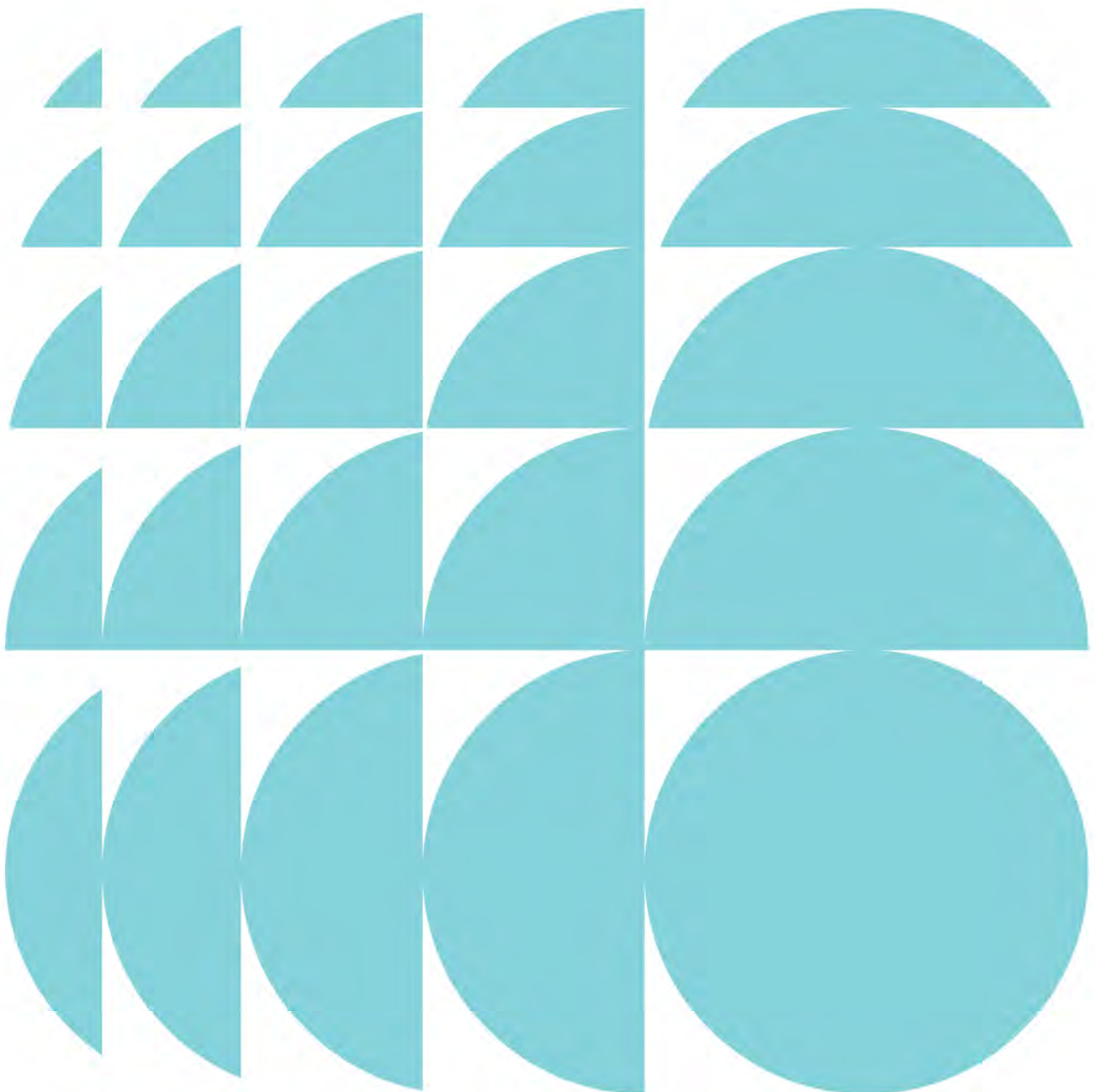


Cessnock Correctional Centre
Residential Accommodation and Associated Facility
Upgrades

On behalf of Corrective Services NSW, a Division of the
Department of Justice

28 August 2018 | 218624



FORMERLY KNOWN AS JBA

CONTACT

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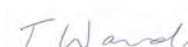
This document has been prepared by:



Chris McGillick

28 August 2018

This document has been reviewed by:



Tim Ward

28 August 2018

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Contents

Declaration

This Addendum Review of Environmental Factors (Addendum REF) has been prepared for Corrective Services NSW, a Division of the Department of Justice (NSW Justice) to assess the potential environmental impacts that could arise from the expansion works of the existing Cessnock Correctional Centre.

This Addendum REF has been prepared in accordance with the *Environmental Planning and Assessment Act 1979*, the *Environmental Planning and Assessment Regulation 2000*, *State Environment Planning Policy (Infrastructure) 2007*, and other applicable Commonwealth and State Legislation.

This Addendum REF has been prepared to capture works to the Cessnock Correctional Centre including amendment of the approved design of the minimum-security residential accommodation and undertake associated facility upgrades that will incorporate a new gatehouse, entry, linking zone, common facilities and amended parking. Based on the information presented in this Addendum REF and the mitigation measures indicated, it is unlikely that there will be any significant environmental impacts associated with the Activity.

Declaration by author

On the basis of the information presented in this REF it is concluded that:

- the proposed activity is not likely to have a significant impact on the environment and therefore an Environmental Impact Statement is not required.
- the proposed activity is not likely to significantly affect threatened species, populations, ecological communities, or critical habitat. Therefore, a Species Impact Statement (SIS) is not required.
- the proposed Activity is not likely to affect any Commonwealth land, is not being carried out on Commonwealth land, or significantly affect any Matters of National Environmental Significance.

Chris McGillick
Senior Urbanist
BPLAN (hons)



Verifier

I have examined this REF and the Declaration by the author Chris McGillick and accept the report on behalf of NSW Department of Justice.

Name *Fiona Gainsford*
Designation *Statutory Planning Approvals Advisor*
Organisation *Department of Justice - Justice Infrastructure & Assets*
Signature *[Handwritten Signature]* 28/8/18

Determination

I accept the report and determine that the activity may proceed with/without additional consent conditions.

Name *Andrew Cappie-Wood*
Designation *secretary*
Organisation *Department of Justice*
Signature *[Handwritten Signature]* 6/9/18

Contents

| | | |
|-----|----------------------------|---|
| 1.0 | Introduction | 4 |
| 2.0 | Site Analysis | 5 |
| 2.1 | Regional and Local Context | 5 |
| 2.2 | Site Description | 5 |

| | | |
|-----|--|----|
| 3.0 | Description of Activity | 10 |
| 3.1 | Demolition works | 11 |
| 3.2 | Gatehouse and Visits Building | 11 |
| 3.3 | Health and Reception Building | 12 |
| 3.4 | Amended Design of Approved Residential Accommodation | 12 |
| 3.5 | Program Building | 12 |
| 3.6 | Car Park | 12 |

| | | |
|------|--|----|
| 4.0 | Permissibility | 13 |
| 5.0 | Consultation | 13 |
| 6.0 | Environmental Impact Assessment | 13 |
| 6.1 | Flora and Fauna | 14 |
| 6.2 | Environmental Planning and Assessment Regulation 2000 Considerations | 15 |
| 6.3 | Noise and Vibration | 16 |
| 6.4 | Traffic and Transport | 17 |
| 6.5 | Stormwater and Water Quality | 17 |
| 6.6 | Geotechnical | 18 |
| 6.7 | Contamination | 19 |
| 6.8 | Services and Utilities | 19 |
| 6.9 | Cumulative Impact | 20 |
| 6.10 | Impact on the Community | 20 |

| | | |
|-----|---------------------|----|
| 7.0 | Mitigation Measures | 21 |
|-----|---------------------|----|

Figures

| | | |
|-----------|---|----|
| Figure 1 | Site Location Context Map | 5 |
| Figure 2 | Aerial photograph of the site | 6 |
| Figure 3 | South-east development site | 7 |
| Figure 4 | Existing medium security facility | 7 |
| Figure 5 | Security walls and surrounding road | 7 |
| Figure 6 | Industries Building | 8 |
| Figure 7 | Existing main road to western gatehouse and car park | 8 |
| Figure 8 | Oaks Gold Club east of the site | 9 |
| Figure 9 | View of the southern grounds and surrounding areas (background) | 9 |
| Figure 10 | Proposed General Arrangement | 10 |

Contents

Appendices

- A** Site Plan and Architectural Drawings
Guymer Bailey
- B** Civil Drawings
Northrop
- C** Stormwater Statement
Northrop
- D** Geotechnical Factual Report
Coffey
- E** Phase 2 Contamination Assessment
Qualtest
- F** Asbestos in Soils Management Plan
Qualtest
- G** Electrical, Hydraulic, Mechanical and Fire Services Statement
JHA
- H** Traffic Statement
NSW Justice

1.0 Introduction

A Review of Environmental Factors was prepared for NSW Department of Justice in October 2016 (JBA) for the expansion and associated facility upgrades of the Cessnock Correctional Centre (CCC), located within the broader Cessnock Correctional Complex. The REF was determined on 19 October 2016 under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and assessed the following activities:

- Site preparation, vegetation removal, bulk earthworks and the provision of utilities and services;
- Relocation and storage of on-site demountable modules;
- Construction of a new 400 bed Rapid Build Prison (RBP);
- Construction of expanded CCC facilities including:
 - Additional 320 maximum security beds;
 - Additional 280 minimum security beds;
 - Modification to existing facilities;
 - Administration and visitor processing building;
 - Staff and visitor parking and modified road layout;
 - Associated site infrastructure and support facilities upgrades/modifications
- Landscaping;
- Stormwater Management; and
- Demolition of buildings as required.

Since this time, Department of Corrective Services has undertaken further planning for CCC which has identified a need to amend the approved design of the minimum-security residential accommodation and undertake associated facility upgrades that will incorporate a relocated gatehouse, entry, linking zone, common facilities and parking. These further changes to the approved Activity are to be carried out by the Department of Correctional Services in line with the 'Better Prisons' program and require assessment under Part 5 of the EP&A Act.

This Addendum REF has been prepared to review any environmental impacts associated with the changes to the facilities in a different location within the Cessnock Correctional Centre and to identify the steps taken to protect or lessen the potential impacts on the environment, where necessary. The Addendum REF should be read in conjunction with the accompanying consultant's reports (see Table of Contents), and the previously approved REF dated October 2016.

2.0 Site Analysis

2.1 Regional and Local Context

Cessnock Correctional Complex (CCC) is located on the northern fringe of Cessnock, approximately 2km north-west from Cessnock town centre; approximately 115 km north-west of Sydney and 48km west of Newcastle. The site is located on the western side of Lindsay Street. The locality of the site is shown in **Figure 1**.

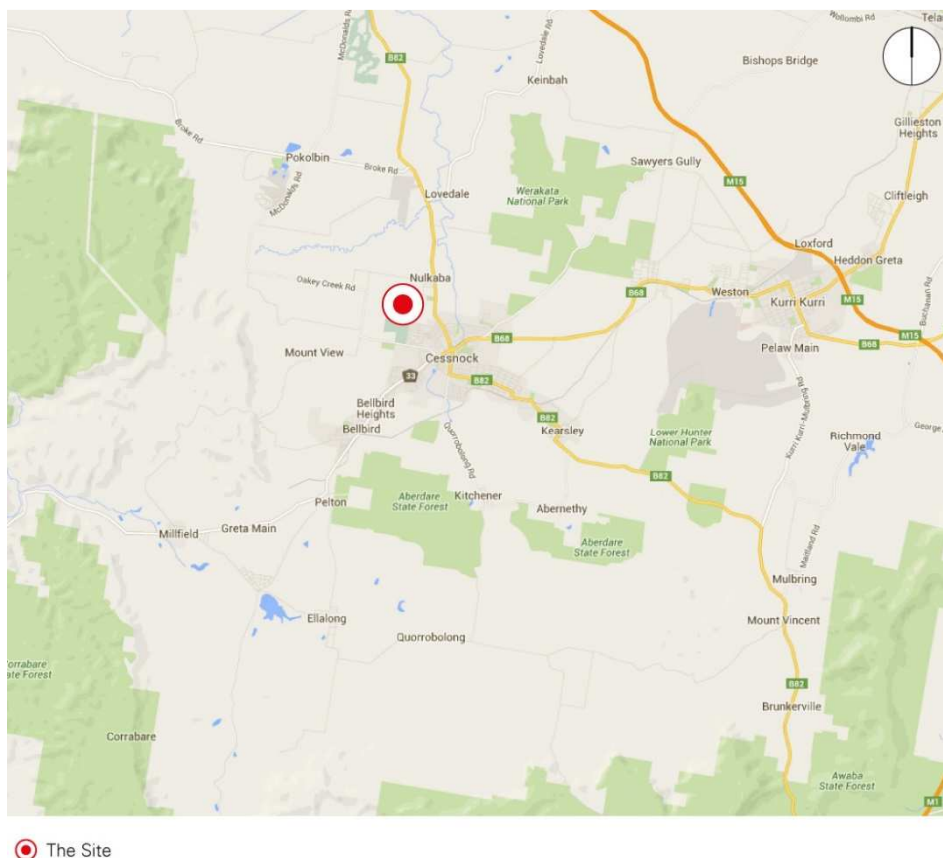


Figure 1 Site Location Context Map

Source: Googlemap

2.2 Site Description

The site is known as Cessnock Correctional Complex, Lindsay Street, Nulkaba. The site comprises a number of parcels of land as follows:

- Lot 1 DP1035135;
- Lots 2 and 3 DP76202;
- Lots 156 and 186 DP755252; and
- Lot 3 DP 226429.

The majority of structures within the site are located on Lot 3 DP76202. The site is owned by the Department of Corrective Services and covers an area of approximately 131.9ha. The site was proclaimed to be the Cessnock Correctional Complex on 2 October 2014 under Section 224(3) *the Crimes (Administration or Sentences) Act 1999* (**Appendix I**).

An aerial photo of the site is shown at **Figure 2**.



Figure 2 Aerial photograph of the site

Source: Nearmap and Ethos Urban

2.2.1 Existing Development

The site is currently occupied by a number of buildings associated with the operation of the CCC. The main complex is located across the north-eastern and central part of the site with buildings that range from one to three storeys in height with a number of buildings serving a range of functions. The centre generally comprises:

- several large secure fenced areas, containing a disparate collection of buildings ranging in size from one to three storeys, visits area, workshops, and playing fields;
- buildings adjacent to, but outside of, the secure fenced area, comprising various;
 - reception and administration buildings, sheds and workshops;
 - a series of other single storey buildings used for administration purposes;
 - areas used for the storage of demountable buildings in the north and west, which are refurbished by inmates.

The site is accessed from an extension of Lindsay Street in the south eastern and north-eastern corner of the site via an internal road that lines the eastern boundary. A secondary road traverses the site west to the maximum-security facility. There are several existing car parks, located adjacent to the security facility entries.

A large dam is located in the western half of the site, on a tributary of Oakey Creek. A shallow rocky drop-off is situated between the secure area and the dam, providing some distant views toward the west.

A second, much smaller dam is located to the immediate north of the hardstand area, to capture stormwater runoff.

Construction works have commenced at the centre of the site for the approved 320 Maximum Security bed facility.

Photographs of the site are shown at **Figure 3 - Figure 7**.



Figure 3 South-east development site



Figure 4 Existing medium security facility



Figure 5 Security walls and surrounding road



Figure 6 Industries Building



Figure 7 Existing main road to western gatehouse and car park

2.2.2 Surrounding Development

The site is located within a rural residential locality north-west of Cessnock. The site is surrounded on all sides by rural land to the north and west or by the Oaks Golf and Country Club to the east and south. Residential development extends further afield to the south and east, predominantly consisting of single level residential dwellings as shown in **Figure 9**.



Figure 8 Oaks Gold Club east of the site



Figure 9 View of the southern grounds and surrounding areas (background)

3.0 Description of Activity

This REF seeks to amend the approved scope of works to integrate the residential accommodation to the existing security facility and incorporate a relocated gatehouse, health and reception centre, programs building, linking facilities and car park. The proposed changes and additional activity are detailed in the Architectural Plans at **Appendix A**.

The arrangement proposed by the addendum is shown at the Site Plan at **Appendix A** and reproduced at **Figure 10**.

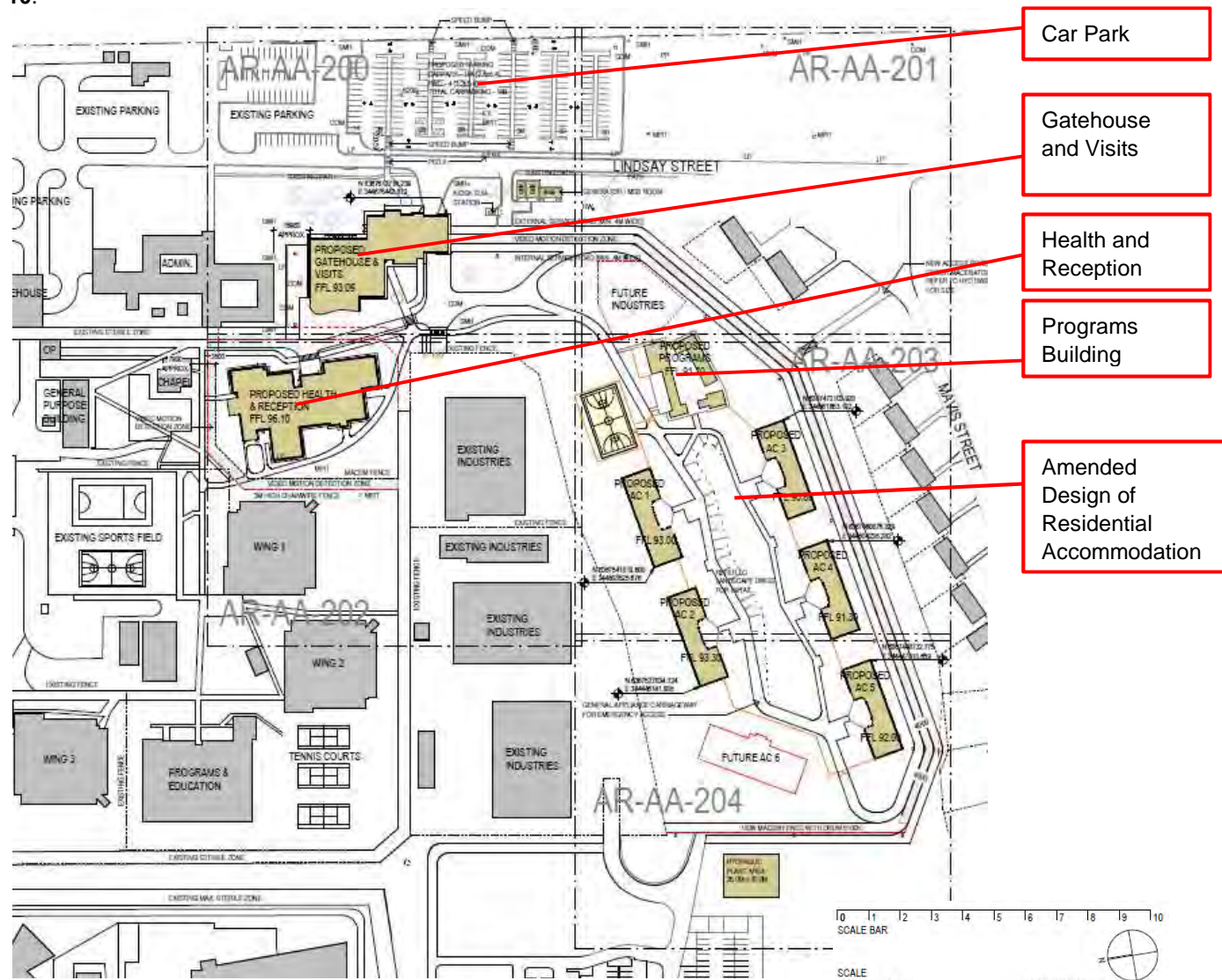


Figure 10 Proposed General Arrangement

Source: Guymer Bailey Architects

Table 1 Summary of Relocated Buildings

| | Original REF location | Addendum REF location |
|-------------------------------|--|--|
| Gatehouse and Visits Building | West of the residential accommodation area | Adjacent to Lindsay Street |
| Health and Reception Building | West of the residential accommodation area | Within the existing CCC facility |
| Programs Building | West of the residential accommodation area | East of the residential accommodation area |
| Car Park | West of the residential accommodation area | East of Lindsay Street |

3.1 Demolition works

To accommodate the proposed health and reception building, the existing visits building within the CCC will be demolished.

3.2 Temporary Visits Building

A temporary Visits Building and associated security fencing is proposed to be delivered as an interim measure until the permanent Visits building is operational, at which point the structure will be removed.

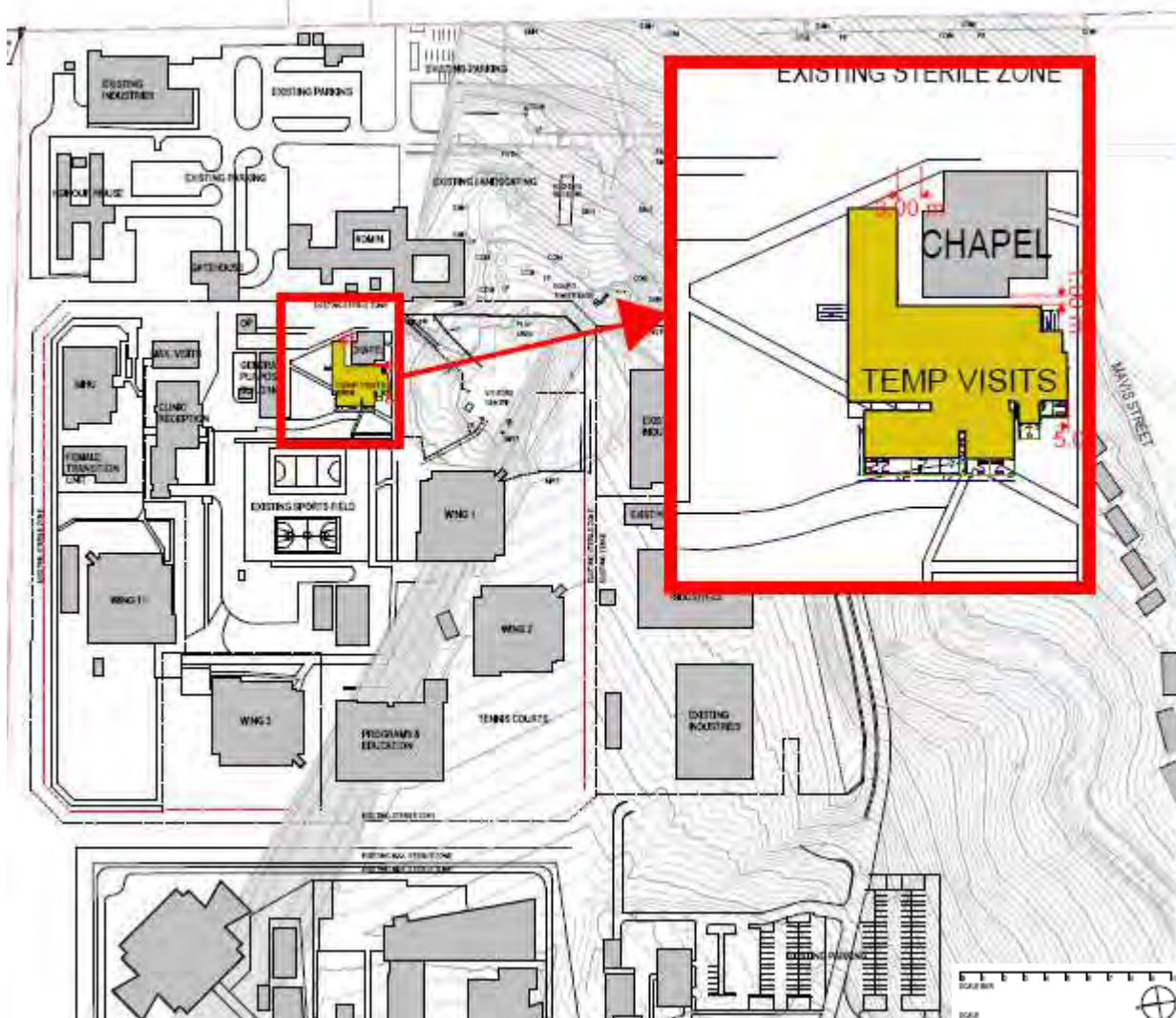


Figure 11 Location of Temporary Visits Structure

3.3 Gatehouse and Visits Building

A gatehouse is proposed to be constructed outside the existing centre to provide a fit for purpose secure perimeter. The proposed location will provide a central entry location for the reconfigures CCC given its proximity to the existing remand centre to the north, the existing industries zone immediately to the west and to the minimum security expansion site to the south (which was the subject of the October 2016 REF).

The new visits centre is integrated with the gatehouse to form one building. The visits centre provides a combination of indoor and outdoor tables, family rooms and non-contact visits configurations.

3.4 Health and Reception Building

The proposed new reception and health building combines inmate reception and processing functions with a health centre facility. The location of the new building facilitates centrality between the existing and new accommodation areas.

The reception centre provides facilities to service sentenced and un-sentenced inmates and conduct inmate arrival and departure from the centre. The design provides a secure vehicle lock, holding cells, search, interview and screening rooms.

3.5 Amended Design of Approved Residential Accommodation

The design of the residential accommodation has evolved with five proposed minimum-security residential units in the southern precinct. The units are positioned to provide individual amenity, light and space for each unit whilst all share an over-look to the central common recreational space. The central recreation common provides a level space whilst providing a circulating recreation pathway with fitness stations.

The accommodation units are divided into four units (or wings), over two (2) floors with a communal laundry and cleaner storage in the middle of each floor. The proposal is for 48 beds per unit. The bedrooms are arranged around a common day room. There are centrally located communal bathrooms and a communal kitchen for each wing.

3.6 Program Building

The Program building provides the following functions:

- Inmate Education and Vocational Training
- Case Management & Community Corrections Services
- 24 Hour Officer Post and Movement Control

3.7 Car Park

A car park is proposed to be relocated to the eastern side of Lindsay Street. The car park will service the relocated Gatehouse and will accommodate 182 vehicles for visitor parking.

4.0 Permissibility

Under Clause 26 of the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP), development may be carried out by or on behalf of a public authority without consent on land within a prescribed zone if the development is in connection with an existing 'Correctional Centre', and is for the following purposes:

- a) sporting facilities or additions to sporting facilities, if the development does not involve clearing of more than 2 hectares of native vegetation,
- b) demolition of buildings,
- c) replacement of accommodation, administration or other facilities in a correctional complex,
- d) alterations of, or additions to, a correctional complex,
- e) construction, maintenance or realignment of security fencing with a height of not more than 12 metres above ground level (existing).

For the purposes of the Infrastructure SEPP:

- The Activity is being undertaken by Corrective Services NSW, being a Division of the Department of Justice who are a public authority.
- The facilities at the site were gazetted as a Correctional Centre and Correctional Complex on 2 October 2014, pursuant to Section 225(3) and 225(4) of the *Crimes (Administration of Sentences) Act 1999*, and as such the proposed works comprise alterations or additions to an existing correctional complex in connection with an existing correctional centre.

It is also noted that the proposed works will be contained to land that is zoned SP2 Infrastructure (Correctional Centre) under Cessnock *Local Environmental Plan 2011* (the LEP), which is identified as a prescribed zone under Part 3 Division 2 of the Infrastructure SEPP. In light of this, the Activity can be undertaken as Development Permitted Without Consent meaning development consent under Part 4 of the EP&A Act is not required. An environmental assessment is still required under Part 5 of the EP&A Act, which has been conducted in this Addendum REF.

5.0 Consultation

The Activity does not:

- increase the population of inmates or staff from that approved by the October 2016 REF;
- impact stormwater management, sewage capacity or water supply system services owned by Council;
- generate additional traffic; or
- trigger assessment for land that is bushfire prone.

The addendum REF does not trigger consultation requirements under Division 1 of the Infrastructure SEPP. Accordingly, no additional consultation was undertaken.

6.0 Environmental Impact Assessment

This section considers only those the planning issues that are relevant to the amended Activity. It contains our assessment of the environmental impacts of the activity and identifies the steps to be taken to prevent or mitigate the potential impacts on the environment. **Table 2** identifies the matters considered by the original detail REF approved in October 2016 and those to address the addendum REF Activity.

Table 2 Matters Assessed and Proposed Addendum Issues

| Matter Assessed | Proposed Modification |
|---|---|
| Commonwealth Environment Protection and Biodiversity Conservation Act | No change. Addressed in original REF. |
| Environmental Planning and Assessment Act 1979 | No change. Addressed in original REF. |
| Cessnock Local Environmental Plan 2011 | See Section 4.0. |
| State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) | See Section 4.0. |
| State Environmental Planning Policy No 55— Remediation of Land | No change. |
| State Environmental Planning Policy No 44 – Koala Habitat Protection | No change. Addressed in original REF. |
| Rural Fires Act 1997 | No change. Addressed in original REF. |
| Threatened Species Conservation Act 1995 | No change. Addressed in original REF. |
| Heritage Act 1977 | No change. Addressed in original REF. |
| National Parks and Wildlife Act 1974 | No change. Addressed in original REF. |
| Roads Act 1993 | No change. Addressed in original REF. |
| Contaminated Land Management Act 1997 | No change. Addressed in original REF. |
| Protection of the Environment Operations Act | No change. Addressed in original REF. |
| Consultation | No consultation is required for the addendum REF Activity. See Section 5.0. |
| Environmental Planning and Assessment Regulation 2000 Considerations | See Section 6.2. |
| Traffic, Access and Parking | The addendum Activity does not change construction or operational traffic impacts. Addressed in the original REF. |
| Geotechnical | See Section 6.6 |
| Contamination | See Section 6.7 |
| Water Quality and Stormwater | See Section 6.5 |
| Services and Utilities | See Section 6.8 |
| Waste Management | No change. Addressed in original REF. |
| Noise and Vibration | Refer to Section 6.3. |
| Flora and Fauna | Refer to Section 6.1. |
| Air Quality | No change. Addressed in original REF. |
| Bushfire | Whilst part of the CCC are mapped as bushfire prone, the land assessed by this addendum REF is no longer mapped as Bushfire Prone Land. |
| Visual Assessment | No change. Addressed in original REF. |
| Heritage | No change. Addressed in original REF. |
| Natural Resource Use | No change. Addressed in original REF. |
| Environment Protection and Biodiversity Conservation | No change. Addressed in original REF. |
| Cumulative Environmental Impacts | See Section 6.9. |
| Impact on the Community | Refer to Section 6.10 |

6.1 Flora and Fauna

Travers Ecology has considered the area subject to the addendum REF as part of the original REF. (refer to Appendix K of the original REF). The addendum REF proposes to remove a small area of trees in the location of the relocated Gatehouse and linking facilities south of the Gatehouse.

Flora

The vegetation in this location is identified by Travers as Lower Hunter Spotted Gum Ironbark Forrest (Endangered Ecological Community (EEC)). As part of the original REF, to mitigate impacts on flora Travers recommended a vegetation management plan be prepared to assist in managing, protecting and enhancing the quality of habitats on-site. This includes 9.8ha of EEC revegetation works on-site and another 12.3ha of enrichment planting works within existing Spotted Gum plantations on-site to increase the area of the EEC on-site and enrich the quality of habitat within existing revegetation areas. Travers conclude that the removal of flora would not have a significant impact on the EEC.

The amount of vegetation required to be removed for the relocated facilities REF is minor and the existing assessment and mitigation measures are considered suitable for the addendum REF activity. Accordingly, no further assessment is required.

Fauna

The activity will remove Squirrel Glider (*Petaurus norfolcensis*) habitat connectivity in the location of the relocated Gatehouse and linking facilities south of the Gatehouse. These impacts will be offset by the planting of trees to enhance connectivity for Squirrel Glider (*Petaurus norfolcensis*). The original REF required a Vegetation Management Plan be prepared that to outline revegetation strategies.

The previous assessment by the original REF remains unchanged in relation to the impact of the addendum REF on fauna. To mitigate impacts of the addendum REF, the mitigation measures outlined by Travers remain applicable. Accordingly, no further assessment is required.

6.2 Environmental Planning and Assessment Regulation 2000 Considerations

Table 3 below provides a summary checklist of matters to be considered under clause 228 of the *Environmental Planning and Assessment Regulation 2000*.

Table 3 Summary checklist of matters to be considered

| Factor | Impact |
|--|---|
| any environmental impact on a community There are long-term benefits associated with the provision of rehabilitation facilities and associated infrastructure that support the operation of this important piece of social infrastructure. Potential impacts associated with construction traffic and noise are likely to occur temporarily. | -ve <input checked="" type="checkbox"/> Nil <input type="checkbox"/> +ve <input type="checkbox"/> |
| any transformation of a locality The proposal is not changing the locality - no change in land use - land will continue to operate as a Correctional Complex. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any environmental impact on the ecosystems of the locality The amended Activity can be appropriately managed, and will not result in any adverse environmental impact or result in displacing any flora and fauna, creating a barrier to their movement, or introducing noxious weeds, vermin or feral species. The amended Activity will not change the quantity or quality of stormwater being discharged from the site. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality There Activity will not reduce the aesthetic, recreational, scientific or other environmental quality or value of the locality. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations The development will not significantly increase or decrease the significance of the site. There are no known heritage items or cultural heritage sites. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act 1974</i>) The Activity will not impact on the habitat of any protected fauna. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air The Activity will not endanger any species of animal, plant or other living thing. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any long-term effects on the environment | -ve <input type="checkbox"/> |

| Factor | Impact |
|--|---|
| There will be no long term effects on the environment. | Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any degradation of the quality of the environment There will be some temporary degradation of the quality of the environment as a result of the construction works. | -ve <input checked="" type="checkbox"/> Nil <input type="checkbox"/> +ve <input type="checkbox"/> |
| any risk to the safety of the environment The proposed works will not result in any risk to safety of the environment as all works will be contained to the existing CCC site. Contamination waste is to be removed from the site. Appropriate site management will be installed during construction works to manage contaminated sediment. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any reduction in the range of beneficial uses of the environment The Activity will not alter the potential for the environment to be utilised. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any pollution of the environment Minor air, noise, and water quality impacts may be generated during the construction process. Mitigation measures are proposed to minimise pollution to the environment. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any environmental problems associated with the disposal of waste No environmental problems are anticipated with the disposal of waste from the proposed works. Should any hazardous materials be identified during works, appropriate measures will be undertaken to manage and dispose of these materials in accordance with legislative requirements and OH&S documents. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply The Activity will have no significant impacts on the terms of demand for scarce resources. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any cumulative environmental effect with other existing or likely future activities The proposed works are contained wholly within the existing CCC site. We are not aware of any works that may conflict with the proposal. Accordingly, there will not be any negative cumulative environmental effect. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |
| any impact on coastal processes and coastal hazards, including those under projected climate change conditions. The Activity will have no impact on coastal processes or coastal hazards, including those under projected climate change conditions. | -ve <input type="checkbox"/> Nil <input checked="" type="checkbox"/> +ve <input type="checkbox"/> |

6.3 Noise and Vibration

The original REF has addressed the noise and vibration impacts to the closest sensitive receiver being 150m from the CCC. The original REF also considered the impact to the Cessnock Retirement Village, 300m to the east.

The closest receiver to the relocated Gatehouse is approximately 295m to the east and is therefore consistent with the assessment undertaken by the original REF. Project specific construction and operation noise management levels recommended by the original REF remain applicable and are outlined below.

Table 4 Noise Management Levels for Residents (Construction)

| Receiver | Period | Noise Management Levels, dB(A) $L_{eq, 15min}$ |
|---|-------------------------------------|--|
| Residences to the southeast, north and retirement village to the east | Standard work hours | 52 |
| | Daytime (outside of standard hours) | 47 |
| | Evening | 40 |
| | Night time | 37 |

Table 5 Noise Criteria for Residents (Operation)

| Receiver | Period | Noise Management Levels, dB(A) $L_{eq, 15min}$ |
|---|---------------------|---|
| Residences to the southeast, north and retirement village to the east | Standard work hours | 47 |
| | Evening | 40 |
| | Night time | 37 |

The acoustic impact has therefore been assessed by the original REF and the addendum does not generate additional impacts that warrant further assessment. Refer to the Acoustic Assessment at Appendix J of the original REF.

6.4 Traffic and Transport

A relocated car park is proposed that has been relocated from the western side of the 240 bed accommodation area (under the original REF) and is required to service the new (relocated) Gatehouse off Lindsay Street. The car park will accommodate 182 visitor vehicles. There is no change in access to the relocated car park which will continue to be accessed from Lindsay Street.

The overall provision of car parking within CCC (801 car parking spaces) does not change as a result of the new car park and there is no increase to the population of inmates, staff or visitors as a result of the addendum REF.

Accordingly, there are no additional traffic or pedestrian movements to those addressed by the original REF.

6.5 Stormwater and Water Quality

A review of the stormwater design has been undertaken by Northrop (**Appendix C**). Stormwater from the accommodation area will drain from the site by an on-ground and pipe system that will discharge to an existing on-site detention basin (OSD) (constructed as part of the original REF) to the south of the residential accommodation. The basin has been designed to accommodate the volume of water generated by the addendum works and will restrict stormwater flows exiting the site.

The relocated car park will drain via an in-ground drainage network to an additional OSD basin that has been designed to restrict flow rates exiting the site. The location of OSD is shown at **Figure 11**.

Northrop confirm the inground drainage network is capable of conveying the 1 in 20 year (5% AEP) storm event, with the allowance for overland flow paths in storm events greater than the 1 in 20 year event.

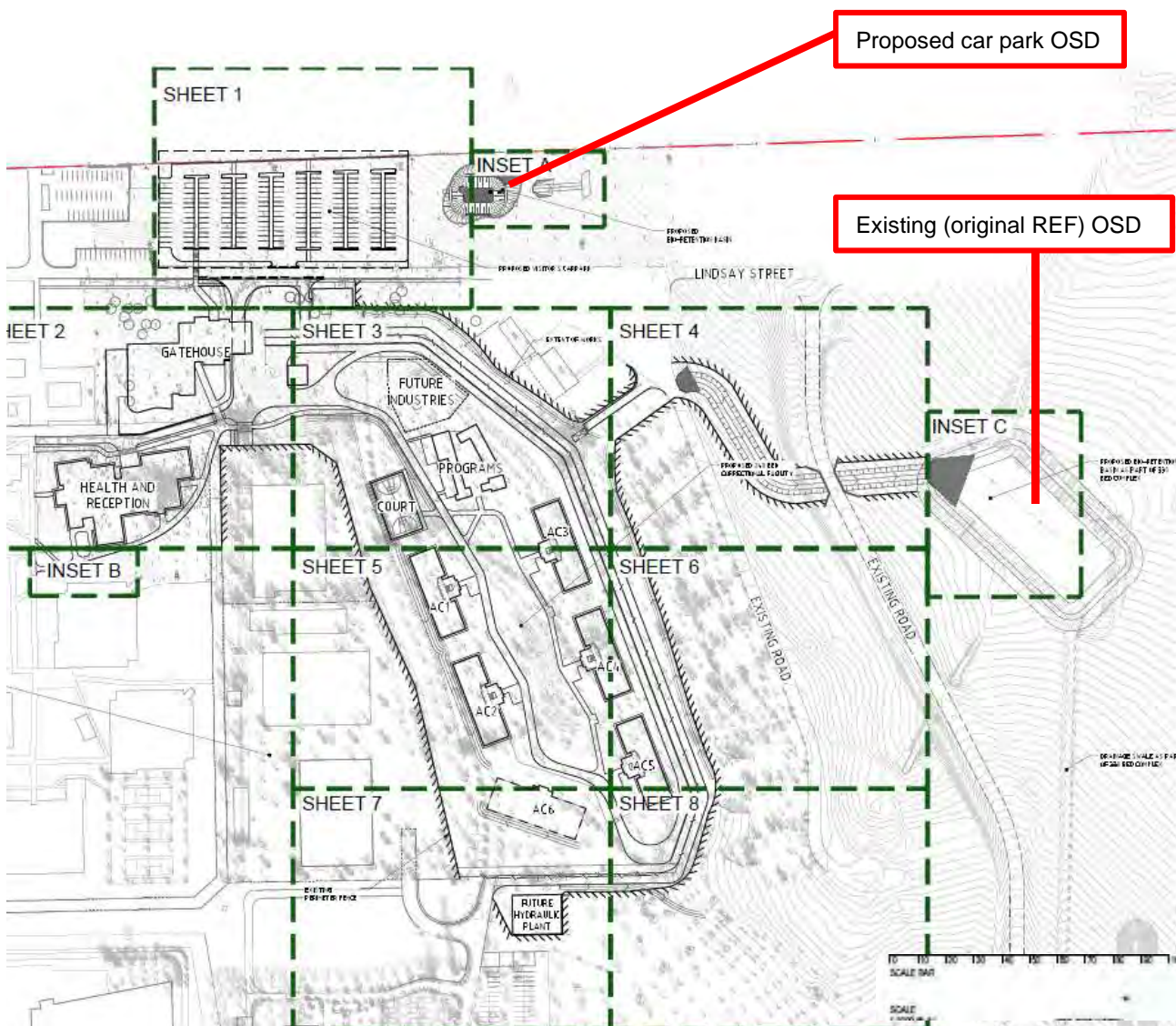


Figure 12 On-site detention basin plan

Source: Northrop

Water Sensitive Urban Design

Water Sensitive Urban Design measures have been incorporated into the stormwater design for the project, including:

- Internal drainage swales; and
- Bio-retention Filter media within each On-Site Detention basin.

6.6 Geotechnical

A Geotechnical Site Investigation has been carried out by Coffey Services Australia (**Appendix D**) to confirm the existing subgrade to assist the geotechnical design of the proposed buildings. Field observations including drilling of nineteen boreholes to a maximum depth of 3m were undertaken.

The majority of boreholes were refused by rock at 1.5m. Subsurface materials generally consist of a thin layer of silty top soil, overlying very stiff medium plasticity residual clay, overlying weathered rock. Deep clayey fill was encountered at some locations. The observations provide a reliable understanding of the subsurface conditions for the suitability for the construction of relocated buildings proposed by the addendum.

6.7 Contamination

A Phase 2 Contaminated Land Report has been prepared by Qualtest (**Appendix E**). Qualtest undertook soil sampling in 60 locations across the site, including test pits, to assess subsurface conditions. The samples were analysed for:

- Asbestos (ID) (fragment of Potential ACM) and Asbestos (w/w)
- Total Recoverable Hydrocarbons (TRH)
- Benzene, Toluene, Ethylbenzene and Xylene (BTEX)
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Heavy metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc)
- Organochlorine Pesticides (OCP)
- OPPs, PCBs and Herbicides
- pH and Cation Exchange Capacity (CEC)

Laboratory analysis showed concentrations of contaminants below the adopted guidelines for residential land use with access to soil. Asbestos was detected in two locations, SS2 (approximate location of the relocated Gatehouse) and SS41 (approximate location of the relocated health and reception building), showing fibrous asbestos and bonded ACM. In both locations, the concentration of asbestos was below the adopted guideline.

Qualtest confirm that based on the results of the assessment the site is suitable for the proposed development subject to mitigation measures outlined below.

Waste Classification

Topsoil and fill material have been preliminary classified as General Solid Waste (nonputrescible). Due to the presence of asbestos, topsoil and fill material around sample locations SS2 and SS41 are classified as General Solid Waste (managed as Asbestos Waste).

Any contaminated topsoil will be removed and classified (in accordance with EPA guidelines), and disposed of at a licensed facility.

The residual soils and weathered rock classify as VENM, in accordance with the NSW EPA (2014) Waste Classification Guidelines. It is noted that if any topsoil or fill material is mixed with the residual soil and weathered rock, then the VENM classification would no longer apply.

Mitigation Measures

Due to the presence of asbestos in soil, the following mitigation measures are required:

- An Asbestos in Soil Management Plan (ASMP) is to be prepared for use during earthworks and/or when construction or maintenance workers could be in contact with asbestos impacted soil. The ASMP is to cover health & safety requirements to protect construction workers, site users and visitors, provide procedures on the placement of the impacted soil, and provide an unexpected finds procedure;
- An asbestos clearance of the top 10cm of soil in the area where the asbestos impacted soils are removed from; and,
- Asbestos removed is to be placed beneath a structure or road pavement, and a survey of the placement location for possible future works.

Qualtest have prepared an Asbestos in Soils Management Plan which is provided at **Appendix F**.

6.8 Services and Utilities

The details of the proposed works for electrical services, hydraulic services, mechanical services and fire services are discussed in detail by JHA at **Appendix G**.

These services must be installed or augmented or approved in accordance with the relevant service provider and the mitigation measures at Section 7.0.

6.9 Cumulative Impact

There are no significant projects occurring in the Cessnock area that would present a cumulative impact to the local community during the construction period.

6.10 Impact on the Community

To ensure the demolition of the existing Visits building does not disrupt the ability for visitors to meet inmates, a temporary visits facility will be provided on-site, adjacent to the chapel, within the existing facility (see below).

7.0 Mitigation Measures

This section specifies mitigation measures relevant to the Activity that are to be implemented in order to protect or lessen potential impacts on the environment. It provides a list of the mitigation measures that are in addition to the original REF, noting that only those measures that are subject to change as a result of this REF have been discussed.

This REF has been prepared in accordance with the following plans and supporting information:

| Report / Description | Plan Number | Plan Date/ Revision | Prepared By |
|---|---|---------------------|---------------|
| Cessnock Correctional Centre Expansion plan series | Accommodation, Gatehouse, Programs Building, Health Reception Buildings | - | Guymer Bailey |
| Civil General Arrangement | CV-AA-54.01 | 1 | Northrop |
| Stormwater Statement | S180594 | 21 August 2018 | Northrop |
| Phase 2 Contamination Assessment | NEW18P-0117-AA | 2 July 2018 | Qualtest |
| Geotechnical Investigation for Cessnock Correctional Centre | 754-NTLGE218006-AB- | Rev.1 | Coffey |
| Asbestos in Soils Management Plan | NEW18P-0117-AB | 13 July 2018 | Qualtest |

A summary of mitigation measures approved under this addendum REF is provided below.

| Issue | Mitigation Measure |
|------------------------|--|
| Detailed Design | Detailed design of the proposal is to be consistent with the recommendations of the supporting specialist documentations appended to the REF. Where there is any inconsistency, additional environmental assessment may be required. |
| Geotechnical | Should topsoil and fill material require disposal off-site, confirmation of waste classification will be required and appropriate disposal at a licenced landfill or beneficial reuse in accordance with NSW EPA Waste Classification guidelines or appropriate EPA Resource Recovery Orders. |
| Contamination | Prior to undertaking asbestos management work a RAP is to be prepared and authorised by a site auditor by issue of a site auditors' statement. |
| | An Asbestos in Soil Management Plan (ASMP) is to be prepared for use during earthworks and/or when construction or maintenance workers could be in contact with asbestos impacted soil. The ASMP is to cover health & safety requirements to protect construction workers, site users and visitors, provide procedures on the placement of the impacted soil, and provide an unexpected finds procedure. The ASMP needs to be consistent with the RAP. |
| | Subject to the RAP, an asbestos clearance of the top 10cm of soil in the area where the asbestos impacted soils are removed from; and, |
| | Subject to the RAP, asbestos removed is to be placed beneath a structure or road pavement, and a survey of the placement location for possible future works. |
| Services and Utilities | Services will be approved, installed or augmented in accordance with the requirements of relevant service providers. |