

# Lochinvar South Precinct

## Statement of Environmental Effects

213 Station Lane Lochinvar

FEBRUARY 2022

---

**213 Station Lane Lochinvar****STATEMENT OF ENVIRONMENTAL EFFECTS**

PROPOSED STAGED RESIDENTIAL SUBDIVISION

Lot 1308 DP1141533

## Document Status

| Version | Description | Author                  | Issue Date    |
|---------|-------------|-------------------------|---------------|
| V1      | Lodged      | Perception Planning P/L | April 2021    |
| V2      | Revised     | Deb Gordon              | February 2022 |

Copyright © HV Planning Pty Ltd

## TABLE OF CONTENTS

---

|        |   |    |
|--------|---|----|
| 1.0    | INTRODUCTION .....                                  | 1  |
| 2.0    | THE SITE.....                                       | 2  |
| 3.0    | PROPOSED DEVELOPMENT.....                           | 4  |
| 4.0    | STATUTORY PLANNING CONTROLS.....                    | 5  |
| 4.1.   | Environmental Planning and Assessment Act 1979..... | 5  |
| 4.2.   | State Environmental Planning Policies.....          | 5  |
| 4.2.1. | SEPP 55 – Remediation of Land .....                 | 5  |
| 4.2.2. | SEPP Infrastructure 2007 (ISEPP).....               | 5  |
| 4.3.   | Maitland LEP 2011.....                              | 6  |
| 4.4.   | Maitland Development Control Plan 2011 .....        | 9  |
| 5.0    | ASSESSMENT OF PLANNING ISSUES.....                  | 11 |
| 5.1.   | Subdivision Design and Layout .....                 | 11 |
| 5.2.   | Bushfire .....                                      | 11 |
| 5.3.   | Ecology .....                                       | 11 |
| 5.4.   | Heritage.....                                       | 12 |
| 5.4.1. | Aboriginal Archaeology .....                        | 12 |
| 5.4.2. | European Heritage .....                             | 12 |
| 5.5.   | Flooding and Stormwater .....                       | 12 |
| 5.5.1. | Flooding.....                                       | 12 |
| 5.5.2. | Stormwater and Drainage.....                        | 12 |
| 5.6.   | Preliminary site investigation .....                | 13 |
| 5.7.   | Earthworks .....                                    | 13 |
| 5.8.   | Traffic and Access.....                             | 13 |
| 5.9.   | Noise & Vibration .....                             | 14 |
| 5.10.  | Landscaping.....                                    | 15 |
| 5.11.  | Services and Infrastructure.....                    | 15 |
| 5.12.  | Safety and Security.....                            | 16 |
| 5.13.  | Site suitability .....                              | 16 |
| 6.0    | CONCLUSION .....                                    | 17 |
| 7.0    | APPENDICES.....                                     | 18 |

Appendix A – Development Plans

Appendix B – Preliminary Site Investigation Assessment

Appendix C – Bushfire Assessment

Appendix D – Cultural Heritage

Appendix E – Traffic Impact Assessment

Appendix F – Stormwater Management

Appendix G – Acoustic Assessment

Appendix H – Ecological Assessment

Appendix I – Services and Infrastructure

Appendix J – Earthworks/Preliminary Engineering Design

## 1.0 INTRODUCTION

---

This Statement of Environmental Effects has been prepared in support of a Development Application to Maitland City Council for the proposed subdivision of land identified as Lot 1308 DP1141533 No. 213 Station Lane Lochinvar.

The land is located within the Lochinvar Urban Release Area on the southern edge of the precinct on Station Lane. Access is obtained directly from Station Lane.

The proposed staged subdivision aims to provide for 164 lots, a local park and a drainage reserve. The development is proposed to be undertaken in 7 stages.

The construction of roads, earthworks, landscaping, drainage works and installation of utility services are all included as part of this development proposal.

This development will integrate with the redevelopment of the surrounding area and provide additional housing opportunities in the locality.

The subdivision is consistent with Maitland LEP 2011 and the Lochinvar Chapter of the Maitland DCP and supports the orderly development of the Lochinvar Urban Release Area. The application is supported with the supplementary specialist reports contained in the appendices and notated on the plans where necessary.

Maitland City Council is the consent authority for the Development Application. Satisfactory Arrangements with the State Government is progressing and Certification will be provided to Council prior to the issue of the development consent as required.

## 2.0 THE SITE

The site is located at the southern extent of Station Lane in Lochinvar.

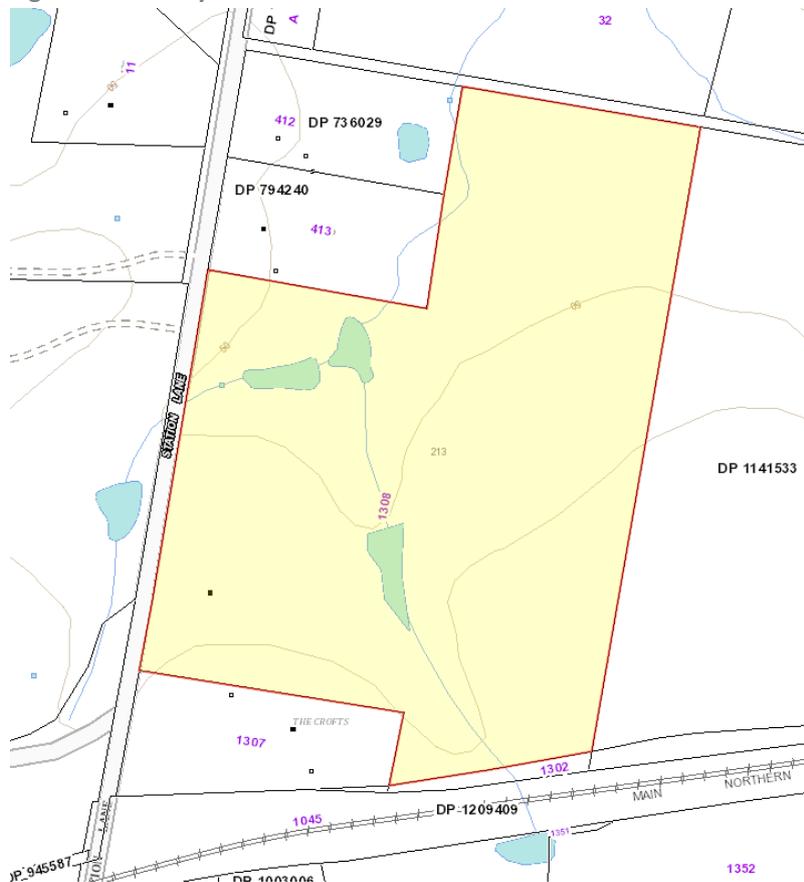
The land is identified as Lot 1308 DP1141533 No. 213 Station Lane Lochinvar. The site has an area of approximately 20.7 hectares.

The general location of the site is identified in Figure 1 – Locality Plan and in Figure 2 – Aerial Photograph.

An existing dwelling and associated sheds are located in the front of the site fronting Station Lane. The land is primarily cleared grassland with scattered trees and has been used for grazing. Landscaping is associated with the existing dwelling. The vegetation in the north east of the site is to be retained.

A local drainage line runs generally north into farm dams within the central part of the site.

Figure 1 – Locality Plan



(Source: NSW Six Maps 2022)

Figure 2 – Aerial Photograph



(Source: Six Maps 2022)

### 3.0 PROPOSED DEVELOPMENT

---

The proposed development is described as follows:

1. Staged subdivision comprising 164 lots, a local park and a drainage reserve;
2. Demolition of existing structures, clearing of part of the land, site regrading and earthworks;
3. Staging of the subdivision into 7 stages;
4. Provision of both internal and external lead-in infrastructure and services including roads, stormwater drainage, water and sewer reticulation, electricity supply and telecommunications (nbn).

The plan of subdivision including proposed staging is provided in **Appendix A**.

Stage 1 proposes a 3 lot subdivision to excise the existing dwelling, an environmental lot, and create a residue superlot for resubdivision. There are no works proposed in conjunction with Stage 1 of the subdivision.

The existing dwelling and associated infrastructure will be located on proposed Lot 1002. Lot 1001 comprises all of the environmental zoned land and will be attached to a residential parcel. Lot 1000 will comprise the residue land including necessary easements for access and services until the land is progressively developed and released in line with the proposed staging plan.

Access to the site is to be provided directly from Station Lane. Minor road widening will be undertaken along the Station Lane frontage to accommodate the development. The internal road network has been designed as local roads in accordance with Council's requirements.

The stormwater basin will be provided in Stage 2 and will be designed to accommodate the entire development. It is intended to be created as a drainage reserve and dedicated to Council.

External lead-in infrastructure and services will be required to be delivered to the site as an extension from the new residential developments to the north in the developing Lochinvar URA. The development will be serviced internally with reticulated water and sewer, electricity supply, nbn/telecommunications, and waste collection services.

Lots on average are to range in size dependent upon topography and constraints, from approximately 500m<sup>2</sup> through to >1000m<sup>2</sup>.

Clearing of the land where necessary, earthworks, road construction and associated drainage, installation of utility services and infrastructure, implementation of sedimentation and erosion control measures and landscaping is included as part of this development application.

Works will also include the widening of Station Lane along the frontage of the site, and the construction of lead-in services including water, sewer, electrical and nbn.

A Subdivision Works Application for each stage of development will be lodged for approval prior to the commencement of construction works.

## 4.0 STATUTORY PLANNING CONTROLS

---

The following legislation, Environmental Planning Instruments (EPIs), regional strategies and local controls are relevant to the proposed development:

### 4.1. ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The proposed development is classified as integrated development under the provisions of Section 4.46 of the Environmental Planning and Assessment Act 1979, as it requires the following approvals:

- Bush Fire Safety Permit under Section 100B of the Rural Fires Act 1997; and
- Controlled Activity Approval under Section 91 of the Water Management Act 2000.

These matters are further discussed within Section 5 – Assessment of Planning Issues.

### 4.2. STATE ENVIRONMENTAL PLANNING POLICIES

The following State Environmental Planning Policies (SEPPs) apply to the proposal:

#### 4.2.1. SEPP 55 – Remediation of Land

Clause 7 of SEPP 55 requires a consent authority to consider whether land is contaminated based on the knowledge of previous land uses on the site, and whether the land is suitable, or can be made suitable, for the purposes of its intended future land use.

A preliminary site investigation (PSI) assessment was undertaken for this subject land and the adjoining parcel identified as Lot 1307 to determine any potential contaminants on site (Cardno, April 2021). A copy of the report is provided in **Appendix B**.

Based on the review of the site history and inspections, no past or current potentially gross contaminating activities were identified as having been undertaken on or adjacent to the site.

No further investigations were determined to be necessary for this site. Stockpiles identified within the report are located within the adjoining land on Lot 1307.

It was recommended that an unexpected finds protocol should be developed as part of the construction management documentation for contractors during the construction phase to address any potential contamination if encountered. This would also identify protocols for the demolition of structures and removal of waste.

The PSI determined that the site is suitable for residential purposes with respect to contamination.

#### 4.2.2. SEPP Infrastructure 2007 (ISEPP)

The development is not identified as traffic generating development and does not require referral to Transport for NSW under the provisions of SEPP Infrastructure 2007.

Part of the land adjoins the Main North Rail Line (MNRL) in the south east. Subdivision 2 of the Infrastructure SEPP applies which relates to development in or adjacent to rail corridors and interim rail corridors.

Clause 85 of ISEPP relates to development adjacent to rail corridors. The rail corridor is not used by electric trains, and the development does not involve the use of a crane in air space above any rail corridor. The development is not likely to have an adverse impact on rail safety or operation of the railway corridor and does not require consultation with the rail authority under this provision.

Clause 86 relates to excavation in, above, below or adjacent to rail corridors. The proposed subdivision proposes filling in part on land in proximity to the rail corridor. No excavation works to a depth of at least 2m below ground level are proposed along this boundary and as such this clause does not apply.

Clause 87 relates to the potential impact of rail noise or vibration on non-rail development and applies to residential development. The clause requires that the design of future accommodation requires appropriate measures to be taken to ensure that the noise levels are not exceeded inside dwellings. This matter is further addressed in Section 5.

Development for the purposes of providing underground power (cl 45), stormwater management (cl 111), telecommunications (cl 114) and a sewerage reticulation system (cl 106) are also to be undertaken on site, on behalf of the relevant public authorities, and in accordance with the provisions of the ISEPP.

### 4.3. MAITLAND LEP 2011

#### *Part 2 – Permitted Development*

##### Clause 2.1 and 2.2 – Land use Zones

The land is zoned R1 General Residential under the provisions of Council's LEP 2011.

The objectives of the relevant zones are as follows:

##### Zone R1 General Residential

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

##### Zone C3 Environmental Management (previously described as E3)

- *To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.*
- *To provide for a limited range of development that does not have an adverse effect on those values.*
- *To maintain and improve the connectivity of habitat between remnant areas of native vegetation.*

The subdivision layout is designed to allow the development of residential lots within the residentially zoned land, consistent with Council's principles for the development of the Lochinvar URA.

The land zoned for environmental management is to be retained as a separate parcel and attached to a residential allotment to enable ongoing ownership and private management.

The lots are adequately sized and located to provide for a variety of housing types and densities, and reflect the constraints and opportunities of the site. The proposed subdivision will provide additional housing opportunities for both the local community and the wider region.

Supporting services and infrastructure will be provided throughout the URA as development of Lochinvar evolves. A local commercial precinct is planned within close proximity to the site. Higher order services are available within the Rutherford shopping area, the Maitland CBD and the regional Stocklands GreenHills shopping centre.

The proposed subdivision is consistent with and satisfies the objectives of the relevant zone.

**Clause 2.6 – Subdivision – consent requirements**

Clause 2.6 of the Maitland LEP 2011 provides that land to which this Plan applies may be subdivided with consent.

**Clause 2.7 – Demolition requires development consent**

Approval is sought for the demolitions of shed structures around the existing dwelling located on Lot 1308.

**Part 4 – Principal Development Standards****Clause 4.1 – Minimum Subdivision Lot Size**

This clause permits a minimum subdivision lot size of 450m<sup>2</sup> for the R1 General Residential zoned land. As identified on the subdivision layout, each residential lot proposed to be created satisfies this minimum lot size.

There are no maximum floor space ratios or building heights relating to the Farley URA.

**Clause 4.2C – Minimum subdivision lot sizes for certain split zones**

The land is subject to a split zoning, part R1 Residential and part E3 Environmental Management.

As detailed on the subdivision layout, Lot 1002 intends to comprise all of the land zoned E3 attached to a residential parcel with a minimum lot size of 450m<sup>2</sup> in accordance with this requirement.

**Part 5 – Miscellaneous Provisions****Clause 5.9 – Preservation of trees or vegetation**

Removal of vegetation on site requires the consent of the Council.

This application seeks approval for the removal of the trees within the subdivision footprint to undertake construction work and future housing. Trees located within the boundaries of proposed Lot 1001 comprising the existing dwelling will be retained. The native vegetation within the environmental zoned land in Lot 1002 will also be retained unless separate approval is otherwise sought.

**Clause 5.10 – Heritage conservation**

There are no listed items of heritage significance or heritage conservation areas identified in Schedule 5 of the Maitland LEP 2011 located upon the subject site.

The Main Northern Railway runs in close proximity to the site along the southern boundary. The adjoining property and a vacant wedge of land identified as Lots 1307 and 1302 DP1141533 separate the railway from the subject site.

The railway corridor is identified as Heritage Item I119 being a Government railway and having local significance.

No development other than earthworks and drainage is proposed in close proximity to the railway. Future development on the land will require consent and be required to be located such to ameliorate any noise impacts. The subdivision of the land is not considered to significantly impact upon the heritage significance of the railway.

Subclause 2(f)(ii) also requires development consent for the subdivision of land on which an Aboriginal object is located. An artefact scatter has been identified on the site. Following development consent a permit will be sought from OEH prior to any works occurring within the vicinity of this object. This matter is further discussed in Section 5.4.

**Clause 5.21 – Flood Planning**

The subject land is not identified as being within the influence of the 1% flood event.

**Part 6 – Urban release areas**

Part 6 of the Maitland LEP 2011 refers to Urban Release Areas. The site of the proposed subdivision is located within the Lochinvar Urban Release Area. The following clauses relate to provisions for Urban Release Areas:

**Clause 6.1 – Arrangements for designated State public infrastructure**

This clause requires satisfactory arrangements to be made for the provision of designated State public infrastructure before the granting of consent for the subdivision of land in an Urban Release Area.

Application has been made and arrangements are being sought to enter into a VPA for the payment of a State Infrastructure Contribution (SIC) for the development. A Satisfactory Arrangements Certificate will be obtained prior to the release of the consent for the subdivision of the land.

**Clause 6.2 – Public utility infrastructure**

Arrangements will be made to make public utility infrastructure available to the site. Reticulated water, sewer and electricity supply services will be provided to each stage of the residential subdivision, as development progresses.

**Clause 6.3 – Development Control Plan**

The Lochinvar Urban Release Area Chapter of the Maitland Development Control Plan 2011 applies to the land. The DCP requirements are addressed within Section 4.

**Part 7 – Additional local provisions****Clause 7.1 – Acid Sulfate Soils**

The subject land is identified on Council's Acid Sulfate Soil (ASS) Map as being located on Class 5 land, which generally introduces requirements for land that is below 5 metres. The subject site is located at around 50m AHD.

Excavation works will be required for the provision of infrastructure (roads, drainage works and utilities) and earthworks to provide for reasonable building sites. The disturbance of any potential Acid Sulfate Soils is not likely as a result of the proposed development.

**Clause 7.2 – Earthworks**

Earthworks are required to be undertaken to facilitate the residential subdivision for which development consent is being sought. Preliminary engineering plans have been prepared identifying potential bulk earthworks required on site. A Subdivision Works Certificate will be sought following Development Consent outlining the earthworks in conjunction with the civil works for each stage.

**Clause 7.4 – Riparian Land and Watercourses**

No watercourses are identified on the land by Council's watercourse land mapping (Maitland LEP 2011, Watercourse Map - Sheet WCL\_002).

Two drainage lines and a series of farm dams are located through the central part of the site draining water to the north. They are identified as a first order stream under the Strahler mapping system. A drainage basin is proposed in this location. This matter is further addressed in Section 5.5 – Stormwater and Drainage.

#### 4.4. MAITLAND DEVELOPMENT CONTROL PLAN 2011

The provisions of the DCP have been taken into consideration in the design of the proposed subdivision.

Table 1 provides a description of compliance with Maitland Development Control Plan 2011, Part F - Lochinvar Urban Release Area. The proposed subdivision is generally consistent with the provisions of the DCP and the overall concept development plan.

**Table 1 – Summary of Compliance with Maitland Development Control Plan 2011**

| Part F – Lochinvar URA                  |   |          |
|---|---|----------|
| Development Requirements                | Comment   | Complies |
| a) Staging and Essential Infrastructure | <p>The site is located within Stage 2 of the URA Staging Plan. The Staging Plan was developed in response to the servicing strategies.</p> <p>Stage 1 is well under construction in the central and western parts of this precinct. Development applications have been lodged and are under consideration by Council for the remaining large holdings in the east of this precinct.</p> <p>Services have been augmented to service the developing URA and this land in Stage 2 south of the New England Highway can now be serviced.</p> <p>The proposed subdivision is consistent with the concept plan, staging, and the design principles of the DCP. The site is zoned R1 but identified in the DCP as a potential medium density site due to the proximity to the railway corridor. The subdivision has been designed for standard residential housing however the opportunity exists on larger lots for a higher density to be achieved in conjunction with noise attenuation works.</p> <p>The residential subdivision is to be staged to provide a logical sequence of developing the site and the delivery of infrastructure and services.</p> | YES      |
| b) Transport Hierarchy Movement         | <p>The subdivision is consistent with the road hierarchy in the DCP. Station Lane is identified as a Primary Distributor Road (15m pavement). Road widening is proposed along the frontage of the site to accommodate this future road design.</p> <p>The internal road network is designed for local traffic and pedestrians only and will be capable of supporting a school bus route.</p> <p>Access to the land to the north and east is to be provided via the existing Crown Road off Station Lane as identified on the DCP Road Hierarchy Plan (Figure 60). No internal access is provided due to the location of the drainage corridor and environmental land.</p> <p>Development contributions will be paid towards the broader road upgrade works within the Lochinvar URA as required.</p>  | YES      |

|  |                    |   |     |
|--|--------------------|---|-----|
| c) Overall Strategy                                | Landscaping        | Street trees will be provided along the internal street network having regard to Council's standards and the principles of CPTED and bushfire risk. A Landscaping Plan will be provided to Council with the Subdivision Works applications for each stage.  | YES |
| d) Passive and Recreational Areas                  | Active             | <p>A local park is proposed to be provided, located in the southern part of the site, and within a walkable catchment directly accessible to all residents as identified by the Lochinvar Contributions Plan (L9).</p> <p>The local park provides a linkage to the off road trail (L35) along the southern boundary of the site towards the eastern property.</p> <p>A monetary offset (WIK) will be sought towards the delivery of both of these facilities under the provisions of Council's Contributions Plan.</p> <p>This development will also benefit from other local parks and the neighbourhood sporting facilities to be provided within the URA.</p>  | YES |
| e) Stormwater Quality Controls                     | & Water Management | A stormwater management plan has been designed over the entire site. A basin is to be provided in the north western part of the site to cater for the residential development.  | YES |
| f) Amelioration of Natural & Environmental hazards |                    | <p>The land is identified as bushfire prone land but will be predominantly cleared of vegetation during construction works. A Bushfire Threat Assessment has been prepared, and APZs and relevant BALs will apply to any dwellings adjoining areas posing a potential bushfire risk.</p> <p>The land adjoins the railway line along the southern boundary. An acoustic assessment has been prepared.</p> <p>The land is not affected by flooding.</p> <p>An ecological assessment has been prepared in accordance with the relevant legislation.</p> <p>The subdivision is not directly visible from any public vantage points and will not have a significant impact on the visual amenity of the locality.</p> <p>An Aboriginal Due Diligence Assessment has been prepared and is discussed within Section 5.</p> | YES |
| g) Key Development Sites                           |                    | The land does not form part of a key development site identified within the DCP.  | N/A |
| h) Neighbourhood, Commercial & Retail Uses         |                    | The development does not propose the inclusion of any neighbourhood commercial or retail uses upon the land.  | N/A |
| i) Provision of Public Facilities & Services       |                    | <p>Contributions will be provided towards the provision of new, and the augmentation of existing, public facilities and services in the URA and within the broader region.</p> <p>A Works-in-Kind agreement will be sought for the provision of a local public park and off-road trail provided within the development site.</p>  | YES |

## 5.0 ASSESSMENT OF PLANNING ISSUES

---

Section 4.15 of the Environmental Planning and Assessment Act 1979 describes matters for consideration in the assessment of a development application. The following assessment considers the environmental impacts of the proposal on the natural and built environments and the social and economic impacts in the locality, as are relevant to the proposal.

### 5.1. SUBDIVISION DESIGN AND LAYOUT

The subdivision plans are provided in **Appendix A**.

The proposal seeks approval for the staged residential subdivision of 164 lots. The subdivision has been designed to ensure that allotments are capable of supporting future residential development, and all lots meet Council's minimum lot size requirements.

The allotments are generally orientated on a north-south or east-west alignment which will provide for good solar access and optimises the design of energy smart homes.

Internal pedestrian/cycleway links will be provided to this estate. An off-road trail is also identified along the southern boundary of the property extending to the east in accordance with the requirements of the DCP and Lochinvar Contributions Plan. External connections with the pedestrian and cycle network will be provided for access to the broader services and facilities located within the URA.

A local park is to be provided in the southern part of the site, positioned within a 400m walkable distance of all lots within the estate. It is located within proximity to the Lochinvar Station and at the start of the off-road trail in this site. A Works-in-Kind agreement will be sought for the provision of both of these facilities as an offset against the payment of monetary contributions for the estate.

Infrastructure including stormwater management, telecommunications, and a sewerage reticulation system is to be provided to each lot within the subdivision.

### 5.2. BUSHFIRE

The land is identified as Bushfire Prone Land by Maitland City Council. A Bushfire Threat Assessment Report is provided in **Appendix C**. The proposed subdivision is consistent with the requirements of the Planning for Bushfire Protection guidelines prepared by the NSW Rural Fire Service (RFS).

The land will continue to be maintained to ensure an acceptable level of bushfire protection during the staged construction of the estate.

### 5.3. ECOLOGY

A Biodiversity Development Assessment Report (BDAR) has been prepared for the site by Firebird ecoSultants Pty Ltd. A copy of the report is provided in **Appendix H**. The site has been modified over time due to past agricultural practices. The area proposed to be cleared and developed is characterised by areas of cleared and grazed pasture grass with scattered vegetation. This footprint will generally remain the same regardless of any changes to the subdivision layout.

A BAM credit assessment has been prepared and biodiversity payments will apply to offset the impacts of the clearing under the relevant legislation prior to any clearing works commencing.

## 5.4. HERITAGE

### 5.4.1. Aboriginal Archaeology

An Archaeological Due Diligence Assessment was prepared by RPS Pty Ltd to determine the likelihood of past Aboriginal occupation and the potential presence of Aboriginal objects. A copy of the report is provided in **Appendix D**.

The Due Diligence report identified a single artefact scatter (three Aboriginal objects) within the site. No Potential Archaeological Deposits (PADs) were identified on this land. The report identified that there is low potential for any sub-surface artefacts to be present on site. As such test excavations (undertaken with an ACHAR) were not identified as being required prior to any consent being issued.

The due diligence report and the identification of artefacts based on history and surface assessment has been conducted in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW 2010).

An ACHAR and an AHIP is required to enable community collection of these artefacts (and in the case of any accidental harm of other objects during construction). The Aboriginal Heritage Impact Permit will be sought following development consent to collect these objects from site prior to any work commencing in that location, but does not prevent development within the remaining parts of the site from occurring in the interim if necessary. A copy of the ACHAR and AHIP will be provided to Council along with a record of the site deregistration once it has been salvaged (ASIR).

Future construction works will be undertaken in accordance with the National Parks and Wildlife Regulations 2009 and the Code of Practice in respect to Aboriginal objects should any items be discovered during works.

### 5.4.2. European Heritage

Non-Aboriginal Heritage is regulated through the NSW Heritage Act 1977 and Local Environmental Plans (LEPs) within local Councils.

There are no listed items of heritage significance or any heritage conservation areas identified in Schedule 5 of the Maitland LEP 2011 located upon the subject site. As discussed in Section 4.3, the Main Northern Railway runs in close proximity to the site along the southern boundary and is identified as Heritage Item I119 being a Government railway and having local significance. The subdivision of the land is not considered to significantly impact upon the heritage significance of the railway and no further heritage assessment is warranted.

## 5.5. FLOODING AND STORMWATER

### 5.5.1. Flooding

The land is not identified as being affected by the 1% flood event.

### 5.5.2. Stormwater and Drainage

A Stormwater Management Strategy has been prepared for the site by Fisher Consulting Engineers Pty Ltd. A copy of the Strategy is provided in **Appendix F**.

A stormwater basin is to be constructed in the north eastern part of the site to cater for the entire residential development of the land. The basin is to be constructed in Stage 2, noting that Stage 1 is a superlot subdivision to excise the existing dwelling and environmental lands. The basin is proposed to be dedicated to Council as drainage reserve. Local stormwater management will involve the collection of stormwater by a pit and pipe drainage network. Drainage easements will be created where necessary to manage stormwater on site.

## 5.6. PRELIMINARY SITE INVESTIGATION

Cardno Pty Ltd prepared Preliminary Site Investigation Assessment for the development of the subject site Lot 1308 and the adjoining parcel identified as Lot 1307. A copy of the report is provided in **Appendix B**. The report remains relevant for both parcels of land. The application however only relates to the subdivision of Lot 1308.

The land contains an existing dwelling and associated sheds, and has otherwise historically been generally cleared and used for grazing. The likelihood of potential contamination is considered in Section 4.2.1. No gross contamination was identified on site that would preclude the development of the land.

The land is not located within a Mine Subsidence District.

The site was considered to be generally suitable for residential development with respect to contamination, slope and stability. A geotechnical report will be provided as required during the construction phase for the basin and civil works.

## 5.7. EARTHWORKS

Bulk earthworks are proposed as part of the subdivision works and for construction of the stormwater basin and drainage works. Preliminary engineering plans have been submitted addressing this matter and provided in **Appendix J**.

Detailed regrading plans addressing filling, retaining walls and Erosion and Sediment Control (ESCP) will be submitted to Council with the Subdivision Works Application for each stage of construction.

## 5.8. TRAFFIC AND ACCESS

A Traffic Impact Assessment for the development has been prepared by Intersect Traffic Pty Ltd to demonstrate that the local road network can accommodate the development, and is provided in **Appendix E**.

Direct access to the subdivision is to be obtained via Station Lane. Two new access points will be constructed to provide a circular road network throughout the estate and provide for a school bus route. All other roads within the estate are designed as local roads. The internal roadwork proposed by this subdivision is consistent with Council's standards and the design principles of the DCP.

Road widening will be provided along the frontage of the site to accommodate the future upgrade works to Station Lane to provide for the ultimate Primary Distributor road design with a 15m pavement design. Based on traffic modelling the TIA identifies that the proposed external road connection intersections on Station Lane for the subdivision can be constructed as normal basic right turn and basic left turn (BAR/BAL) urban intersections.

Station Lane north of the site will be incrementally widened and upgraded by each respective developer as the redevelopment of the URA progresses. Currently applications are under consideration by Council for development within 450m of this site which will require road upgrade works in this location.

Station Lane is currently designed and operating as a local road with a 6m pavement and accommodating two way traffic. It is capable of supporting the increased traffic movements generated by the staged development of this land until such times as the road network upgrades are completed.

The road network within the broader URA will progressively be developed and provide linkages through the estates to the new intersection locations on the New England Highway (NEH). The upgrade of the intersection at Station Lane and the NEH is currently under construction which will cater for the release of all approved lots within the central catchment of the Stage 1 precinct. This allows for a left-in left-out of Station Lane and a right turn movement into Station Lane.

The western intersection at St Helena/Terriere Drive (western TCS) will provide a future signalised intersection for access off the highway to the residential estates from the west. The signalised intersection in the eastern part of the URA (eastern TCS) has been constructed and every effort is being made by adjoining developers to construct the internal connections to enable it operational. Development Applications are under consideration by Council for land in this eastern precinct.

Further to discussions with TfNSW and Council, their concerns are acknowledged that the capacity of the current intersection at Station Lane and the NEH will be reached due to existing development approvals within Lochinvar Downs. No additional development can utilise this intersection until an alternative access to the NEH is available, which is expected to occur via the eastern TCS. In this regard, a condition of consent would be accepted restricting the release of lots within Stage 2 of this subdivision proposal onwards prior to an alternative access to the highway being available, or access via Springfield Drive to the eastern TCS intersection (at McCloy's Hereford Park).

It should be noted that Stage 1 of the subdivision relates to a superlot subdivision and can be released without any restriction. It should also be acknowledged that the construction of the subdivision and release of any Subdivision Works Certificates should be permitted without restriction. Monetary contributions will be made towards broader roadworks in accordance with the requirements of the Contributions Plan.

## 5.9. NOISE & VIBRATION

The Main North Rail Line (MNRL) is located in close proximity to the site along the southern boundary. An advisory acoustic contour of 60dB(A) was included in the Lochinvar DCP to trigger the requirement for an acoustic assessment.

An Acoustic Assessment was undertaken over the subject site (Lot 1308) and the adjoining property (Lot 1307) by RAPT Consulting to identify potential impacts and mitigating measures associated with development located in proximity to the Main Northern Railway Line. The report is provided in **Appendix G**.

The boundary of the modelled noise constraint contour is identified within the report and overlaid on the proposed subdivision plan (see Constraint Plan).

The proposed subdivision has been designed where possible to locate residential lots outside of the area of noise affectation. However Lots 606 and Lots 701-704 will require mitigation measures to manage noise impacts. The development of these lots will be subject to future design and approval.

Noise attenuation measures can be implemented into the design of buildings or provided externally within the lot boundaries in order to maintain acceptable noise levels in accordance with the Australian Standards. Details of a noise attenuation barrier or alternative options for acoustic treatments will be provided for the affected lots with the relevant Subdivision Works application for the respective stages. A relevant restriction will be included on the title of these lots reflecting this constraint.

Residential development is permitted in this location and the Lochinvar URA DCP Chapter acknowledges that noise attenuation measures are to be implemented in the layout and design of development on the impacted sites in proximity to the railway line.

Residential development located further from the rail line than this contour does not require any specific noise control or acoustic treatment.

The assessment also considered the impact of vibration on the site and future residential development. All measurements taken over the course of the monitoring period were safely within adopted guideline values, and vibration as a result of trains passing the site is not expected to impact upon the development.

## 5.10. LANDSCAPING

Landscaping Plans will be prepared for each stage of the subdivision in conjunction with the Subdivision Works application to provide for street planting along the internal roads within the subdivision and having regard to bushfire regulations and the management and maintenance of the drainage reserve. Detailed Landscape Plans will also be provided with the civil design to address the landscape treatment of the stormwater basin.

Vegetation will be maintained along the riparian corridors where possible in conjunction with the stormwater strategy designs and the requirements of NRAR.

Native vegetation will be retained within the environmentally zoned land located in the NE of the site.

## 5.11. SERVICES AND INFRASTRUCTURE

A servicing strategy was initially prepared for the entire URA during Council's investigation phase which identified the likely sequencing for the provision of services to the URA and determined the staging precincts. Significant works have since been undertaken to deliver and augment lead-in service infrastructure to the URA.

Hunter Water's Growth Plan identifies the strategic direction for service delivery and funding and identifies the subject site as being readily serviced in the immediate 0-5 year period. HWC has issued their Formal Notice of Requirements for the development of this site and confirmed that the land can be serviced with the augmentation and extension of services. Hunter Water Corporation is the relevant consent authority for these works. A copy of the notice and the HWC Growth Plan for the locality is provided in **Appendix I**.

In relation to Council's DCP, the subject land is located within Stage 2 of the Lochinvar URA. The development of Stage 1 in the central and western precinct of the URA is well under construction. The remaining land holdings to the east in Stage 1 are the subject of development applications under consideration by Council. Designs and approvals for the Stage 2 precinct are now critical given the lead-times to deliver land. The development and release of this subdivision is consistent with the staging and sequencing of service delivery in this catchment of the URA.

Trunk sewer and water upgrades have already been undertaken within Lochinvar in conjunction with the servicing delivery for other development fronts within the URA.

Sewer is currently being constructed through the adjoining land to the north of the site being developed in conjunction with Lochinvar Downs Pty Ltd and is designed to extend south to service this parcel. Trunk sewer upgrade works will also be undertaken in Station Lane to service the remaining central catchment as identified on the Sewer Servicing concept plan provided in **Appendix I**.

Water main extension works will be designed and constructed along Station Lane to the site and internally in accordance with the expanded water servicing strategy currently being developed for the locality.

Electricity is currently provided to the site via overhead power lines along Station Lane. Connections will be provided to this OHP network to service the estate. All internal connections will be located underground and services undergrounded along the site frontage in conjunction with roadworks before connecting back to the OHP network. This network will be incrementally upgraded and undergrounded as required with future development to the north and west. An internal electrical concept plan is also provided in **Appendix I**.

Prior to the release of the subdivision for each stage, electrical, NBN, water and sewer connections will be provided to all residential allotments within the subdivision, in accordance with requirements of the relevant public authorities.

## 5.12. SAFETY AND SECURITY

The proposed subdivision has been designed with regards to the design principles of Crime Prevention Through Environmental Design (CPTED) to maximise safety and security.

The road and pedestrian network provides a clearly defined path of travel with clear sightlines between public and private places. Appropriate lighting of the public streets will be provided and will comply with relevant Australian Standards.

The subdivision design provides opportunities for future housing to provide for natural surveillance of the drainage reserve, local park and public spaces. Street tree planting will be provided along the road reserves for amenity and to provide an identity to the estate. Planting around the basin will be designed to minimise the opportunities for concealment.

The noise attenuation measures to be provided along the southern boundary of the site adjacent to the rail corridor will need to consider the safety of users of the off-road trail.

## 5.13. SITE SUITABILITY

The NSW State Government has supported the direction of urban expansion in this locality. The site is suitable for the proposed development for the following reasons:

- The proposal is permissible with consent within the R1 General Residential zone under the provisions of Maitland LEP 2011;
- The subdivision proposal has been designed in accordance with the principles of the Maitland LEP 2011 and the Lochinvar URA Chapter of Maitland DCP 2011;
- The development will provide a range of housing opportunities for the community, in an identified Urban Release Area with access to schools, shops, and sporting and community facilities.
- The proposed subdivision has been located and designed so as to minimise and manage the environmental effects on the environment;
- The site can be adequately serviced;
- The subject land is not located within a proclaimed Mine Subsidence District and is not subject to any building restrictions imposed by the Mine Subsidence Board;
- The subject land can be developed with mitigation measures as necessary in relation to rail noise and vibration as a result of the proximity of the Great Northern Railway;
- The site investigations have determined that the land is suitable for its intended purpose for development; and
- The subdivision will contribute towards meeting the housing demands of the Lower Hunter which in turn will contribute towards economic growth within the Maitland LGA.

It is determined that the site is suitable for the residential subdivision as proposed.

## 6.0 CONCLUSION

---

This Statement of Environmental Effects has been prepared to support the development application for the subdivision of land to facilitate residential housing within the Lochinvar Urban Release Area.

The proposal involves the staged subdivision of residentially zoned land into 164 residential lots, a local park and a drainage reserve.

The development is consistent with Council's Lochinvar URA Chapter of the Maitland Development Control Plan.

Satisfactory arrangements certification will be provided prior to the release of any development consent towards the provision of State public infrastructure in accordance with the relevant statutory requirements.

The proposed residential allotments are designed to accommodate residential housing and are capable of being serviced by sewer and water, and stormwater, electricity and telecommunications infrastructure.

The subdivision provides a range of lot sizes to accommodate different housing types in order to conform to the NSW State Government policies and Council's strategic planning for the Maitland LGA.

The constraints of the site have been managed and the proposal is considered suitable for the site and represents an efficient use of land.

It is considered to be in the public interest and will provide additional housing stock and new infrastructure and will contribute towards the provision of community facilities and public recreation areas to benefit the local community.

The environmental effects of the development have been considered in accordance with Section 4.15 of the Environmental Planning and Assessment Act 1979. The proposal is not considered to have a significant impact upon the built or natural environments, or the social or economic fabric of the locality.

It is recommended that the subdivision be supported by Council.

## 7.0 APPENDICES

---

