

Volume 3 - Appendix 3

Architectural Drawings

Prepared by H&E Architects

Sydney Opera House Lower Concourse Improvements

Project No:2466

Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

Sydney Opera House Trust

Development Application

General Notes & Abbreviations

General Notes The copyright of this design remains the property of H+E Architects. This design is not to be used, copied or reproduced without the authority of H+E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works. This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.	Hydraulics Stormwater drainage, waste water drainage, fresh water, gas supply and other hydraulic services are to be designed and constructed in accordance with the Local Authority, Statutory Authority, Hydraulic and/or Civil Works Consultant's requirements.	D? ## Door (? : Level ##: Number refer to schedule) Dr Door DA Development Application / Delayed action (door closer) Demo Demolish and remove from site Det(s) Detail(s) Dia Diameter Dim Dimension Doc(s) Documentation, documents DP Down pipe DPC Damp proof course Drw(s) Drawer(s) Dwg(s) Drawing / drawings EA Equal angle EG Eaves Gutter EJ Expansion joint to aprvd detail Elec Electrical Elev Elevation Eng'(s) Engineer'(s) Eq Equal Est Estimated Ex From / out of... or existing when referring to building elements Existing Ext External / exterior FCL Finished ceiling level FE Fire escape / Fire extinguisher FF## Floor finish (## refer to applicable schedule) FFL Finished floor level FG Fixed glazing FGL Finished ground level FH Fire hydrant FHR Fire Hose Reel Fix Fixing / fixings FJ Floor joist Fla Flashing Flr Floor FR Fire rated Frm Frame / framing FT## Floor type (## refer to schedule) Fur Furring (channel) Fxd Fixed GA General Arrangement Gd Grid... GD Grated Drain Gla## Glass / Glazing type reference (## refer to schedule) Gnd Ground Hd Head Hdl Handle Hor Horizontal HR Hand Rail Ht Height Hyd Hydraulic IAW In accordance with Incl Include / included / inclusive Ind Indicator Ins Insulation / Inside / Inside of... Inst Instruction(s) Int Internal IO Inspection opening Lev Level Lvr Louvre / louvered Man'(s) Manufacturer'(s) Max Maximum Mech Mechanical Min Minimum MR Mirror rev / moisture resistant Mtr Mitre / Mitred NA Not applicable NCC National Construction Code Nom Nominal NTS Not to scale OA Overall Obs Obscure OH Over head Orig Original (building fabric) OS Outside / Outside of... / On site Own Owner / Proprietor / Principal PA Project Administrator Pav Paving PCA Principal certifying authority PF Selected paint finish PFC Parallel flange channel Plt Plate PM Project Manager Prelim Preliminary	Proj Project Prop Proposed Prt Part / Partition Qty Quantity Rad Radius RCP(s) Reflected Ceiling Plan(s) Reb Rebate Recyc Demolish, stockpile and recycle into the works as req Ref Reference, refer (to...) Rem Remove, take care to avoid damage to substrate materials and structure, and dispose of Reo Reinforced / reinforcement Rep Replace, UNO to match exst Req(s) Required / Requirement(s) Rev Revision RFR Recover without damage, protect, store and prepare for reuse within the works as req RFO Recover without damage for the Owner to remove HS Rectangular hollow section RI Rough in (cap and/or terminate as req for future connection) RL Reduced / relative level (to datum) RT## Roof type (## refer to schedule) RWO Rain Water Outlet S96 Section 96 Application to amend a Development Consent Schd(s) Schedule(s) SDr Surface drainage Sect Section Sel Selected... typically referring to a finish to be selected by the architect, client, PA or PM Serv(s) Services SFL Structural floor level SHS Square hollow section Sk Sketch Skt Skirting SI Seal / sealant SL Surface level / Shadow-line Slid Sliding Smk Smoke SN Stair nosing Sof Soffit Spec(s) Specification(s) SR Service(s) riser SSD Sub-surface drainage SSL Structural slab level Std Standard Struct Structure / Structural SWP Storm water pit TBA To be advised (UNO generally by the PA, Arch and/or Owner) TBC To be confirmed (UNO generally by the Contractor) TGSI Tactile ground surface indicators Tmb Timber TO Top of... TOG Top of gutter TOK Top of kerb Tol Tolerance TOR Top of ramp TOS Top of stair TOW Top of wall Tr Tree Typ Typical UA Unequal angle UB Universal beam UC Universal column / under cut UG Under ground UNO Unless noted otherwise US Underside VB Vapor barrier Vert Vertical W With W? ## Window, Glazing and/or Shop Front element (? : Level ##: Number refer to schedule) Win Window WF## Wall finish (## refer to schedule) WO Without WP Water proof WPM Water proof membrane WT## Wall type (## refer to schedule)
Coordination Where applicable refer to and coordinate information contained in the architectural drawings, and the documentation of other consultants. Notify discrepancies between architectural and/or other consultant's documentation for direction prior to proceeding with the affected part of the works.	Services (existing & proposed) Confirm location of existing under and above-ground services and coordinate with the relevant service authority to ensure that services are handled in accordance with the relevant authorities instructions prior to commencement of demolition, excavation and/or construction works.		
Specifications and Schedules Where applicable refer to and coordinate with relevant Specifications and Schedules. Written specifications and schedules take precedence to the extent of any discrepancy. Notify discrepancies between documents for direction prior to proceeding with the affected part of the works.	Levels Levels shown are consistent with the datum and benchmarks shown on the associated detail survey. In most instances the surveyed levels will be indicated relative to Australian Height Datum. However the existing site levels and datum are to be confirmed on site with reference to the site survey documents.		
Detail Drawings Unless noted otherwise, refer to detail drawings for set-out information. Drawings at larger scales take precedence over drawings at smaller scales to the extent of any discrepancy. Notify discrepancies for direction prior to proceeding with the affected part of the works.	Interpretation "Provide" means to supply and install. "Required" means required by the contract documents or by the Local or Statutory Authorities. "Proprietary" means identifiable by naming the manufacturer, supplier, installer, trade name, brand name, catalogue or reference number.		
Execution of the works (Standards) Execute the works in compliance with the current edition of the Building Code of Australia (as amended), current editions of relevant Australian and other applicable published Standards and the relevant requirements of Local and Statutory Authorities.	Standard Abbreviations AAP Acoustic access panel Acst Acoustic Adj Adjustable / adjacent AFFL Above finished floor level Agmt Arrangement Amd(t) Amend(ed) / Amendment AP Access Panel Aprv(d/l) Approved / Approval Aprx Approximate Arc Architrave Arch Architect AS Australian Standard Avg Average AWC Accessible water closet Awn Awning Bal Balustrade Bat(s) Batten(s) BCA Building Code of Australia Bdy (Property) Boundary BG Box Gutter to detail Bhd Bulkhead Bldg Building BOR Bottom of ramp BOS Bottom of stair CC Construction certificate Ceil Ceiling Chg(d) Change / changed Chk Check Chnl Channel CJ Control joint / Construction joint to aprvd detail / Ceiling joist CL Centre line Clr Clear / Clearance / closer Cnr Corner Col Colour / Column Con'(s) Consultant'(s) Cont'(s) Contractor'(s) Cor Corrugated / Cornice COS Check / confirm on site CP Cover plate Crs Centres Csk Countersink CT## Ceiling type reference (## refer to applicable schedule) Ctr Centre / contour		
Units of measurement Unless noted otherwise: - Dimensions are shown in millimetres; and - Levels are shown in meters			
To detail Where a notation refers to an item as "...to detail" the applicable item is to be in accordance with the relevant detail to be provided by the Architect.			
Materials handling and storage Unless noted otherwise material, fixtures and fittings are to be handled, stored and installed, commissioned and maintained as applicable in accordance with the Manufacturer's current written instructions.			
Structure Foundations, footings, reinforced concrete, slabs, retaining walls, framing, bracing, tie-down and other structural elements are to be designed and constructed in accordance with the Structural Engineer's details and specifications.			



Drawing List - Development Application			
Sheet Number	Sheet Name	Revision	Revision Date
49HE001-0001	Title Sheet and Drawing List	F	13/08/19
49HE001-0502	Site Plan	E	30/07/19
49HE001-1100	General Arrangement Plan - Lower Concourse - Existing & Demo	E	13/08/19
49HE001-1101	General Arrangement Plan - Lower Concourse - Proposed	F	13/08/19
49HE001-1102	General Arrangement Plan - Upper Concourse - Existing	D	26/06/19
49HE001-1103	General Arrangement Plan - Upper Concourse - Proposed	E	30/07/19
49HE001-3100	General Arrangement Elevation	E	30/07/19
49HE001-3200	Detail Plan - Opera Bar Glazing Line - Existing & Demo	D	26/06/19
49HE001-3202	Detail Plan - Opera Bar Glazing Line - Proposed	D	26/06/19
49HE001-3205	Detail Elevation - Opera Bar Glazing	D	26/06/19
49HE001-3220	Detail Plan - Shade Structure	E	30/07/19
49HE001-3221	Shade Structure - Reflected Ceiling Plan	E	30/07/19
49HE001-3225	Detail Section - Shade Structure	D	26/06/19
49HE001-3230	Detail Elevation - Shade Structure	C	26/06/19
49HE001-3231	Detail Section - Shade Structure Services	C	26/06/19

Rev	Date	Amendments
01	02/04/19	For Information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue
E	30/07/19	Development Application Issue
F	13/08/19	Development Application Issue

H

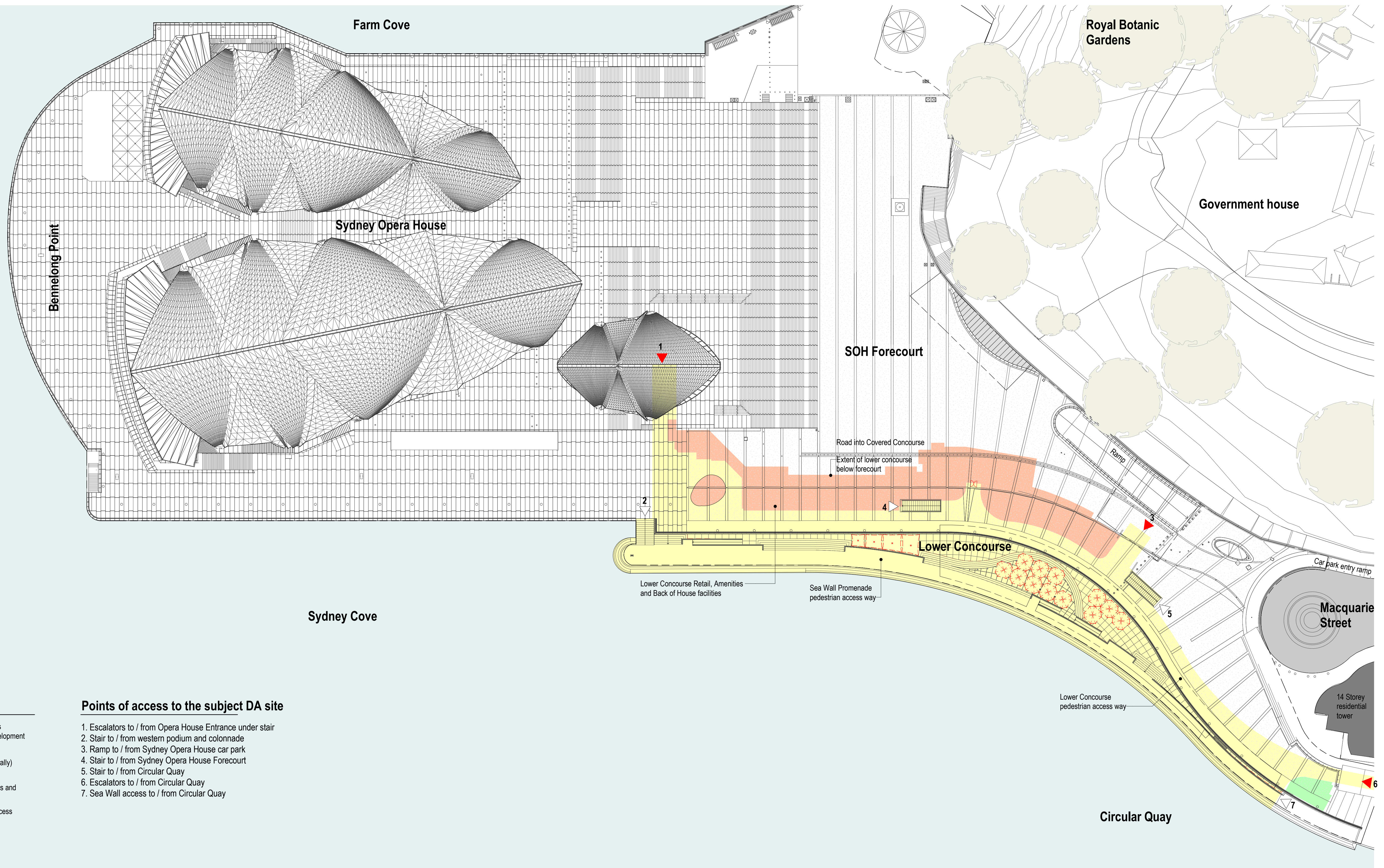
E

ARCHITECTS

Suite 35 Level 2 94 Oxford Street
Darlinghurst NSW 2010 Australia
+61 2 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 89056638227
Nominated Architect: Glenn Cunningham #6415

Development Application

Scale @ A1	Drawn by	Checked by
Scale @ A3	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date
Project No.	2466	Zone
Discipline	LC	
Drawing No.	49HE001-0001	Revision
		F



Site Plan Legend

The extents of the plan hatched as follows represents the physical scope of this Development Application.

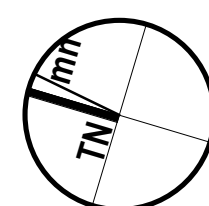
- Proposed new building fabric (generally)
- Lower Concourse Retail, Amenities and BOH facilities
- Sea Wall Promenade pedestrian access way and external seating area
- Lower Concourse WC

Points of access to the subject DA site

- Escalators to / from Opera House Entrance under stair
- Stair to / from western podium and colonnade
- Ramp to / from Sydney Opera House car park
- Stair to / from Sydney Opera House Forecourt
- Stair to / from Circular Quay
- Escalators to / from Circular Quay
- Sea Wall access to / from Circular Quay

General Notes

The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.



Rev	Date	Amendments
01	02/04/19	For information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue
E	30/07/19	Development Application Issue
F	14/08/19	Development Application

Rev	Date	Amendments
-----	------	------------

**H
&E**
ARCHITECTS

Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8905638227
Nominated Architect: Glenn Cunningham #6415

Project
Sydney Opera House Lower Concourse Improvements

Client
Sydney Opera House Trust

Location
Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

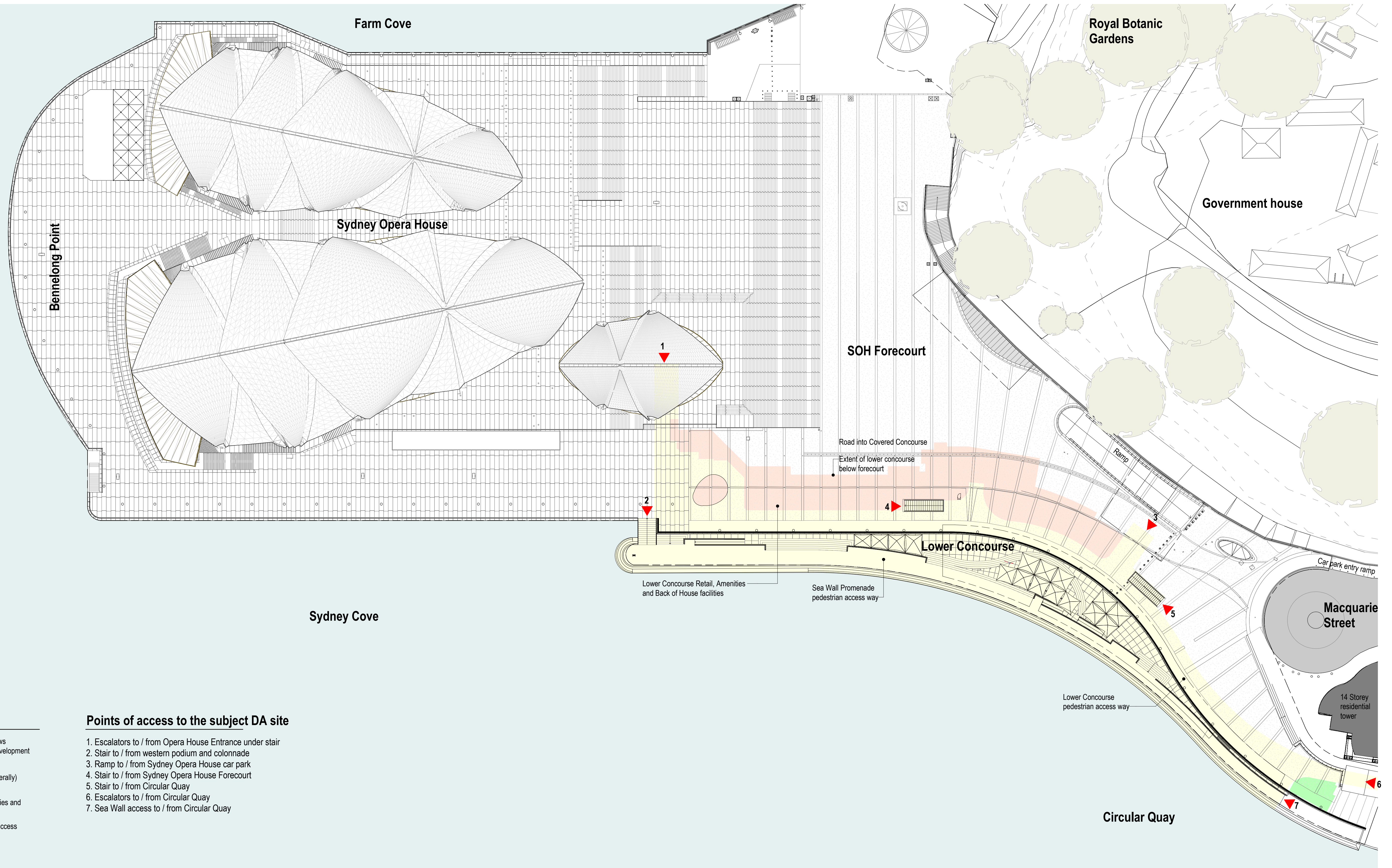
Drawing
Site Plan - Existing

0M 10 20 30 40 50

Development Application

Scale @ A1	1:500	Drawn by	Checked by
Scale @ A3	1:1000	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	14/08/19
Project No.	2466	Zone	LC
Drawing No.	49HE001-0502	Discipline	
		Revision	F

14/08/2019 3:50:44 PM



Site Plan Legend

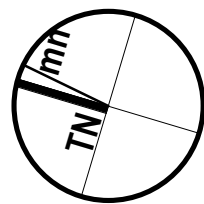
The extents of the plan hatched as follows represents the physical scope of this Development Application.

- Proposed new building fabric (generally)
- Lower Concourse Retail, Ammenities and BOH facilities
- Sea Wall Promenade pedestrian access way and external seating area
- Lower Concourse WC

Points of access to the subject DA site

- Escalators to / from Opera House Entrance under stair
- Stair to / from western podium and colonnade
- Ramp to / from Sydney Opera House car park
- Stair to / from Sydney Opera House Forecourt
- Stair to / from Circular Quay
- Escalators to / from Circular Quay
- Sea Wall access to / from Circular Quay

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.



Rev	Date	Amendments
A	14/08/19	Development Application

Rev	Date	Amendments
-----	------	------------

**H
&E**
ARCHITECTS

Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8905638227
Nominated Architect: Glenn Cunningham #6415

Project
Sydney Opera House Lower Concourse Improvements

Client
Sydney Opera House Trust

Location
Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

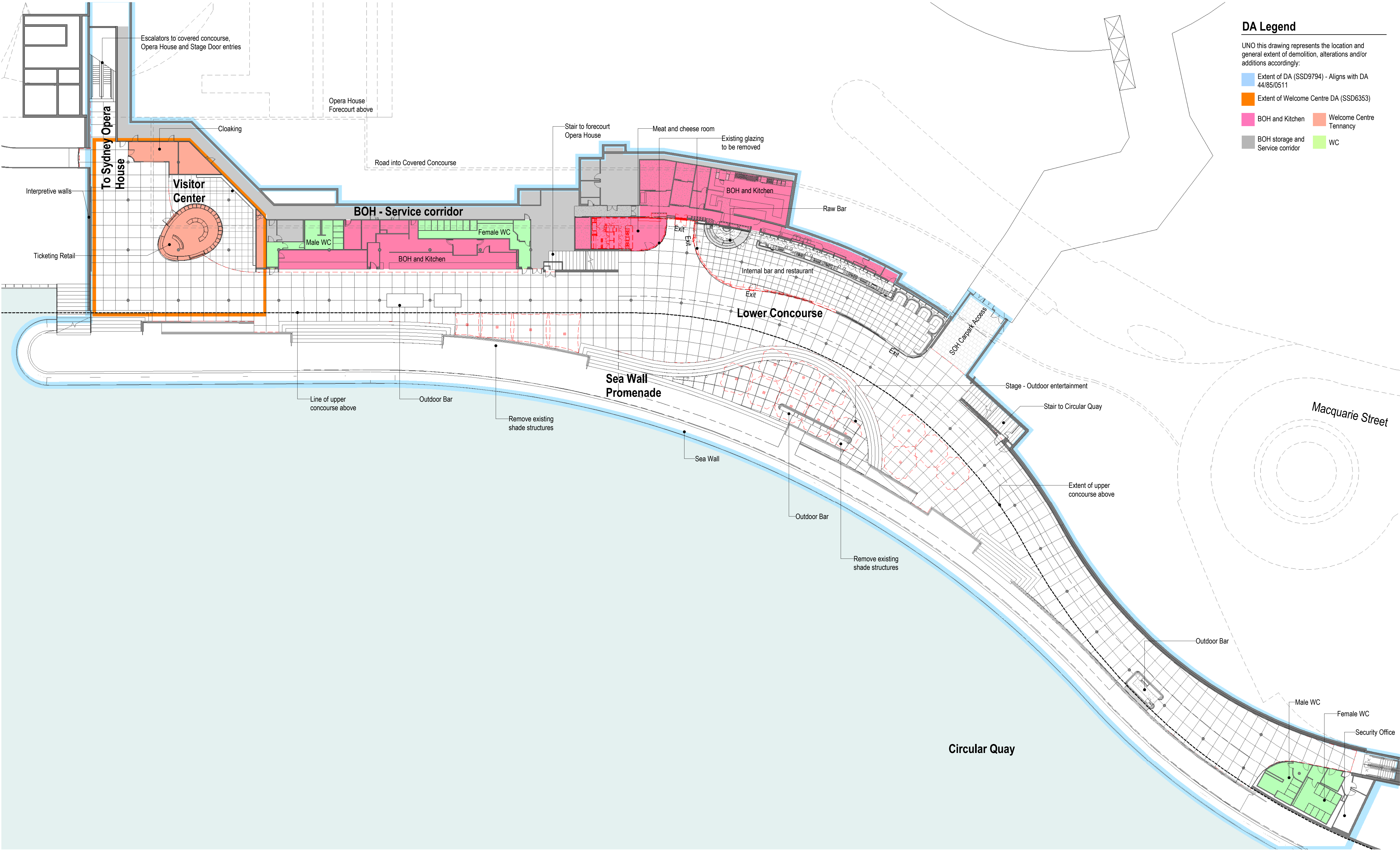
Drawing
Site Plan - Proposed



Development Application

Scale @ A1	1:500	Drawn by	Checked by
Scale @ A3	1:1000	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	14/08/19
Project No.	2466	Zone	LC
Drawing No.	49HE001-0503	Revision	A

14/08/2019 3:56:23 PM



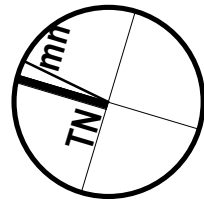
DA Legend

- UNO this drawing represents the location and general extent of demolition, alterations and/or additions accordingly:
- Extent of DA (SSD9794) - Aligns with DA 44/85/0511
 - Extent of Welcome Centre DA (SSD6353)
 - BOH and Kitchen
 - BOH storage and Service corridor
 - Welcome Centre Tennancy
 - WC

General Notes

The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.

This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.



Rev	Date	Amendments
01	02/04/19	For information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue
E	13/08/19	Development Application Issue

Rev	Date	Amendments
-----	------	------------



Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300

Humphrey & Edwards Pty Ltd | ABN 88056638227
Nominated Architect: Glenn Cunningham #6415

Project
Sydney Opera House Lower Concourse Improvements

Client
Sydney Opera House Trust

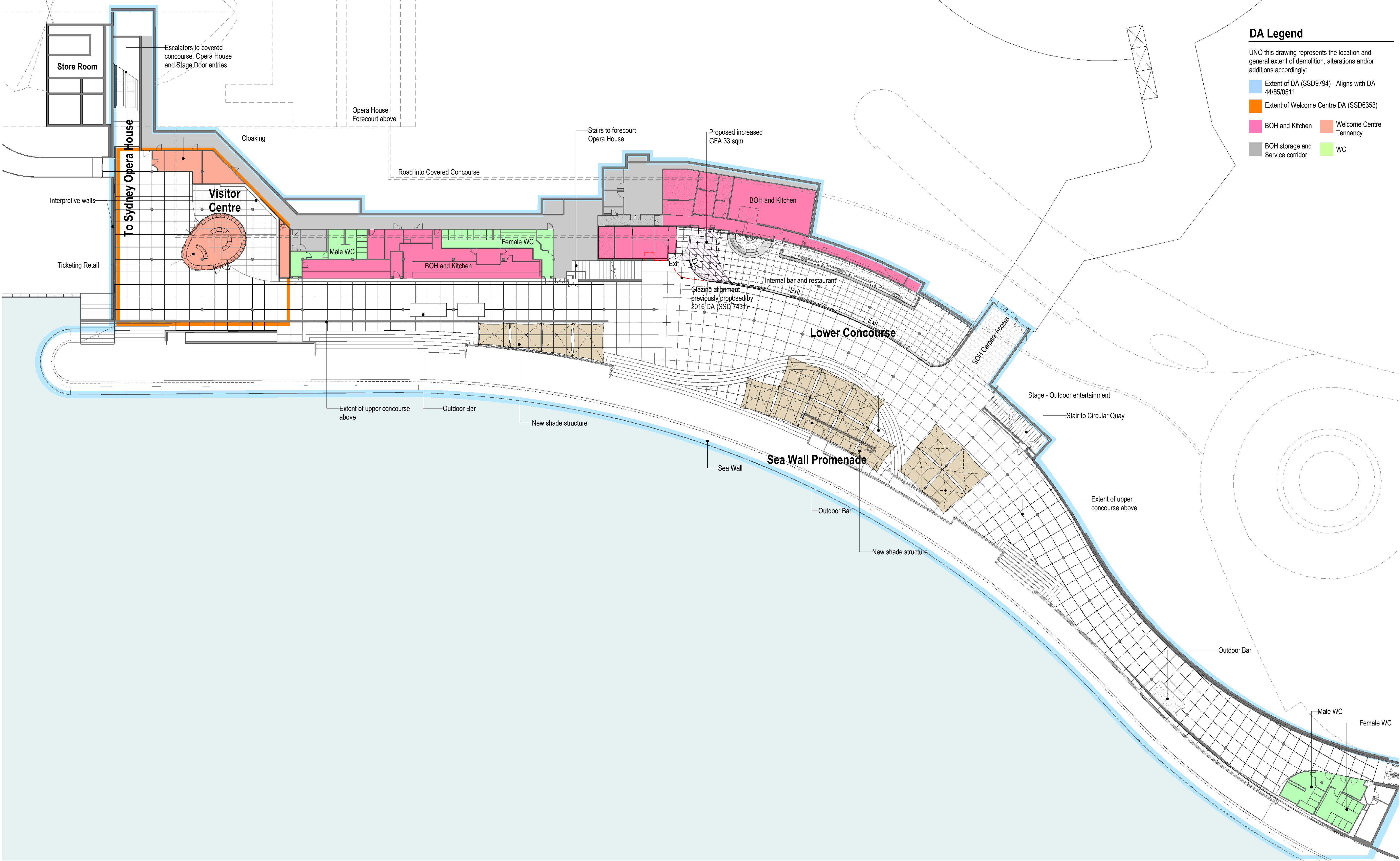
Location
Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

Drawing
General Arrangement Plan - Lower Concourse - Existing & Demo



Development Application

Scale @ A1	1:250	Drawn by	Checked by
Scale @ A3	1:500	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	13/08/19
Project No.	2466	Zone	LC
Drawing No.	49HE001-1100	Revision	E



DA Legend

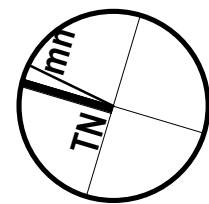
UNO this drawing represents the location and general extent of demolition, alterations and/or additions accordingly:

- Extent of DA (SSD9794) - Aligns with DA 44/85/0511
- Extent of Welcome Centre DA (SSD6353)
- BOH and Kitchen
- Welcome Centre Tennancy
- BOH storage and Service corridor
- WC

General Notes

The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.

This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.



Rev	Date	Amendments
01	02/04/19	For Information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue
E	30/07/19	Development Application Issue
F	13/08/19	Development Application Issue

Rev	Date	Amendments
-----	------	------------

H&E
ARCHITECTS

Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300

Humphrey & Edwards Pty Ltd | ABN 8905638227
Nominated Architect: Glenn Cunningham #6415

Project
Sydney Opera House Lower Concourse Improvements

Client
Sydney Opera House Trust

Location
Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

Drawing
General Arrangement Plan - Lower Concourse - Proposed

0M 2.5 5 7.5 10 12.5

Development Application

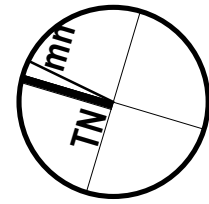
Scale @ A1	1:250	Drawn by	Checked by
Scale @ A3	1:500	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	13/08/19
Project No.	2466	Zone	LC
Drawing No.	49HE001-1101	Revision	F

13/08/2019 3:02:28 PM



Development Application

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.



Rev	Date	Amendments
01	02/04/19	For Information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue

Rev	Date	Amendments



Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8805638227
Nominated Architect: Glenn Cunningham #6415

Project Sydney Opera House Lower Concourse Improvements
Client Sydney Opera House Trust

Location Lower Concourse, Sydney Opera House, Bennelong Point, Sydney
Drawing General Arrangement Plan - Upper Concourse - Existing

Scale @ A1 1:250	Drawn by KR	Checked by GC
Scale @ A3 1:500	Project Issue Date 16/03/2015	Sheet Issue Date 26/06/19
Project No. 2466	Zone LC	Discipline
Drawing No. 49HE001-1102	Revision D	

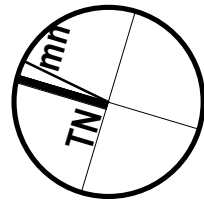


Circular Quay



Development Application

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.



Rev	Date	Amendments
01	02/04/19	For Information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue
E	30/07/19	Development Application Issue

Rev	Date	Amendments

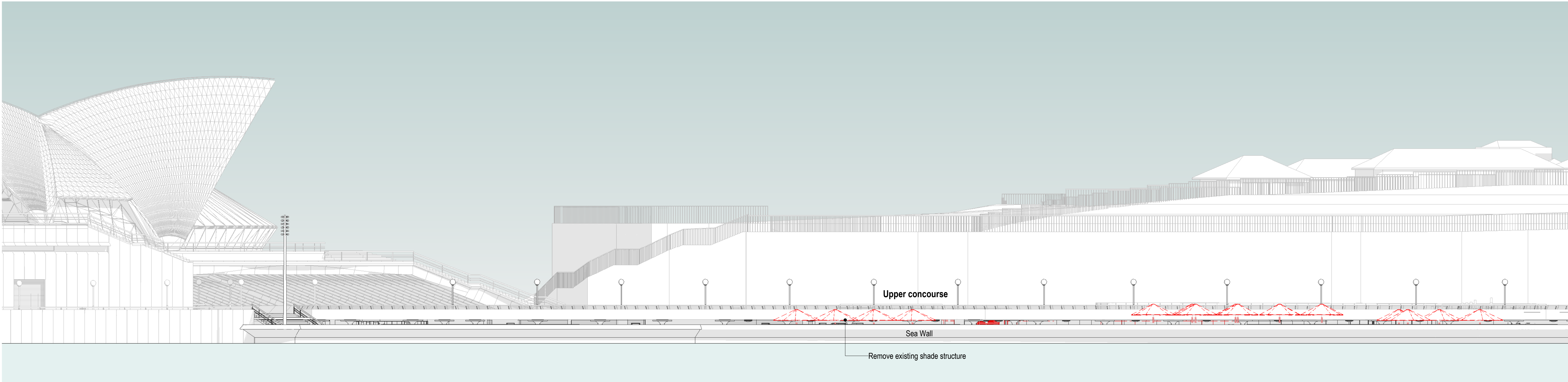


Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8905636227
Nominated Architect: Glenn Cunningham #6415

Project Sydney Opera House Lower Concourse Improvements
Client Sydney Opera House Trust

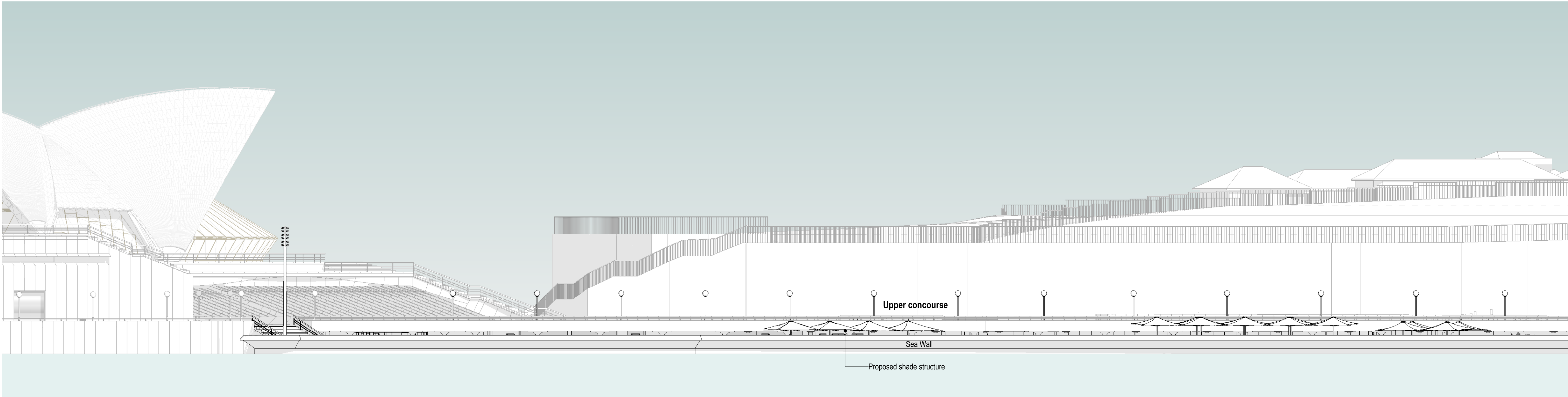
Location Lower Concourse, Sydney Opera House, Bennelong Point, Sydney
Drawing General Arrangement Plan - Upper Concourse - Proposed

Scale @ A1 1:250	Drawn by KR	Checked by GC
Scale @ A3 1:500	Project Issue Date 16/03/2015	Sheet Issue Date 30/07/19
Project No. 2466	Zone LC	Discipline
Drawing No. 49HE001-1103	Revision E	



2 Western Elevation (From Circular Quay) - Existing and Demo

1 : 200



1 Western Elevation (From Circular Quay) - Proposed

1 : 200



Development Application

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.

Rev	Date	Amendments
01	02/04/19	For information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue
E	30/07/19	Development Application Issue

Rev	Date	Amendments
-----	------	------------



Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8905638227
Nominated Architect: Glenn Cunningham #6415

Project
Sydney Opera House Lower Concourse Improvements

Client
Sydney Opera House Trust

Location
Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

Drawing
General Arrangement Elevation

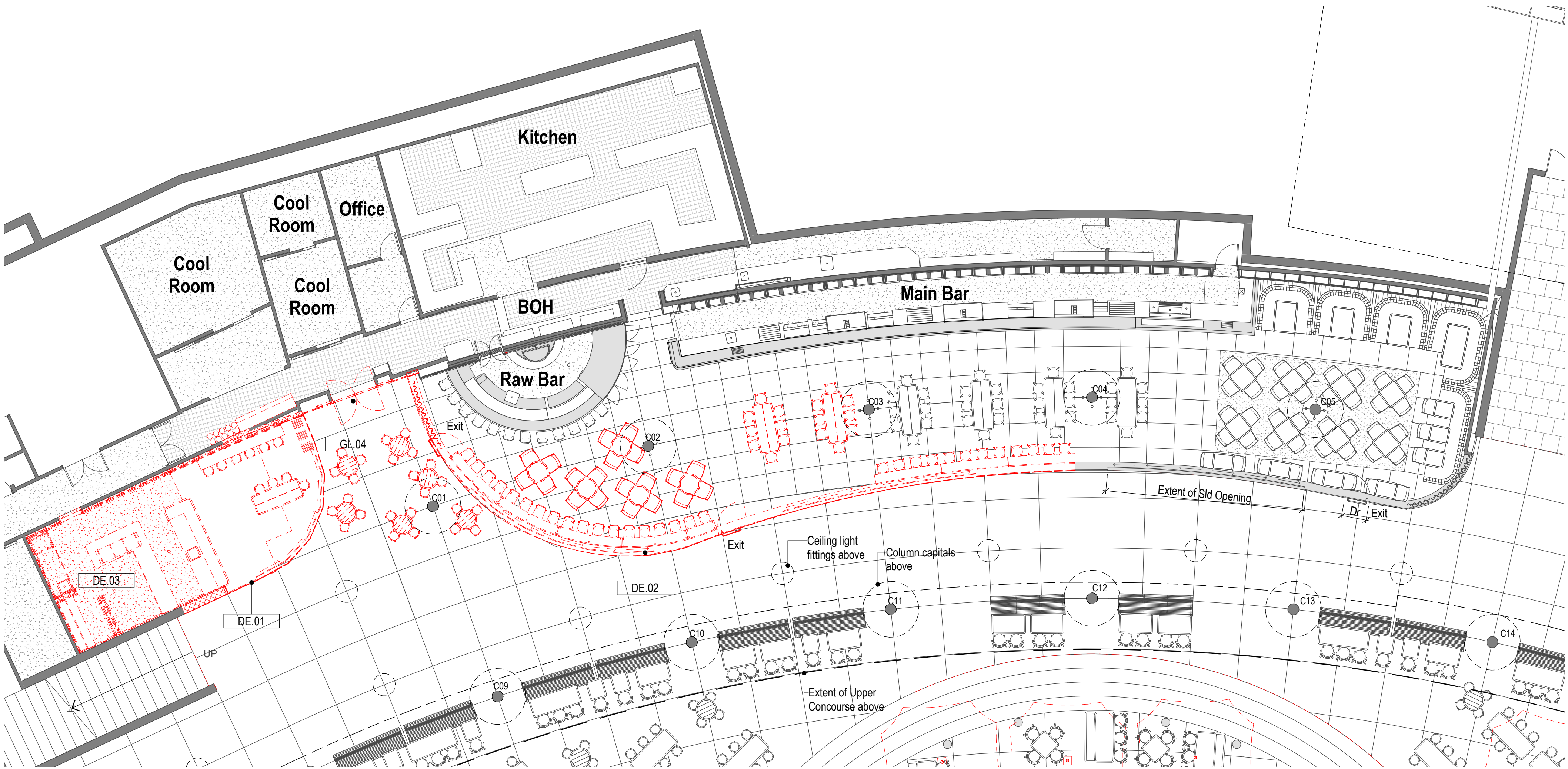
Scale @ A1	1:200	Drawn by	Checked by
Scale @ A3	1:400	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	30/07/19
Project No.	2466	Zone	LC
Drawing No.	49HE001-3100	Revision	E

30/07/2019 5:22:15 PM

Note:
Structure and sub-frame layout to be concentric and in alignment with the geometric set out of the existing granite pavers below. All structure to be in accordance with structural engineer's design and specification, in accordance with applicable codes and standards and to the approval of the Sydney Opera House Structural Engineers.

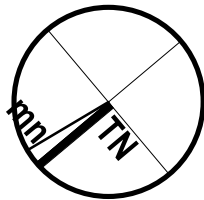
Specification Legend

Ref	Specification
DE.01	Demolish existing "Meat and Cheese Area" glazing line.
DE.02	Partially demolish part of the existing Main Bar area glazing.
DE.03	Demolish meat and cheese area fitout.
GL.04	Refurbish and modify existing bronze service door for new fire exit. Provide new matching frame to suit proposed configuration.



Development Application

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.



Rev	Date	Amendments
01	02/04/19	For information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue

Rev	Date	Amendments
-----	------	------------



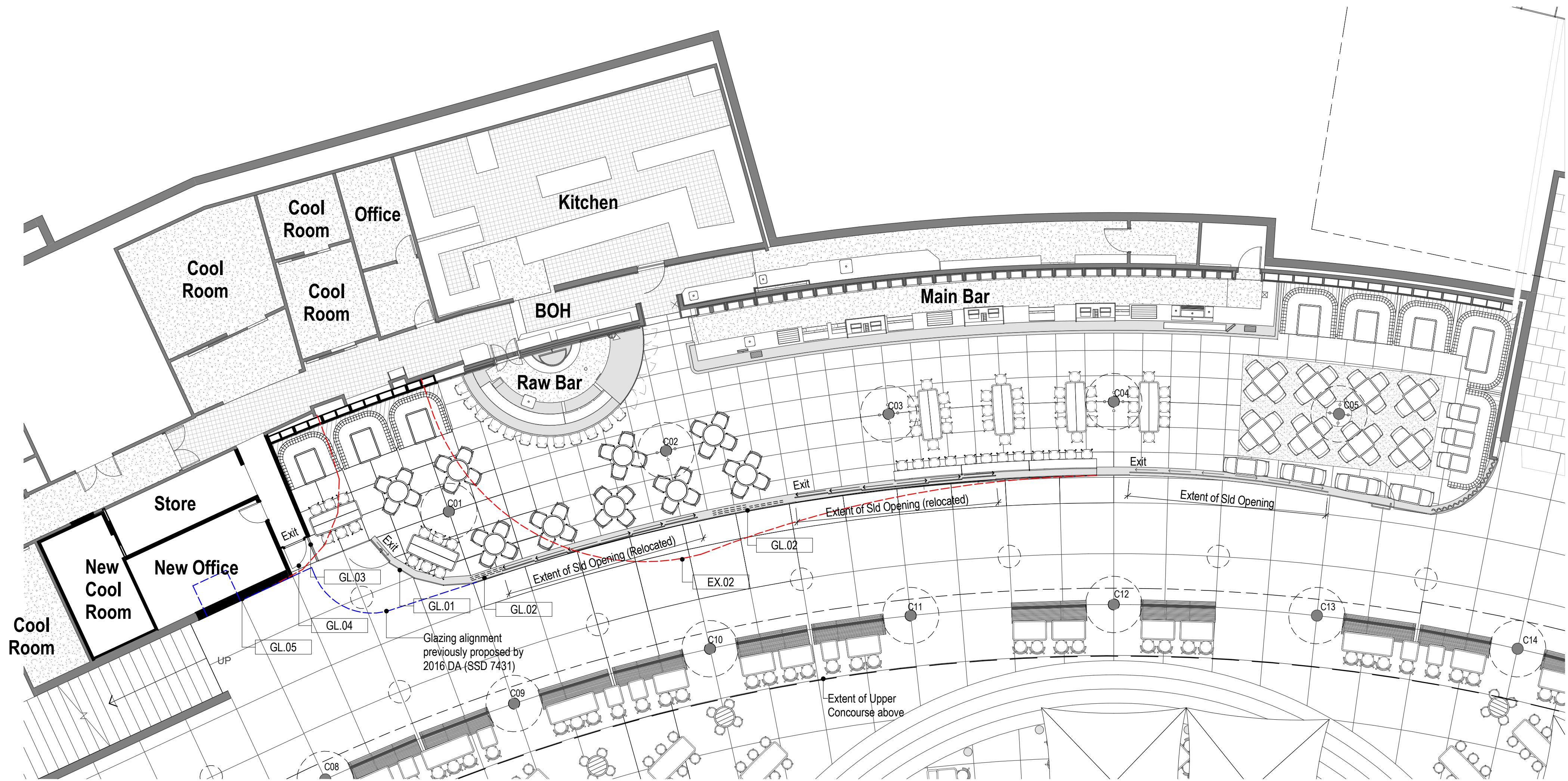
Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8805638227
Nominated Architect: Glenn Cunningham #6415

Project	Sydney Opera House Lower Concourse Improvements
Client	Sydney Opera House Trust

Location	Lower Concourse, Sydney Opera House, Bennelong Point, Sydney
Drawing	Detail Plan - Opera Bar Glazing Line - Existing & Demo

Scale @ A1	1:100	Drawn by	Checked by
Scale @ A3	1:200	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	26/06/19
Project No.	2466	Zone	LC
Drawing No.	49HE001-3200	Revision	D

Note:
Structure and sub-frame layout to be concentric and in alignment with the geometric set out of the existing granite pavers below. All structure to be in accordance with structural engineer's design and specification, in accordance with applicable codes and standards and to the approval of the Sydney Opera House Structural Engineers.

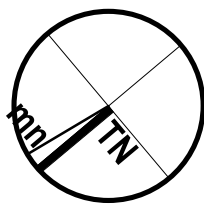


Specification Legend	
Ref	Specification
EX.02	Existing glazing line
GL.01	Proposed glazing line
GL.02	Stacking location for sliding glass panels (similar to existing)
GL.03	Extend full height glazing to match existing and return to solid brass door repositioned from existing fire exit
GL.04	Refurbish and modify existing bronze service door for new fire exit. Provide new matching frame to suit proposed configuration.
GL.05	Clad new wall in stone to match existing (full height) and return into fire door



Development Application

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.



Rev	Date	Amendments
01	02/04/19	For information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue

Rev	Date	Amendments
-----	------	------------



Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8905638227
Nominated Architect: Glenn Cunningham #6415

Project	Sydney Opera House Lower Concourse Improvements
Client	Sydney Opera House Trust

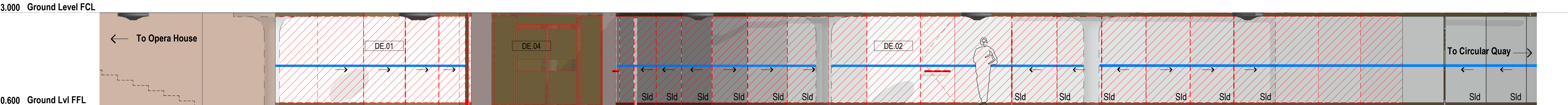
Location	Lower Concourse, Sydney Opera House, Bennelong Point, Sydney
Drawing	Detail Plan - Opera Bar Glazing Line - Proposed

Scale @ A1	1:100	Drawn by	KR	Checked by	GC
Scale @ A3	1:200				
Project Issue Date	16/03/2015	Sheet Issue Date	26/06/19		
Project No.	2466	Zone	LC	Discipline	
Drawing No.	49HE001-3202	Revision	D		

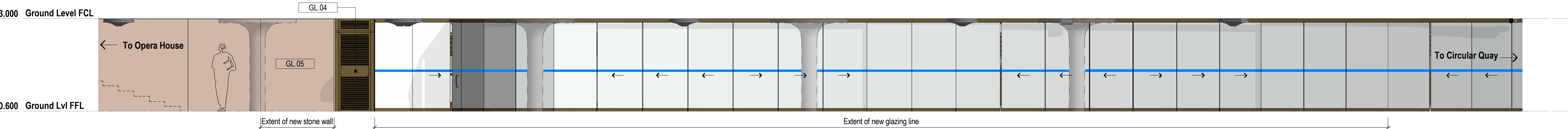
Note:
Structure and sub-frame layout to be concentric and in alignment with the geometric set out of the existing granite pavers below. All structure to be in accordance with structural engineer's design and specification, in accordance with applicable codes and standards and to the approval of the Sydney Opera House Structural Engineers.

Specification Legend

Ref	Specification
DE.01	Demolish existing "Meat and Cheese Area" glazing line.
DE.02	Partially demolish part of the existing Main Bar area glazing.
DE.04	Remove, salvage and protect from damage existing bronze doors and vents.
GL.04	Refurbish and modify existing bronze service door for new fire exit. Provide new matching frame to suit proposed configuration.
GL.05	Clad new wall in stone to match existing (full height) and return into fire door



1 Detail Elevation - Glazing Line - Existing and Demo
1 : 50



2 Detail Elevation - Glazing Line - Proposed
1 : 50



Development Application

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.

Rev	Date	Amendments
01	02/04/19	For Information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue

Rev	Date	Amendments
-----	------	------------



Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 89056638227
Nominated Architect: Glenn Cunningham #6415

Project
Sydney Opera House Lower Concourse Improvements

Client
Sydney Opera House Trust

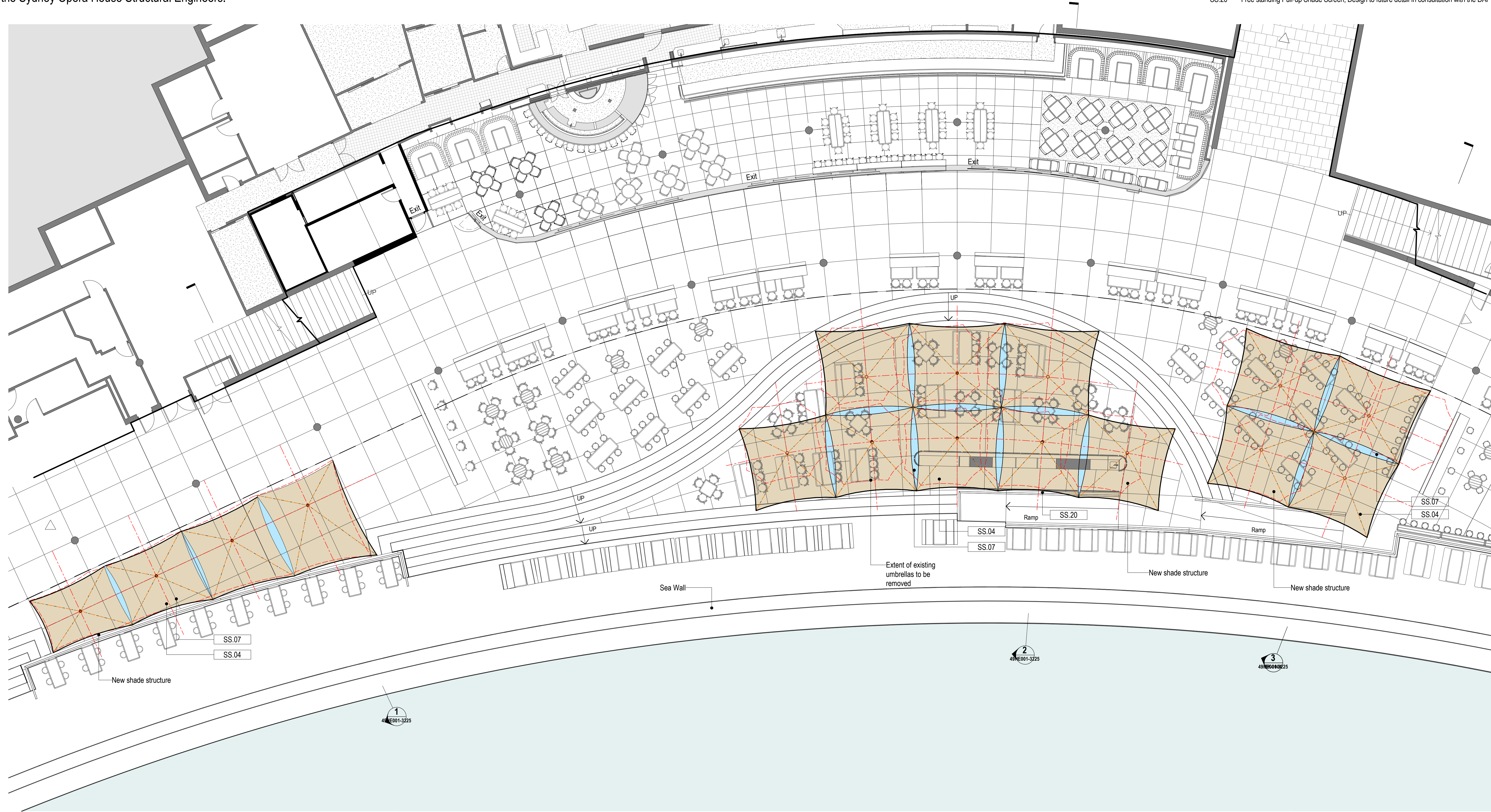
Location
Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

Drawing
Detail Elevation - Opera Bar Glazing

Scale @ A1	1:50	Drawn by	Checked by
Scale @ A3	1:100	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	26/06/19
Project No.	2466	Zone	LC
Drawing No.	49HE001-3205	Revision	D

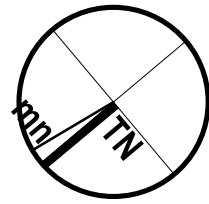
NOTE:
Structure and sub-frame layout to be concentric and in alignment with the geometric set out of the existing granite pavers below. All structure to be in accordance with structural engineer's design and specification, in accordance with applicable codes and standards and to the approval of the Sydney Opera House Structural Engineers.

Specification Legend	
Ref	Specification
SS.04	Tensile fabric equal to Serge Ferrari Soltis, colour closest approved match to Dulux Coconut Husk, to be designed and installed to approved details.
SS.07	Tensile fabric, Serge Ferrari 402, Translucent infill between umbrella elements as indicated on plan.
SS.20	Free standing Pull-up Shade Screen, Design to future detail in consultation with the DAP



Development Application

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.



Rev	Date	Amendments
01	02/04/19	For information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue
E	30/07/19	Development Application Issue

Rev	Date	Amendments

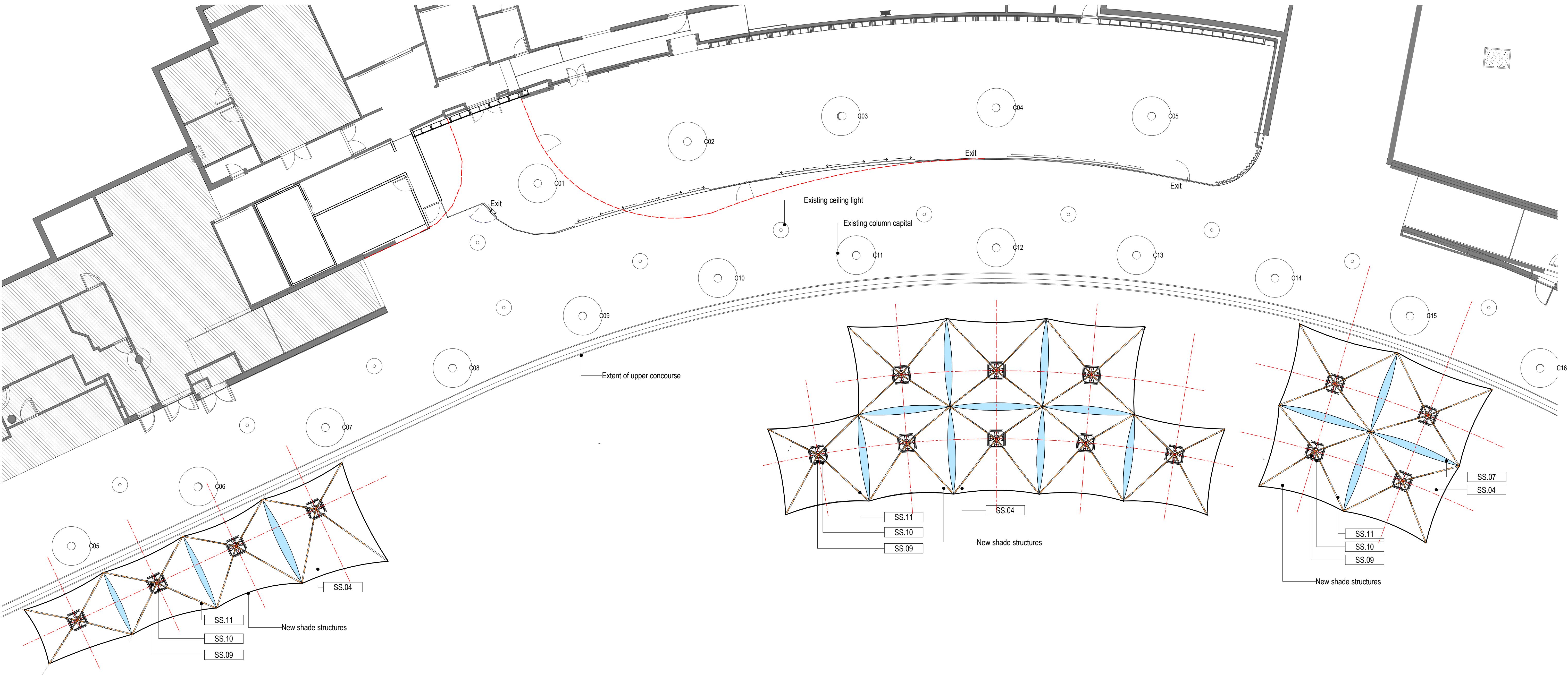


Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8905638227
Nominated Architect: Glenn Cunningham #6415

Project	Sydney Opera House Lower Concourse Improvements
Client	Sydney Opera House Trust

Location	Lower Concourse, Sydney Opera House, Bennelong Point, Sydney
Drawing	Detail Plan - Shade Structure

Scale @ A1	1:100	Drawn by	KR	Checked by	GC
Scale @ A3	1:200				
Project Issue Date	16/03/2015	Sheet Issue Date	30/07/19		
Project No.	2466	Zone	LC	Discipline	
Drawing No.	49HE001-3220	Revision	E		



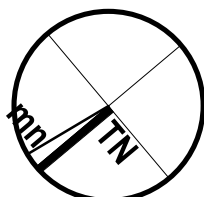
Specification Legend

Ref	Specification
SS.04	Tensile fabric equal to Serge Ferrari Soltis, colour closest approved match to Dulux Coconut Husk, to be designed and installed to approved details.
SS.07	Tensile fabric, Serge Ferrari 402, Translucent infill between umbrella elements as indicated on plan.
SS.09	Indicative speaker locations. Speaker similar to void indigo 6 pro with colour matched finish (to dulux "coconut husk" with adjustable mounting brackets. Location, specification and configuration TBC with acoustic and audio-visual consultants. Speakers are to generally be directed away from residential apartments to the south and downwards from their mounting position towards patrons.
SS.10	Infra-red electric radiant heating with variable control and zoned wiring. Specifications and configuration TBC, with experienced contractors.
SS.11	Strip led up-lighting to the underside of the shade structure fabric fabricated from proprietary suitably weather-proof strip led fitted within proprietary aluminum housing with integrated acrylic diffusers to effect even distribution of light over the underside of the canopy. Fit led strip in 2 or 3 independently controlled sections to facilitated graduated illumination of the underside of the fabric to compensate for the variable proximity of the strip light to the fabric.



Development Application

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.



Rev	Date	Amendments
01	02/04/19	For information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue
E	30/07/19	Development Application Issue

Rev	Date	Amendments
-----	------	------------



Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8905638227
Nominated Architect: Glenn Cunningham #6415

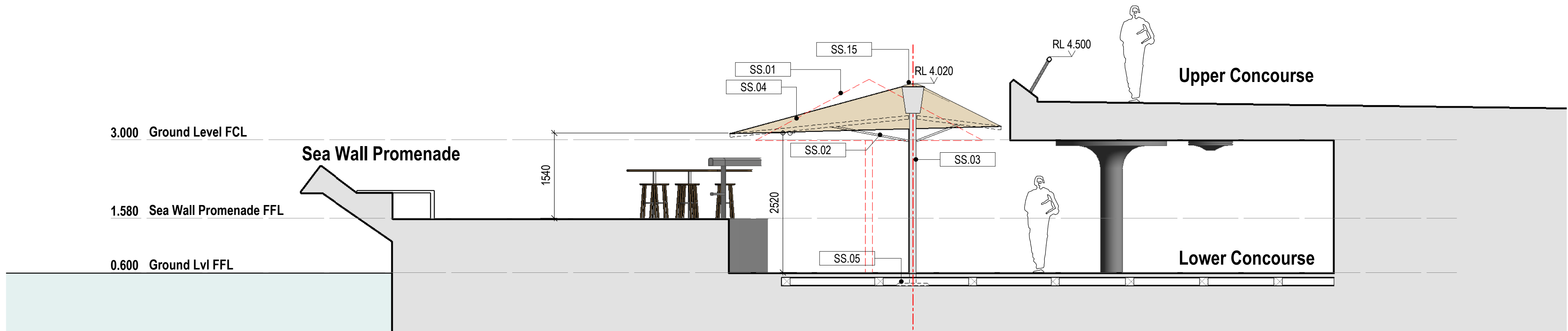
Project
Sydney Opera House Lower Concourse Improvements

Client
Sydney Opera House Trust

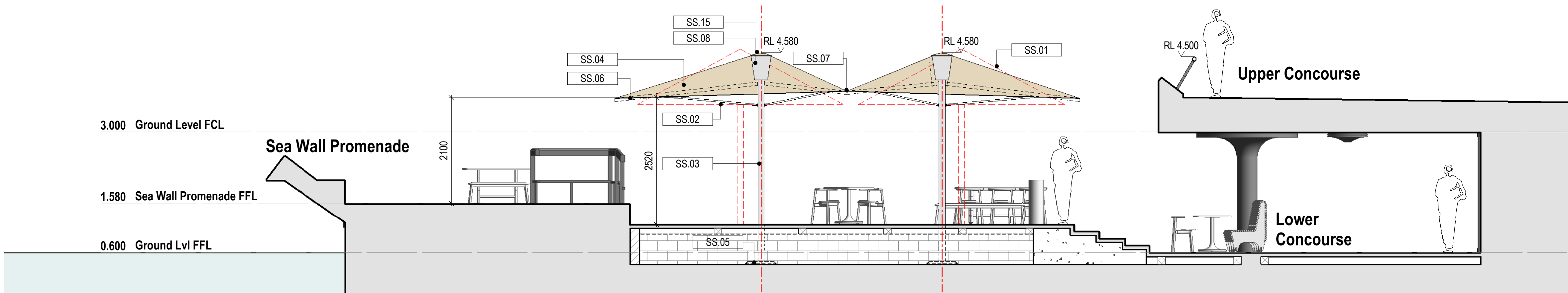
Location
Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

Drawing
Shade Structure - Reflected Ceiling Plan

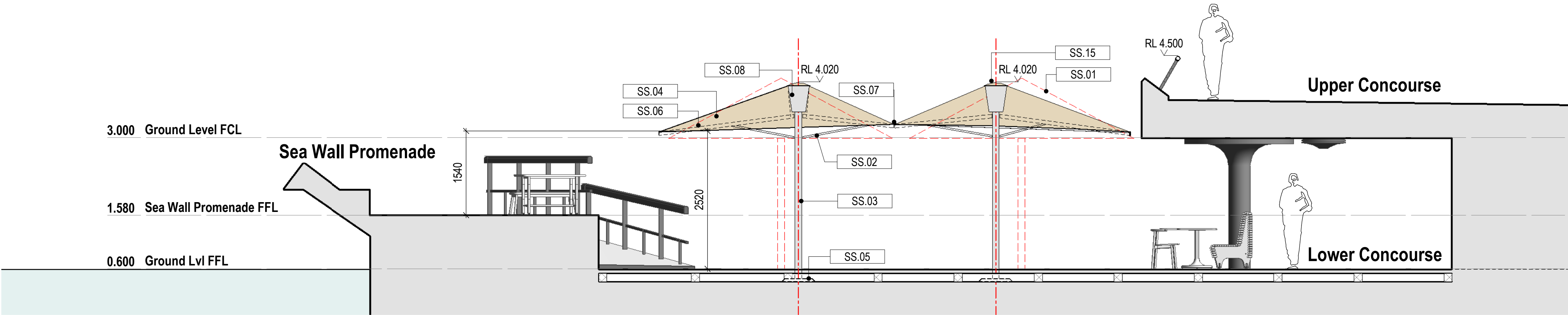
Scale @ A1	1:100	Drawn by	Checked by
Scale @ A3	1:200	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	30/07/19
Project No.	2466	Zone	LC
Drawing No.	49HE001-3221	Revision	E



1 Shade Structure Section 1
1 : 50



2 Shade Structure Section 2
1 : 50



3 Shade Structure Section 3
1 : 50

Note:
Structure and sub-frame layout to be concentric and in alignment with the geometric set out of the existing granite pavers below. All structure to be in accordance with structural engineer's design and specification, in accordance with applicable codes and standards and to the approval of the Sydney Opera House Structural Engineers.

General Notes Detail Shade Structure:
All metal works to be No.4 finished 'inished' Stainless Steel consistent with an approved sample.

Specification Legend	
Ref	Specification
SS.01	Existing umbrellas to be removed. Patch and repair ex pavers where fixings are removed to an approved standard.
SS.02	SS Shade structure struts designed and fabricated to approved detail.
SS.03	SS shade structure masts designed and fabricated to approved detail.
SS.04	Tensile fabric equal to Serge Ferrari Soltis, colour closest approved match to Dulux Coconut Husk, to be designed and installed to approved details.
SS.05	SS base plate and fixing in accordance with the structural engineer's design and specification
SS.06	SS shade structure outriggers designed and fabricated to approved detail. Powder coat finished. Colour: closest approved match to dulux coconut husk.
SS.07	Tensile fabric, Serge Ferrari 402, Translucent infill between umbrella elements as indicated on plan.
SS.08	Removable approved perforated stainless sheet panels with discreet secure SS fixings designed to conceal services infrastructure including GPS table location system, wifi extenders, lighting drivers, speaker connections, CCTV connections, heater junctions etc as required. Design to facilitate the installation and provide access for the ongoing maintenance of services.
SS.15	SS column cap to manufacturers detail with integrated structural connection to columns. Powder coat finish colour: closest approved match to dulux 'coconut husk'.



Development Application

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.

Rev	Date	Amendments
01	02/04/19	For information
02	27/05/19	Preliminary
03	25/06/19	Development Application
D	26/06/19	Development Application Issue

Rev	Date	Amendments
-----	------	------------

**H
&E**
ARCHITECTS

Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8805638227
Nominated Architect: Glenn Cunningham #6415

Project
Sydney Opera House Lower Concourse Improvements

Client
Sydney Opera House Trust

Location
Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

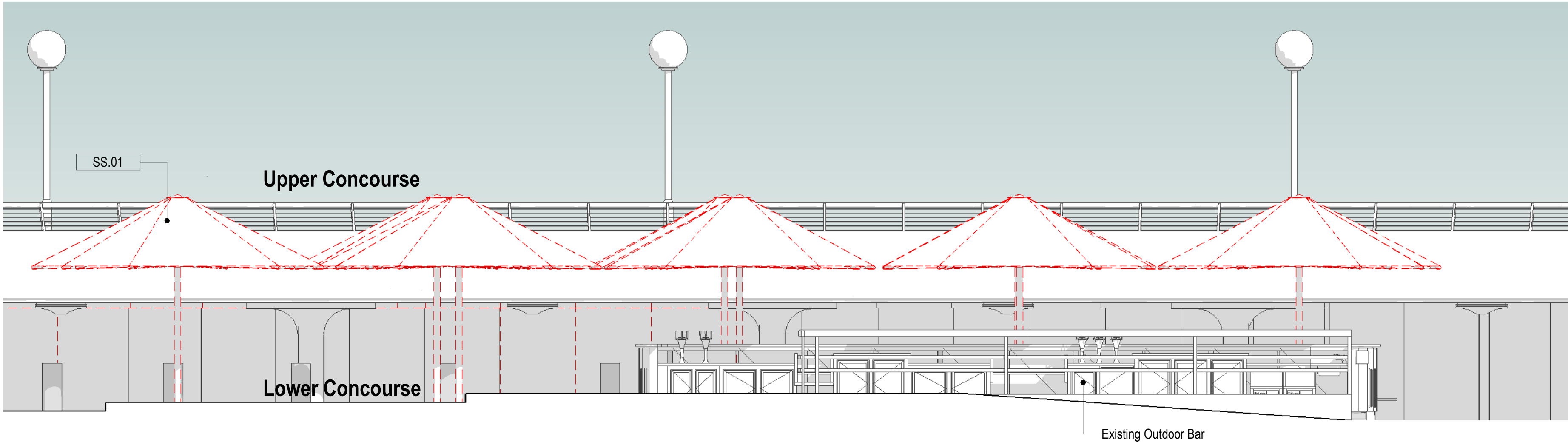
Drawing
Detail Section - Shade Structure

Scale @ A1	1:50	Drawn by	Checked by
Scale @ A3	1:100	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	26/06/19
Project No.	2466	Zone	LC
Drawing No.	49HE001-3225	Revision	D

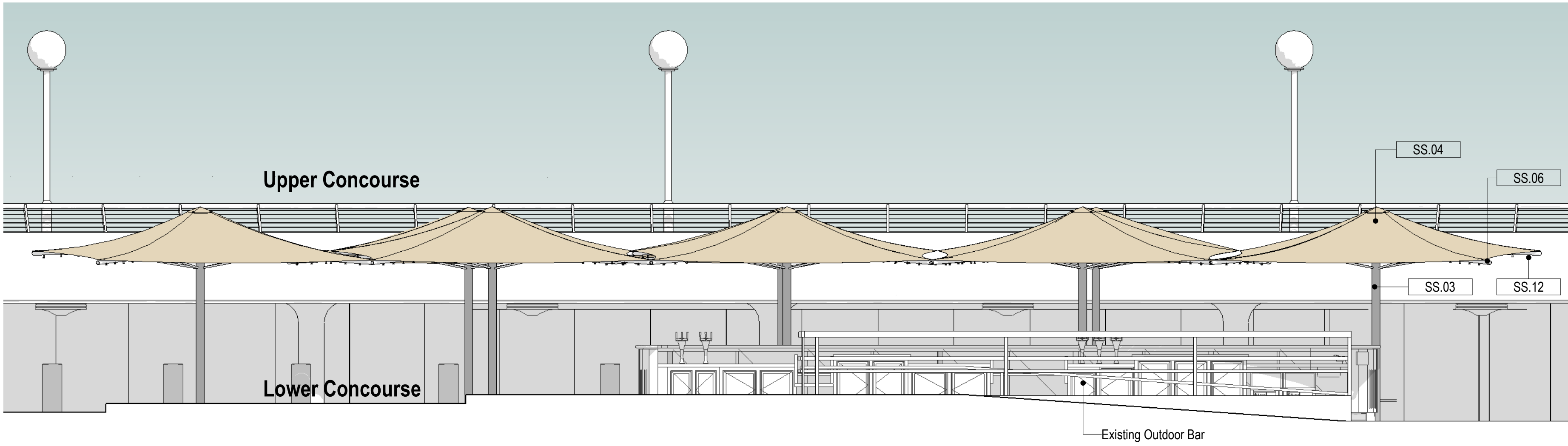
Note:
Structure and sub-frame layout to be concentric and in alignment with the geometric set out of the existing granite pavers below. All structure to be in accordance with structural engineer's design and specification, in accordance with applicable codes and standards and to the approval of the Sydney Opera House Structural Engineers.

General Notes Detail Shade Structure:
All metal works to be No.4 finished 'linished' Stainless Steel consistent with an approved sample.

Specification Legend	
Ref	Specification
SS.01	Existing umbrellas to be removed. Patch and repair ex pavers where fixings are removed to an approved standard.
SS.03	SS shade structure masts designed and fabricated to approved detail.
SS.04	Tensile fabric equal to Serge Ferrari Soltis, colour closest approved match to Dulux Coconut Husk, to be designed and installed to approved details.
SS.06	SS shade structure outriggers designed and fabricated to approved detail. Powder coat finished. Colour: closest approved match to dulux coconut husk.
SS.12	Misting nozzles. Misting runs within framing only. All connections made in accessible locations. Nozzles protrude through outriggers.



1 Elevation - Shade Structure - Existing
1:50



2 Elevation - Shade Structure - Proposed
1:50



Development Application

General Notes
The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.
This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.

Rev	Date	Amendments
01	02/04/19	For Information
02	25/06/19	Development Application
C	26/06/19	Development Application Issue

Rev	Date	Amendments
-----	------	------------

**H
&E**
ARCHITECTS

Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 8905638227
Nominated Architect: Glenn Cunningham #6415

Project
Sydney Opera House Lower Concourse Improvements

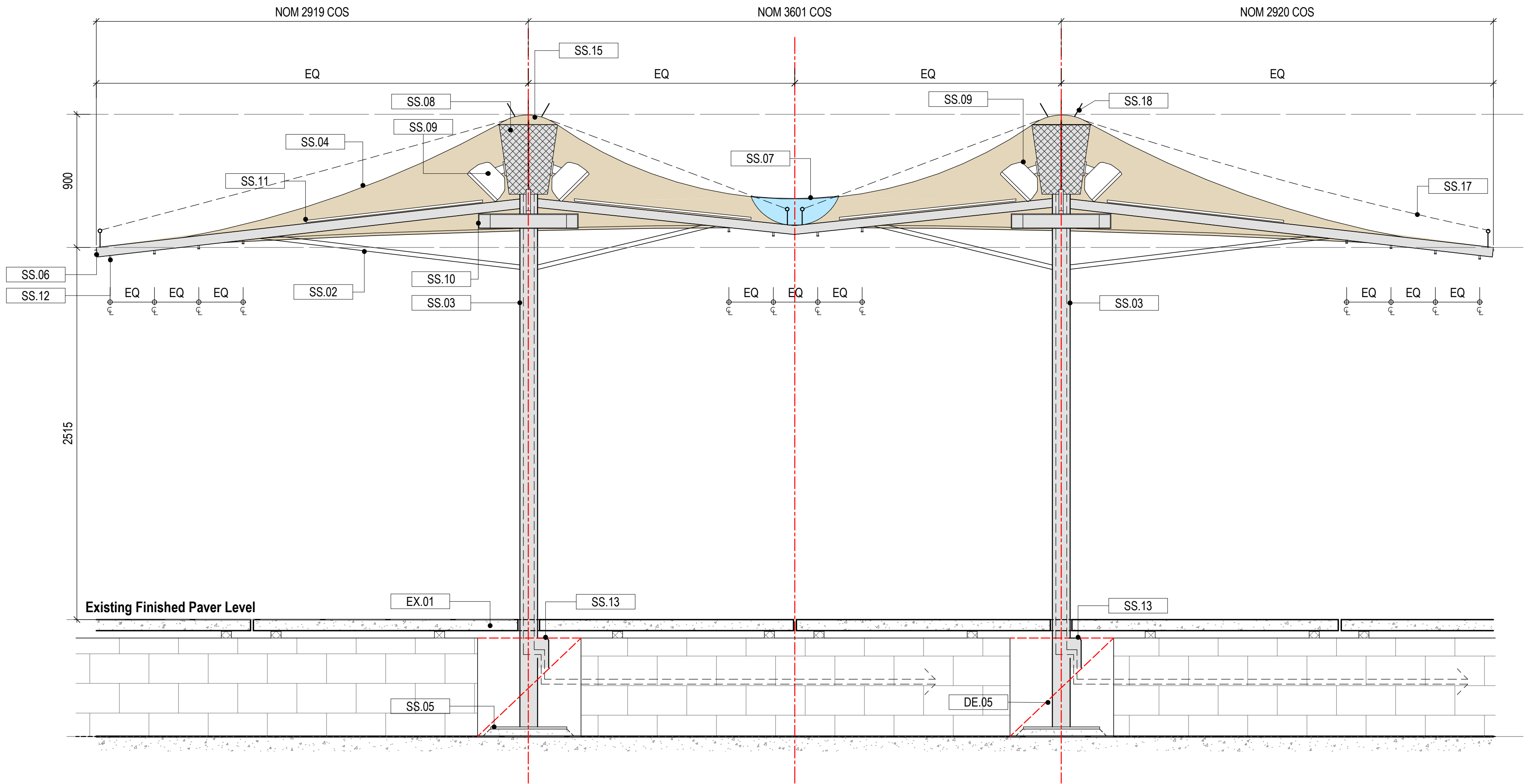
Client
Sydney Opera House Trust

Location
Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

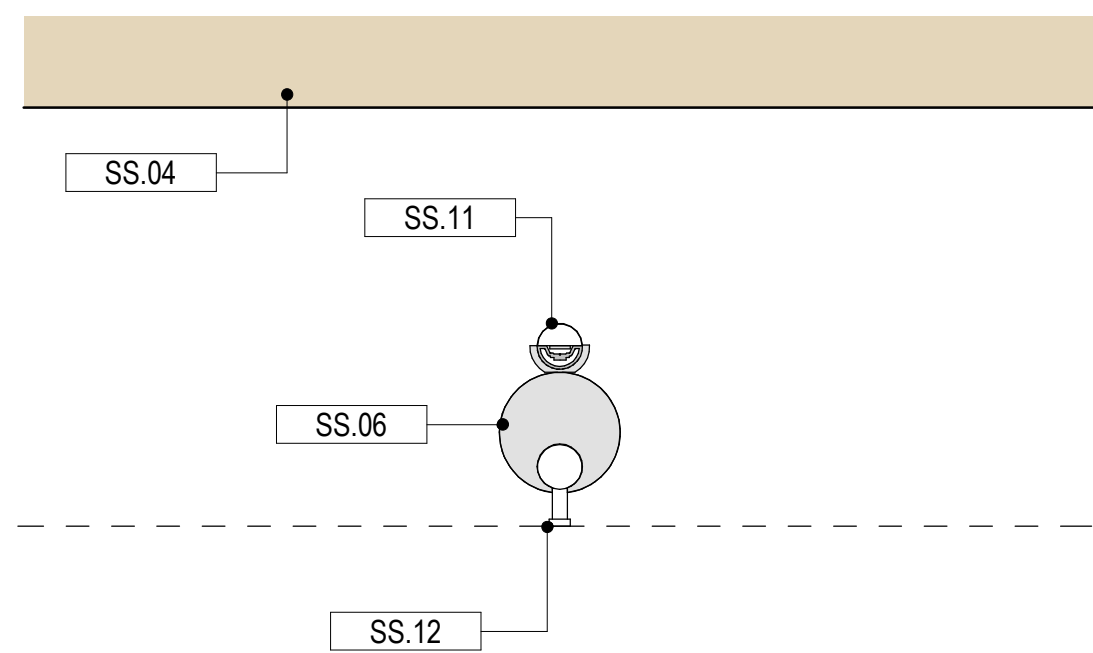
Drawing
Detail Elevation - Shade Structure

Scale @ A1	1:50	Drawn by	Checked by
Scale @ A3	1:100	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	26/06/19
Project No.	2466	Zone	LC
Drawing No.	49HE001-3230	Revision	C

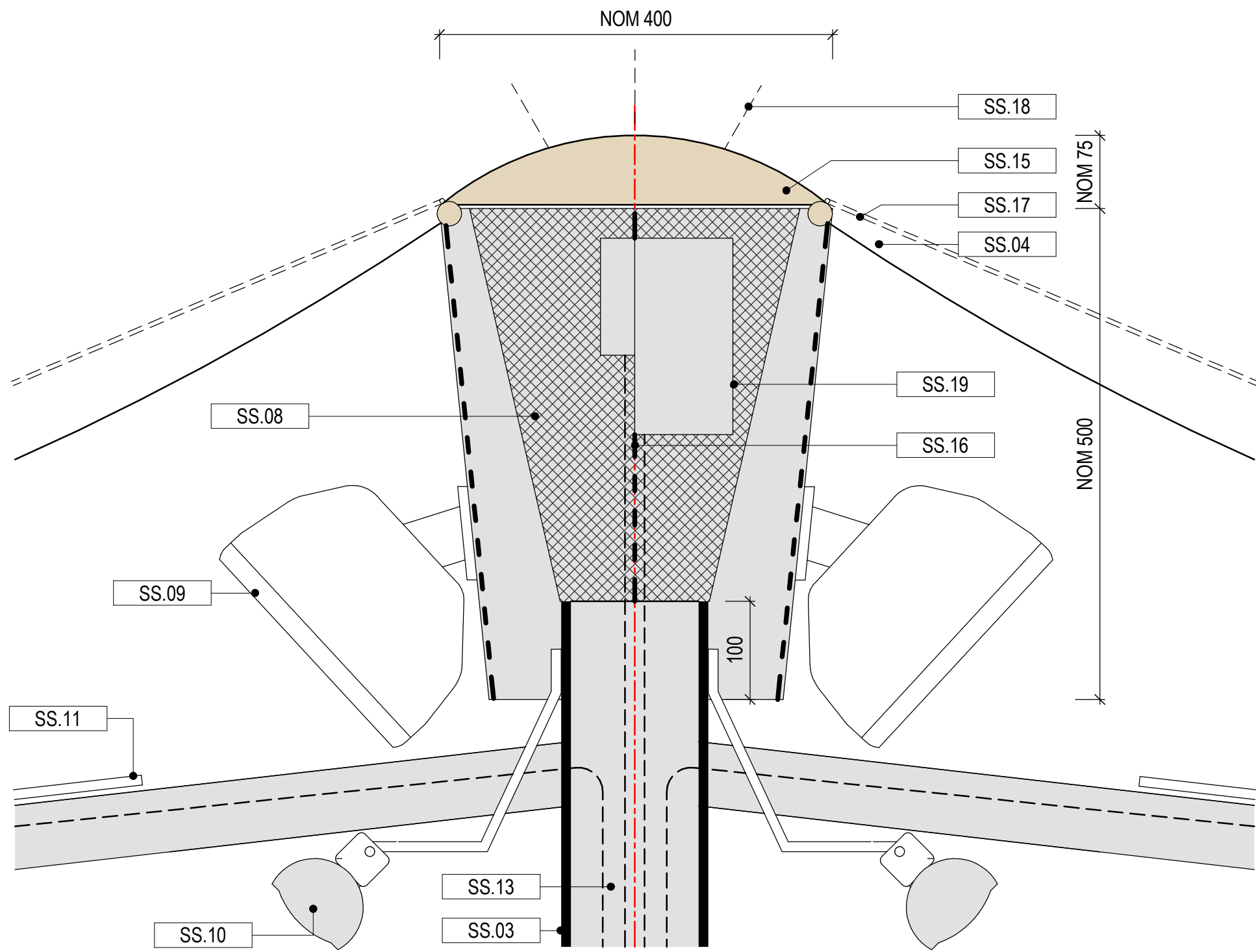
13/08/2019 3:08:40 PM



1 Detail Section - Shade Structure Services
1:20



2 Detail Section - Service bracket
1:5



3 Detail Section - Shade Structure Services
1:5

Note:
Structure and sub-frame layout to be concentric and in alignment with the geometric set out of the existing granite pavers below. All structure to be in accordance with structural engineer's design and specification, in accordance with applicable codes and standards and to the approval of the Sydney Opera House Structural Engineers.

General Notes Detail Shade Structure:
All metal works to be No.4 finished 'inished' Stainless Steel consistent with an approved sample.

Specification Legend

Ref	Specification
DE.05	Cut section of granite paving and block wall out as required to facilitate fixing for shade structure columns
EX.01	Existing granite pavers to remain insitu. Neatly cut around shade structure columns providing consistent clearance
SS.02	SS Shade structure struts designed and fabricated to approved detail.
SS.03	SS shade structure masts designed and fabricated to approved detail.
SS.04	Tensile fabric equal to Serge Ferrari Soltis, colour closest approved match to Dulux Coconut Husk, to be designed and installed to approved details.
SS.05	SS base plate and fixing in accordance with the structural engineer's design and specification
SS.06	SS shade structure outriggers designed and fabricated to approved detail. Powder coat finished. Colour: closest approved match to dulux coconut husk.
SS.07	Tensile fabric, Serge Ferrari 402, Translucent infill between umbrella elements as indicated on plan.
SS.08	Removable approved perforated stainless sheet panels with discreet secure SS fixings designed to conceal services infrastructure including GPS table location system, wifi extenders, lighting drivers, speaker connections, CCTV connections, heater junctions etc as required. Design to facilitate the installation and provide access for the ongoing maintenance of services.
SS.09	Indicative speaker locations. Speaker similar to void indigo 6 pro with colour matched finish (to dulux 'coconut husk' with adjustable mounting brackets. Location, specification and configuration TBC with acoustic and audio-visual consultants. Speakers are to generally be directed away from residential apartments to the south and downwards from their mounting position towards patrons.
SS.10	Infra-red electric radiant heating with variable control and zoned wiring. Specifications and configuration TBC, with experienced contractors.
SS.11	Strip led up-lighting to the underside of the shade structure fabric fabricated from proprietary suitably weather-proof strip led fitted within proprietary aluminum housing with integrated acrylic diffusers to effect even distribution of light over the underside of the canopy. Fit led strip in 2 or 3 independently controlled sections to facilitated graduated illumination of the underside of the fabric to compensate for the variable proximity of the strip light to the fabric.
SS.12	Misting nozzles. Misting runs within framing only. All connections made in accessible locations. Nozzles protrude through outriggers.
SS.13	All service connections to run under pavers in accordance with service consultants requirements with weather proof penetration to shade structure in accordance with shade structure manufacturers details.
SS.15	SS column cap to manufacturers detail with integrated structural connection to columns. Powder coat finish colour: closest approved match to dulux 'coconut husk'.
SS.16	Perforated SS gusset to facilitate the mounting of service infrastructure
SS.17	Stainless Steel bird wire to approved details
SS.18	Stainless Steel bird spikes to approved details
SS.19	Indicative equipment within SS gusset. Equipment including, GPS table location system, wifi extenders, lighting drivers, speaker connections, CCTV connections, heater junctions etc.



Development Application

Scale @ A1	1:5, 1:20	Drawn by	Checked by
Scale @ A3	1:10, 1:40	KR	GC
Project Issue Date	16/03/2015	Sheet Issue Date	26/06/19
Project No.	2466	Zone	LC
Discipline			
Drawing No.	49HE001-3231	Revision	C

13/08/2019 3:08:48 PM

General Notes

The copyright of this design remains the property of H&E Architects. This design is not to be used, copied or reproduced without the authority of H&E Architects. Do not scale from drawings. Confirm dimensions on site prior to the commencement of works. Where a discrepancy arises seek direction prior to proceeding with the works.

This drawing is only to be used by the stated Client in the stated location for the purpose it was created. Do not use this drawing for construction unless designated.

Rev Date Amendments

01	27/05/19	Preliminary
02	25/06/19	Development Application
C	26/06/19	Development Application Issue

Rev Date Amendments

01	27/05/19	Preliminary
02	25/06/19	Development Application
C	26/06/19	Development Application Issue



Suite 35, Level 2, 94 Oxford Street
Darlinghurst NSW 2010 Australia
+612 9357 2288
hello@h-e.com.au
www.h-e.com.au
PO Box 490 Darlinghurst NSW 1300
Humphrey & Edwards Pty Ltd | ABN 88056638227
Nominated Architect: Glenn Cunningham #6415

Project

Sydney Opera House Lower Concourse Improvements

Client

Sydney Opera House Trust

Location

Lower Concourse, Sydney Opera House, Bennelong Point, Sydney

Drawing

Detail Section - Shade Structure Services