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Section 75W Modification

MP08_0222

Global Switch Sydney 2 Data Centre

273 Pyrmont Street, Ultimo



Prepared on behalf of Global Switch Property (Australia) Pty Ltd

December 2011



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issue register

| Date of Issue | Reason for Issue | Prepared by | Checked by | Signed |
|---------------|---------------------------------|-------------|------------|--------|
| 28/11/11 | Draft No.1 to Architects | M Ryan | L Ryan | |
| 29/11/11 | Draft No.2 to Architects/Client | M Ryan | L Ryan | |
| 19/12/11 | Final Issue to Architects | M Ryan | L Ryan | |
| 22/12/11 | Final EAR to DOP | M Ryan | L Ryan | |
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Statement of Validity

Prepared under Part 3A of the Environmental Planning and Assessment Act 1979 (as amended).

Environmental Assessment prepared by:

| | |
|----------------|---|
| Name | Michael Ryan |
| Qualifications | BA (Urban & Regional Studies) Curtin University WA Graduate Certificate Public Sector Management, Griffith University QLD Certified Practicing Planner, MPIA |
| Company | DEM (Aust) Pty Ltd |
| Address | Level 8, 15 Help Street Chatswood NSW 2067 |

Section 75W Modification:

| | |
|--------------------------------------|--|
| Applicant name | Global Switch (Property) Australia Pty Ltd |
| Applicant's Address | 400 Harris Street, Ultimo NSW |
| Land to be Developed | 273 Pyrmont Street, Ultimo NSW |
| Proposed Development | Construction of Data Centre Facility |
| Environmental Assessment Certificate | I certify that the attached environmental assessment has been prepared in accordance with the Environmental Planning and Assessment Act and Regulations and to the best of my knowledge, the information provided is not false or misleading |

Signature

A handwritten signature in black ink, appearing to read 'M Ryan', written over a light gray rectangular background.

| | |
|------|---------------|
| Name | Michael Ryan |
| Date | December 2011 |



1 Overview

1.1 Introduction

This Environmental Assessment Report has been prepared on behalf of Global Switch Property (Australia) Pty Ltd in support of an amendment to Project Application MP08_0222 pursuant to Section 75W of the *Environmental Planning and Assessment Act 1979 (EP&A Act)*. The EAR is submitted to the Minister for Planning pursuant to clause 3(1) of Schedule 6A to the Environmental Planning and Assessment Act 1979 (EP&A Act) that provides for the continued application of the provisions of the now repealed Part 3A of the EP&A Act.

MP08_0222 was approved under Section 75J of the EP&A Act on 16 November 2010 for the construction of a purpose built, six storey data centre building above three sub-ground levels containing approximately 22,285 m² of technical area and 15,227 m² of plant area. A total of 12 car spaces will still be provided at the Pyrmont Street grade level on the northern boundary of the site.

Upon receipt of the project approval, Global Switch undertook a validation analysis to determine the final building configuration in order to proceed to Tender and Construction in early 2012. Consequently, a number of minor modifications have been identified in order to facilitate the project's imminent implementation. In summary, the modifications involve reducing three basements to one; introducing a second lift core to accommodate staging of the development; minor internal layout changes; reducing the overall GFA by 4,110m² and minor amendments to consent conditions. A detailed description of the modifications is explained in Section 2.0.

The modifications do not alter the overall height of the building or the approved building envelope, and external elevations and materials remain unchanged.

This report should be read in conjunction with the original Environmental Assessment Report prepared by DEM (Aust) Pty Ltd dated March 2010 that accompanied the original project application and all supplementary documentation appended to this report.

1.2 The Site

The subject site is currently vacant land located immediately to the east of the existing Global Switch Sydney 1 facility located at 400 Harris Street, Ultimo and is bounded to the north by the Western Distributor, to the east by Pyrmont Street and to the south by Quarry Street.

The site comprises of three (3) allotments, namely Lot 12 in DP 632526, Lot 3 in DP 632526 and Lot 10 in DP 840467. The development will also be constructed partly over the common boundary with Global Switch Sydney 1, known as Lot 1, DP 109652.

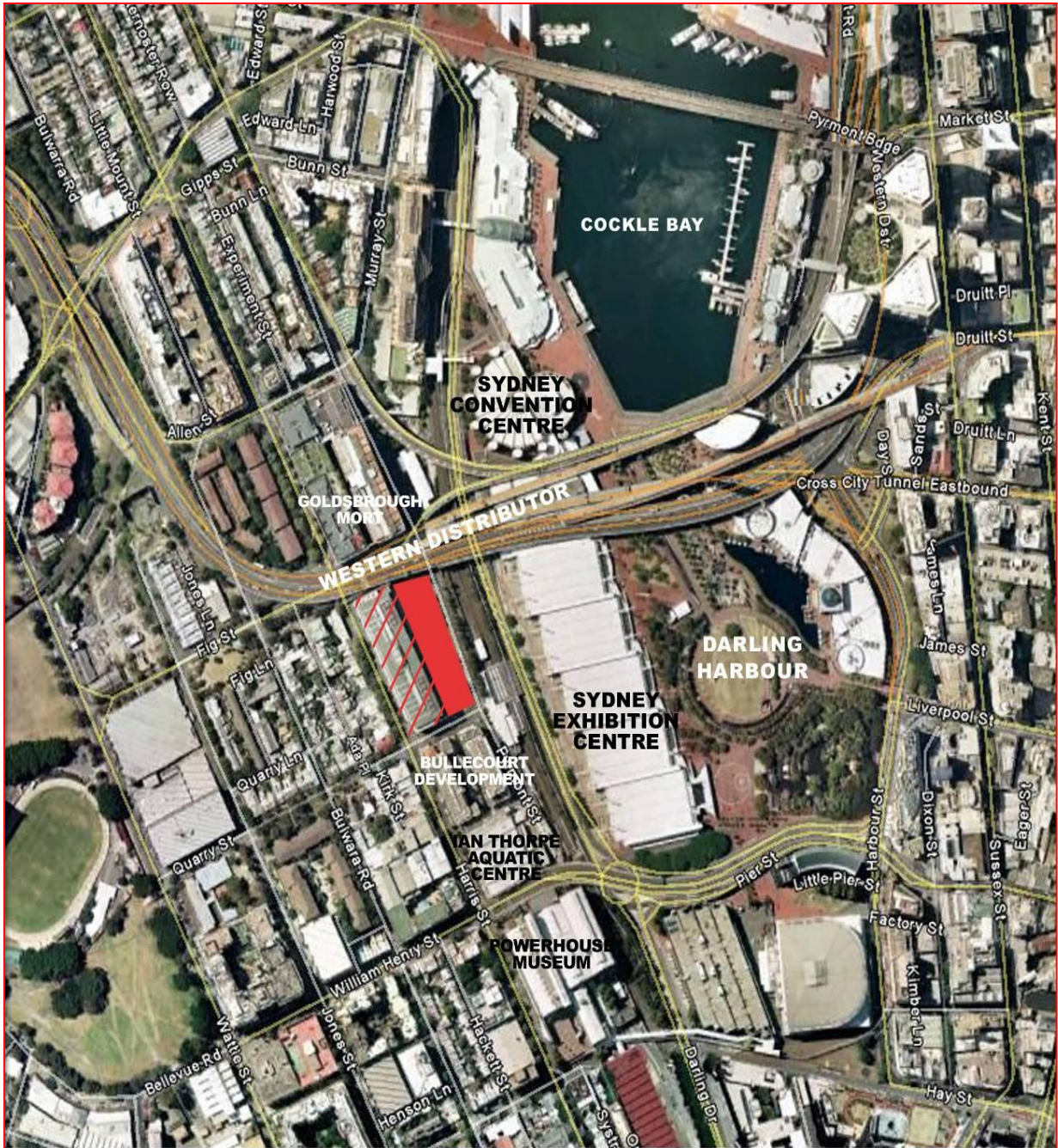
The total site area is 5065.9 m².

1.3 Consultation

In the preparation of this modified application, consultation was undertaken with the NSW Department of Planning at a meeting held on 3 November 2011. In summary, staff confirmed that the proposed modifications could be considered as a Section 75W application and did not raise any unforeseen objections to matters discussed.



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Source : Google Earth

LEGEND



SITE OF
GLOBAL SWITCH SYDNEY 2



EXISTING GLOBAL SWITCH SYDNEY 1



2 Proposed Modifications

The following modifications are proposed to the approved development:

- Delete the two lower basement levels and reduce the size of the remaining basement level, thereby reducing excavation and bulk earthworks;
- Reduce the Gross and Net Floor Area of the building from 22,285 m² to 18,175 m².
- Re-configure the floor levels and space allocation of the plant rooms;
- Introduce a second lift core to accommodate the staging the building;
- Relocating the roof level breakout area to the north of the building to coincide with the new position of the lift core.

The proposed modifications are detailed in architectural plans prepared by DEM, reduced copies of which are attached at Appendix 5.1.

2.1 Floor Space

Contained within the '*Master Plan Strategy for the GPO and AML&F sites*' was a maximum business floor space total of 79,300 m² for both the Global Switch (former GPO site) and the AML&F site, with 32,000 m² being apportioned to the AML&F site and 47,300 m² apportioned to the GPO site.

The approved project originally proposed a total 'business' (technical) gross floor area (*as defined in the Master Plan*) of 22,285 m² with an additional 15,227 m² of dedicated plant and machinery which is critical to the operations of the data centre.

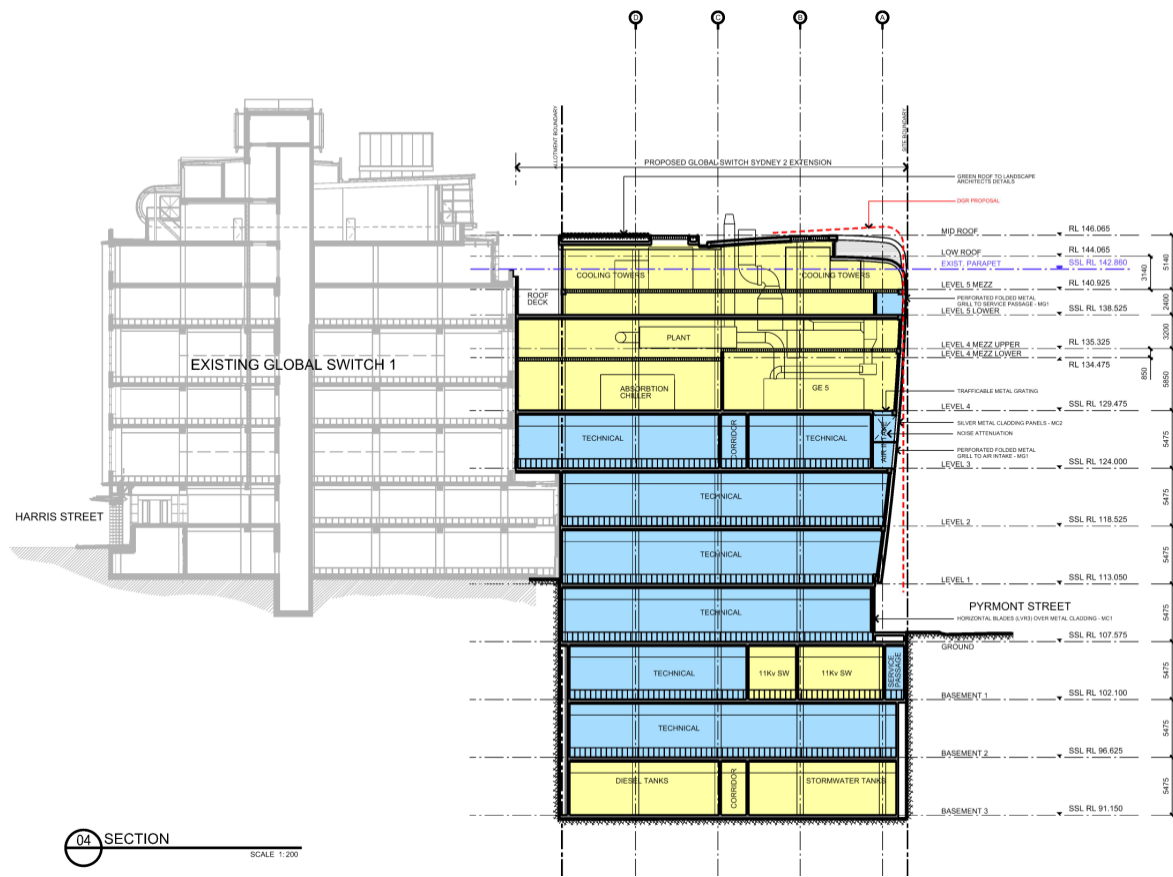
The revised gross floor area as modified is now 18,175 m² with plant area of 7,615 m² - a reduction in GFA of 4,110 m².

A comparison of the changes to each floor within the building is provided in Table 1 below.

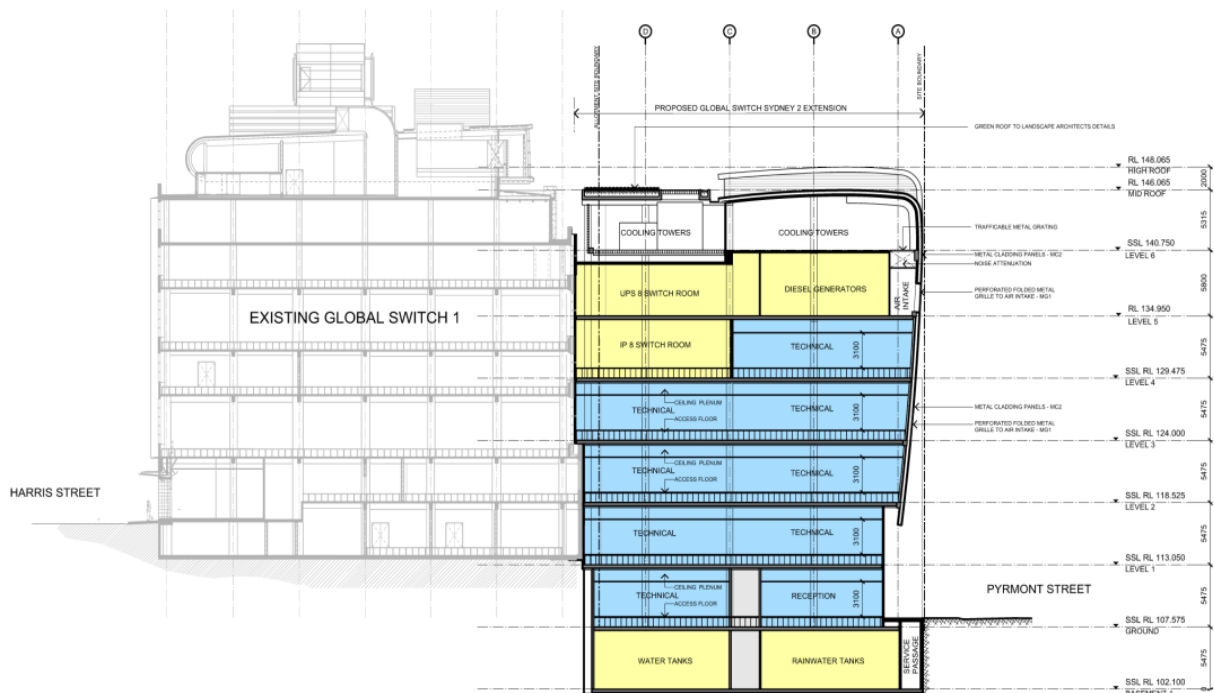
Note: plant and machinery floor space is excluded from the definition of Gross Floor Area (GFA) as defined in the site specific Master Plan (MPS)



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Approved Cross Section – 3 basements



Modified Cross Section – 1 basement



TABLE 1 – Approved and Revised Floor Space Figures

| Floor | Functions on each Level | Approved GFA m ² | Revised GFA m ² | Approved Plant Area m ² | Revised Plant Area m ² | Approved Total Area m ² | Revised Total Area m ² |
|--------------------|---|-----------------------------|----------------------------|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|
| Basement 3 | Technical & Plant (diesel tanks, storage, water storage & treatment, pump rooms & urea storage) | 1480 | 0 | 2687 | 0 | 4167 | 0 |
| Basement 2 | Technical & Plant (electrical switch rooms) | 3515 | 0 | 664 | 0 | 4179 | 0 |
| Basement 1 | Technical & Plant (switchrooms, equipment and connection rooms, pump room, riser ducts, amenities.) | 3260 | 265 | 1020 | 1285 | 4280 | 1550 |
| Ground | Technical & Plant (switchroom, electrical transformers) Lobby & reception areas Car Parking & Dock | 3390 | 3050 | 423 | 650 | 3813 | 3700 |
| First | Technical & Plant (switchrooms) Access link to GSS1 building | 3285 | 3355 | 620 | 380 | 3905 | 3735 |
| Second | Technical & Plant Access link to GSS1 building | 3450 | 3540 | 633 | 360 | 4083 | 3900 |
| Third | Technical Access link to GSS1 building | 3665 | 3875 | 787 | 370 | 4452 | 4245 |
| Fourth | Plant (Gas Engine (producing electricity) & diesel generators) | — | 3870 | 4460 | 370 | 4460 | 4240 |
| Fifth | Plant (Diesel generators -remainder of the area is for reticulation of pipework for Cooling towers positioned on the L5 mezzanine). | — | 0 | 3920 | 4200 | 3920 | 4200 |
| Roof | Green roof area Break out / meeting area Amenities Lift overruns | 240 | 220 | 13 | 0 | 253 | 220 |
| Total Areas | | 22,285 | 18,175 | 15,227 | 7,615 | 37,512 | 25,790 |

2.2 External Modifications

The approved building footprint and height remains unchanged. The only minor change proposed relates to the roof level breakout area which has now been relocated to the north of the building to coincide with the new position of the second lift core.



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Facade materials also remain unchanged from what was originally approved. The location of horizontal air intake grilles on the east façade is amended, with the lower level band now being removed.

2.3 Access, Parking & Loading

The approved twelve (12) secured car spaces will still be provided, including one disabled space and a separate loading dock area. Manoeuvring for loading and unloading on site will continue to be via a turntable arrangement adjacent to the dock within the service yard. This will permit service vehicles to enter and leave the site in a forward direction. Direct pedestrian access into the building from the dock is provided.

2.4 Staging

As was discussed at the preliminary briefing meeting with Department of Planning staff on 3 November 2011, it is somewhat unclear as to the precise meaning of Condition C2 on the topic of Staging.

As was agreed at the meeting, it is obvious that the condition acknowledges the project was to be constructed in stages, but lacks a degree of certainty. Therefore it is requested that Condition C2 be reworded based on the revised architectural drawings as detailed below – additional wording in ***bold italics***

| Approved condition | Modified Condition sought |
|--|--|
| <p>The proponent is to comply with the conditions contained in this instrument for all stages of development subject to this approval.</p> <p>Prior to the commencement of each stage of works, the proponent is to notify the Department and Council of the proposed works and compliance to date with this approval. The proponent, or any party acting upon this approval, shall also submit a report addressing future compliance with all relevant conditions of this approval.</p> | <p>The proponent is to comply with the conditions contained in this instrument for all stages of development subject to this approval.</p> <p>Prior to the commencement of each stage of works, the proponent is to notify the Department and Council of the proposed works and compliance to date with this approval. The proponent, or any party acting upon this approval, shall also submit a report addressing future compliance with all relevant conditions of this approval.</p> <p><i>The development will be constructed in two (2) main building stages with internal fitout of each stage being undertaken, completed and occupied progressively. Final details of the main building stages and progressive internal fitout and occupation of the building are to be provided to the PCA for approval prior to release of the relevant staged Construction Certificate.</i></p> |



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2.5 Modified Conditions of Approval

The proposed modifications described above require minor changes to the approval conditions which are detailed below. Words proposed to be deleted are shown in ~~bold strike through~~ and words to be inserted are shown in ***bold italics***. Refer to Appendix 5.2 for a full version of the proposed amended consent conditions.

SCHEDULE 1

| | |
|----------------------------|---|
| Application No: | MP08_0222 |
| Proponent: | Global Switch Property (Australia) Pty Ltd |
| Approval Authority: | Minister for Planning |
| Land: | 273 Pyrmont Street, Ultimo Lot 3 and 12 in DP 632526, Lot 10 in 840467, Lot 1 DP 109652 |
| Project: | <i>Staged</i> Construction of a six-storey data centre building and three one basement level, including: <ul style="list-style-type: none"> • site preparation works; • excavation; • 12 car parking spaces; • plant and equipment; • landscaping and street upgrade works; and • building identification sign • <i>works will be constructed in two main building stages with internal fitout of the building being undertaken progressively;</i> • <i>the works are to be occupied progressively in line with staged construction and fitout of the new building.</i> |



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SCHEDULE 2
CONDITIONS OF APPROVAL
MAJOR PROJECT APPLICATION No. MP 08_0222
PART A – ADMINISTRATIVE CONDITIONS

| Drawing No | Issue | Name of Plan | Date |
|-----------------------------|---------|--------------|------------|
| Cover Page | B02 | ar--cv00 | 22/12/2011 |
| Site Plan | B03 | ar--0200 | 22/12/2011 |
| Basement Level 3 | deleted | ar--1200 | deleted |
| Basement level 2 | deleted | ar--1201 | deleted |
| Basement level 1 | B03 | ar--1202 | 22/12/2011 |
| Ground Floor | B04 | ar--1203 | 22/12/2011 |
| First floor | B03 | ar--1204 | 22/12/2011 |
| Second Floor | B03 | ar--1205 | 22/12/2011 |
| Third Floor | B03 | ar--1206 | 22/12/2011 |
| Fourth Floor | B03 | ar--1207 | 22/12/2011 |
| Fourth floor mezzanine | B03 | ar--1208 | 22/12/2011 |
| Fifth Floor | B03 | ar--1209 | 22/12/2011 |
| Fifth Floor mezzanine | deleted | ar--1210 | 22/12/2011 |
| Roof Plan | B02 | ar--1211 | 22/12/2011 |
| Section One | B03 | ar--2100 | 22/12/2011 |
| Section Two | B04 | ar--2101 | 22/12/2011 |
| Section Three | B03 | ar--2102 | 22/12/2011 |
| Section Four | B03 | ar--2103 | 22/12/2011 |
| North & South Elevations | B03 | ar--2500 | 22/12/2011 |
| Eastern elevation | B03 | ar--2501 | 22/12/2011 |
| Signage Views | B01 | ar--5004 | 22/02/2010 |
| Landscape Plan Ground Floor | A02 | la--0501 | 15/02/2010 |
| Landscape Plan Roof Level | A02 | la--0502 | 15/02/2010 |



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PART B—PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE

B1 Section 94 Contribution

Timing of Payment

The contribution shall be paid prior to the release of ~~any-staged~~ Construction Certificates **as follows**;

- **50% payment on release of the Stage 1 Construction Certificate;**
- **50% payment on release of the Stage 2 Construction Certificate.**

B3 Stormwater and Drainage

(a) Prior to the issue of ~~a the~~ Construction Certificate being issued, details of the proposed stormwater disposal and drainage from the development including a system of on-site stormwater detention in accordance with Council's standards requirements and details of the provision and maintenance of overland flow paths must be submitted to and approved by Council. All approved details for the disposal of stormwater and drainage are to be implemented in the development.

B5 Public Domain Plan

(a) A detailed Public Domain Plan must be prepared and lodged with Council's Public Domain Section and approved by Council prior to the issue of ~~a the~~ Construction Certificate being issued for new building work, excluding approved preparatory, demolition or shoring work.

(b) The Public Domain Plan must be prepared in accordance with the City of Sydney's Public Domain Manual and the Ultimo Pyrmont Public Domain Manual. The works to the public domain are to be completed in accordance with the approved plan **being before** any Occupation Certificate is issued in respect of the development or before the use commences, whichever is earlier.

B7 Car Parking Spaces and Dimensions

A maximum of 12 off-street car parking spaces must be provided. The design, layout, signage, line marking, lighting and physical controls of all off-street parking facilities must comply with the minimum requirements of Australian Standard AS/NZS 2890.1-2004 Parking Facilities. The details must be submitted to and approved by the PCA prior to ~~a the~~ Construction Certificate being issued.

B8 Accessible Parking Spaces

The design, layout, signage, line marking and physical controls of all off-street accessible parking facilities must comply with the minimum requirements of Australian Standard AS/NZS 2890.6-2009 Parking facilities Part 6: Off-street parking for people with disabilities. The details must be submitted to and approved by the PCA prior to ~~a the~~ Construction Certificate being issued.

PART C—PRIOR TO THE COMMENCEMENT OF WORKS

C2 Development Staging

The proponent is to comply with the conditions contained in this instrument for all stages of development subject to this approval.

Prior to the commencement of each stage of works, the proponent is to notify the Department and Council of the proposed works and compliance to date with this approval. The proponent, or any party acting upon this approval, shall also submit a report addressing future compliance with all relevant conditions of this approval.

The development will be constructed in two (2) main building stages with internal fitout of each stage being undertaken, completed and occupied progressively. Final details of the main building stages



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and progressive internal fitout and occupation of the building are to be provided to the PCA for approval prior to release of the Construction Certificate.

PART E – PRIOR TO OCCUPATION OR COMMENCEMENT OF USE

E1 *Interim and Final* Occupation Certificates to be submitted

~~An~~ ***Interim and Final*** Occupation Certificates must be obtained from the PCA and a copy submitted to the Department and Council prior to the commencement of occupation or use of ***staged components of*** the building.

The following documents should be forwarded to the Department and Council within two (2) days of the date of ~~the each~~ Certificate being determined:

- (1) A copy of the determination;
- (2) Copies of any documents that were lodged with the ***Interim or Final*** Occupation Certificate application;
- (3) A copy of the ***Interim or Final*** Occupation Certificate, if it was issued;
- (4) A copy of the record of all critical stage inspections and any other inspection required by the PCA;
- (5) A copy of any missed inspections; and
- (6) A copy of any compliance certificate and any other documentary evidence relied upon in issuing the ***Interim or Final*** Occupation Certificate.

E2 Infrastructure Repair

Prior to issue of ~~the any~~ ***Interim or Final*** Occupation Certificate, the PCA must be satisfied that any damaged public infrastructure caused as a result of construction works ***related to the relevant stage of the works completed*** (including damage caused by, but not limited to, delivery vehicles, waste collection, contractors, sub contractors, concrete vehicles) is fully repaired to the satisfaction of Council Development Engineer and at no cost to Council.

E3 Existing Light Rail Line Corridor

Prior to the issue of ~~the any~~ ***Interim or Final*** Occupation Certificate, a joint inspection of the rail infrastructure and property in the vicinity of the project is to be carried out by representatives from RailCorp and Sydney Metro Transport Pty Ltd and the proponent. These dilapidation surveys will establish the extent of any existing damage and enable any deterioration during construction to be observed. The submission of a detailed dilapidation report will be required unless otherwise notified by RailCorp.

Prior to the issue of ~~an any~~ ***Interim or Final*** Occupation Certificate, the proponent is to submit to RailCorp a copy of the final As-Built drawings ***for the relevant portion of the completed works*** and surveyed location of all rock anchors used.

E4 WAE Plans for Stormwater Management and Disposal

Prior to issue of ~~the any~~ ***Interim or Final*** Occupation Certificate, a registered surveyor must provide a works as executed (WAE) survey of the completed stormwater drainage and management systems ***for the relevant portion of the completed works***. The survey must be submitted to and approved by the PCA prior to issue of ~~the any~~ ***Interim or Final*** Occupation Certificate. The survey must indicate:

- as built (reduced) surface and invert levels for all drainage pits
- gradients of drainage lines, materials and dimensions



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- as built (reduced) level(s) at the approved point of discharge to the public drainage system
- as built location and internal dimensions of all detention and retention structures on the property (in plan view) and horizontal distances to nearest adjacent boundaries and structures on site
- the achieved storage volumes of the installed retention and detention storages and derivative calculations
- as built locations of all access pits and grates in the detention and retention system(s), including dimensions
- the size of the orifice or control fitted to any on-site detention system
- dimensions of the discharge control pit and access grates
- the maximum depth of storage possible over the outlet control
- top water levels of storage areas and indicative RL's through the overland flow path in the event of blockage of the on-site detention system

The works as executed plan(s) must show the as built details above in comparison to those shown on the drainage plans approved with the Construction Certificate prior to commencement **of the relevant stage of the** works. All relevant levels and details indicated must be marked in red on a copy of the PCA stamped construction certificate stormwater plans.

E5 Sydney Water Section 73 Compliance Certificate

Prior to issue of ~~an~~ **any Interim or Final** Occupation Certificate, the Section 73 Sydney Water Compliance Certificate **for the relevant portion of the completed works** must be obtained and submitted to the PCA.

E7 Mechanical Ventilation

Following completion, installation and testing of all the mechanical ventilation systems **for the relevant portion of the completed works**, the PCA shall be satisfied of the following prior to the issue of any **Interim or Final** Occupation Certificate:

- The installation and performance of the mechanical systems complies with:
 - the Building Code of Australia
 - Australian Standard AS1668
 - Australian Standard AS3666 where applicable
- The mechanical ventilation system in isolation and in association with other mechanical ventilation equipment, when in operation will not be audible within a habitable room in any other residential premises before 7am and after 10pm Monday to Friday and before 8am and after 10pm Saturday, Sunday and public holidays. The operation of the unit outside these restricted hours shall emit a noise level of not greater than 5dbA above the background when measured at the nearest adjoining boundary.

Note: Written confirmation from an acoustic engineer that the development achieves the above requirements is to be submitted to the PCA prior to the issue of ~~the~~ **any Interim or Final** Occupation Certificate.

E8 Accessibility

Prior to the issue of ~~an~~ **any Interim or Final** Occupation Certificate, the PCA shall be satisfied that **the relevant part of the buildings works satisfy the following**:

- the lift design and associated functions are compliant with AS 1735.12 & AS 1428.2



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- the level and direction of travel, both in lifts and lift lobbies, is audible and visible
- the controls for lifts are accessible to all persons and control buttons and lettering are raised
- international symbols have been used with specifications relating to signs, symbols and size of lettering complying with AS 1428.2
- the height of lettering on signage is in accordance with AS 1428.1 – 1993
- the signs and other information indicating access and services incorporate tactile communication methods in addition to the visual methods

E9 Works as Executed Plans

Prior to **final** occupation **of the fully completed building**, one (1) full set of works as executed plans, and other supporting documentation including further studies and revised plans required by this approval, shall be submitted to Council for information purposes only.

E10 Post-Construction Dilapidation Report

The proponent shall engage a suitably qualified person to prepare a post-construction dilapidation report at the completion of **the relevant completed stages of** the construction works. This report is to ascertain whether the construction works created any structural damage to adjoining buildings, infrastructure and roads.

The report is to be submitted to the Department and the Council and is to:

- (a) Compare the post-construction dilapidation report with the pre-construction dilapidation report, identifying the nature and costs of damage (if any) which has occurred during and as a result of construction, and
- (b) Have written confirmation from the relevant authority that there is no adverse structural damage to its infrastructure and roads (as far as reasonably practical) or that satisfactory arrangements have been made to remedy any damage. If this has been unreasonably delayed by the relevant authority, attempts to seek such confirmation shall be given to the satisfaction of the Department.

E11 Cooling Towers

Prior to the commencement of use **of the relevant portion of the completed works**, the owner or occupier of the premises must apply to Council for the registration of water cooling systems and warm water systems installed on the premises in accordance with the Public Health (Microbial Control) Regulation 2000.

PART F — POST OCCUPATION

Note: Part F applies to the fully completed works or staged works as appropriate at the completion of each stage.

ADVISORY NOTES

AN11 Long Service Levy

Under Section 34 of the Building and Construction Industry Long Service Payments Act 1986 any work costing \$25,000 or more is subject to a Long Service Levy. The levy rate is 0.35% of the total cost of the work **for each stage** and shall be paid to either the Long Service Payments Corporation or Council. Under section 109F(1) of the Environmental Planning & Assessment Act 1979 this payment must be made prior to commencement of building works **for each stage**.



2.6 Modified Statements of Commitments

SCHEDULE 3

STATEMENT OF COMMITMENTS

The proposed modifications require minor changes to the approval Statement of Commitments detailed below. Words proposed to be deleted are shown in ~~bold strike through~~ and words to be inserted are shown in ***bold italics***.

1. Documentation

The development will be undertaken generally in accordance with architectural and landscape drawings prepared by DEM (Aust) Pty Ltd and all documentation appended to the ***Section 75W Modification Environmental Assessment*** report. ~~February 2010~~ and the ***following supporting documentation Preferred Project Report dated August 2010***, listed as follows:

- Architectural Drawing Nos. ~~ar-cv00 revB01, ar-0200 revB01, ar-1200 revB01, ar-1201 revB01, ar-1202 revB01, ar-1203 revB02, ar-1204 revB01, ar-1205 revB01, ar-1206 revB01, ar-1207 revB01, ar-1208 revB01, ar-1209 revB01, ar-1210 revB01, ar-1211 revB01, ar-2100 revB01, ar-2101 revB02, ar-2102 revB01, ar-2103 revB01, ar-2500 revB01, ar-2501 revB02, ar-5000 revB01, ar-5001 revB01, ar-5002 revB01, ar-5003 revB01.~~ ***ar-cv00(B02), ar-0200(B02), ar-1202(B02), ar-1203(B03), ar-1204 – 1209 (all Revision B03), ar-1211(B03), ar-2100(B03), ar-2101(B04), ar-2102(B03), ar-2103(B03), ar-2500(B03), ar-2501(B03), ar-5004(B01)***
- Landscape Drawings Nos. ~~la-cv00 revA02, la-0201 revA02, la-0501 revA02, la-0502 revA02, la-3301 revA02.~~
- Landscape Maintenance Strategy dated February 2010.
- Signage Plan ar-5003 prepared by DEM (Aust) Pty Ltd.
- External Finishes Schedule prepared by DEM (Aust) Pty Ltd.
- Part 3A Acoustic Report, Ref: 36148-013-01, dated 29 January 2010 Rev 01.
- Engineering Response Report, Ref: 36148/3.8 dated 15 March 2010 Rev 4.
- Air Quality & Greenhouse Gas Impact Assessment dated February 2010 Rev00
- Assessment of Transport, Traffic & Parking Implications Ref 0953 dated February 2010
- Geotechnical Investigation Report Ref: 22706VTTrpt dated 23 April 2009.
- BCA Assessment Report No. 1321-15 Rev 02 dated 17 February 2010 and modified BCA Significant Issues Report prepared by AE&D dated December 2011.
- Construction Management Plan as modified 19 December 2011.
- Access Report dated 19 February 2010 and modified Access Review Report prepared by AE&D dated December 2011.
- PB response letter, Ref: 2117107ARevA/LT_2686 dated 26 August 2010.
- AUR Environmental Noise Criteria Report, Ref: 36148-013-01, dated 30 June 2010.



2. Lot Consolidation & Easements

Easements and restrictions as to user affecting Lots 3 and 12 in DP 632526 will be extinguished and relocated, where necessary.

3. Acoustics

All appropriate recommendations and commitments detailed in the Part 3A Acoustic Report prepared by Aurecon, Ref: 36148-013-01, dated 29 January 2010 Rev 01 and updated Environmental Noise Criteria Report prepared by Aurecon, Ref: 36148-013-01, dated 30 June 2010 will be implemented. A SoundPLAN environmental noise model will be developed during the detailed design stage which consists of:

- A 3D model of the affected area incorporating topography and existing structures
- Identifying and modelling all of the noise emissions from site based on specifications of equipment and operating conditions/scenarios
- Noise propagation to be calculated utilising the ISO 9613-2 method
- Calculate total noise emission from the development site to the affected sensitive receivers
- Develop noise contours showing the extent of noise emissions from site

The results of this model will then be used during the design process to optimise the noise emissions from site through the introduction of additional noise mitigation measures to ensure compliance with the applicable project specific noise emission criteria.

4. Utilities & Services

All appropriate recommendations and commitments detailed in the Engineering Response to Director General's Requirements Report, Ref 36148/3.8 dated 15 March 2010 Rev 4 will be implemented, in relation to the following services:-

- Electrical
- Telecommunications
- Security
- Mechanical
- Fire
- Hydraulic

5. Emissions

All mitigation and management measures recommended in Section 10.2 of Air Quality & Greenhouse Gas Impact Assessment dated February 2010 Rev00 and updated PB additional Preferred Project Report response letter Ref. 2117107ARevA/LT_2686 dated 26 August 2010 to control emissions in the operation phase of the data centre will be implemented.

6. Traffic & Parking

Access, servicing and parking arrangements will be undertaken in accordance with the architectural drawings and Assessment of Transport, Traffic & Parking Implications Report prepared by Transport & Traffic Planning Associates, Ref 0953 dated February 2010.



7. Geotechnical

Recommendations contained within the Geotechnical Investigation Report Ref 22706VTrpt dated 23

April 2009 will be implemented. In reference to site remediation, the applicant will implement the recommendations contained within Section 6 of Geotechnical Investigation Report Ref 22706VTrpt dated 23 April 2009

8. Drainage

A detailed stormwater drainage plan will be prepared to the satisfaction of the Director General to harvest rainwater for re-use, and dispose of excess rainwater to the existing street drainage system.

9. Reflectivity

A reflectivity study to assess the impact of solar reflectivity and glare from materials of the new building façade will be prepared as part of the Construction Certificate.

10. Energy Performance (ESD)

An ESD Performance Report that investigates appropriate benchmarking for data centre facilities, as the application of NABERS Office Energy & NABERS Office Water tools are considered not appropriate for use due to protocol limitations. The report will also reference international guidelines of the U.S. Green Building Council's LEED program. This will be the basis against which the design, construction and ongoing operation phases of the building will be assessed. The elements of sustainability that will be addressed will include:

- Local planning provisions where applicable to the development type
- Energy & water efficiency measures and benchmarks
- Materials & waste minimisation
- Operational monitoring & reporting.

11. Access & Mobility

An Access & Mobility Assessment of the detailed design of the building will be prepared and demonstrate how the proposed development satisfies the following statutory and regulatory guidelines to ensure effective, appropriate and safe use by all people including those with a disability:

- AS 1428.1, AS 1428.2, AS 1428.4, AS 1735.12, AS2890.1.
- Parts D3.2, D3.3, D3.6, D3.8, E3.6, and F2.4 of the Building Code of Australia (BCA)
- Disability Discrimination Act

12. Archaeological & Aboriginal Relics

In the event that archaeological resources are unearthed during any stage of the development, work in the immediate vicinity is to cease and an archaeologist contacted to make an assessment of the find. Consultation with the Heritage Branch and further assessment may be required prior to works progressing on site. Further research may be required. It should be noted by the Client that further research and an application for an excavation permit would delay construction schedules.

In the event that objects pertaining to the Aboriginal cultural values are unearthed during any stage of the development, works will cease and an archaeologist contacted to make an assessment of the find. Consultation with the Department of Environment, Climate Change and Water may be required prior to works progressing on the site.



13. BCA

All proposed building works will comply with the deemed-to-satisfy provisions of BCA, or will be supported by an alternative solution to demonstrate compliance with the performance requirements of the BCA.

14. Waste Management

A detailed waste management plan will be prepared in accordance with the recommendations of Section 8.2.3 of the Engineering Response to Director General's Requirements Report, 36148/3.8 dated 15 March 2010 Rev 4.

15. Construction & Traffic Management

All measures and recommendations contained within the construction management plan prepared by Global Switch will be implemented in relation to the following services:-

- Public safety, Amenity and Site Security;
- Operating Hours, Noise and Vibration Controls;
- Air and Dust Management;
- Stormwater and Sediment Control;
- Waste and Materials Re-Use; and
- Traffic Management and Materials handling.

Additional mitigation and management measures relating to dust and vehicle emissions as recommended in Section 10.1 of Air Quality & Greenhouse Gas Impact Assessment dated February 2010 Rev00 will be incorporated into the construction management plan.

16. Erosion & Sediment Control

An erosion and sediment control plan will be prepared as part of the Construction Certificate and will be implemented and maintained by the Contractor responsible for carrying out the works.

17. Hours of Operation

Operational –

The Data Centre will operate 24 hours, 7 days per week.

Construction –

The construction hours, including the delivery of materials to and from the site, will be restricted as follows:

- Between 7.00 am and 5.00 pm Mondays to Fridays;
- Between 8.00 am and 1.00 pm Saturdays;
- No work on Sundays and Public Holidays.



3 Environmental Assessment

As detailed in Table 2, all the specialist reports submitted with the approved project remain unchanged from an environmental viewpoint. The modifications remain within the scope of works identified and referred to in the approved project.

TABLE 2

| Original Documentation | Prepared by | Modified |
|---|--|------------------------------|
| Site Survey Information | Hard & Forrester | Unchanged |
| Architectural plans | DEM (Aust) Pty Ltd | Revised – Refer Appendix 5.1 |
| Landscape Plans | DEM (Aust) Pty Ltd | Unchanged |
| Landscape Maintenance Strategy | DEM (Aust) Pty Ltd | Unchanged |
| Shadow Diagrams | DEM (Aust) Pty Ltd | Unchanged |
| External Finishes | DEM (Aust) Pty Ltd | Unchanged |
| Proposed Signage | DEM (Aust) Pty Ltd | Unchanged |
| Stakeholder and Community Consultation Plan and Responses | Id Planning | Unchanged |
| Acoustic Report | Aurecon | Unchanged |
| Engineering Response to DGRs | Aurecon | Unchanged |
| Air Quality & Greenhouse Gas Impact Assessment | Parsons Brinckerhoff Aust. Pty Ltd | Unchanged |
| Traffic & Parking | Transport & Traffic Planning Associates | Unchanged |
| Geotechnical Investigation Report | Jeffery & Katauskas P/L | Unchanged |
| Archaeological Assessment | Austral Archaeology Pty Ltd | Unchanged |
| Statement of Heritage Impact | Graham Brooks & Associates | Unchanged |
| BCA Report | AE & D | Revised – Refer Appendix 5.3 |
| Construction Management Plan | Global Switch Property (Australia) Pty Ltd | Revised – Refer Appendix 5.4 |
| Access Report | Accessibility Solutions Pty Ltd | Revised – Refer Appendix 5.5 |
| Quantity Surveyor Certification of Cost | Turner & Townsend Pty Ltd | Revised– Refer Appendix 5.6 |

3.1 Relevant Environmental Planning Instruments

Clause 3 of Schedule 6A of the EP&A Act provides that the provisions of Part 3A, including the modification powers in Section 75W continues to apply to "transitional Part 3A projects", including relevantly, approved projects. This means that project approvals, such as the subject MP10_0023 Bulk Excavation and Basement Car Parking can still be modified under section 75W of the EP&A Act.



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Clause 3 of Schedule 6A of the Act also states that any State environmental planning policy or other instrument made under or for the purposes of Part 3A, as in force on the repeal of that Part and as amended after that repeal continues to apply to and in respect of a transitional Part 3A project (as defined). As detailed in Section 2.0, the proposed modifications are considered to be significantly minor in nature and do not depart from the original Director General Requirements (DGR's) issued on 10 February 2009.

The original DGR's identified the following Environmental Planning Instruments (EPIs) policies and guidelines as being relevant to the project:

- State Environmental Planning Policy (Major Projects) 2005
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy No. 55 – Remediation of Contaminated Sites
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Sydney Harbour Foreshores & Waterways Area DCP
- Darling Harbour Development Plan No.1
- Ultimo Pyrmont Section 94 Contributions Plan, and
- The Former GPO and Australian Mortgage Land and Finance Company Site Master Plan, March 2000 (the Master Plan).

No new DGR's were issued for the modifications now proposed.

With the exception of the *GPO and Australian Mortgage Land and Finance Company Site Master Plan*, the proposed modifications will not adversely affect the Approved Project's consistency with the above mentioned planning controls.

3.2 Modification to Floor Space

As detailed in Section 2.1 a significant component of accommodating data storage equipment is the need to provide expansive areas of plant and machinery. The approved data centre facility proposed a total 'business' (technical) gross floor area (*as defined in the Master Plan*) of 22,285 m² with an additional 15,227 m² of dedicated plant and machinery, totalling 37,512 m².

The revised floor area is now 25,790 m², comprising 18,175 m² technical floor area and 7,615 m² of plant and machinery. Consequently, the revised floor space calculations are significantly less to the approved project.

3.3 Car Parking

Under the approved project, provision was made for twelve (12) secured car spaces, including one disabled space and a separate loading dock area. The modified application proposed no changes to these arrangements. Both the quantity and location of onsite parking remains unchanged as part of this modified application.

All parking and loading facilities will be constructed as part of Stage 1.

3.4 Visual Impact

A detailed analysis of the visual impact of the project building was comprehensively addressed in the original EAR, and as stated, the building will be visible from the north, south and east of the site. As there are no changes proposed to the external appearance of the building in terms of height, envelope or finishes and



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materials, the visual impact assessment submitted with the original project application suffices for the purpose of this Section 75W modification.

4 Conclusion

This modified application seeks the following amendments to Project MP08_0222 in order to facilitate the project's imminent implementation.

- Delete the two lower basement levels and reduce the size of the remaining basement level, thereby reducing excavation and bulk earthworks;
- Reduce the Gross and Net Floor Area of the building from 22,285m² to 18,175 m².
- Re-configure the floor levels and space allocation of the plant rooms;
- Replacement of cogeneration for the first stage of the development by drawing power from the existing Global switch 1 electrical supply;
- Introduce an energy efficient free cooling air conditioning system to offset the reduction of the originally proposed Tri-generation system;
- Introduce a second lift core to accommodate the staging the building;
- Removal of gas engines from the upper levels;
- Relocating the roof level breakout area to the north of the building to coincide with the new position of the lift core.

The modifications **do not** alter the overall height of the building or the approved building envelope, and external elevations and materials remain unchanged.

As demonstrated in this environmental assessment report, the modifications are minor in nature resulting in a reduction of gross floor area of 4,110 m² and remain consistent with the approved project outline. The modifications will not result in any adverse environmental impacts, particularly with respect to the appreciation of the heritage gate, and the landscape presence on the facades.

We therefore request that the Minister or his delegate approve the Modification Application in accordance with the modified conditions detailed in Section 2.6.



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5 Appendices



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5.1 Section 75W Modified Drawings



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5.2 Proposed Modified Consent Conditions



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5.3 Modified BCA Report



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5.4 Modified Construction Management Plan



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5.5 Modified Access Report



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5.6 Quantity Surveyors Revised Certification of Cost