



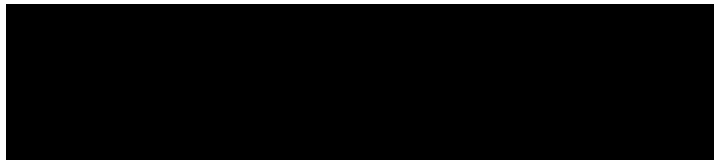
Heritage of Western Australia Act 1990
Section 29

HERITAGE AGREEMENT

between

HERITAGE COUNCIL OF WESTERN AUSTRALIA
(ABN 16 868 556 261)

and



in respect of

OLD ONSLOW TOWNSITE
(HCWA Place No. 3444)

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HERITAGE AGREEMENT

Portion of the Old Onslow Townsite North of the Ashburton River Ashburton, Western Australia

THIS AGREEMENT is made between the following parties:

1. **HERITAGE COUNCIL OF WESTERN AUSTRALIA** (ABN 16 868 556 261) a corporate body established pursuant to the *Heritage of Western Australia Act 1990*, of 108 Adelaide Terrace, East Perth, Western Australia 6004 (the "Council"); and
2. [REDACTED], of [REDACTED] [REDACTED] (the "Occupier").

RECITALS:

- A. The Council's objects are to identify, conserve and, where appropriate, enhance those places which are of significance to the cultural heritage of Western Australia; facilitate development that is in harmony with the cultural heritage; and promote public awareness and knowledge of Western Australia's cultural heritage.
- B. [REDACTED]
- C. The Place has been identified as being of cultural significance, and was entered in the Register of Heritage Places on a permanent basis pursuant to the Act on 17 February 2006.
- D. The Council and the Occupier wish to enter this Agreement to provide for the interpretation of the Place so as to retain its cultural heritage significance for present and future generations.

AGREEMENT:

The Parties agree with each other as follows:

PART 1 DEFINITIONS & INTERPRETATION

1.1 Definitions

In this Agreement, unless the contrary intention appears:

"Act" means the *Heritage of Western Australia Act (WA) 1990*;

“Agreement” means this Agreement as it may from time to time be varied as permitted by its terms;

“Completion Date” means a date no later than the commencement of construction of the Wheatstone Project on the Land;

“Damage” means losses, costs, damages, liabilities, expenses, actions, suits or claims of any kind;

“Development” means the development or use of the Land including any excavation or other works.

“Development Impact Mitigation Plan” means the plan described in Item 3 to guide impact mitigation measures in respect of the occupier’s use of the Land;

“Effective Date” means the date on which this Agreement is certified by the Minister pursuant to Section 32(1) of the Act;

“Event of Default” is defined in clause 5.1;

“Land” means the land described in Item 2 of the Schedule;

“Leases” means the leases described in Recital B of this Agreement.

“Minister” means the Minister responsible for the administration of the Act;

“Mitigation measures” means the activities specified in Item 4 of the Schedule.

“Place” means the place described in Item 1 of the Schedule;

“Register” means the Register of Heritage Places as defined in the Act;

“Related Body Corporate” has the meaning given in section 50 of the *Corporations Act 2011* (Cth).

“Venturer” means a Person (including a co-interest owner, joint venturer, partner or co-lessee of Occupier) who shares an economic interest in common with Occupier or a Related Body Corporate of Occupier in relation to the [REDACTED] and [REDACTED]

1.2 Interpretation

In this Agreement, unless the contrary intention appears:

- (a) a reference to any statute, regulation, proclamation, ordinance or by-law includes all statutes, regulations, proclamations, ordinances or by-laws varying, consolidating or replacing them, and a reference to a statute includes all regulations, proclamations, ordinances and by-laws issued under that statute;
- (b) a covenant or agreement by more than one person binds, and is enforceable against, those persons jointly and each of them severally;
- (c) no rule of construction applies to the disadvantage of a party on the basis that the party was responsible for drafting this Agreement or any part of it;
- (d) a reference to this Agreement or any other document or instrument includes the Agreement, document or instrument (as the case may be) as varied or replaced, regardless of any change in the identity of the parties;
- (e) a reference to the Occupier doing or refraining from doing anything includes a reference to the Occupier causing a person to do, or causing a person to refrain from doing, that thing (as the case may be);

- (f) a reference to any thing is a reference to the whole and each part of it;
- (g) words and phrases having defined meanings in the Act, unless otherwise defined in this Agreement, have the meanings so defined in the Act; and
- (h) a reference to any area including the Land is to that area as amended from time to time.

PART 2
COMMENCEMENT, DURATION AND SCOPE OF THIS AGREEMENT

2.1 Commencement and Duration of this Agreement

- (a) This Agreement is made pursuant to Section 29 of the Act and is conditional upon the Minister
 - (i) being satisfied that this Agreement is necessary for the purposes of, and complies with, the Act; and
 - (ii) certifying that fact upon each executed copy of this Agreement.
- (b) This Agreement commences on the Effective Date and, unless terminated earlier with the written consent of the Council, terminates upon termination of the Leases.

2.2 Scope of this Agreement

- (a) This Agreement:
 - (i) applies to the Land; and
 - (ii) binds the Occupier.
- (b) All of the obligations of the Occupier under this Agreement relating to development or use of the Land or any part of the Land or the conservation or care of any building, natural feature or other object on the Land are covenants made pursuant to section 29(10) of the Act and are intended to run with the Land.
- (c) The Occupier warrants that it has all necessary authority under any other relevant agreements to fulfill the Occupier's obligations under this agreement, including the authority to consent to the Land being made subject to the covenants described in clause 2.2(b).
- (d) The rights and obligations of the Occupier under this Agreement are not assignable by the Occupier without the prior written consent of the Council, which consent shall not be unreasonably withheld, except to a successor operator of the Wheatstone Project in which case the Occupier may assign this Agreement by providing written notice to the Council.
- (e) Subject to clause 2.2(f), on the person who is at the time the Occupier ("**Outgoing Occupier**") transferring the whole of that person's interest in the Land to another person, the Outgoing Occupier is released from all personal liability under this Agreement. For the avoidance of doubt, this clause 2.2(d) operates only to release the Outgoing Occupier personally and does not release, vary or otherwise affect the obligations of the Occupier under, or in connection with, this Agreement.
- (f) The provisions of clause 2.2(e) will not apply in respect of any liability or claim which arose prior to the date of registration of the transfer of the whole of the interest of the Outgoing Occupier to another person.

2.3 Capacity

- (a) The Occupier is entering into this Agreement on behalf of the Venturers severally and not jointly, in accordance with the Venturers' respective participating interests.
- (b) The Council agrees to look only to Occupier for the performance of this Agreement, and nothing contained in this Agreement imposes any liability upon, or entitles the Council to commence any proceedings against, any individual Venturer other than Occupier.
- (c) The Occupier shall enforce this Agreement on behalf of the Venturers, and shall be entitled to recover, on behalf of the Venturers, all losses, damages, injuries or expenses caused by Council.

PART 3 DEVELOPMENT AND MITIGATION

3.1 Development Impact Mitigation Plan

The parties acknowledge that the Development Impact Mitigation Plan is the primary guiding document for the conservation and future use of the Place and should be read in conjunction with this Agreement as an essential reference document.

3.2 Mitigation

The Occupier must undertake the Mitigation measures in respect of the Place in accordance with the Development Impact Mitigation Plan and is required to carry out certain of the Mitigation measures, by the Completion Date.

3.3 Development

Unless approved by the relevant authority following advice from the Council, the Occupier shall not:

- (a) carry out any Development on the Land; or
- (b) without prejudice to the generality of clause 3.3(a), do or permit to be done anything on or in relation to the Place which adversely affects the cultural heritage significance or characteristics of the Place.

3.4 Conservation Consultant

The Occupier must appoint a consultant or consultants approved in advance in writing by the Council to supervise the Mitigation measures and any Development of the Land or other action which requires the approval of the Council under clause 3.3.

3.5 Reporting

- (a) All reports required in this clause shall be prepared on behalf of the Occupier by a consultant appointed pursuant to clause 3.4, or such other person with the necessary skills approved in writing in advance by the Council.
- (b) The Occupier must ensure that a written report is provided to the Council within 60 days after receipt of a written request from the Council for a report describing

- (i) all Mitigation measures or Development activities which the Occupier has undertaken pursuant to this Agreement since the later of the Effective Date or the date of any previous report; and
- (ii) any other matters regarding the conservation of the Place as specified in the written request;

provided that no more than one such report shall be required within any 12-month period.

- (c) In the event that the Council requires further information, detail, explanation or other clarification beyond that provided in a submitted report, the Council will notify the Occupier in writing of the particular information required and the time in which the Occupier is to provide that information, which shall not be less than 30 days from the date of receipt of the written notice from the Council.
- (d) The Occupier's failure to provide any report or additional information required under this Clause 3.5 shall constitute an Event of Default.

3.6 Compliance with Statutes

The provisions of this Agreement are in addition to the Act and any other written laws and nothing in this Agreement removes, limits or modifies the Occupier's obligations to comply with all relevant statutory and other requirements in connection with the Development of the Land, and the Occupier is responsible for obtaining all approvals, consents and licences required for Development of the Land, including planning approvals and building licences, from all relevant bodies and authorities including the local authority.

PART 4 COUNCIL'S RIGHTS OF ENTRY AND POWERS OF INSPECTION

4.1 Council's rights of entry and powers of inspection

- (a) Subject to clause 4.1(b) the Council shall, through its nominated representative or nominated officer from time to time, have the power to enter the Land at reasonable times, and on reasonable prior notice, for any purpose related to the provisions of this Agreement, including without limitation to inspect the Land with a view to ensuring compliance with the provisions of this Agreement.
- (b) Subject to clause 4.1(c), the Council will comply with any reasonable requirement imposed by the Occupier for the purpose of exercising the rights of the Council under clause 4.1(a).
- (c) The Occupier must do all things necessary to enable the Council to exercise its rights of inspection as set out in clause 4.1(a), including without limitation, ensuring that reasonable access is provided to all parts of the Land and ensuring access to and use of any facility at the Land which is necessary to facilitate inspection.

PART 5 DEFAULT

5.1 Events of default

An Event of Default occurs if:

- (a) the Occupier is in breach of, or does not comply with, any of its obligations

under this Agreement and the breach or non-compliance continues for 30 business days, or such longer period as is reasonable for rectification having regard to the nature of the breach or non-compliance, after receipt of written notice from the Council to effect compliance; or

- (b) the Occupier repudiates or commits a fundamental breach of this Agreement.

5.2 Rights and remedies of Council

In the event any Event of Default occurs, the Council shall be entitled to exercise any one or more of the following powers:

- (a) any rights and remedies which may be available to the Council at law or in equity, including applying to the court for an order for specific performance, together with or separately from;
- (b) the rights, powers and remedies available to the Council under the Act,

and nothing in this Agreement limits or prejudices or shall hinder the exercise by the Council or the Minister or any other person of any of the rights, powers or remedies available to the Council, the Minister or that person under the Act if an Event of Default occurs, or any other event occurs which is a breach of any provision of the Act.

5.3 Land at risk of Occupier

The Land shall remain at the risk of the Occupier in all respects, notwithstanding any provisions in this Agreement dealing with the Development or maintenance of the Land. Without limitation, all Development and maintenance of the Land shall be conducted entirely at the risk of the Occupier.

5.4 Interest on overdue money

If the Occupier becomes liable to pay any amount of money to the Council pursuant to this Agreement or arising from any matter the subject of this Agreement, the Occupier shall pay to the Council interest on that amount from and including the due date for payment of the amount to but excluding the actual date of payment of that amount. The interest is to be paid on demand by the Council, is to be calculated on daily balances, and is to be at the rate then payable on judgment debts pursuant to the provisions of the *Supreme Court Act (WA) 1935*.

PART 6 NOTICES

6.1 Form of notices

Any notice, report or other communication which must be given, served or made under or in connection with this Agreement:

- (a) must be in writing in order to be valid;
- (b) is sufficient if executed by the Party giving, serving or making the notice, or if executed on such Party's behalf by any officer, director, attorney or solicitor having the authority to so act for such Party;
- (c) is sufficient, in the case of the Occupier's obligations under clause 3.5, if executed by the relevant consultant appointed pursuant to clause 3.4;
- (d) will be deemed to have been duly served, given or made in relation to a

person if it is delivered or posted by prepaid post to the address, or sent by facsimile to the address of that person identified in clause 6.2 or at such other address or number as is notified in writing by that person to the other Parties from time to time; and

- (e) will be deemed to be served, given or made:
 - (i) if delivered by hand, on delivery;
 - (ii) if sent by prepaid post, on the second day after the date of posting; and

if sent by facsimile, on receipt of a transmission report confirming successful transmission.

6.2 Address for notices

The details of each Party for the purposes of giving notice are as follows:

- (a) the **Council**: Heritage Council of Western Australia
PO Box 7479
Cloisters Square PO WA 6850
Phone: (08) 6552 4000 Fax: (08) 6552 4001
ATTENTION: Manager, Development Referrals

- (b) the **Occupier**: [REDACTED]

Phone: (08) [REDACTED] Fax: (08) [REDACTED]
ATTENTION: [REDACTED]

PART 7 GENERAL

7.1 Variation to be in writing

No variation of this Agreement will be effective unless in writing and executed by the Council and the Occupier.

7.2 Governing Law

This Agreement is governed by the Laws of the State of Western Australia and the parties submit to the jurisdiction of that State.

7.3 Further assurances

Each party shall do all things and execute all further documents as are necessary to give full effect to this Agreement.

7.4 Extension of time by Council

The Council may, at the Council's discretion and by written notice to the Occupier, extend any time period for performance by the Occupier of any of its obligations under this Agreement.

7.5 Costs

Each party shall pay all its own legal costs and expenses in relation to the preparation, execution and stamping of this Agreement.

THE SCHEDULE

Item 1: Place

Old Onslow Townsite (HCWA Place No. 3444), located north of the Ashburton River, and consists of:

- (a) the Land;
- (b) all buildings, structures and works on the Land from time to time; and
- (c) any thing in connection with the Land, entered or deemed to be entered in the Register.

Item 2: Land

Means the area in common between the area of the Leases and the area registered as HCWA Place No. 3444, being a portion of Lot 567 on Deposited Plan 71345, a portion of Lot 569 on Deposited Plan 71345, all of Lot 238 on Deposited Plan 195206 and a portion of Lot 3055 on Deposited Plan 52026, as shown outlined in red and labelled the "Heritage Agreement Area" in Annexure B to this Agreement,

Item 3: Development Impact Mitigation Plan (DIMP)

Old Onslow Town (3444) Development Impact Mitigation Plan prepared by Gaye Nayton, Heritage Archaeologist, in association with Coakes Consulting for [REDACTED] (June 2010, updated September 2011), attached as Annexure C.

Item 4: Mitigation measures

The schedule of activities described in Annexure A.

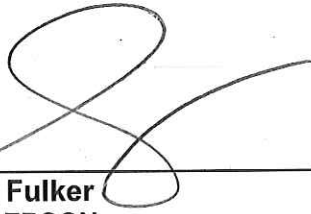
EXECUTED AS A DEED

THE COMMON SEAL of the HERITAGE COUNCIL OF WESTERN AUSTRALIA is affixed in the presence of:



Graeme Gammie
EXECUTIVE DIRECTOR





Marion Fulker
CHAIRPERSON

26/10/12

Date signed

30/10/12

Date signed

Executed on behalf of _____ by:

Signature of authorised person

Office held

Name of authorised person

Date signed

**CERTIFICATE UNDER SECTION 32
OF THE HERITAGE OF WESTERN AUSTRALIA ACT (WA) 1990**

I, the Hon. G M Castrilli, MLA, Minister for Local Government; Heritage; Citizenship and Multicultural Interests, hereby certify that this Agreement is necessary for the purposes of, and complies with, the *Heritage of Western Australia Act (WA) 1990*.

Dated the 6th day of November 2012.



Minister for Local Government; Heritage; Citizenship and Multicultural Interests

Annexure A

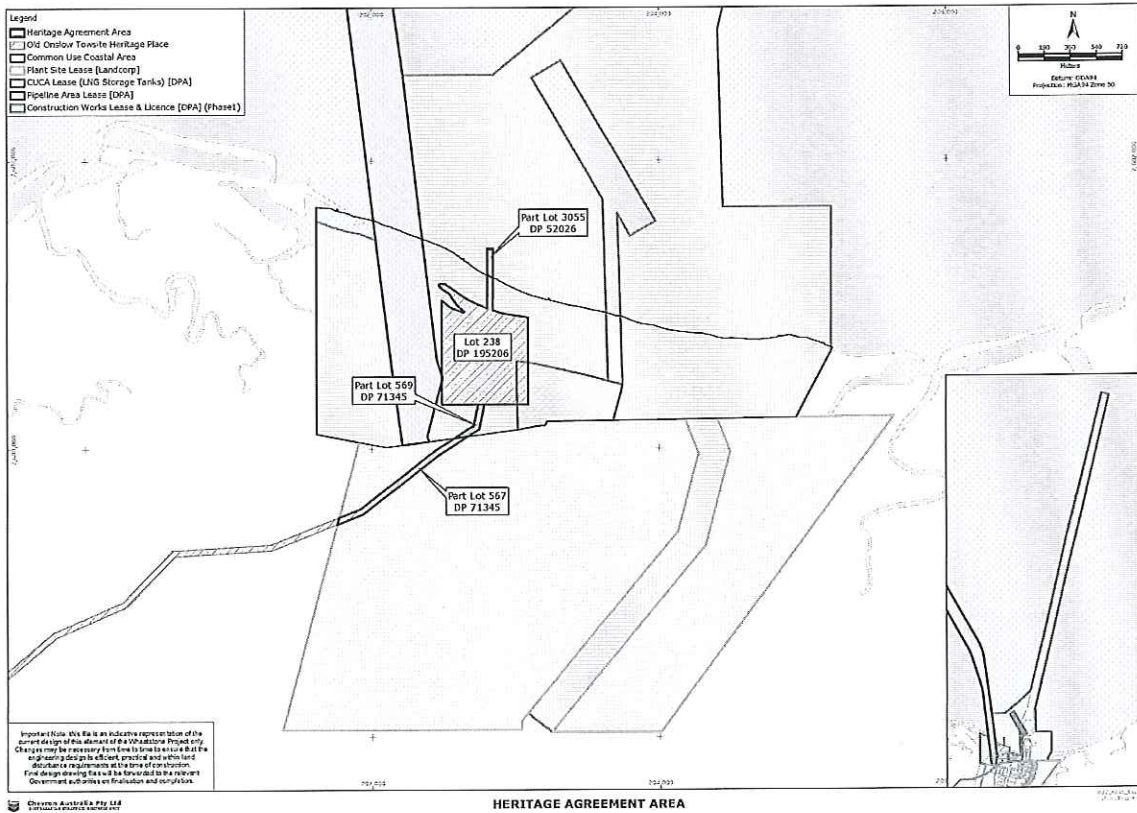
Mitigation measures

This will be a list of works involving conservation, archaeological research, and interpretative works, to be agreed upon, based on the Heritage Council's conditions of support for the Wheatstone project, and completed to the satisfaction of the State Heritage Office:

1. Archaeological surveys, including mapping and full recording of all features, and controlled excavation carried out at archaeological sites (guided by an appropriate research design) impacted by the Wheatstone Project, with adequate provision for the long-term conservation, analysis, interpretation and storage of recovered artefacts in suitable accommodation, determined in consultation with the Shire of Ashburton, Office of Heritage and the Western Australian Maritime Museum.
2. Interpretation Plan for the *Old Onslow Townsite* (inclusive of Lot 238 and Sea Jetty) to be prepared by a suitably qualified heritage interpretation professional, with a commitment to implement the recommendations. Means of interpretation of the areas physically impacted by the Wheatstone Project should be considered in the detailed design of the Wheatstone Project infrastructure, and incorporated where possible into the interpretation of the place.
3. A baseline monitoring program is to be established in the main area of the *Old Onslow Townsite*. Any damage to the extant fabric as a result of the construction shall be rectified on completion of the works.
4. An information package relating to the cultural heritage significance of the *Old Onslow Townsite* (inclusive of Lot 238 and Sea Jetty) is to be developed for personnel related to the Wheatstone Project, to be included in an induction program. This information should include guidelines relating to appropriate behaviours and treatment of archeological sites of significance.
5. Relocation of telegraph poles (as guided by the Development Impact Mitigation Plan).

Annexure B

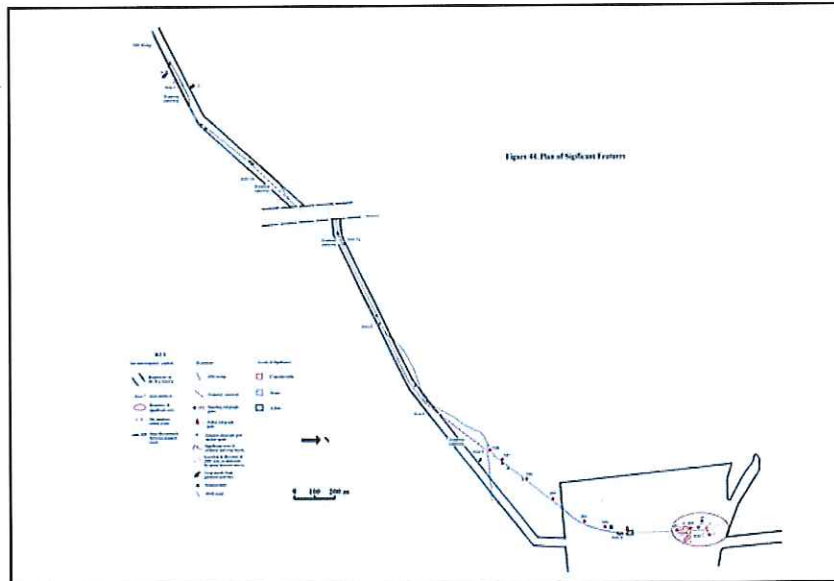
Heritage Agreement Area



Annexure C
Development Impact Mitigation Plan

◆◆◆◆◆◆◆◆◆◆
WHEATSTONE PROJECT

Old Onslow Town (3444)
Development Impact Mitigation Plan



PREPARED BY

**Gaye Nayton Heritage Archaeologist
In association with
Coakes Consulting**

FOR

Chevron Australia Pty Ltd

June 2010

Updated September 2011



This report has been prepared by

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EXECUTIVE SUMMARY

HERITAGE LISTINGS

The Old Onslow Townsite is a registered European heritage site under the *Heritage of Western Australia Act 1990*, and part of the registered curtilage is contained within the Ashburton North Strategic Industrial Area (hereafter known as Ashburton North SIA).

The area registered under the *Heritage of Western Australia Act 1990* within Ashburton North SIA contains a sea jetty and port site. Although these are not currently protected under the *West Australian Maritime Archaeology Act 1973*, a review of the Act is being undertaken which could result in the sea jetty and port site being protected in the future.

Archival data indicates a slight possibility of shipwrecks being located within the area of interest. All shipwrecks, whether or not they are discovered yet, are protected under the *Commonwealth Historic Shipwrecks Act 1976* and under the *West Australian Maritime Archaeology Act 1973*.

IMPACT OF PROPOSED PROJECT PLANS ON EUROPEAN HERITAGE SITES

Impacts to European heritage will occur as a result of the Project's activities. The impact is not likely to affect the main area of the Old Onslow Townsite registered place, with the exception of a possible upgrade of an existing access track that runs through the south-east corner of the HCWA conservation area. However, aspects of the Old Onslow Townsite registered place which extend into the Ashburton North SIA contain archaeological heritage associated with the 1901 to 1925 sea jetty and port, and the tramway and telephone line linking the port to the Old Onslow Townsite.

This draft report contains mitigation procedures based on the Heritage Council of Western Australia's (HCWA) conservation plan policy recommendations and Western Australian Maritime Museum (WAMM) procedures for both pre-construction and construction phases of the proposed Project. The mitigation strategies within this draft report are intended to be a basis for discussions with HCWA, WAMM, the Shire of Ashburton and other relevant authorities. In summary, the recommended impact mitigation measures are:

- Undertake a terrestrial archaeological excavation to identify, remove, and/or document artefacts in the HCWA conservation area
- Undertake a marine archaeological investigation and possible excavation to identify, remove and/or document artefacts in the project area near the old sea jetty and to confirm there are no shipwrecks in the area affected by the Project
- Relocate eight telegraph poles closer to Old Onslow townsite
- Provide funding for a new conservation management plan, new heritage interpretation signage at Old Onslow, and storage of artefacts

The final Old Onslow Townsite (3444) Development Impact Mitigation Plan will also be used to obtain the relevant development approvals required for the Project.

PROPOSED PROJECT INFRASTRUCTURE IN RELATION TO EUROPEAN HERITAGE SITES

Figure 2 shows the HCWA conservation area in relation to the current proposed Project infrastructure. **This diagram is an indicative representation of the current design of this element of the Wheatstone Project only.** Changes may be necessary from time to time to ensure that the engineering design is efficient, practical and within land disturbance requirements at the time of construction. Final design drawing files will be forwarded to the relevant Government authorities on finalisation and completion.

Figure 1: Proposed Project Infrastructure in Relation to the HCWA Conservation Area

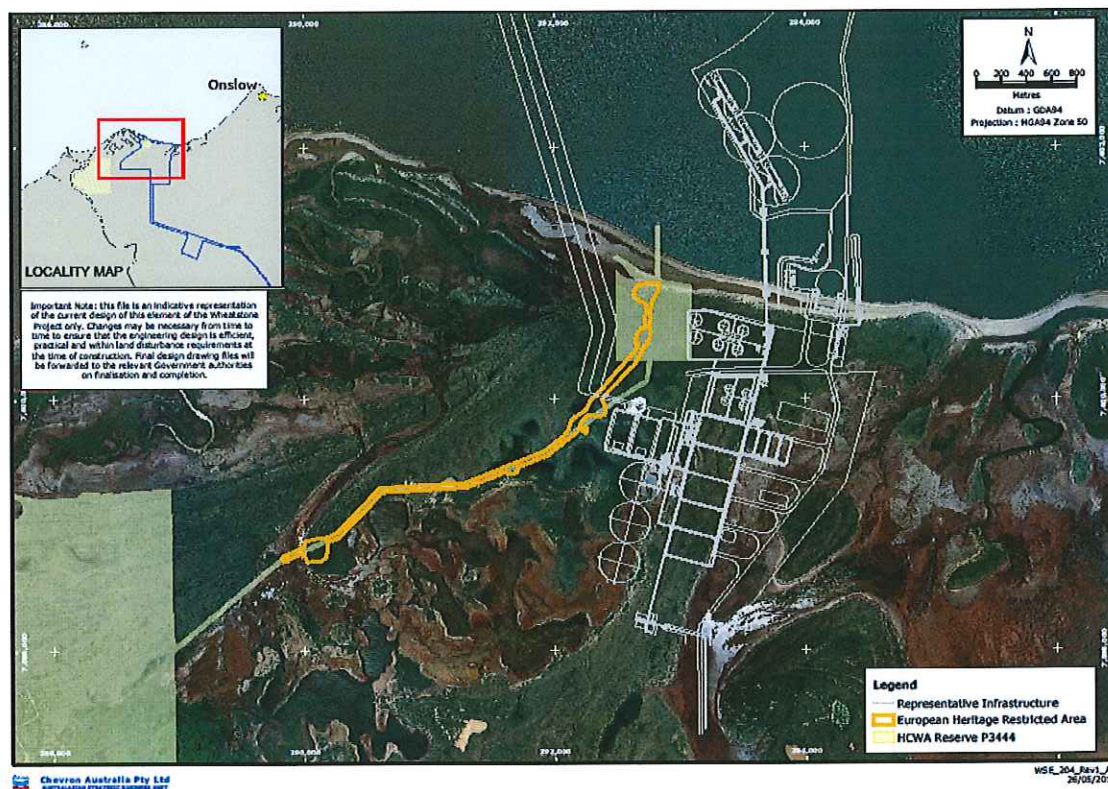


Figure 2 shows the areas within the HCWA conservation area where artefact materials have been found.

Figure 2: Areas of artefact material within the HCWA reserve



Appendix A contains detailed background information about European heritage sites within the Ashburton North SIA.

Update of DIMP following 2010 mitigation investigations

After receiving HCWA approval some of the DIMP mitigation investigations were carried out with fieldwork in 2010 and analysis of results in 2011. The results of all investigations to date were combined in a stage 1 terrestrial and maritime archaeological report. One of the recommendations of the stage 1 report was that the DIMP be updated with the new knowledge and recommendations generated by the stage 1 investigations. This document has been updated with these results and recommendations.

HERITAGE IMPACT MITIGATION RECOMMENDATIONS

Recommended Mitigation Procedures During Pre-Construction

Exceptional Significance

Old Onslow Townsite

The Old Onslow Townsite lies outside of the Ashburton North SIA. The Project fence line is approximately 2.5 kilometres from the Old Onslow town and one kilometre from the Old Onslow cemetery.

There will be no ground disturbance in the Old Onslow Town or the Old Onslow cemetery, which are the most significant areas of heritage value in the locality. However, an existing access track which runs through the south-east corner of the HCWA conservation area may be widened and upgraded to allow temporary road access to support construction activities. In addition, the physical presence of the plant will have some visual impacts; construction-related traffic along the existing access track may increase noise and dust in the south-east corner of the HCWA conservation area; and there will be an increase in noise levels at the Old Onslow cemetery during emergency flaring and when weather conditions carry noise from the LNG Plant further than normal.

It is recommended that the Project's staff induction procedures contain information about the heritage of Old Onslow. In addition, it is recommended that workers on the Project are encouraged not to adversely impact on the heritage of Old Onslow either during working hours or during their leisure times.

Considerable Significance

Port Area: Area 7 (sites 1, 2, 6, 7, 8 & 9)

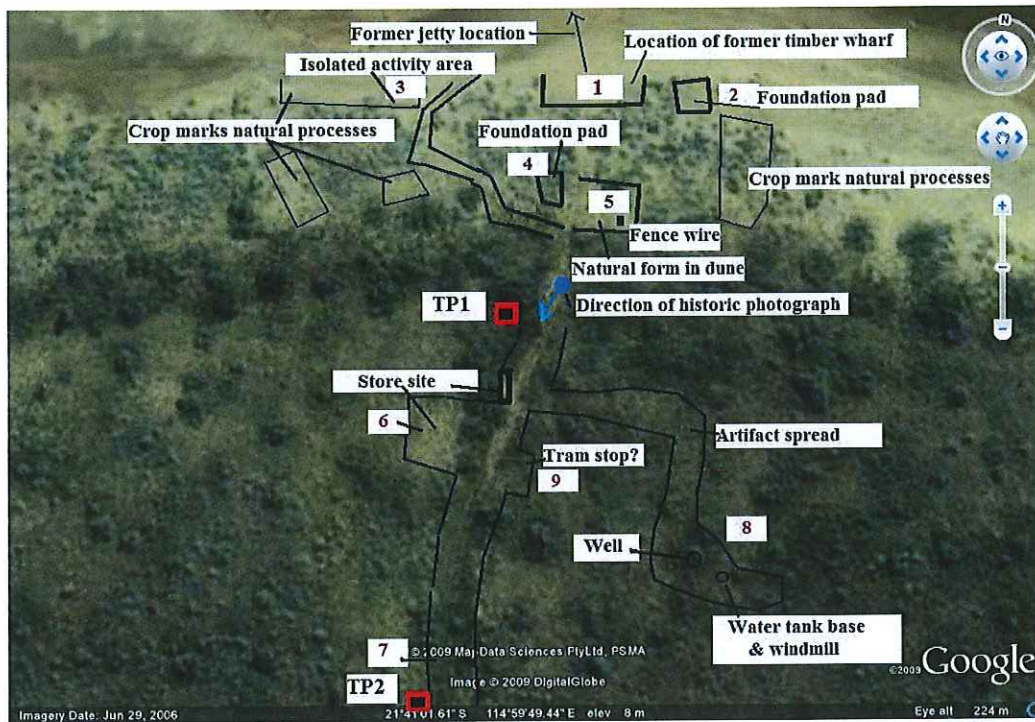
Terrestrial Excavation at the Port Area (Area 7)

The European heritage study conducted in 2009 for the Project by Gaye Nayton identified over 1500 square metres of artefact spread in the port area associated with five main sites. As these sites may be impacted during plant construction it is recommended to carry out a major excavation at the site of the port store and extensively test excavate the wharf area, small warehouse, well area and tram stop (see below). It is estimated these excavations will ideally take a team of 10 archaeologists 10 days.

Excavation would be by standard archaeological methodology being by trowel, dustpan and bucket with material sieved through 5 mm sieves. It is estimated the excavations across the whole site are not likely to exceed 40 cm depth. Non artefact materials excavated such as the sand matrix will be left on site.

The greatest numbers of artefacts have been found within Area 7 as outlined in Figure 2 . Figure 3 below shows the sites within that area.

Figure 3: Artefact sites within Area 7



It is recommended that substantial archaeological excavation be undertaken of the sites within Area 7 shown above. This would include:

- A major excavation at site 6 (the port store complex)
- Test excavations at sites 1 & 2 (the timber land backed jetty platform and small warehouse). The sites will be tested sufficiently to recover an adequate sample of material culture and to determine any variation on density or type of artefacts within the sites.
- Sample surface collections and test excavation at site 8 (the windmill and well). The site would be tested sufficiently to recover an adequate sample of material culture and to determine any variation on density or type of artefacts within the sites. A photographic archival record will be completed of the well, windmill and drinking trough.
- Test excavations at site 9 (the possible tram stop). The site would be tested sufficiently to recover an adequate sample of material culture and to determine any variation on density or type of artefacts within the site
- Sample surface collections and test excavations on either side of the 4WD track between the last two extant telephone poles including a brief investigation of Area 7. The area would be tested sufficiently to recover an adequate sample of material culture and to determine any variation on density or type of artefacts along the former tramway route that could inform on port activity areas.
- Excavations to determine if any jetty piles remain within the beach area will not be carried out, unless expressly instructed to do so by HCWA or the Maritime Museum. There may be metal detector work carried out if required.

Terrestrial Excavation along the Causeway (Areas 1-4)

The 209 European heritage study conducted by Gaye Nayton identified just over 700 metres of extant causeway between the 1907 bridge and the port area. It is recommended that the extant causeway be mapped and artefacts along the top of the feature photographically recorded to produce a photo mosaic. It is estimated that a two person team of archaeologists with a total station, custom tripod and camera would take four days to carry out this work.

Post fieldwork, it is estimated to take one archaeologist two days to produce a photo mosaic file from the photographs.

Excavating a cross section of the causeway is estimated to take a team of four archaeologists two days under some direction from the site director. As this cross section is primarily to expose a flat cross section of the wall to record how the causeway was constructed a suitable spot at the end of one of the surviving sections will be chosen to excavate by shovel to expose the section for recording by camera and section drawing.

In summary, it is recommended that surviving sections of the tramway causeway between Areas 1 to 4 be surveyed, photographed and mapped in detail and associated artefacts recorded in situ. As the causeway is likely to be buried for the foreseeable future an archival record of the place that includes details of its construction should be completed from this information.

Telephone Poles & Anchor Points: Areas 4, 6 & 7

It is recommended that all eight surviving telephone poles and anchor links be removed from the Ashburton North SIA and replaced in the original locations of telephone poles at the start of the telephone line at Old Onslow. The relocation will be supervised by a heritage archaeologist, and the length of time required for supervision will therefore depend on the site contactor's estimate of duration of works. The contractor will need a crane, truck and lifting gear to lift the poles out of the ground and transport them. It will be investigated whether the relocation of telephone poles can be contracted to the Shire of Ashburton.

Marine Excavation at the Port Area (Area 7)

Possible jetty use artefact spread

It is recommended that a detailed examination of the maritime history associated with the 1901 jetty be undertaken. The results on this study would inform any fieldwork and consultation that may be required.

It is recommended that Chevron liaise with the Western Australian Maritime Museum to determine an appropriate scope of works to investigate whether any artefact spread has survived. This should include a review of existing data such as side scan, magnetometer, and multi-beam surveys.

It may be determined by the Western Australian Maritime Museum that an underwater heritage investigation will be required which samples the sea bed area associated with the 1901 sea jetty prior to dredging operations to determine if an

artefact spread has survived and to determine the extent of the spread. Should this study occur, it will aim to determine the presence, extent and significance of underwater remains, including jetty structure, artefact deposits, related maritime structures and any shipwreck material that may be associated with the Onslow Jetty site. This will allow suitable mitigation procedures to be formulated for parts of the spread that will be directly or indirectly affected by dredging operations. It should be noted that dredging will not occur in the vicinity of the jetty area.

During the construction phase, it is recommended that a marine archaeologist provides advice and management if known remains, artefact deposits, nearby related maritime heritage structures or shipwreck materials are affected by construction work. This monitoring may include managing the discovery of new remains, artefacts and sites.

Historic shipwrecks

Locating a historic shipwreck is considered to be an unlikely scenario for this project. However, it is a requirement under both the Commonwealth Historic Shipwrecks Act and the Western Australian Maritime Archaeology Act to report the finding of any historic shipwrecks to the Director of the Western Australian Museum.

Little Significance:

Pastoral sites: Area 1 (sites 2, 3, 4), Areas 4, 6 & 9

Isolated finds: Areas 1, 1A, 2A, 2, 3, 6 and 7 (sites 3 & 4)

It is recommended that the Wheatstone Project: Historical and Archaeological Survey Report (Nayton 2009) is treated as an archival record of pastoral sites and isolated artefacts within the study area for the purposes of impact mitigation.

If the above report is accepted as a suitable archival record then it is recommended that:

- Burial of these sites is allowed without further mitigation.
- Removal of pertinent artefacts for display purposes be allowed within areas to be impacted. Selection of suitable artefacts to be in consultation with the Shire of Ashburton and the HCWA.

Recommended Mitigation Procedures During Construction

Exceptional Significance:

It is recommended that Project staff induction procedures should contain information about the heritage of Old Onslow. In addition, it is recommended that workers on the Project are encouraged not to adversely impact on the heritage of Old Onslow either during working hours or during their leisure times.

Considerable Significance:

It is recommended that management procedures be put in place to enable the Project workforce to quickly contact an archaeological monitor for advice if any unexpected structures, remnants or artefact scatters are found during construction within the dune system. The material should be left *in situ* until after the archaeological monitor has assessed and if necessary salvaged it.

It is recommended that management procedures be put in place to enable the Project workforce to quickly contact a marine archaeological monitor for advice if any unexpected known remains, artefact deposits, nearby related maritime heritage structures and shipwreck material are found that may be affected by construction work. This monitoring may include managing the discovery of new remains, artefacts and sites.

Recommended Reporting Requirements

It is recommended for both the terrestrial and marine archaeology studies that the following are produced:

- interim and final fieldwork reports
- cultural resource management archaeological reports
- database catalogue of artefact materials

RESULTS OF 2010 MITIGATION INVESTIGATIONS

After stakeholder consultation was completed this document was submitted to the HCWA Development Committee which was generally supportive of the recommendations within the Development Impact Mitigation Plan (DIMP). HCWA issued an in-principle agreement letter dated 21.6.10 which confirmed the recommendations of the DIMP and set out terms and conditions of a work permit condition 4a of which concerned carrying out on-site archaeological mitigation and investigations which were recommended in the DIMP.

Condition 4a states:

The agreement is to provide for Chevron to undertake the following measures to mitigate the project's adverse impacts on the cultural heritage significance of the place:

- a. Archaeological surveys, including mapping and full recording of all features, and controlled excavation carried out at archaeological sites (guided by an appropriate research design) impacted by the Project, with adequate provision for the long-term conservation, analysis, interpretation and storage of recovered artefacts in suitable accommodation, determined in consultation with the Shire of Ashburton, Office of Heritage and the WAMM.

In 2010 an archaeological team including a maritime archaeologist returned to the site to carry out this work and to finalise stage 1 of archaeological work at this site.

During this fieldwork new areas of archaeology associated with the 1896 jetty were discovered and a greater depth of knowledge was gained of the site during historical research and artefact analysis. Therefore one of the recommendations of the stage 1 report was that the DIMP be updated with the new knowledge and recommendations generated by the stage 1 investigations.

Stage 1 of the Wheatstone project cultural heritage plan found that.

1. The area labelled Area 7 in the DIMP was the main land based activity area associated with the 1899 sea jetty and as such is significant. It once contained a small corrugated iron structure that the archaeology suggested was a rest room, a work area associated with jetty construction/repairs, a storage area associated with the 1914 major upgrade of the tramline to the port, a siding on the tramline which may also be associated with the 1914 upgrade, a watering area containing well, water tank and water troughs, a stock holding area, an early pre ca1910 transient camping area which had at least some ethnic component and a lime burning pit. It did not contain Clark's store, any port warehousing or accommodation for workers constructing or repairing the jetty or tramline or working at the port.
 - a. The development mitigation strategies of archaeological investigation contained in the DIMP have been carried out within this area.

2. The surviving poles of the telephone line, which connected the town and the 1899 jetty, are significant and will be under threat as the Ashburton North and port is fully developed. Digital and paper based archival records of the surviving evidence of the telephone line in its current environment have been completed and surveys have been conducted to find the route and surviving evidence of the line outside of Ashburton North. The physical evidence of the line has also been compared to the physical evidence of the 1885 overland telegraph line. This information is included in the Phase 1 report but has also been included in a discussion paper for stakeholders to determine the best location within the Old Onslow townsite for future removal and reinstatement of the poles within the townsite.
 - a. Part of the development mitigation strategies for this feature contained in the DIMP have been carried out. Removing and relocating the telephone poles remains to be carried out.

3. The surviving sections of tramline alignment and associated artefacts in the Ashburton North are significant and are likely to be under threat as the Ashburton North and port is fully developed. Two digital based archival records of the surviving evidence of the tramline in its current environment have been completed. This includes a full photographic record of the feature and its associated artefacts.
 - a. The development mitigation strategies for this feature contained in the DIMP have been carried out.

4. 2010 and 2011 surveys associated with the maritime fieldwork and a wider GIS survey for debris fields discovered new sites not covered by the present DIMP. This include the 1896 jetty site, the 1900 navigation beacon site, a spread of artefacts to the east of the navigation beacon, a beach flotsam zone of artefact spread, coastal debris fields of large timbers and inland debris fields of large timbers associated with creek lines and flood zones. The most important discovery was the 1896 jetty site. This site is complex and its extent, character, and significance is still to be determined. The artefact spread to the east of the navigation beacon is also an area of potential significance.

Historical documentation was located which states that accommodation was built near the 1896 jetty for the men working on its construction. This area is the only area so far discovered within the Ashburton Sea Port site which shows artefact evidence which is more domestic in character and it is therefore potentially the historical accommodation area. However, not enough investigation of this area has been carried out to confirm this hypothesis and the evidence could be the result of other activities of lesser significance.

- a. Further work needs to be conducted to examine the new discoveries and report on their extent, character, significance, and management. This will be carried out as part of stage 2 investigations.

Recommendations - Terrestrial Archaeology Sites

The stage 1 report recommends that:

Inter swale area of Area 7

- It is recommended that features left *in situ* such as the southern gate, Metter's trough and discarded tram rails are considered for removal for future display purposes as the physical fabric adds to the story of how the area was used.
- It is recommended that adequate development mitigation of the archaeological fabric of the place has been undertaken within this area to allow any future development to proceed.

Beach area of Area 7

- It is recommended that test excavation of the dune area associated with the timber base of the 1899 jetty is included in the Phase 2 investigations for this project.
- It is also recommended that maritime evaluation of the possible subsurface remains of the 1899 jetty is included in the Phase 2 investigations for this project.

Ashburton Sea Port telephone line

- It is recommended that the significant elements of the telephone line surviving within the Ashburton North are removed for reinstating outside of the development area.
- Once this is completed then it is further recommended that adequate development mitigation has been undertaken on this feature to allow future development to proceed.

Ashburton Sea Port tramline

- It is recommended that good examples of iron sleepers and the two cart axles are considered for removal for future display purposes. Discarded rails located within Area 7 should also be considered for removal to complete the suite of physical evidence associated with the tramline as evidence of the rails is now scarce along the tramline route.
- Once this is completed then it is further recommended that adequate development mitigation has been undertaken on this feature to allow any future development to proceed.

Artefact scatter to east of 1900 navigation beacon

- It is recommended that proponents of any future nearby development protect the site from accidental adverse impact during construction by the erection of temporary fencing.

- It is also recommended that proponents of any future development that will directly impact on the site undertake further archaeological investigation including excavation prior to the development taking place.

Recommendations - Maritime Archaeology sites

Stage 2

It is recommended that in stage 2:

1. Further archaeology fieldwork is conducted to map and determine the significance of the 1896 jetty site, shoreward of the low water mark.
2. High resolution side scan sonar, sub bottom profiling and magnetometer surveys are made of the 1896 jetty site seaward of the low water mark. This includes the lagoon enclosed by the beach spit and the open sea beyond.
3. Further archaeological fieldwork is conducted to map and determine the significance of the 1900 navigation beacon site.
4. Further archaeological fieldwork is conducted to map and determine the significance the artefact scatters discovered at the east end of the fore dune system.
5. Investigation is made to confirm the extent, characteristics and origins of other reported jetty timber debris fields reported as lying in the salt marsh and clay pans behind the coastal dune systems.

Stage 3

Phase 3 would be influenced by the results of phases 1 and 2. A watching brief would be initiated if proposed construction works are expected to disturb known remains and artefacts, or lead to the discovery of new remains, artefacts, or even sites.

Phase 3 will monitor construction works in order to manage known remains, artefact deposits, nearby related maritime heritage structures and shipwreck material that may be affected by construction work. This monitoring may include managing the discovery of new remains, artefacts and sites. Experience from previous projects has shown that the success of this stage will be dependent on a high level of cooperation from construction workers and their supervisors.

It is recommended that:

1. A qualified maritime archaeologist, approved by the Department of Maritime Archaeology at the Western Australian Maritime Museum, as the delegated authority under the *Western Australian Maritime Archaeology Act (1973)*, is appointed to manage and conduct the watching brief.
2. Construction workers and their supervisors are briefed on the watching brief

Wheatstone Project: Old Onslow Town (3444) Development Impact Mitigation Plan

- process and its requirements.
3. In the event of any disturbance of known, or discovered remains and artefacts:
 - a. Temporarily stop work;
 - b. Determine the location of the find(s) in relation to fixed datum points, survey plans and other relevant construction works;
 - c. Measure and photograph the remains or artefacts;
 - d. Prepare a brief written site description and an explanation of how the site was discovered;
 - e. If the appointed maritime archaeologist is not onsite immediately contact and notify that person of the find;
 - f. Ensure as soon as possible that the maritime archaeologist inspects, documents and assesses the find's condition and significance.
 4. On the basis of the assessment made by the maritime archaeologist and, after due consultation with the Department of Archaeology at the Western Australian Maritime Museum and the client, either:
 - a. Continue work;
 - b. Avoid any further disturbance of the remains or artefacts, continue work and rebury the site once work is completed;
 - c. Arrange for further site inspections and necessary maritime archaeological work to protect and manage the remains or artefacts.
 5. Accurately survey and document the position of the site to assist with future site management and interpretation.

New sites of high significance

Following the discovery of any new sites and before any further site disturbance is carried out it is recommended that:

1. An appropriate maritime archaeology research and work plan is developed in consultation with the Department of Maritime Archaeology at the Western Australian Museum and the client to manage the site;
2. Any required maritime archaeological fieldwork is carried out including further test excavations, recording and mapping, possible reburial or removal of remains for analysis, conservation and storage;
3. An appropriate long-term management plan is developed to protect the site;

5. The findings of the fieldwork work are documented and formerly reported to the client, Department of Archaeology at the Western Australian Museum and any other agency or delegated authority.

PROVISION OF FUNDING FOR HERITAGE SIGNAGE, CONSERVATION MANAGEMENT PLAN AND ARTEFACT STORAGE

Chevron Australia Pty Ltd (Chevron) must comply with the United States Foreign Corrupt Practices Act of 1977 (FCPA). The purpose of this act is to make it unlawful for certain classes of persons and entities to make payments to foreign government officials to assist in obtaining or retaining business. Therefore, Chevron must receive legal advice before providing any funding to any government body, including the Shire of Ashburton, HCWA or the Western Australian Maritime Museum. Hence, it should be noted that the funding recommendations listed below will not be possible if it is deemed they contravene the FCPA requirements.

Provision of Funding For Heritage Signage in Old Onslow Townsite

The Old Onslow Townsite is a significant heritage asset for the region. It is recommended that Chevron Australia provide funding to the Shire of Ashburton for the installation of interpretive heritage signage in the Old Onslow Townsite. The signage will provide information about the site, buildings and activities that existed in Onslow from 1883 to 1927.

Provision of Funding for Updating the Old Onslow Townsite (3444) Conservation Plan

The existing Old Onslow Townsite (3444) Conservation Plan was written in 1998. It is recommended that the Plan be updated to reflect changes made to the HCWA conservation area as a result of Project construction activities so it is a true and accurate reflection of the current status of the conservation area. It is therefore recommended that Chevron Australia fund the development of an updated Old Onslow Townsite (3444) Conservation Plan.

Provision of Funding for Artefact Storage

All artefacts recovered in excavation works will require correct storage, and it is recommended that Chevron provide funding towards the cost of this storage. Prior to fieldwork, it is recommended that discussions are held with WAMM, the Office of Heritage and the Shire of Ashburton to determine where the artefacts should be stored in both the short and long term.

APPENDIX A: BACKGROUND INFORMATION FOR WHEATSTONE PROJECT OLD ONSLOW TOWN (3444) DEVELOPMENT IMPACT MITIGATION PLAN

INTRODUCTION

In 2008 Chevron Australia appointed Gaye Nayton to conduct extensive research to identify possible impacts of the Wheatstone project on European heritage within the development area. While the definition of heritage is broad and encompassing, being that which we inherit and that which we pass on the future generations, for administrative and legal purposes different aspects of heritage are defined and protected under -different acts, policies and procedures. Under this arrangement European heritage is split between historic period heritage and maritime heritage. European heritage can be listed at several levels being local government, state government, Commonwealth/federal government, and international levels.

No European heritage sites within the development area are listed at the international level. The Old Onslow Townsite is listed at the Commonwealth of Australia federal government level as an indicative place on the Register of the National Estate. This listing confers status but does not provide statutory legal protection. The place is however protected under state legislation. The Trail shipwreck off Barrow Island is included on the Register of the National Estate but this shipwreck is not within the development area.

Historic shipwrecks over 75 years old and in Commonwealth waters which extend from below the low water mark to the edge of the continental shelf are protected under the *Commonwealth Historic Shipwrecks Act 1976*. The Act is administered by the Department of the Environment, Water, Heritage and the Arts in conjunction with delegates in each of the States, the Northern Territory and on Norfolk Island. The research carried out for Chevron Australia indicates the potential of historic shipwrecks being located within the development area which would be listed under the Act.

Of particular relevance to the development area is the Old Onslow Townsite, which is a registered European heritage site under the *Heritage of Western Australia Act 1990*. The Townsite which forms the bulk of the registered place lies outside of Ashburton North but part of the registered curtilage is contained within the designated industrial area. This part of the curtilage contains archaeological heritage associated with the 1901 to 1925 Onslow sea jetty and port, also the tramway and telephone line linking the port to the Old Onslow Townsite.

The area registered under the *Heritage of Western Australia Act 1990*, within Ashburton North contains a sea jetty site and a port site which could also be protected under the *West Australian Maritime Archaeology Act 1973* after the review of that Act has been completed.

SUMMARY OF LATEST INFORMATION ON EUROPEAN HERITAGE SITES WITHIN ASHBURTON NORTH.

Previous heritage research at the Old Onslow Townsite was undertaken in 1991 and 1998. The first was an archaeological survey which concentrated on mapping archaeological sites with the main town area (Nayton 1991). A short two hour drive by survey was undertaken within the development area down the route of the 1901 tramline to the 1901 jetty area. This survey identified six sites within Ashburton North.

In 1998 a conservation plan was developed for the Old Onslow Townsite (Jean, Bosworth, Goulder and Hayes). The conservation plan relied heavily on the 1991 archaeological survey to provide physical information on the location of sites. Historical research associated with the conservation plan did, however, identify the presence of a store at the port site. The store site was not located and mapped for the conservation plan research. Based on the combined 1991 and 1998 research the conservation plan identified all sites within the curtilage of the Old Onslow Townsite to be of exceptional significance.

Given that the physical survey was conducted in 1991 and it was not detailed in nature Chevron Australia has conducted extensive research to identify, map and, with the benefit of more detailed information, reassess the heritage significance of European heritage sites within Ashburton North. This research determined that key features recorded in 1991 are no longer extant and defined the exact extent of surviving material within the delineated industrial area (Nayton 2009). Seven areas of archaeological sites and areas containing isolated artefacts were located and mapped. The heritage significance of the surveyed sites within Ashburton North was then reassessed based on this more detailed information (Nayton 2009).

This reassessment determined that remnant sections of tramway causeway and directly associated artefacts have a higher significance as concentrated evidence of the tramway construction and location. Similarly standing telephone poles, surviving bases and telephone pole anchors have a higher significance as evidence of the construction and location of the telephone line. The individual features associated with the telephone line do not have associated archaeological deposits to illuminate construction or activity further, therefore the significance is confined to the physical evidence of the structures themselves.

Sites within area 7 have a high degree of significance as the main evidence for the period of use of the area as the port for Old Onslow. This area was determined to have considerable significance but does not have the exceptional level of significance of the Old Onslow town site or the earlier river landing port area. This is because use of the area is both shorter and late within the story of the settlement and growth of Old Onslow. It is, however, an important part of the Old Onslow story illustrating the struggle to keep the town alive at its original location. The failure of the port within Ashburton North led directly to the relocation of Old Onslow to the new site at Beadon Creek.

The results of the reassessment are listed below and shown graphically in Figure 4. It should be noted that this reassessment has not yet been accepted by the HCWA

therefore, under the Act, all elements within the curtilage are still noted as being of exceptional significance.

Reassessed level of significance

Exceptional

Main area of Old Onslow Townsite including 1879-1901 landing place and cemetery:
All sites are located outside of Ashburton North.

Considerable

1901-1925 Port Area: Area 7 (sites 1, 2, 6, 7, 8 & 9)
1901 Telephone Poles & Anchor Points: Areas 4, 6 & 7
1901 Tramway Causeway: Areas 1, 1A, 2A & 3
1909 Large Timber Bridge, 1991 site 6: Located outside of Ashburton North industrial area.

If located

Any artefact spread associated with 1901 jetty
Any historic shipwreck located within study area

Some

Telephone Pole Anchor Point: Area 3

Little

Pastoral sites: Area 1 (sites 2, 3, 4), Areas 4, 6 & 9
Isolated finds: Areas 1, 1A, 2A, 2, 3, 6 and 7 (sites 3 & 4)

Detailed summary of significant places

1901-1925 Port Area – Considerable Significance: The port area was designated Area 7 and nine possible site areas were searched within Area 7. Six areas located containing archaeological materials with most material being associated with the store, tram stop and well (Figure 3). Cut out features, isolated artefacts and one artefact spread associated with a sand pad foundation were the only evidence found associated with the 1901 jetty, land backed wharf and warehouses. The jetty remanet photographed in 1991 is no longer extant and no evidence was found of the earlier unsuccessful 1897 jetty.

Site 1, 2 & 4: land backed wharf, jetty and associated building sites – The site of the former land backed wharf is noticeable on site as a rectangular area cut away from the forward face of the back beach dune with metal bolts protruding from the face of the cut. Metal detector survey indicated the presence of buried metal scattered across the area which would have been under the land backed wharf indicating other material from jetty activities may still be extant in the area.

Figure 4: Plan of significant features

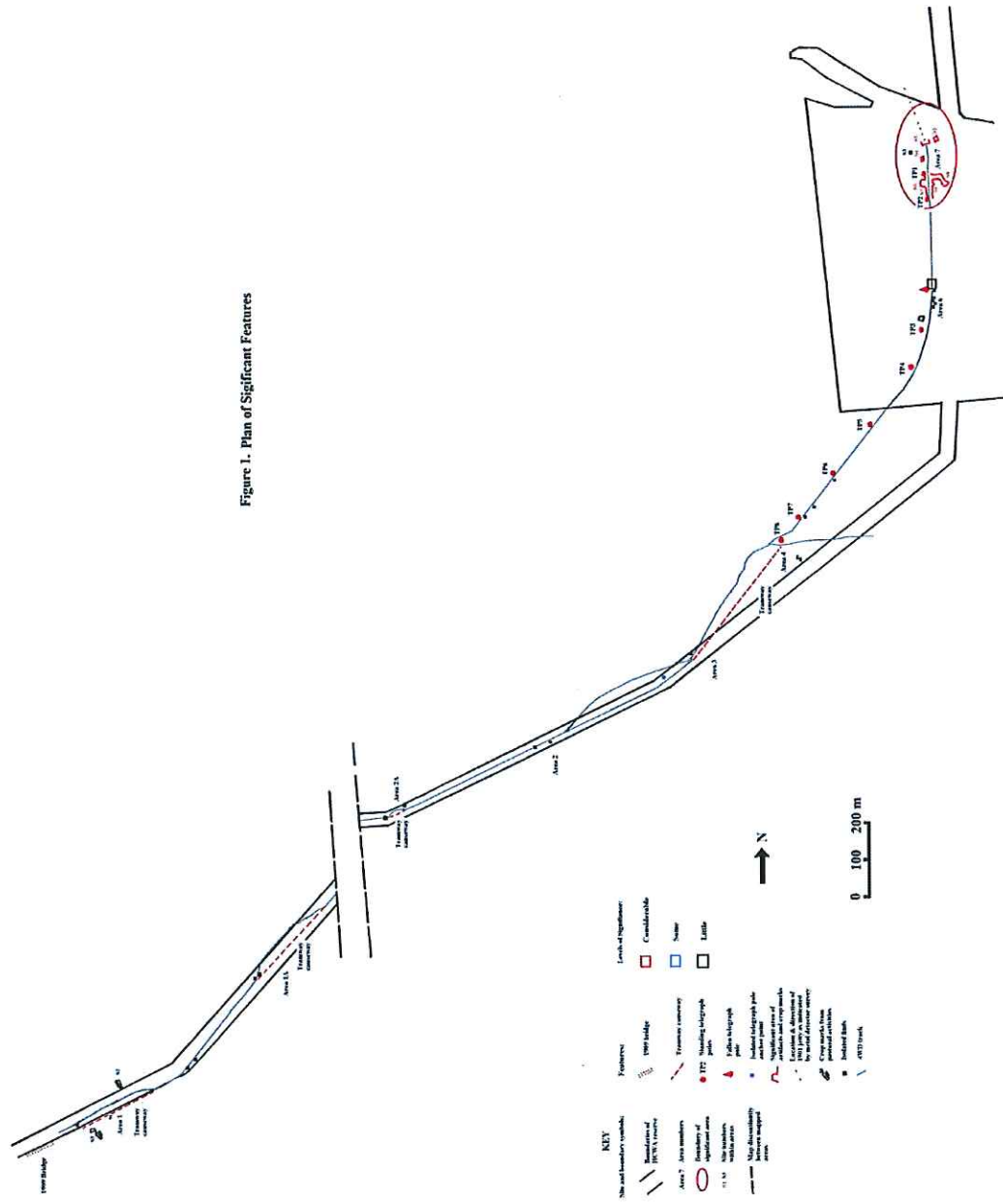


Figure 1. Plan of Significant Features

The jetty remnant noted in 1991 no longer exists. The metal detector survey produced a few isolated strong signals from the edges of an area 50 metres long by approximately 9 metres wide. The signals were found at the edges of the area and they were widely spaced. The indicated metal is almost certainly evidence of the location of former jetty piles but the signals may only be indicating the presence of an associated bolt rather than a jetty pile still in situ.

Site 1 was associated with two sand platforms (sites 2 & 3) located on either side of the feature which were created largely by filling a section of the back beach dune system. The results of the metal detector survey on this site suggest site 2 is likely to be the site of a small building probably a warehouse or storage shed. Site 4 located on at the rear of the back beach dune is also likely to be a small warehouse or storage shed.

Site 6: Store Complex - Located on a large semi circular area of flat land at the rear of the dune system historical photographic evidence suggests the main body of the store was located to the west and southwest of the last telephone pole within a large area which crop mark analysis indicates is an activity area.

Archaeological survey confirmed the location of a small concrete foundation and an area of visual and buried artefact spread 13 metres by 18 metres located immediately to the south of the concrete pad. There is also an activity area associated with the tramway track/port access route which extended for four metres on either side of the current 4WD track and for the length of the track between the last two extant telephone poles.

Site 8: Windmill and well – Well located 37 metres south of the first extant telephone pole and 46 metres east of the current 4WD track. The well site consists of the remains of an iron windmill, concrete tank base, concrete water trough and a well. A metal detector survey returned signals indicating a scatter of buried artefacts around the site which stretched for 8 metres towards the road to the west of the site, 6 metres to the south and 14 metres to the east covering an area extending past the windmill and water tank in this area.

To the north of the well visible and buried artefacts stretched in a linear path northwards which then curved and met the track just south of the first extant telephone pole. The artefact trail averaged between 4 to 5 metres wide and extends for 24 metres before curving south towards the well. This evidence is obviously associated with access and use of the well.

Site 9: Suspected tram stop – Located on the eastern side of the current 4 WD track 30 metres south of the first extant telephone pole. The site consists of a visible and buried scatter of artefacts extending five metres along the track and for a distance of 12 metres eastwards. Visible artefacts included a tram rail lying parallel to the 4WD track at a distance of approximately 2 metres. The presence of the rail, apparently still *in situ*, suggests this may be the tram stop and that it was located slightly to the east of the access track to the jetty. This stop would be for passenger and goods being loaded or unloaded for the store as it is likely the tramway itself extended onto the timber land backed platform and along the jetty to the ship berthing area. There is some pictorial evidence for the presence of tram rails on the timber land backed platform

beside the jetty warehouse (Nayton 2009: Fig. 5).

1901 Telephone Poles & Anchor Points – Considerable Significance: Eight standing telephone poles, one fallen pole and associated anchor points were located and mapped. All the evidence was located in the northern half of the study area. The line was found to run parallel to the tramway on its western side. No spreads of artefact material from construction or use were found associated with the telephone poles.

1901 Tramway – Considerable Significance: The actual route of the tramway between the 1909 timber bridge and the jetty site was mapped. It was found to largely run parallel to a 4WD track with some areas of route overlap. Areas of overlap were on areas of firmer ground where the tramway was constructed directly onto the sandy clay surface. This construction technique has resulted in very little evidence of the tramway surviving where it follows the same route as the current dirt track. However, areas 1A, 2A and Area 6 contain some sparse scattered artefacts on and beside the 4WD track.

Where the tramway route is located off the current dirt track it mainly runs across softer ground and is consequently raised on an earthen causeway. There is much more evidence of the tramway surviving on sections of causeway with the most obvious evidence being metal objects such as railway spikes, iron straps and fish plates. Significant lengths of tramway causeway located were:

Area 1 - Section raised causeway 197 metres long, located between 13 and 19 metres south of the 4WD track. Section had iron fish plates and railway spikes scattered along its length

Area 2A – Section raised causeway approximately 208 metres long with scattered metal tramway related artefacts such as rail spikes scattered along its length as well as a small dense scatter of metal sheet fragments.

Area 3 – Section of raised causeway approximately 273 metres long and scattered with metal objects which relate to the tramway function.

There appears to be no evidence left of timber sleepers and tram rails except where the odd tram rail survives in a secondary use as a fence post.

Figure 5: Tramway causeway



Figure 6: Metal artefacts on causeway



1909 Large Timber Bridge – Considerable Significance: Located outside of Ashburton North. The central section of this bridge is still standing however, both end sections have been considerably damaged since 1991. It is situated in a tidal flat to the east of Ashburton North.

Seabed materials – Considerable Significance: Historic and survey evidence suggest that there is little likelihood of historic shipwrecks being located within the study area. There is a stronger possibility of a seabed spread of artefactual material associated with the use of the 1901-1925 sea jetty still being *in situ*.

The proposed development of facilities for the Wheatstone off shore oil and gas project provides an opportunity for a closer examination of the maritime archaeological values of the 1901 old Onslow Jetty site and to develop management strategies to identify and manage these values and ensure the sites long term protection. It is noted that the maritime archaeological significance of the underwater portion of the site is currently unknown but is likely to be of considerable significance if still *in situ*.

Pastoral sites– Little Significance: This new research has identified a series of crop marks within four areas along the tramway. The majority of crop marks were rectangular and where they could be identified consisted of squared bare areas of vegetation or vegetation growing in straight lines and right angles. They were associated with little surface or sub surface artefactual material and therefore have a low archaeological potential.

IMPACT OF PROPOSED PROJECT PLANS ON EUROPEAN HERITAGE SITES

The project plans supplied for the purpose of this report (Figure 1 and Figure 7) show that there is proposed construction impact on part, or all, of the heritage registered curtilage which falls within the Ashburton North SIA industrial area. This curtilage consists of approximately one fifteenth of the registered heritage place. The proposed construction will either destroy or bury archaeological sites across all or most of this area. Figure 7 shows the maximum extent of the area which could be impacted by the plant. This area includes the entire suite of European heritage features located within Ashburton North industrial area.

Figure 7 Expanded development footprint in relation to HCWA conservation area

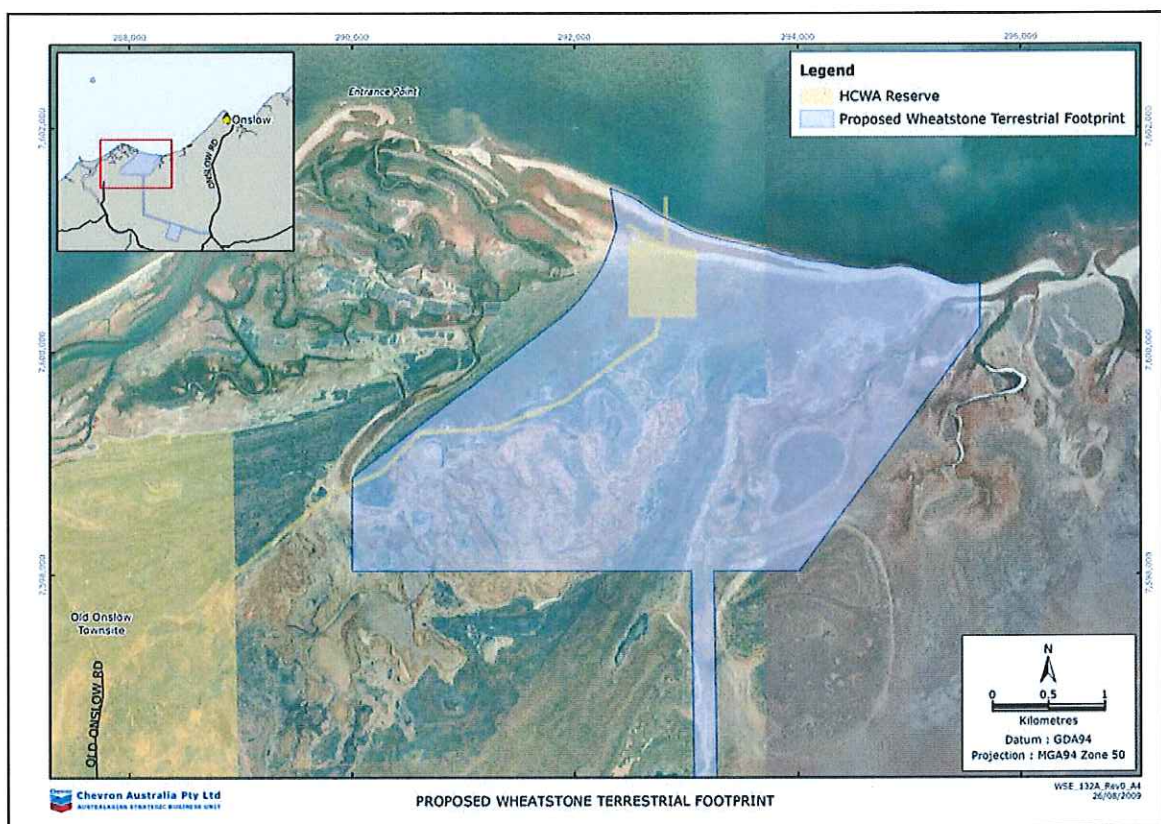


Figure 1 shows the most current project plans for the location of the plant in relationship to the registered curtilage within Ashburton North. The proposed method of developing the area is to construct a retaining wall around the edge of the construction area and fill the contained area. This development method will have four different impacts:

1. The construction of the retaining wall will destroy any European heritage sites located within the work area of the wall construction. Also any part of the plant which requires foundations dug below the depth of the sand fill will destroy any European heritage sites located within the work area for the foundation.

2. It will bury some European heritage sites under sufficient depth of fill to protect them from the construction of the LNG plant.
3. It will bury the existing telephone poles for all or most of their depth possibly leaving the tops sticking out of the sand pad. These features will not be buried to a sufficient depth to protect them.
4. Construction would also impact the sea bed adjacent to the area either directly as part of construction and dredging or indirectly by changing environmental conditions and greater disturbance through area use. These activities may impact artefactual evidence of the use of the 1901-1925 jetty and possibly may discover evidence the location of ships known to have been lost within the general Onslow area.

A detailed analysis of the extent of possible underwater remains is below.

- A bathymetry plan indicates that the declared Heritage Council Reserve (HCR) (P3444), containing the underwater part of the jetty site, extends approximately 200 m from the shore and is approximately 50 m wide.
- An inspection of a Public Works Department (PWD) plan of the original jetty structure shows that, as planned, the jetty was to extend 940 ft (286.51 m) from the high water mark and 870 ft (265.17 m) from the low water mark.
- The plan also indicates that the jetty head was to stand in approximately 17 ft (5.18 m) of water at high tide and 8 ft (2.43 m) at low tide. The depth at low water correlates with the chart depths shown at the end of the Onslow Jetty on Admiralty chart 3152, 1st April 1915, Ashburton Road. Australia-N.W coast.
- The jetty head piles were to be driven into the seabed to a depth of at least 12 ft (3.65 m). The piles for the jetty neck were to be driven to a depth of 10 feet (3.04 m). The plan indicates that the neck was to be approximately 20 foot wide (6.09 m) and that the jetty deck was to stand approximately 30 ft (9.14 m) above the seabed.

The depth to which the piles were to be driven provides an argument for the survival of remnants in the sediment. It is also possible that other structural remains and artefacts lie on the seabed, or are buried in the sediment under, or on either side, of the jetty alignment. Previous studies of jetty sites on the Western Australian coast have shown that remains and artefact deposits can extend up to 15 to 20 m either side of this alignment (Garratt, D, McCarthy, M, Richards, V and Wolfe, A. 1995).

It is noted that timber remains, possibly from a jetty, have also been found on an island amongst the mangroves to the west of the jetty site and, east of the mouth of the Ashburton River Paul Greenfeld. Pers. Comm. 12.04, 09 January 2010 and 16.30, 09 December 2009). Paul has advised that the area is subject to a quarry related application and that the coordinates for the approximate location (within 100m) of the remains are: 294656 E; 7597000 N.

These remains may come from the site, or from the 2760 ft (841.24 m), long 1896 jetty, which was built at some point to the east of the 1901 jetty but destroyed in a cyclone in 1897 before it could be used. Subject to any development proposals in this area these remains may need to be inspected and appropriate management undertaken.

- Possible discoveries on the site include the remains of the jetty structure, Wheatstone Project: Old Onslow Town (3444) Development Impact Mitigation Plan

artefacts associated with the jetty's operation, and remains and artefacts associated with shipping that used the jetty.

- Preliminary site maps provided by the client show that facilities will be built approximately one kilometer to the east of the old Onslow Jetty site and indicate that the site may not be directly affected by the indicative dredging, breakwater construction or the laying of underwater pipelines (Chevron 2009). Despite this there is also potential for site disturbance from:
 - Shipping and small boat traffic during construction works;
 - Shifting of sediments and other environmental changes resulting from propose works;
 - Increased human visitation to the site during and after construction works.

The latter may create an increased risk of removal or physical damage to artefact material and other remains.

It is noted that plans for the construction of facilities may change, creating a more direct threat.

The preliminary side scan map provides no evidence of any underwater remains of the jetty (Chevron 2009). This evidence may exist but only be visible on a larger scale map. Alternatively evidence may be found by conducting a high resolution, site-specific, side scan sonar and magnetometer survey.

Three, definable seabed shadows, which lie approximately 600 m to the east of the HCR jetty area, are visible on the preliminary side scan back scatter map (Chevron 2009), and these features may need to be identified.

The preliminary maps also only relate to one point in time. It is desirable that before any maritime archaeological fieldwork commences that a range of time related data is reviewed to determine if there are any environmental patterns, including the seasonal movement of sediments that may affect the site. Such patterns may lead to the periodic exposure of jetty remains above the seabed and in the tidal zone.

Impacts on land sites within the plant development area are going to be severe, either destroying them or burying them and ending their role as a heritage object until some point in the future when the plant is demolished and the sand pad removed. Impacts on possible underwater maritime heritage sites may range from minimal to severe depending on a range of different factors.

The proposed development will therefore destroy or remove from current generations sites currently assessed as being of exceptional significance and which even when reassessed on the basis of more detailed knowledge are deemed to be of considerable and some heritage significance. Some heritage significance is the threshold for entry onto the Register of Heritage Places under the *Heritage of Western Australia Act 1990*. These sites have the potential to tell important stories regarding the fight to save Old Onslow as a viable town, the operations of the port and store and on the material culture associated with this final phase of the pioneering town.

Sites registered under the *Heritage of Western Australia Act 1990* cannot be adversely impacted or destroyed without the permission of HCWA. As the Old Onslow Townsite currently has a blanket level of significance of exceptional significance, which includes the section within Ashburton North, it is foreseeable that such permission may not be granted.

The reassessment of sites associated with the 1901 jetty, tramway and telephone line as being of considerable and some significance with pastoral sites within the area being of little significance, if accepted by the HCWA, allows some scope for mitigation. In this instance mitigation can be based on policy recommendations for mitigating development impact on archaeological sites at the considerable and some levels of significance contained in the HCWA brief for conservation plans. Mitigation strategies based on these levels of significance are outlined in the next section.

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