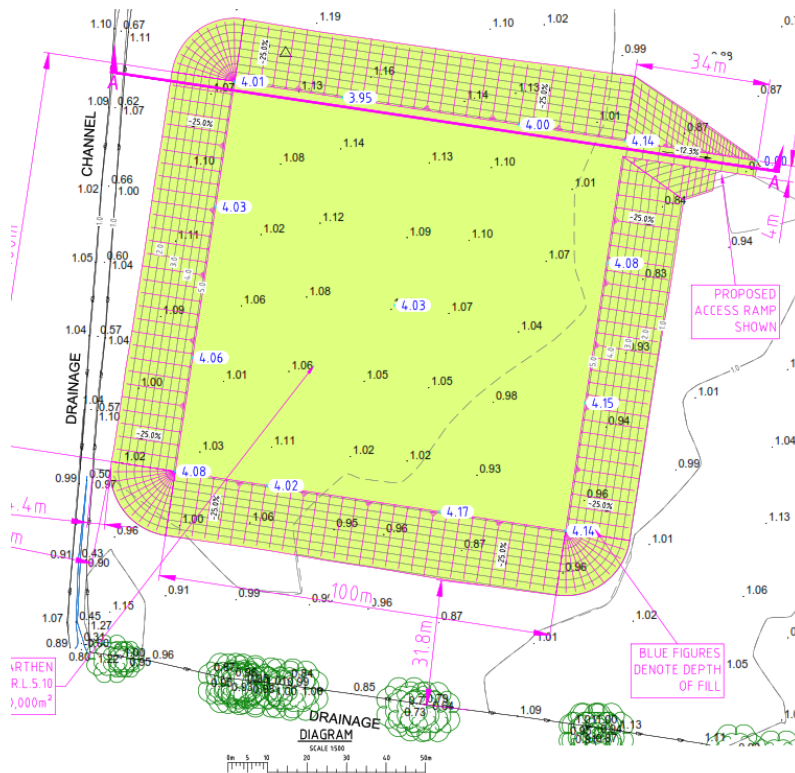




LE MOTTEE GROUP

SURVEYING | CIVIL ENGINEERING | TOWN PLANNING | PROJECT MANAGEMENT
STRATA CERTIFICATION | ECOLOGY | BUSHFIRE ASSESSMENT

Pty Limited ABN 38 136 535 156



PROPOSED MOUND

STATEMENT OF ENVIRONMENTAL EFFECTS

LOT 4 DP 262053

181 WOODBERRY ROAD, MILLERS FOREST

OUR REF: 9231

This report was prepared by Liam Davis from Le Mottee Group Pty Ltd (LMG).

LMG Ref: 9231

Date: 27 March 2024

Prepared by:

Le Mottee Group Pty Ltd

Liam Davis

Town Planner

Bachelor of Environmental Science and Management

Reviewed by:

Le Mottee Group Pty Ltd

Nicole Gerrard

Planning Manager

Master of Environmental Law

Table of Contents

1.	Introduction	1
1.1	Background	1
1.2	Context	1
1.3	Overview	1
1.4	Scope and Structure of the Report	2
1.5	Supporting Documents	2
2.	Site Description	3
2.1	Locality	3
2.2	Subject Land	3
2.3	Existing Development	4
2.4	Surrounding Development	4
3.	Proposed Development	5
3.1	Aim of the Proposed Development	5
3.2	Development Details	5
4.	Planning Provisions.....	8
4.1	Environmental Planning and Assessment Act 1979	8
4.2	Water Management Act 2000	9
4.3	State Environmental Planning Policy (Resilience and Hazards) 2021	10
4.3.1	Clause 2.10 Development on land within the coastal environmental area.....	10
4.4	Maitland Local Environmental Plan, 2011	12
4.4.1	Existing Zoning	12
	Clause 7.1 – Acid Sulfate Soils	13
4.4.2	Clause 7.2 Earthworks.....	13
	Clause 5.21 Flood planning	16
4.5	Maitland Development Control Plan, 2011	18
4.5.1	Part B – Environmental Guidelines	18
4.6	Other planning considerations	21

4.6.1	Bushfire.....	21
4.6.2	Biodiversity.....	21
4.6.3	Traffic	22
4.6.4	Stock	22
5.	Conclusion.....	24

1. INTRODUCTION

1.1 BACKGROUND

Le Mottee Group (LMG) has been engaged by Mick Mulligan to write a Statement of Environmental Effects (SoEE) to accompany a Development Application (DA) to Maitland City Council for a proposed mound at 181 Woodberry Road, Millers Forest.

This SoEE provides details about the site and proposed development as well as assessing the proposed development pursuant to the relevant matters under Section 4.15 of the *Environmental Planning and Assessment Act, 1979*.

1.2 CONTEXT

The Hunter Valley catchment undergoes regular inundation, resulting in a significant risk to life and property for landowners residing in close proximity to major rivers.

The availability of access to flood-free ground during a flood event is extremely important, particularly within the context of more frequent rainfall events associated with increased flood hazard. Given the instance of above-average rainfall occurring for northern and eastern Australia, it is considered vital that landowners put in place measures to protect their life and property.

This current proposal is for the erection an earthen mound, which will act as a flood refuge for livestock and a storage place for essential belongings such as agricultural equipment and machinery.

1.3 OVERVIEW

The aim of the proposed development is to undertake earthworks on **Lot 4 DP 742165**, establishing a mound to be utilised as a refuge for livestock during and after a flood event, and to store hay bales and hay shed, agricultural machinery, and a cattle crush. Additionally, the site owner intends to erect a second dwelling upon the mound, subject to a future application.

This report considers the proposed development against the controls of the Maitland Council Local Environmental Plan (LEP) and Development Control Plan (DCP). Under the MLEP the site has a mixed zoning of RU1

Primary Production and C2 Environmental Conservation, and the proposed development is permitted with consent.

1.4 SCOPE AND STRUCTURE OF THE REPORT

The remainder of the report is structured as follows:

- **Section 2** – Site Description
- **Section 3** – Proposed Development
- **Section 4** – Planning Provisions
- **Section 5** – Conclusion

1.5 SUPPORTING DOCUMENTS

The following documents are provided as Attachments to this report:

- **Annexure A** – Engineering Mound Design Plan,
- **Annexure B** – Flood Impact and Cumulative Assessment Report; and,
- **Annexure C** – AHIMS Search (200m).

2. SITE DESCRIPTION

The following section identifies the subject land, existing development on site and the surrounding development.

2.1 LOCALITY

The subject land is located in Millers Forest, within the Maitland Council LGA.

Millers Forest is situated approximately 3 km west of Raymond Terrace and 15 km southeast of Maitland. The approximate location of Millers Forest and the subject site is shown below in **Figure 1**.



Figure 1: Map of the subject land and site (Source: SIX Maps)

2.2 SUBJECT LAND

The subject land is located at 124 Woodberry Road Millers Forest. The land is formally identified as **Lot 4 DP 742165**. For the purpose of this report **Lot 4** shall be referred to as 'the site'.

The site has an area of approximately 53.37 ha with access from Woodberry Road.

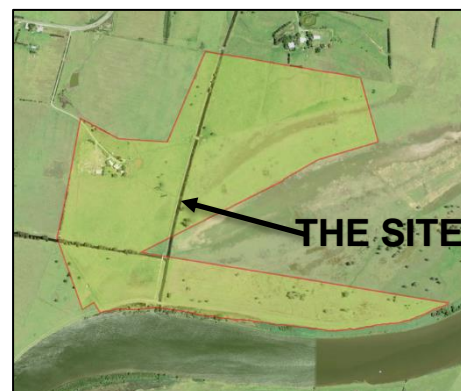


Figure 2: Map of the site (Source: SIX Maps)

2.3 EXISTING DEVELOPMENT

The site supports a single dwelling, ancillary structures associated with the agricultural use of the land and a partial mound. All existing structures are to be retained.

2.4 SURROUNDING DEVELOPMENT

The immediate area is predominantly rural in nature.

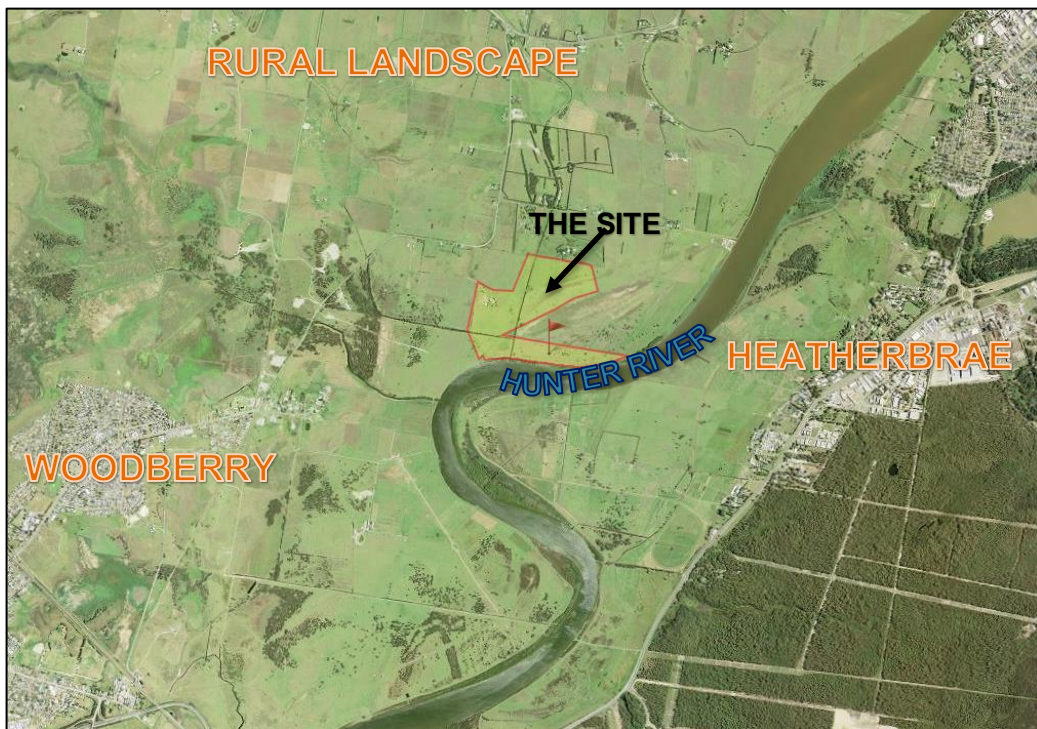


Figure 3: Map outlining the land use in the immediate area (Source: SIX Maps)

The site is bound in all directions by land primarily used for agricultural purposes with the Hunter River flowing towards the south. Therefore, there will be no land use conflict.

3. PROPOSED DEVELOPMENT

3.1 AIM OF THE PROPOSED DEVELOPMENT

The aim of the proposed development is to erect a mound upon the site to be utilised as a refuge for livestock during and after a flood event in a stockyard.

Beyond livestock refuge, the proposed mound will also be used to support water tanks/troughs, cattle yards, cattle crush, storage of machinery and a shed to store agricultural machinery and hay.

3.2 DEVELOPMENT DETAILS

As previously stated, the proposal subject to this report is to create an area above the flood planning level to be utilised by livestock as a flood refuge, and for the storage of agricultural machinery, equipment, feed, and hay bales. The proposed earthworks will increase the useable area of the site to support livestock and store equipment during a flood event.

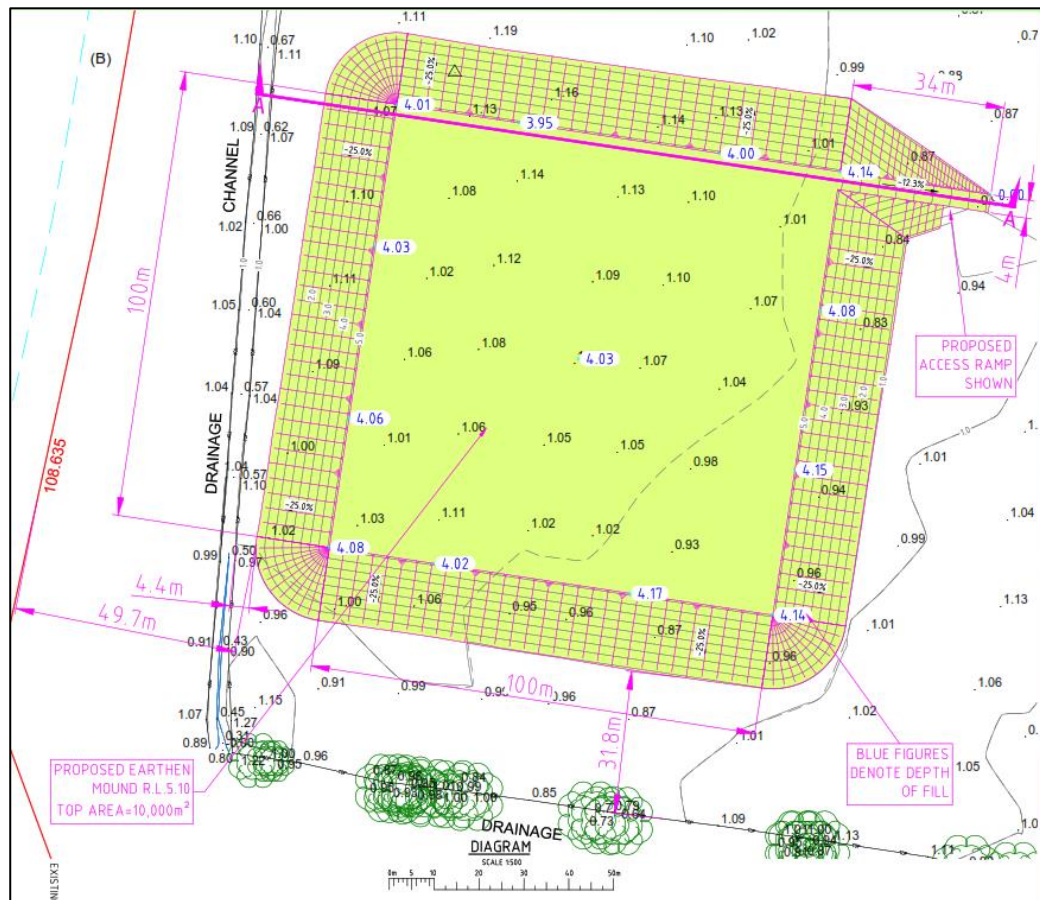


Figure 4: Image of the proposed mound (Le Motte Group)

The proposed mound will include individual access to the natural ground level. The upper mound will have an area of 1000m², which will elevate this portion of the site well above the flood planning level. This mound will have access to rear pastures and farmland via an access ramp to the northeast.

Approximately 55.354.3m³ of fill is required to construct the mound with only certified VENM, ENM or material subject to a waste exemption under Clause 51 of the Protection of the Environment Operations (Waste) Regulation (2014) to be used. No unclassified fill will be used.

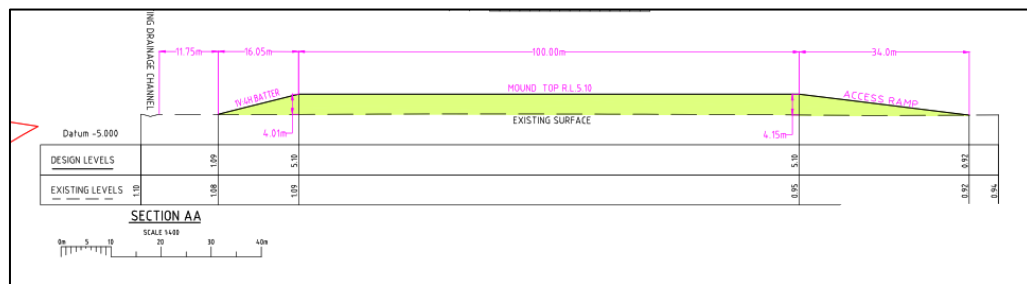


Figure 5: Section of the proposed mound (Le Mottee Group)

Please see the mound plans provided herewith as Annexure A for further details.

It is also important to note that the purpose of the proposed mound is not merely as a flood refuge during a flood event. The landowners propose the mound to provide a safe, level area of non-saturated land above the flood planning level to conserve their livestock, vehicles, agricultural equipment, hay bales, and feed during and after a flood event.

The NSW Department of Primary Industries has prepared the *Livestock flood refuge mounds 2009*, a guideline that aims to assist in the sustainable planning of rural developments. The document outlines the importance of providing sufficient feed and water troughs to support livestock whilst isolated on a mound during the event of a flood. Due to saturated soils, soil degradation and ongoing production losses such as crops submerged for multiple days.

The addition of a mound enables activities on site to resume as swiftly as possible, as the natural ground surface remains sodden for a long period of time. This is compounded by the effect of cows incidentally ripping up the soil. Even in low-level flood events, efforts to re-establish use of the site are often lengthy. The mound will support ongoing livestock health during this time, by avoiding the opportunity for waterlogged ground to be created. Boggy ground creates the risk of foot rot and increases the potential for livestock to become trapped and, in severe cases, fatality can result.

Finally, given the topography of the land and flood characteristics in the lower reaches of the Hunter Catchment, flood waters rarely drain within a 24-hour period, but linger for weeks and often up to months at a time. The erection of a mound will act as a climate resilient practice that ensures ongoing viability of the agricultural enterprise, independent of seasonal and long-term climate changes.

4. PLANNING PROVISIONS

4.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Section 4.15 of the Environmental Planning and Assessment Act, 1979 provides the matters that must be considered in the assessment of any development application.

Section 4.15 of The Environmental Planning and Assessment Act, 1979, as amended, states the following:

'(1) Matters for consideration – general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) the provisions of:

(i) any environmental planning instrument, and

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and

(iii) any development control plan, and

(iii) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and

(iv) (repealed)

that apply to the land to which the development application relates,

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,

(c) the suitability of the site for the development,

(d) any submissions made in accordance with this Act or the regulations,

(e) the public interest.'

The matters of relevance for this application are dealt with in the following sections of this Statement.

4.2 WATER MANAGEMENT ACT 2000

Any proposed development works located in, on or adjacent to levees or within declared floodplains must be referred to Department of Planning, Industry and Environment for consideration under Section 256 of the Water Management Act 2000.

Further, given that the site is located within 40m of a mapped watercourse, a controlled activity approval will be required under the provisions of the Water Management Act 2000.

The site is located within a declared floodplain and therefore a flood impact assessment has been prepared for the site. It was found that proposal will not have a significant effect of the flood characteristics of the site or surrounding land and will provide effective flood refuge above flood prone land. The proposed earthworks will not affect the functioning, stability or ongoing maintenance of any flood mitigation structures located in the floodplain.

Please refer to the flood impact assessment provided herewith as *Annexure B* for further details.

4.3 STATE ENVIRONMENTAL PLANNING POLICY (RESILIENCE AND HAZARDS) 2021

4.3.1 CLAUSE 2.10 DEVELOPMENT ON LAND WITHIN THE COASTAL ENVIRONMENTAL AREA

The proposed development is located upon land identified within the coastal environmental area; therefore, the following applies:

(1) Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following—

(a) the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment,

it is not expected that the proposed development will create any adverse impacts to the subject biophysical, hydrological or ecological environment.

(b) coastal environmental values and natural coastal processes,

(c) the water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1,

The proposed development is not located within any sensitive coastal lakes.

(d) marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms,

(e) existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,

The subject land is not part of a headland or rock platform, nor is it along the foreshore of a beach. Therefore, it is not expected to cause any impacts to those areas.

(f) Aboriginal cultural heritage, practices and places,

An AHIMS Search was conducted within a 200m buffer of the site, and it was revealed that the site is not located on land near or within any significant Aboriginal Sites or Places. Further, it is not expected that the site will impact any areas of Aboriginal Cultural Heritage.

(g) the use of the surf zone.

The site is not located within a surf zone.

(2) Development consent must not be granted to development on land to which this section applies unless the consent authority is satisfied that—

(a) the development is designed, sited and will be managed to avoid an adverse impact referred to in subsection (1), or

- (b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or*
- (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.*

The proposed development has been designed to avoid or minimise any significant impacts that might arise from the proposal. If any significant impacts arise, they will be managed and mitigated.

4.4 MAITLAND LOCAL ENVIRONMENTAL PLAN, 2011

All relevant sections of the *Maitland LEP, 2011 (MLEP)* are addressed below.

4.4.1 EXISTING ZONING

Under the *Maitland Councils LEP*, the subject lots have a mixed zoning of **RU1 Primary Production** and **C2 Environmental Conservation**. A copy of the land zoning map extract is included as *Figure 6*.

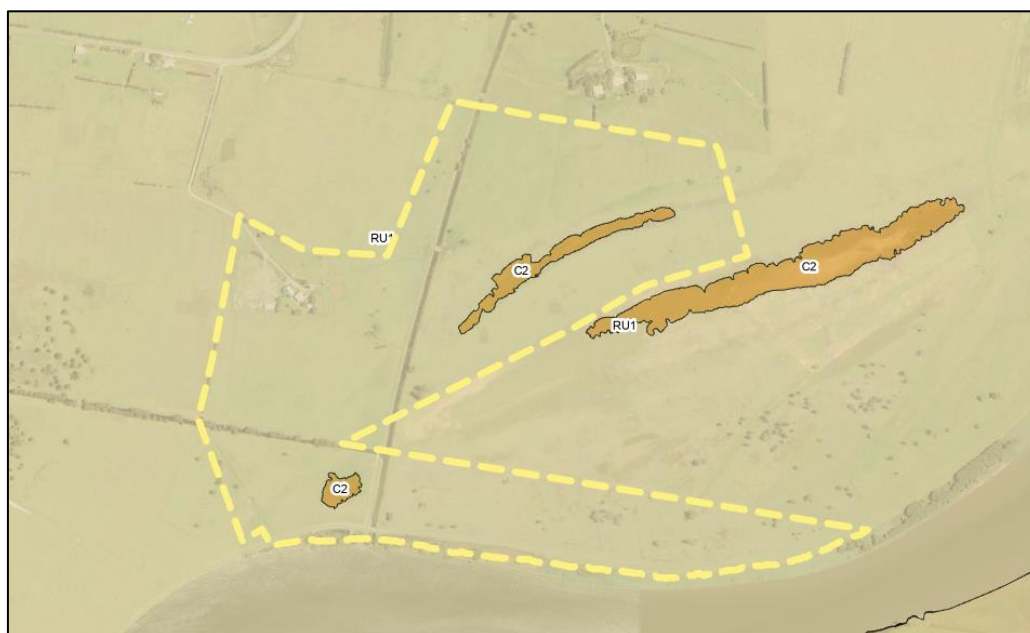


Figure 6: Maitland's LEP zoning map extract (Source: ePlanning Spatial Viewer)

ZONE OBJECTIVES:

The objectives of each zone are:

RU1 Primary Production:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base;
- To encourage diversity in primary industry enterprises and systems appropriate for the area;
- To minimize the fragmentation and alienation of resource lands;
- To minimize conflict between land uses within this zone and land uses within adjoining zones.

C2 Environmental Conservation:

- *To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.*
- *To prevent development that could destroy, damage or otherwise have an adverse effect on those values.*
- *To ensure that development and management of the land has minimal impact on water quality and environmental flows of receiving waters.*
- *To permit limited extensive agricultural uses where such uses do not compromise the ecological values of the wetland.*

The purpose of the mound is to provide an area of flood free land, which is ancillary to the primary agricultural use of the land.

Therefore, the proposed mound and minor earthworks are permitted with consent on the site within the RU1 Primary Production and C2 Environmental Conservation zones.

CLAUSE 7.1 – ACID SULFATE SOILS

Acid Sulfate Soils (ASS) are naturally occurring sediments deposited under estuarine conditions; ASS contains iron sulphides (pyrite). When these soils are exposed to oxygen due to disturbance, they produce excess sulfuric acid, this makes the soils more acidic.

The subject site is located on land that potentially contains class 2 ASS. This means that works below the natural ground surface will require an ASS management plan. The development will not involve works below the natural ground surface, and therefore the potential for the development to trigger oxidation and the production of acid from acid sulfate soils is envisaged to be low to none. Therefore, the development does not require an ASS management plan and the provisions of SEPP No. 55 (Remediation of Land) are not applicable to this application.

4.4.2 CLAUSE 7.2 EARTHWORKS

(1) The objectives of this clause are as follows:

(a) to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land,

(b) to allow earthworks of a minor nature without requiring separate development consent.

The proposed earthworks will create a level elevated area of land upon the site. The proposed mound will not negatively impact environmental functions or processes, or adjoining land uses.

(2) Development consent is required for earthworks unless:

(a) the earthworks are exempt development under this Plan or another applicable environmental planning instrument, or

The proposed earthworks are not exempt.

(b) the earthworks are ancillary to development that is permitted without consent under this Plan or to development for which development consent has been given.

The proposed earthworks are ancillary to the use of the site. The mound will provide an area of flood free land above the FPL to support a number of livestock, water tanks, cattle yards, vehicles and is appropriately sized to support future structures.

(3) Before granting development consent for earthworks (or for development involving ancillary earthworks), the consent authority must consider the following matters:

(a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,

The site borders are predominantly rural in nature and the proposed earthworks are not located within or adjacent an existing drainage channel.

Therefore, the proposed development is not expected to result in a detrimental effect to the existing drainage patterns onsite and soil stability in the locality.

(b) the effect of the development on the likely future use or redevelopment of the land,

Due to the nature of the surrounding land, the mound shall not affect likely future uses or redevelopment of the land as it is ancillary to the existing use. It will enable the site to support and protect livestock, along with storing agricultural equipment and machinery during and after a flood event.

(c) the quality of the fill or the soil to be excavated, or both,

Only certified VENM, ENM or waste-derived material the subject of a resource recovery exemption within the meaning of the Protection of the Environment Operations (Waste) Regulation (2014) shall be used to create

the proposed terracing. All certifications will be issued to Council prior to certification of the works. No unclassified fill will be used.

(d) the effect of the development on the existing and likely amenity of adjoining properties,

The surrounding land uses within the subject area of Millers Forest are predominantly rural. Development of the site for livestock and storage purposes shall support the existing rural development in the surrounding area. The proposal is in the best interest of the site given the current and expected future climate conditions and is in keeping with the rural nature of the area.

The proposal is not considered to impact upon the amenity of adjoining properties and will enhance the rural character of the locality. Consequently, it is highly unlikely that the proposed mound will have any impact on the amenity of nearby properties.

(e) the source of any fill material and the destination of any excavated material,

The fill to be used for the mound shall be certified prior to being brought to site and certification shall be provided to Council or private certifier prior to practical completion of the mound.

(f) the likelihood of disturbing relics,

There are no known heritage relics on the site. The development is unlikely to disturb any items of heritage significance. An AHIMS search has been undertaken where there are no Aboriginal Heritage Sites or Aboriginal Places within a 200 m radius of the site.

Please refer to the AHIMS Search provided herewith as Annexure C.

(g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,

Only certified VENM, ENM or waste-derived material the subject of a resource recovery exemption within the meaning of the Protection of the Environment Operations (Waste) Regulation (2014) shall be used for the proposed earthworks. Further, the proposed works are not located within a drinking water catchment or in close proximity to an environmentally sensitive area. Therefore, the proposed development will not have an adverse impact on any nearby watercourses.

(h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

The use of only certified ENM, VENM or waste-derived material the subject of a resource recovery exemption within the meaning of the Protection of

the Environment Operations (Waste) Regulation (2014) is considered as appropriate to avoid impacts of development, and no unclassified fill will be used.

CLAUSE 5.21 FLOOD PLANNING

The site is mapped as being flood prone as shown in *Figure 7* below.

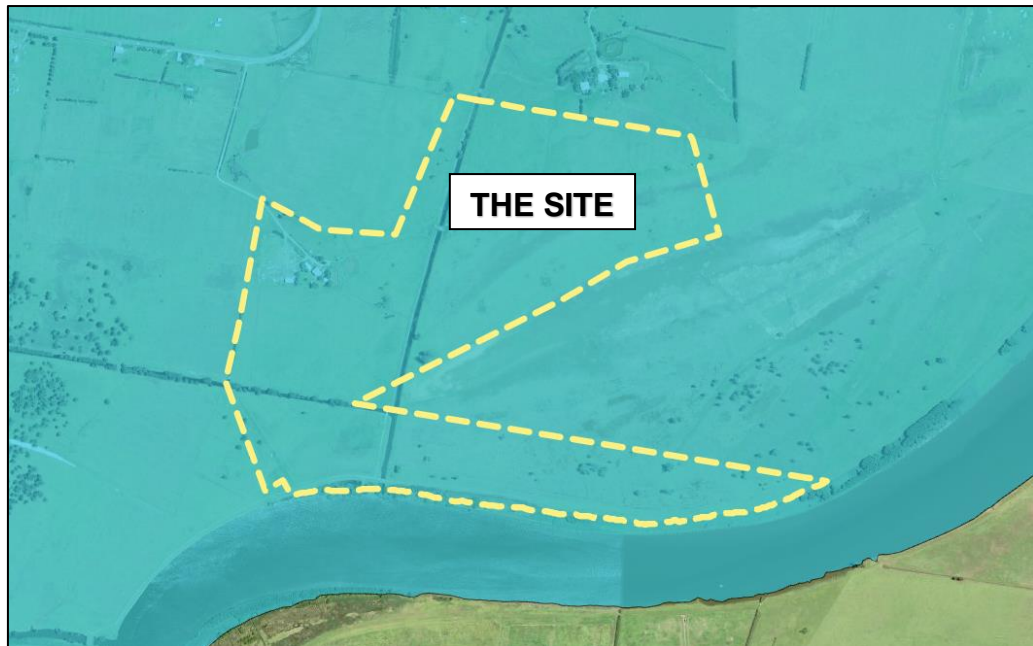


Figure 7: Maitland LEP Flood Planning Map (Planning Portal Spatial Viewer)

The objectives of this clause are:

- to minimise the flood risk to life and property associated with the use of land,
- to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,
- to avoid significant adverse impacts on flood behaviour and the environment.
- To enable the safe occupation and efficient evacuation of people in the event of a flood.

The proposed earthworks will provide land above the flood planning level to support livestock during and after a flood event. The development will not create adverse impacts on flood behavior in the environment. A flood assessment has been prepared for the proposal and concludes:

The flood assessment has determined that the proposed mound is compatible with the existing flood hazard and does not result in adverse off-site flood impacts. Further, a cumulative development assessment has found that if future mound developments

adhere to the recommended constraints, then it is considered that the likely impacts resulting from such development will only be minor. The impacts are considered reasonable, particularly given the improved flood resilience that the construction of such mounds affords the local communities, most of which are used for the purposes of livestock refuge and/or shed constructions. The recommended criteria for sustainable mound development are:

- each Lot can accommodate a single mound development (or combination of multiple smaller mounds) totalling up to 10% of the Lot area, capped at a maximum of 1.3 ha per Lot*
- mound footprints should not encroach upon the areas with a modelled VxD of greater than 1.4 at the 1% AEP event and*
- mounds should be located where the average 1% AEP VxD within the proposed mound footprint does not exceed that of the overall average of the available area within the Lot.*

The proposed mound conforms to the recommended constraining criteria to limit the potential future impacts of cumulative development. Therefore, the mound proposal is considered acceptable from a cumulative development perspective.

It is expected that the proposed earthworks will not have a major impact on local flood behaviour and will result in a positive outcome for safety during flood events.

PERMISSIBILITY:

The proposed development subject to this report includes earthworks to create a mound above the flood planning level upon **Lot 4 DP 742165**. It is intended to be utilized as a refuge for livestock during and after a flood event, and to support agricultural machinery, hay bales, and feed during this time. The mound is appropriately sized to accommodate future structures under a future application.

The development is considered an innominate use and is ancillary to the desired use of the site.

The site is currently zoned RU1 Primary Production and C2 Environmental Conservation. Under the provisions of the Maitland Councils LEP 2011 the proposed earthworks are permitted with consent.

There is nothing in the MCLEP that prohibits the proposed development.

4.5 MAITLAND DEVELOPMENT CONTROL PLAN, 2011

The relevant sections of the *Maitland DCP, 2011* have been addressed below.

4.5.1 PART B – ENVIRONMENTAL GUIDELINES

B3 – Hunter River Floodplain

The site is zoned RU1 Primary Production and is located within flood prone land. However, the flood velocity and depth for the site is noted as being subject to further investigation as shown in Figure 8 below.

Regardless, Chapter B.3 Hunter River Floodplain Management from Part B of the Maitland DCP has been addressed below.



Figure 8: Maitland DCP Flood Planning Map extract (Map – Sheet FLD_007)

Filling of Flood Storage and Flood Fringe Areas:

Significant adverse impacts on flood behaviour and the environment are avoided.

Filling does not increase flood affectation elsewhere on the floodplain.

Minimise the flood risk to life and property associated with the use of land.

The site is noted by Maitland Council as being flood prone. However, Councils mapping does not indicate the hazard level or hydraulic category for the site as it is within an area subject to further investigation.

The proposed development includes the construction of a mound to provide an area above the flood planning level as a place of refuge and storage during and after a flood event. Given the low-lying nature of the

site, a flood refuge is essential to the existing rural use and shall decrease the effect of flooding to life and property.

Further, a flood impact assessment, including a cumulative impact, has been prepared to determine the mounds compatibility with the existing flood hazard. As a result of this study, it has been determined that the mound is compatible with the flood hazard and achieves all three recommended mound development criteria when assessing at a cumulative impact scale. Consequently, the proposed mound meets the requirements of the DCP.

General building requirements

Minimise the flood risk to life and property associated with the use of land.

All habitable finished floors shall be no lower than the FPL.

Parts of buildings and structures at or below the FPL shall be constructed in accordance with Table 1: Flood Aware Design Requirements for Residential Development on Flood Prone Land.

The proposed mound will provide a flood refuge above the flood planning level, without impacting upon surrounding property. Furthermore, the proposed mound will provide safe refuge for livestock, agricultural equipment, feed and machinery during flood events.

The development shall be certified by a qualified Structural Engineer that the building has been designed to withstand the depth of inundation, buoyancy and flow velocity forces (including potential for debris impact) at the development site for a 1:100 ARI event.

No new structures are proposed with this application. Any future structures shall be certified under a future application.



Figure 9: Maitland DCP flood extent map extract (Sheet= FLD_007)

Flood-free access shall be provided from the development to an appropriate evacuation facility (as identified in the Maitland Local Flood Plan), at the 1:20 ARI flood level or higher.

Provision shall be made for the safe evacuation of people from the development in accordance with the Maitland Local Flood Plan.

The proposed mound is ancillary to the use of the site and no structures are proposed with this application. Nevertheless, evacuation egress in the event of a flood can be achieved via Woodberry Road toward Raymond Terrace Road. During events of heavy rainfall, public radio broadcasts shall be monitored for warnings by the BOM and the issue of evacuation orders by the SES. Warnings are to be issued to areas of high threat, and when flash-flooding is imminent. Occupants should move away from a flood threat, via the evacuation route from the site. Anyone on-site shall have adequate warning time to evacuate the site via this route to a flood free area if need be.

Moreover, the proposed mound will provide adequate area above the FPL in flooding events and will be readily accessible in an emergency situation.

The development will not increase the risk to life or property. There will be no further occupants on the site as a result of the proposed development being approved. Accordingly, risk to human life has been adequately addressed through consideration of evacuation requirements, access restrictions and warning time.

Sufficient storage space for household effects shall be provided above the FPL.

Electrical fixtures such as light fittings and switches shall be sited above the FPL unless they are on a separate circuit (with earth leakage protection) to the rest of the building.

The proposed mound will enable a safe and accessible area above the flood planning level to support livestock, agricultural equipment, vehicles and will be sufficiently sized to support a future shed or dwelling under a separate application.

4.6 OTHER PLANNING CONSIDERATIONS

4.6.1 BUSHFIRE

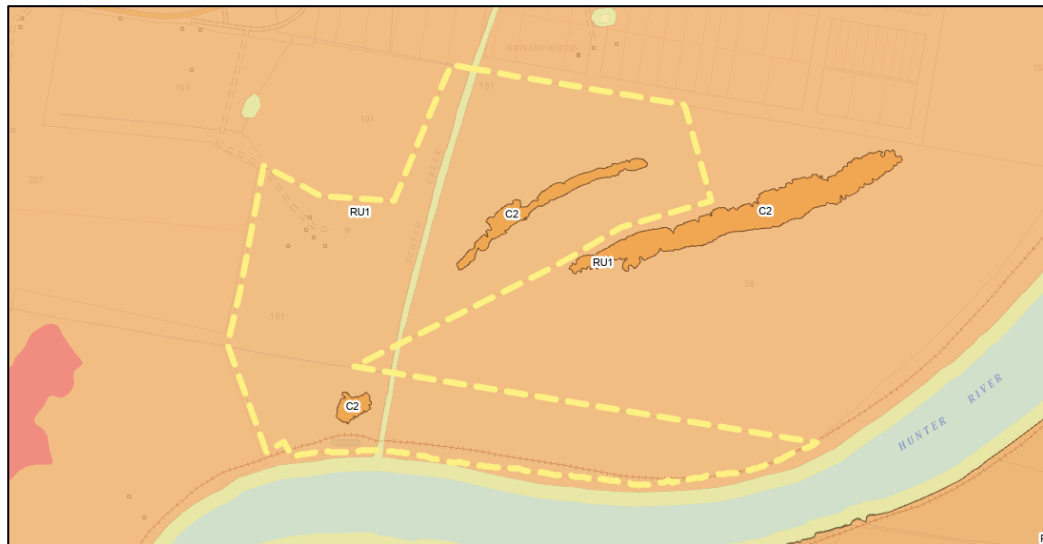


Figure 10: Maitland LEP Bushfire Map (NSW ePlanning Spatial Viewer)

The site is mapped as being located on bushfire prone land. However, the proposed mound is not a habitable structure and therefore no additional risk to life from bushfire hazard is expected to arise as a result of this development.

4.6.2 BIODIVERSITY



Figure 11: Maitland LEP Biodiversity Values Map (NSW ePlanning Spatial Viewer)

The site is mapped as land containing biodiversity values, being the area of coastal wetlands located upon the north-eastern portion of the site. The site is generally low-lying and flat and does not contain any trees. It is

not proposed to clear any native vegetation on or adjacent the site, and therefore no impact to the ecology of the area is expected to arise. Further, no works shall occur within the portion of the land mapped with biodiversity values

4.6.3 TRAFFIC

Truck and Dog trailer combination will be used to transport the fill on-site. The maximum length of each truck and dog is 19m and will carry approximately 50 tonnes of fill. The mound will require approximately 55,354 tonnes of fill. This will involve 1,107 deliveries over a period of 3 to 6 months averaging 8 to 10 deliveries per day Monday to Saturday.

Woodberry Road is a public road with good site distance in both directions. Accordingly, there is ample space and time for trucks to pull off so that traffic is not impacted. The trucks will make egress via the entry at Woodberry Road.

These types of truck movements can already be undertaken as exempt development on a daily basis. For example, a farmer may have several silos on a property that are to be filled with grain. Without any development consent from Council, the farmer can order the grain and have it delivered in trucks that could require many trips. This situation is no different. Accordingly, it is envisaged there will be no impact on the road network.

4.6.4 STOCK

The NSW Department of Primary Industries has prepared the *Livestock flood refuge mounds 2009*, a guideline that aims to assist in the sustainable planning of rural developments. This document discusses the issues that may arise from keeping livestock on coastal floodplains, and further outlines the best approaches to alleviate and manage flood risk. Under the provisions of the guideline, the proposed mound has the capacity to safely provide refuge for up to 80 head of cattle.

Cattle:

Holding space = 25m² per head.

$$H = 25\text{m}^2 \times 80 \text{ adult cattle} = 2000\text{m}^2$$

Feeding space = 0.8m² per head.

$$F = 0.8 \text{ m}^2 \times 80 \text{ head} = 64\text{m}^2$$

Watering space = 0.5 m² per head.

$$W = 0.5 \text{ m}^2 \times 80 \text{ head} = 40\text{m}^2$$

Storage space = 3m² per head

$$S = 3 \text{ m}^2 \times 80 \text{ head} = 240\text{m}^2$$

Total useable area = H + F + W + S

$$= 2000 + 64 + 40 + 240 = 2.344\text{m}^2$$

Therefore, the total area of the mound will provide sufficient area to withhold the maximum head of cattle during a flood event.

The mound will also provide refuge for machinery, feed and water troughs ancillary to the use of the site shall be stored atop of the mound both in the relocated and in the open. A future application may be made for a storage shed or dwelling house to provide further storage and management opportunities for the mound, and the dwelling has been sized accordingly. These provisions are considered to make the mound size suitable to reduce the risk to both life and property and enable ongoing viability for the owners of the land.

5. CONCLUSION

The proposed development subject to this report and Development Application is to erect a mound upon **Lot 4 DP 742165**. It shall be utilised as a refuge for cattle, and as a storage area for hay, agricultural equipment, and machinery during and after a flood event. The proposal is consistent with the current land use within Millers Forest and is in keeping with the character of the locality.

The development is permitted with consent under the provisions of the Maitland Council's LEP 2011. The proposed development makes logical and sensible use of the site, as well as being of minimal environmental impact.

This statement sets out the primary matters for consideration under Section 4.15 of the Environmental Planning and Assessment Act and is accompanied by several attachments dealing with special issues related to the site.

Given that there are no matters which justify refusal of the application, we respectfully request that Council provide a favourable determination.

Annexure A

Mound Plan

Le Mottee Group

Annexure B

Flood Assessment Report

Torrent Consulting

Annexure C

AHIMS Search