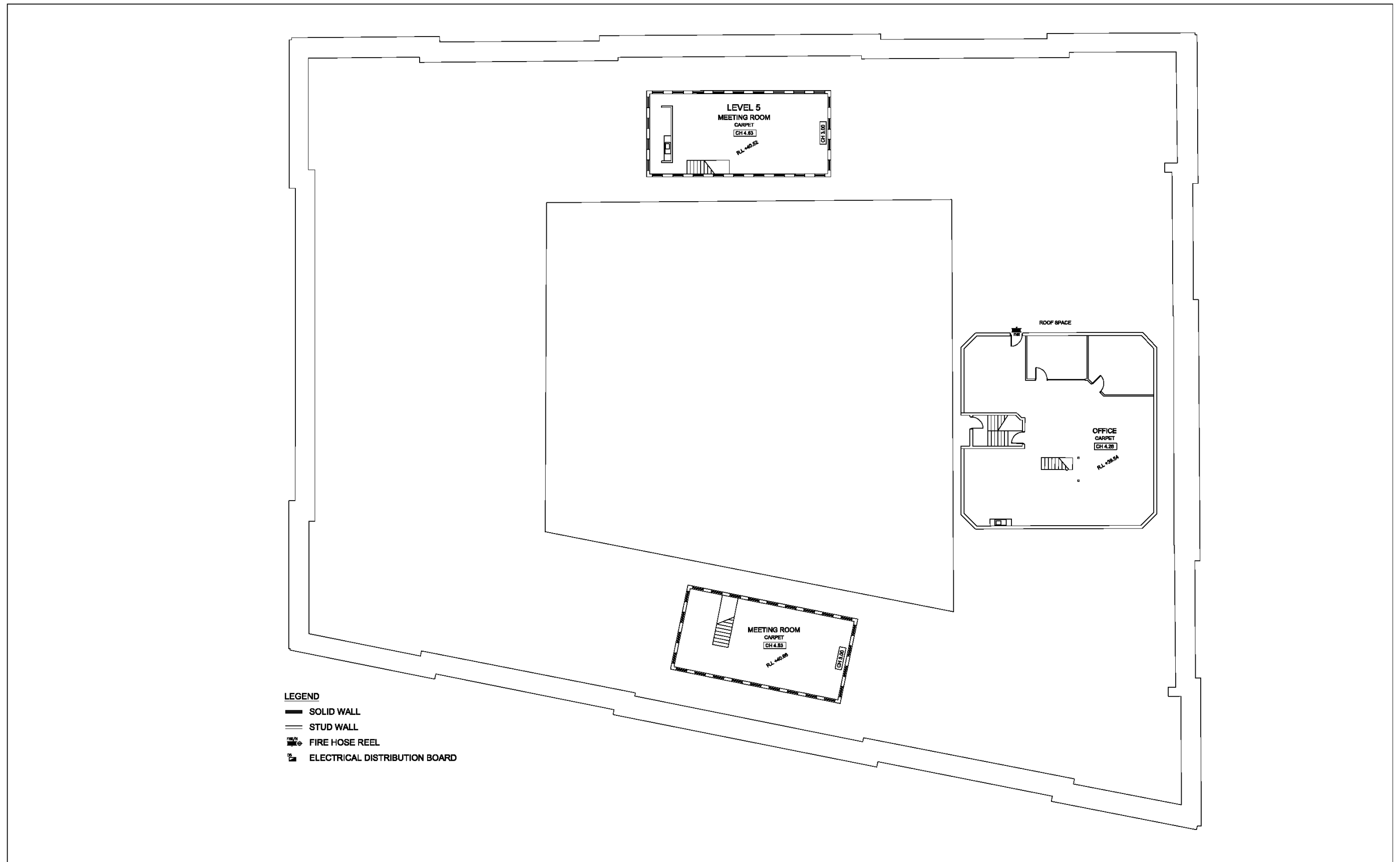


Figure 57: Fifth Floor

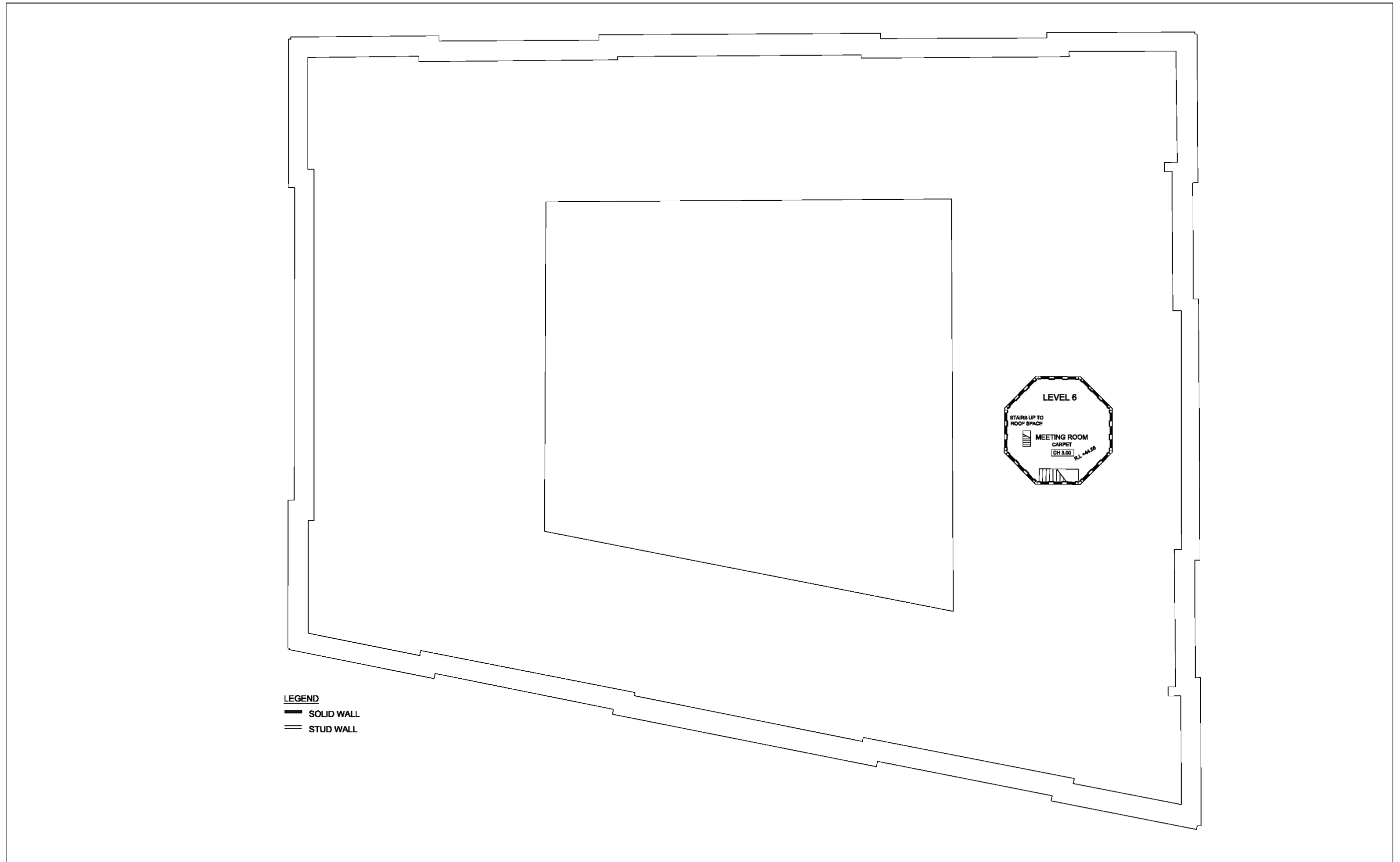


Figure 58: Fifth Floor mezzanine

PART 8 - CYCLICAL MAINTENANCE
PLAN

8.1 MAINTENANCE POLICY

In order to maintain the fabric of the building in good condition, it is essential that an on-going program of maintenance be established, which addresses all forms of maintenance, whether daily, cyclical, preventative or planned maintenance activities.

REVIEW

This Cyclical Maintenance Plan should be regularly reviewed to ensure that it remains relevant, taking into account conservation and maintenance works previously undertaken. Regular reviews should be made of the following:

- The relevance, effectiveness and efficiency of the maintenance work that has been carried out;
- The effectiveness of previous decisions, so that subsequent maintenance expenditure will be more effective;
- The necessity, appropriateness, time frame and standard of the work carried out, reviewed as part of the annual condition inspection.
- Changes in technology of services and compliance needs.
- Changes in use.

8.2 TYPICAL CAUSES OF DETERIORATION

Every external material used in the construction of a building is subject to weathering and aging. The combined effect of rain, wind, sun and atmospheric pollutants causes building fabric to deteriorate. Similarly the internal furnishings and fittings, as well as building services including plumbing, electrical and mechanical installations (air conditioning) are subject to aging and deterioration due to general wear and tear.

Typical causes of building fabric deterioration at the Lands Building include the following:

- Cracked, slipped and/or missing roof slates
- Cracked, damaged or penetrated roof membranes
- Damaged connections between roof sheets/ membrane
- Damaged, loose and/or missing roof flashings
- Blocked, leaking and/or disconnected sumps, gutters and downpipes
- Leaking and/or blocked drains and service pipes
- Movement (causing structural cracking)
- Corroded exposed metalwork
- Cracked and open jointed brickwork and cement rendered wall areas

- Cracked and/or open joints to stone walls
- Cracking and/or weathering of stone units
- Ineffective or missing damp proof courses
- Ineffective or missing ant caps
- Open jointing around window or door frames
- Decayed or split timber window sills, frames and sashes
- Deterioration of paint finishes
- Condensation and biological growth
- Water ponding on paved areas adjacent to building walls
- Paving that does not shed water away from the building
- General wear and tear of internal furnishings and fittings, including floor linings, kitchen and toilet fittings

8.3 PREVENTATIVE MEASURES

Adhering to the following recommendations concerning effective building use will prevent unnecessary deterioration to the fabric:

- Increase lighting and security as a means of preventing graffiti and other vandalism. All graffiti should be treated with the utmost urgency. Graffiti removal requires specialist advice and immediate treatment, particularly where it occurs on porous, un-painted materials, such as the external stone walls.
- Keep all walls and floor vents of any object likely to prevent the vent opening operating to its fullest. Sub-floor ventilation is critical in preventing rot and termite attack. Keep internal wall and floor vents clear of furniture and furnishings.
- Regularly check to ensure roof gutters and downpipes are not blocked, and are cleared of plastic bags, leaves and debris from any overhanging trees etc., especially after wind and storm activity and in autumn when deciduous trees shed their leaves.
- Roof cladding, such as slates and copper sheeting, should not be walked on. These materials can break and crack due to foot traffic. Similarly flat metal-decked roofs are liable to be holed or dented by foot traffic. Water can then pond in the dents and cause corrosion of the metal.
- Ensure that external ground level drainage remains clear and does not allow water to pond adjacent to the building.
- Ensure a high frequency of use and occupancy as a means of deterring

trespassing and vandalism.

- Develop a strategy to prevent motor cycles from parking adjacent the building walls to avoid marks and damage.

The following guidelines have been prepared to ensure that the significance of the various building elements is preserved during any maintenance works.

Table 7.1

LOCATION/AREA	RECOMMENDED ACTION	NOT RECOMMENDED
LANDSCAPE		
GROUND WORK	<p>Minimise disturbance of the ground around the site, thereby reducing the possibility of destroying unknown archaeological resources.</p> <p>Ensure that adequate site and roof drainage is provided to prevent water from splashing or pooling against building or foundation walls, or draining towards the building.</p> <p>Undertake archaeological investigation in accordance with the requirements of the Heritage Division and the Local Council.</p>	<p>Do not cause ground disturbances without evaluating the archaeological potential of the site.</p> <p>Do not change the appearance of the site by removing built or site elements before evaluating their importance in the history and development of the site.</p>
EXTERIOR		
LOCATION/AREA	RECOMMENDED ACTION	NOT RECOMMENDED
ROOFS & ROOF ELEMENTS	<p>Preserve the original roof shape.</p> <p>Provide adequate roof drainage and ensure that the roof materials provide a weather tight covering for the structure.</p> <p>Ensure roof drainage items expel storm water away from the building.</p> <p>Replace deteriorated material that matches the original, in composition, size, shape, colour and texture.</p> <p>Preserve or replace, where necessary, all architectural features that give the roof its essential character.</p>	<p>Do not replace deteriorated roof coverings or drainage items with new materials that differ to such an extent from the old in composition, size, shape, colour and texture, that the external appearance of the building is altered.</p> <p>Do not strip the roof of architectural features important to its character.</p> <p>Do not apply new roofing material that is inappropriate to the style and period of the building or which will cause corrosion through incompatible metals.</p>
COPPER ROOF/SHEETING	<p>Replacement sheets to have profile, finish & fixing methods to match the existing.</p> <p>Sheeting that is unpainted should remain unpainted.</p> <p>Consider reinstating original known roof coverings</p>	<p>Beware of corrosion through placement of incompatible metals.</p>

LOCATION/AREA	RECOMMENDED ACTION	NOT RECOMMENDED
	where replaced with other materials.	
COPPER MANSARD WINDOWS & VENTS	Preserve the original dormer windows/ vents where extent. New windows/ vents to match existing in size, profile & material.	Do not apply waterproof or water repellent coats to elements that are presently unpainted.
BUILDING STRUCTURE	Recognise that structural problems of historic buildings require specialist care and consideration in their repair. Undertake stabilisation and repair of weakened structural members and systems. Supplement existing structural systems when damaged or inadequate. Replace historically important structural members only when necessary.	Do not disturb existing foundations with new excavations that undermine the structural stability of the building. Do not rectify existing structural issues with methods that will cause continuing deterioration and shorten the life of the building.
EXTERNAL WALLING: SANDSTONE	Carefully record details before carrying out work and record the works undertaken in a report. Retain original material and mortar where possible. Repoint only those mortar joints where there is evidence of moisture problems, elastomeric sealants or where mortar is lost or deteriorated. Duplicate original mortar in composition, colour and texture. Clean with an appropriate non-abrasive technique, such as a low-pressure water jet and soft bristle brushes, avoiding detergents or acid as these may bleach or stain. Clean only as necessary to remove graffiti and stains, using the gentlest method possible. Seek professional advice to ascertain the most acceptable cleaning method to avoid any unnecessary damage. Where necessary, repair or replace deteriorated material with new material that duplicates the old as closely as possible. Replacement stone to match in size and profile of original. Avoid creating new joints between stones.	Do not apply waterproof or water repellent coatings, anti-graffiti coatings or surface consolidant treatments unless required to solve specific technical problems, which have been studied and identified. Do not use electric saws and hammers to remove mortar, which can seriously damage the adjacent stonework. Do not repoint with mortar of high Portland cement content, thereby creating a bond, which can be stronger than the stone. Do not use mechanical cleaning methods, such as sandblasting, including dry and wet grit and other abrasives. Do not use chemical cleaning methods that may bleach or stain. Do not remove architectural features.
BIRD PROOFING	New bird proofing should not visibly detract from the appearance of the building or require excessive fixing holes. Re-use existing fixing holes where possible.	

LOCATION/AREA	RECOMMENDED ACTION	NOT RECOMMENDED
EXTERNAL WALLING: RENDERED MASONRY	<p>Retain and repair existing render wherever possible.</p> <p>Where required to be replaced, replacement render is to match existing mix in type, components and consistency.</p> <p>Where possible repaint over previous layers of paint, as these may contain evidence of the original colour scheme.</p>	<p>Do not replace stable and sound render work.</p> <p>Do not remove evidence of earlier colour schemes, by stripping back to the substrate.</p>
METAL WORK (CAST/WROUGHT IRON ELEMENTS)	<p>Retain original material wherever possible.</p> <p>Clean when necessary with appropriate method.</p> <p>Cleaning methods should not abrade the surface of the metalwork.</p>	<p>Do not remove architectural features that are an essential part of the building's character and appearance and thus illustrate the continuity of growth and change.</p> <p>Do not expose metals that were intended to be protected from the environment.</p> <p>Do not use cleaning methods, which alter the colour or texture of the metal.</p>
PAINTING (EXTERNAL FACADE & ELEMENTS)	<p>Retain sound paint layers as evidence of previous colour schemes.</p> <p>Choose colours and types of finish under the advice of a heritage specialist.</p>	<p>Do not remove all evidence of previous paint schemes by stripping back to the substrate.</p> <p>Do not paint elements not previously painted (such as external sandstone walls).</p>
WINDOWS & DOORS	<p>Retain and repair existing window and door openings, including window frames, glass, sashes, lintels, sills, architraves, doors, pediments, hoods, steps and all hardware.</p> <p>Duplicate the material, design and hardware of the older window sashes and doors if new windows and doors are required.</p> <p>Use original doors and door hardware where they can be repaired and reused in place. Refer to store of original items in room G31</p>	<p>Do not introduce new window and door openings into the principal elevations, or enlarging or reducing window or door openings to fit new stock window and door sizes.</p> <p>Do not alter the size of window panes or sashes, as this may destroy the scale and proportion of the building.</p> <p>Do not install inappropriate new window or door features, such as aluminium screens, fake shutters or awnings.</p> <p>Do not discard original doors and doors hardware, if these can be repaired and reused in situ.</p>
VERANDAHS, ENTRANCES & STEPS	<p>Retain original verandahs & steps that are appropriate to the building and its development.</p> <p>Open up enclosed verandahs where possible.</p> <p>Repair or replace where necessary deteriorated architectural features.</p>	<p>Do not alter porches, entrances and steps in an inappropriate manner to the building's development and style.</p> <p>Do not strip porches and steps of original material and architectural features such as handrails, balusters, columns, brackets and roof decorations.</p> <p>Do not enclose entrances, verandahs and steps, even with temporary fittings.</p>
MARBLE FLOORING	<p>Undertake restoration/ cleaning work by</p>	<p>Do not use of chemical cleaning products or harsh</p>

LOCATION/AREA	RECOMMENDED ACTION	NOT RECOMMENDED
	experienced tradesperson.	brushes.
BUILDING CODE & WHS REQUIREMENTS	<p>Comply with code requirements in such a manner that the essential character of a building is preserved intact.</p> <p>Investigate performance-based alternative solutions where required that preserve the architectural integrity of the original building.</p> <p>Install adequate fire preventative equipment in a manner that does minimal damage to original fabric.</p> <p>Provide access & facilities for the handicapped without impacting on the essential character of the building.</p>	<p>Do not install new code requirements that intrude upon the historic appearance of the building. Seek specialist advice on meeting the performance requirements of the code in an alternative less intrusive manner.</p> <p>Do not add new steps and ramps that alter important architectural features and spaces of the building.</p>
BUILDING SERVICES (ELECTRICAL, MECHANICAL, COMMUNICATION & SECURITY)	<p>Upgrade or install new services in a manner to minimise damage to original fabric.</p> <p>Where possible, new services should be confined to areas of lesser significance or areas previous modified.</p> <p>New air conditioning units should be located away from the facades of the original stone building.</p> <p>Design to integrate in an unobtrusive manner.</p> <p>Surface mounted conduit is preferable (to chasing), with fixings in to joints lines or locations where fixings already exist.</p>	Do not chase new services in to stonework.
SIGNAGE	<p>Where possible locate new signage on surfaces of lesser significance.</p> <p>Where signage is required to the stone walls, fixings should be located within joint lines or locations where fixings already exist. Use only stainless steel 316 grade fixings.</p>	<p>Do not fix into stonework.</p> <p>Do not use ferrous metals near stonework.</p>
INTERIOR		
TIMBER STRUCTURE / PANELLING	<p>Repair or replace where necessary deteriorated timber elements, retaining as much as possible of the original fabric.</p> <p>Where necessary, repair or replace deteriorated material to match the original as closely as possible.</p> <p>Where possible repaint over previous layers of paint, as these may contain evidence of the original colour scheme.</p>	<p>Do not replace stable and sound timberwork.</p> <p>Do not remove evidence of earlier colour schemes, by stripping back to the substrate</p>

LOCATION/AREA	RECOMMENDED ACTION	NOT RECOMMENDED
FLOOR		
CARPET	Keep blinds of drapes closed where possible to avoid fading.	Avoid use of chemical cleaners. Avoid placing pot plants directly on to carpet. Avoid using a colour unsympathetic to the overall colour scheme.
TIMBER FLOOR (SUBSTRATE)	Do not create new penetrations, use manholes provided	
MARBLE	Use rubber tyre trolleys to avoid breakage of marble. If heavy weights are required to be moved over the floors, use timber boards to create a pathway.	Avoid placing steel office furniture directly on to the marble.
WALLS		
PLASTER	Patch repair deteriorated sections of plaster is preferable to full replacement. Plaster mixes should match adjacent surfaces as closely as possible with regard to number of coats, material and finish. Take care when moving furniture to avoid damage to walls. Reuse fixing points wherever possible.	Do not use of hard cement based plasters. Do not remove and replace sound areas of original plaster.
PAINTING	Retain sound paint layers as evidence of previous colour schemes. Choose colours in conjunction with a heritage specialist.	Do not remove all evidence of previous paint schemes by stripping back to the substrate. Do not paint elements not previously painted.
INTERNAL DETAILING		
JOINERY	Where possible retain original architectural features. Replacement mouldings and sills should match the existing in size and profile. Similar profiles are not acceptable.	Do not use solvent based or abrasive cleaners on timber finished joinery.
GLASS	Surface clean using water and detergent. Replace cracked or broken glass panels with new sections of compliant glass to match original. New beading to match existing adjacent. Protect the glass when work is being carried out in adjacent areas.	Do not replace glazing panels with new panels that change the appearance of the window/door. Avoid contact of water with the timber joinery, as this can cause staining. Do not use reflective films on glass.
STAIRS	Clean baluster using water & detergent.	Avoid using excessive water when cleaning. Avoid moving heavy items up the stairs.

LOCATION/AREA	RECOMMENDED ACTION	NOT RECOMMENDED
BUILDING SERVICES		
BUILDING SERVICES (ELECTRICAL, MECHANICAL, COMMUNICATIONS & SECURITY)	<p>Upgrade or install new services in a manner to minimise damage to original fabric.</p> <p>Where possible, new services should be confined to areas of lesser significance or areas previously modified.</p> <p>Design to integrate in an unobtrusive manner.</p> <p>Use concealed spaces where possible, Surface mounted conduit is preferable (to chasing), with fixings in to joints lines or locations where fixings already exist.</p>	Do not chase new services in to masonry walls.

HOW TO USE THIS MAINTENANCE PLAN

The Cyclical Maintenance Work has been prepared using maintenance spreadsheets supplied by the Department of Lands and Water Conservation in 2012. The spreadsheets indicate the:

- Area/location where work is required;
- Frequency of inspection required;
- Typical maintenance work that could be required for the material and its finish;
- Repair guidelines for replacing defective material or parts, including the identification of alternative materials where appropriate;
- Inspection details of what to look for and when, which should form part of the regular inspections; and
- Priority of the work.

8.4 PRIORITISING/PROGRAMMING MAINTENANCE WORKS

The frequency of inspection for each type of building element is identified in the Schedule of Cyclical Maintenance Works. It is recommended that the following guidelines be noted when programming the maintenance works.

- Attend to building repair work regularly to keep the building fabric condition at a level that will carry it through from one repair cycle to the next.
- Minor defects should be attended to promptly, thereby avoiding further deterioration/damage, potential increase in repair cost and potential collateral effects.
- Except for urgent or immediate repairs, all cyclical maintenance should be

grouped and performed as a unified operation. This should reduce any disruption to the normal functioning of the buildings and reduce the cost of site establishment.

- Inspections have been identified weekly, monthly, biannually, yearly, every 3, every 7 and every 10 years, according to the fabric /deterioration type.
- It is recommended that a full assessment be undertaken 20 years after the adoption of this Maintenance Plan.

8.5 RECORDING

An important part of the Maintenance Plan is to keep a record of all aspects of the building, its shortfalls, deterioration, failures and what repairs are necessary as they arise. If the defects recorded are hazardous or will create further damage to the building they then will need to be rectified straight away. Those that do not can be incorporated with the results of an annual inspection survey into the schedule of work programmed for the following years.

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
GROUND WORK							
Stormwater drainage lines		20-25 years	Flush all stormwater drainage to ensure downpipes, sumps and drain lines are operational to the full capacity of the pipe and there are no blockages. Clean out blocked and defective pipes. Repair cracked or leaking pipes.	Avoid hosing debris into pits and lines. Avoid using PVC for exposed pipes and fittings.	Biannually	2015	Cyclical
Sewer Drainage		20-25 years	Flush and video the drainage system to ensure that the drain lines are operational to full capacity of the pipe and there are no blockages. Clean out blocked and defective pipes. Repair cracked or leaking pipes.	Avoid hosing debris into pits and lines. Avoid using PVC for exposed pipes and fittings.	Biannually	2015	Cyclical
Pavement Surfaces		15-20 years	Inspect for ponding in pavement areas adjacent to the building and re-level to ensure no ponding occurs. Allow to adjust pavement surface to create new levels and falls adjacent sumps. Remove and relay with new any areas that have broken or lifted.		Yearly	2015	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
EXTERIOR							
ROOF							
Roofing and roof sheeting (all)	Varies			Clean debris.	Yearly	2015	Cyclical
Slate tiles		Up to 100 years	Check for Slipped, broken, cracked, missing tiles. Re-secure loose or replace cracked slates or ridge caps.	Replacement slate tiles and ridge caps should be of a size, thickness, profile, finish and fixing method to match the existing.	Every 3rd and 7th year	2015	Cyclical
Copper roof/ mansard sheeting	Varies	20–50 years	Check for Lifting of sheets, loose or corroded fixings, and broken joints. Re-secure loose or lifted sheets. Re-fix loose or replace corroded fixings. Replace badly deformed, dented or corroded sheets. Spot treat corrosion.	Replacement sheets, ridge caps and barge rolls should be of a profile, finish and fixing to match the existing. Sheeting that has not been painted should remain unpainted.	Every 3rd and 7th year	2015	Cyclical
Flat rubber membrane roof		20–25 years	Check for cracking in the membrane, sagging, water ponding and open joints. Reseal open seams and cracking.	All work to be undertaken in accordance with the manufacturer's instructions. Repair work should not damage	Every 3rd and 7th year	2015	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
			Ensure water is flowing towards downpipes.	adjacent significant material (e.g. parapets and chimneys).			
Dormer windows & vents (all)		20-50+ years	<p>Inspect internal ceilings for water stains that may indicate roof leaks.</p> <p>Check for lifting of edges or damaged sections.</p> <p>Re-secure loose or lifted sheets.</p> <p>Re-fix loose or replace corroded fixings.</p> <p>Replace badly deformed, dented or corroded sections. Spot treat corrosion.</p>	<p>Replacement sections would be of a material and finish to match existing.</p> <p>Sheeting that has not been painted should remain unpainted.</p>	Every 3rd and 7th year	2015	Cyclical
Box gutters, eaves gutters & downpipes (copper)	Generally 1980-90s - varies	10+ years	<p>Check fall and realign.</p> <p>Clean silt and debris.</p> <p>Check for blockages and ensure stormwater flows freely.</p> <p>Spot treat corrosion.</p> <p>Replace damaged, crushed or corroded sections.</p>	<p>Clean appropriately, avoid hosing leaves and debris into downpipe outlets.</p> <p>Replacement sections should match profile, material and fixing method.</p>	Yearly	2015	Cyclical
Flashings (copper/ lead)	Varies	20 years	<p>Loose or corroded sections and fixings.</p> <p>Re-secure loose or lifted sections.</p> <p>Re-fix loose or replace corroded fixings.</p> <p>Spot treat corrosion.</p>	Replacement sections should be of a profile, finish and fixing to match.	Yearly	2015	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
WALL STRUCTURE							
Sandstone	1870s 1980-90s: Conservation works		<p>Inspect for open, loose or missing mortar to stonework, particularly around windows, doors and below flashings.</p> <p>Check if the stone is cracking or delaminating.</p> <p>Check for potentially dangerous stone.</p> <p>Check for rising or falling damp that can indicate failure of damp proof course / water ponding adjacent the walls or faulty for rainwater drainage.</p> <p>Remove surface dirt, bird excretion, plant and fungal growth etc.</p> <p>Inspect critical areas where major synthetic stone repair has been previously carried out.</p>	<p>Potential stone conservation work is to be inspected and assessed by an experienced conservation specialist, an experienced stonemason and a structural engineer (where required).</p> <p>Replacement stone should meet the specification requirements for matching stone in colour, texture, durability in accordance with requirements determined by experienced Stonemasons and Conservation Architects.</p> <p>Where potentially dangerous stone exists, arrange for an approved stonemason and conservation specialist to carry out the make safe work in accordance with safety requirements of local authorities. Record details prior to removal.</p> <p>Use an approved elastomeric sealant jointing material to the top horizontal stone surfaces only as appropriate.</p>	5 yearly (following capital works repairs)	2018	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
				Use only low-pressure water jet to clean. Do not use chemicals or abrasive cleaning. Temporarily seal all open joints, facade openings and cracks in stonework.			
Sandstone	1870s 1980-90s: Conservation works		Monitor cracking above the Loftus street entrance. To be monitored every 2 years using discrete “telltale” indicators (or similar).		2 yearly	2015 2016 etc.	Cyclical
Lead weatherings	1980-90s	20-50 years	Inspect joints, welts, drips, etc., and all associated detailing. Check lead drips to cornice & gutter edges etc., and all associated detailing. Repair/replace where required. Check coping & cornice soffits.	Leadwork contractor to have proven experience. Use traditional methods for laying and fixing.	5 yearly (following capital works repairs)	2018	Cyclical
Bird proofing			Inspect all bird proofing. Repair and or replace as required.	Any new bird proofing to not visibly detract from the appearance of the building, or require excessive fixing holes. The reuse of existing fixing holes is preferred wherever possible.	5 yearly	2018	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
Rendered masonry		20-30 years	<p>Inspect rendered wall areas for loose, cracked or drummy render.</p> <p>Remove loose material and clean out cracking prior to repair.</p> <p>Remove plant growth and bird excreta from surfaces and clean.</p> <p>Spot paint areas of repair. Repaint defective painted wall areas.</p>	<p>Clean by using a low-pressure water-jet, avoid detergents or acid as these may bleach or stain renderwork.</p> <p>Remove loose material and clean cracking with a hammer and chisel. Use of power tools is not acceptable</p>	5 Yearly	2018	Cyclical
JOINERY							
Doors (timber)	1870 – 1890's	20+ years	Replace broken or cracked glass panes to doors.	Glass to match the existing.	Yearly	2015	Urgent
Doors (timber)	1870 – 1890's	20+ years	<p>Adjust doors for ease of opening and lubricate hardware.</p> <p>Secure loose and replace decayed and broken architraves, mouldings, lining boards and jambs.</p> <p>Inspect for loose jambs, decay of the threshold or damaged locks, wall fixings or hardware.</p>	<p>Where replacement is required, replacement timbers to match original in size, profile, species and finish. Similar sections are not acceptable.</p> <p>Where jambs have decayed, splice a matching profile section 600mm long.</p> <p>All original hardware should be retained. If hardware is beyond repair, immobilise and provide additional latch adjacent.</p>	7 yearly	2021 (then 2028)	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
				<p>Replacement of members should be kept to a minimum.</p> <p>Spot prime during repair and repaint all previously painted fabric affected by the work.</p>			
Windows (timber)	1870 – 1890's	20+ years	Replace broken or cracked panes of glass.	Glass to match the existing.	Yearly	2015	Urgent
Windows (timber)	1870 – 1890's	20+years	<p>Adjust window panes for ease of opening and remove layers of paint build up to ensure windows are operable.</p> <p>Provide clearance to accommodate additional coats of paint.</p> <p>Treat or replace rusted or broken hinges, casement stays and handles.</p> <p>Secure loose mouldings and architraves.</p> <p>Spot repair and paint deteriorated, or replace cracked and broken sills.</p>	<p>All replacement sections or components to match the existing.</p> <p>Repair hardware where possible</p>	7 yearly	2021 (then 2028)	Cyclical
Facade metalwork	1870 – 1890's	100+years	Check for corrosion, deformation. Inspect all façade metalwork including all cast iron, wrought iron etc., windows grilles, door entrance gates to the main street facades,	Where full replacement is unavoidable, the replacement element should match the original material, profile, pattern and method of manufacture.	7 yearly	2030 (assumes repainted in 2023)	

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
			<p>including the balustrading, metal walkways etc. Spot treat corrosion.</p> <p>Patch repair where required is preferable to full replacement of an element.</p> <p>Repaint all previously painted items and areas.</p>	Repaint only those elements that have previously been painted.			
Window vent openings	1870 – 1890's		<p>Inspect all window vent openings.</p> <p>Clean bronze mesh covers to vent openings to prevent blockages / debris.</p>	Bronze mesh covers should not be blocked or covered over.	5 yearly	2018	Cyclical
PAINTING (EXTERIOR)							
Painting		7 years	Inspect for flaking or crazing paintwork, and weather cracks to timberwork.	<p>Repaint all previously painted surfaces.</p> <p>Clean down, prepare and spot prime base surfaces, undercoat and apply two coat finish paint system to all previously painted surfaces.</p> <p>Retain sound paint layers as evidence of previous paint schemes.</p> <p>Match colours in conjunction with a heritage specialist.</p>	7 yearly	2021 (assumes repainted in 2015)	Cyclical
FLOORS (EXTERIOR)							

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
Marble flooring	Street entrances, external balconies, Levels first and second floors		Inspect all marble flooring and repair where required. Clean out drains etc.	All work to marble to be undertaken by tradesperson with experience in marble restoration/cleaning. No chemicals or harsh brushes to be used during the cleaning process. No grouts or glues.	2 yearly	2015	Cyclical
INTERIOR							
CEILINGS							
Plaster	1870+		Inspect for cracking and water damage that may indicate roof or leaking services. Repair source of water penetration.	Fill and repair surface damage with plaster mix to match the adjacent. Re-attach delaminated or loose lath and plaster. Screw fixing to joists. Patch repair is preferable to full replacement.	Yearly	2015	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
Plasterboard		25-35 years	Repair damaged or cracked sheets. Secure loose sheets. Check for water damage that may indicate roof leaks.	Not heritage fabric. Repair as per manufacturer's recommendation.	10 yearly	2024	Cyclical
WALLS							
Hard plaster surfaces	1870 – 1890's		Inspect for crazing to the finish.	Fill and repair surface damage with plaster mix to match the adjacent.	Yearly	2015	Cyclical
Painted finish generally		10+ years	Surface clean with damp soft cloth only when required. Patch re-paint using colours and finishes to match existing only.	Match existing colour scheme and surface finish.	Yearly	2015	Cyclical
Painted finish		10+ years	Clean down, prepare and spot prime bare surfaces. Repaint to previously painted surfaces. Prior to painting inspect ceiling and around window openings for water staining, which may indicate a failure of the flashings or roof covering.	Repaint all previously painted surfaces. Retain sound paint layers as evidence of previous paint schemes. Match colours and finishes in conjunction with a heritage specialist.	10 yearly	2024 (assumes repainted in 2015)	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
Central strongroom Dome	1890's		Monitor cracking to the central strong room dome using "tell-tale" indicators (or similar) every two years	Monitor and report	2 yearly	2015, 2016 etc.	Cyclical
FLOORS							
Floors generally			Vacuum carpets regularly, approximately once a week in attended rooms and once a month in non-attended rooms. Dust and dirt can accelerate decay in carpet in rooms that are in active use. Mop up liquid as soon as spillage occurs using a dry cloth or paper towel.	When replacing carpet, avoid the use of commercial cleaners. Do not place pot plants directly onto carpets. Keep blinds or drapes closed when possible to avoid fading.	Weekly		Cyclical
Carpet		10 years	Check for water damage, spillage and fading of colour. Adhere loose seams, trim and stretch carpet and resecure where necessary. Trim raised tufted carpet. Note that some specially loomed spare onsite carpet is to be retained and protected due to specific heritage significance.	Avoid using a colour unsympathetic to the character of the building.	5 yearly	2018	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
Timber boarded	1870 – 1890's	20-50 + years (hardwood) 15-20 + years (softwood)	Inspect for termite activity. Secure loose boards.		Yearly	2015	Cyclical
Timber boarded	1870 – 1890's	20-50 + years (hardwood) 15-20 + years (softwood)	Replace damaged timber floor boards to match existing in size and profile. If left exposed, apply/re-apply tung oil (no polyurethane additives) floor coating as per manufacturer's instructions.	Do not use any solvent based or abrasive cleaners on timber floors. Vacuum regularly, and wash occasionally using a solution of warm water, methylated spirits and white vinegar. Do not create new penetrations, use existing manholes as required.	10 yearly	2024	Cyclical
Marble	1870 – 1890's		A sugary appearance indicates that the surface is deteriorating. Vacuum using soft brush and surface clean using damp mop and few drops of soap-free detergent. Change the water in the bucket before it becomes very dirty and, rinse the floor well using clean water on damp cloth. Clean the floor regularly to avoid a build-up of dirt. Do not make the floor too wet or not slop water on to the skirting boards.	Marble is a hard and brittle substance and will break or chip easily. It is also porous and will stain easily and can be damaged by chemical or physical action. Avoid using household cleaning agents and abrasive agents. Use only rubber tyre trolleys. If heavy weights are to be moved over the marble floors timber boards should be used to create a pathway.	Annual inspection/clean	2015	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
				Do not place steel office furniture directly onto the marble.			
Linoleum		15-20 years	Re-adhere loose or bubbled tiles or sheets. Replace cracked or broken tiles.	Maintain colour and pattern of any replacement linoleum. Avoid using a colour unsympathetic with the existing colour scheme.	5 yearly	2018	Cyclical
JOINERY							
Windows and Doors (timber shellac finish, buffed)	1870 – 1890's	20+ years	Surface clean timber with soft cloth and wipe down surfaces if soiled. Clean ledges using vacuum and soft brush.	Avoid damage to timber window frames during cleaning process. Cover while adjacent work is being carried out. Do not use any solvent based or abrasive cleaners on timber finished joinery.	Fortnightly		Cyclical
Windows and Doors (timber, shellac finish, buffed)	1870 – 1890's	20+ years	Use soft lint free cloth to wipe down surfaces if soiled.	Generally required polished timberwork is required to be waxed	every 4 years	2018	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
Windows and Doors (timber, shellac finish, buffed)	1870 – 1890's	20+ years	Use soft lint free cloth to wipe down surfaces if soiled.	Generally polished timberwork is required to be shellac coated	every 12 years	2026	Cyclical
INTERNAL DETAILING							
Windows (glass)	All levels		Surface clean using water and detergent.	Avoid contact of water with timber joinery, as this will cause staining on the surface. Protect the glass when work is being carried out in adjacent areas.	Monthly		Cyclical
Staircase & balustrade, skirting, chair rail, architraves etc.	1870 – 1890's All levels		Surface clean timber with soft cloth and ledges using vacuum and soft brush	Avoid damage to joinery during cleaning process. Cover while adjacent work is being carried out.	Fortnightly		Cyclical
Stairs – cast iron	All levels, exterior		Vacuum using soft brush. Surface clean using damp mop and few drops of soap-free detergent, changing water frequently.	Avoid using excessive water. Avoid moving heavy items up the stairs or use temporary protective treads.	Weekly		Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
Inbuilt furniture	Level 1, Rm 107		Use soft duster with hemmed edges or 'hogshair' soft brush for difficult areas. Repolishing should be carried out by a trained conservator.	Do not allow dust to collect on wooden surfaces. Avoid using duster on furniture with moulding or veneer. Do not use household furniture polish.	Weekly		Cyclical
Inbuilt furniture	Level 1, Rm 107		Inspect poorly ventilated areas, e.g. cupboards, drawers and bookcases, back of furniture or pictures next to walls.		Annual		Cyclical
Fireplaces – marble	1870 – 1890's		Remove dust by vacuuming and cleaning with damp cloth.	Avoid scratching with abrasive objects. Call for expert advice if damage occurs.	Monthly		Cyclical
Fireplaces – hearth	1870 – 1890's		Use dry or damp mop or vacuum to reduce grit. Clean hearth with damp cloth and non-soap based detergent.	Avoid abrasive cleaning agents.	Monthly		Cyclical
Clock	Tower clock		Surface clean when required. Clean interior by specialist only. Service electrical components as required.	Avoid damage to painted finish and interference with mechanism when cleaning. All exposed elements such as housing, face and hands to be repaired by clock restorer only.	Monthly clean Annual service	2015	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
Clock	Level 1 Loftus entrance lobby above door		Surface clean exterior when required. Clean interior by specialist only. Service components as required.	Avoid damage to painted finish and interference with mechanism when cleaning. All exposed elements such as housing, face and hands to be repaired by clock restorer only.	Monthly clean Annual service		Cyclical
Plaques	Brass		Wipe over with soft cloth.	Avoid polishing with commercial abrasive cleaning agents.	Monthly		Cyclical
Sign writing	Doors – all levels		Wipe over with soft cloth.	Avoid polishing with commercial abrasive cleaning agents.	Monthly		Cyclical
SERVICES							
Lighting generally		20-25 years	Surface clean using water and detergent (damp cloth only). Re-lamp as lamps fail.		Yearly	2015	Cyclical
Lighting		20-25 years	Secure loose or replace cracked or missing light fittings and broken or defective power outlets and switches.	All work should be undertaken by a qualified electrician.	Yearly	2015	Cyclical

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
Hydraulic		20-25 years	<p>Replace failed mixer faucets and cisterns.</p> <p>Secure loose and replace damaged or missing toilet pan seats and fittings.</p> <p>Charge all toilets and run taps to refill drainage traps.</p> <p>For cold water, Reduced Pressure Zone Devices need to be serviced in accordance with manufactures requirements.</p> <p>For hot water, Instantaneous electric hot water heaters need to be serviced.</p> <p>Thermostatic mixing valves need to be serviced.</p> <p>Boiling/Chilled water unit need to be serviced.</p>	All work to be carried out by a licensed plumber.	Yearly		Cyclical
Lift s			Comprehensive maintenance		Monthly		Cyclical
WHS							

BUILDING ELEMENT	LOCATION /YEAR INSTALLED (WHERE KNOWN)	LIFE EXPECTANCY	MAINTENANCE ITEMS	REPAIR GUIDELINES	INSPECTION FREQUENCY	YEAR DUE	STATUS DESCRIPTION
					Annual		Cyclical
					Monthly/ Annual		Cyclical
					Annual		Cyclical
					Annual		Cyclical

This document is formatted for double sided printing

9.1 REFERENCES

- Apperley, R. et al. (1989) *A Pictorial Guide to Identifying Australian Architecture* Angus & Robertson Sydney
- Australian Dictionary of Biography (<http://adb.anu.edu.au/biography/young-john-4904>).
- Croker, R. and Kelly, M. 1977. *Sydney Takes Shape: collection of contemporary maps from foundation to federation*. Doak Press in association with Macleay Museum, University of Sydney.
- GAO Heritage Group 2007 *Lands Department Building: Facade Condition Report* (Report no HG07/49) Unpublished report for the NSW Department of Lands and Water Conservation.
- GAO Heritage Group 2008 *Lands Department Building: Assessment of Building Structure under Earthquake Loading*, Report no 08087, Unpublished report for the NSW Department of Lands and Water Conservation.
- GAO Heritage Group 2013 *Lands Department Building: Heritage Asset Management Plan (Draft)*, Unpublished report for the NSW Department of Lands and Water Conservation.
- Johnson, C. 1999, *Shaping Sydney: Public Architecture and Civic Decorum*, Hale and Ironmonger, Alexandria.
- Kass, T. 1995 *Thematic History of the Department of Land and Water Conservation*. Unpublished Report for the NSW Department of Public Works and Services.
- Kent, H.C. 1924 'Reminiscences of Building Methods in the Seventies under John Young, Architecture' in: *Architecture: an Australian magazine of architecture and the allied arts* - Vol. 13, no. 11 (Nov. 1924).
- Lands Department NSW 1884 *Metropolitan Detail Series of Sydney Section C4*.
- Leigh, S.T. 1867 *Handbook of Sydney and Suburbs* S.T. Leigh & Co Sydney.
- Mann, D.D. 1811 *The Present Picture of New South Wales*. John Booth London.
- Noel Bell Ridley Smith & Partners Architects 1996 *The New South Wales Lands Building Conservation Management Plan* Unpublished Report for the NSW Department of Lands and Water Conservation.
- Proudfoot, H. 1989. 'Sydney Change Scale: The Impact of James Barnet's Australian Museum Building on the Town of Sydney' in Colheart, L.(ed.) *Significant Sites History and Public Works in NSW* Public Works Department, NSW.
- Thalis, P. & Cantrill, P.J. 2013. *Public Sydney: Drawing the City*. Historic Houses Trust and the University of New South Wales.

ARCHIVAL MAPS, PLANS AND RECORDS

Water Board Archives, Trigonometrical Survey of Sydney 1865.

Plans of building 1876 (PWD Archive) and NSW Government Gazette No. 108; 4 April 1876, 1327.

Public Works Special Bundle SAONSW 2/893

REFERENCES FROM THE HISTORY SECTION OF THE 1996 CONSERVATION PLAN BY NOEL BELL RIDLEY SMITH.

Doug Benson and Jocelyn Howell **Taken for Granted the Bushland of Sydney and its Suburbs** Kangaroo Press. 1995

Baiba Berzins **The Coming of Strangers Life in Australia 1788-1822** Australia. 1988.

Peter Bridges and Don McDonald **James Barnet Colonial Architect** Hale and Iremonger 1988

Robert Crundwell, Hilary Golder, Robert Wood **From Parchments to Passwords a History of the Land Titles Office of NSW** Hale and Iremonger 1995

Gibbs and Shallard **An Illustrated Guide to Sydney 1882** Gibbs Shallard and Co. (Facs Ed)

Morton Herman **The architecture of Victorian Sydney** Angus and Robertson 1956

Jackson Teece Chesterman and Willis, Wendy Thorp **Conservation Plan Chief Secretary's Building** Minister for Planning 1995

Terry Kass **Thematic History of Department of Land and Water Conservation including the Former Registrar Generals Office** Department of Public Works 1995

Max Kelly, Ruth Croker **Sydney Takes Shape** Doak 1979

David Langman **Survey of Government Sculptures** Department of Public Works 1993

S.T. Leigh **Handbook to Sydney and Suburbs** S.T. Leigh and Co. 1867

T. McCormick **First Views of Sydney 1788-1825** David Ell Press 1987

D.D. Mann **The Present Picture of New South Wales 1811** Facs. Ed 1979

Public Works Department of NSW **Annual Reports 1888-1995**

G.Robertson and Co. **Beautiful Sydney 1895** G.Robertson and Co. 1895

G. Scott **Sydney's Highways of History** Georgian House. ND

H.O. Woodhouse and Danks Pty Ltd **The Lands Department Building Historical Report and Conservation Plan**

Department of Public Works 1985

A Collection of Unpublished Papers in Proof for the Information of Sir Henry Parkes
Government Printing Office 1882.

Correspondence, Minute Papers

James Barnet Papers **ML Mss 726**

Public Works **Special Bundle SAONSW 2/893**

News, Journal and Other Articles

C.H. Bertie "The Street Names of Early Sydney" **Journal of the Royal Australian Historical Society Volume 36.**

H.C Kent "Reminiscences of Building Methods in the Seventies under John Young" **Building November 1924, 5ff**

Helen Proudfoot "Sydney Changes Scale: The Impact of James Barnet's Australian Museum Building on the Town of Sydney" **In Significant Sites History and Public Works in NSW** (Ed. L. Coltheart) Hale and Iremonger 1987.

Australasian Builders and Constructors News

25 February 1888 (p14)

17 March 1888 (p179)

24 March 1888 (p186-187)

5 May 1888 (p298)

12 May 1888 (p298)

Illustrated Sydney News

19 August 1876

12 October 1876

Enquiries and Parliamentary Investigations

Inquiry into the Working of the Lands Department **Votes and Proceeding Legislative Assembly of NSW 1887**

Public Service Inquiry into - Lands Department **NSW Parliamentary Papers 1918**

Miscellaneous

Statistical Registers of NSW 1878-1900 Department of Conservation and Land

Management

Lands Department Building Bridge Street, Sydney Lands Department File Notes

Government Gazette 108, 4 April 1876

Maps and Plans

Sketch of Part of Sydney Cove Showing proposed Improvements 1833 **SAONSW AO Map 3633**

NSW Department of Lands Metropolitan Details Series City of Sydney Section C4 1884 **ML M Ser 4 811.17/1**

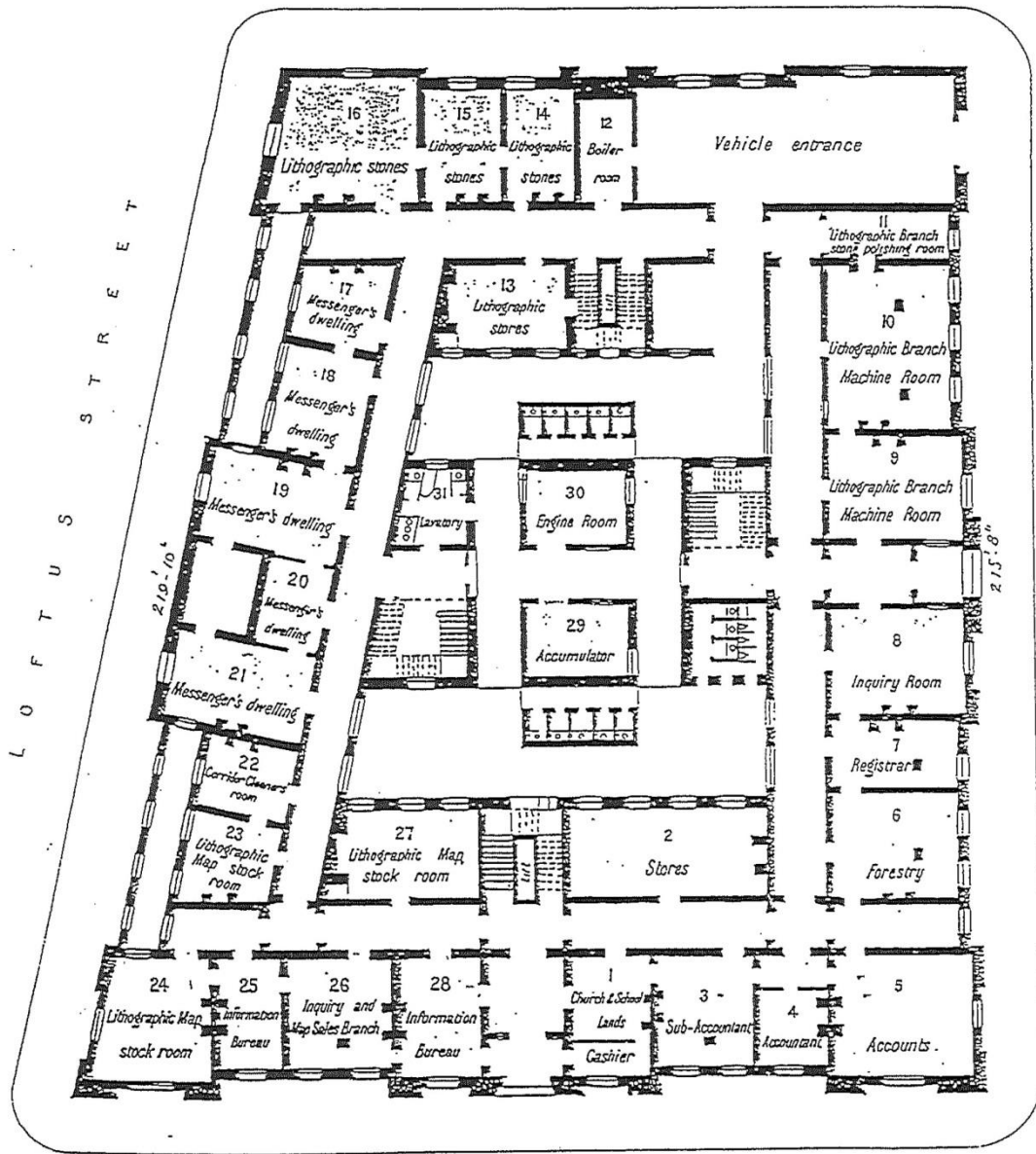
Graphics

Various images ML Small Picture File

APPENDIX A: HISTORICAL DRAWINGS

This document is formatted for double sided printing.

B E N Z T S T R E E T



B R I D G E S T R E E T

LANDS DEPARTMENT BUILDING
 GROUND FLOOR PLAN
 DLWC ARCHIVE OFFICE DATE UNKNOWN



NOT TO SCALE