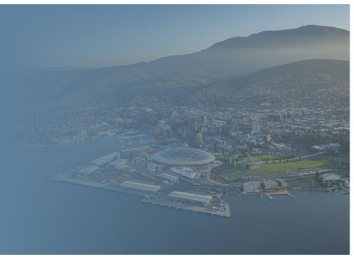
Document Review and Endorsement Form



MACQUARIE POINT
DEVELOPMENT CORPORATION

This form must be used to confirm MPDC review and endorsement of consultant and/or contractor prepared documents that will be incorporated into the MPDC Project Document Management System for use by MPDC and its Contractors and Consultants.

Document Information					
Document Title:	The Hydro Electric Commission Substation No.770 Photographic Archival Recording			**Revision**	**Date**
Drafting Organisation:	Purcell Architecture Australia Pty Ltd			P03 – S5 Final	19-Aug-26
Document Purpose:	The Macquarie Point Development Corporation (MPDC) commissioned Purcell to prepare this Photographic Archival Record (PAR) of the Hydro Electric Commission (HEC) substation (No.770) located at, 12 Evans Street, Hobart, Tasmania (Certificate of Title 210801/1). This archival record is prepared to discharge Condition H15 of State Policies and Projects (Macquarie Point Precinct) Order 2025 Statutory Rules 2025, No.49, dated 21 October 2025.				
	Organisation	**Name**	**Position Title**	**Date**	**Initials / Signature**
Prepared by:	Purcell Architecture Australia Pty Ltd	Lucy Burke-Smith	Partner Architect	19-Aug-26	LBS
Reviewed by:	MPDC	J.Puustinen	Project Manager	07-Sep-26	JP
Endorsed by:	MPDC	J.Puustinen	Project Manager	07-Sep-26	JP
For Document Control to Complete					
For MPDC Documents				**Revision**	**Date**
MPDC Document No.	MPMS-PUR-RP-ES-05-The Hydro Electric Commission Substation No.770 Photographic Archival Recording_A			A	07-Sep-26

Acknowledgement and Approval (Order)

Suitably Qualified Expert Acknowledgement/Approval	This Archival Record has been prepared and reviewed by the following suitably qualified and experienced person(s) as per attached evidence: • Lucy Burke-Smith
MPDC Acknowledgement/Approval	James Puustinen Project Manager Signature:
Order Authority Acknowledgement/Approval	

Lucy Burke-Smith *BSc (Architecture); BArch (Hons Class 1); Grad Cert Herit Cons*
Partner

PURCELL



Professional Associations
Architectural Registration (TAS ARN: 898 Building Practitioners Reg: CC6606; NSW ARN: 8242)
A+ Member (AIA)
Jury Chair 2020 AIA (Tas Awards) and Jury Member 2022 AIA (Tas) Awards
Former Chapter Councillor Institute of Architects (Tas)
Member Tasmanian Heritage Council

Lucy is a registered architect with specialist experience in built heritage and post graduate qualifications in heritage conservation. She has over 20 years experience in the delivery and management of complex, large-scale conservation and infrastructure projects and extensive experience as a participant in, and leader of, multidisciplinary teams.

In previous roles, Lucy acted as custodian and manager of significant government property portfolio's of The Rock's and Port Arthur Historic Sites.

Lucy is Chair of the Purcell Employee Ownership Trust and member of the Tasmanian Heritage Council.

Relevant Project Experience

Bridgewater Bridge, Nipaluna, Hobart
Role: Project Lead // Client: Department of State Growth
Purcell, together with photographer Marty Passingham, prepared PAR recording for 13 outbuildings and features of 37 Black Snake Lane, required prior to their demolition is associated with the construction of the Bridgewater Bridge. The PAR included photographs and annotated plans detailing the cultural landscape, spatial relationships and significant details of the site. The PAR adopted best practice standards and guidance of Heritage NSW. This PAR was prepared in response to the Major Project Permit requirements for the Bridgewater Bridge, and accepted as discharging this condition.

Shene Estate, Nipaluna, Hobart
Role: Project Lead // Client: Lark Distilling Company
Purcell, together with photographer Marty Passingham, prepared PAR recording of the cultural landscape of the Shene Estate at Pontville. The PAR included photographs and annotated plans detailing the cultural landscape, spatial relationships and significant details of the site, prior to the commencement of development works. The PAR adopted best practice standards and guidance of Heritage NSW. This PAR was prepared in response to a condition of consent from the Tasmanian Heritage Council, and accepted as discharging this condition.

Black Snake Inn, Nipaluna, Hobart
Role: Project Lead // Client: Department of State Growth
Purcell, together with photographer Marty Passingham, prepared a PAR documenting the historic and contemporary context of an outbuilding to the Black Snake Inn, nominated for demolition due to its irrecoverable condition and integrity. The PAR included photographs and annotated plans detailing the materiality and construction methodology of the outbuilding. The PAR adopted best practice standards and guidance of Heritage NSW. This PAR was prepared in response to a condition of consent from the Tasmanian Heritage Council, and accepted as discharging this condition.



Bridgewater Bridge, source: Marty Passingham



Shene, source: Marty Passingham

PURCELL

The Hydro Electric Commission Substation No.770

Photographic Archival Recording

19/08/2026

Purcell Architecture Australia Pty Ltd (ABN: 43 636 400 327)
ARB Tas Registered Architect Firm: F157
Nominated Architect: Lucy Burke-Smith TAS:898/CC6606

243280-03 The HEC Substation No.770 PAR P03

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Date	Revision	By	Checked
22/01/2026	P01 – S3 For Review	Hugh Jones	Lucy Burke-Smith
06/03/2026	P02 - S3 For Review	Linda Mott	Lucy Burke-Smith
19/08/2026	P03 – S5 Final	Hugh Jones	Lucy Burke-Smith

Acknowledgment of country

Purcell pays respects to the original owners of the land upon which we work, the Muwinina people, who did not survive British colonisation.

We acknowledge the Tasmanian Aboriginal community as the continuing custodians of Lutruwita (Tasmania) and honour Aboriginal Elders past and present.

We value the history, culture and strength of the Tasmanian Aboriginal community, and commit to listen deeply to Story and be respectful of Country in our collaborations with First Nations Peoples.

Lutruwita milaythina Pakana – Tasmania is Aboriginal land.

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1.0 Introduction

1.1 Background

The Macquarie Point Development Corporation (MPDC) commissioned Purcell to prepare this Photographic Archival Record (PAR) of the Hydro Electric Commission (HEC) substation (No.770) located at, 12 Evans Street, Hobart, Tasmania (Certificate of Title 210801/1) known hereafter as the Place. Macquarie Point is subject of a Major Project proposal for the Macquarie Point Multipurpose Stadium.

This archival record is prepared to discharge the following condition of State Policies and Projects (Macquarie Point Precinct) Order 2025 Statutory Rules 2025, No.49, dated 21 October 2025:

Schedule 4- Historic Cultural Heritage Conditions

Clause 8. 16 H15

> (1) Before any demolition occurs on Project land as part of heritage works, an archival record of the buildings referred to in subclause (2) must be prepared by the Proponent that –
>
> (a) is in accordance with Practice Note No.3, approved by the Heritage Council on 19 November 2014, and entitled Procedure for Recording a Heritage Place; and
>
> (b) once so prepared, is made publicly available.
>
> (2) An archival record is required under this condition of the following buildings:
>
> (a) the Goods Shed;
>
> (b) the building known as the Red Shed;
>
> (c) the Hydro Electric Commission Building.

Lucy Burke-Smith (Partner) of Purcell and Hugh Jones (Architectural Graduate) of Purcell prepared this report. Lucy Burke-Smith of Purcell and Marty Passingham (Photographer) undertook the photographic recording on 15 January 2026.

The historic images and drawings included at Appendix E were provided by Tas Networks.

1.2 Methodology

This report accords with the following best practice guidelines:

- L Greenup, 'Photographic Recording of Heritage Items using Film or Digital Capture', Heritage Office, 2006
- Tasmanian Heritage Council, 'Practice Note No 3 Procedure For Recording A Heritage Place', Version 2: November 2014 (approved by Tasmanian Heritage Council 19 November 2014).

Each photograph has been allocated a unique name/number (refer to Appendix 2). The name/numbers are then cross referenced to the Plan and Catalogue Sheets (refer to Appendix 1 and Appendix 2 respectively). Markers are used on the Plan Sheet to indicate the location in which the photographs were taken. The Catalogue Sheets record the project details, date, photographer's name, camera type and lenses used, photographic data, direction, and brief description of each photograph.

This PAR captures close-up and overall views of the Place. The photographic documentation follows the order depicted on the aerial site maps and drawings in the Plan Sheets (refer to the plans at Appendix A).

1.3 Limitations

Limitations include suitable vantage points and landscape screening, to capture all angles of the Place and grounds.

There is little archival or documentary evidence of the history of the HEC Substation. As research of primary historical sources, and an assessment of significance is beyond the scope of this study the Overview of significance (Section 2.2) and Summary History (Section) 2.4 has been drawn, as relevant, from comparative sources.

2.0 Understanding the Site

2.1 Location

The HEC Substation No.770, is located at 12 Evans Street, on land at Macquarie Point that was reclaimed incrementally. It is within the Macquarie Point Development Site, which is south of the Cenotaph, west of the Hobart Port, north of Sullivan's Cove and northeast of Hobart's CBD. The surrounding area has a large concentration of highly significant heritage places.



Figure 1: Approximate Site extent is shaded purple, the HEC Substation No.770 is outlined in yellow, (Source: LISTMap, modified by Purcell).

2.2 Statutory listings and overview of significance

The HEC Substation No.770 is not listed on the World, National, Commonwealth, State, or Local Heritage lists or registers.[1] The Substations' significance is likely to include the following:

The Hydro Electric Commission Substation is a rare and good example of an externally intact Inter-War Stripped Classical style substation building. It demonstrates typical characteristics of this architectural style applied to a utilitarian building.

With any other surviving hydro Electric Commission substations, it demonstrates the fundamental role that electricity played in powering Australia's industrialisation and how technological innovations of the time, specifically electricity, defined Tasmania's industrial development during the twentieth century. It was likely constructed to service the electrical needs of the Goods Yard, the railway, and adjacent Jones & Co jam (later IXL) Jam factory and gas works plant.

It is an intact and attractive example of an Inter-War Stripped Classical style substation that contributes to the streetscape. The building is a good representative example of the Inter-War Stripped Classical style applied to a substation.

The Substation is associated with the Hydro Electric Commission which generated and distributed electricity within Tasmania. It is also associated with the Tasmanian Government Railways who were operating the Goods yard on which it is located. The place likely has associations with architect Arthur Voss who was Acting Architect and House Engineer with HEC from 1942, 'Supervising Architect' from 1949, and then in the retitled role of 'Chief Architect' from 1969 to 1977 (Felton 2008, pp.437,490).

The building may offer research potential into the evolution of technology for electricity supply and architectural design for substations.

1 As accessed through the UNESCO, 'World Heritage List', Australian Heritage Council, 'Australian Heritage Database', and Heritage Tasmania, 'Search the Tasmanian Heritage Register' [websites], accessed 15 January 2025.

2.3 Non-statutory listings

The Site is not included on the Register of the National Estate (non-statutory archive).[2]

The Tasmanian National Trust no longer maintains a publicly available list of Tasmanian Heritage places.

2.4 Summary History

The Tasmanian Government created the Hydro Electric Department (HED) in c.1914 when it purchased a hydro-electric power scheme started by the Gillies' Hydro-Metallurgical Company Pty Ltd. The HED completed the scheme in 1916. Electricity generated at the station was marketed to Hobart Council, Hobart Tramways, Hobart residents and commercial premises, and demand from retail and industry had a steady growth through the 1920s.

The Substation was constructed prior to 1946, as it is visible in early historical aerial images from 16-03-1946.[3] It was possibly built after 1929 when the HED was renamed the Hydro-Electric Commission (HEC).[4] The substation's design, like that of other HEC buildings constructed around this time, was an expression of the progressive nature of hydro-electric power generation.[5]

The building was likely designed by Arthur Voss during the time he was working in the HEC's Design and Drawing Office, or by Bert Dechaineux as that office's Architect-in-Charge (Blythe 1996, p.104). Around the time of the buildings assumed construction Voss was 'Acting Architect and House Engineer' (from 1942).[6]

2.5 Place Description

The Hydro Electric Commission Substation is an Inter-War Stripped Classical style,[7] single storey, two-tone brick building with elements of Art Deco styling including the horizontal cement band in the red brick. There is a vestigial classical cornice at the top of the building hiding the flat concrete roof. The building has a symmetrical façade with a central entrance roller door that has a smaller doorway within it. The projecting middle section of lighter brick contrasts with the rest of the red brick building and creates an emphatic portal. The words "The Hydro Electric Commission" are attached at the top of the portal. The building generally has simple surfaces except for the polychromatic brick work and projecting bands of bricks either side of the roller door. The polychromatic bricks at the base of the building create a vestigial classical base to the building which is most obvious on the front of the building where it projects forward slightly.

The horizontal concrete band is continued around all sides of the building. The north and south sides have three, three-pane windows directly under the concrete band. The north side has an entrance door aligned under the end of the central window, making this side asymmetrical. The south side has five ventilation louvres, three larger ones over the three windows and a smaller one, slightly lower placed than the larger ones at each end. The rear of the building is plain other than three low vents and one above the concrete band.

The signage plate to the front roller door, in scripted 'H.E.C 770' identifies the sub-station number, with later plate signage 'T10' identifying the transformer number (Refer images HEC_EXT_07 and HEC_EXT_08).

2 Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW), 'Register of the National Estate – archive' [website], last updated: 03 October 2021.
3 Land Tasmania, 'Aerial Photo Viewer v2' [website], accessed 16/05/2024.
4 'Cultural Artefact: Electricity', *Companion to Tasmanian History*, Centre for Tasmanian Historical Studies (2005); University of Tasmania (2017).
5 THR Datasheet 11734, Treasury Complex and Public Buildings, p.18, accessed 21/01/2026
6 THR Datasheet 11734, Treasury Complex and Public Buildings, p.18, accessed 21/01/2026
7 R Apperly, R Irving, and PL Reynolds, A pictorial guide to identifying Australian architecture: styles and terms from 1788 to the present, Angus & Robertson, Pymble NSW, 1994, pp 166.

3.0 Photographic Documentation

3.1 Camera and lens specifications

A 35mm camera digital equivalent was used for this PAR's photographs, meeting the requirements of the NSW Heritage Office Guidelines for Photographic Recordings. The camera and lens specifications are as follows:

Camera: Canon EOS 7D Mark II Digital SLR (20.2 Megapixel)

Lens: 16-35mm

3.2 Image format

The photographs were taken at 18 megapixels in RAW format and converted to high resolution JPG format (approx. 3MB to 6MB each), in accordance with the NSW Heritage Office Guidelines for Archival and Photographic Recordings. The digital copies of this PAR comprise each photograph in both RAW and TIFF format, as well as thumbnail sheets with reference numbers.

3.3 Photographic catalogue

This PAR comprises the following sections, consistent with the NSW Heritage Office Guidelines:

Plan Sheets – documenting the location and orientation of each photograph using arrowed markers (Appendix A);

Drawings – documenting the sectional composition of the building (Appendix B)

Catalogue Sheets – comprising detailed descriptions of each photograph, orientation of photographs and cross-references to both plan sheets and thumbnail images (Appendix C);

Thumbnail Sheets – comprising a thumbnail of each photograph and reference numbers (Appendix D);

Selection of Photographs – comprising a selection of photographs that capture the Station and setting (Appendix E), and;

Historical Images and Drawings – original and early images and drawings of the buildings provided by Tas Networks (Appendix F).

3.4 Distribution

A digital copy of this PAR is to be submitted to the Macquarie Point Development Corporation for their distribution to Heritage Tasmania and other public repositories as considered appropriate.

APPENDICES

Appendix A: Plan sheets

Appendix B: Drawings

Appendix C:Catalogue sheets

Appendix D: Thumbnail image sheets

Appendix E: Selection of photographs

Appendix F: Historical documents

Appendix A: Plan Sheets



N

1 Existing HEC Building Site Plan
1:100

0 1m 2m 3m 4m 5m 10m

Notes:

Drawings are based on archival plans & site measurements documentation may not accurately represent what is physically present.

Do not scale from this drawing. All dimensions are to be verified on site before proceeding with the work.

All dimensions are in millimetres unless noted otherwise. Purcell shall be notified in writing of any discrepancies.

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REV	DATE	BY	CHK	DESCRIPTION
P2	22.01.2026	HJ	LBS	S4 For Approval
P1	09.01.2026	HJ	LBS	S1 For Coordination

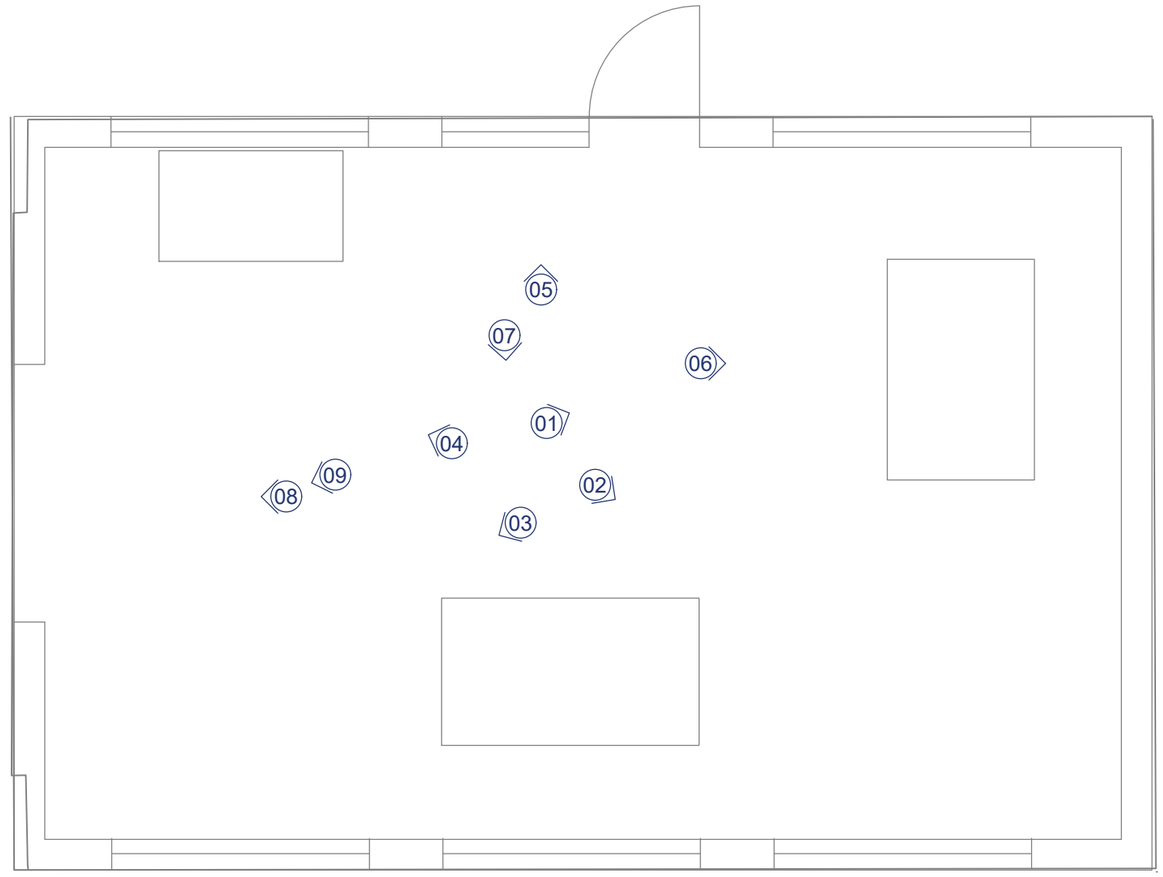
CLIENT
Macquarie Point Development Corporation
PROJECT
The HEC Building
Photographic Archival Recording (PAR)

JOB NUMBER
243280
TITLE
Existing Site Plan

SIZE A3L SCALE 1:100
REV **P2** SUITABILITY/REASON FOR ISSUE **S4 - Issue For Approval**
DRAWING NUMBER
243280-PUR-03-00-DR-A-0100

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Nominated Architect: Lucy Burke-Smith TAS: 898 CC6606 ARB Tas Registered Architectural Firm F157
nipaluna - 183 Macquarie Street, Hobart, TAS, 7000 ABN 43 636 400 327



1 Existing HEC Building Ground Floor Plan
1:50

0 500mm 1m 2m 3m 4m 5m

Notes:

Drawings are based on archival plans & site measurements documentation may not accurately represent what is physically present.

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REV	DATE	BY	CHK	DESCRIPTION
P2	22.01.2026	HJ	LBS	S4 For Approval
P1	12.01.2026	HJ	LBS	S1 For Coordination

CLIENT
Macquarie Point Development Corporation
PROJECT
The HEC Building
Photographic Archival Recording (PAR)

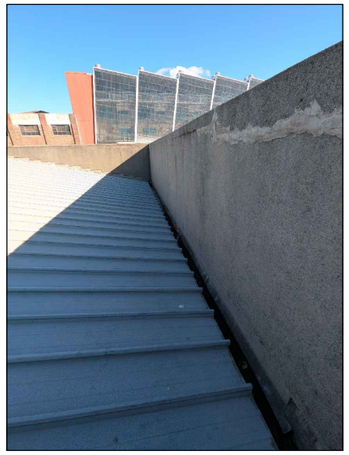
JOB NUMBER
243280
TITLE
Existing Ground Floor Plan

SIZE A3L SCALE 1:50
REV **P2** SUITABILITY/REASON FOR ISSUE **S4 - Issue For Approval**
DRAWING NUMBER
243280-PUR-03-00-DR-A-0101

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nipaluna - 183 Macquarie Street, Hobart, TAS, 7000 ABN 43 636 400 327

Appendix B: Drawings



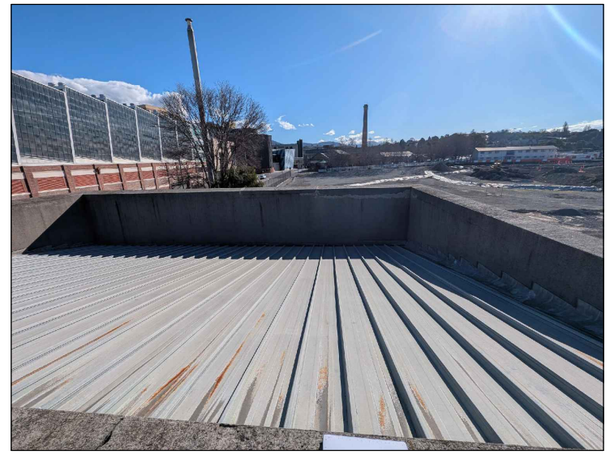
01 - Existing gutter interface with parapet wall.



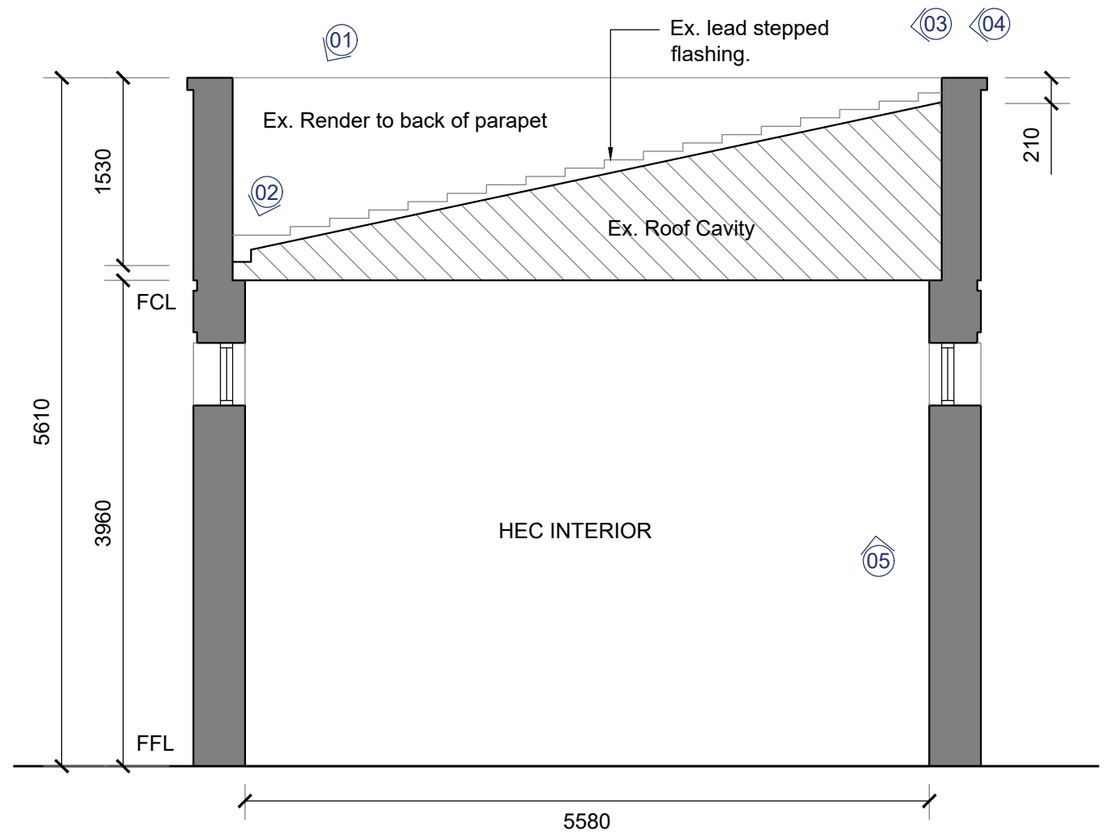
02 - South Western Corner - Sump



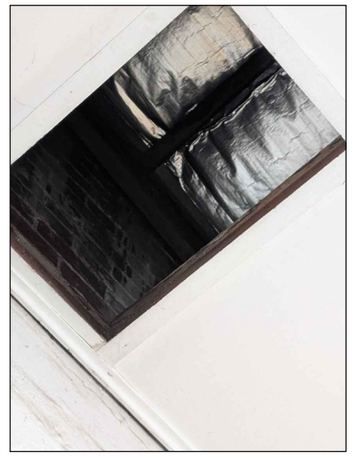
03 - General roof arrangement - looking West



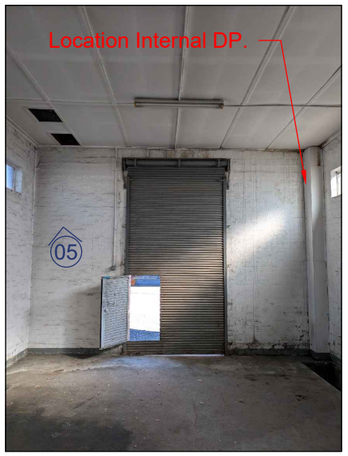
04 - General roof arrangement - looking North-West



1 Existing HEC Building Section
1:50



05 - Existing roof cavity access - located South-East corner.



06 - Existing roof cavity access - located South-East corner.

0 500mm 1m 2m 3m 4m 5m

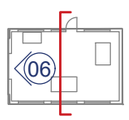
Notes:

Drawings are based on archival plans & site measurements documentation may not accurately represent what is physically present.

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REV	DATE	BY	CHK	DESCRIPTION
P1	17.08.2026	HJ	LBS	S4 For Approval

CLIENT
Macquarie Point Development Corporation
PROJECT
The HEC Building
Photographic Archival Recording (PAR)

JOB NUMBER
243280
TITLE
Existing Section

SIZE A3L SCALE 1:50
REV **P1** SUITABILITY/REASON FOR ISSUE **S4 - Issue For Approval**
DRAWING NUMBER
243280-PUR-03-00-DR-A-0102

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Appendix C: Catalogue sheets

PURCELL

Project	The HEC Building - Photographic Archival Record		
Project Phase	Prior to Demolition		
Camera	Canon EOS 7D Mark II (16-35mm Lens)		
Date	15/01/2026	**Photographer**	Marty Passingham

Image No.	View	Description
Plan Reference: 0100 Site Plan		
HEC-EXT-01	N	North elevation
HEC-EXT-02	W	East elevation
HEC-EXT-03	W	East elevation - detail window, frieze and parapet
HEC-EXT-04	N	South elevation
HEC-EXT-05	N	South elevation - detail signage
HEC-EXT-06	N	South elevation - detail brick work
HEC-EXT-07	N	South elevation - detail roller door. Substation No.0770; Transformer No.T10
HEC-EXT-08	N	South elevation - detail roller door label of substation. Substation No.770
HEC-EXT-09	E	West elevation
Plan Reference: 0101 Ground Floor Plan		
HEC-INT-01	NW	HEC interior- North West corner
HEC-INT-02	NE	HEC interior- North East corner
HEC-INT-03	SE	HEC interior - South East corner
HEC-INT-04	SW	HEC interior - South West corner
HEC-INT-05	E	HEC interior - detail windows typical
HEC-INT-06	N	HEC interior - detail high voltage switchboard
HEC-INT-07	E	HEC interior - detail transformer
HEC-INT-08	S	HEC interior - detail roller door
HEC-INT-09	NA	HEC interior - detail typical ceiling

Appendix D: Thumbnail image sheets



HEC_EXT_01



HEC_EXT_02



HEC_EXT_03



HEC_EXT_04



HEC_EXT_05



HEC_EXT_06



HEC_EXT_07



HEC_EXT_08



HEC_EXT_09



HEC_INT_01



HEC_INT_02



HEC_INT_03



HEC_INT_04



HEC_INT_05



HEC_INT_06



HEC_INT_07



HEC_INT_08



HEC_INT_09

Appendix E: Selection of photographs



HEC_EXT_01



HEC_EXT_02



HEC_EXT_04



HEC_EXT_05



HEC_EXT_07



HEC_EXT_08



HEC_EXT_09



HEC_INT_02

Appendix F: Historical documents

TELEGRAPHIC AND CABLE ADDRESS
"WATERPOWER," HOBART.

PLEASE ADDRESS ALL COMMUNICATIONS TO THE DEPARTMENT, AND NOT TO INDIVIDUAL OFFICERS.

TASMANIA

YOUR REFERENCE

IN REPLY PLEASE QUOTE OUR REFERENCE

Hydro-Electric Department,
Hobart,

GHL/TP.

MEMORANDUM to 25th January, 1924.

Chief Engineer & General Manager.

SUBJECT:— Supply to H. Jones & Co..Ltd.

Messrs. H. Jones & Co. Ltd. are installing ~~upwards of~~ 500 H.P. of A.C. motors and as we have no transformers in the immediate vicinity which could carry the additional load it will be necessary to erect an additional substation.

The centre of gravity of the load in the neighbourhood of Jones & Co. is approximately at the junction of Gas Works Lane and right-of-way through Jones & Co's property. At this point the road is some 80 ft. wide and I recommend that if possible a transformer kiosk, approximately 30 ft. x 10 ft. x 17 ft. high, be built in the centre of the road so as to divide the down and up traffic from the Railway Goods Sheds. Failing this a site near the above in the Tasmanian Government Railway property or Jones & Co's property will be required.

The total load available in the neighbourhood of the proposed substation when Jones & Co. have completed their changeover will be approximately 350 Kva. Since, however, Messrs. Jones & Co.'s plant is continually being increased and as in the future we may be supplying electricity to them for steam-raising etc. I have recommended a substation building which will be capable of finally accommodating at least 1000 Kva. of transformers

For the present I propose to use 2-100 Kva. 6600 Volt star-star transformers which will supply Jones & Co.'s requirements for several months and by the time these are loaded two similar 100 Kva. transformers will be released from Messrs. Crisp & Gunn's Brickworks, which will bring the substation capacity up to 400 Kva.

At a still later stage I recommend that the 500 Kva. star-star transformer at Hospital Substation be replaced by 2-400 Kva. 11,000 Volt delta-star transformers with the usual tappings and that the existing 500 Kva. be transferred to the proposed substation.

The reasons for the above recommendations are as follows:-

1. The present Hospital Sub. transformer is connected star-star and is thus not entirely suit-

2. No tappings are provided on this transformer and thus compensation for voltage drop cannot be made.

3. The load in the neighbourhood of Jones & Co. is largely a motor load and thus compensation for voltage drop is not so necessary as for lighting loads, further, since the load is practically balanced troubles due to a floating neutral will not occur.

4. The installation of 11,000 Volt transformers at Hospital Sub. will enable us to complete an 11,000 Volt loop to the Tramway Sub. by changing 1-50 Kva. transformer at Patrick & Elizabeth Streets and making the necessary alteration in the Tramway Sub.

5. When the above and a short extension from Bowen Road to Swanston Street & Risdon Road provided for in our annual estimates are completed we shall then have two complete 11,000 Volt feeders into the Tramway Sub.

6. The four 100 Kva. transformers released will be available as spares for either Jones & Co. or Franklin Square Substations and are readily transportable.

In order to ensure reasonable continuity of supply asked for by Messrs. Jones & Co. it is necessary that the supply be given from the 6600 Volt mains as we have two short 6600 Volt feeders into the Tramway Sub. against one long 11,000 Volt feeder.

I propose to supply Messrs. Jones & Company normally from feeder 23 but in order to provide for operation when the Tramway Substation is shut down for alterations or repairs I propose to put in an alternative supply off feeder 2 before it enters Tramway Sub. as shown on the attached plan. This will enable us to keep the whole of the 6600 Volt mains alive when Tramway Sub. is shut down for the abovementioned reasons.

Further, portion of this alternative supply will be required when the 2200 Volt line to Government House is changed over to 6600 Volts and the extra cost to make the alternative supply available is £25.

I have therefore to recommend that the alternative supply be made available.

Attached hereto please find estimates of cost to erect the substation excluding cost of land which may possibly be obtained without charge as I understand the Government has some rights in connection with the roadway upon which it is proposed to build the substation.

From the estimates it will be seen that the cost of a brick substation will only be £179 more than a plain galvanised iron substation and in view of the longer life and better appearance of the brick building I recommend that if the road site is obtainable it be constructed of brick after the style of Franklin Square Substation. If erected on Railway property I am doubtful

Approved

[FORM NO. H.E. 45]

GOVERNMENT OF TASMANIA

CALCULATION NO.

SHEET NO.

Hydro-Electric Department.

Calculation Sheet.

DESIGN of SUBSTATION FOR H. JONES & CO. LTD.

SUMMARY OF ESTIMATES.

(a) Cost of Brick Substation complete except transformers & land as per Sheet 1.	£803: 0: 0
High & Low Tension mains as per Sheet 3 approx.	337: 0: 0
	£1140: 0: 0

(b) Cost of galvanised iron Substation (very plain) complete except transformers as per Sheet 2.	£624: 0: 0
High & Low Tension mains as per sheet 3 approx.	£337: 0: 0
	£ 961: 0: 0

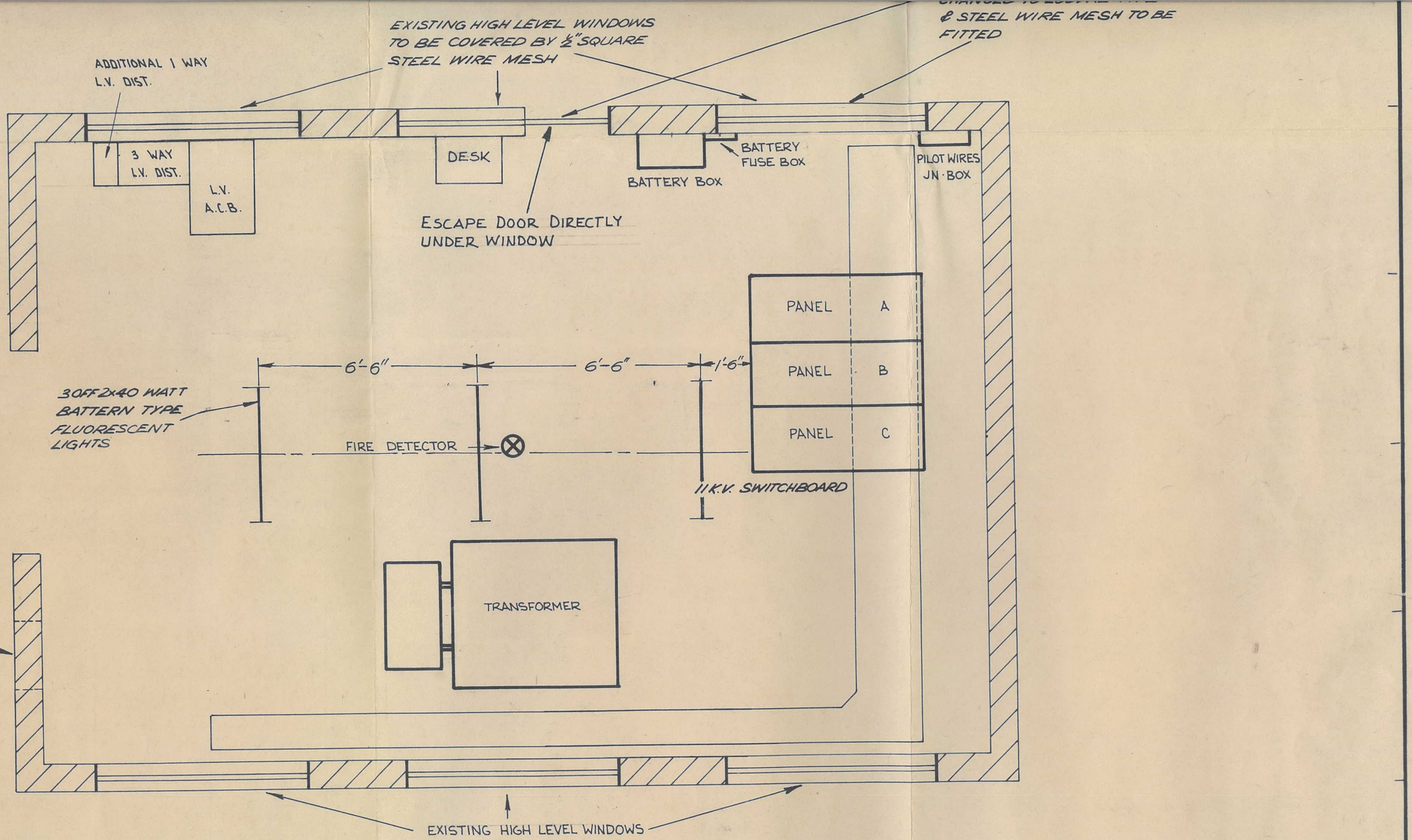
REF. DRAWINGS

REF. ESTIMATE NO.

PREPARED BY A P B Binns 25/1/24

Checked [illegible] Date 25/1/24 Approved Date

B93945...4—St. 98 (14)



THIS DRAWING CONFORMS TO SUBSTATION SECTION REQUIREMENTS :- NO.

REFERENCE DRAWINGS	
FLOOR PLAN	S/SB 275
AC SCHEMATIC	S/SB 276
DC SCHEMATIC	S/SB 277
SINGLE LINE DIAGRAM	S/SC 110
PLANT DIAGRAM	S/SD 106

DESIGNED	BAW.	CHECKED	BAW.	SCALES
DRAWN	R J C	CHECKED	BAW	3/8" = 1'-0"
RECOMMENDED	R. S. D.E.			

THE HYDRO-ELECTRIC COMMISSION. TASMANIA

EVANS ST. DISTRIBUTION SUBSTATION

S/SC 424

REG.

C D E F G H J

UNIVERSITY CENTRE FOR THE ARTS S/S

PILOT CABLES. A.C. D.C.

HOBART GAS Co. SUBSTATION

PILOT CABLES A.C. D.C.

MARINE BOARD MACQUARIE WHARF SUBSTATION

A296 A261 A277 A86T A285

A252

B296 B261 B285

B252

C296B C253

C296A M kWh M.D.

C252 N.O.

11kV

B496

C297

96 57 86FL

B426 B487 B86T

B551 A B596A

B552

B596B

415V

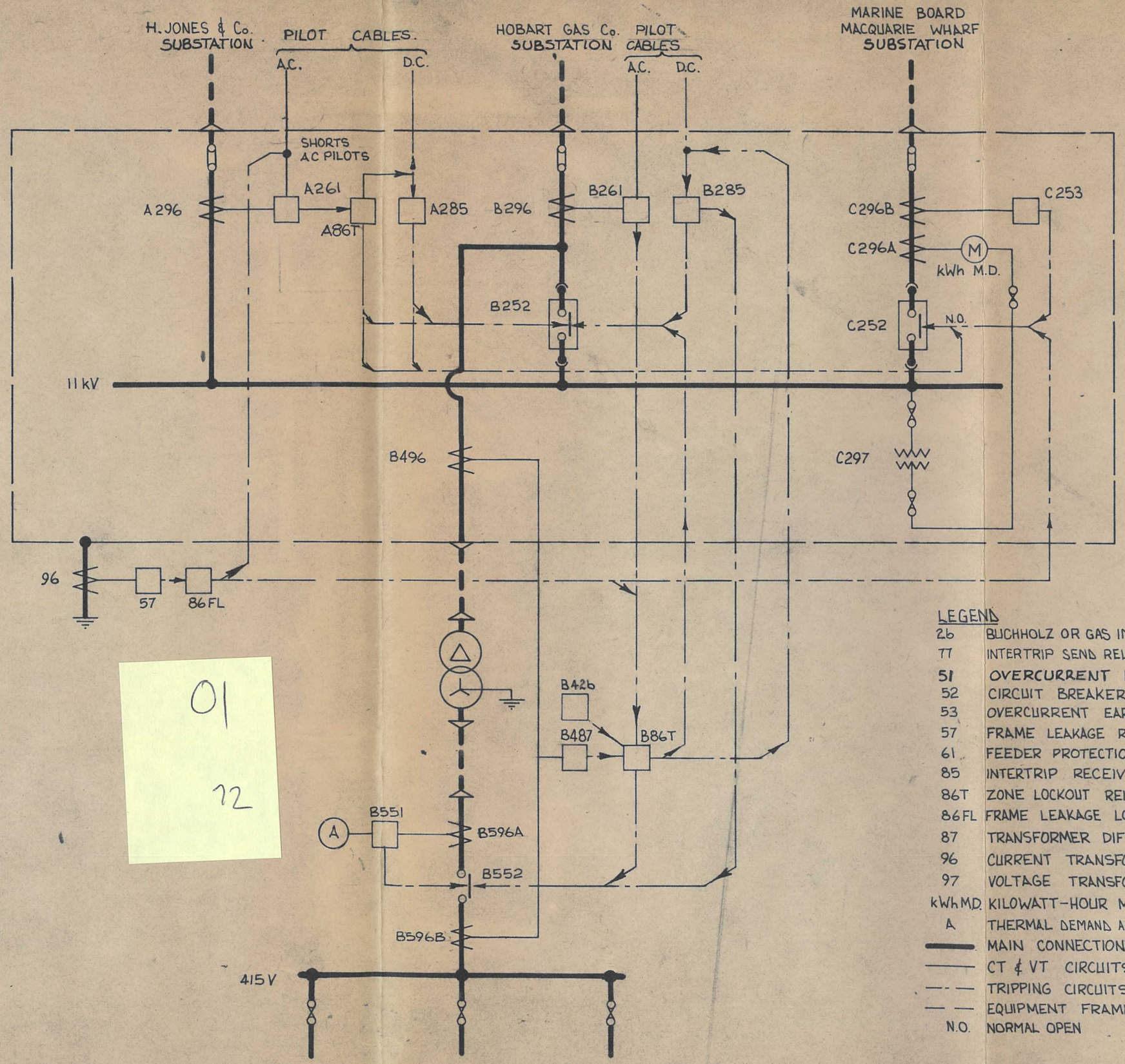
LEGEND

26	BUCHHOLZ OR GAS IMPULSE RELAY
77	INTERTRIP SEND RELAY
51	OVERCURRENT RELAY
52	CIRCUIT BREAKER
53	OVERCURRENT EARTH FAULT RELAY
57	FRAME LEAKAGE RELAY
61	FEEDER PROTECTION RELAY
85	INTERTRIP RECEIVE RELAY
86T	ZONE LOCKOUT RELAY
86FL	FRAME LEAKAGE LOCKOUT RELAY
87	TRANSFORMER DIFFERENTIAL RELAY
96	CURRENT TRANSFORMER
97	VOLTAGE TRANSFORMER
kWhMD.	KILOWATT-HOUR MAXIMUM DEMAND METER
A	THERMAL DEMAND AMMETER
▬▬	MAIN CONNECTIONS
———	CT & VT CIRCUITS
—·—	TRIPPING CIRCUITS
— —	EQUIPMENT FRAME
N.O.	NORMAL OPEN

THIS DRAWING CONFORMS TO SUBSTATION SECTION REQUIREMENTS:-

CHECKED SCALES

THE HYDRO-ELECTRIC COMMISSION, TASMANIA



01

72

LEGEND

26	BUCHHOLZ OR GAS IMPULSE RELAY
77	INTERTRIP SEND RELAY
51	OVERCURRENT RELAY
52	CIRCUIT BREAKER
53	OVERCURRENT EARTH FAULT RELAY
57	FRAME LEAKAGE RELAY
61	FEEDER PROTECTION RELAY
85	INTERTRIP RECEIVE RELAY
86T	ZONE LOCKOUT RELAY
86FL	FRAME LEAKAGE LOCKOUT RELAY
87	TRANSFORMER DIFFERENTIAL RELAY
96	CURRENT TRANSFORMER
97	VOLTAGE TRANSFORMER
kWhMD	KILOWATT-HOUR MAXIMUM DEMAND METER
A	THERMAL DEMAND AMMETER
———	MAIN CONNECTIONS
———	CT & VT CIRCUITS
—·—	TRIPPING CIRCUITS
— —	EQUIPMENT FRAME
N.O.	NORMAL OPEN

THIS DRAWING CONFORMS TO SUBSTATION SECTION REQUIREMENTS:-

REFERENCE DRAWINGS		DESIGNED	B.H.W.	CHECKED		SCALES
FLOOR PLAN	S/SB275	DRAWN	R.J.C	CHECKED		N.T.S
A.C. SCHEMATIC	S/SB276					

THE HYDRO-ELECTRIC COMMISSION. TASMANIA

S/SC 110

ITEM	PLANT	TYPE	MANUFACTURER	ORDER No.	No. OFF	RATIO	RATING	CLASS	CONNECTION	B.I.L.	O.C.F.	FUNCTION	REMARKS
A296	11 kV Primary Feeder To H. Jones & Co. Substation	Indoor Through	Reyrolle Nilsen		1 x 3	400/5	11 kV	2.5P75	Star	95 kV	13.1 kA for 3 Secs.	Feeder Prot.	
B296	11 kV Primary Feeder To Hobart Gas Co. Substation	"	"		1 x 3	400/5	"	2.5P75	"	"	" " "	Feeder Prot.	
B496	Primary side of Transformer	"	"		1 x 3	75/5	"	2.5P50	"	"	175 for 0.5 Secs.	T/F Diff. Prot.	To match B596B
B596A	Secondary side of Transformer	"	"		1 x 3	800/5	660V	2.5P50	"		54 for 0.5 Secs.	Combined O/C & E/F	
B596B	Busbar side of Transformer	"	"		1 x 3	2000/2.89	"	2.5P50	Delta	95 kV	21 for 0.5 Secs.	T/F Diff. Prot.	
C296A	11 kV Feeder to Marine Board Macquarie Wharf Substation	"	"		1 x 3	300/150/75/5	15 VA 11 kV	0.5	Star	"	13.1 kA for 3 Secs.	Metering	
C296B	" " " "	"	"		1 x 3	300/5	15 VA 11 kV	2.5P50	"	"	13.1 kA for 3 Secs.	Combined O/C & E/F	
96	11 kV Busbar	"	"		1	400/5	660V	10P50			35 for 3 Secs.	Frame Leakage Protection	
C297	11 kV Busbar Potential Transformer		"		1	11 kV/110V	11 kV 200 VA		Star/Star			Metering	

REFERENCE DRAWINGS

Plant Diagram S/SD106
Plant Table S/SD448
Protection Table S/SD449 Sheet 1
Single Line Diagram S/SC110
Protection Table S/SD453 Sheet 2

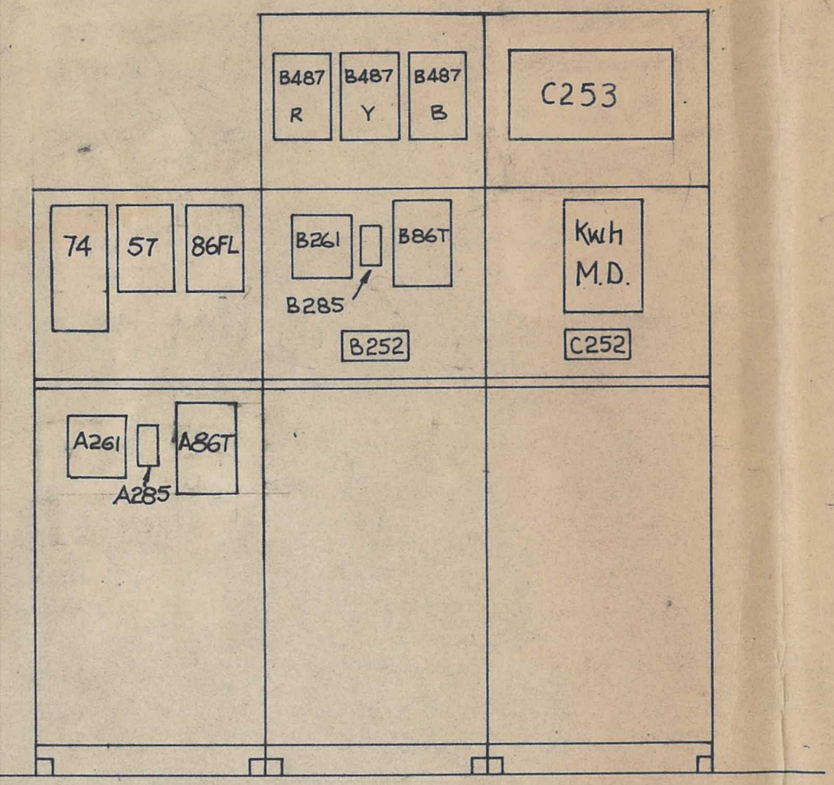
Designed	B&W.	Checked	B&W.	SCALES
Drawn		Checked	B&W.	
RECOMM.	R.S.D.E.			
APPR'VD.	DATE	METROPOLITAN DISTRIBUTION ENGINEER.		

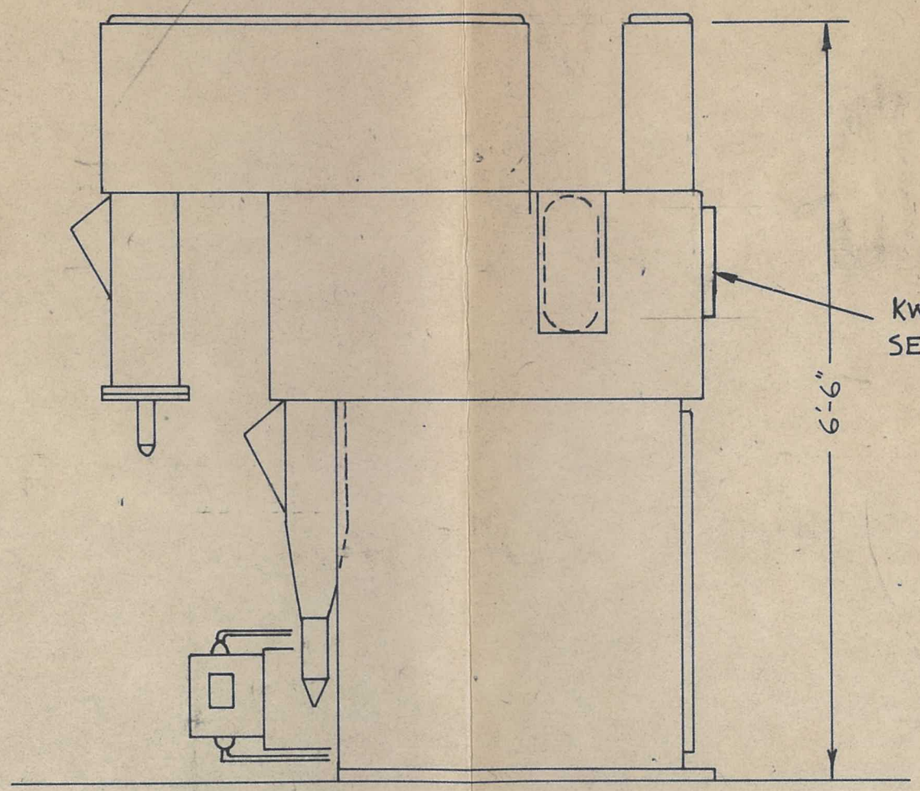
THE HYDRO-ELECTRIC COMMISSION - TASMANIA

EVANS STREET DISTRIBUTION SUBSTATION

CURRENT TRANSFORMER AND VOLTAGE TRANSFORMER TABLE

S/SD450





THIS DRAWING CONFORMS TO SUBSTATION SECTION REQUIREMENTS :-

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