

CEH SURVEY

CONSULTING LAND, ENGINEERING AND MINING SURVEYORS

STATEMENT OF ENVIRONMENTAL EFFECTS

Valley Drive Earthworks LOT 26 DP1244557

Prepared by:

CEH Survey

*Consulting Land, Engineering and Mining Surveyors
"Astrolabe", Rutherford Lane, Lithgow, NSW, 2790*

On Behalf of:

CEEDIVE Pty Ltd

"Astrolabe" 1 Rutherford Lane,
LITHGOW 2790

ABN: 68 056 544 551
Email: survey@ceh.com.au

Office: (02) 6351 2281
Website: www.ceh.com.au



Existing Consent

003/07DA gives consent for a two lot subdivision of lot 604 DP1051775 (now lot 26 DP1244557). Approval was granted on 24/11/2008. Lithgow City Council has confirmed in a letter dated 23/9/2016 that significant commencement has occurred, the approval will last in perpetuity and a construction certificate for civil works can be submitted. The approval was modified in 2017 (s96027/17) and again in 2022 (MODDA015/22 & MODDA048/22).

S96027/17 allowed for the construction of the batter as required by the original DA as well as the removal of mine workings to eliminate any future mine subsidence issues. MODDA015/22 amended the approved subdivision boundary to create a more suitable lot for future development. A separate DA has been lodged with council (DA137/22) which outlines the proposed future use of the site.

Development Proposal

The development is to undertake earthworks in order to reshape the land to address the potential impact of mine subsidence and provide a suitable landform for any future development. The potential for mine subsidence has been identified as a primary constraint of the site and its remediation will help to facilitate the future development of the site. The proposal is an extension of previous works to cover the site of the amended subdivision approved by MODDA015/22 & MODDA048/22 and provide a stable base for the batter between the proposed lot and adjoining land.

Local Government Area

The area is within the Lithgow Local Government Area (LGA) in the suburbs of Pottery Estate and Sheedys Gully.

Lithgow Local Environment Plan 2014 (LEP)

Zoning

The subject land covers three areas of zoning. These zones have been identified as: B4 – Mixed Use, R1 – General Residential and E3 (Environmental Management) (Figure 1). The proposal is confined to the area zoned B4 – Mixed Use.

The proposal is consistent with the zoning of the subject site.

Pottery Estate Development Area

The site is within the Pottery Estate Development Area covered by CI7.12 of the LEP stated below;

7.12 Development in Pottery Estate

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

(a) to ensure that the development of land known as Pottery Estate is planned in an orderly manner and achieves appropriate built form,

(b) to ensure that the development has regard to the unique environmental constraints and opportunities of the land,

(c) to ensure that the development of this land is appropriately serviced.

(2) This clause applies to land identified as "Pottery Estate" on the Pottery Estate Development Map.

(3) Development consent must not be granted for development on land to which this clause applies unless the consent authority has taken into consideration a development control plan approved by the Council for that purpose that contains comprehensive provisions relating to, but not limited to:

(a) the layout and design of both vehicular and pedestrian traffic through that land, and

- (b) the need to integrate the mixed land uses of the land through appropriate design and buffers, and*
- (c) minimising the impact of development on the heritage significance of the cultural landscape, including both the built and archaeological heritage items on the land and proposed means of conservation management, and*
- (d) any areas of land that may need restrictions due to the impact of mine subsidence, slope, bush fire, flooding or inundation or any other identifiable hazard, and*
- (e) investigation and identification of any areas of land affected by contamination and the means to alleviate any risk of injury or harm, and*
- (f) stormwater and water quality management, and*
- (g) the conservation of natural watercourses, and*
- (h) the protection of any potential habitat of any identified threatened species of flora and fauna, in particular the Purple Copper Butterfly (*Paralucia spinifera*), and*
- (i) good design principles relating to building heights and setbacks, densities, materials, colours, form and scale, and*
- (j) the servicing of the land, and*
- (k) management of open space and public lands.*

The area in which the earthworks are planned is a heavily disturbed area of the subject land. The proposal is for earthworks to address the issue of mine subsidence to enable a stable base for future development. Through addressing the subsidence constraint, the earthworks will enable the future realisation of the opportunities of the land. The proposal does not impact upon the unique environmental constraints of the land as it contains itself to the area of heavily disturbed land along the frontage to Valley Drive. As mentioned below, it does not encroach upon the riparian zone to the unnamed creek which flows through Sheedys Gully.

Groundwater and Surface Water

The site of the proposed earthworks is over the site of old workings from the Lithgow Valley Colliery. The workings are at the outcrop of the seam, with the seam dipping to the north east at 1 in 40 as indicated on Record Tracing 17. Craven, Elliston & Hayes (Lithgow) has had a long association with Lithgow Valley Colliery dating back prior to 1968. In speaking with registered mine surveyors who know the workings well, the area of the workings in the vicinity of the proposed earthworks is known to be dry and as such, it can be deduced that the workings are above the level of any potential groundwater. As the proposed earthworks do not extend below the level of the workings, there is not expected to be any direct interaction with groundwater.

The design of the earthworks allows for well managed surface flow between the gully to the east of the site, through the site and to the unnamed creek to the west. The surface water will be managed in accordance with the SWMP plan which has been prepared in compliance with the Managing Urban Stormwater - Soils and Construction (2004 – known as the Blue Book).

Watercourses and Riparian Corridors

The subject site does not contain any land mapped as sensitive waterway or subject to clause 7.6 in the LEP.

The subject land is traversed by an unnamed creek which flows through Sheedys Gully and a secondary intermittent waterway which begins in another gully to the north of Sheedys Gully. The unnamed watercourse is a category three watercourse under the Strahler System of ordering

watercourses. The Office of Water recommends a vegetated riparian zone (VRZ) width of 30m from each edge of the watercourse. The proposed works are outside of this VRZ.

The Standard Instrument – Local Environment Plan defines a watercourse as *“any river, creek, stream or chain of ponds, whether artificially modified or not, in which water usually flows, either continuously or intermittently, in a defined bed or channel, but does include a waterbody (artificial).”* The NoRBE Guidelines 2015 accept this definition of a watercourse. As the secondary intermittent waterway does not have a defined channel, it is not considered a watercourse under the NoRBE assessment.

The secondary watercourse was effectively dammed during works necessary to relinquish the mining leases which were once held over the land. The proposed works aim to rectify this by providing an appropriate temporary route for water to flow around the site until further development is proposed for the site. It is expected that future development will convey the water from the site through pit and pipe infrastructure and appropriate overland flow to councils existing pit and pipe infrastructure.

Water Cycle Management Plan:

The development is defined as a Module 5 development according to the Neutral or Beneficial Effect on Water Quality Assessment Guideline 2015, published by the Sydney Catchment Authority. The site is within the Sydney Drinking Water Catchment and as such must comply with SEPP (Sydney Drinking Water Catchment) 2011. There are no covenants in favour of SCA on the title.

The required reporting for a Module 5 development is outlined in Table A3 of the SCA Guidelines. The summary of these is below;

A Water Cycle Management Study is required which will comprise the documentation below.

A Soil and Water Management Plan as the amount of proposed earthworks is above 2500m².

A MUSIC model is not required as there is no impervious area created as part of the proposal.

A Contamination Report will be required as the site was once part of the Lithgow Valley Colliery. A contamination report was completed in 2005 and an update completed in 2022.

The site is outside the area affected by a 1% AEP along Sheedys Gully. However, a secondary tributary to Sheedys Gully is shown on the topographic map to flow through the site. The secondary drainage line does not exhibit any features of a watercourse (i.e. defined banks and channel) and may not be classified as a watercourse under the Water Management Act 2000.

A Soil and Water Management Plan and a contamination report will be included in the submission for approval.

A Flood Study has not been included for the drainage line which runs through the site. The application is for preliminary earthworks only and is not expected to have a detrimental impact on surrounding development or water quality in the event of flood as the site is currently heavily disturbed and exhibits no defined flow paths through the area subject to this application. A comprehensive flood study will be required for any future development for the site however such development is not sought as part of this modification to the current approval.

Waste Material Removal

In order to eliminate the issues of mine subsidence from the site, it is proposed to remove an amount of carbonaceous waste material. The site of the proposed earthworks will encounter old workings from the closed Lithgow Valley Colliery. The amount of carbonaceous waste left is difficult to determine as the record tracing shows a large part as being goaf (the waste left after an area has been wholly or partially mined).

It is proposed to transport the carbonaceous waste to the Springvale Coal Services facility at Blackmans Flat. The coal services site is considered a compatible land use for the carbonaceous waste.

Further details of the transport and disposal of the material to be removed is dealt with in a separate report.

Details of consultations with the Department of Primary Industries are included in a separate report.

Summary

The Valley Drive site is a key site in the centre of Lithgow. The current site has constraints due to previous mining activities which limit the potential future development of the site. The proposed earthworks are designed to ameliorate the subsidence constraints to allow the potential of the site to be fully realised.