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FINAL REPORT

**OSBORNE NORTH
INDUSTRIAL PRECINCT**

386TH REPORT

OF THE

PUBLIC WORKS COMMITTEE

Tabled in the House of Assembly and ordered to be published 14 October, 2010

First Session, Fifty-Second Parliament

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THE PUBLIC WORKS COMMITTEE

The Public Works Committee is established pursuant to sections 12A, B and C of the Parliamentary Committees Act, 1991, proclaimed February 1992.

The following members constitute the Seventeenth Public Works Committee as reconstituted on 24 March 2009:

Mr Tony Piccolo MP (Presiding Member)

Mr Michael Atkinson MP

Mr Lee Odenwalder MP

Mr Michael Pengilly MP

Mr Martin Hamilton-Smith MP

Principal Research Officer:

Mr Keith Barrie

Administrative Officer:

Ms Amanda Pacella

THE FUNCTIONS OF THE COMMITTEE

Section 12C of the Parliamentary Committees Act defines the functions of the Public Works Committee as:

- (a)** to inquire into and report on any public work referred to it by or under this Act, including-
 - (i)** the stated purpose of the work;
 - (ii)** the necessity or advisability of constructing it;
 - (iii)** where the work purports to be of a revenue-producing character, the revenue that it might reasonably be expected to produce;
 - (iv)** the present and prospective public value of the work;
 - (v)** the recurrent or whole-of-life costs associated with the work, including costs arising out of financial arrangements;
 - (vi)** the estimated net effect on the Consolidated Account or the funds of a statutory authority of the construction and proposed use of the work;
 - (vii)** the efficiency and progress of construction of the work and the reasons for any expenditure beyond the estimated costs of its construction;
- (b)** to perform such other functions as are imposed on the Committee under this or any other Act or by resolution of both Houses.

PART ONE: PREAMBLE AND PROJECT SUMMARY

1.1 Term of Reference

Parliamentary Committees

Parliamentary Committees have the specific task of examining individual initiatives, projects or policies of the government of the day, or issues of importance to society as a whole. Standing Committees are created by Act of Parliament and charged with the ongoing examination of subject categories such as public works.

Parliamentary Committees are made up of both government and opposition Members, with numbers of each calculated according to rules which reflect the numbers of seats each group holds in the Parliament. Much of the Committee process is open to the public, and completed reports are public documents.

This Project

Defence SA has referred the Osborne North Industrial Precinct project to the Public Works Committee pursuant to the requirements of the Parliamentary Committees Act 1991. Please refer to the "Functions of the Committee" on the previous page for a full description of the Committee's tasks.

1.2 Further Reporting to the Committee

Defence SA must notify the Committee immediately in writing should there be substantial changes to the nature of the project or the evidence provided to the Committee. To enable appropriate monitoring of the project, Defence SA must also provide quarterly reports to the Committee on the progress of construction. Pursuant to section 12C (vii) of the Act, these reports must outline the efficiency and progress of construction and provide an explanation of any expenditure beyond the estimated costs quoted in this report. Evidence of any substantial changes to, or the withdrawal of, any approval (provisional or otherwise) must also be relayed to the Committee immediately with an appropriate explanation, and an assessment of the probability of a suitable resolution.

In addition, the Committee requires that it be notified of the proposed date for the commissioning of the works.

The Committee has the authority under Section 16 (1)(c) of the Parliamentary Committees Act to re-open investigations into any project for the purpose of further examination and monitoring.

1.3 Scope of This Report

This Report examines the history of the proposal and the efficacy of the application of South Australian taxpayer funds to the Osborne North Industrial Precinct. The Report structure is guided by, and largely limited to, the terms of the Parliamentary Committees Act. It describes, in summary, the evidence presented to the Committee and concludes with a brief summary incorporating findings and recommendations.

Detailed evidence upon which the Committee's decision is based is held in Parliament and, in most cases, can be examined by making an application to the Committee Administrative Officer.

PART TWO: EXECUTIVE SUMMARY

The development of the Osborne North Industrial Precinct represents the continuation of the State's commitments to long-term sustainable development on the northern Lefevre Peninsula.

The project works will deliver a 27-hectare industrial land development in two stages over six years. Stage 1 involves the augmentation of infrastructure headworks services to the precinct and the first stage of land development (eight hectares). Stage 2 involves the second stage of land development (19 hectares) and the signalisation of the Victoria/Veitch Road intersection. The subject area is depicted in Attachment 1.

The works are divided into four components:

- Civil Works Package 1: Stage 1 land development works and augmentation of infrastructure headwork services, and Mersey Road corridor extension to Pelican Point Road
- Streetscape Landscape works – Stage 1
- Civil Works Package 2: Stage 2 land development works and Victoria / Veitch Road intersection signalisation, and
- Streetscape Landscape works – Stage 2.

The works will predominantly be undertaken on land improved as part of the 'Techport Australia (Stage 3 and 4) and Osborne North Industrial Precinct Site Preparation Works' project, examined by the Public Works Committee in December 2008 (Report 317 refers) and now close to completion.

Completion of the project will create approximately 27 hectares of serviced industrial land accessible from an extension of Mersey Road and new roads within the land development. It will ensure the consistent flow of industrial land to the market in the emerging northern Lefevre Peninsula economic region.

The project is estimated to cost \$23.569 million (excluding land acquisition and site preparation costs) and will be fully funded by the Government of South Australia (through Defence SA). The project is expected to generate land sales revenues of approximately \$48.881 million over six years (2011-12 to 2016-17).

Funding for the project was approved in the 2008–09 State Budget, to allow Defence SA to undertake works required to facilitate the release of additional development ready industrial land on the northern Lefevre Peninsula, commencing 2010–11.

Land division and design approvals have been secured for the project and the detailed infrastructure headworks design completed and tendered (ie Civil Works Package 1).

PART THREE: EVIDENCE PRESENTED TO THE COMMITTEE

3.1 *The Current Proposal*

This project will develop approximately 27 hectares of serviced industrial land in two development stages, to be offered for sale or lease over a six year period.

The Osborne North Industrial Precinct is zoned General Industry, providing for continued growth of defence industry activity as well as port related industrial land uses given the proximity of the site to Outer Harbor.

Built form within the precinct will be controlled by Defence SA through the implementation of development guidelines covering both urban design and environmental sustainability requirements, consistent with Defence SA's approach to development within the Techport Australia Supplier Precinct.

The subject site is within the City of Port Adelaide Enfield and comprises two land parcels:

- Parcel One: 35 hectares north of Techport Australia at Osborne, and
- Parcel Two: approximately 21 hectares adjacent Pelican Point Road and the Outer Harbor rail corridor at Outer Harbor.

Parcel One is zoned General Industry, and is accessible via both Mersey and Pelican Point Roads. Once developed, the parcel will comprise of 27 hectares of land for sale and approximately eight hectares of public roads, stormwater swales and open space purposes.

Parcel Two is zoned open Metropolitan Open Space System (Buffer), and will be used for stormwater management and open space purposes.

The site is identified as:

- portion of Certificate of Title Volume 6012, Folio 883 being part Allotment 2000 in Deposited Plan 76925, in the area named Osborne, Hundred of Port Adelaide, and
- portion of Certificate of Title Volume 6022 Folio 191 part Allotment 2 in Deposited Plan 20023 in the area named Outer Harbor, Hundred of Port Adelaide.

It is located adjacent Mutton Cove Conservation Reserve to the east, the Outer Harbor rail corridor to the west and Pelican Point Power Station to the north.

The project involves the construction of infrastructure headworks services on Defence SA controlled land, west of the Outer Harbor rail corridor adjacent Pelican Point Road and east of the site between Mersey Road and the Port River, adjacent Mutton Cove Conservation Reserve.

The ownership, care, control and maintenance of these works will be vested with service authorities including SA Water, ETSA Utilities and City of Port Adelaide Enfield at completion of the project.

Site Issues

The following site issues have been considered:

- *Location* – the project will be situated north of Mersey Road, Osborne (adjacent Techport Australia) and is accessible via Mersey and Pelican Point Roads.
 - *Terrain* - the site is generally flat and a staged process of geotechnical preparation including compaction and filling has commenced.
 - *Access and Car Parking* - the site is accessed from Mersey Road and Pelican Point Road. Car parking to be accommodated on individual sites by purchasers to suit individual requirements.

3.1 The Current Proposal (cont.)

- *Landscape* - site landscaping will be undertaken with consideration for the marine and industrial environment and designed to integrate with landscape already completed within Techport Australia.
- *Infrastructure* - the capacity of Primary Headworks infrastructure servicing the site is being upgraded to adequately service the land being developed (Secondary Headworks Stage 1 and 2).
- *Stormwater Management* – the long-term regional stormwater requirements for the NLP have been considered in the design. In the future the central stormwater detention system can be extended and/or adapted into a wetland and stormwater Managed Aquifer Recharge (MAR) and reuse scheme. A staged approach involving the progressive construction of wetland cells is possible to achieve a wetland system, but a MAR scheme would only be feasible after the full northern Lefevre Peninsula stormwater catchment has been developed.
- *Consultation/Stakeholder Contribution* – during the design process, significant consultation has been completed with City of Port Adelaide Enfield, the Department of Transport, Energy and Infrastructure, SA Water Corporation, Environment Protection Authority, ETSA Utilities, and a number of other key stakeholders.

Northern Lefevre Peninsula Detailed Infrastructure Planning

This phase comprised development of an overarching infrastructure plan for government land holdings across the peninsula, completed in 2009 under a Joint Principals arrangement with Flinders Ports. This was considered advantageous to develop an understanding of potential construction cost sharing arrangements with other land owners. The scope addressed all engineering and landscape disciplines and a key output was the development of a staged infrastructure delivery strategy. The engagement included significant stakeholder and service authority consultation.

Detailed Design and Documentation

This phase involved the specific detailed design and documentation of the augmentation of infrastructure headworks services (Primary Headworks Infrastructure), land development works (Secondary Headworks Infrastructure), Victoria/Veitch Road junction signalisation, and landscape works for the Osborne North Industrial Precinct. The design addresses the project's minor and major stormwater management requirements, road design, low pressure sewer, potable water supply, street lighting, electrical reticulation and streetscape landscape.

The project scope as a percentage of anticipated cost based on the final engineering design is estimated as:

Service Discipline	% of work
Earthworks	3.5
Stormwater	31.5
Roads – Mersey and internal roads	19.0
Victoria/Veitch Road junction upgrade	8.5
Low pressure sewer	3.0
Mains water reticulation	4.0
Street lighting and electrical reticulation	15.5
Landscape - streetscapes	3.5
Preliminaries	6.5
Contingency	5.0

3.1 The Current Proposal (cont.)

Development Approvals

This phase included the engagement of professional service contractors to prepare reports, lodge and obtain Development Approval for Crown Development Applications, under s49 of the *Development Act 1993*, as follows:

- DA 040/G236/09 for Land Division over the Osborne North Industrial Precinct (Parcel One), and
- DA 040/V439/09 for the construction of a stormwater management system over two stages adjoining Pelican Point Road, Outer Harbor (Parcel Two).

Design Objectives

Defence SA's core design objective was to create a design for the project that allowed staged delivery upon market requirements for serviced industrial land, specifically addressing suitability of land size, dimensions, access and service capability, and incorporating flexibility into the allotment design that allows amalgamation or subdivision of allotments for industrial users.

Design Solution

Augmentation of Infrastructure Headworks Services (Primary Headworks Infrastructure)

The augmentation of Infrastructure Headworks Services scope encompasses a significant proportion of new stormwater and road construction such as the extension of Mersey Road corridor, major stormwater management swales and detention basins, and the supply of all other major headworks (back-bone) capabilities to service the subdivision.

Key scope inclusions are:

- new stormwater pipe network design to manage up to the 1 in 100 year major stormwater event
- new stormwater drainage swales and detention storage ponds to design to cater for the 1 in 100 year major stormwater events, including a stormwater rising main to pump stormwater from the storage detention ponds out to the Port River
- all stormwater swales and detention ponds are to be landscaped in order to comply with EPA water quality regulations
- new stormwater and sewer pipes to be constructed beneath the adjacent Australian Rail Track Corporation and Viterra Grain owned rail corridors linking the precinct to the central Cultural Park reserve
- extension of Mersey Road, linking it to Pelican Point Road
- all new roads are designed to cater for B-Double and B-Triple heavy vehicles
- pedestrian/cycling boulevard along Mersey Road linking Mersey Road to Pelican Point Road with a connection to an existing pedestrian/cycle path in Techport Australia
- new low pressure sewer network and individual new connections to all new allotments in the precinct
- new mains water network and individual connections to all new allotments in the precinct
- new electrical distribution network to service the precinct and major conduit provision in the Mersey Road extension to service future development stages on the western side of the northern Lefevre Peninsula
- new street lighting to all new roads and alterations to existing lighting at the Mersey Road and Pelican Point Road connections
- communications conduit provisions within Mersey Road to allow for multiple communication service providers
- coordination of service locations with proposed landscape design theme, and
- construction of Mutton Cove earth mound eastern of the Mersey Road extension alignment.

3.1 The Current Proposal (cont.)

Victoria / Veitch Road Intersection Signalisation

The Victoria/Veitch Road intersection signalisation includes the installation of additional turning lane upgrades at the junction of Victoria and Veitch Road. Veitch Road is the main access point to the Osborne North Industrial Precinct and Techport Australia and the junction upgrades will assist in managing significant additional projected traffic volumes in the area.

Land Development Works (Secondary Headworks Infrastructure)

Key inclusions of the land development works are:

- new stormwater pipe network design to manage minor and major stormwater
- new internal subdivision roads designed to cater for B-Double and B-Triple heavy vehicles
- new low pressure sewer network and individual new connections to all internal allotments
- new mains water network and individual connections to all internal allotments
- new electrical distribution network to service internal allotments
- new street lighting to all new internal subdivision roads
- communications conduit provisions within internal roads to allow for multiple communication service providers, and
- coordination of service locations with proposed landscape design theme.

The land development works will be constructed in two separate civil works packages. The first stage will be constructed as part of the primary headworks Civil Works Package 1. The second stage is forecast to commence in 2014-15 with the Victoria / Veitch Road signalisation as part of Civil Works Package 2, and subject to successful Stage 1 sales and market demand.

Streetscape Landscape Treatments & Project Image

The key landscape features of the project include:

- streetscape planting to all new roads and the Mersey Road earth mound
- creation of semi-aquatic landscape areas within stormwater drainage swales, including the Link Reserve (immediately south of the Osborne North Industrial Precinct) and the Eastern Drainage Reserve (linking the precinct to the Port River – north of Mutton Cove), and
- hydro-seeding of stormwater detention basins.

Development guidelines will be implemented for all allotments to control the appearance and quality of built form as well as ensuring that appropriate environmental sustainability measures are adopted by land purchasers.

Streetscape planting to all new roads will be undertaken following the completion of each civil works construction package.

Structural - Geotechnical

The project site including the proposed Mersey Road corridor will undergo geotechnical conditioning and site levels raised in accordance with development approval requirements. A methodology has been prepared in conjunction with Coffey Geotechnics and the project civil engineer GHD Pty Ltd, both acting on behalf of Defence SA.

Additional geotechnical site investigations have been undertaken throughout the Link Reserve and Cultural Park where bulk earthworks are to be undertaken for stormwater management. GHD Pty Ltd has used this information to inform the design and required design solution to identify construction risk issues.

3.1 The Current Proposal (cont.)

Civil – Stormwater Management

The development is designed to include water sensitive urban design techniques with the overall objective to achieve best management practice outcomes. These techniques will ensure that the site does not adversely impact on downstream receiving environments, in particular the Port River waterway.

Water quality improvement measures have been incorporated in the design to reduce suspended solids, total nitrogen and total phosphorus loading to the Port River. To achieve this, a series of swales has been developed with both the invert of the swales and detention basins vegetated and designed to allow a minimum ponding level of 200mm prior to stormwater being pumped or gravity fed from these bodies to the river. The water quality criteria for discharge of stormwater to the Port River has been set in accordance with targets specified in the EPA *Water Quality Policy (2003)*, which specifies criteria for allowable concentrations of pollutants.

The multi-objective stormwater design approach:

- detains and slows the conveyance of stormwater through the system
- uses vegetation and landscaping to filter and treat stormwater
- uses water efficient landscaping and local indigenous vegetation species
- protects and enhances recreational, social, and cultural values, and
- improves ecological and habitat outcomes.

The long-term regional stormwater requirements for the northern Lefevre Peninsula have also been considered in the design. In the future the central stormwater detention system can be extended and/or adapted into a wetland and stormwater Managed Aquifer Recharge (MAR) and reuse scheme. A staged approach involving the progressive construction of wetland cells is possible to achieve a wetland system, but a MAR scheme would only be feasible after the full peninsula stormwater catchment has been developed. The cost associated with extending or adapting the system would be met by the associated landowner beneficiary (or beneficiaries) and is feasible provided demand for recycled stormwater exists in the local region.

Construction Delivery Solution

The project will be delivered in two packages each for civil works and landscape construction, described as:

- Civil Works Package 1 - comprising Stage 1 land development works (Secondary Headworks – Stage 1) and all of the augmentation of infrastructure headwork services (Primary Headworks Infrastructure)
- Civil Works Package 2 - comprising Stage 2 land development works (Secondary Headworks – Stage 2) and the Victoria / Veitch Road signalisation
- Stage 1 Streetscape Landscape Package and Mersey Road earth mound, and
- Stage 2 Streetscape Landscape Package

The key features of the delivery strategy are:

- the completion of each civil works package has been planned to provide a timely and continuous supply of industrial land to the market
- early construction of the full Mersey Road corridor in Civil Works Package 1 provides an alternate access point to the Osborne North Industrial Precinct and Techport Australia projects, which will improve traffic congestion in the short-term and site emergency access
- construction of the full Mersey Road corridor also demonstrates to the prospective purchasers Government's commitment to large scale development throughout the region, which will maintain market credibility and improve land marketability
- the infrastructure headworks construction stages have been matched to the on-going availability of staged site prepared land under the Site Preparation Works contract, and

3.1 The Current Proposal (cont.)

- construction of the new signalised intersection at the corner of Victoria and Veitch Road in Civil Works Package 2 has been planned to commence only when increased traffic demand triggers the need for this upgrade - this will avoid unnecessary early government capital investment and also allows actual traffic volumes to be monitored and verified before an ultimate upgrade is implemented.

3.2 Consultation

This project has been subjected to extensive consultation, including with:

- Flinders Ports
- International Power Australia
- Penrice Soda Holdings Limited
- Viterro Grain
- MacKenzie Intermodal
- Port Adelaide Enfield Chamber of Commerce
- DP World
- Pacific Marine Batteries
- Australian Rail Track Corporation
- Adelaide and Mount Lofty Ranges Natural Resources Management Board
- Environment Protection Authority
- City of Port Adelaide Enfield
- Coastal Protection Board
- Auditor General's Department (Crown Solicitor's Office and ILUA Branch)
- Department Environment and Heritage
- Department of the Premier and Cabinet (Aboriginal Heritage Branch and Sustainability and Climate Change Division)
- Department for Transport, Energy and Infrastructure
- Department of Treasury and Finance
- Department of Water Land and Biodiversity Conservation
- Department of Planning and Local Government (Planning SA)
- Land Management Corporation
- National Native Title Tribunal
- ETSA Utilities
- ElectraNet
- APA Group (formerly Origin Energy)
- SA Water
- Seagas
- EPIC Energy, and
- Telstra.

Consultation with key stakeholders occurred as part of the Development Application process and public notification will be undertaken pursuant to s49 of the *Development Act 1993*.

Project approvals to date include:

- Development Approvals by Development Assessment Commission
- service authority design endorsement, and
- adjoining land owner design endorsement

Following assurance and advice from the Department of Treasury and Finance, the Crown Solicitor's Office and the Department of the Premier and Cabinet (Sustainability and Climate Change Division) with respect to financial, legal, procedural and sustainability issues, Cabinet approved referral of this project to the Public Works Committee on 20 September 2010.

The Committee accepts that the proposing agency has undertaken all appropriate agency and community consultation.

3.3 Aboriginal Heritage

The Aboriginal Heritage Branch (Department for the Premier and Cabinet) advised that the *Control Archive*, which includes the *Register of Aboriginal Site and Objects*, has no entries for Aboriginal sites that correspond to the subject land.

The Indigenous Land Use Agreement Branch (Attorney General's Department) advised that there is a native title application dated August 2001 covering the entire Adelaide Metropolitan area, from Victor Harbour in the south to Port Broughton in the north of the state.

3.4 Heritage Buildings

The Committee is satisfied that investigations undertaken by the proposing agency reveal that there are no heritage listed buildings on the site that will impact on the proposed works.

3.5 Ecological Sustainability

Ecologically sustainable development strategies for the planning, design and delivery phases have been developed and are described in the following sections.

Noise

The project aims to minimise construction and operational noise impacts on surrounding residences west of Victoria Road, in line with the noise mitigation framework established for the northern Lefevre Peninsula and Development Approval day-time (52 dB) and night-time (45 dB) noise criterion.

For all construction activities, contractors are required to control noise and fit equipment with effective silencing mechanisms, and to organise and conduct its work to minimise inconvenience to property owners and residents near the site. In particular, noisy machinery operating at night or at any time on a Sunday shall be deemed to be an inconvenience, with noisy machinery to be electrically powered or otherwise effectively silenced.

Whole of Life

Durability – maximising the durability of above-ground and in-ground structures, and mitigating corrosion to improve infrastructure longevity is a key aim within the precinct. The works are being constructed in a harsh marine environment, which comprises in-situ Penrice (ICI) calgrit material. Increased design strengths have been adopted for steel and concrete based infrastructure in high risk areas.

Recycling – recycling initiatives are being explored with respect to the project such as use of fly-ash in the concrete and recycled materials during construction. Steel off cuts and waste concrete during construction will also be recycled.

Based on recycling and energy reduction principles, the project is the beneficiary of approximately 270,000m³ of surplus excavated materials imported from another Government project. The material imported was deemed to be a beneficial road base and positioned beneath the majority of Osborne North future roads.

Future adaptability – construction of headworks infrastructure has been designed with consideration to future northern Lefevre Peninsula development opportunities, therefore minimising the redundancy and rework of existing infrastructure.

3.5 Ecological Sustainability (cont.)

Minimise energy consumption – Defence SA is committed to exploration of initiatives that minimise energy consumption. Sustainability development guidelines are being prepared for the development, incorporating principles of sustainability for future developments (commercial and industrial) on the subject land.

Pursuant to the development guidelines, industrial developments will be assessed by Defence SA on initiatives including energy, emissions, land use and ecology, indoor environment quality, waste, building materials, and transport. The guidelines will be enforced by Defence SA through a *Memorandum of Encumbrance* registered on land titles or leases as appropriate.

Air Quality

The contractor is required to use dust suppressants and significant silt/wind break fencing for this project. Regular watering (including the use of sea water) in dust prone and heavily trafficked areas, particularly on hot, dry or windy days will be used. These applications have proved beneficial in minimising dust and other emissions on other Defence SA projects.

A *Construction Management Plan*, the responsibility of the contractors, contains procedures for the management and monitoring of air quality and covers controlling site dust, vehicle and plant emissions and odorous emissions.

Conservation

Minimisation of Impact on Flora and Fauna – an earth mound shielding the Mutton Cove Conservation reserve is proposed as part of the project. The Department for Environment and Heritage has endorsed the final earth mound design, which will be planted with locally propagated native vegetation species.

Native Vegetation Council clearance associated with establishing the stormwater management system for new areas to be developed on the northern Lefevre Peninsula, was assessed in accordance with Regulation 5(1)(d) – clearance for provision of infrastructure. Council was satisfied that clearance was required for the provision of infrastructure and that clearance had been minimised in the planning stage. The planning process has meant that an area identified as being of high biodiversity value is being retained adjacent Pelican Point Road, Osborne and clearance of the remaining areas was exempt under Regulation 5(1)(d).

Indigenous landscaping will be re-introduced to the site within the streetscapes and stormwater swale and detention basin areas. Locally sourced and propagated native plants will be used within the project to maximise its chance of survival and minimise water use.

Stormwater

The development is designed to include water sensitive urban design techniques with the overall objective to achieve best management practice outcomes. This will ensure that the site does not adversely impact on downstream receiving environments, in particular the Port River waterway.

Strategies are being employed to manage erosion and other potential stormwater impacts through the project's *Construction Management Plan*, which complies with *Stormwater Pollution Prevention Codes of Practice* and the *Environment Protection (Water Quality) Policy 2003* issued by the Environment Protection Authority. Specific protection measures are also being employed to preserve the sanctity of the Mutton Cove Conservation Reserve located adjacent to the project.

PART FOUR: FINDINGS OF THE COMMITTEE

4.1 Project Justification

The State's *Metropolitan Adelaide Industrial Land Strategy* (2007) identifies the Lefevre Peninsula/Gillman area as one of three areas that should be afforded long term protection from incompatible or competing uses, due to its economic importance to the state, significant export function, extent of infrastructure investment and future industrial land supply.

In March 2008, Government endorsed the *Northern Lefevre Peninsula Masterplan* to guide the long term sustainable development of government land holdings in the area. A subsequent Development Plan Amendment established zoning consistent with the masterplan.

Demand for industrial land in the northern Lefevre Peninsula is increasing as a result of considerable public and private sector infrastructure development activity, including:

- deepening of the Outer Harbor shipping channel and extension to the container terminal booth
- completion of the deep sea grain wharf and ABB Grain terminal
- a freight corridor linking the road and rail network to Outer Harbor, including the Port River Expressway, the new road and rail bridges over the Port River and rail corridor upgrades on Lefevre Peninsula
- development of the Techport Australia naval and defence industry
- Port Adelaide Waterfront Redevelopment, and
- Largs North Marina Adelaide marine industrial precinct.

The project aims to be consistent with the:

- *Northern Lefevre Peninsula Masterplan* (2008) to guide the long term sustainable development of government land holdings in the area
- *30-Year Plan for Greater Adelaide* (2010), and
- State's *Metropolitan Adelaide Industrial Land Strategy* (2007) by maintaining the long term protection from incompatible or competing uses given the economic importance of the area.

The project aims to create an industrial land development design that offers flexibility to amalgamate or further subdivide allotments to meet market demand.

4.2 Public Value of the Proposed Project

Delivery of development-ready land on the northern Lefevre Peninsula will support generation of further economic benefits for the State in what is an important industrial region.

The serviced land provides the potential to consolidate further support industries engaged on the Air Warfare Destroyer program at Techport Australia, and provide large scale general industry opportunities not previously available on the northern Lefevre Peninsula.

Economic impact analysis undertaken in October 2007 by the Department of Trade and Economic Development indicates that the development of the State's industrial land holdings on the northern Lefevre Peninsula, over a 15 year period, would contribute approximately \$1.069 billion to Gross State Product and sustain an average of 1,960 jobs statewide.

4.3 Revenue Earning Capacity of Proposed Project

The project works will deliver a 27-hectare industrial land development, with estimated sales proceeds of \$48.881 million in two stages over six years.

	2011-12 Estimate \$000	2012-13 Estimate \$000	2013-14 Estimate \$000m	2014-15 Estimate \$000m	2015-16 Estimate \$000m	2016-17 Estimate \$000m	Total Estimate \$000m
<i>Income</i>							
▪ Stage 1	7,352	8,396	11,961	-	-		27,709
▪ Stage 2	-				10,068	11,104	21,172
<i>Total Income</i>	7,352	8,396	11,961		10,068	11,104	48,881

Land will be released in two stages, with Stage 1 expected to generate sales revenue of \$27.709 million over three years. Subject to successful sales during this period, Stage 2 construction is expected to commence in 2014-15 and generate further sales revenue of \$21.172 million over two years (2015-16 to 2016-17), marking completion of the project.

Net sales proceeds (sale price less sale costs) will be returned to government.

4.4 Whole Life Costs of the Project

The budget for the project works is summarised below:

Prior Years Estimate \$000		2010-11 Estimate \$000	2011-12 Estimate \$000	2012-13 Estimate \$000	2013-14 Estimate \$000m	2014-15 Estimate \$000m	Total Estimate \$000m
▪ Planning & Design	1,828	69	285	-	-	-	2,182
▪ Headworks and Landscape Construction (including Project Mgt & Governance)		15,048	2,469	3,870	-	-	21,387
<i>Total Approved Budget</i>	1,828	15,117	2,754	3,870			23,569

The project works budget excludes:

- land acquisition costs of \$3.531 million (approximately \$10/m²), and
- site preparation costs of \$15.197 million (of total site preparation costs of \$23.050 million, relating to the 'Techport Australia [Stage 3 and 4] and Osborne North Industrial Precinct Site Preparation Works' project, examined by the Public Works Committee in December 2008 [report 317 refers]).

Project funding is contained within Defence SA forward estimates.

Operating Costs

Various state and local government agencies and private sector organisations will be responsible for the ongoing operation and maintenance of the common infrastructure within the project. The cost of maintaining and operating infrastructure inside the boundary of individual allotments is the responsibility of future land purchasers.

Operations and maintenance responsibilities are summarised below:

4.4 Whole Life Costs of the Project

Defence SA

- vacant land held for future sale within the Osborne North Industrial Precinct, on behalf of the Minister for Economic Development, including rubbish removal, weeding and slashing of grasses and dust suppressant control
- interim management and ownership of the Cultural Park Precinct and drainage swale corridors before care, control and maintenance is transferred to the City of Port Adelaide Enfield, and
- short-term temporary maintenance and dust control of stormwater detention mounds, Mutton Cove earth mound and areas adjacent stormwater ponds in the central Cultural Park Precinct prior to the implementation of other landscape projects within the region.

Operating and maintenance expenses will be met within existing Defence SA resources (Properties Maintenance Budget).

Non-Defence SA

- SA Water - all common water and low pressure sewer infrastructure
- Port Adelaide Enfield Council - road pavements, footpaths, streetscape landscape, common stormwater infrastructure (earth mounds along Mersey Road, within the central Cultural Park Precinct and underground infrastructure)
- ETSA - lighting poles, substations, transformers, switches and cubicles, and underground electrical reticulation, and
- telecommunications provider – communications cabling.

4.5 Estimated Net Effect of the Work, and Its Use, on Public Funds

No impact upon the Consolidated Account is anticipated.

A better than anticipated outcome however from the Civil Works Package 1 tender process is expected to result in project savings, and therefore positively impact the Budget. As part of the contract award process, appropriate Government approvals will be sought to amend Defence SA's forward estimates, to reflect:

- anticipated project savings, and
- revised project cashflows to reflect the proposed construction program as specified in the successful tender.

4.6 Project Delivery

Activity	End Dates
<i>Completed Activities</i>	
Northern Lefevre Peninsula Detail Infrastructure Planning	June 2009
Development Application Approvals	January 2010
Civil Package 1 - Expression of Interest	April 2010
Detail Infrastructure Design and Documentation	July 2010
Civil Package 1 - Request for Tender	July 2010
Civil Package 1 – negotiations with preferred tenderer	August 2010
<i>Forward Activities</i>	
Civil Package 1 - Cabinet consideration (contract award)	October 2010
Civil Package 1 – contract award	October 2010
Civil Package 1 – commence construction	October 2010
Civil package 1 – complete construction	June 2011
Construction – Stage 1 Streetscape Landscape	June 2012
Land sales – Stage 1 release	June 2011
Construction – Osborne North Civil Package 2	June 2015
Land sales – Stage 2 release	June 2015
Construction – Stage 2 Streetscape Landscape	June 2016

Constant monitoring and review of the project program will be undertaken throughout the duration of the project to correct any slippages, should they occur. This approach has worked successfully on other projects completed by Defence SA.

This project involves the delivery of both design and construction elements by Defence SA on behalf of the State, pursuant to its commitments as lead agency responsible for industrial land development for the State Government on the northern Lefevre Peninsula.

As at 30 April 2010, Defence SA had engaged the following professional service contractors to develop the Northern Lefevre Peninsula Infrastructure Plan and Osborne North Infrastructure Headworks detailed design and documentation, prior to tendering of the Civil Works Package 1.

Contractor	Role	Fee \$'000	Overall Costs %
Engineering House	Civil engineering services - NLP Infrastructure Plan (half share as Joint Agency with Flinders Ports)	242	26.0
GHD Pty Ltd	Civil engineering services – Osborne North Detail Design and streetscape landscape design	505	54.3
Soil & Groundwater	Environmental Site Assessment Engineer	33	3.5
Coffey Geotechnics	Geotechnical Engineer	15	1.6
Connor Holmes Consulting	Planning Consultants – Development Application report and advice	10	1.1
QED / Aurecon	Planning & Engineering Consultants	38	4.1
Rider Levett Bucknall	Quantity surveyors	3.5	<1.0
Infrastruct	Quantity surveyors	4.5	<1.0
Aecom	Acoustic Consultancy Services	8	<1.0
Martins Design	Graphic Design	4	<1.0
WOW Design	Creative Design	2	<1.0
Alexander Symonds	Surveying services	15	1.6
Cost Plan	Cost Planning services	8	<1.0
Infrastruct	Specialist Quantity Surveying service	6	<1.0
AEC Environmental	Environmental Advisor	12	1.3
Lerwick Advisory	Strategic and Contract Advice	19	2.0
Deloitte	Auditor	5	<1.0

4.6 Project Delivery (cont.)

Contract preparation and commercial advice has been provided by Defence SA's inhouse Crown Solicitor's Office representative, and charged in accordance with CSO's scale of fees.

Construction Contracts

Infrastructure Headworks

Civil Works Package 1 has been procured by a two-stage tender process, consisting of an open public Expression of Interest and Registration for Tender (short-listed tenderers from the EOI).

Five companies were short-listed and requested to submit a tender, based on tender documents prepared by Defence SA incorporating infrastructure design drawings prepared by engineering service contractor GHD Pty Ltd. Subject to Government approval, Defence SA will contract with the preferred tenderer in October 2010.

The Department of Transport, Energy and Infrastructure (Transport Services Division) has approved Defence SA to self manage procurement and delivery of the Civil Works Package 1, on the basis that the agency has adequate documentation, processes and resource in place to manage the risks to Government presented by the project.

Pursuant to the *Development Act 1993*, development approval has been obtained for the Osborne North land division and stormwater management system. Service authority approvals have been obtained from SA Water, ETSA and the City of Port Adelaide Enfield.

An AS2124-1992 lump-sum contract will be used for the Civil Works Package 1. This traditional and preferred option provides Defence SA with a known, maximum total cost (allowing for variations), as well as allowing identified project risks to be specifically allocated, and includes a 12-month defect liability period covering all works.

Civil Works Package 2 construction is scheduled to occur three to four years following the completion of Civil Works Package 1. Package 2 will therefore be tendered separately (anticipated mid-2014), subject to successful Stage 1 land sales and market demand.

Streetscape Landscape Contracts

Defence SA has completed the detailed landscape design and documentation for the Osborne North Industrial Precinct. The works are proposed to be delivered in two stages and contracts, following completion of each civil works package.

Again, AS2124-1992 lump-sum contracts will be used, with specific modifications to transfer some known risk items to the contractor. These works will be tendered separately to the civil works packages, due to their specialist nature.

Approval from the City of Port Adelaide Enfield Council will be required prior to commencing landscape construction. The landscape treatments will become an asset of the City of Port Adelaide Enfield Council and care, control and management will be vested with Council, after completion of the project works and a minimum 12-month defects liability period.

4.6 Project Delivery (cont.)

Best Practice

A range of strategies has been adopted to ensure best practice procurement, including:

- a detailed project design brief developed to establish requirements
- monthly Senior Management Review Meetings (comprising senior representatives from Defence SA and GHD Pty Ltd) held during the detailed design phase
- weekly Design Management Meetings held during the detailed design phase
- a number of value management workshops and reviews undertaken to re-evaluate the requirements to ensure a cost effective design solution
- investigation and realisation of cost saving initiatives to reduce project cost
- identification of risk through the project management structure with the assistance of senior level managers within Defence SA
- development of a risk register at project commencement and risk management workshops held to review key project risks and to develop a top 20 project risk list (all risks have been subsequently monitored through all stages of the project and will continue to be monitored during construction phases)
- review and adopt 'lessons learnt' from other Defence SA infrastructure projects
- competitive appointment of key professional service contractors, and
- a public Expression of Interest, and shortlist Request for Tenders for preferred civil contractors.

Project Management

The project management process has incorporated and will continue to include:

- evaluation and review of design solutions against the brief
- development of a Design Management Plan in conjunction with the professional service contractors for the internal management of design activities and external management of sub-consultants, and to ensure the design scope is clearly understood and unambiguous
- preparation of a project program to reflect the scope of the project and the procurement requirements to meet the project objectives
- conduct two key stakeholder workshops within the infrastructure design phases to:
 - establish key communications channels between stakeholders, professional service contractors and Defence SA
 - ensure Government requirements are understood and achieved,
 - develop project ownership between stakeholders, and
 - agree the key stakeholder sign-off strategy for the headworks infrastructure plan
- establishment of a cost plan and compliance of designs and documentation to maintain the project cost within that plan
- appointment of professional service contractors with appropriate responsibilities and delegations to ensure that the project is well managed in regard to achieving excellence in design and completion within budget and on time
- appointment of technical service contractors in the fields of civil and geosciences to ensure that the project is well managed in regard to achieving excellence in design and quality
- appointment of experienced and competent contractors in the fields of civil and landscape construction
- setting of satisfactory key milestones during the life of the project and enforcement of agreed liquidated damages to guarantee contractor performance
- regular construction site meetings to monitor progress and review strategies adopted to address variances
- identification of potential risks, including the development of a 'Top 20 high risks' and implementation of risk minimisation strategies
- progress regularly monitored against project program and development of a project management action lists used to track key project deliverables, and
- regular and established reporting to senior Defence SA executive management and Project Management team through all project phases.

4.6 Project Delivery (cont.)

Risk Management

The project has been subject to an ongoing risk analysis which indicated that the major project risks for the project were:

Site issues

Ensure the proposed site has been investigated for any existing services.

Dial Before You Dig investigations and a detailed existing service scoping, physical locating and surveying strategy implemented. Also the project scope has been amended to avoid sensitive high pressure gas pipelines on the eastern side of the site.

Environmental issues

Ensure the proposed site has been investigated for any potential environmental contamination taking into consideration its end use. These have been managed by Defence SA with the assistance of technical service contractors in the environmental discipline.

Geotechnical issues

Ensure the proposed site has been investigated for any potential groundwater interface issues. These have been managed by Defence SA with the assistance of technical service contractors in the geotechnical discipline. Targeted soil testing at known locations of proposed works located at or below the water table level allows an understanding of additional constructability issues which has informed the sufficiency of budget contingency allowances.

Budget constraints

Early identification of design cost savings and rigorous value management of the design and cost plan has occurred to contain construction estimates within a range acceptable to Defence SA.

Procurement

The major construction works in the project are being procured through lump sum contracts (AS2124-1992 form), with specific modifications to transfer some known risk items to the contractors.

Program

Delays in obtaining stakeholder endorsement of the design could delay construction and availability of serviced allotments. Defence SA has engaged a professional service contractor to obtain key service stakeholder approvals/endorsements in accordance with the final agreed design. Further, Defence SA has taken a direct role in coordinating support from direct landowners affected by the project including Viterro Grain, International Power, Australian Rail Track Corporation and the Department for Environment and Heritage.

4.7 The Efficiency and Progress of the Project and Justification of Any Expenditure Beyond Estimated Costs

The Committee will monitor the progress of the project as required by the Parliamentary Committees Act through the regular reports the proposing agency is required to provide prior to the completion of construction (refer to "Further Reporting to the Committee"). The Committee will provide a further statement to Parliament in the event that subsequent information provided renders this Report inaccurate or misleading.

PART FIVE: CONCLUSION & RECOMMENDATION

The Public Works Committee has examined written and oral evidence in relation to the proposal to the Osborne North Industrial Precinct. It has also been assured by Defence SA that acquittals have been received from the Departments of Treasury and Finance, Premier and Cabinet and the Crown Solicitor that the works and procedures are lawful. The Committee is satisfied that the proposal has been subject to the appropriate agency and community consultation and meets the criteria for examination of projects as set out in the Parliamentary Committees Act 1991.

Based upon the evidence considered, and pursuant to Section 12C of the Parliamentary Committees Act, 1991, the Public Works Committee reports to Parliament that it recommends the proposed public work.

***Tony Piccolo MP
PRESIDING MEMBER
Public Works Committee***

2010

PART SIX: ATTACHMENTS

6.1 List of Witnesses and Submissions

Witnesses

The following persons appeared before the Committee on Wednesday, 6 October 2010 at Old Parliament House, North Terrace, Adelaide:

Mr Andrew Fletcher, Chief Executive, Defence SA;
Mr Richard McLachlan, General Manager Development, Defence SA

Submissions

Defence SA, Osborne North Industrial Precinct, September 2010.

ATTACHMENT: 1

NORTHERN LEFEVRE PENINSULA



