

9.0 Bibliography

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Appendix 1: Study Brief

The State Heritage Office Guidelines for the preparation of Conservation Management Plans are available at:

<http://stateheritage.wa.gov.au/docs/conservation-and-development/guide-to-conservation-management-plans0CE0050FE47C.pdf?sfvrsn=2>

Appendix 2: Burra Charter

The Burra Charter is available online from Australia ICOMOS at:

<http://australia.icomos.org/publications/burra-charter-practice-notes/>

Appendix 3: Criteria for the Assessment of Cultural Heritage Significance

The State Heritage Office publication outlining the assessment criteria for cultural heritage significance is available at:

<http://stateheritage.wa.gov.au/docs/assessment-and-registration/assessment-criteria-for-cultural-heritage-significance.pdf?sfvrsn=10>

Appendix 4: Land Information

Application 1359
TRANSFER 1927
2/19/27
17

FOL.



REGISTER BOOK.

Vol. 972 Fol. 22

INDEXED
Lancet 177

WESTERN AUSTRALIA.

Certificate of Title

under "The Transfer of Land Act, 1893" (Sch. 5, 56 Vic., 14.)

CANCELLED

CT 0972 0022 F



Commonwealth of Australia

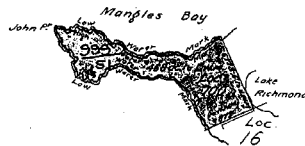
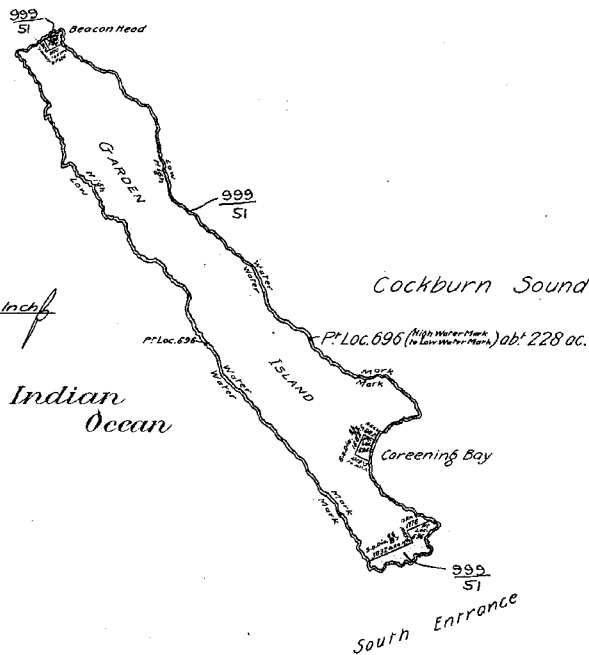
now the *sole* proprietor
of an estate in fee simple in possession subject to the easements and encumbrances notified herounder in ALL
those piece of land delineated and coloured *green* on the map hereon,
containing *in the aggregate seven hundred and forty two acres and two rods*
or thereabouts, being *Cockburn Sound Locations 692 700 and*
portion of Cockburn Sound Location 696.

added

999/51
Carnac Island
South Coast (Pt. Loc. 692)
Carnac Island
South Coast (Pt. Loc. 692)

Correct 1930. Totally cancelled and a new certificate issued for within land. Registered 11th April 1928 at 30^o 999-51.
Ad. Sherry

Cancelled



Dated the *fifth* day of *August* One thousand nine hundred and twenty-seven.

Ad. Sherry
Assistant Registrar of Titles.

12845/27*

For encumbrances and other matters affecting the land see back.

EASEMENTS AND ENCUMBRANCES REFERRED TO.

Cancelled

CT 0972 0022 B



CERTIFICATE OF TITLE

Registered Vol.....Fol.....





Certificate of Title

under "The Transfer of Land Act, 1893" (Sch. 5, 56 Vio., 14.)

CT 0999 0051 F



Commonwealth of Australia

is now the sole proprietor

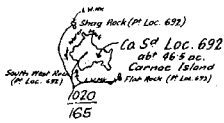
of an estate in fee simple in possession subject to the easements and encumbrances notified hereunder in ALL

these pieces of land delineated and coloured green on the map hereon,

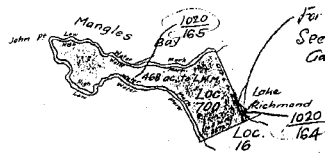
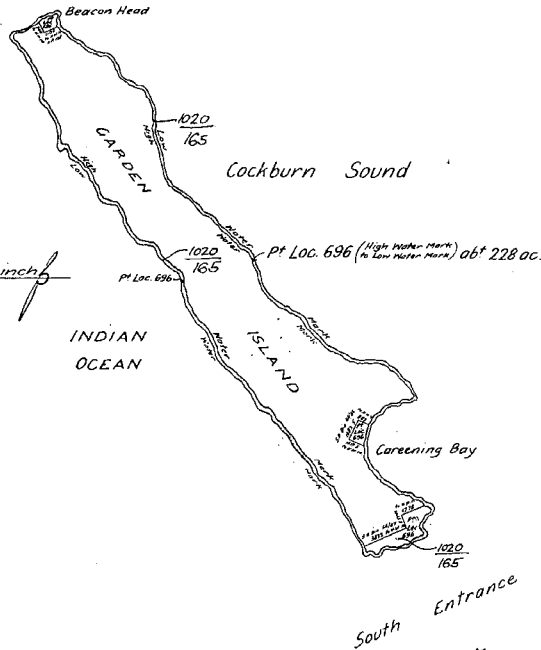
containing the aggregate seven hundred and forty acres and two roads

or thereabouts, being Cockburn Sound Locations 692, 696 and

700.



Cancelled



For authority to sell portions
See Commonwealth
Gaz. G. 2. 20 p. 109

Dated the seventh day of April

One thousand nine hundred and twenty-eight.

Assistant Registrar of Titles

Assistant Registrar of Titles.

Application 1506/1930. Totally cancelled and a new certificate issued for the balance
(Locations 692 and 696 and Portion of Location 700). Registered 7th August 1930 at 2.35p

1020-165

Assistant Registrar of Titles

ASSISTANT REGISTRAR OF TITLES

43967/27*

For encumbrances and other matters affecting the land see back.

Transfer 5964/1930 Portion of Location 700 to George the Fifth. Registered 7th August
1930 dt 2.35cc
✓ 1020.164

ASSISTANT REGISTRAR OF TITLES

Cancelled

CT 0999 0051 B



CERTIFICATE OF TITLE

Registered Vol.....Fol.....





REGISTER BOOK.

Vol. 1020 Fol. 165

WESTERN AUSTRALIA.

Certificate of Title

under "The Transfer of Land Act, 1893" (Sch. 5, 56 Vict., 14.)

Diagram 203/1.
PLAN 7836
Plan. 7928

The Commonwealth of Australia

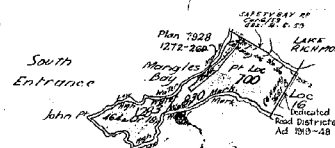
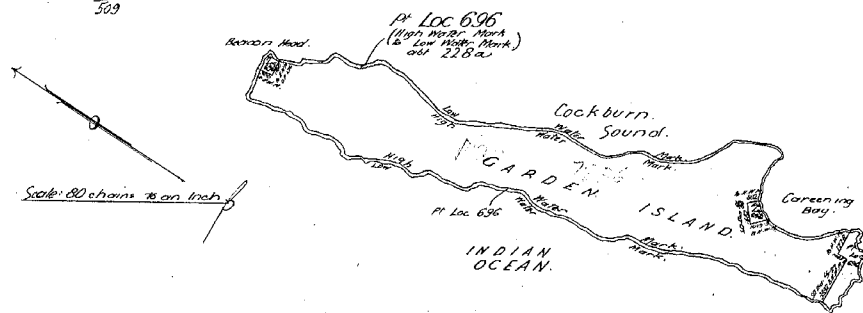


is now the sole proprietor

of an estate in fee simple in possession subject to the encumbrances and encumbrances notified hereunder in ALL

those pieces of land delineated and coloured green on the map hereon, containing in the aggregate seven hundred and thirty eight acres two roods eighteen perches or thereabouts, being Cockburn Sound Locations 692, 696 and portion of Cockburn Sound Location 700

*Shag Rock
Co. SD Loc 692
1263
509*



Dated the twenty day of August

One thousand nine hundred and thirty.

W. J. Harvey
Assistant Registrar of Titles.

N. Rev. 1/11/31
for 12 columns in title.

TOTALLY CANCELLED
TRANSFER 8763/104. Balance to
then 1000 1/2 by Cred. Brigade 10/12/30
Registered *1/11/31* May 1964 at 9:00am
1283 830.
REGISTRAR OF TITLES

EASEMENTS AND ENCUMBRANCES REFERRED TO.

TRANSFER 4030/1956. Portion the subject
of diagram 20371 to
Her Majesty Queen Elizabeth the Second
Registered 23rd March 1956 at 11.80's. *P. J. Moran*
J 1191-774. **AUT** Registrar of Titles.

TRANSFER 14214/1962 Location 692
to
Her Majesty Queen Elizabeth the Second
Registered 2nd August 1962 at 10-45's. *P. J. Moran*
1263-509. Registrar of Titles.

APPLICATION a separate certificate
27833/63
Issued for The subject of Plan 7928
Registered 20th May 1963 at 11.20's. *L. F. Symes*
1272-260. Registrar of Titles.

TRANSFER 31163/61. The balance
of location 700
to
Her Majesty Queen Elizabeth the Second
Registered 11th May 1961 at 9.03's. *P. J. Moran*
1383-830. Registrar of Titles.

CT 1020 0165 B



CERTIFICATE OF TITLE.

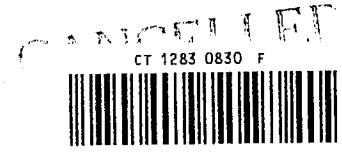
Registered Vol. Fol.



WESTERN AUSTRALIA.

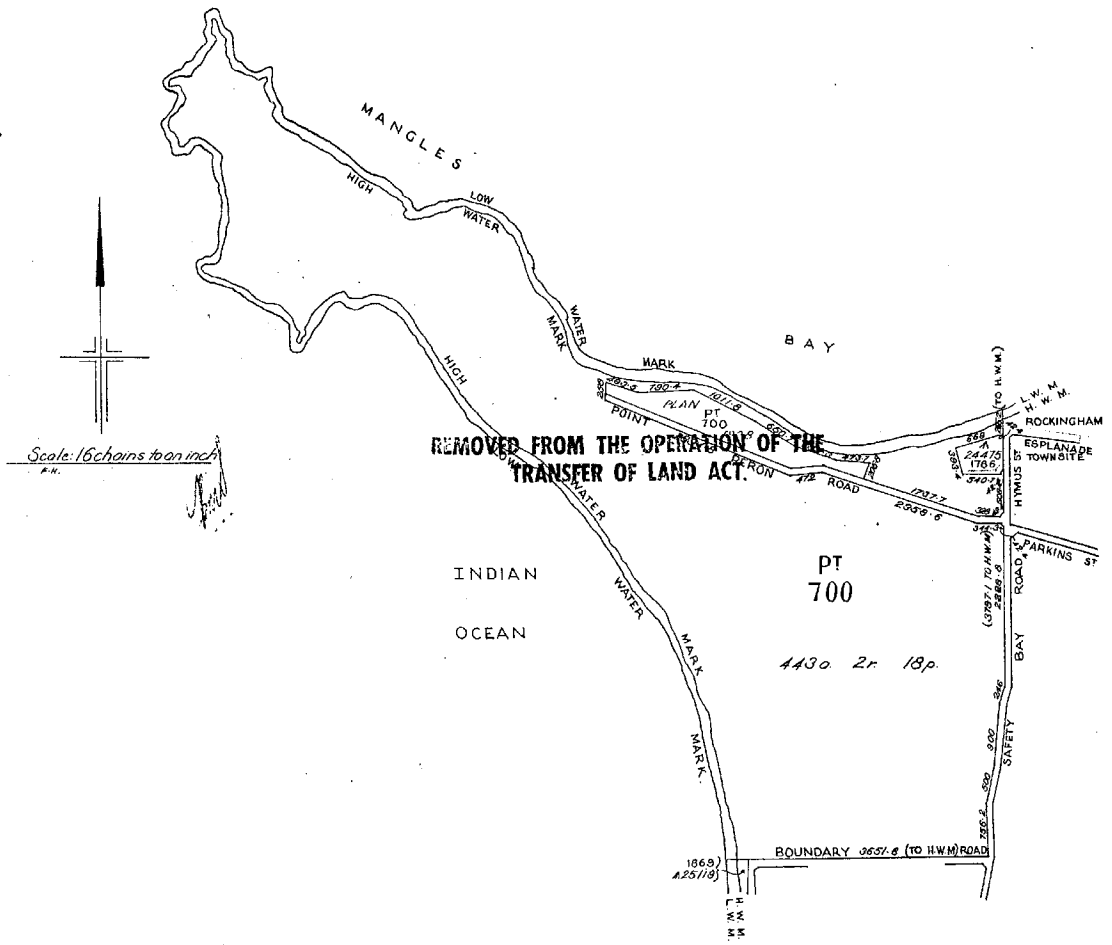
Certificate of Title

under "The Transfer of Land Act, 1893" (56 Vic. 14. Sch. 5).



Her Majesty Queen Elizabeth the Second, is now the proprietor of an estate in fee simple subject to the easements and encumbrances notified hereunder in all that piece of land delineated and coloured green on the map hereon containing four hundred and forty-three acres two roods and eighteen perches or thereabouts, being portion of Cockburn Sound Location 700.

Cancelled



REMOVED FROM THE OPERATION OF THE
TRANSFER OF LAND ACT.

Dated the fourteenth day of May One thousand nine hundred and sixty-four.

Cor. 1-66. Caz. 4-3-66
REVESTED AND CANCELLED
TOTALLY
H. Blackmore
REGISTRAR OF TITLES

H. Blackmore
Registrar of Titles.

CANCELLED

For encumbrances and other matters affecting the land see back.

EASEMENTS AND ENCUMBRANCES REFERRED TO

Cancelled

CT 1283 0830 B



CERTIFICATE OF TITLE

Vol. **1283** Fol. N^o **830**

WESTERN



AUSTRALIA

REGISTER NUMBER 301/DP48616	
DUPLICATE EDITION N/A	DATE DUPLICATE ISSUED N/A

RECORD OF QUALIFIED CERTIFICATE

VOLUME
LR3140

FOLIO
959

OF

CROWN LAND TITLE

UNDER THE TRANSFER OF LAND ACT 1893
AND THE LAND ADMINISTRATION ACT 1997

NO DUPLICATE CREATED

The undermentioned land is Crown land in the name of the STATE of WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 301 ON DEPOSITED PLAN 48616

STATUS ORDER AND PRIMARY INTEREST HOLDER:
(FIRST SCHEDULE)

STATUS ORDER/INTEREST: RESERVE UNDER MANAGEMENT ORDER

PRIMARY INTEREST HOLDER: CONSERVATION COMMISSION OF WESTERN AUSTRALIA OF CORNER OF HACKETT DRIVE AND AUSTRALIA II DRIVE, CRAWLEY

(XE L848273) REGISTERED 2 FEBRUARY 2012

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. K194937 PART RESERVE 48968 FOR THE PURPOSE OF RECREATION REGISTERED 17.5.2007.
L848273 MANAGEMENT ORDER. CONTAINS CONDITIONS TO BE OBSERVED. WITH POWER TO LEASE FOR ANY TERM NOT EXCEEDING 21 YEARS. REGISTERED 2.2.2012.

- Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
Lot as described in the land description may be a lot or location.
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP48616.
PREVIOUS TITLE: LR3136-65, LR3136-64, LR3136-61.
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.
LOCAL GOVERNMENT AREA: CITY OF ROCKINGHAM.
RESPONSIBLE AGENCY: DEPARTMENT OF PARKS AND WILDLIFE.

END OF PAGE 1 - CONTINUED OVER

ORIGINAL CERTIFICATE OF CROWN LAND TITLE
QUALIFIED

REGISTER NUMBER: 301/DP48616

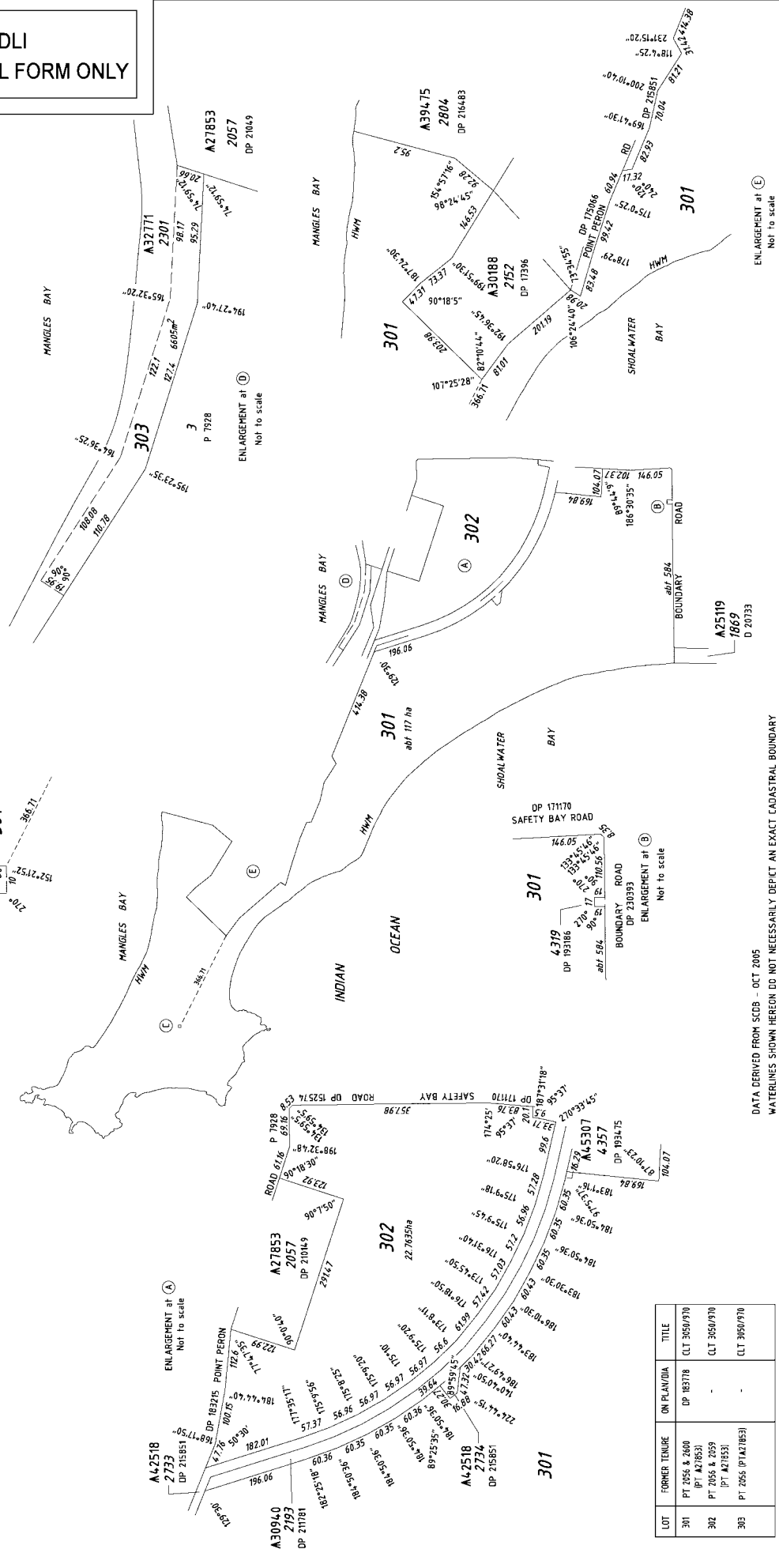
VOLUME/FOLIO: LR3140-959

PAGE 2

NOTE 1: K004447 SUBJECT TO SURVEY - NOT FOR ALIENATION PURPOSES
NOTE 2: L848273 CORRESPONDENCE FILE 51174-2005-01RO

HELD BY DLI
IN DIGITAL FORM ONLY

ED/VER	AMENDMENT	BY	SIGNATURE	DATE	APPROVED Authorized Land Officer	Date



DATA DERIVED FROM SC03 - OCT 2005
WATERLINES SHOWN HEREON DO NOT NECESSARILY DEPICT AN EXACT CADASTRAL BOUNDARY

LOT	FORMER TENURE	ON PLAN/DIA	TITLE
301	PT 2056 & 2060 (PT A27853)	DP 183778	CLT 3050/970
302	PT 2055 & 2059 (PT A27853)	-	CLT 3050/970
303	PT 2055 (PT A27853)	-	CLT 3050/970

TYPE PURPOSE	CROWN SUBDIVISION	FORMER TENURE	See table
PLAN OF	LOTS 301 - 303	DATE	25/10/2005
DISTRICT	COCUBURN SOUND	TOWNSHIP	
FILE	327/1932V1	LOCALITY	PERON
LOCAL AUTHORITY	CITY OF ROCKINGHAM	DATE	25/10/2005
SUBJECT TO SURVEY NOT FOR ALIENATION PURPOSES		APPROVED	20/11/05
SUBJECT TO DEALINGS		FOR AUTHORIZED LAND OFFICER	DATE
SUBJECT TO		APPROVED	DATE
1. Amendment and redescription of Reserve 27853 to comprise lots 2057 and 2058 on DP 270149			
2. Reservation of lots 301, 302 hereon			

DEPOSITED PLAN
48616

SHEET 1 OF 1
EDITION 1 VERSION 1

Reserve Enquiry Detail [5100L]

[Screen Friendly](#) [Print](#)

Reserve	48968	Legal Area (ha)	143.3657
Name		Status	Current
Type		Current Purpose	RECREATION
Notes	WITH POWER TO LEASE FOR ANY TERM NOT EXCEEDING 21 YEARS.		
File Number			
Additional Reserve Information	RESERVE COMPRISES LOT 301 ON DP48616 & LOT 500 ON DP55827 (K194937)		

Class	Responsible Agency	Date of Last Change
C	DEPARTMENT OF CONSERVATION & LAND MANAGEMENT	10/02/2012

Management Orders	Document	Land Use	Local Government Authority
CONSERVATION COMMISSION OF WESTERN AUSTRALIA	K72599	RECREATION	ROCKINGHAM, CITY OF

Add Item	CLT Number	Parcel Identifier	Street Address	Suburb	File Number	PIN	Area (sqm)	Map
<input type="checkbox"/>	LR3140-959	Lot 301 On Plan 48616			51174-2005-01RO	11506785	1169585.0	
<input type="checkbox"/>	LR3147-348	Lot 500 On Plan 55827			51174-2005-01RO	11653036	263657.0	

Reserve Number 48968

Previous Certificates of Title	Historic Crown Allotments

Gaz Page/Document	Date	Type	Text
K194936	17/05/2007	Vesting Revoked	REVOKED
K194937	17/05/2007	Current Area	143.3657
K72599	30/01/2007	Current Vesting	VESTING CONSERVATION COMMISSION OF WESTERN AUSTRALIA
K72599	30/01/2007	Historical Vesting	VESTING CONSERVATION COMMISSION OF WESTERN AUSTRALIA
K4449	29/11/2006	Class	C
K4449	29/11/2006	Current Purpose	RECREATION
K4449	29/11/2006	Historical Area	140.4240

This product is for information purposes only. A search of the original documentation is required for all legal purposes
Western Australian Land Information Authority (Landgate)

Reserve Enquiry Detail [5100L]

[Screen Friendly](#) [Print Page](#)

Reserve	31488	Legal Area (ha)	0.0101
Name		Status	Current
Type		Current Purpose	TRIGONOMETRICAL STATION
Notes			
File Number	1668/72		

Class	Responsible Agency	Date of Last Change
C	WESTERN AUSTRALIAN LAND INFORMATION AUTHORITY	15/07/2008

Management Orders	Document	Land Use	Local Government Authority
		TRIGONOMETRICAL STATION	ROCKINGHAM, CITY OF

Add Item	CLT Number	Parcel Identifier	Street Address	Suburb	File Number	PIN	Area (sqm)	Map Viewer
<input type="checkbox"/>	LR3000-611	Lot 2238 On Plan 48616			01668-1972	355529	100.0	

Reserve Number	31488
-----------------------	-------

Previous Certificates of Title	Historic Crown Allotments
	COCKBURN SOUND Location 2238

Gaz Page/Document	Date	Type	Text
K648901	07/07/2008	Historical Responsible Agency	DEPARTMENT FOR PLANNING AND INFRASTRUCTURE
3034	11/08/1972	Original Gazettal and page	ORIGINAL GAZETTE
	11/08/1972	Current Area	ABT4.0.0
	11/08/1972	Class	C
	11/08/1972	Current Purpose	TRIGONOMETRICAL STATION
	11/08/1972	Correspondence File Number	1668/72
	11/08/1972	Location	COCKBURN SOUND,2238

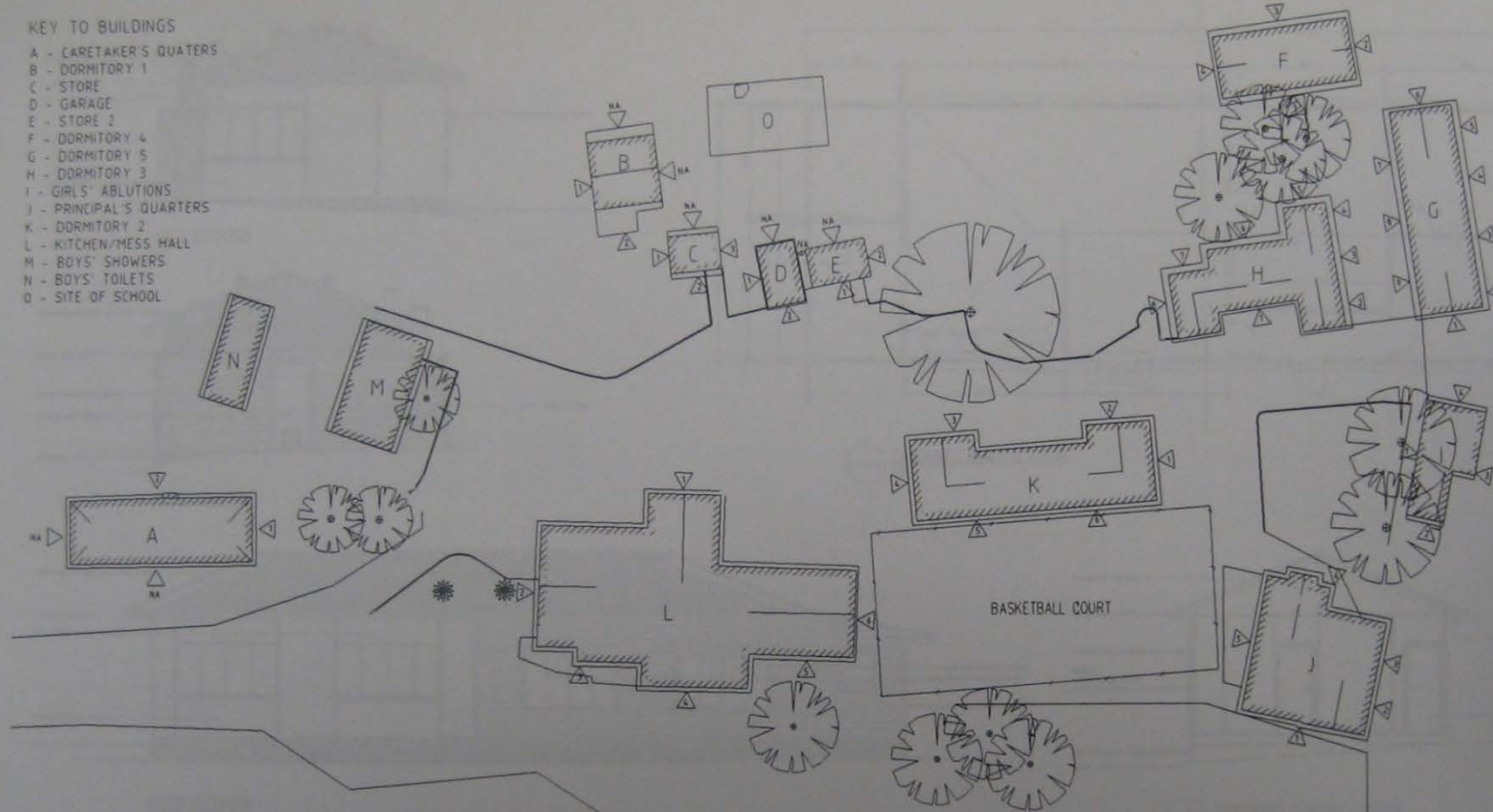
11/08/1972	Public Plan	PEEL (02) 3.29
01/01/0001	Metric Conversion	0.0101,P11

This product is for information purposes only. A search of the original documentation is required for all legal purposes
Western Australian Land Information Authority (Landgate)

Appendix 5: Plans of National Fitness Camp 1997

KEY TO BUILDINGS

- A - CARETAKER'S QUARTERS
- B - DORMITORY 1
- C - STORE
- D - GARAGE
- E - STORE 2
- F - DORMITORY 4
- G - DORMITORY 5
- H - DORMITORY 3
- I - GIRLS' ABLUTIONS
- J - PRINCIPAL'S QUARTERS
- K - DORMITORY 2
- L - KITCHEN/MESS HALL
- M - BOYS' SHOWERS
- N - BOYS' TOILETS
- O - SITE OF SCHOOL



▷ DIRECTION OF CORRESPONDING PHOTO
 NA ELEVATION NOT ACCESSIBLE

M A N G L E S B A Y
 C O C K B U R N S O U N D

○ SITE PLAN
 NOT TO SCALE

COX COX HOWLETT & BAILEY
 ARCHITECTS + PLANNERS
 Level 2, 80-82 King Street, Perth, WA 6000
 Tel: 94 38 1286 Fax: 94 38 97 4222 Mob: 9422 28 96

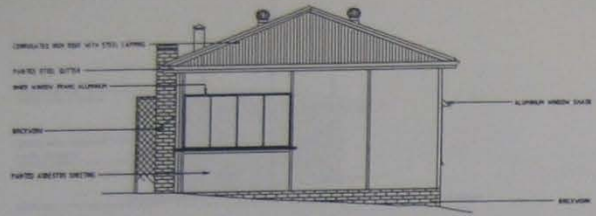
DEPARTMENT OF
 CONTRACT AND
 MANAGEMENT
 SERVICES

DEWING HOUSE
 2, Newland Street
 West Perth
 W. A. 6005
 Tel: 322 2555
 Fax: 322 1455

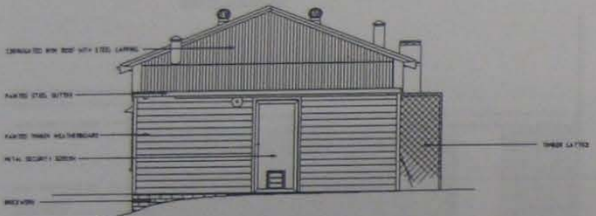
NATIONAL FITNESS CAMP - PT PERON
 POINT PERON WA
 SITEPLAN

DESIGN	CPV	REVISION	
TRACKED		REVISION	
APPROVED	MTR	DATE	01/03/97
SCALE		DATE	16/3/97
DATE FOR SET	08/04/97	FILE NO.	A1-02

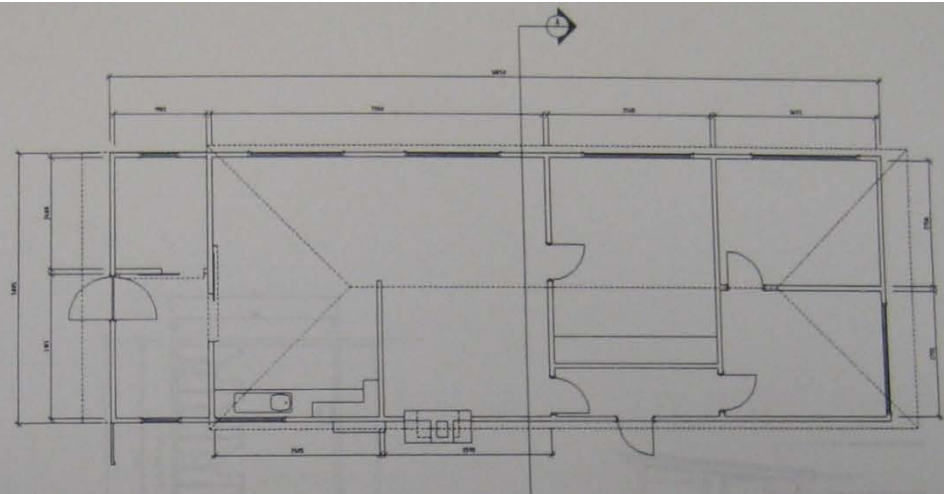
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 AND NOT BE LOANED OUT



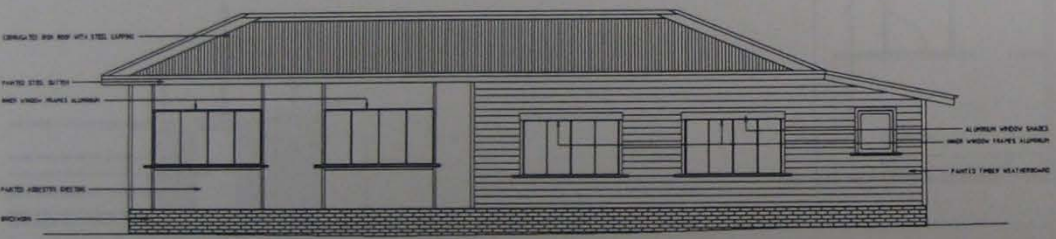
EAST ELEVATION



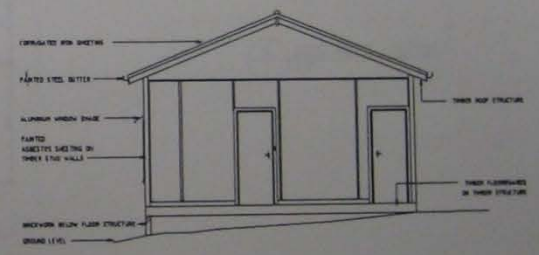
WEST ELEVATION



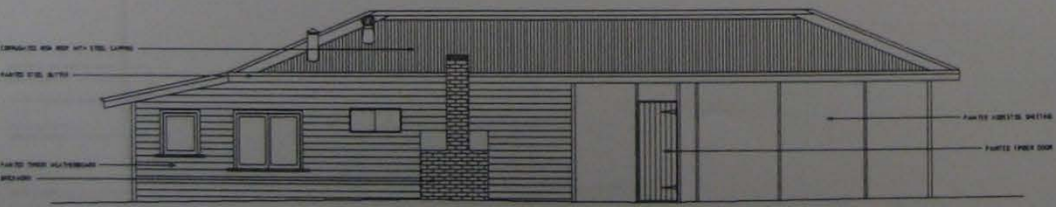
CARETAKER'S QUARTERS / PLAN
1:50



NORTH ELEVATION



A CARETAKER'S QUARTERS / SECTION
1:50



SOUTH ELEVATION

CARETAKER'S QUARTERS / ELEVATIONS
1:50

ALL DIMENSIONS SHOWN ARE UNLESS OTHERWISE SPECIFIED

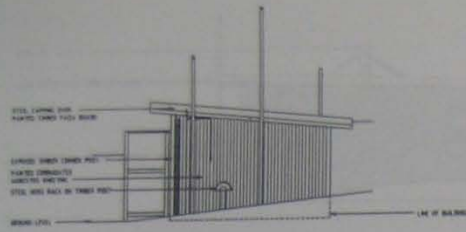
COX COX HOWLETT & BAILEY
ARCHITECTS + PLANNERS
Level 2, 20-22 King Street, Perth WA 6000
Tel: 08 943 1700 Fax: 08 943 1000

DEPARTMENT OF
CONTRACT AND
MANAGEMENT
SERVICES
LAFRANCE HOUSE
1 Newcastle Street
West Perth
W.A. 6005
Tel: 021 0000
Fax: 021 0000

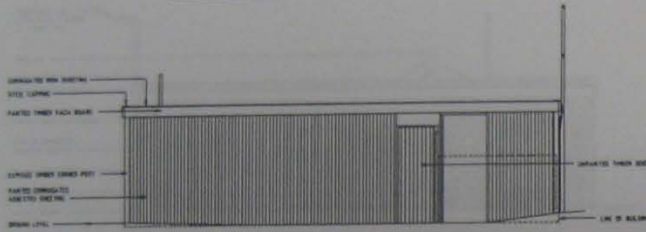
NATIONAL FITNESS CAMP - PT PERON
POINT PERON W.A.
MEASURED DRAWINGS
CARETAKER'S QUARTERS

DESIGN	DATE	REVISION
CHECKED	1/10/00	1
APPROVED	1/10/00	
SCALE	1:50	DATE 16.5.97
DRAWN BY	BB 14/21/96	REVISION NO.
		A2-01

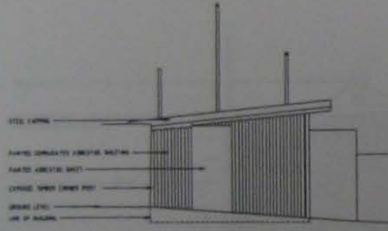
THIS IS A LEGAL DOCUMENT
DO NOT REMOVE THIS DOCUMENT FROM THE PROJECT



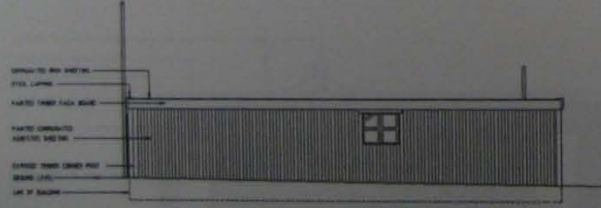
SOUTH ELEVATION



WEST ELEVATION

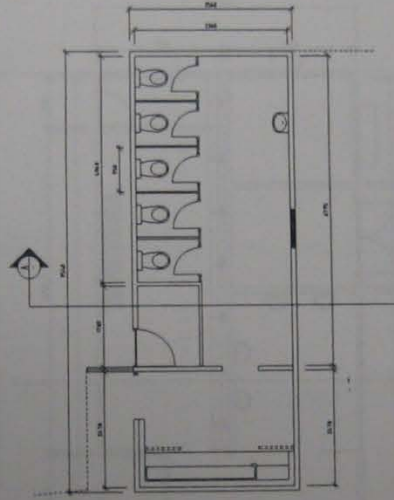


NORTH ELEVATION

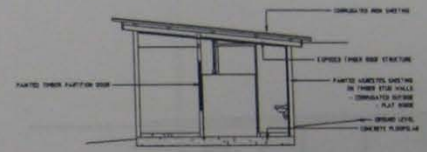


EAST ELEVATION

BOYS TOILETS / ELEVATIONS
1:50



BOYS TOILETS / PLAN
1:50



BOYS TOILETS / SECTION
1:50

ALL DIMENSIONS GIVEN IN THESE PLANS UNLESS OTHERWISE SPECIFIED

COX **COX HOWLETT & BAILEY**
 ARCHITECTS & PLANNERS
 Level 1, 81-83 King Street, Perth, WA 6000
 Tel: 922 4248 Fax: 922 4242

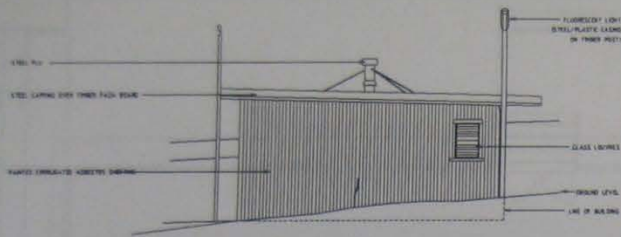
DEPARTMENT OF
CONTRACT AND
MANAGEMENT
SERVICES

81/83 KING STREET
 PERTH, WA 6000
 TEL: 922 4248
 FAX: 922 4242

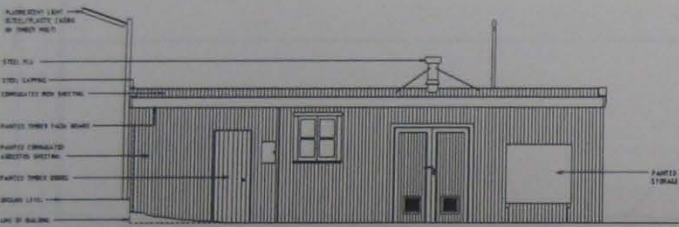
NATIONAL FITNESS CAMP - PT PERON
 POINT PERON WA
 MEASURED DRAWINGS

DRAWN		DESIGNED		CHECKED	
EPVH					
HTB					
SCALE	1:50	DATE	16.5.97	PROJECT NO.	A2-02
DATE DRAWN	08/11/96	FILE NO.			

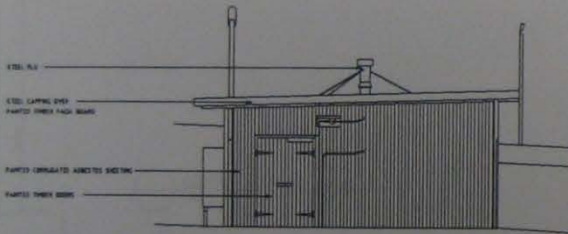
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 DO NOT SCALE DRAWING



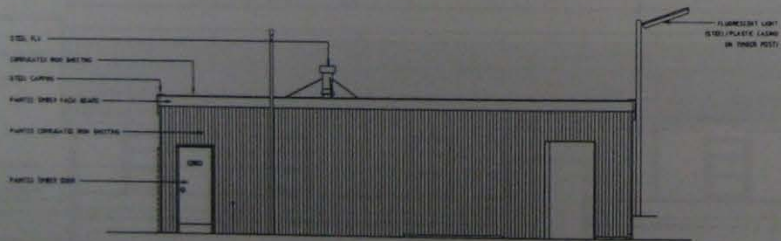
SOUTH ELEVATION



EAST ELEVATION

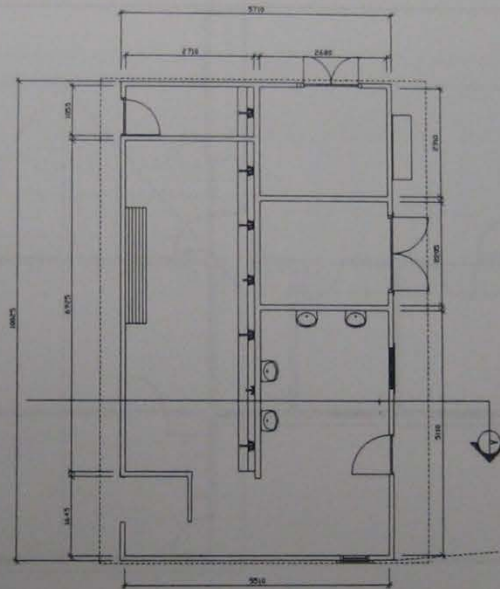


NORTH ELEVATION

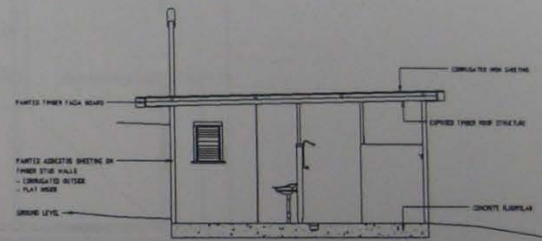


WEST ELEVATION

BOYS' SHOWERS / ELEVATIONS
1:50



BOYS' SHOWERS / PLAN
1:50



A BOYS' SHOWERS / SECTION
1:50

NO. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED.

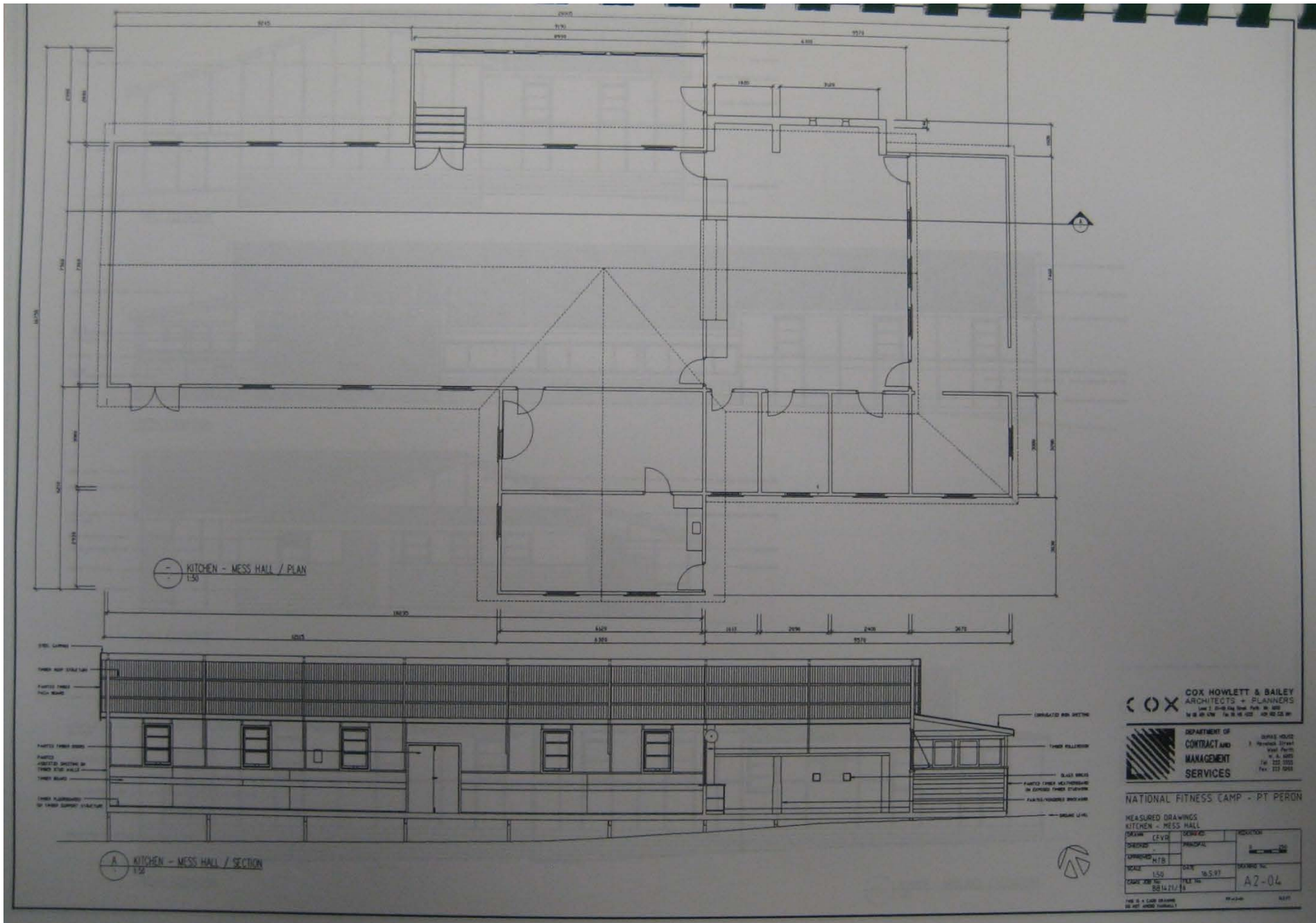
COX **COX HOWLETT & BAILEY**
ARCHITECTS & PLANNERS
Level 3, 25-26 Old Quay Road, Perth, WA 6000
Tel: 81 401 4100 Fax: 81 401 4102 Adv: 81 401 4101

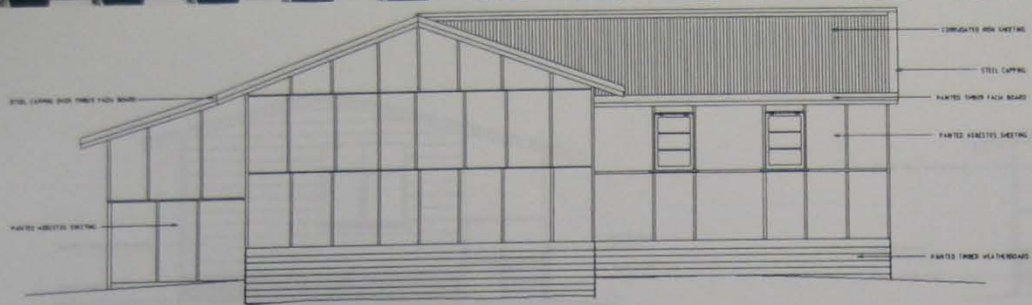
DEPARTMENT OF
CONTRACT AND MANAGEMENT SERVICES
DUNALD HOUSE
1 MURDOCH STREET
WEST PERTH
W.A. 6005
Tel: 272 3333
Fax: 272 3935

NATIONAL FITNESS CAMP - PT PERON
POINT PERON WA
MEASURED DRAWINGS
MALE SHOWERS

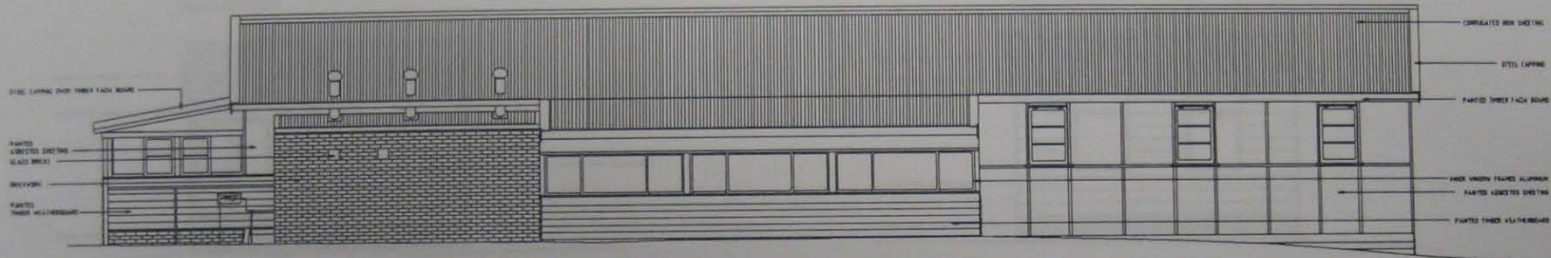
DESIGNER	REVISED	REVISION
EFVR	REVISION	
MTB		
SCALE	DATE	REVISION NO.
1:50	16.5.97	
DRAWN BY	FILE NO.	
BB 14/21/96		A2-03

THIS IS A CAD DRAWING
DO NOT SCALE DRAWING

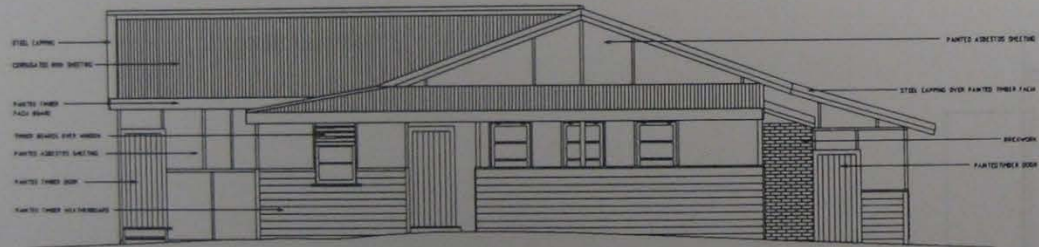




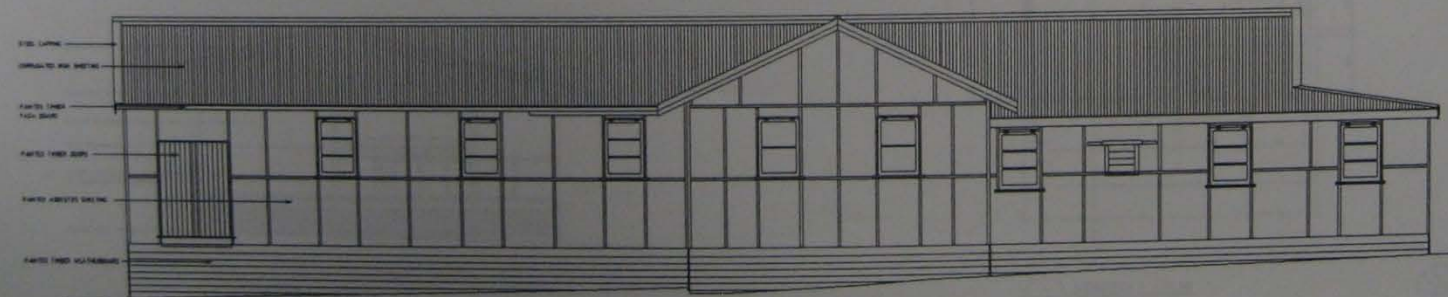
WEST ELEVATION



NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION

KITCHEN - MESS HALL / ELEVATIONS
1:50

ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED

COX
COX HOWLETT & BAILEY
 ARCHITECTS + PLANNERS
 Level 2, 100-102 King Street, Perth, WA 6000
 Tel: 08 94 46 0700 Fax: 08 94 46 0722

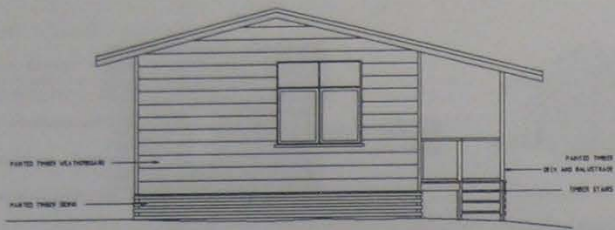
DEPARTMENT OF
CONTRACT AND
MANAGEMENT
SERVICES
 DUPAS HOUSE
 11 Macquarie Street
 PERTH
 WA 6000
 TEL: 08 922 5055
 FAX: 08 922 5055

NATIONAL FITNESS CAMP - PT PERON

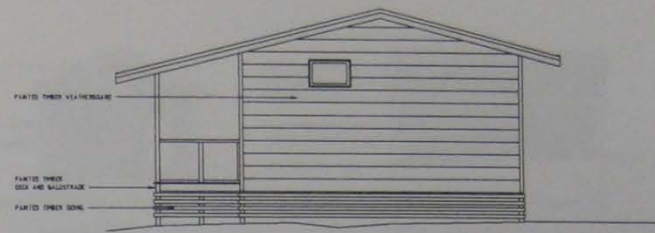
POINT PERON
 MEASURED DRAWINGS
 KITCHEN - MESS HALL

DATE	BY	REVISION
DESIGNED	CEV/BJ	PROPOSED
APPROVED	MTB	AS SHOWN
SCALE	1:50	DATE
CHECKED	MTB	DATE
DATE	08/14/21/99	PROJECT NO.
		82-05

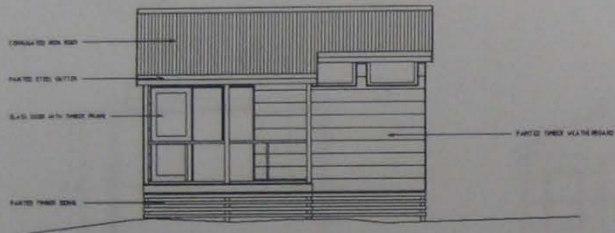
THIS IS A CAD DRAWING
 DO NOT SCALE DRAWING



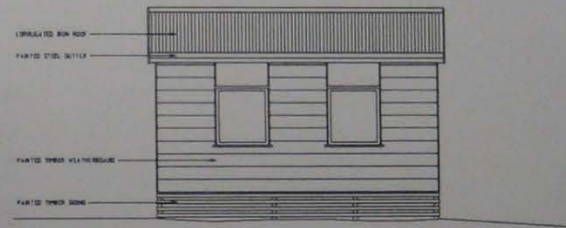
EAST ELEVATION



WEST ELEVATION

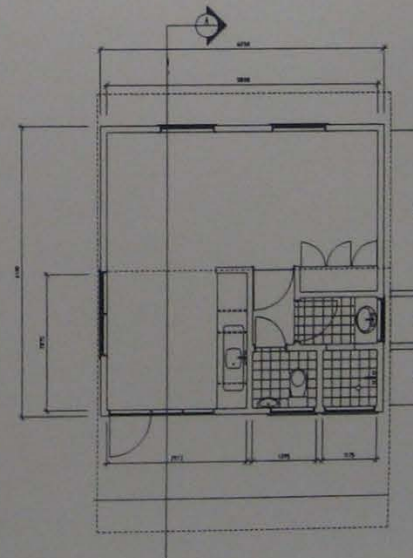


NORTH ELEVATION

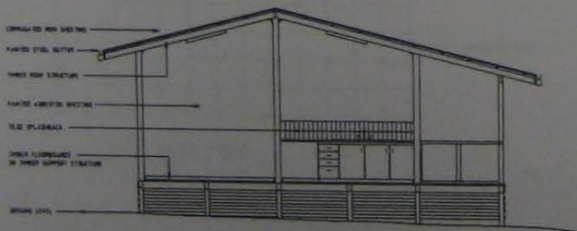


SOUTH ELEVATION

DORMITORY 1 / ELEVATIONS
E:50



DORMITORY 1 / PLAN
E:50



DORMITORY 1 / SECTION
E:50

ALL DIMENSIONS SHOWN ARE THEY UNLESS STATED OTHERWISE

COX COX HOWLETT & BAILEY
ARCHITECTS & PLANNERS
Level 1, 10-12 City Street, Perth WA 6000
M 08 947 4300 F 08 947 4322 A3 922 43 00

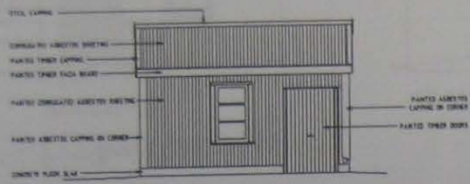
DEPARTMENT OF
**CONTRACT AND
MANAGEMENT
SERVICES**

NATIONAL FITNESS CAMP - PT. PERON

POINT PERON WA
MEASURED DRAWINGS
DORMITORY 1

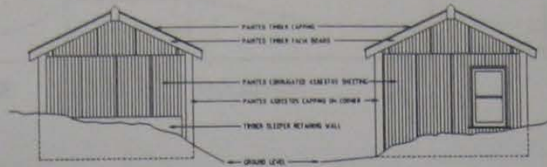
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CHECKED	HTB	PROJECT NO.	0
APPROVED	HTB	DATE	14.5.07
SCALE	1:50	FILE NO.	BB 14.21.10
CADRE JOB NO.	BB 14.21.10	DATE	14.5.07
		PROJECT	A2-06

THIS IS A LEGAL DOCUMENT
BY NOT ARCHITECTS



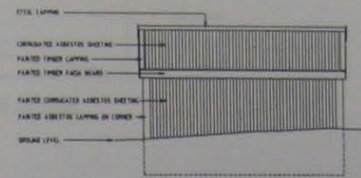
NORTH ELEVATION

STORE / ELEVATIONS
1:50

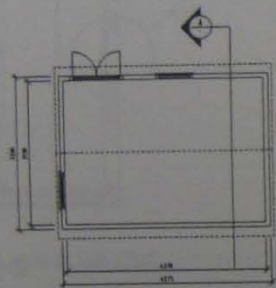


EAST ELEVATION

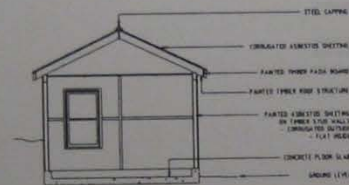
WEST ELEVATION



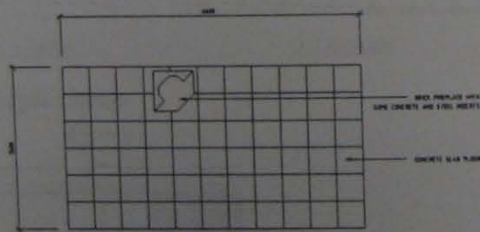
SOUTH ELEVATION



STORE / PLAN
1:50



STORE / SECTION
1:50



SCHOOL / PLAN
1:50

ALL DIMENSIONS UNLESS OTHERWISE STATED

COX **COX HOWLETT & BAILEY**
ARCHITECTS & PLANNERS
Level 3, 170-172 Sturt Street, Perth, WA 6000
Tel: 9448 2700 Fax: 9448 4322 9448 9500 9448 9501

DEPARTMENT OF
CONTRACT AND
MANAGEMENT
SERVICES

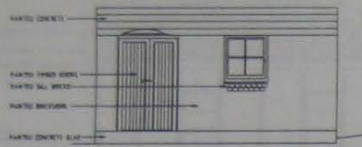
600/20 HOBSON
7, Murdoch Street
Perth WA 6000
Tel: 9448 2000
Fax: 9448 1000

NATIONAL FITNESS CAMP - PT PERON
POINT PERON WA
MEASURED DRAWINGS
STORE / SCHOOL

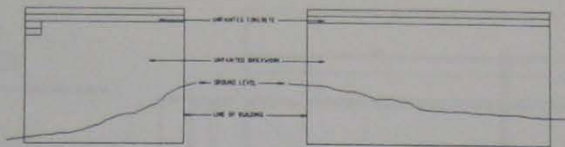
PROJECT	CLIENT	DESIGNER	REVISION
CPVM	PTB	155	15.5.87
155	15.5.87	15.5.87	15.5.87
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DATE: 15.5.87
DRAWN BY: A2-07

THIS IS A LEGAL DOCUMENT
BY THE ARCHITECT

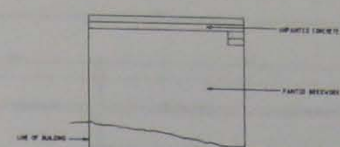


NORTH ELEVATION



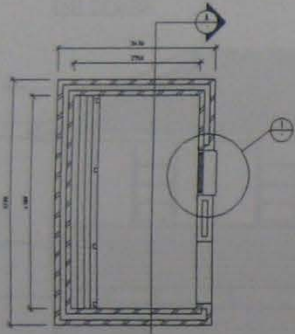
WEST ELEVATION

SOUTH ELEVATION



EAST ELEVATION

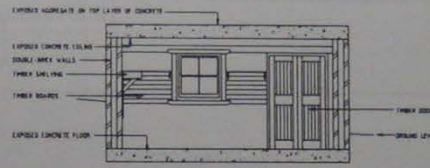
AMMUNITION STORE / ELEVATIONS
1:50



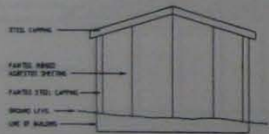
AMMUNITION STORE / PLAN
1:50



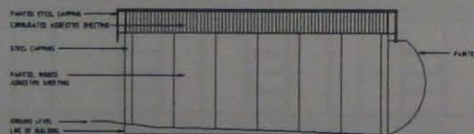
AMMUNITION STORE / DETAIL
1:20



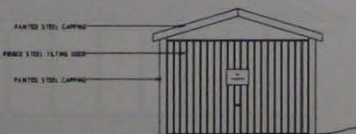
AMMUNITION STORE / SECTION
1:50



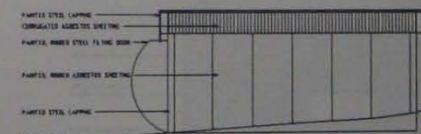
SOUTH ELEVATION



EAST ELEVATION

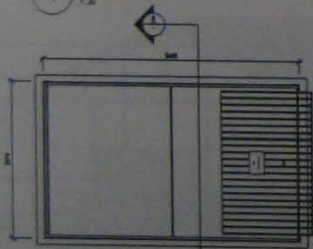


NORTH ELEVATION

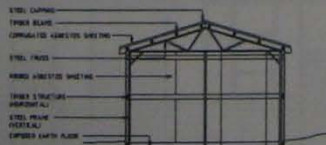


WEST ELEVATION

GARAGE / ELEVATIONS
1:50



GARAGE / PLAN
1:50



GARAGE / SECTION
1:50

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COX **COX HOWLETT & BAILEY**
ARCHITECTS & PLANNERS
 Suite 1, 40-42 King Street, Perth, WA 6000
 M 08 945 1760 Fax 08 945 1222 08 922 528 891

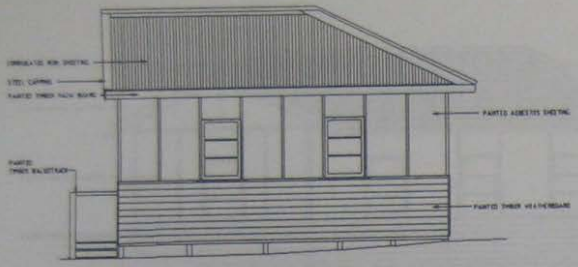
DEPARTMENT OF
CONTRACT AND
MANAGEMENT
SERVICES

01/24/2008 10:00:00
 2 Newmarket Street
 West Perth
 W. A. 6005
 Tel: 922 0200
 Fax: 922 3455

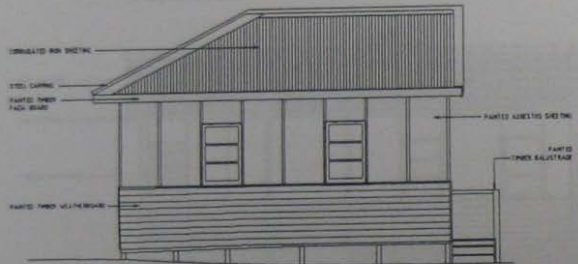
NATIONAL FITNESS CAMP - PT PERON
POINT PERON
MEASURED DRAWINGS
GARAGE / STOREZ

DESIGN	CPVR	DRAWN		REVISION
CHECKED		APPROVED		
SCALE	1:50	DATE	14/5/97	DRAWING NO.
CADW	20876	PROJECT NO.		A2-08
	88/14/21/16			

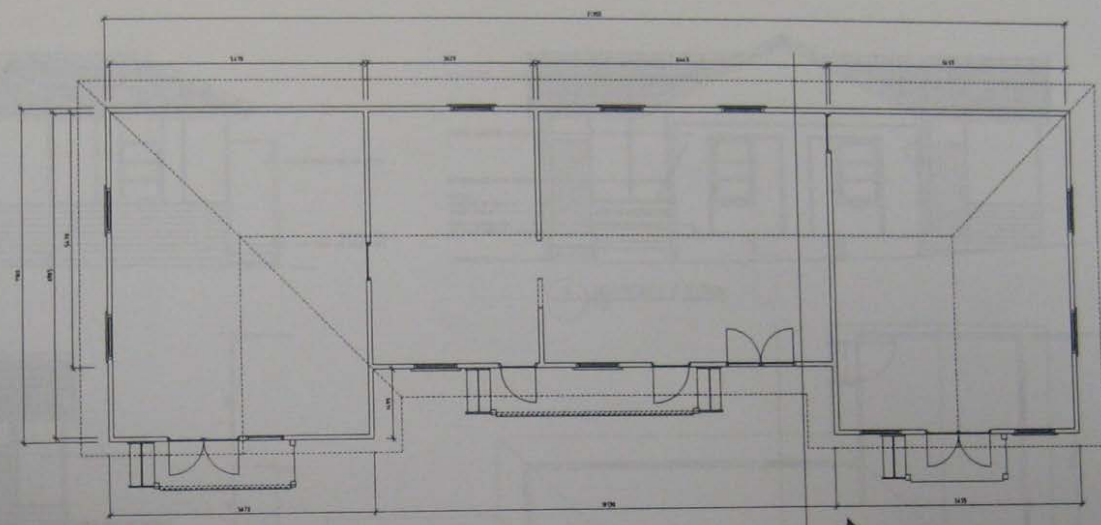
THIS IS A MEASURED DRAWING
 BY THE ARCHITECT



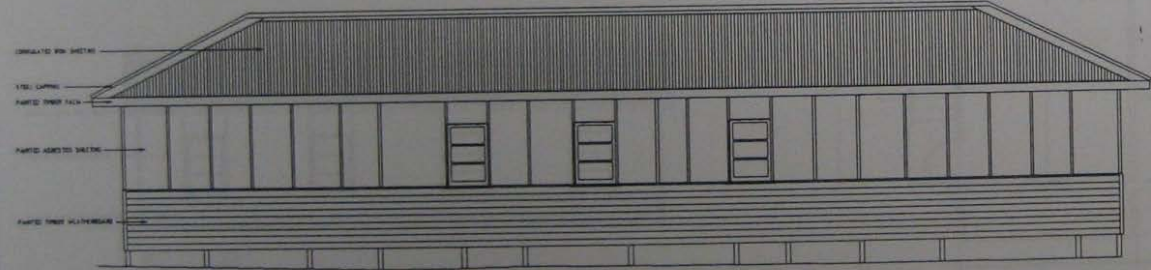
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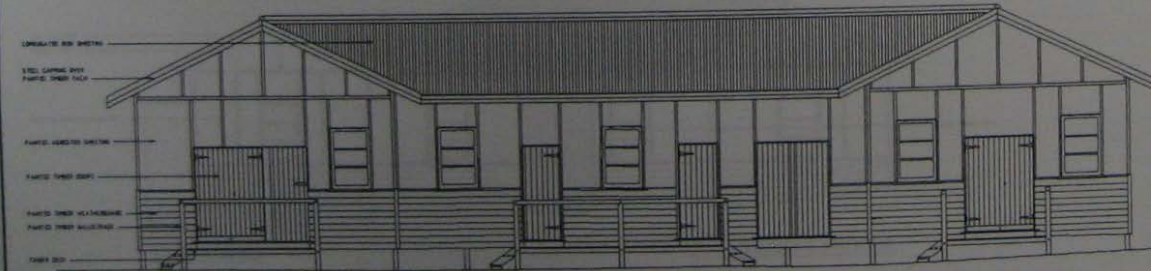
WEST ELEVATION



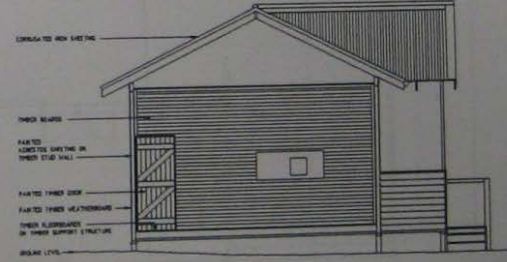
DORMITORY 2 / PLAN
1:50



NORTH ELEVATION



SOUTH ELEVATION



DORMITORY 2 / SECTION
1:50

ALL DIMENSIONS GIVEN ARE UNLESS OTHERWISE STATED OTHERWISE

COX COX HOWLETT & BAILEY ARCHITECTS + PLANNERS
Unit 1, 8-10 The Strand, Perth, WA 6000
Tel: 9438 1700 Fax: 9438 1422 08 102 526 997

DEPARTMENT OF
CONTRACT AND
MANAGEMENT
SERVICES

10/142 10052
2 Murdoch Street
West Perth
WA 6005
Tel: 322 5333
Fax: 322 5393

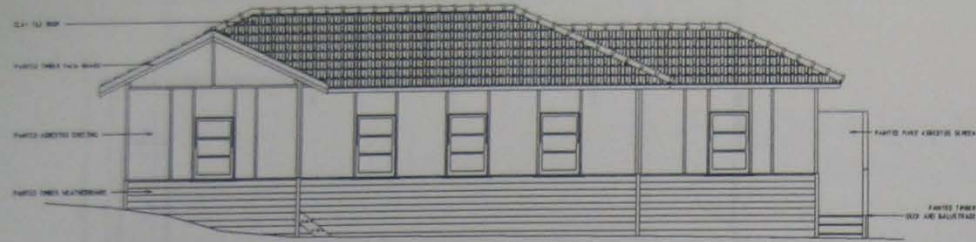
NATIONAL FITNESS CAMP - PT PERON
POINT PERON WA
MEASURED DRAWINGS
DORMITORY 2

DESIGN	CEVR	REVISION	DESCRIPTION
DESIGNED	HTB	PRINCIPAL	
DRAWN	HTB		

SCALE 1:50 DATE APRIL 97 DRAWING NO. A2-09
DATE FOR ISSUE 08/12/96

NO. 2 A LINE DRAWING OF NET WEIGHT RAILWAY

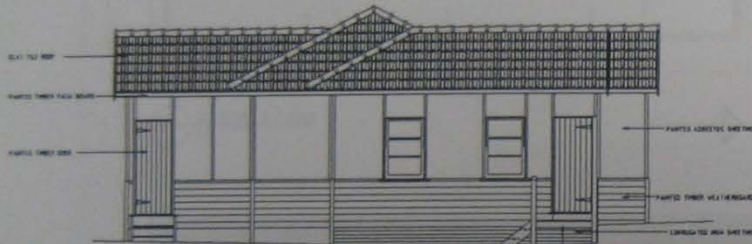
DORMITORY 2 / ELEVATIONS
1:50



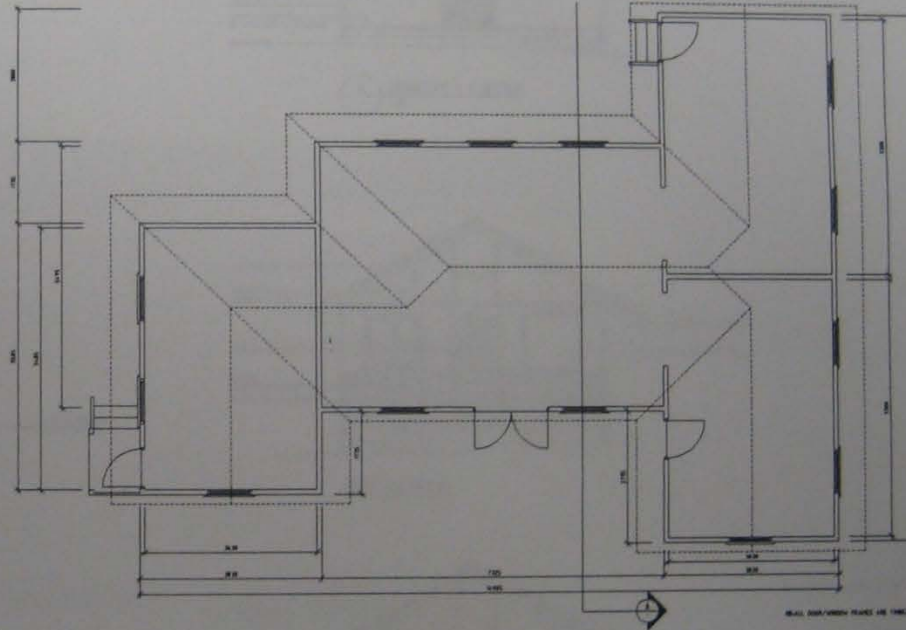
SOUTH ELEVATION



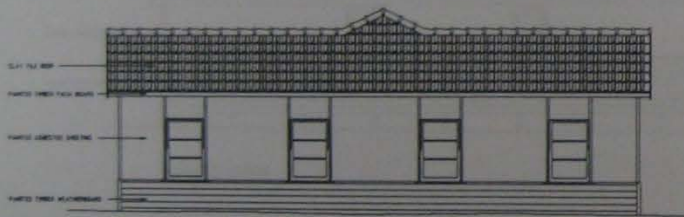
DORMITORY 3 / SECTION
1:50



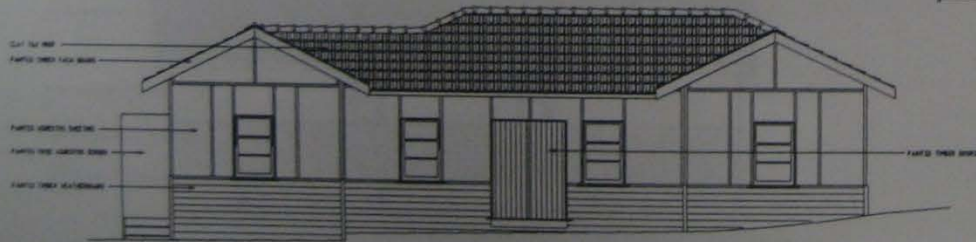
EAST ELEVATION



DORMITORY 3 / PLAN
1:50



WEST ELEVATION



NORTH ELEVATION

DORMITORY 3 / ELEVATIONS
1:50

ALL DIMENSIONS IN METERS UNLESS OTHERWISE SPECIFIED

COX **COX HOWLETT & BAILEY**
 ARCHITECTS + PLANNERS
 Level 2, 80-85 Hay Street, Perth, WA 6000
 Tel: 91 48 436 Fax: 91 48 100 Mob: 992 248 991

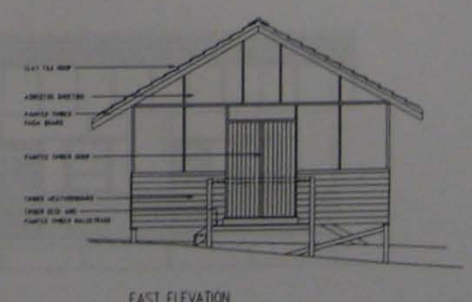
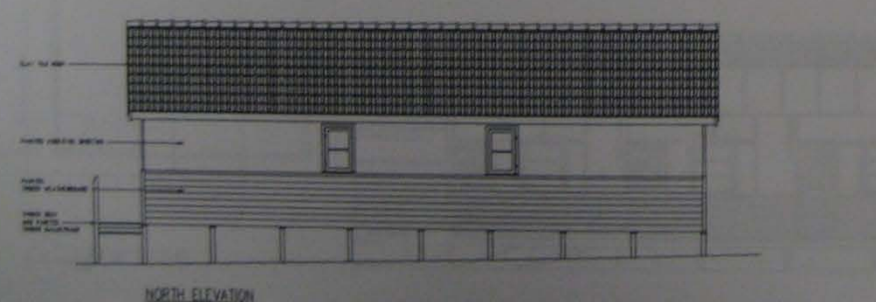
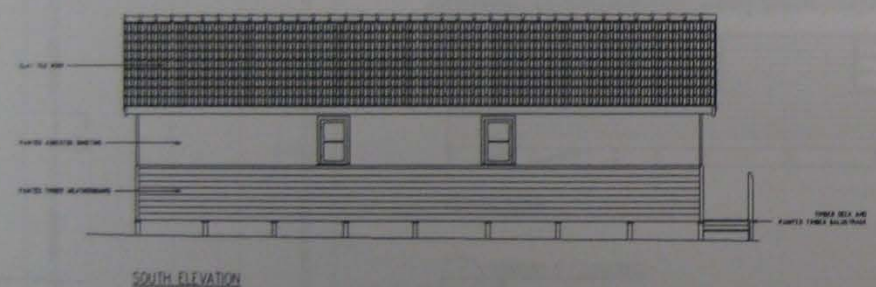
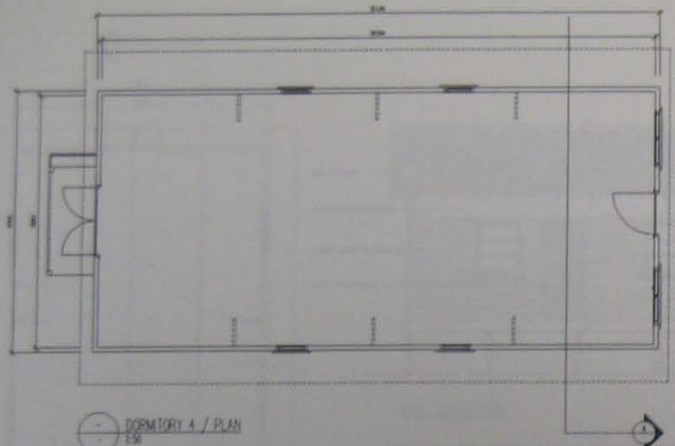
DEPARTMENT OF CONTRACT AND MANAGEMENT SERVICES

DEAN'S HOUSE
 3 Riverside Street
 West Perth
 W.A. 6005
 Tel: 922 3333
 Fax: 922 3400

NATIONAL FITNESS CAMP - PT PERON
 POINT PERON W.A.
 MEASURED DRAWINGS
 DORMITORY 3

DRAWN	CPVR	DESIGNED	REVISION
CHECKED		APPROVED	
DATE	15/10/97	SCALE	AS SHOWN
SCALE	1:50	DATE	14/5/97
CONTRACT NO.	88/1421/16	FILE NO.	A2-10

THE STATE OF WESTERN AUSTRALIA
 DEPARTMENT OF CONTRACT AND MANAGEMENT SERVICES



DORMITORY 4 / ELEVATIONS
1/50

ALL DIMENSIONS UNLESS OTHERWISE STATED

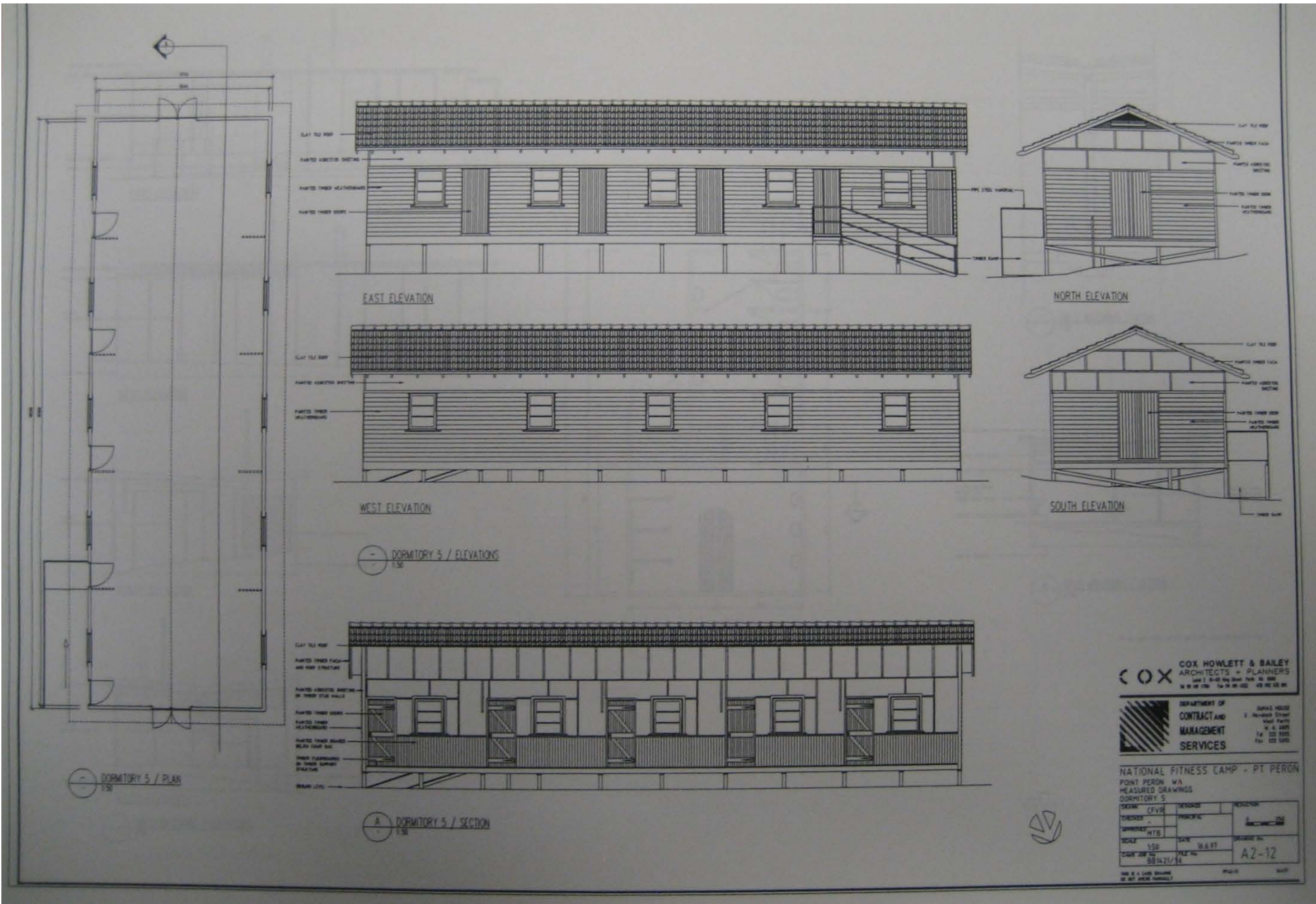
COX COX HOWLETT & BAILEY
ARCHITECTS & PLANNERS
201 E. 10th Street, Suite 100
W. A. 4400
Tel. 322-1000
Fax. 322-3883

DEPARTMENT OF
CONTRACT AND
MANAGEMENT
SERVICES

NATIONAL FITNESS CAMP - PT PERON
POINT PERON WA
MEASURED DRAWINGS
DORMITORY 4

DESIGN	CEV/RE	REVISIONS	REVISION
DRAWN		REVISION	
APPROVED	HTB		
SCALE	1/50	DATE	14.5.97
DRAWN BY	HTB	SCALE	1/50
CHECKED BY	HTB	DATE	14.5.97
			A2-11

NO. 2 - 1/50 DRAWING
BY HTB
DATE 14.5.97



EAST ELEVATION

NORTH ELEVATION

WEST ELEVATION

SOUTH ELEVATION

DORMITORY 5 / ELEVATIONS
1:50

A DORMITORY 5 / SECTION
1:50

DORMITORY 5 / PLAN
1:50

COX COX HOWLETT & BAILEY
ARCHITECTS + PLANNERS
Level 2, 81-83 King Street, Perth WA 6000
Tel: 9438 1330 Fax: 9438 4022 Cell: 992 528 89

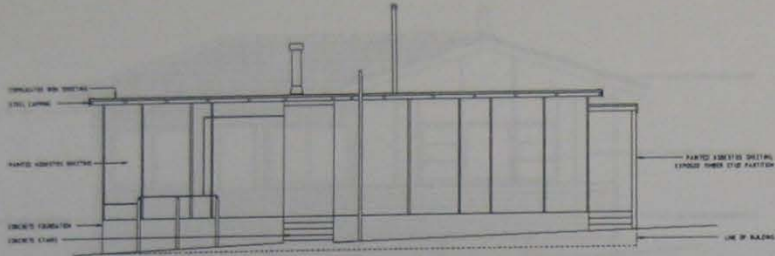
DEPARTMENT OF
CONTRACT AND
MANAGEMENT
SERVICES

3rd/4-5/1052
7 Newland Street
Perth WA 6000
Tel: 122 8800
Fax: 122 5255

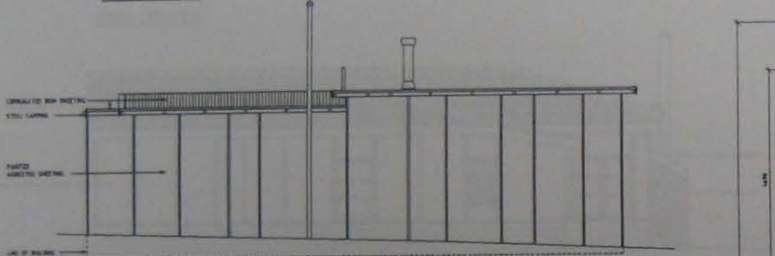
NATIONAL FITNESS CAMP - PT PERON
POINT PERON WA
MEASURED DRAWINGS
DORMITORY 5

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DATE	15.8	FILE NO.	88/1421/16	PROJECT NO.	A2-12		

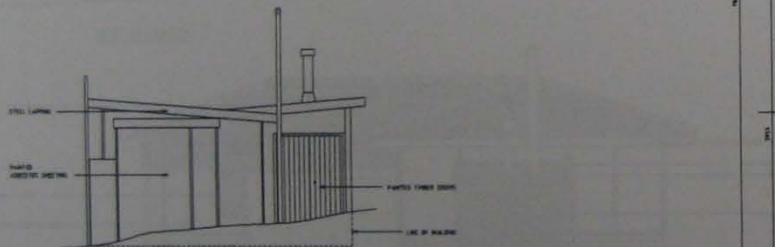
PREPARED BY: [Signature] DATE: [Date]



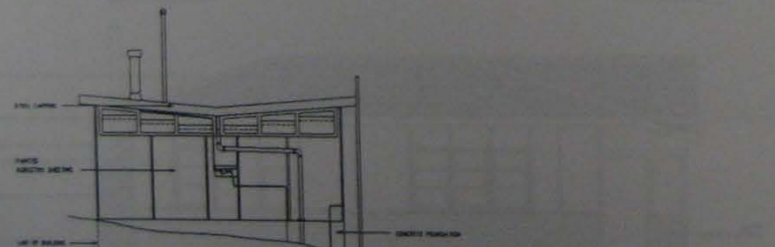
EAST ELEVATION



WEST ELEVATION

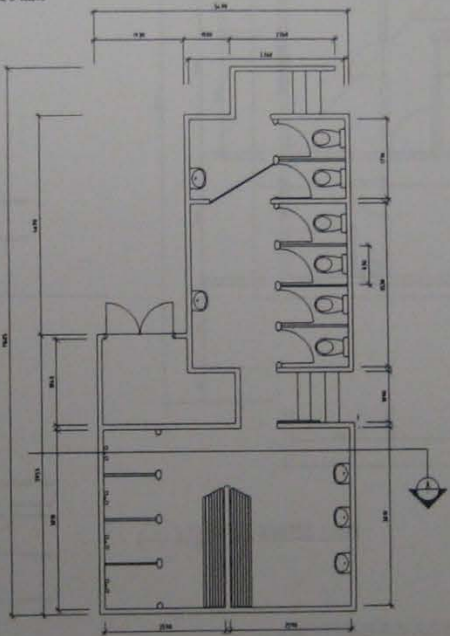


NORTH ELEVATION

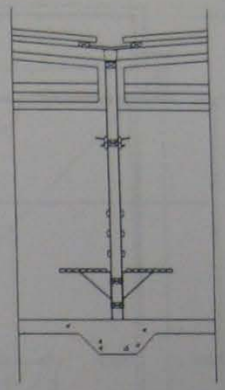


SOUTH ELEVATION

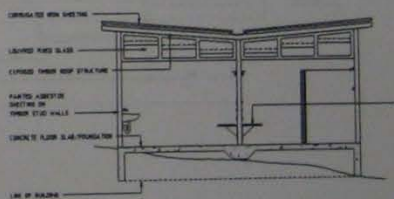
0 GIRLS ABLUTIONS / ELEVATIONS
1:50



0 GIRLS ABLUTIONS / PLAN
1:50



1 GIRLS ABLUTIONS / DETAIL
1:20



A GIRLS ABLUTIONS / SECTION
1:50

ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED

COX

DEPARTMENT OF
CONTRACT AND
MANAGEMENT
SERVICES

COX HOWLETT & BAILEY
ARCHITECTS + PLANNERS
Level 2, 40-42 King Street, Perth, W.A. 6005
Tel: 08 9442 1100 Fax: 08 9442 1101

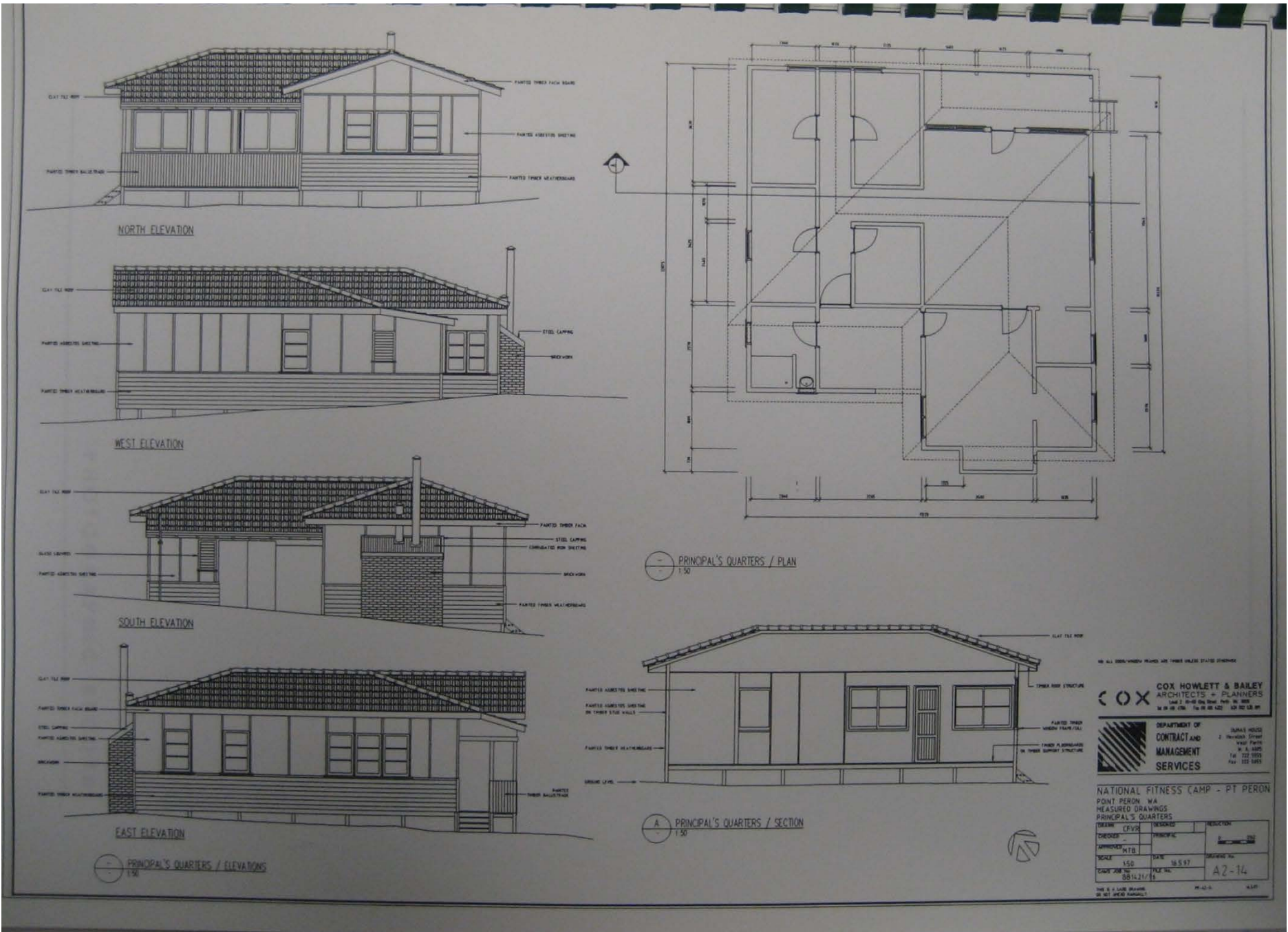
2, Havelock Street
Perth, W.A. 6005
Tel: 08 9442 1100
Fax: 08 9442 1101

NATIONAL FITNESS CAMP - PT PERON

POINT PERON
MEASURED DRAWINGS
GIRLS ABLUTIONS

DRAWN	CHECKED	DESIGNED	REVISION
CFVR	MSFCAL		
478			
SCALE 1:50	DRAWN H.S. 9/1	DATE 11/11/88	DRAWING NO. A2-13
DATE FOR SET 28/11/88	FILE NO. 8814.21/8		

THIS IS A LAME DRAWING BY THE ARCHITECT



NORTH ELEVATION

WEST ELEVATION

SOUTH ELEVATION

EAST ELEVATION

PRINCIPAL'S QUARTERS / PLAN
1/50

PRINCIPAL'S QUARTERS / SECTION
1/50

PRINCIPAL'S QUARTERS / ELEVATIONS
1/50

IN ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED

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Appendix 6: Structural Engineers Assessment Report



Point Peron Rehabilitation Project,
Conservation Management Plan,
Structural Engineering Services Assessment Report

For Hocking Heritage Studio

17 December 2015
Revision No: 0

Project No: 1547

Peter Baxendale Consulting Engineer

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Document Revision

REVISION	DATE	COMMENT	BY
0	17 December 2015	For Client Review	Peter Baxendale

1. Introduction

Peter Baxendale (PBCE) was commissioned by Hocking Heritage Studio (HHS) to investigate and advise on the structural condition of the various buildings and building remains at the former Point Peron 'K' Battery site, an integral element of Western Australia's coastal defence during the Second World War.

The intent of this report is to provide professional guidance on the necessary scope of remedial and maintenance works required to enable the existing structures to continue their life safely either as managed ruins or in an adaptive re-use scenario into the foreseeable future.

Structural Engineering services inspections were undertaken by Peter Baxendale on 11 September 2015.

1.1 Background Summary

The Point Peron 'K' Battery site (PPKB), also known as Cape Peron Battery (CPB), is located in Point Peron Reserve in the City of Rockingham. The Reserve is part of the Rockingham Lakes Regional Park and managed by the Department of Parks and Wildlife (DPaW). Point Peron Rehabilitation Committee (PPRC) is a voluntary group of stakeholders with an interest in the conservation and restoration of the historically important defence site.

In May 2015, PPRC sought to appoint a heritage consultant to prepare a Conservation Management Plan (CMP) for the Battery site. HHS were appointed to this task in August 2015.

This commission was made to inform HHS's CMP work on aspects of a structural nature.

2. Scope of Work

The following brief was put forward for the structural investigation:

- Visual inspection and assessment of the all structures on the Point Peron 'K' Battery site, namely those marked on the 'Study Area' given in the CMP Brief: Observation Tower, Gun Emplacements 1 & 2, Machine Gun Pit, Bunkers x 3, demolished cottage ruins and any structures at Johns Point and Mushroom Rocks. No intrusive investigations.
- Review available documentation relating to the buildings including any significant historic repair work.
- Interview relevant maintenance personnel where available with regard to past works and past issues faced the buildings.
- Report briefly for each structure:
 - i) A summary of structural condition and safety.
 - ii) Structural issues to be considered in prospective conservation works.
 - iii) Structural issues to be considered in future prospective re-use works.
- The report will inform broadly the structural condition of the buildings, their safety and the issues surrounding their prospective conservation and scope for adaptive re-use. It will not be a formal

Building Condition Assessment Report, rather a tool to inform and guide the Conservation Management Plan on matters relating to structure. Some photographs to assist conveyance of critical issues will be included.

2.1 Qualifications

The following qualifications apply to this report:

- Defects noted in this report were correct at the time of inspection. Due to the present condition, the building could deteriorate further due to exposure post inspection.
- It should be noted that some areas of the building could not be visually examined. As such it is probable that the inspection cannot identify all of the potential defects or shortcomings of the building.
- No intrusive investigation was undertaken within the survey. The findings of this report are based on the visual inspection only.
- No testing of material samples was carried out. Similarly, comments on specialist services not included in our areas of expertise have been excluded.
- No geotechnical or sub-surface investigations were carried out by geotechnical engineers.
- No Engineering measurement or calculations have been performed.
- Detailed design of remedial works excluded.

This report has been prepared on behalf of and for the exclusive use of the Client and is subject to and issued in connection with briefing from the Client. No liability or responsibility is accepted in respect of any use or reliance upon this report by any third party.

- The report will specifically exclude the following aspects:
 - Environmental considerations.
 - Hazardous substances.
 - Acoustics.
 - Occupational Health and Safety Considerations.
 - Conformance with Disability Discrimination Act.
 - BCA compliance issues outside of the services inspected.
 - Landscape Reticulation.

The client should consider the need to engage specialist consultants to report on the above areas.

2.2 Available Documents

The following documents were available at the time of inspection:

- Point Peron Rehabilitation Project, Conservation Management Plan Brief – Point Peron Rehabilitation Committee and the Hon Phil Edman MLC, undated.

3. Observations and Recommendations

Building structure references in this report follow the site plan below taken from the PPRC brief to heritage consultants of May 2005.



3.1 Observation Tower

3.1.1 Building Construction

Structural steel roof-mounted tripod sighting target.

Concrete roof slabs supported on concrete columns and load bearing solid brick masonry walls. Evidence of one-time bitumen coating to roof top.

Non-loading bearing brick infill wall panels built of ground slab.

Concrete ground bearing floor slabs, possibly suspended at split higher level.

Perimeter concrete strip footing below ground slab, except to West side.



3.1.2 Structural Condition and Safety

The overall condition of the building is good given the original quality and speed of construction, its intended design life at outset, its atmospheric exposure and the levels of maintenance seen since decommissioning.

There are safety issues arising from falling debris due to concrete cancer but these are limited and local in nature. Of higher importance is an ongoing stability issue on the West side of the building relating to ground level changes.

Evidence externally indicates that ground levels around the building were much higher than at present. On the West side, the storage spaces which project from the wall at waist height were originally built off sand backfill against this wall. With the backfill now removed a problem of imbalance has been created in the wall. The storage boxes now cantilever uncomfortably off the wall and have induced a lean in the wall. The wall has also torn away from its returns.

It is important to halt this movement from a safety point of view. Early temporary propping is encouraged whilst a permanent scheme for the building is being developed.

On the East side of the building, the extent of render suggests a much higher former level of backfill than at present.

3.1.3 Issues for Consideration in Prospective Conservation Works

Concrete cancer management

It is important to understand the status of the concrete cancer in the concrete elements of the building so that it can be managed appropriately going forward. An appreciation of both its severity where taken hold and of the progress that carbonation and chloride fronts (which bring about the cancer) have made elsewhere is essential to formulating an approach to conservation.

A level of materials testing is needed to both assist understanding and to inform on treatment options. The services of a material scientist is therefore required, the scope of their work should be arrived at in conjunction with the heritage architect and structural engineer.

From the experience of similar sites it is most likely that the rapid acceleration of concrete cancer is not far away. With the cost and invasiveness of concrete repairs, the large scale concrete repair of such structures is likely to be both financially prohibitive and undesirable from a heritage viewpoint due to the scale of fabric loss. A more realistic approach to adopt is that of a managed ruin whereby efforts are focused on measures to slow down the onset of cancer as much as possible. Ultimately cancer will develop but with appropriate measures put in place, particularly those against water ingress and those promoting local and global drainage of surfaces, the timing of such can be slowed down significantly. The building's life is consequently extended significantly as a result.

For this building suitable measures may include:

- i) Re-screeding of concrete roof tops to good falls and with waterproof membrane or acrylic barrier.
- ii) Covers to look out openings at each levels.
- iii) Cover to entrance door opening.
- iv) Possible local concrete patch repairs and/or 'benching' of local surface to improve drainage.
- v) Corrosion inhibitor and epoxy/acrylic barrier coatings to exposed external concrete surfaces.
- vi) Carbonation barrier and corrosion inhibitor coatings to all internal concrete surfaces.

It is unlikely that a cathodic protection approach to concrete cancer management will produce reliable and cost effective results in combating the condition. Weather proofing items i) to iv) above would still be needed as the front line measures against ongoing corrosion.

West wall stabilisation

A permanent solution for the issue outlined in 3.1.3 above is required, whether this is to return backfill against the wall or some other means of providing support to the underside of the storage boxes. Crack damage to the return walls needs to be stitched.

External brickwork

General re-pointing work is required in areas.

If external ground levels are raised against walls, a vertical waterproof membrane is encouraged to resist lateral moisture penetration.

Roof-top sighting target

The significance of the tripod to the place must be determined in the normal way via the Conservation Plan. Direction can then be given to its future. If to be retained there are works needed to all fastenings used both in the structure and for fixity to the roof slab. These are suffering corrosion. Corrosion expansion of the holding down bolts are causing damage to the roof slab. Renewal of all fixings with durable replacements required.

Paintwork to all steelwork is due for renewal. It has been lost fully at base plates and corrosion expansion has ensued applying further stress on bolts and the concrete roof slab in turn.

Other issues

It is not clear why the perimeter concrete footings do not extend around the West side of the building. A small trial hole revealed instead two courses of brick below slab level here. This is an odd detail if original. The slab does appear to have settled a little here, the brick courses may be a later remedial action. From the presence of graffiti on the buried face of the slab, there is a suggestion that the ground level on this side was at some stage even lower than at present. This may have been at a time prior to the gabion wall works around the hill here a few metres off the building. Some exploratory work may reveal some hitherto unknown feature to the building.

In a similar vein, it is known that other observation towers of similar design in other battery sites in WA use a suspended slab in the upper level to allow storage space below. This appears unlikely here as no suggestion for an entry but the notion is nevertheless worthy of note in case evidence of entry is found later.

3.1.4 Issues for Consideration in Future Prospective Adaptive Re-use Works

Future building life and maintenance

As for prospective conservation works, the management issues surrounding the building's concrete cancer need to be properly appreciated when considering any adaptive re-use scheme. The needs of the structure must be kept fully in mind if a permanent user is being contemplated. Likely re-application times for coatings, re-inspection needs and likely renewal times for patch repairs are examples of these considerations, each of which must be accommodated by the building user.

The building custodian must also appreciate the likely point at which cancer is anticipated to cause widespread safety issues from falling concrete cover, failing elements etc. This would effectively be the end of building life from a user's perspective. Long term tenancy contracts will need to bear this in mind and may be shorter in length than would be expected in a healthier concrete building.

Adaptability

As many wall panels are non-load bearing brick infill panels with the concrete frame, there is good scope for making new openings to either connect new adjacent structures or to achieve the circulation needs of the re-use scheme.

Vertical extension of the building is unrealistic in heavy construction, mainly due to the roof slab cantilevers. Lightweight construction may be possible although investigation work is needed on the roof slabs to establish their ability to carry load. Additional elements in the ground storey may be necessary to assist transfer of new loads from above to ground. New penetrations in the roof slabs are possible although not of great size without new edge supports.

New internal lightweight partition walls could be built off the existing ground slabs without additional support. New penetrations typical for drainage works are possible in the ground slabs.

Chasing of walls and roof slab soffits for services generally not encouraged although possible subject to location and appropriate treatment of steel reinforcement.

3.2 Bunker (near Observation Tower)

3.2.1 Building Construction

Concrete roof slab with integral upstanding beams.

Load-bearing cavity brick perimeter masonry walls, sunken below ground level to two-thirds of building height. 9" external leaf, 4.5" internal leafs.

Concrete ground-bearing floor slab.

Expected concrete strip footings to all walls.

Mass brick masonry retaining walls and concrete steps to entrance approach.



3.2.2 Structural Condition and Safety

As for the Observation Tower, the structure has fared well given its history. The most vulnerable element on the face of it, the concrete roof slab, is in good condition without widespread cancer damage. Consistent damage has occurred however in the high level courses of the perimeter brickwork onto which the slab immediately drains. Horizontal steel bar bed reinforcement has been used at one course down in the two leafs of brickwork. These have corroded and expanded significantly in locations, particularly at the building corners. Here corrosion forces have been high, sufficient to jack up slab corners and push local brickwork off the building both externally and internally. This is both the most important condition issue and most important safety issue facing the building.

Shifting external ground levels has clearly occurred over time with erosion appearing to dominate the West side and deposition the East. This has not affected the structure much except to increase exposure to lateral moisture penetration on the East side and block the entry (now cleared). Additional lateral pressure is exerted on the brick retaining walls of the entry approach but to no effect as yet since entry clearing work. There has been undermining of the small brick vent shafts on the north side, these have consequently fallen away.

3.2.3 Issues for Consideration in Prospective Conservation Works

Removal of bed reinforcement

The subject steel causing the high level problems in the brick walls was and remains in fact of little use structurally and is best removed from the structure for the long term good. A systematic approach to raking out joints and removing bars can be used in conjunction with brick and crack repairs.

There is little that can be done to improve inundation of the top brick courses as the roof slab drains. Introduced guttering is not likely to be effective and is undesirable from a heritage point of view. With the embedded steel removed however, the brickwork will not react violently as previously.

Concrete cancer management

The principals and actions outlined in 3.1.3 for the Observation Tower apply here for the roof slab element. No issues are anticipated for the concrete ground slabs, covers to openings serve to protect against moisture ingress into the fabric generally.

External ground levels

It is a difficult exercise to manage the natural sand shifts occurring around the building perimeter and therefore difficult to return the lost vent shafts using the original pad footing support detail. A means of taking support off the external leaf of the building is required.

The behavior of the entrance approach walls should be monitored now that lateral loads have increased. Their heights have been raised by sand bags but no lateral strengthening has taken place.

3.2.4 Issues for Consideration in Future Prospective Adaptive Re-use Works

Future building life and maintenance

Similar comments to those made under 3.1.4 apply here. Concrete elements are in better condition and are less vulnerable here than at the Observation Tower.

Adaptability

The partial subterranean nature of the building presents restricted scope for new openings in walls but if new adjacent works were to consider external earthworks, new door openings can be accommodated in the existing perimeter walls. It should be noted that it is possible that the existing external leaf increases in thickness with depth on the fill side of the wall.

Although investigation into the slab reinforcement arrangement is needed, there is a good possibility that a penetration of some size may be accommodated in the roof slab between the two upstanding beams with limited or no need for compensating new structure. Elsewhere, a stair penetration could still be made with the introduction of internal column and edge beam supports.

In conjunction with the high level perimeter brick repairs and bed reinforcement removal work in 3.2.3, new or enlarged clerestory windows could be formed.

Vertical extension of the building in heavy construction is possible to some extent (above perimeter walls) although undesirable from a heritage perspective. Lightweight construction may be possible although investigation work is needed on the roof slabs and beams in particular, to establish their ability to carry load. Additional elements in the ground storey may be necessary to assist transfer of new loads from above to ground.

The single space presents some flexibility for use. Lightweight partition walls may be built of the existing ground slab. New penetrations typical for drainage works are possible in the slabs.

Chasing of walls and roof slab soffits for services generally not encouraged although possible subject to location and appropriate treatment of steel reinforcement. Service penetrations in the roof slab are generally possible.

3.3 Gun Emplacement 1

3.3.1 Building Construction

Munitions stores: concrete roof slabs, walls and ground slabs

Gun mount: deep circular concrete pedestal connected to perimeter concrete strip footing for gun stay track via three no. deep concrete radial walls. Sand infill and brick paving to the segments of this arrangement. Steel stay track and gun hold down components.



3.3.2 Structural Condition and Safety

The structure exists in precarious dramatic equilibrium between shifting ground supports and its own structural ability to cope with these shifts. It has variously settled, twisted, snapped, slid, dragged, slumped and rotated in all planes with the natural erosion of the supporting dune.

The concrete strip footing of the stay track has been severely undermined and now spans in beam action to where support can be gained from either the dune or radial walls. It has failed in torsion on the North side trying to do this. Steel reinforcement has yielded and a new temporary equilibrium found until further dune erosion brings about a worsening of support conditions. A good deal of the South wing of the footing is suspended and with similar problems. The central concrete pedestal has been partially undermining but has tipped to the North with the weight of the stay footing imposed on it via its wing wall. The brick paving has all but fallen away and the northern munitions store has tipped and slid as a unit in the direction of sand shift, its base breaking up under the movement. The Southern munitions store remains the most stable of the site's features although this too has developed a lean towards downhill.

The situation is grave for the emplacement ruin and can only be expected to worsen as dune movement continues.

3.3.3 Issues for Consideration in Prospective Conservation Works

Sand dune issues

Intelligence is needed on the behavior of the dune soil before a plan for structural conservation can be considered and formulated. Intelligence must first predict what future movements are likely to be and secondly, examine options for bringing about slope stabilization. Thirdly, it must give advice for ground improvement below existing footings, both where soil exists and where lost. The services of a geotechnical engineer are required for such advice.

Slope stability works should be handled by the geotechnical engineer

Structural stabilisation works should be formulated by the structural engineer in conjunction with the geotechnical engineer and with the input of the heritage architect and client to meet site

access, visitor and interpretation needs. These work could conceivably involve new earthworks specifically for re-support to elements, local micro-fine cement grout injection of supporting soil to elements, new permanent pier supports on concrete pad footings and new retaining structures. No attempt will be made to restore or improve levels to the emplacement elements, such a notion being fraught with conservation, technical, safety and financial issues.

Concrete cancer management

The principals and actions outlined in 3.1.3 for the Observation Tower apply here for the munitions stores. Issues would not normally be anticipated for the gun mount elements but with their now higher exposure and increased fractures they are much more vulnerable to cancer than their counterparts at Emplacement 2.

Additional concrete repairs


Some additional concrete repairs beyond those for concrete cancer would also possibly be necessary due to the structural damage incurred under dune movement. The scale of these will depend on the scheme selected for re-supporting the structure.

3.3.4 Issues for Consideration in Future Prospective Adaptive Re-use Works

Notwithstanding the condition of the site, the nature of the facility barely lends itself to alternative uses other than its present function as a ruin for visitor attraction and historical interpretation.

3.4 Bunker (adjacent to Gun Emplacement 1)

3.4.1 Building Construction

<p>Concrete roof slab supported on concrete external walls. Walls sunken below ground to half building height typically but to full depth on one corner.</p> <p>Internal perimeter non-load bearing brick masonry wall to one room, offset 0.5m from concrete structural wall to form passage. Single load-bearing brick wall between rooms</p> <p>Concrete ground floor slabs. Expected to support masonry walls.</p> <p>Expected concrete strip footings to support concrete load-bearing walls.</p> <p>Mass brick masonry retaining walls to sides of entrance approach path.</p>	
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3.4.2 Structural Condition and Safety

The concrete components have performed remarkably well. Clear concrete cancer is very limited in it's occurrence – at the base of external vent hoods only. The building's location on high ground with good falls away from structure and good drying conditions have benefited the

structure well. There is water ingress occurring through fine cracks in the roof slab and lateral ingress is taking place in the rear wall against which external sand build up has occurred, but this has not developed into visible concrete cancer to date.

Internally, brickwork is in good condition. The floor slab are obscured by sand build up but are expected also to be in good condition.

3.4.3 Issues for Consideration in Prospective Conservation Works

Concrete cancer management

The principals and actions outlined in 3.1.3 for the Observation Tower apply here. Whilst concrete is in much better condition here, the advances made by carbonation and chloride fronts still need to be known in order plan for the structure's future management. No issues are anticipated for the concrete ground slabs, covers to openings serve to protect against moisture ingress into the fabric generally.

An important management item for consideration will be the water proofing treatment to roof top and external face of rear walls, the timing and method for this in particular. Whilst not seemingly urgent at present, it is key to the building's continued long term survival. Some prediction of likely shift in surrounding ground levels will be central to deciding the extent of treatment.

3.4.4 Issues for Consideration in Future Prospective Adaptive Re-use Works

Adaptability

New external wall openings will be more difficult to form than in the brick buildings of the Battery but they can nevertheless be well accommodated. New door openings in internal walls are straightforward, large openings in the dividing wall between rooms will be less so. The latter presents some restriction on the opening up of the internal space without compensating new structure.

The scope for vertical extension in heavy or lightweight construction is good if loading directly over external walls or the internal brick load-bearing wall. The scope for re-using the roof slab as a floor is potentially good subject to investigation of slab details and nature of new floor load.

Normal penetrations for drainage and other services in the ground and roof slabs can be readily accommodated.

Chasing of walls and roof slab soffits for services generally not encouraged although possible subject to location and appropriate treatment of steel reinforcement.

Future building life and maintenance

Similar comments to those made in 3.1.4 for the Observation Tower apply here. Concrete elements are in better condition and are less vulnerable here than at the Observation Tower. The level of maintenance works will therefore be lower.

Works needed to secure loose concrete surfaces before re-use is minimal.

3.5 Gun Emplacement 2

3.5.1 Building Construction

Munitions stores: concrete roof slabs, walls and ground slabs.

Gun mount: deep circular concrete pedestal connected to perimeter concrete strip footing for gun stay track via three no. deep concrete radial walls. Sand infill and brick paving to the segments of this arrangement. Steel stay track and gun hold down components.



3.5.2 Structural Condition and Safety

The emplacement remains are in good general structural condition. Shifting soil issues do not appear to have adversely affected stability of this site unlike the Emplacement 1 site. Concrete cancer is evident on the soffits of the munitions stores' roof slabs but the gun mount is relatively unaffected.

The steel perimeter belt around the upstand of the central gun hold down has corroded through on the far side of the upstand and presents a hazard to users. Potentially loose cover concrete to the munitions stores' roof soffits is another hazard to users who may enter the store space.

3.5.3 Issues for Consideration in Prospective Conservation Works

Concrete cancer management

The principals and actions outlined in 3.1.3 for the Observation Tower apply here for the munitions stores. Issues are not anticipated for the gun mount elements although embedded steel components such as holding down bolts and hooks have protection needs.

3.5.4 Issues for Consideration in Future Prospective Adaptive Re-use Works

The nature of the facility barely lends itself to alternative uses other than its present function as a ruin for visitor attraction and historical interpretation. A public gathering point for celebrations or services may be another function. The existing fabric is conducive to receiving installed guard railing, podium structures, seating and the like.

3.6 Bunker (adjacent to Gun Emplacement 2)

3.6.1 Building Construction

Concrete roof slab supported on concrete external walls. Walls partially sunken below ground to up to half building height.

Internal perimeter non-load bearing brick masonry wall to one room, offset 0.5m from concrete structural wall to form passage.

Concrete ground floor slabs. Expected to support masonry walls.

Expected concrete strip footings to support concrete load-bearing walls.

Mass brick masonry retaining walls and concrete steps to entrance approach.



3.6.2 Structural Condition and Safety

The building is similar in construction and condition to the bunker at Gun Emplacement 1.

The concrete components have performed well. Clear concrete cancer is limited in its occurrence – the base of external vent hoods are affected only. The water ingress occurring through cracks in the roof slab is heavier than at the Gun Emplacement 1 bunker but this has not developed into visible concrete cancer to date.

Internally, brickwork is in good condition. The floor slabs are obscured by sand build up but are expected also to be in good condition.

3.6.3 Issues for Consideration in Prospective Conservation Works

Concrete cancer management

The principals and actions outlined in 3.1.3 for the Observation Tower apply here. Whilst concrete is in better condition here, the advances made by carbonation and chloride fronts still need to be known in order to plan the structure's management. No issues are anticipated for the concrete ground slabs, covers to openings serve to protect against moisture ingress into the fabric generally.

3.6.4 Issues for Consideration in Future Prospective Adaptive Re-use Works

Adaptability

New external wall openings will be more difficult to form than in the brick buildings of the Battery but they can nevertheless be well accommodated. New door openings in internal walls are straightforward, large openings in the dividing wall between rooms will be less so. The latter presents some restriction on the opening up of the internal space without compensating new structure.

The scope for vertical extension in heavy or lightweight construction is good if loading directly over external walls or the internal brick load-bearing wall. The scope for re-using the roof slab as a floor is potentially good subject to investigation of slab details and nature of new floor load.

Normal penetrations for drainage and other services in the ground and roof slabs can be readily accommodated.

Chasing of walls and roof slab soffits for services generally not encouraged although possible subject to location and appropriate treatment of steel reinforcement.

Future building life and maintenance

Similar comments to those made in 3.1.4 for the Observation Tower apply here. Concrete elements are in better condition and are less vulnerable here than at the Observation Tower. The level of maintenance works will therefore be lower.

Works needed to secure loose concrete surfaces before re-use is small.

3.7 Other Features/Structures

3.7.1 General

The following features and structures were not included in this assessment:

Machine Gun Pit near Observation Tower – this pit has been deliberately temporarily filled in by PPRC for safety and protection reasons.

Demolished Cottage – the remains of this could not be located. Remains are believed to be minimal.

Structure at St John's Point – access to this point is not permitted due to dangerous cliffs.

Appendix 7: Maintenance Schedules

Place Name: Point Peron "K" Battery
 Place No: 3365
 Address: Point Peron Road, Rockingham
 Date of Inspection: 30 October 2015
 General Observations: Place was in reasonable condition though subject to sand accumulation. Certain aspects of the structures are showing signs of concrete deterioration which requires remediation and all structures have been subject to graffiti. Vandalism is an issue across the site together with inappropriate use of the site and all structures have now been secured to prevent access. The remnant WWII structures are located in obscured positions around the site which is predominantly sand dune and bush.

Condition Rating Codes		
Rating	Status	Definition of Rating
A	Excellent	<ul style="list-style-type: none"> No defects As new condition and appearance
B	Good	<ul style="list-style-type: none"> Minor deterioration Superficial wear and tear Major maintenance not required
C	Fair	<ul style="list-style-type: none"> Damaged Worn finishes require maintenance Services are functional but need attention
D	Poor	<ul style="list-style-type: none"> Failed but retrievable Badly deteriorated Potential structural problems
E	Very Poor	<ul style="list-style-type: none"> Failed and not retrievable Not operational Unfit for occupancy of normal use





Priority Ranking Scale		
Priority Rating	Status	Definition of Rating
1	Immediate action	Works required to prevent serious disruption of activities and/or may incur higher costs if not addressed within 1 year
2	Urgent	Works that need to be addressed between 1-2 years to prevent serious deterioration
3	Medium term	Works likely to require rectification within 3 years
4	Long term	Works that can be safely and economically deferred beyond 3 years

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
<p>Observation Post</p> <p>Brick construction with reinforced concrete structural supports, reinforced concrete projecting roof, painted finish</p>				
<p>North elevation</p>	<p>C</p>	<p>Cracking occurring to the north west corner where the weight of the projecting storage spaces is pulling the west wall away from the north and south elevations. Spalling of concrete caused by water ingress into the concrete and subsequent rusting of the steel reinforcement. Loose and missing mortar to the brickwork. Non-original paint finish.</p>    	<p>A solution to supporting the projecting section of the west wall needs to be determined either by way of reintroducing the ground level under the projection which will provide support in the original manner or some form of bracket/brace will need to be designed by the engineer to provide adequate load bearing support.</p> <p>Once the projecting element to the west wall has been remediated the cracking in the north wall can be remediated by crack stitching using Helifix Helibars to engineer's specification. The crack stitching will tie the wall back together reintroducing the desired level of structural stability and redistribute the load of the wall in its desired manner.</p> <p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p> <p>Repoint all joints showing sign of deterioration by raking out loose mortar to a depth that will ensure new mortar will hold. Mortar is to match existing ensuring that the mortar is a softer mix than the brick.</p> <p>Concrete elements are to be remediated. Rusting to the structural elements encased by the concrete is becoming visible causing the concrete to spall and break off. The high salt content in the air contributes to the accelerated rate of deterioration as does inadequate protection from water ingress.</p> <p>It is not recommended that the damaged concrete be removed in its entirety, utilising patch repairs to try and retain the original fabric. Where the steel reinforcement has rusted causing the concrete to spall, the concrete needs to be cutback and the steel cleaned, treated with an anticorrosive treatment such as Sika Ferro Guard and new concrete patched in to match existing. Due to the harsh environmental conditions at Point Peron, it is recommended that a corrosion barrier coating is applied to all concrete surfaces to reduce/delay further deterioration.</p> <p>As graffiti appears to be an on-going issue, an anti-graffiti coating may be considered but this should not interfere with the performance of the corrosion</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
			inhibitor applied to the concrete. Discussions with the manufactures are recommended to assess compatibility of products.	2
East Elevation	C	<p>Spalling of concrete caused by water ingress into the concrete and subsequent rusting of the steel reinforcement. Loose and missing mortar to the brickwork. Non-original paint finish.</p> 	<p>Damage to the reinforced concrete framework, particularly at low level is to be remediated utilising the cut out, application of corrosive inhibitor and patch repair of the concrete method outlined above for the north elevation.</p> <p>The cause of the low level damage is unknown as it is a localised area of failure and may have been exacerbated through human intervention. Land levels have been altered around the building which</p>	2
West Elevation	C	<p>The west elevation is the principal façade of the structure incorporating the two viewing windows. The lower section of the elevation is experiencing cracking due to the weight of the unsupported projecting storage area. The original ground levels provided natural support to this element in past eras but since the ground level has been reduced, the support has been removed placing loading issues on other sections of the building. The west wall is being pulled away from the north and south walls and if left unchecked, will fall away completely in time.</p>	<p>A solution to supporting the projecting section of the west wall needs to be determined either by way of reintroducing the ground level under the projection which will provide support in the original manner or some form of bracket/brace will need to be designed by the engineer to provide adequate load bearing support.</p> <p>Once the projecting element to the west wall has been remediated the cracking in the north wall can be remediated by crack stitching using Helifix Helibars to engineer's specification. The crack stitching will tie the wall back together reintroducing the desired level of structural stability and redistribute the load of the wall in its desired manner.</p> <p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried.</p>	1 1 1

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
		 <p data-bbox="617 1371 931 1402">Loose mortar in brick joints</p> <p data-bbox="617 1434 893 1465">Non-original paint finish</p> <p data-bbox="617 1497 1665 1528">Rusted reinforcements in the concrete causing sections of concrete to spall and fall off</p>	<p data-bbox="1694 247 2644 369">Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p> <p data-bbox="1694 401 2644 495">Repoint all joints showing sign of deterioration by raking out loose mortar to a depth that will ensure new mortar will hold. Mortar is to match existing ensuring that the mortar is a softer mix than the brick.</p> <p data-bbox="1694 527 2644 648">Concrete elements are to be remediated. Rusting to the structural elements encased by the concrete is becoming visible causing the concrete to spall and break off. The high salt content in the air contributes to the accelerated rate of deterioration as does inadequate protection from water ingress.</p> <p data-bbox="1694 680 2644 919">It is not recommended that the damaged concrete be removed in its entirety, utilising patch repairs to try and retain the original fabric. Where the steel reinforcement has rusted causing the concrete to spall, the concrete needs to be cutback and the steel cleaned, treated with an anticorrosive treatment such as Sika Ferro Guard and new concrete patched in to match existing. Due to the harsh environmental conditions at Point Peron, it is recommended that a corrosion barrier coating is applied to all concrete surfaces to reduce/delay further deterioration.</p>	<p data-bbox="2754 401 2772 432">1</p> <p data-bbox="2754 527 2772 558">1</p>



Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
South Elevation	B	<p>The south elevation is in good condition apart from sections of missing or loose mortar around the bricks.</p>	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p>	2
			<p>Repoint all joints showing sign of deterioration by raking out loose mortar to a depth that will ensure new mortar will hold. Mortar is to match existing ensuring that the mortar is a softer mix than the brick.</p>	2
		<p>The main area of deterioration is the underside of the roof overhang over the observation opening. The rusted steel reinforcements are clearly visible illustrating the extent of concrete failure. Painted finish</p>	<p>Concrete elements are to be remediated. Rusting to the structural elements encased by the concrete is becoming visible causing the concrete to spall and break off. The high salt content in the air contributes to the accelerated rate of deterioration as does inadequate protection from water ingress.</p>	2
			<p>It is not recommended that the damaged concrete be removed in its entirety, utilising patch repairs to try and retain the original fabric. Where the steel reinforcement has rusted causing the concrete to spall, the concrete needs to be cutback and the steel cleaned, treated with an anticorrosive treatment such as Sika Ferro Guard and new concrete patched in to match existing. Due to the harsh environmental conditions at Point Peron, it is recommended that a corrosion barrier coating is applied to all concrete surfaces to reduce/delay further deterioration.</p>	





Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
Roof	B	Concrete roof slabs supported on load bearing reinforced concrete framework and brick infill panels. 	Monitor condition as currently appears to be in sound condition. Bitumen covering has eroded and consideration may be given to reapplying the finish if water ingress becomes an issue.	2
Ground floor – interior	C	Spalling of concrete in projecting storage areas with clearly visible rusted steel reinforcement rods.   Underside of roof slab forming the ceiling is showing early signs of concrete cancer. Render to concrete column at foot of stairs is drummy, cracking and falling off.  Painted finish with graffiti	Patch repairs to reinforced concrete as outlined above. Monitor condition of ceiling for further deterioration. Remove paint from all elevations as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete. Remove drummy render from the concrete column at the foot of the stairs, ensuring that all retained render is in a sound condition. Patch repair in a render mix to match existing. If the structure is to be secured by the metal grille gate graffiti should not be an ongoing issue for the internal space and once all paint and graffiti has been removed, there should not be a requirement to coat the internal fabric with an anti-graffiti coating.	2 2 2

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
		 <p data-bbox="611 953 834 989">Missing flagstones</p> 		
Upper floor interior	C	<p data-bbox="611 1436 1670 1524">Concrete cancer around embrasure opening with prominent rusted steels projecting through concrete with the reinforced steel framework clearly visible demonstrating a substantial loss of concrete.</p> 	<p data-bbox="1688 1436 2641 1556">Concrete elements are to be remediated. Rusting to the structural elements encased by the concrete is becoming visible causing the concrete to spall and break off. The high salt content in the air contributes to the accelerated rate of deterioration as does inadequate protection from water ingress.</p> <p data-bbox="1688 1587 2641 1829">It is not recommended that the damaged concrete be removed in its entirety, utilising patch repairs to try and retain the original fabric. Where the steel reinforcement has rusted causing the concrete to spall, the concrete needs to be cutback and the steel cleaned, treated with an anticorrosive treatment such as Sika Ferro Guard and new concrete patched in to match existing. Due to the harsh environmental conditions at Point Peron, it is recommended that a corrosion barrier coating is applied to all concrete surfaces to reduce/delay further deterioration.</p> <p data-bbox="1688 1860 2641 1950">Remove paint from all elevations as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking</p>	<p data-bbox="2754 1436 2778 1461">2</p> <p data-bbox="2754 1923 2778 1948">2</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
		<p>hairline cracking in the concrete slab ceiling</p>  <p>Painted finish with graffiti and rubbish accumulation</p> 	<p>on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p>	
<p>Operations Bunker</p> <p>Reinforced concrete slab roof, load bearing double leaf brick walls. Concrete slab floor Brick retaining walls to steps</p>	<p>C</p>			
<p>North Elevation</p>	<p>D</p>	<p>Upper sections of brick walls are showing signs of failure due to water damage from the flat roof causing the steel reinforcement bars to rust and expand causing failure to the brickwork. The north west corner has experienced brick loss as a result.</p>	<p>The reinforcing bars should be removed to prevent further damage. Each should be cut out by raking out the joints, removing the corroded steel, replace with Helibars to crack stitch the walls to engineer specifications.</p> <p>Areas of damaged mortar to be raked out to an appropriate depth to allow the new mortar to hold. New mortar is to match the existing and is advisable to have the mortar analysed to ensure a match is made. The mortar is likely to be a lime mortar which is softer than the brick allowing for moisture to escape through the joints rather than destroy the brick. Due to the harsh environmental conditions the structures are located in, consideration may be</p>	<p>1</p> <p>1</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
		 <p>The concrete roof slab in the north east corner has been pushed up from the brickwork with the corner of the slab breaking off.</p>  <p>The brickwork around the two small openings is damaged and the flue shafts that once protected the openings have become detached from the main structure due to not being keyed in.</p>  <p>Brickwork is covered in graffiti</p>	<p>given to using a hydraulic lime to give increased strength. The original style of pointing should be replicated in all new work.</p> <p>Where bricks need to be replaced, these should be salvaged bricks to match the existing. Bricks from around the site may be used. All introduced bricks should be the same dimensions as the originals.</p> <p>Concrete elements are to be remediated. Rusting to the structural elements encased by the concrete is becoming visible causing the concrete to spall and break off. The high salt content in the air contributes to the accelerated rate of deterioration as does inadequate protection from water ingress.</p> <p>It is not recommended that the damaged concrete be removed in its entirety, utilising patch repairs to try and retain the original fabric. Where the steel reinforcement has rusted causing the concrete to spall, the concrete needs to be cutback and the steel cleaned, treated with an anticorrosive treatment such as Sika Ferro Guard and new concrete patched in to match existing. Due to the harsh environmental conditions at Point Peron, it is recommended that a corrosion barrier coating is applied to all concrete surfaces to reduce/delay further deterioration.</p> <p>Graffiti is an issue across the site. Santi graffiti coatings can be applied but these should not be to the detriment of the original underlying fabric. Any coating should allow the underlying fabric to breathe and function as designed. Any coating should not impact on the aesthetic of the underlying fabric.</p>	<p>1</p> <p>1</p>
East Elevation	B	<p>The east elevation incorporates the entrance and is generally in good condition. Bricks are missing to the south east corner by the entrance and along the main elevation.</p>	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which</p>	2



Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
			<p>applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete. Specifier's instructions are to be followed in the application.</p> <p>The missing brickwork around the entrance should be reinstated. Check around the structure to look for bricks. If salvaged bricks are to be used, ensure they are clean of mortar debris prior to reinstatement. Rake the mortar joints out to a good depth to ensure the new mortar will hold and relay the bricks using the same bond and pointing style as the original.</p>	1
South Elevation	B	<p>Upper sections of brick walls are showing signs of failure due to water damage from the flat roof causing the steel reinforcement bars to rust and expand causing failure to the brickwork.</p> 	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried.</p> <p>Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p>	2

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
				
West Elevation	D	<p>Upper sections of brick walls are showing signs of failure due to water damage from the flat roof causing the steel reinforcement bars to rust and expand causing failure to the brickwork.</p>   	<p>The reinforcing bars should be removed to prevent further damage. Each should be cut out by raking out the joints, removing the corroded steel, replace with Helibars to crack stitch the walls to engineer specifications.</p> <p>Areas of damaged mortar to be raked out to an appropriate depth to allow the new mortar to hold. New mortar is to match the existing and is advisable to have the mortar analysed to ensure a match is made. The mortar is likely to be a lime mortar which is softer than the brick allowing for moisture to escape through the joints rather than destroy the brick. Due to the harsh environmental conditions the structures are located in, consideration may be given to using a hydraulic lime to give increased strength. The original style of pointing should be replicated in all new work.</p> <p>Where bricks need to be replaced, these should be salvaged bricks to match the existing. Bricks from around the site may be used. All introduced bricks should be the same dimensions as the originals.</p> <p>Concrete elements are to be remediated. Rusting to the structural elements encased by the concrete is becoming visible causing the concrete to spall and break off. The high salt content in the air contributes to the accelerated rate of deterioration as does inadequate protection from water ingress.</p> <p>It is not recommended that the damaged concrete be removed in its entirety, utilising patch repairs to try and retain the original fabric. Where the steel reinforcement has rusted causing the concrete to spall, the concrete needs to be cutback and the steel cleaned, treated with an anticorrosive treatment such as Sika Ferro Guard and new concrete patched in to match existing. Due to the harsh environmental conditions at Point Peron, it is recommended that a corrosion barrier coating is applied to all concrete surfaces to reduce/delay further deterioration.</p> <p>Graffiti is an issue across the site. Santi graffiti coatings can be applied but these should not be to the detriment of the original underlying fabric. Any coating should allow the underlying fabric to breathe and function as designed. Any coating should not impact on the aesthetic of the underlying fabric.</p>	<p>1</p> <p>1</p> <p>1</p>
Roof	B	<p>The roof is showing minimal signs of deterioration.</p>	<p>The roof at present appears to be in good condition with only early signs of concrete cancer being visible. Patch repairs to the concrete may be required. Generally the roof structure should be monitored regularly.</p>	<p>2</p>



Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
				
Interior – Entry	C	<p>Walls are partially painted, with the paint stopping before floor level. Areas of graffiti. Tendency for sand accumulation.</p> 	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p> <p>Graffiti should be removed without the need to apply an anti-graffiti coating.</p> <p>Ensure all sand is removed regularly as this can contribute to damp at the lower levels of the walls.</p> <p>The metal grille gate can be removed or retained depending on owner requirements.</p>	<p>2</p> <p>1</p>
Interior – Room 1	C	<p>Brick walls covered in graffiti with an underlying dusty white paint finish which is wearing away. Low level signs of damp due to earlier sand accumulation. Damage to brickwork around high level opening in north west corner.</p>	<p>Graffiti to be removed without causing harm to the underlying fabric. As the structure is locked, there will not be a requirement to add an anti-graffiti coating to the brickwork.</p> <p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p> <p>Ensure all sand is removed on a regular basis. Accumulation can be a cause of damp and subsequent decay of the fabric. Removal ensures that the</p>	<p>2</p> <p>2</p> <p>2</p>



Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
			<p>underlying fabric can breathe and therefore prolong the life of the material.</p> <p>Loose bricks are scattered around the room and outside which should allow for the repair of the wall around the openings. Ensure all mortar is removed from the brick prior to rebuilding. Use mortar mix to match existing and use same pointing profile.</p>	2
<p>Gun Emplacement No. 1</p> <p>Reinforced concrete construction with remnant brick paving, central reinforced concrete gun mount</p>	E	<p>Gun Emplacement No. 1 is in poor condition but it is not recommended that the structure be reconstructed. The current state of the gun emplacement reflects the way in which the unstable land conditions can impact on any built structure. However, Gun Emplacement No. 1 is in a potentially dangerous condition for visitors and works are required to stabilise the structure. Reinforcement steel bars are sticking out beneath the structure. The loads have shifted due to the changing land conditions which has removed the structural support from aspects of the structure causing cracking and potential splitting of elements, especially the concrete retaining wall. The structure has been partially painted.</p> 	<p>Any repairs are to be undertaken in conjunction with the structural engineer's advice.</p> <p>The key issue is to try and create ground stability prior to implementing any repairs to the Gun Emplacement structure. The type of investigative works required to determine a solution is outside the scope of this report and will require the input of a specialist geotechnical engineer. The works required to create any level of stabilisation will be substantial but should prevent the structure from slipping and twisting further. Once stabilisation has been achieved, the structure will remain in its current condition and will not be reconstructed.</p> <p>Once the structure is stabilised, certain conservation works will be required to address the onset of concrete cancer. Repairs are to be carried out in line with the methodology outlined above.</p> <p>Substantial cracks have occurred in the concrete retaining wall due to a shifting of loading conditions and loss of support. Depending upon the method of stabilisation implemented, some form of crack stitching or introduction of ties may be required to tie the elements back together.</p> <p>Ideally the paint should be removed.</p> <p>The amount of public access to the structure needs to be carefully considered. At present, the structure provides a tempting invitation to climb all over it. Whilst it is not the best form of conservation to have this occur due to the ongoing damage it can cause to the fabric, preventing access would be require some form of fencing which may impact on the natural aesthetics of the place. The heritage significance of the place must be weighed up</p>	<p>1</p> <p>1</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p>



Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
			<p>against public safety. At present there are a large number of reinforcement rods that project out of the concrete retaining walls which can cause serious injury.</p>	
<p>Ammunition Store 1 Reinforced concrete</p>	<p>D</p>	<p>Ammunition Store No. 1 has also suffered from the land movement and has slipped into the the gun emplacement, twisting and cracking the reinforced concrete structure. Although the ammunition store has remained relatively in tact, the concrete slab floor has pushed up in places and cracks have occurred in the walls.</p> <p>Part of the external walls have been painted.</p> <p>Sand accumulation and vegetation growth within the structure.</p> 	<p>Works to the Ammunition Store will be limited to crack repairs and concrete cancer. As with the main gun emplacement structure, it is not the intention to restore the Ammunition Store. The structure is taking the majority of its structural support from the gun emplacement and following the structural works to the gun emplacement, the store should still be able to use it for its main support without further substantial movement. Some new footings may be required but all work is to be guided by the structural and geotechnical engineers together with the heritage architect.</p> <p>Crack stitching will be required to tie the walls back together and provide some increased structural strength.</p> <p>The paint should be removed as per the methodology outlined elsewhere in this report.</p> <p>The sand accumulation and vegetation growth within the structure should be removed.</p>	<p>2</p> <p>2</p> <p>2</p> <p>1</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
				
<p>Ammunition Store 2 Reinforced concrete</p>	<p>C</p>	<p>The second ammunition store has fared much better with only slight movement from its original position and has not been subjected to the same degree of twist and torsion and has therefore remained virtually in tact. The structure is largely submerged in the sand dune which may have contributed to its protection. The Ammunition Store is full of sand and vegetation.</p> 	<p>Remove the sand and vegetation growth from within the structure, address any signs of concrete cancer utilising the methodology outlined above.</p>	<p>1</p>
<p>Ammunition Bunker No. 1 Reinforced concrete walls and roof, brick internal walls, concrete slab floor, brick retaining walls to entrance</p>	<p>C</p>			
<p>North Elevation</p>	<p>B</p>	<p>The north elevation is the principal façade and is the only elevation that is clearly visible. The key elements being the entrance and the projecting air vents positioned along the roof line of the elevation. Minimal signs of concrete cancer. Painted finish.</p>	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p>	<p>2</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
			<p>Monitor the rate of deterioration to the air vents. The undersides have corroded due to water ingress and will require remedial action in the future to prevent the entire element being lost. The method of patch repairs outlined above can be utilised.</p>	2
East Elevation		<p>The east elevation is obscured by sand dune and vegetation. It is unpainted and is likely to be in good condition.</p>	<p>Full inspection of the elevation is required to determine condition. Small scale concrete patch repairs re likely.</p>	1
South Elevation	B	<p>Partially submerged into sand dune and partially obscured by vegetation. Full inspection not possible. Concrete deterioration to base of air vent shaft.</p> 	<p>Full inspection of the elevation is required to determine condition. Concrete patch repairs required to base of air vent shaft.</p>	<p>1 2</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
West Elevation	C	<p>Slight concrete damage. Loss of ventilation shaft and deterioration to underlying concrete. Water drainage issues from roof causing some of the deterioration.</p> 	<p>Repair concrete around the air vent. To prevent further damage the air vent shaft should be reconstructed based on the design of extant air shafts. Protection of the opening will safeguard the vulnerable fabric around the opening and also prevent water ingress into the building.</p>	2
Roof	C	<p>Appears to be in sound condition with only hairline cracking. Water drainage issues causing some damage to the air vent shafts and edge of the concrete roof. Sand build up on the roof with subsequent vegetation growth.</p> 	<p>Consideration to be given to adding a new top screed, angled to allow run off for rain water. Roof to be coated with waterproof breathable membrane or other coating to reduce water penetration into the fabric and subsequent damage.</p> <p>Sand removal from the roof is required if full roof inspection to be undertaken.</p>	2



Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
<p>Interior Entry passageway</p>	<p>C</p>	<p>Concrete walls, ceiling and floor. Graffiti to most surfaces. Deep sand build-up. Partial painted treatment to walls.</p> 	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p> <p>Remove sand and inspect walls and floor for damage.</p> <p>Retain all loose bricks for repairs to the structure or other buildings on site.</p>	<p>2</p> <p>1</p>
<p>Room 1</p>	<p>C</p>	<p>Concrete outer walls and a brick partition wall. Clouded white paint finish wearing off. Walls with graffiti. Sand accumulation.</p> 	<p>Remove sand accumulation and monitor further collections to prevent damage to floor and lower levels of the walls. Remove painted finish and graffiti.</p>	<p>2</p>


Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
Room 2 plus blast corridor	C	<p>Brick internal walls with concrete outer walls. Clouded paint finish to walls with graffiti. Sand accumulation.</p> 	<p>Remove graffiti. There is no requirement for an anti-graffiti coating to be applied if public access is going to be controlled. Removal of graffiti should not damage the underlying brick and concrete.</p> <p>Remove painted finish to the walls as per specifications above or other suitable alternative conservation method.</p> <p>Slight signs of concrete deterioration to the ceiling. Further deterioration to be monitored.</p> <p>Sand accumulation to be monitored and removed prior to substantial build-up.</p>	2 2
<p>Gun Emplacement No. 2</p> <p>Reinforced concrete retaining wall, brick steps and paving, central reinforced concrete gun mount</p>	B	<p>Gun Emplacement No. 2 is in good condition and has not suffered from the same fate as its counterpart Gun Emplacement No. 1. Shifting sand and ground conditions do not appear to be impacting on the structural condition of this structure.</p> <p>There is some concrete damage to the top of the gun mount and the steel perimeter edging around the top of the mount has rusted in places, springing loose from the concrete it is encasing.</p> <p>Sand accumulation in places.</p> <p>Non-original painted surfaces.</p>	<p>Conservation works are limited to replacing the steel edge to the gun mount and regularly removing the sand. The paint should be removed from the gun mount as per the methodology specified elsewhere in this report.</p> <p>The concrete elements should be regularly monitored as they will be susceptible to the harsh coastal environmental conditions.</p> <p>As this element is to be the main focus of the site and potentially the site for a memorial, the visitor numbers will be higher. The paving and brick steps should be regularly inspected to ensure they are not loose and creating trip hazards.</p>	2
				



Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
<p>Ammunition Store 1 Reinforced concrete</p>	<p>B</p>	<p>The ammunition store is in good condition with only slight signs of concrete cancer occurring to the roof.</p> <p>Non-original painted elements.</p> <p>Sand accumulation and vegetation growth.</p> 	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried.</p> <p>Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p> <p>Concrete elements are to be remediated. Rusting to the structural elements encased by the concrete is becoming visible causing the concrete to spall and break off. The high salt content in the air contributes to the accelerated rate of deterioration as does inadequate protection from water ingress.</p> <p>It is not recommended that the damaged concrete be removed in its entirety, utilising patch repairs to try and retain the original fabric. Where the steel reinforcement has rusted causing the concrete to spall, the concrete needs to be cutback and the steel cleaned, treated with an anticorrosive treatment such as Sika Ferro Guard and new concrete patched in to match existing. Due to the harsh environmental conditions at Point Peron, it is recommended that a corrosion barrier coating is applied to all concrete surfaces to reduce/delay further deterioration.</p> <p>Remove sand and vegetation from within the structure.</p>	<p>3</p> <p>3</p> <p>2</p>
<p>Ammunition Store 2 Reinforced concrete</p>	<p>B</p>	<p>Generally in good condition. Slight signs of concrete deterioration. Painted finish and sand accumulation.</p> 	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried.</p> <p>Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p> <p>Concrete elements are to be remediated. Rusting to the structural elements encased by the concrete is becoming visible causing the concrete to spall and break off. The high salt content in the air contributes to the accelerated rate of deterioration as does inadequate protection from water ingress.</p> <p>It is not recommended that the damaged concrete be removed in its entirety, utilising patch repairs to try and retain the original fabric. Where the steel reinforcement has rusted causing the concrete to spall, the concrete needs to be cutback and the steel cleaned, treated with an anticorrosive treatment such as Sika Ferro Guard and new concrete patched in to match</p>	<p>3</p> <p>3</p>



Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
			existing. Due to the harsh environmental conditions at Point Peron, it is recommended that a corrosion barrier coating is applied to all concrete surfaces to reduce/delay further deterioration. Remove sand and vegetation from within the structure.	2
Ammunition Bunker No. 2 Reinforced concrete elevations and roof, concrete slab floor Paint finish to part	B			
North Elevation	C	Mainly obscured by vegetation and steep drop in the land form. Unpainted concrete construction with some graffiti. The visible sections of the elevation generally appear to be in sound condition but the projecting air vent shafts have succumbed to concrete cancer with the bottom sections completely eroding in places, revealing the reinforcing steels.  	A full inspection of the north elevation is required to accurately determine its condition. From the limited access available the main elevation appears in sound condition with deterioration being limited to the base of the air vent shafts. This is caused by water run off from the roof and proximity to the surrounding vegetation. Some of the vegetation may need to be cleared to reduce impacts on the fabric of the building. The steels need to be cleaned and treated with an anti-corrosive treatment prior to the concrete being reapplied. The concrete may then be coated with a barrier to reduce the amount of water ingress and subsequent deterioration.	2
East Elevation		Not accessible	A full inspection of the east elevation is required to determine the exact condition of the wall. This may require the removal or cutback of some of the vegetation to allow access. Problems of concrete deterioration are likely to the air vent shafts as per other elevations around the building.	1
South Elevation	C	The south elevation is the principal elevation incorporating the entrance steps and the lower level entry passageway. Generally, the south elevation is in fair to good	The cracks in the wall and roof need addressing. Investigation into the full extent of the cracking is required prior to a remedial solution being specified.	1


Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
		<p>condition but signs of cracking at the upper level which extends through the roof and the first few concrete block courses resulting in water ingress into the structure. If left unchecked this will result in failure of the concrete through rusted reinforcement rods and blown concrete.</p> <p>Deteriorated undersides to the projecting air shafts where water drip is causing the fabric to decay. Concrete has blown and fallen off in chunks.</p> <p>Painted finish with graffiti. Sand collection in the footwell of the steps.</p> 	<p>The concrete around the cracking sound be checked for its soundness. If it is likely that the reinforcement steels are rusted and blown appropriate action should be taken to clean and protect the steels prior to remediating the concrete.</p> <p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried.</p> <p>Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p>	<p>2</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
West Elevation		<p>Much of the west elevation is obscured by vegetation. The elevation is partially submerged. Projecting air shafts extending from the roof level down approximately three block courses. The underside of the vents showing signs of concrete cancer and erosion in some instances. This elevation has not been painted.</p> 	<p>Full inspection of elevation is required to determine condition. This may require the removal of some vegetation.</p> <p>Monitor condition of elevation. Patch repairs to the air shaft vents to reduce further deterioration.</p>	<p>1 3</p>
Roof	C	<p>Slight cracking , especially at the edges of the roof, resulting in water ingress into the interior. If left unchecked this will result in eventual concrete cancer. Generally in good condition.</p> 	<p>The cracking in the roof are to be addressed and remediated in association with the structural engineer's specification. Full extent of the cracking and associated damage to be determined to inform appropriate solution.</p> <p>Water collection is an issue for the structure as there is no specific drainage escape. Roof plumbing is not an option. An additional screed top coat built up at one side to create a fall to enable water to flow off the roof may be a solution. Water dripping from the roof and down the elevations and air vent shafts and close proximity to the planting are the predominant causes of decay for the base of the air vent shafts. A waterproof membrane or coating may be added to the roof and air vents to prevent water ingress into any weaker areas of the structure and also to reduce the rate of water related concrete deterioration. Any coating should not be to the detriment of the underlying fabric.</p>	<p>1 2</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
Interior				
Entry Passage	C	<p>Concrete walls and ceiling painted in a white paint finish which is beginning to show signs of wear. Walls and ceiling subjected to graffiti. Sand accumulation causing early signs of damp at low level.</p> 	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p> <p>Graffiti to be removed. An anti-graffiti coating is not required.</p> <p>Ensure sand levels are maintained implementing regular removal.</p>	3
Room 1	C	<p>Concrete and brick walls and concrete ceiling all been painted white which is beginning to cloud and wear off. Walls covered with graffiti. High level signs of damp at junction of wall and ceiling and around the open air vents. Previous sand accumulation has caused slight signs of low level damp. Concrete floor appears in sound condition.</p>	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p> <p>Remove graffiti. An anti-graffiti coating is not required.</p> <p>Ensure sand levels are monitored, removing any sand build up on a regular basis.</p> <p>Monitor the areas of damp. Allow to dry and assess condition of concrete prior to undertaking any remedial action. Once the air vent shaft has been reconstructed, water ingress will be substantially reduced and the surrounding fabric will dry out. However the water damage may have caused deterioration to the concrete and its condition is to be monitored.</p>	<p>2</p> <p>2</p> <p>1</p> <p>1</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
				
<p>Room 2 plus blast corridor</p> <p>Concrete outer walls and brick inner walls, concrete ceiling and floor</p>	<p>C</p>	<p>Brick work to the internal walls is generally in sound condition, with some graffiti. Dusted white painted finish wearing off from the walls. Some slight signs of damp at the junction between the wall and ceiling, likely to be in line with the roof cracks. Evidence of recent sand removal from both the main room and the blast corridor. Signs of early concrete cancer to the roof with some of the enforcement bars rusting and breaking through the concrete.</p> 	<p>Remove paint from entire elevation as this can contribute to the deterioration of the fabric. Paint removal should not unduly damage the substrate and mortar and test panels in discrete locations should be established prior to embarking on the full removal. Non-caustic solvent based methods or low pressure steam removal can be tried. Peelaway paint removal system can be used or Westox's DeLam which applies a poultice to the paint and will be ready to be removed within a few days. Not all paint traces will be removed due to the texture of the bricks and concrete.</p> <p>Remove graffiti. An anti-graffiti coating is not required.</p> <p>Ensure sand levels are monitored, removing any sand build up on a regular basis.</p>	<p>2</p> <p>2</p> <p>1</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
				
<p>Water Tank</p> <p>Reinforced concrete, corrugated iron roof no longer extant but possible remnant roofing material lays in and around the tank</p>	<p>C</p>	<p>Slight signs of concrete cancer, rusted steel tension bands and substantial graffiti to the interior. Roof no longer extant but remnant fabric may exist in the foot of the tank and around the structure.</p> 	<p>Retention or removal is a decision for the owners of the site. Concrete cancer is beginning to occur which will require remediation if the structure is to be retained for interpretation purposes.</p> <p>There is no requirement to reinstate the corrugated iron roof.</p> <p>Removal of graffiti from the interior of the tank is recommended and consideration should be given to coating the structure with an anti-graffiti coating ensuring that this does not cause harm to the underlying fabric.</p>	<p>2</p>

Building Name	Condition Rating	Defect and Location	Work to Rectify Defect	Priority Ranking
		 The 'Defect and Location' column contains two side-by-side photographs. The left photograph shows a wall covered in colorful graffiti, including the word 'KING' in large, stylized letters. The right photograph shows a pile of debris on the ground, including pieces of corrugated metal, wood, and other trash, suggesting structural damage or vandalism.		

Appendix 8: Relevant Newspaper Articles

TURTLE PRODUCTS.

Promising Local Industry.

The Rockingham Factory.

It seems likely that soon plethoric Lord Mayors in boiled shirts will lose the great distinction that they and other great ones have long enjoyed. No longer will they be the predestined and generally envied consumers of turtle soup. The revolutionary thought is born of a visit to the neighbourhood of Rockingham. On the sheltering arm of the bay, not far from Point Peron, stands the turtle canning establishment of Chelonia, Ltd., clean and new. It is awaiting a shipment of de Rougemont's steeds from North-Western coasts to set its various processes in motion and produce for Australia, Europe, and America, within reach of the moderate purse, the delicacy hitherto held sacred to the revelries of the gentlemen above indicated. "Chelonia" is the Latin name for the turtle. The company that has adopted this designation has its headquarters in Glasgow. Two members of the directorate are Western Australians—Messrs. H. Mandelstam and H. B. Rodway. Yesterday they entertained a large inspection party from Perth, which included the Premier (Sir James Mitchell), the Colonial Secretary (Mr. R. S. Simpson), the Leader of the Opposition (Mr. P. Collier), Messrs. Angwin and Angelo, M.S.L.A., and C. S. Nathan (chairman of the Council of Industrial Development). The visitors were unable to see the canning in progress, as the factory has not yet commenced in earnest; and only one turtle, a dun-coloured outline, was to be viewed, swimming lazily in the fenced pool provided at the shore end of the company's jetty. But they did have the opportunity of appraising the firm's turtle soup. A plate of this delicacy costs in London about two guineas. Chelonia, Ltd., state that they will be able to produce the soup for Australian households at a price approximating that of Bovril. The costliness of the article, together with its assumed exquisite flavour, have probably overshadowed in the public mind the food and restorative values which it is asserted, on impressive evidence, to contain in an astonishing degree. The factory at Rockingham will turn out three main commodities derived from the turtle: the soup; a conserve (which is a highly concentrated form of the soup); and an extract to be called "Chelo," which is designed for invalids. There is also turtle oil, stated to possess great medicinal value. At present the firm has to avail itself of the ordinary steamship service to transport its turtles from northern waters to Fremantle. Later it expects to have its own craft for this purpose. The turtles are carried on the deck of the steamer, and require no sustenance during the trip south. A hosing-down twice daily meets the case. Turtles commence to lay at 7 years of age, and are very prolific. The supply is declared to be practically inexhaustible.

practically inexhaustible. The "Chelonia" factory is a substantial two-storey structure that appears at first sight to be built of corrugated iron, but the substance is in reality Fibrolite, a local production.

HOLIDAY RESORTS.

No. 6.—Rockingham.

As a holiday resort that is near the metropolitan area, has a fine beach for bathing, and plenty of fish that seem anxious to be caught, Rockingham has much to commend it. This watering place is only 19 miles by road from Fremantle, and is very popular with weekend or one-day trippers. It is reached by two roads from Fremantle, one following the coast and the other passing through Beaconsfield and Spearwood.

Rockingham overlooks Mangles Bay, and is sheltered from ocean swells by several islands. Nearby lies Garden Island, a popular camping ground, with good fishing in Careening Bay. For miles along the coast from Rockingham the waves of the Indian Ocean lap placidly on to a smooth beach, where bathers may disport themselves with safety. From two jetties—relics of the timber shipping days—anglers catch fish in plenty. A reserve opposite the hotel contains swinging boats, see-saws, and other equipment for entertaining children. The beach is well provided with dressing rooms and shelter sheds.

Two or three miles to the north of Rockingham lies the hulk of the steamer *Kwinana*, which was blown from her moorings outside Fremantle after her interior had been burned at Carnarvon. A ladder enables sightseers to clamber over her rusting bulwarks. South of Rockingham a track, over which motor cars can pass, leads to Cape Peron, three miles distant. From the rocky cape, around which breakers foam and swirl, an ocean panorama takes in the rugged coast, with Garden Island, Penguin Island, Seal Island, and Bird Island. There is a strip of beach ideal for bathing, and the surrounding ground is thickly carpeted with wild couch grass. Picnic parties spend pleasant afternoons at this healthy spot.

Tennis courts and bowling greens are open for play at Rockingham, and garages are available.

Transport and Accommodation.

Particulars of transport and accommodation are as follow:—

Transport.—By taxi: Leaving William-st., Fremantle, on Tuesdays and Saturdays at 7 p.m., and on Sundays at 10.30 a.m. Steamer trips as advertised.

Accommodation.—One up-to-date hotel, tariff 14/ a day, £4/4/ a week; flats, furnished cottages, bungalows, and camps, tariff from 25/ or £2/2/ a week. Detailed information may be

pages, bungalows, and camps, tariff from 25/ or £2/2/ a week. Detailed information may be obtained from the Government Tourist Bureau 62 Barrack-street, Perth. (Phone B4376.)

LIFE IN THE ARMY

The members of the local militia fought some stirring battles at the recent Rockingham camp. They returned with an excellent snapshot of a publican's son carrying out fatigue duty. At the "Battle of Point Peron," a corporal, who is employed by the Kalgoorlie council, was the first casualty. He was bitten by a snake. Later his mates ran the "Whiskers Blake" to earth. They found it had died from alcoholic poisoning.

The Kalgoorlie Miner, 23 October 1937, p. 3.

ROCKINGHAM CAMP.

"Defending" Point Peron.

The 13th field company of the Royal Australian Engineers, members of the 44th Battalion, and the 13th Field Army Medical Corps took part in a bivouac last week-end and yesterday commenced six days of training in camp at Rockingham. An interesting syllabus has been drawn up, and the commanding officer (Lieut.-Col. McKenzie) and his staff have left no stone unturned to make the training successful.

A big defensive scheme will be carried out at Point Peron today and tomorrow, and yesterday was occupied in anti-gas and wire-netting drill in preparation for it. Members of the 44th Battalion will entrench themselves in a defensive position, and signallers will provide lines of communication. The construction of the position will be supervised by the engineers, who will lay concertina wire in the water. The A.M.C. will co-operate in the evacuation of the "wounded."

The West Australian, 19 October 1937, p. 13.

BATTLE OF PERON, DEFENDING THE COAST.

Militia Training at Rockingham.

Point Peron, that narrow neck of land three miles from Rockingham, which runs out into the sea towards Garden Island, is showing signs of the battle which for the last two weeks has raged over its sandhills and beaches. Trenches, machine-gun emplacements and dug-outs have scarred the slopes of the abrupt little mounds built up by the winds without symmetry or order over the surface of the peninsula; the grass which, 14 days ago, made a green mantle for the hills and valleys has wilted beneath the feet of a thousand men; and the steel-rimmed wheels of galloping limbers have churned the winding tracks into flying clouds of white powder.

These are the fruits of war training. A week ago the 28th Battalion of the Militia Forces learnt valuable lessons in coastal defence. This week the 44th Battalion, the 13th Field Engineers and the Army Medical Corps carried on the work of teaching young Australians the art of defence. Next week artillery, signallers and supply and transport companies will continue the annual lesson.

Warning Issued.

The 44th Battalion, Engineers and Medical units went into their annual camp last Sunday under the command of Lieutenant-Colonel E. G. MacKenzie, Major V. L. Steffanoni and Lieutenant-Colonel J. R. Donaldson respectively. On Monday night news of an enemy's approach was received and the intelligence service reported that a landing might be expected soon after dawn on Wednesday morning. The only landing possible was between Bird Island and Point Peron and preparations were made immediately for coastal defences to be prepared. The notice of attack was short, but the defending forces, although they arrived on the scene at 10 a.m. on Tuesday, coolly and efficiently went to work. By nightfall everything was done. Barbed wire entanglements stretched along the beach, machine-gun posts and trenches were cunningly hidden from view right on the seafront and in the smaller sandhills. In support were other machine-gun posts and a mortar, the former to command the only roadway to which a successful landing party might penetrate. The camouflage of all defence points was left to the ingenuity of the men themselves, and the manner in which the work was completed called forth the praise of the commanding officer who, throughout the day and night, until the very hour of attack, constantly toured the defence area.

There was an interlude for the evening meal when the men assembled at the

field kitchens in the lee of Sausage Hill upon whose crown stood the operation headquarters. Below nearly 500 men gathered at the field kitchens and fortified themselves with large plates of stew against the cold and drizzling rain which threatened.

At intervals during the evening platoons were relieved and only a keen eye could have discerned the movement of 20 fully armed and accoutred soldiers as they crawled through the scrub taking every advantage of the shadows thrown by the fitful gleams of moonlight, but moving rapidly and without sound up to the front line. That sentries everywhere were alert was shown by the experiences of a party of four visitors who visited the posts during the night. A shower of rain forced them to shelter beneath bushes a little to the rear of the firing line. Presently they resumed their tour. Hidden in the deep shadows and moving without sound away from their shelter, they were suddenly challenged almost simultaneously from four quarters and were bidden to advance and give the pass-word. The sentries' alertness was due in some measure to the activities of an intelligence officer, who had set out to discover the pass-word if he could. He at last succeeded by crouching near an outpost and overhearing the mystic word carelessly spoken aloud in answer to the sentry's challenge.

Unrehearsed Incident.

There were unrehearsed incidents. A youth, after his long day's work, collapsed into sound sleep beside the road and lay unnoticed until a motor car driven by an officer passed close to his slumbering form. Bystanders, believing he had been knocked down, raised an alarm for stretcher bearers, and loudly declared him dead. Another bluntly informed the horrified motorist that he had run "clean over his guts." Eventually a medical officer healed the sick by laying on hands and shaking him to wakefulness.

A very important part in the manoeuvres was played by the engineers who, in short time, ran up a very efficient

IN THE FRONT LINE.

BATTLE AT POST PEDON.

28th Battalion Manoeuvres.

THE 28th Battalion, which has been in the front line since the outbreak of the war, is now being retrained for the modern methods of fighting. The battalion is being retrained by the 2nd Division, and is now being retrained by the 2nd Division, and is now being retrained by the 2nd Division. The 28th Battalion is now being retrained by the 2nd Division, and is now being retrained by the 2nd Division. The 28th Battalion is now being retrained by the 2nd Division, and is now being retrained by the 2nd Division.

In Commemorative Fight.

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AFTER 28 YEARS.

MILITARY MANOEUVRES The annual manoeuvres of the 20th Battalion is being held at Buckingham.



A panoramic view of the camp.



Exercises which were held during the manoeuvres at Post Pedon.



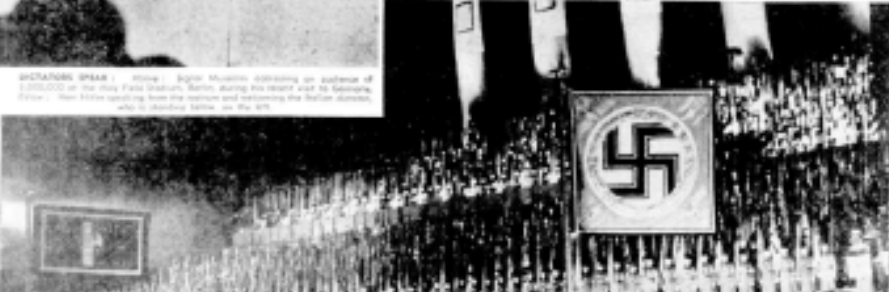
Men of the field company on Tuesday night during manoeuvres at Post Pedon.



EXERCISES IN THE TRENCHES - Above: Soldier looking through a field of view of 100000 at the Bay View Stadium, Perth, during the manoeuvres at Post Pedon.



Putting out the ropes at 8 o'clock during the manoeuvres. Things in the rough weather were laid to grip and were beside the ropes on the beach.



PARADE IN THE TRENCHES - Above: Soldier looking through a field of view of 100000 at the Bay View Stadium, Perth, during the manoeuvres at Post Pedon.

FISHING AT POINT PERON.

A correspondent has complained about the scarcity of fish for anglers at Point Peron, attributing it to the use of nets. One night during the Easter holidays, he stated, he saw a group of men on the beach at the Point in the act of pulling in a net from 100 to 150 yards in length.

When inquiries were made at the Fisheries Department yesterday, it was stated that net fishing was prohibited on that part of Rockingham Beach extending from Point Peron to the Rockingham jetty, although fishing might be lawfully carried out on the southern (Safety Bay) side of Point Peron. Frequent but irregular visits were made to the locality by fisheries inspectors and nothing of an exceptionable nature had been observed for some considerable time.

The Chief Inspector of Fisheries (A. J. Fraser) expressed the opinion that net fishing was frequently very beneficial to a fishery, particularly if it was properly regulated. "Certainly," he said, "the use of such a small piece of net as is referred to by the correspondent would have no ill-effect on these waters. Several applications for closure of the Safety Bay side of Point Peron and of the bay itself have recently been investigated, but no justification has yet been found for bringing into force the protective clauses of the Fisheries Act. Authentic reports furnished by competent observers indicate that there is no shortage of line fish hereabouts."

The West Australian, 20 April 1939, p. 5.

FIRING PRACTICE.

Live ammunition will be used by light anti-aircraft guns firing seawards near Cape Peron tomorrow between 10 am and noon and 2 pm and 4 pm. On January 11, 13, 14 and 16, at night, artillery using live ammunition will practise on the Rockingham range. The danger areas are advertised in this issue. No person or vessel is permitted to enter those areas during the times stated.

The West Australian, 11 January 1944, p. 4.

Sea Controls May Be Lifted

RESTRICTIONS on Rottnest Island, Fremantle Inner Harbour, Carnac Island and Point Peron may soon be lifted.

An Army spokesman said today that orders revoking those made under National Security regulations in respect to those areas had been forwarded for tabling and gazettal.

The Daily News, 4 October 1945, p. 7.

PT. PERON REHAB. CENTRE

Rehabilitation centre at Pt. Peron for ex-servicemen ineligible for Repat. benefits will start early in the New Year, will cater for 20 if necessary, said Social Services D/Commissioner J. R. Ashall yesterday.

"Social Services Dept. is responsible for aftercare and welfare of discharged men whose disabilities are not war-caused," explained Mr. Ashall.

"We pay them an allowance up to 3 months after discharge and undertake treatment.

"In a number of cases, particularly men suffering from an anxiety state or lack of self-confidence, all they need is somewhere similar to a convalescent depot.

"We have this week been given approval to take over a suitable camp at Point Peron, about 34 miles from Perth on the far side of Rockingham.

"This is ideal.

"Men will be able to recuperate and find renewed self-confidence under the supervision of an occupational therapist, soon to be appointed.

"We will thus be able to take care of those few who might otherwise be thrown back into civilian life suffering from a disability for which they could get no Commonwealth help because it was not considered war-caused."

The Sunday Times, 16 December 1945, p. 5.

YOUTH CAMP.

POINT PERON SITE.

Opening Tomorrow.

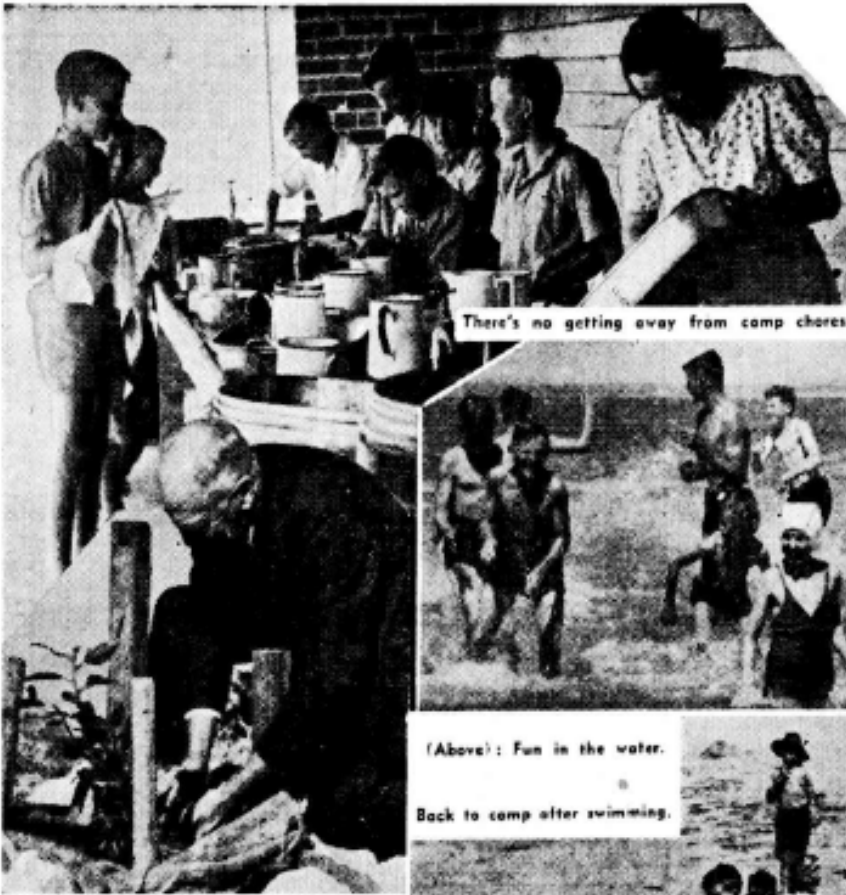
The Minister for Education and Social Services (Mr. Tonkin) will open the Point Peron youth camp tomorrow at 3.30 p.m. The area has been made available on a permissive tenancy basis from the Commonwealth Minister for Social Services and at present is being used by the Education Department for its first camp school.

Over 80 children from the Wongan Hills area and surrounding small schools arrived by train last Monday, and were transported to the camp by bus. An interesting educational programme has been arranged, including visits by departmental experts in the fields of nature study, art, music and physical education. Teachers from the schools concerned have accompanied the children and an additional camp staff has been appointed, funds having been made available to the department by the Commonwealth National Fitness Council. Some mothers accompanied the children and are assisting in the direction of general domestic duties concerned with the camp. The camp will conclude on December 21, when a special train will take the children back to their districts.

This camp is part of the general scheme in which the Education Department is working in collaboration with the National Fitness Council, and will provide a change of environment for children from these isolated areas and at the same time, while preserving the continuity of their education, will make full use of the environment which the camp provides. A similar camp school for several schools in the southern area is at present being conducted at the Albany quarantine station, which was made available for the purpose by the Commonwealth Department of Health.

Point Peron Youth Camp

Children from Burakin, Ballidu, Cadoux, Lake Hinds and Wongan Hills State schools enjoyed a pre-Christmas holiday camp at Point Peron which was officially opened by the Minister for Education (Mr. Tonkin) on December 15. The camp provided opportunities for educational lecture and physical training as well as swimming and sun-bathing. There were 87 children in camp.



There's no getting away from camp chores.



(Above): Fun in the water.

Back to camp after swimming.

A red hibiscus is planted in memory of the camp by Mr. R. Ackland, of Wongan Hill.



Rest period ends when the whistle blows and the children come running from the quarters.

YOUTH CONGRESS

Point Peron Camp Fixtures

The annual conference of the associated youth committee of the National Fitness Council will be held at the Point Peron camp this weekend. Seventy-five representatives from 17 major youth organisations will attend the camp which will be under the direction of the chairman of the committee (Mr. T. Sten), Principal of the Teachers' Training College.

The discussion programme is as follows:

Saturday night: Economic contributions of youth, led by the Assistant-Director of Adult Education (Mr. J. Burman). Sunday afternoon: Cultural side, the Principal of Scotch College (Mr. J. M. T. Keles). Sunday evening: Attitude of youth to the spiritual aspects of community life, led by the State president of the Boy Scouts Association (Mr. I. T. Birtwistle). Monday morning: Social contributions of youth, led by the Principal of the Fairbridge Farm School (Mr. W. Mein). Monday afternoon: The physical side of general health, the Commissioner of Public Health (Dr. C. E. Cook).

YOUTH LEADERS' CAMP

Over 30 youth leaders from centres throughout the State are attending a two-weeks' refresher course in social and physical activities at Point Peron. The camp is under the direction of the National Fitness Council. Pictures on this page give some idea of the spirit of the camp.



Peron Camp



Balanced on Beches: Instructed by Pat Henderson, assistant organiser of National Fitness activities, girls in camp devoted part of each morning to physical exercises.

DURING the last fortnight of January the National Fitness Council of Western Australia held its first residential leaders' course at Point Peron Youth Camp. About 40 young men and women, among them representatives of far distant country districts, attended; camp activities were designed to develop mind and body, and, in doing so, to accentuate potential leadership qualities.

Physical education was by no means the sole purpose of the camp, and morning and evening lectures covered a wide variety of subjects, including appreciation of music and drama, national affairs, town planning, social entertainment in youth clubs, visual education and physiology.

We spent a day at the Peron Camp; morning lectures were over when we arrived and sun-tanned Pat Henderson, woman organiser, was putting the girls through their paces over the pommel horse. Folk dancing followed. At noon the whole camp including the Director of National Fitness, Mr. R. E. Halliday, and enthusiastic, ever-busy organiser, Mr. Bill English donned swim suits and tramped over the sandhills for a pre-luncheon dip. Afternoons in camp were mostly given over to voluntary activities.

Visiting lecturers talked in the evenings, but on the night of our visit 50 members of the National Fitness Leaders' Association were entertained, embryo leaders meeting and exchanging ideas with the "old hands" amidst the camp's friendly holiday atmosphere.



Ross Ewen, in charge of male physical activities, and his wife Marie, who instructed the life-saving class and made music for folk dancing.



Betty Young, a Teachers' College student, the only girl in the life-saving class of five, practices giving artificial respiration before being examined for her Bronze Medal. Patient is Florence Grice, formerly one of Modern School's star swimmers.



On the Duty Roster: Milton Newman, of Norseman (left) and Norrie Cousins, of Wagin, help Mrs. A. MacLennan (right) and her husband, "Mac," with dinner preparations. Caterers for the camp, Mr. and Mrs. MacLennan went to Rockingham for a holiday, ended as "King and Queen" of the Peron kitchen.

CAMP SCHOOL AT POINT PERON

Camp schools for country schoolchildren, conducted by the Education Department at the National Fitness camp at Point Peron, were resumed this year, and will be continued after the Christmas holidays. At present children from Chowrup, Cundernup and Coorow State schools and four correspondence students from those districts are in camp. During the day normal school lessons are given with a break for swimming instruction. When the children arrived at the camp some of them had never seen the sea before, and none could swim; but after a few weeks it is expected that all will have a fair knowledge of swimming. Similar camps are also held at Esperance and Albany.



Shirley Tuckett (Chowrup), Laurel Hally (Cundernup) and Audrey Mack (correspondence student from the Bayup Brook district) building sand castles



A swimming class learning leg movements.



Beryl Mead (Chowrup), Connie Mead (Chowrup), Margaret Granow (Coorow), Olga Lomas (Cundernup), Mary Lomas (Cundernup) and Lheona Lampard (Coorow) at swimming practice.



Colin Hartnott (Cundernup), Robert Glover (Coorow), Ted Hally (Cundernup), Doug Hartnott (Cundernup) and Bruce Hally (Cundernup) in the water at Point Peron.



Stanley Furniss (correspondence student from Mabrup) and Ruth Folland (Coorow) take their turn at the wash-up dish.



Recreation officer Mrs. R. Bromilow shows a class the correct arm action during a swimming lesson.

HUNDREDS OF HUTS FOR POINT PERON?

Hundreds of one-room holiday shacks will be built at Pt. Peron—if the Dept. of Interior agrees to a Rockingham Road Board proposal.

Scheme is so far advanced that Road Board secretary G. E. Black said yesterday: "We hope to allocate the first 100 lots at the end of this month."

Proposed holiday camp area will be on 300 acres fronting Shoalwater Bay, near which is a bore yielding about 500,000 gallons of fresh water daily.

Shacks will compulsorily be of standard design—one 14 x 10ft. room with a front verandah, and a back verandah containing kitchen arrangements.

Cost of new material for the standard hut will be about £100, which means anybody can build a beach home of this type over a 2-year period without infringing building regulations.

Ground rental for each shack will be £5 yearly.

Mr. Black said that a number of prominent professional men were among those who had already inquired about the holiday area.

In this scheme for acquiring Commonwealth land and then leasing it for permanent holiday shack areas, Fremantle Road Board was a jump ahead of the Rockingham authorities.

At Naval Base—near Rockingham boundary—Fremantle Road Board secured 98 blocks from the Commonwealth. On this rising ground overlooking the sea 40 small week-end shacks are now being erected.

Mostly they are being built by their owners during week-ends. One man prominent in the motor world is building his week-end shack with the help of his wife and 6 daughters.

Most of these shacks should be completed well before

be completed well before Christmas.

Blocks have been staggered so that ocean views will be uninterrupted and those shacks nearing completion look neat and efficient despite their smallness.

Between the Rockingham road and the sea Fremantle Road Board is also planning a caravan park to hold about 90 vehicles for Naval Base holidayers.



SMALL COMFORT FOR CAMPERS: A Rockingham Road Board by-law prohibiting camping in the board's area between Kwinana Beach and Safety Bay has forced a number of campers to move to Point Peron, where a bore provides the only water supply. Campers collect their drinking water from this source, where a girl in bathers enjoys a shower, mothers wash clothes and children paddle. The by-law will be discussed at a meeting of the Rockingham Ratepayers' Association tomorrow night.

The West Australian, 6 January 1949, p. 7.

DISCOMFORTS OF CAMPING AT POINT PERON

(By a Staff Reporter.)

Apart from flies and the usual discomforts of camping, the Point Peron reserve this year offers a host of additional inconveniences to unsuspecting campers.

Having seen the existing conditions, it is not amazing that persons such as Mr. A. R. Fullarton, of Victoria Park, and his family are resenting the enforcement of the Rockingham Road Board by-law prohibiting camping in areas under its control.

Many campers during the recent holiday period set up tents along the coast only to be bluntly given two hours' notice to quit. With reduced petrol supplies, most motorists had no option but to camp at Point Peron, which was overcrowded in consequence.

The approach to Point Peron over two miles of dusty bush track bordered by stunted undergrowth and dry grass is in itself uninviting. But on arrival at the camping grounds the lack of welcome is more forcibly driven home by the scanty facilities provided. These are of a bare minimum, consisting of one artesian bore supplying warm, brackish water and a few lavatories, mostly situated with no privacy.

The bore water is carried away in an open stone drain where clothes are washed, drinking water drawn and ablutions made. The lavatories, although cleared regularly, are otherwise untouched and the use of a broom or deodorants is unknown.

JOURNEY ON FOOT.

About 120 yards before reaching the bore the road forks. The track to the right leads to a cliff overlooking the beach. Here cars have to be parked and the journey continued on foot down steps built by the campers. At the foot of the cliff tents are huddled on a stretch of dirty sand and deluged in dust from the cliffs above when a land breeze blows.

Conveniences for those camped on the beach are situated 50 yards back from the top of the cliff and many camped farther along the beach do not trouble to walk the distance to them. The water supply being so far from the

the distance to them. The water supply being so far from the beach, some have tapped water at depths of 8ft. or 9ft. The water thus obtained is cooler and not so brackish as that from the bore, but the risk of pollution is apparent as refuse is buried and it is a long walk to the public conveniences.

FIRE HAZARD.

Everywhere the bush is carpeted with dry grass and it is a wonder that with all the camp fires and lack of water the camping area has not been set ablaze.

Campers complained of the difficulty experienced once or twice a week at low tide in getting boats launched and around a sand spit which runs out to sea from the beach. At times, they said, it was impossible to use the boats. During these periods the smell of decaying seaweed on the uncovered seabed was most objectionable.

Groceries and vegetables are delivered daily, meat twice weekly and bread every second day. But an unforeseen shortage means a two to three-mile trudge along a dusty road to the nearest store.

However, ratepayers of the Rockingham district have asked the road board to rescind the by-law banning camping and to allow campers in prescribed areas near the sea front, with facilities for camping. Not only Rockingham residents but the caravanning public of Western Australia are awaiting a decision from the Rockingham Road Board which may be made at its meeting tonight.

Youth Camp at Point Peron

Eighty-six young people from 20 different youth organisations spent the long weekend in camp at Point Peron. Designed to promote discussion on the way in which club activities can help to bring about better international understanding, the camp provided a practical example of this ideal by including five young displaced persons.



Members were rostered daily for mess duties, and here four of the girls are pictured preparing salads.



It was not all work, and this section enjoyed a game of dodge-ball.



Right: A sub-division of one of the groups relaxes for a discussion.



Joy Dixon appears interested in a note taken down by Walek Isakow (Estonian), while Ganas Germanis, of Latvia, looks on.



Below: Oloerts Uptic (Latvian), Bernice Jamieson, Alois Sashegyi (Hungary) and Jan Czollnaki (Luxemburg) talk with Mr. B. Mather, the camp director.

Below: To save time, study films were screened immediately after the midday meal.





Holiday Under Canvas

Many of the campers holidaying at Point Peron since Christmas moved on there when they found that a Rockingham Road Board by-law prohibited camping in the board's area between Kwinana Beach and Safety Bay. Although amenities are few, the campers are happy in their adopted surroundings.



Miss Peggy Bain, of Victoria Park, does the washing while her baby sister, Carol, sits in the "tub"—the outlet from Point Peron's only water supply for campers, a bore sunk within sight of the sea.



A small stray cat caught by Mr. F. Maynard attracts a lot of attention.



Mr. M. J. Smith, of Perth, cooks for his wife and child.



Left: In the heat of the day, Mrs. F. Maynard, of Armadale, her daughter, Kerry, and their dog, Bonzer, take time off for a rest.



FITNESS

Scenes from the National Fitness Council camp at Point Peron where student teachers are doing an extensive course in physical education. The course, which includes physical exercises, games, swimming and life-saving, will equip the teachers to promote physical fitness in schools throughout the State.



Seventh Day Adventists

Seventh Day Adventists held their annual camp at Point Peron during Easter. The pictures show how they enjoyed the occasion.



Music while it rained.



Denise Ross (centre) was the youngest.



Miss M. Fowrie, Mr. N. Myers and Miss E. Groom slice bread for the multitude.



Mary Holmes plays for the sing-songsters.

SCHOOL CAMP AT POINT PERON

The first of the new series of camp schools conducted by the Department of Education will commence this weekend, when 75 children from one-teacher schools at Walgoolan, Beacon, Gutha and Wialki and the senior classes of the Wiluna school will enter the National Fitness camp at Point Peron. They will be joined by 11 children from isolated areas who are securing their education by correspondence. While in camp the children will visit the Royal Show and other metropolitan places of interest.

The camp schools are planned principally to give children of one-teacher schools and correspondence pupils a change of environment and the social benefits of being members of a large corporate group. Such facilities are available at the Point Peron camp, and at Albany, Esperance and Bunbury. The camps, which last for about three weeks, are conducted as schools, at which the ordinary departmental curriculum is enriched by a programme which makes full use of the environment.

The West Australian, 30 December 1948, p. 13.

Army reservists help restore WWII coastal defence battery at Point Peron

By Kathryn Diss and Jessica Strutt
Posted Sun 3 May 2015, 7:50am

Batteries and bunkers built south of Perth to defend Western Australia's coastline during the World War II are being restored.

It has been more than 70 years since soldiers were stationed on the stretch of coastline at Point Peron.

Much of the site, which played an integral role in WA's coastal defence strategy, has now fallen into disrepair.

Army reservists from the 11th/28th battalion are now helping restore the infrastructure to its former glory.

Lieutenant colonel Chris Adams said 20 of his regiment volunteered to help remove sand from the bunkers and batteries.

"There's 70 years of dirt that's been built up down here - the soldiers are digging it out," he said.

"To have something like this for the rest of the community to come and look at will be wonderful once it's completed.

"Most people in the community wouldn't be aware that these bunkers exist with the large guns that were protecting our borders. And to be here to restore these is a privilege."

Museum to accompany restoration

Liberal MP Phil Edman has formed a committee to drive the restoration project.

He has plans to build a museum on the site, construct a memorial, create picnic areas and open up the bunkers and batteries to the public.

"We've got people coming in and out graffitiing it, ruining it," Mr Edman said.

"We've got to get on with the master plan, turning it into what I believe will be a significant coastal defence museum which hopefully will be the largest ever seen in Australia."

Mr Edman has also been collecting memorabilia from the time, which has turned his Rockingham electorate office into a makeshift museum until the artefacts can be showcased at the site.

"We've got people building models for us, there is stuff being donated, there's stuff we've bought as well from all over the world, as well as around Australia, we've picked up some deceased estates as well," he said.

"It's an ongoing job to find memorabilia that happened in Australia. You think you could just pick it up in Perth - you can't, you've got to go all around the world to find it."

Restoration will help educate public on its role

Environmental authorities currently managing the site, are also supporting the project.

Kelly Gillen from the Department of Parks and Wildlife said restoring it to its World War II glory would help educate the public on the important role it played.

"The story of the coastal defences for Western Australia is an untold story," he said.

"There's a great opportunity with this site to restore some of the world war two infrastructure and to interpret that story for the general public."

Mr Gillen hopes to finalise the master plan for the project soon.

"This year, we will certainly be in a position to have a framework and a plan that we're actually able to work to," he said.

The committee hopes to have the heritage and design planning complete by the end of the year, paving the way for it to seek funding from local, state and federal governments.



PHOTO: Army reservists have volunteered their time to restore the batteries and bunkers at Point Peron. (ABC News: Kathryn Diss)

MAP: Peron 6168



PHOTO: The coastal defence battery at Point Peron has fallen into disrepair. (ABC News)

The story of the coastal defences for Western Australia is an untold story.

Parks and Wildlife spokeswoman Kelly Gillen

Appendix 9: Below Threshold documentation Point Peron Recreational Camp

REGISTER OF HERITAGE PLACES

Below Threshold

1. **DATA BASE No.** 4646
2. **NAME** *Point Peron Recreational Camp* (1942-43; c.1946; 1968; 1984)
FORMER NAME K Battery Barracks
3. **LOCATION** Point Peron Road, Peron
4. **DESCRIPTION OF PLACE INCLUDED IN THIS ENTRY**
Cockburn Sound Locations 2056, 2057, 2058, 2059 and 2600, being Crown Reserve 27853 and being the whole of the land comprised in Crown Land Record Volume 3099 Folio 978.
5. **LOCAL GOVERNMENT AREA** City of Rockingham
6. **OWNER** Crown, Vested in the Recreation Camps and Reserve Board.
7. **HERITAGE LISTINGS**
 - Register of Heritage Places: Below Threshold 27/09/1996
 - National Trust Classification: -----
 - Town Planning Scheme: -----
 - Municipal Inventory: -----
 - Register of the National Estate: -----
8. **CONSERVATION ORDER**

9. **HERITAGE AGREEMENT**

10. **STATEMENT OF SIGNIFICANCE**

Point Peron Recreational Camp, a group of single-storey, timber framed buildings clad with weatherboard up to sill level and asbestos cement sheeting above and having terra cotta tiled or corrugated asbestos cement sheet roofing, has cultural heritage significance for the following reasons:

the place was an integral component of K Heavy Battery which was part of the World War Two defences of the area;

the existing World War Two camp structures as part of an army battery installation are the only ones currently known to remain in the State as a substantially intact group;

the place has some social value by being associated with the National Fitness Council and its program to promote recreation in the

community. The ongoing use by the Ministry of Sport & Recreation has continued this social association; and,

The use of the camp by the National Fitness Council as one of their early camps used to promote recreational activity as part of community living is of some historic interest.

11. ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE

The criteria adopted by the Heritage Council in September, 1991 have been used to determine the cultural heritage significance of the place.

11.1 AESTHETIC VALUE

The current camp offers little aesthetic value to the community. The ad hoc layout of the camp and current condition of the structures do not present an attractive setting.

11.2 HISTORIC VALUE

The camp was an integral component of K Heavy Battery, which was part of the World War Two defences of the area. (Criterion 2.2)

The use of the camp by the National Fitness Council as one of their early camps used to promote recreational activity as part of community living is of some historic interest. (Criterion 2.2)

11.3 SCIENTIFIC VALUE

11.4 SOCIAL VALUE

The camp has some social value by being associated with the National Fitness Council and its program to promote recreation in the community. The ongoing use by the Ministry of Sport & Recreation has continued this social association. However, in the context of all the camps, the contribution of *Point Peron Recreational Camp* was not major or distinctive. (Criterion 4.1)

12. DEGREE OF SIGNIFICANCE

12.1 RARITY

Although the camp buildings as a type are quite common, the existing World War Two camp structures as part of an army battery installation are the only ones currently known to remain in the State as a substantially intact group. (There are other better camps associated with RAAF bases, eg. *Cunderdin Airfield*, but not army bases. There are also better battery installations from World War One, eg. *Albany Forts*.) However, the importance of the camp alone is considerably diminished without the battery in reasonable condition. (Criteria 5.1 & 5.2)

12.2 REPRESENTATIVENESS

The buildings represent a type that was quick and easy to erect. (Criterion 6.1)

12.3 CONDITION

The current overall condition of the buildings is fair, but they present a certain risk to the public as they contain asbestos cement sheeting and electrical and sewer services are in poor condition. The timber subfloor structure is aged and worn and will require upgrading if it is to continue in active use.

12.4 INTEGRITY

Originally designed as the barracks for a heavy coastal battery during World War Two, the buildings have subsequently been used as a recreational camp. This is not incompatible with the original intention of the place as camp accommodation. *Point Peron Recreational Camp* has a high degree of integrity.

12.5 AUTHENTICITY

The camp buildings have not been altered to any great extent as most of the original buildings remain in their original locations and in their original form. Later buildings have been located adjacent to but separate from the original structures. Overall, the camp has a high level of authenticity.

13. SUPPORTING EVIDENCE

Attached are key sections of the supporting evidence prepared by Cox Howlett & Bailey, Architects and Planners: 'Point Peron Recreational Camp Heritage Assessment' (prepared for the WA Department of Contract and Management Services August 1996).

13.1 DOCUMENTARY EVIDENCE

For a detailed discussion of the documentary evidence refer to Cox Howlett & Bailey, Architects and Planners: 'Point Peron Recreational Camp Heritage Assessment' (prepared for the WA Department of Contract and Management Services August 1996).

13.2 PHYSICAL EVIDENCE

For a detailed discussion of the physical evidence refer to Cox Howlett & Bailey, Architects and Planners: 'Point Peron Recreational Camp Heritage Assessment' (prepared for the WA Department of Contract and Management Services August 1996).

13.3 REFERENCES

Cox Howlett & Bailey, Architects and Planners: 'Point Peron Recreational Camp Heritage Assessment' (prepared for the WA Department of Contract and Management Services August 1996).