IN THE ENVIRONMENT COURT

CHRISTCHURCH REGISTRY

I MUA I TE KOOTI TAIAO O AOTEAROA

ENV-2017-CHC-090

Under	**the Resource Management Act 1991**
In the matter	**of an appeal pursuant to section 120 of the Act**
Between	**THE ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND INCORPORATED** **Appellant**
And	**WEST COAST REGIONAL COUNCIL AND BULLER DISTRICT COUNCIL** **Respondents**
And	**STEVENSON MINING LIMITED** **Applicant**

UPDATED AND REVISED STATEMENT OF EVIDENCE OF ANNE JANETTE BREWSTER FOR STEVENSON MINING

20 August 2021

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INTRODUCTION

1 My full name is Anne Janette Brewster. I am the Chief Operating Officer, Stevenson Mining. I have a BMS (Management and Accounting). I have 30 years commercial and financial experience both in New Zealand and the UK, working in commercial roles for organisations such as Telecom (NZ), Fisher and Paykel, and The Tussauds Group (UK).

2 I joined Stevenson in 2008 as Financial Controller for three of Stevenson's manufacturing companies. I joined the Stevenson Mining team in 2011 when Stevenson successfully tendered for the Rotowaro Mining Services contract.

3 I was responsible for the management of the Stevenson's mining contract operations at Coaldale open-cast coal mine in Nightcaps, Southland (2011-2014) and the Rotowaro open-cast coal mine near Huntly, where Stevenson was the mine operator for seven years (2011-2018).

4 My current responsibilities include management of the site works for the Stevenson Groups Drury South Crossing industrial development in Drury, Auckland.

5 I am responsible for the planning and design of the Te Kuha project, as well as managing the processes for obtaining the approvals and consents needed for the project.

SCOPE OF EVIDENCE

6 My evidence provides:

(a) a description of the project;

(b) a summary of alternatives considered;

(c) a summary of the environmental management proposed;

(d) a summary of the consultation we have undertaken;

(e) the overview of the process for obtaining physical access to the site; and

(f) comments on some financial and economic issues of the project.

DESCRIPTION OF THE PROJECT

7 The Te Kuha mining permit covers 884 hectares, approximately 12 kilometres south-east of Westport. The mine site (other than the lower portions of the access road) are at an elevation ranging from 600 to 800 metres above sea level.

8 The legal boundaries of the site are shown in **Figure 2.** Twelve hectares of the total mine footprint of 144 ha is Department of Conservation administered stewardship land. The remainder is administered by the Buller District Council as a local purpose reserve, except for approximately 2 ha of private land which is the site of the proposed rail loadout.

9 The maximum disturbance area (which is referred to as the 'Te Kuha footprint') over the life of the project is 144 ha which is comprised of:

(a) approximately 112 ha for the mine pit and associated infrastructure (including ex-pit engineered landforms for overburden - ELFs);

(b) approximately 1.3 ha of ex-pit water treatment infrastructure;

(c) approximately 28 ha for the access/haul road; and

(d) approximately 2 ha for the coal load-out site.

10 **Figure 1** provides an indicative overview of the project. Below, I provide a general summary of the project. More detailed descriptions of various aspects of the proposal are set out in various expert's evidence.

11 By way of comparison, the total maximum disturbed area of 144 ha is smaller than the Stockton mine (1,132 ha including the Cypress pit), Rotowaro, near Huntly (762 ha) and Escarpment mine on the Denniston Plateau approx. 150 ha).

Mine Access Road

12 An access road is required to transport staff to and from the mine, to enable all mining activities to take place, and to haul about 1,000 tonnes of coal per day from the mine to the rail loop for train loading. The access road will run for approximately 9 km from a

coal load-out site situated on KiwiRail land at Te Kuha, near the Buller River, up to the mine site.

13 For the purpose of calculating the maximum area disturbed, an average footprint width of the mine access road of 35 m has been used. However, in actual terms, the amount of disturbance will be less than this because the road will have a typical width of 7m (single lane with regular passing bays). Soil and overburden stockpiles will also be located along the road. The route of the access road is shown on the plan in **Figure 3**. Construction of the access road, including ways to minimise visual effects, is to be controlled by a Construction Management Plan, required by Condition 47.

Summary of Mine Components

14 Key components of the mine footprint are two mine pits (Brunner and Paparoa), overburden placement areas, engineered landforms (ELFs), and soil stockpile areas, diversion drains and in-pit sumps. Ex-pit water management infrastructure includes a water treatment plant (WTP) and dual sump system.

15 Coal mining activities will take place in both pits concurrently, however, the Brunner pit (Brunner coal measures (BCM)) will need to be completed prior to accessing the area of the Paparoa pit which sits beneath the BCM. The Paparoa pit contains the Paparoa coal measures (PCM). The accompanying ‘flyover’ video shows this geology.

16 In general terms, activities associated with the project are:

(a) development of mine infrastructure, including the access/haul road, ex-pit sumps, stormwater and mine water management drains;

(b) removal of vegetation and soils (and associated ecosystems);

(c) excavation of overburden and coal;

(d) transportation, processing and loading-out of coal;

(e) deposition of overburden, soil and rehabilitation material as part of temporary storage and permanent placement within ELFs;

(f) management of dust;

(g) water treatment;

(h) management of weeds and pests at the site;

(i) rehabilitation of the site during and after coal extraction; and

(j) ongoing habitat enhancement measures (primarily pest control) over an area of at least 6,907 ha as shown in Figure 10 of Dr Bramley's evidence.

17 The mine is planned to produce approximately four million tonnes of coal over a 16-year period (approximately 250, 000 tonnes per annum), with rehabilitation being carried out progressively during that period (Condition 54). A further 10-year period is anticipated to finish all post-mining rehabilitation and aftercare of the site and to achieve the 'closure' requirements set out in Condition 31.

Concept Mine Plan / Excavation of Overburden and Coal

18 The mine design is described in detail in the evidence of Ms Tracey Rock. It has been based on mining the overlapping Brunner and Paparoa pits individually. The mine has been designed to concept level and will need further detailed design after the results of further geological and geotechnical drilling have been confirmed.

19 The maximum mine footprint is shown in **Figure 4.**

20 The mine design has been based on mining the individual pits from approximately south to north in strips, as shown in **Figure 5**. The Brunner pit is based on five 140 m wide strips and the Paparoa pit is based on eight 100 m wide strips.

21 When required, drilling and blasting will be used to remove overburden and coal, which is standard mining practice in this geology. The blasted rock will be removed by excavator and loaded into haul trucks. All explosives to be used for blasting activity will be stored in a magazine off site.

22 Coal will be extracted and hauled to the mine ROM pad where it will be crushed and screened. No coal washing is required as the coal has low ash and there are no old workings at Te Kuha. The

coal once crushed and screened will be stockpiled until being transported to the coal load-out facility.

23 As noted, two open cast pits have been conceptually designed. A geotechnical assessment on the conceptual mine design may result in minor changes to the stages of mine planning. However, the total mine footprint will not increase because the coal resource is constrained by outcrop and geological information from drill holes.

24 Each of the pits commence mining in strip one. Vegetation, soils and overburden is removed from the next strip before coal is mined along strike in each advancing strip.

25 At completion of coal mining (Year 16) a temporary final void will still be present. This void will be backfilled using material available on site. Backfilling of this void will take two years from the completion of mining.

Use of Overburden, Soil and Rehabilitation Materials

26 The mine planning includes the excavation and salvage of soil and vegetation. This it is an important part of the operation since these materials will be used in rehabilitation. Topsoil and vegetation will be removed by excavator and loaded into dump trucks. These materials will either be immediately reused (where achievable, avoiding costs of double handling) or stockpiled for future use.

27 Any overburden removed during pit development will be placed in ELFs, either as temporary storage (to be re-handled later in mine sequencing) or to form a final ELF.

28 Three ex-pit ELFs are required for the life of the mine, including two areas adjacent to the initial mining area in both the Brunner and Paparoa pits (to the east), and one area adjacent to the final area of mining in the Brunner pit (to the north).

29 The progression of the ELF schedule follows the progression of mining in both of the pits. The ELF east and adjacent to the first mining area in the Brunner pit is the main ELF. A portion of this ELF is used as the ROM pad after the first two years of mining. This location was selected to reduce the overall mine footprint.

30 The progression of the ELF schedule during the mining stage is shown in **Figures 6 to 10,** which include planned locations for soil stockpiles, ELFs, and locations for water management infrastructure (sumps and drains). The ELFs will start as ex-pit ELFs but will progress to in-pit ELFs when the elevation is the same as the base elevation of the pit floor.

31 Soil will be stockpiled in up to three different areas within the mine footprint, to be used in final rehabilitation. Rehabilitation will progressively occur each year and follow the progression of the mining. (Condition 54)

32 **Figures 11(a) – 11 (d)** show the development of the final ELF which includes reinstatement of the ridgeline. (For details see the graphic supplement attached to Peter Rough's evidence).

Rehabilitation

33 Rehabilitation has formed a critical part of our mine planning, and Dr Simcock has been involved in the mine planning process. Stevenson is committed to applying best practice rehabilitation methods and techniques, and continuously improving our understanding and techniques as we proceed. I understand that there are proven rehabilitation techniques already used on the West Coast on similar sites. We propose to adopt these methods and improve them where we can.

34 We will use direct vegetation transfer (DT) in the rehabilitation as much as practicable (Condition 51(a)). The aim is to transfer any sods directly from the source to its final placement. A minimum of 15 ha of the mine footprint is allowed for in mine plan (Condition 51(a)). While Stevenson is committed to maximising the amount of DT used (not least because it will assist us to more effectively achieve the closure criteria), from an operational perspective we need to be careful not to unreasonably constrain the process by committing to levels of DT that we cannot with confidence know we can achieve. This is an aspect of the operation that we anticipate having close involvement of independent expert advisors, and it is an issue which we are required to report on in our annual plan process (Condition 63).

35 Rehabilitation is designed to progressively occur each year and follow the progression of the mine. At the completion of mining the final void will be filled in and the ridgeline reinstated (Condition 50(a)).

36 Details of the rehabilitation methods to be used and the objectives to be achieved are discussed by Dr Simcock in her evidence.

Water Management

37 The proposed mine is situated at the crest of a north-south orientated hill range, and largely impacts on catchments that drain the upper western flanks of the hill range.

38 The concept for managing and treating mine water relies upon adequate flow buffering and primary treatment of storm water runoff within the mine pit to enable the ex-pit treatment of a controlled maximum flowrate of mine water via a water treatment plant (WTP). Details of the water management system are set out in Mr Cudmore's evidence.

39 The buffering of mine surface water runoff will be achieved by utilising multiple storage components as shown in **Figure 12**:

(a) firstly, in-pit primary settlement sumps, including a relatively large in-pit sump located within the mine excavation;

(b) discharging to an ex-pit WTP Buffer Sump, ahead of;

(c) an ex-pit WTP Settling Pond, before;

(d) discharge of treated water to the receiving environment.

40 The combined buffer storage volume (in-pit sumps, plus the ex-pit WTP Buffer Sump) will contain the runoff and seepage water to enable a steady discharge and to the ex-pit WTP Settling Pond.

41 The key elements of the concept design are presented in **Figure 13**. This starts with the in-pit sumps and main pit sump that supply flow to the WTP Buffer Sump that is located out of the pit as shown in **Figure 12.**

42 The chemistry of mine drainage is predicted to be neutral with low concentrations of trace elements. Although the overall geochemistry indicates neutral mine drainage, additional neutralising material (limestone) will be blended with waste rock

on site to lift the ratio of acid neutralising to acid forming material. This will ensure that re-handling waste rock will not release any acidic material during construction of the final landform and final rehabilitation. In addition, contingency plans for water treatment have been developed to manage any water quality that does not meet expected chemistry prior to discharge.

43 Details of the geochemical investigations, mine drainage chemistry predictions, water quality scenarios, waste rock management, ELF construction and adaptive management for any unanticipated water or rock chemistry issues are provided in Dr Pope's evidence.

Rail Loop and Coal Load-Out Site

44 Processed coal (crushed and screened) will be transported via the mine access road to the coal load-out site. The coal load-out site (including a stormwater settling area) will be entirely located on 2.08ha of land owned by KiwiRail. The rail loop and coal load-out site are shown on the plan in **Figure 14**. The rail loop was removed in the 1980s and this will be reinstated and upgraded by KiwiRail to transport coal from the site.

45 Usually, one coal train per day, between 14 and 18 wagons, will be loaded with a wheel loader, which equates to about 1,000 tonnes. Trains will transport the coal to Port Lyttelton via the Midland Line.

Hours of Operation and Size of Workforce

46 The hours of operation will be 6am to 10pm, Monday to Saturday from 1st October to 31st March and 6am to 6pm, Monday to Saturday from 1st April to 30th September (Condition 149). Maintenance activities will take place on Saturdays when required. The coal load-out operational hours will be 5am to 11pm, seven days a week (to allow for Kiwi Rail's scheduling) (Condition 150).

47 I consider this to be a relatively small scale mine in terms of volume of coal extracted and number of employees. The following figures give examples of the scale of opencast mines in New Zealand.

Mine	Coal extracted p.a.
Stockton	1.1m to 1.8m
Rotowaro	800k to 1m
Proposed Escarpment	500,000
Proposed Te Kuha	250,000

48 The expected number of staff required for mining is 58 FTEs. In comparison, Stockton at its peak employed over 1100 people and operated 24 hours a day, 7 days a week, today it is around 250 FTEs and operates 20 hours a day, 5 days a week. Rotowaro employs around 120 people and operates 22 hours a day Monday to Friday.

49 The plan of having day-shift operations only at Te Kuha will mean employees will have to reside in the Buller District, which Stevenson has been advised is beneficial to the local community.

Mining Equipment

50 The mine will be a truck and shovel operation, utilising excavators and trucks sized to move approximately 1,400,000 bank cubic metres (material measured in cubic metres before its excavated) of overburden, 250,000 tonnes of coal and undertake rehabilitation works annually. The overburden and coal equipment would work approximately 2,000 production hours per annum. Because of the small volumes smaller, mining and earthmoving equipment would be used. For overburden removal we would have two plant groups using up to 100 tonne excavators and 60 tonne trucks and for coal winning one plant group, using a 40 tonne excavator and 30 tonne trucks.

Dust Management

51 Potential sources of dust emissions generated during mining are:

(a) vehicle movements, including hauling coal to the load-out site;

(b) construction earthworks;

(c) coal extraction (when necessary) by drilling and blasting;

(d) overburden placement; and

(e) loading and transporting of coal and overburden.

52 To ensure that no adverse effects arise from the generation and deposition of dust, dust mitigation will be implemented throughout the wider mine area. Water trucks and fixed sprinklers will be used to control dust. Sufficient water will be made available for this purpose. In dry weather, dust suppression may take place continuously, however for much of the time dust suppression will not be necessary as rainfall is frequent at the site.

53 Details of the management of dust are set out in the May 2018 evidence of Ms Prue Harwood.

Noise Management

54 Marshall Day Acoustics Limited conducted noise level measurements near the location of the proposed coal load-out site. These measurements indicated that noise levels at the site are low, which is consistent with other daytime noise measurements in similar environments.

55 Stevenson has been advised that noise is not an issue for the proposed mine as there are no neighbours in close proximity and also no night-time activity is planned. Details of the noise management are discussed in the May 2018 evidence of Mr Robert Blakelock.

Traffic Movements

56 Carriageway Consultants Ltd provided Stevenson with an assessment of the traffic impacts on the proposed vehicle movements to the mine.

57 Traffic to the mine using Nine Mile Road will be minimal. The intention is to transport workers to the site in buses from Westport to minimise the traffic. Estimated traffic movements per day for light vehicles is 18, and heavy vehicles is 2. Heavy vehicles would be for fuel, explosives, cranes and delivery trucks.

58 Details of the potential effects of traffic are set out in Mr Carr's evidence.

Westport Water Supply

59 While most of the mine will be within a local purpose reserve administered by the Buller District Council for water supply, the mine will not affect the water supply. **Figure 15** shows the various catchments in the area and confirms that there will be no works in the water supply catchment.

Positive Environmental Measures

60 In addition to the rehabilitation of the footprint, the project involves positive habitat enhancement measures and pest control over the wider area around Te Kuha. This is described in Dr Bramley's evidence.

61 During the operation of the mine the estimated cost to manage environmental works is approximately $2m pa and would create 2 FTEs.

62 As part of the Access Arrangement discussions with DoC in Westport we agreed to assist with funding of the mining heritage project at Charming Creek (see **Appendix 1**), and we are prepared to include this as a condition of the resource consents. However, I am still unclear whether DoC considers that such an offer is useful. (Condition 197).

ALTERNATIVES CONSIDERED

Access Road to the Proposed Mine

63 An access road is required to transport staff to and from the mine as well as being used to enable all mining activities to take place and to haul about 1,000 tonnes of coal per day from the mine to the rail loop for train loading. The route of the access road is shown on the plan in **Figure 16**.

64 When we were planning for the access road we investigated three options (shown on the plan):

(a) **Option 1 -** BDC water reservoir route. This route had been previously proposed by others in the early 2000's. While it would be the cheapest to construct we found it was not the most suitable for the following reasons:

(i) It is in the same catchment as BDC water reservoir;

(ii) Coal would be transported along public roads including SH67 which in some cases were not built to carry coal trucks; and

(iii) The coal trucks would pass through Westport.

(b) **Option 2 –** Down the ridge line to the south-west. This route had been previously considered by Milburn Cement in the 1980's (who previously held the mining licence over the site) as it would have closely followed a proposed aerial ropeway which would have transported the coal from Te Kuha Mine across the Buller River and on to the cement works at Cape Foulwind. While this route was possible to build, it was discarded for the following reasons:

(i) It would have zig- zagged down the ridge line facing south-west.;

(ii) The visual impact would be significant;

(iii) Large rimu and other native trees would have to be removed; and

(iv) Because of the steep grade the road corridor would have to be wide because of the zig – zags and high road batters.

(c) **Option 3** – A private, approximately 9 km road from the mine to the Te Kuha Rail Loop. This is our preferred option for the mine access road and will be developed as follows:

(i) The road formation will be approximately 9 km in length and will have a 7 m wide unsealed carriageway with at least seven passing bays at approximately 1 km intervals. Gradients will average less than 1 in 10. The proposed road footprint, including stockpile areas, is located on land administered by the Department of Conservation, Buller District Council and land that is privately owned.

(ii) Several streams and watercourses will need to be crossed by the road. Smaller streams will have piped culverts up to 1 m diameter installed. Some of the

streams are steep and show evidence of logs and rocks being brought down in recent floods. Those streams will either be bridged with single lane bridges or, where the creek is too dynamic and the bed load is too unpredictable, a concrete overflow ford with underlying culverts (for normal flows) will be constructed.

(iii) The road footprint has been constrained to a 7 m gravelled, running width being a one lane route with passing bays used by road trucks and light vehicles, not dump trucks. This has also reduced the required height and width of protective roadside bunds to 3 m width.

65 Due to the visual aspect/character of the landscape and the fact that it would overlook Westport Township, every effort has been made to minimise the view from Westport of the road line formation. This option has been designed to allow for shielding behind gullies, ridges and existing trees.

66 Another consideration in selecting the route was that the road had to be multi-functional i.e. able to provide light vehicle access to the mine site and plant on the hill and be wide enough to accommodate road trucks and trailer units bringing coal off the mine site. A gradient of generally less than 1 in 10 would allow trucks to haul earthmoving equipment and associated plant up the hill to the mine site and would allow road trucks the ability to transport coal down to the coal load-out site.

67 It is also important to us that the road route does not cross into any catchment feeding water into the Westport town supply.

Transporting Coal from the Mine to the Rail Loop

68 We considered options of transporting coal from the mine other than hauling the coal on the access road. Other options we considered and discarded are as follows:

(a) A Doppelmayr gondola system to bring the coal in a straight line from the mine site to the rail loop was investigated in the preliminary stages of the project. The proposed towers would have required light vehicle access to them for

maintenance and repairs of the Doppelmayr system. So, if this option was used two roads would be required to operate the mine.

(b) An aerial conveyor system. This has the same limitations as the gondola.

69 Both these options proved to be impracticable, price prohibitive and completely unnecessary as this small mine requires only 1,000 tonnes of coal to be transported to the railway loadout each day. In any event, neither option negated the need for an access road to the mine for vehicles delivering supplies and transporting staff.

70 We have therefore decided to transport coal from the mine to the railway line via the access road as this is the only practicable and financially viable option.

Location of the Load-Out Operations

71 The original proposal was to have the crusher and screening plant located at the loadout facility however, to reduce the size and visual impact of the load out facility this was amended so that those activities will now be located at the mine site. The loadout facility will just have a laydown area for coal stockpiles with no need for any buildings.

Underground Mining

72 Underground mining is not an option at Te Kuha because the strip ratio is too low.

Mitigation/Compensation delivery

73 To provide an appropriate mechanism for the delivery of the proposed off-footprint mitigation and environmental compensation, Stevenson propose to establish a trust which will involve representation from Ngāti Waewae, as well as the wider community. Stevenson has discussed this proposal with Te Runanga O Ngāti Waewae, and we have been advised that the Runanga supports the concept. Stevenson consider that the objects of the trust should be wider than just the delivery of the mitigation/compensation for Te Kuha but should extend to enabling the establishment of a ‘landscape scale’ biodiversity

enhancement initiative (including animal pest control) in this part of the Buller District. Proposed Conditions 198 – 203 provide for such a trust.

74 While Stevenson are proposing to establish a trust for this purpose, we are open to consider other options for both the implementation of the Te Kuha mitigation/compensation conditions and wider positive conservation actions, such as a charitable company.

ENVIRONMENTAL MANAGEMENT

75 Environmental management is a key part of our day to day operations at all Stevenson's sites. For the Te Kuha Mine Project, a Site Environmental Management Plan (SEMP) will be prepared in accordance with company policy, which will define Stevenson's commitment and responsibilities to environmental management of the site, including compliance with all conditions.

76 The management plans listed below and described in various experts' evidence will comprise part of the SEMP for the Te Kuha Mine Project. The plans are required to ensure that all operational methods and criteria set out in consent conditions are complied with and that the operations and the relevant effects are monitored and reported as required by consent conditions. The plans are:

(a) Contingency and Response and Hazardous Substances Management Plan (Condition 44).

This plan sets out a) the procedures to be followed by the Consent Holder and parties under its control in the event of accidents or other events that may result in adverse environmental effects; and b) practices and procedures to be adopted to ensure that hazardous substances are managed so that their storage and use is carried out safely and will not adversely affect the environment.

(b) Construction Management Plan (Condition 47).

This plan sets out the practices and procedures to be adopted to ensure that all resource consent conditions

relating to earthworks during the construction phase are complied with

(c) Rehabilitation Management Plan (Condition 50)

This plan is prepared in consultation with the Department of Conservation and is to achieve an outcome generally in accordance with the Rehabilitation Concept Plan which is attached to the conditions, to meet a number of specified objectives.

(d) Geotechnical Management Plan (Condition 87).

This plan sets out the practices and procedures to ensure that any potential slope instability is appropriately managed to enable Completion of Closure to occur.

(e) Mine Closure Plan (Condition 59)

This plan is prepared in consultation with the Department of Conservation and sets out the practices and procedures to be adopted to ensure that closure of the site can be achieved in accordance with the conditions of these consents, including the stated closure targets.

(f) Water Management Plan (Condition 126).

This plan sets out the practices and procedures to be adopted to ensure compliance with the conditions of the water related consents.

(g) Overburden Management Plan (Condition 131).

This plan sets out the practices and procedures to ensure the correct classification of stripped overburden of varying geology or geochemistry and the correct fill scheduling and destination with appropriate rock/chemistry type.

(h) Dust Management Plan (Condition 142).

This plan sets out the practices and procedures to be adopted to minimise the effects of air discharges

(i) Te Kuha Biodiversity Management and Enhancement Plan (Condition 170).

This plan is prepared in consultation with the Department of Conservation and Rūnanga o Ngāti Waewae, and sets out the practices, procedures, baseline surveys and monitoring to be adopted to ensure compliance with the conditions about ecological enhancement of the Te Kuha area and how the objectives set out in the conditions will be achieved.

(j) Waste Management Plan (Condition 194).

This plan is for the purpose of minimising the waste and litter generated during mining, to maximise recycling and reuse opportunities, to avoid or minimise any pollution risk associated with the waste generated and disposed of at the site, and to assist with pest control.

77 In addition, we are required (Condition 62) to provide to both councils an Annual Work Plan. The Annual Work Plan is detailed and includes:

(a) A description of all the mining operations, mitigation measures, rehabilitation (including the amount of soil stockpiled and the amount of DT completed), placement of overburden, monitoring and reporting carried out in the preceding 12 months;

(b) A description of all the mining operations, mitigation measures and rehabilitation (including an estimate of soil volumes potentially available for use in rehabilitation and the amount of DT planned), placement of overburden, monitoring and reporting intended to be carried out in the forthcoming 12 months, with an approximate timetable of events; and

(c) A report on compliance with the management plans.

78 As well as the annual plan, we are also required to submit an annual environmental monitoring report (Condition 68) which is to include:

(a) all environmental monitoring undertaken to ensure compliance with the conditions, including environmental monitoring within the mine site, and monitoring relating to progress, results and outcomes of biodiversity management,

rehabilitation and habitat enhancement programmes within the wider Te Kuha area;

(b) all the data collected, as required under the Environmental Monitoring Plan. This is to include graphical presentation, statistical summations of monitoring data and a critical analysis of the information in terms of compliance and environmental effects;

(c) Highlighting and discussing any important environmental trends, including in relation to rehabilitation trials if undertaken; and

(d) Progress towards achieving the closure criteria.

79 In preparing the draft conditions as part of the application, and during the councils hearing process in response to issues raised, we have built on the approaches used in earlier resource consents for Cypress pit (Stockton), Mt William North pit (Cypress) and the Escarpment Mine. Our advisors have developed the conditions in consultation with council officers and council advisors and have adopted the approaches to conditions which have proved to be operationally efficient and effective at these other mines. An example of this is the ability for the Councils to refer issues to technical reviewers at Stevenson's cost (Condition 72). In discussions with Council officers it was agreed this approach is preferable to the situation with earlier consents where there is a 'standing' peer review panel. We agreed that the approach for Te Kuha will be more efficient but will retain the same level of oversight and peer review. We have also sought to better align the reporting procedures for these plans with annual reporting requirements.

80 Stevenson's advisors inform me that the set of conditions represent current best practice and provide an appropriate balance between certainty for everyone interested in the consents and operational flexibility.

81 Conditions 2 - 4 are also important in that they demonstrate Stevenson's commitment to ensuring compliance by requiring Stevenson to employ an environmental manager who reports to the mine manager, and whose recommendations must be given

effect to in mine planning and operations, unless that is inconsistent with our health and safety obligations.

82 Stevenson recognises the need to contribute to the global effort to address climate change. We have a responsibility to help address this global challenge by reducing emissions at our operations and by sustainably producing a product that is essential for building the technologies and infrastructure needed to transition to a low-carbon economy. As a company committed to climate action, we will:

- Continue to foster a culture of energy and carbon savings, which will further underpin innovation in our business.
- Set energy and carbon improvement targets.
- Work with our customers and transportation providers to reduce emissions downstream of our business.
- Adapt to the potential physical impacts of climate change and increase the resilience of our assets.
- Establish partnerships with local groups, councils and Iwi in the regions in which we operate to help increase the resilience of their communities and local ecosystems to the potential physical impacts of climate change.

CONSULTATION AND UNDERSTANDING THE VIEWS OF THE COMMUNITY

83 Stevenson have consulted over the last ten years with a number of groups and individuals within the community regarding the proposed Te Kuha Mine Project including:

- neighbouring property owners;
- the Department of Conservation;
- Te Runanga O Ngati Waewae;
- the Buller District Council and West Coast Regional Council as representatives of the community.

84 A community meeting, which was advertised in the Westport News, was held on the 15th February 2016 at the NBS Theatre in Westport where Stevenson presented the proposed project to over 70 attendees.

85 During this period, we also reviewed the evidence and decisions relating to Solid Energy's and Bathurst's proposals over the last decade or so. Those processes also confirmed that there is a spectrum of views from very positive to very opposed, and all shades in between. We also considered the evidence presented and decision for the Escarpment Mine in terms of the potential social impact of a 'fly in fly out' operation. That was one of the reasons why we decided on the limited hours/days of operation of Te Kuha – so those effects would be avoided. Consequently, I was advised a that a full social impact assessment was unnecessary.

86 The issues raised in the submissions and in comments in relation to both access arrangement applications identified a range of issues and concerns. These issues are discussed in Ms Courtier's evidence.

87 Because of this work, I believe that we understand the range of views within the community. Those views range from complete support to complete opposition, and they include a number of specific reasons for varying levels of support or opposition. In order to test our view, we sought the advice of a social impact specialist who confirmed that all issues had likely been identified, and that there was no benefit in undertaking additional opinion surveys of opinions.

OTHER APPROVALS FOR THE MINE

88 In addition to obtaining the necessary resource consents, because the mine footprint is on both stewardship land administered by the Department of Conservation and land managed by the Buller District Council as a local purpose water conservation reserve, we must obtain access arrangements from both the Buller District Council and jointly from the Minister of

Energy and the Minister of Conservation under the Crown Minerals Act.

Access Arrangement over Conservation Land

89 An application for an access arrangement was made to the Minister of Conservation on 20 March 2014. This relates to the 12 ha area of the mine which is on stewardship land. Because the mining permit is classified as a 'Tier 1' permit under section 61 of the Crown Minerals Act 1991, the decision on the application is to be jointly made by the Minister of Conservation and the Minister of Energy. The access arrangement application to the Ministers of Conservation and Energy involved a public submission and hearing process, which was completed in April 2016.

90 The access application was declined by Minister Sage and Minister Woods in June 2018. Unfortunately, the Ministers were not provided with the full information on the project, particularly the suite of proposed conditions which set out the controls on the effects of the mine and how they would be managed, including by way of off-footprint mitigation, offsets and compensation.

91 Consequently, the legal advice provided to Stevenson was that we should lodge a fresh access application and work with the Department of Conservation to ensure that this time the Ministers will be provided with the full and complete information to allow them to make a properly informed decision.

92 In May 2021, the Government announced the setting up of panels to evaluate the status, and where appropriate recommend the reclassification or disposal of, stewardship land in the north of the South Island and the West Coast (which includes the Te Kuha area). This review process was expected to take approximately eight months. The Government also announced that it would introduce legislation to streamline the assessment and reclassification process. However, I understand that Ngai Tahu have issued Court proceedings to challenge this assessment and reclassification process.

93 Because of the uncertainty around the future of stewardship land, Stevenson has decided to put the new access application on hold until we have more clarity on the situation.

94 It is our hope that any access arrangement requirements will be aligned to the resource consent conditions. We consider that to be the most effective and efficient approach, both for Stevenson and the Department.

Access Arrangement over Local Purpose Reserve

95 In July 2020, the Supreme Court ruled that when considering an access application over the rest of the proposed site which is a local purpose reserve, the Buller District Council must give effect to the Reserves Act.

96 The legal and ecological advice that Stevenson has received confirms that giving effect to the Reserves Act is achievable. Stevenson has decided that we wish to progress the resource consent appeal process prior to progressing the access application to the District Council. Stevenson considers that the contested process under the RMA will result in more detailed information being made available which will assist both Stevenson and the District Council when considering an application for access in due course.

97 It is Stevenson's intention to provide annual payments to the Council as administering body of the reserve based on the amount of coal recovered. The intention is that these payments would be used by the Council for the purposes of protecting and enhancing the drinking water supplies for Westport and the surrounding areas. Stevenson is prepared to accept a condition on the resource consent which gives effect to this intention. That is currently provided for in proposed conditions 204 and 205.

2013 Buller Coal Plateau Discussions

98 In 2013 Stevenson was part of an initiative led by the government involving a range of parties who engaged in discussions about areas on the Buller Coal Plateau which should be 'open for mining' and related activities and areas to be set aside for enduring protection of conservation, heritage and community values on the and to make recommendations to relevant Ministers of the Crown.

99 The discussions were subject to a confidentiality agreement signed on 2 October 2013 which provided that the obligations about confidentiality were to continue for a period of five years. Those obligations have now ended.

100 The Buller Coal Plateau as the area under discussion is identified in **Figure 18** attached to my evidence.

101 An interim report on the discussions was provided to the Minister of Conservation and the Minister of Energy and Resources on 15 October 2013. A final report was provided to the Ministers on 18 December 2013. A copy of both these reports is attached to my evidence as **Appendix 2**.

Coking Coal is a Critical Mineral

102 The question can be asked why Stevenson are wanting to mine coking coal in these times when the world is needing to move towards a low carbon economy, and the burning of fossil fuels is a major contributor of greenhouse gases.

103 Here, I believe it is important to distinguish between thermal coal which is used for electricity generation and producing process heat on the one hand, and metallurgical or coking coal on the other. Not only do the two types of coal have different properties (as described by Dr Pope in his evidence), but they also have very distinct uses.

104 Coking coal is a key ingredient used in steel, carbon fibre and batteries: many items that go towards manufacturing "clean energy" solutions (such as wind-farms, solar panels, electric cars). For the foreseeable future, there is no viable substitute to coking coal to produce steel[1]. The coal produced at Te Kuha will be entirely coking coal.

105 In a September 2020 report, the European Commission includes coking coal as one of the top 30 "critical raw materials" for the

[1] See https://www.straterra.co.nz/lets-talk-about-coal-2/future-of-coal/making-steel-without-coal/ While there is work being done to consider alternatives to the use of coking coal, or to reduce greenhouse gas emissions, solutions appear to be some time away. Eg see the Net-Zero Steel Initiative - https://missionpossiblepartnership.org/steel

European Union. These are raw materials that the EC considers "are most important economically and have a high supply risk."[2]

ECONOMIC/FINANCIAL MATTERS

106 In his evidence, Dr Pope describes the special qualities of the Te Kuha coking coal which means that it can attract premium prices, both in itself and for blending with other coals.

107 Mr Bragg sets out in his evidence the potential uses of Te Kuha's specialist coal and describes why Stevenson is confident that we will be able to sell the coal at these premium prices.

108 Some submitters queried how Stevenson can have that confidence when the Escarpment mine was consented in 2013 and began production in late 2014 but was put into care and maintenance in May 2016, and Solid Energy reduced its output and workforce at Stockton Mine from 2015/2016. Both of those situations followed a period of lower than anticipated prices for coking coal on the international market. I note that the Roa/Rajah mine near Greymouth has operated throughout this period, averaging about 150k tonnes p.a., with only small fluctuations in production or staffing. The Roa/Rajah operation is a better analogy for Te Kuha because the coal at both sites have similar qualities.

109 With regard to the economics of Te Kuha it is not possible or appropriate to draw a direct comparison between Te Kuha and either the Stockton Mine or the Escarpment Mine. I am not aware of the detailed financial situations of either Solid Energy or Bathurst over that period, but I do know that international coal prices are not the only important factor in the financial health of a particular mining operation. The availability of capital and what else the company concerned is undertaking at the time such as other projects or acquisitions are also important factors.

110 I have reviewed the economic evidence on coal prices and the viability of that particular mine that was presented to the

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[2] 'Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability' European Commission, Brussels 3 September 2020. Available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0474

Environment Court in the Escarpment Mine hearing by Mr Geoff Butcher and Mr Peter Clough. I have also considered the Environment Court's comments about that evidence in its decision which is dated March 2013. I have been asked by Stevenson's counsel to assist the Court in relation to the effect of variable international coal prices on the viability of Te Kuha on the assumption that this is a matter which is relevant for the Court.

111 To do that, I modelled the financial implications for Te Kuha if it had been consented in 2014 and began producing coal in January 2015 like Escarpment. The objective was to understand whether Te Kuha would have stopped production in the same way that Escarpment Mine has done.

112 I used the published Hard Coking Coal (HCC) prices (using an average of the four quarters) and the actual USD exchange rates that applied at the time (between 2014 and today). I used 2014 as Year 1 of the model (which involved establishing the infrastructure but no coal production) and 2015 as Year 2 which involved some but not full production. While the details of our financial model are commercially sensitive, I can advise the Court that the result of that modelling is that had Te Kuha started in 2014 we would not have closed the mine at all, and the mine would have operated at a profit over all of that time, and would be continuing to operate at a profit until now. That modelling is in line with our original financial modelling which was done in 2012.

113 The Te Kuha financial model has been updated to reflect the forecast HCC prices (source Macquarie) and this continues to show that the mine is profitable at these forecast rates. Demand for HCC continues to be as strong today as it was when the Te Kuha consents were granted by the Councils in November 2017.

114 Attached to my evidence is **Figure 17** which shows the relevant HCC price between April 2010 and June 2021 (actuals) and also shown is the forecast HCC prices out to 2024. Even at the lowest range of the HCC prices shown the Te Kuha mine is financially viable because of the strip ration and low operational cost model for Te Kuha

115 **Figure 17** identifies relevant timing of events related to the Escarpment mine and where the HCC price was at that time.

116 As I have noted, I am not party to Bathurst's detailed accounts, so I am unable to form a complete view on the reasons for what has happened at Escarpment. However, I am aware that Escarpment had not actually got to the stage that it was producing higher quality coking coal before it was put on "care and maintenance". In contrast, Te Kuha will produce the specialist high quality premium coking coal from the Paparoa Pit from the start of production.

117 Given the coal quality, Stevenson fully anticipates that we will be able to secure a fixed price contract covering a considerable part of (a) annual coal output; and (b) mine life. This will significantly 'de-risk' the project. I do not know what, if any, arrangements Bathurst had for Escarpment like this.

118 I also don't believe it is valid to compare Te Kuha with what happened with Solid Energy and the Stockton Mine. Solid Energy's operations and the pressures it was facing in 2014/2015 are nothing like Stevenson Mining, and the Stockton Mine is quite different to Te Kuha. The problems Solid Energy faced were not solely because of an unexpected downturn in the coal price.

119 In addition, Te Kuha mine has key differences from both Stockton and Escarpment. The attributes of the Te Kuha coal with its low sulphur and high rank as described by Dr Pope means it will attract a premium price and likely be utilised in specialised applications. As Te Kuha has not been previously mined there will be a higher yield than operations where old workings are involved such as Stockton and Escarpment. The strip ratio with an average 4.3 to 1 makes it very economic to mine, and I am confident that our operation will be very cost-effective.

CONCLUSION

120 Te Kuha is a valuable coal resource, although small in scale it is an economically viable project that will have direct and indirect economic benefits for Westport and the West Coast region.

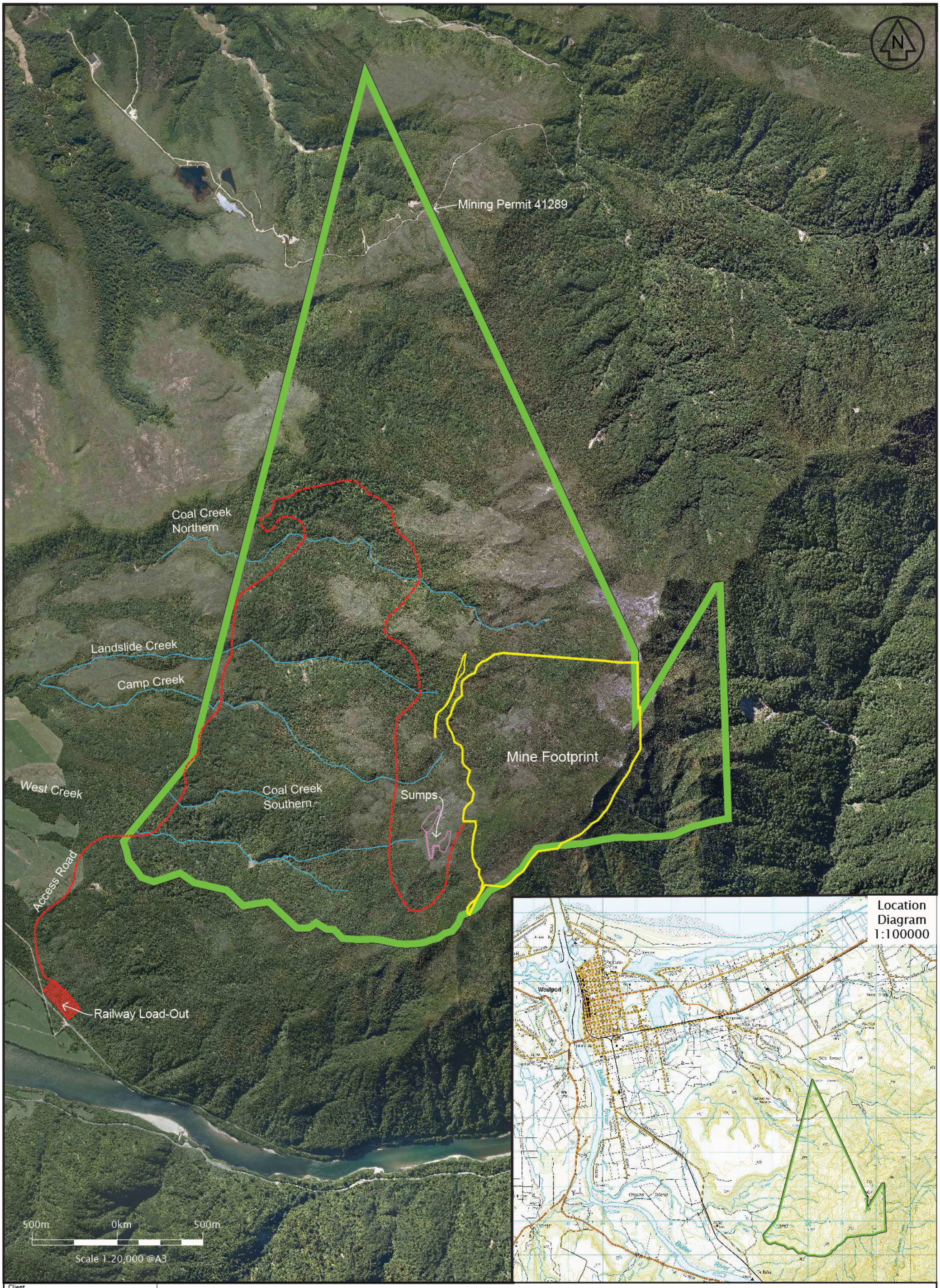
121 Stevenson is a responsible, financially viable company with a proven track record of operating resource extractive businesses

while always ensuring that all environmental requirements are met.

122 During all phases of the mine development and operation robust management plans and practices, as I have outlined, will be put in place to minimise the effect of mining on the environment and to ensure the site is rehabilitated to a high standard.

Anne Brewster

20 August 2021



Client
Stevenson Mining

NOTES
- All dimensions shown are in metres unless otherwise shown
- Copyright on this drawing is reserved
- Check any electronic data against the hardcopy plan to ensure it is the latest version
-If this plan is being used as part of sale and purchase agreement then it is done so on the basis that it is preliminary only, final dimensions and areas may vary on final survey
-NZTM Coords

FIGURE 1 : AN OVERVIEW OF THE PROPOSED TE KUHA MINE AND ASSOCIATED INFRASTRUCTURE.

L:\S12073 - Stevenson Mining - Te Kuha Coal\CAD\S12073.Location.02_Rev C.dwg Plotted:14.07.2016

N

Mining Permit 41289

Section 14
Blk VIII Kawatiri SD
Water Conservation Reserve

Access Road

Crown Land
Block X
Kawatiri SD

Pt Section 6
Blk II Ohika SD

Section 17
Blk II Ohika SD
Water Conservation
Reserve

Mine Footprint

Sumps

Section 21
Blk II Ohika SD
PE Limited

Pt Section 8
BLK II
Ohika SD
Stevenson
Properties
2015 ltd

Nine Mile Rd

Railway Load-Out

Section 16
Blk III Ohika SD
Scenic Reserve Lower Buller

Buller River

Stillwater - Ngakawau line

Lot 1
DP 389757
Stevenson Properties
2015 ltd

500m 0km 500m

Scale 1:20,000 @A3

Location
Diagram
1:100000

Westport

Buller River

Organs Island

Te Kuha

Client
Stevenson Mining

NOTES
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-NZTM Coords

FIGURE 2: LEGAL BOUNDARIES ASSOCIATED WITH THE PROPOSED TE KUHA MINE.

L:\S12073 - Stevenson Mining - Te Kuha Coal\CAD\S12073.Location.02_Rev D.dwg Plotted:14.07.2016

STILLWATER - NGAKAWAU RAILWAY LINE

SECTION 15 BLK I OHIKA S.D. P&E. Ltd

NINE MILE ROAD - LEGAL ROAD

SEC 21 P&E. Ltd (FORMERLY TE KUHA FARMS LTD)

PT SEC 4 DoC

Pt SEC 5 DoC

LEGAL ROAD

SEC 30 DoC

PT SEC 13 DoC

SEC 31 DoC

PROPOSED TE KUHA ROUTE 6

Pt SEC 6 DoC

Pt SEC 7 DoC

P&E. Ltd Pt 253

PT SEC 8 Stevenson Properties 2015 Ltd.

SEC 14 WATER CONSERVATION RESERVE Gaz 1951 Pg 1185

SEC 20 SCENIC RESERVE Gaz 1981 Pg 1335

SEC 17 WATER CONSERVATION RESERVE Gaz 1951 Pg 1185

SEC 16 SCENIC RESERVE Gaz 1981 Pg 1335

MINE FOOTPRINT

LEGEND

- MINOR CONTOUR INTERVAL 2m
- MAJOR CONTOUR INTERVAL 10m
- CADASTRAL BOUNDARY
- TE KUHA ROUTE 6
- RAILWAY LINE
- MINE FOOTPRINT
- HAUL ROAD CORRIDOR
- STREAM CHANNEL
- BRIDGE/BOX CULVERT
- PASSING BAY AND OVERBURDEN/REHAB STOCKPILE

DATUM NOTE

COORDINATE DATUM : GEODETIC 2000
IN TERMS OF NZTM 2000
HEIGHT DATUM : MSL LYTTELTON
ORIGIN: BM NN84 RL 27.54m
ALL ELEVATIONS ARE IN METRES

Prepared for:

STEVENSON MINING LTD.

PROPOSED ACCESS ROUTE 6 - FROM RAILWAY SIDING TO MINE-SITE

CHRIS J COLL SURVEYING Ltd.
Regd Land Surveyor, Resource Management Consultant
19 BROUGHAM STREET PO BOX 204 WESTPORT

DRAWN	WARREN KEOGHAN.	CHECKED	CHRIS J COLL.
DATE	JANUARY 2016.	REF	2787 ACCESS ROUTE 6C

SCALES 1:5,000 (A1) 1:10,000 (A3)

SHEET 3

SERIES 3 OF 24

Figure 4

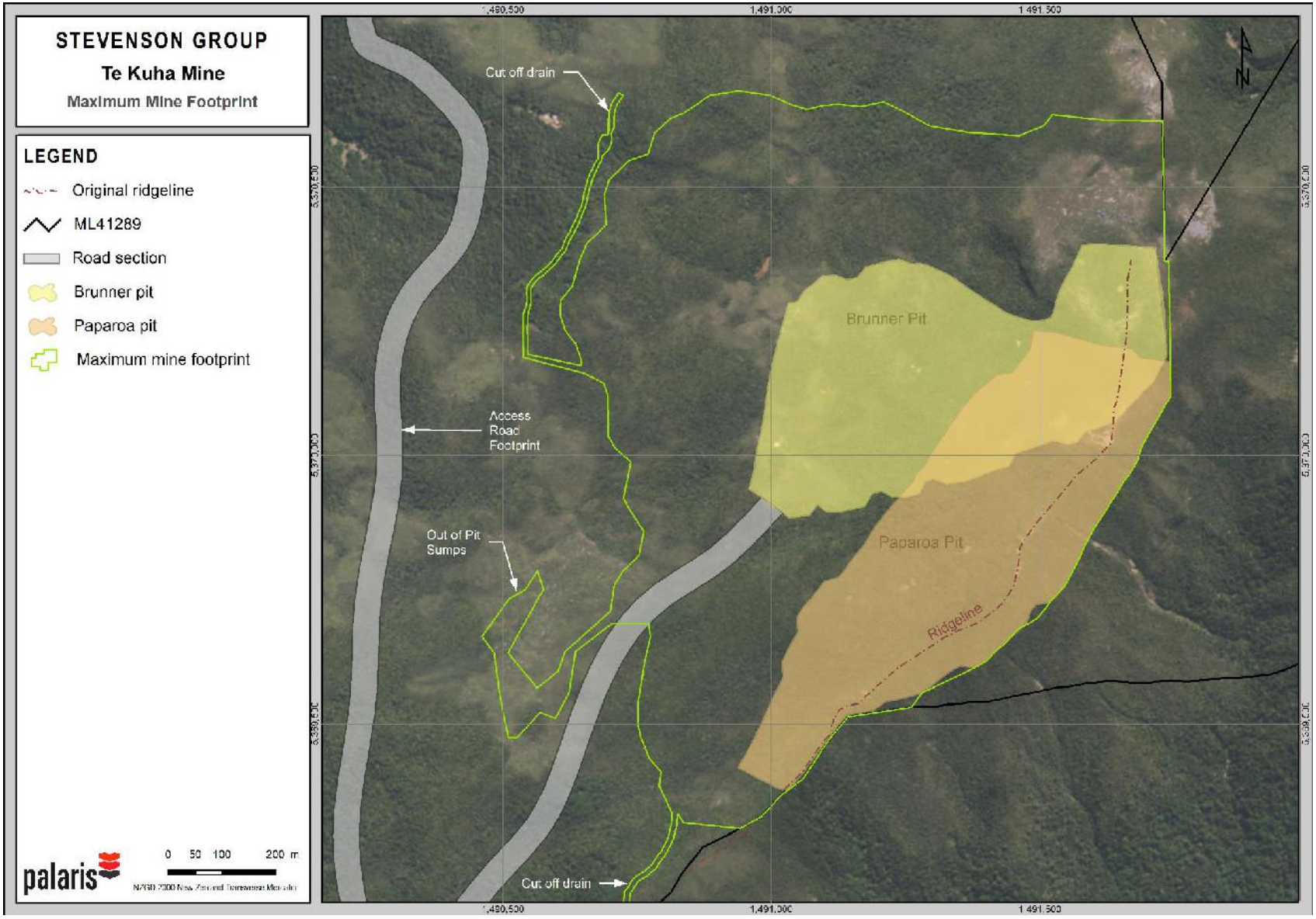

STEVENSON GROUP
Te Kuha Mine
Maximum Mine Footprint
LEGEND
Original ridgeline
ML41289
Road section
Brunner pit
Paparoa pit
Maximum mine footprint
Cut off drain
Access Road Footprint
Out of Pit Sumps
Brunner Pit
Paparoa Pit
Ridgeline
Cut off drain
1,490,500
1,491,000
1,491,500
5,370,500
5,370,000
5,369,500
N
0 50 100 200 m
palaris

Figure 5

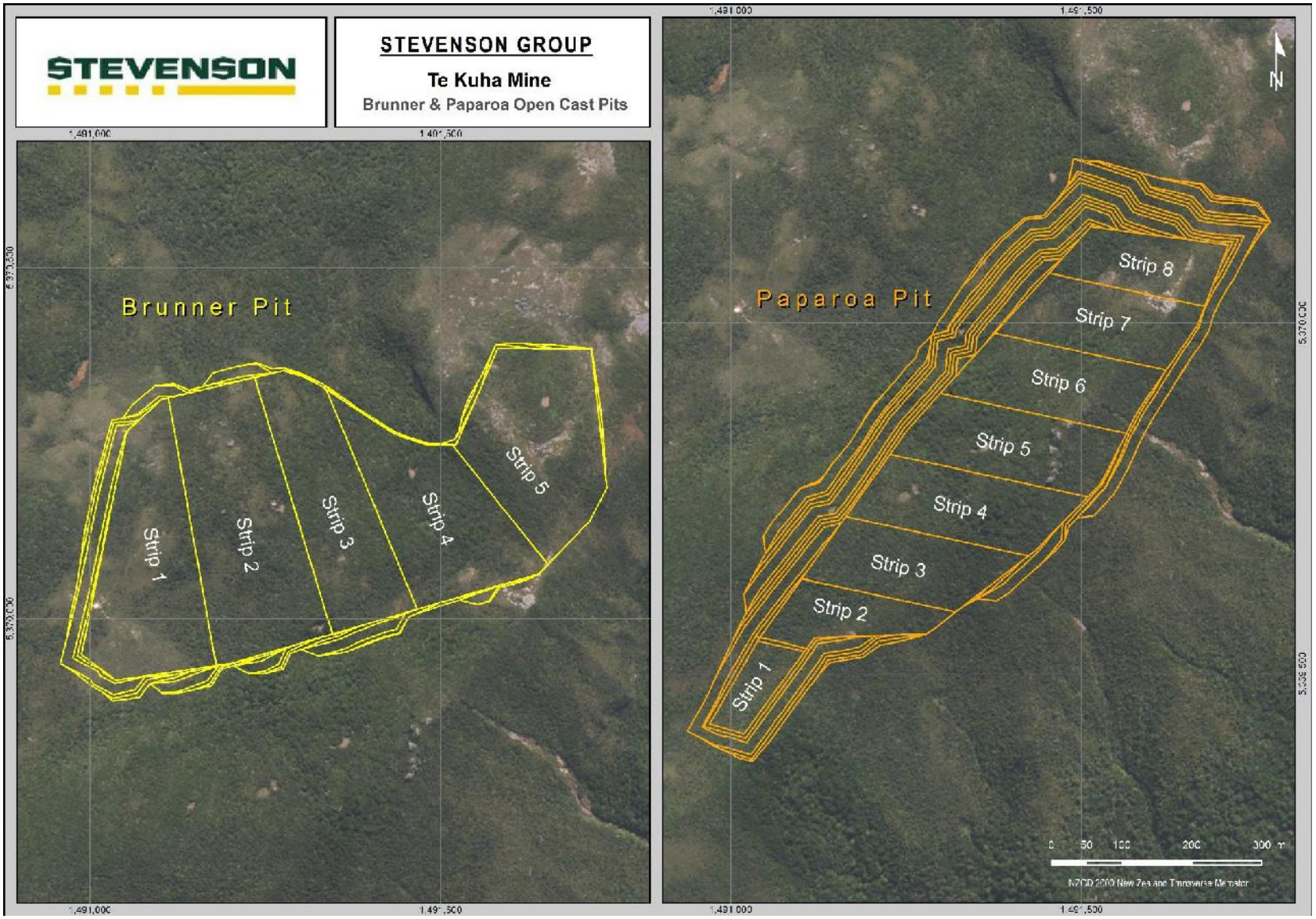

STEVENSON
STEVENSON GROUP
Te Kuha Mine
Brunner & Paparoa Open Cast Pits
Brunner Pit
Strip 1
Strip 2
Strip 3
Strip 4
Strip 5
Paparoa Pit
Strip 8
Strip 7
Strip 6
Strip 5
Strip 4
Strip 3
Strip 2
Strip 1
N
0 50 100 200 300 m
NZTM 2000 New Zealand Transverse Mercator

Figure 6

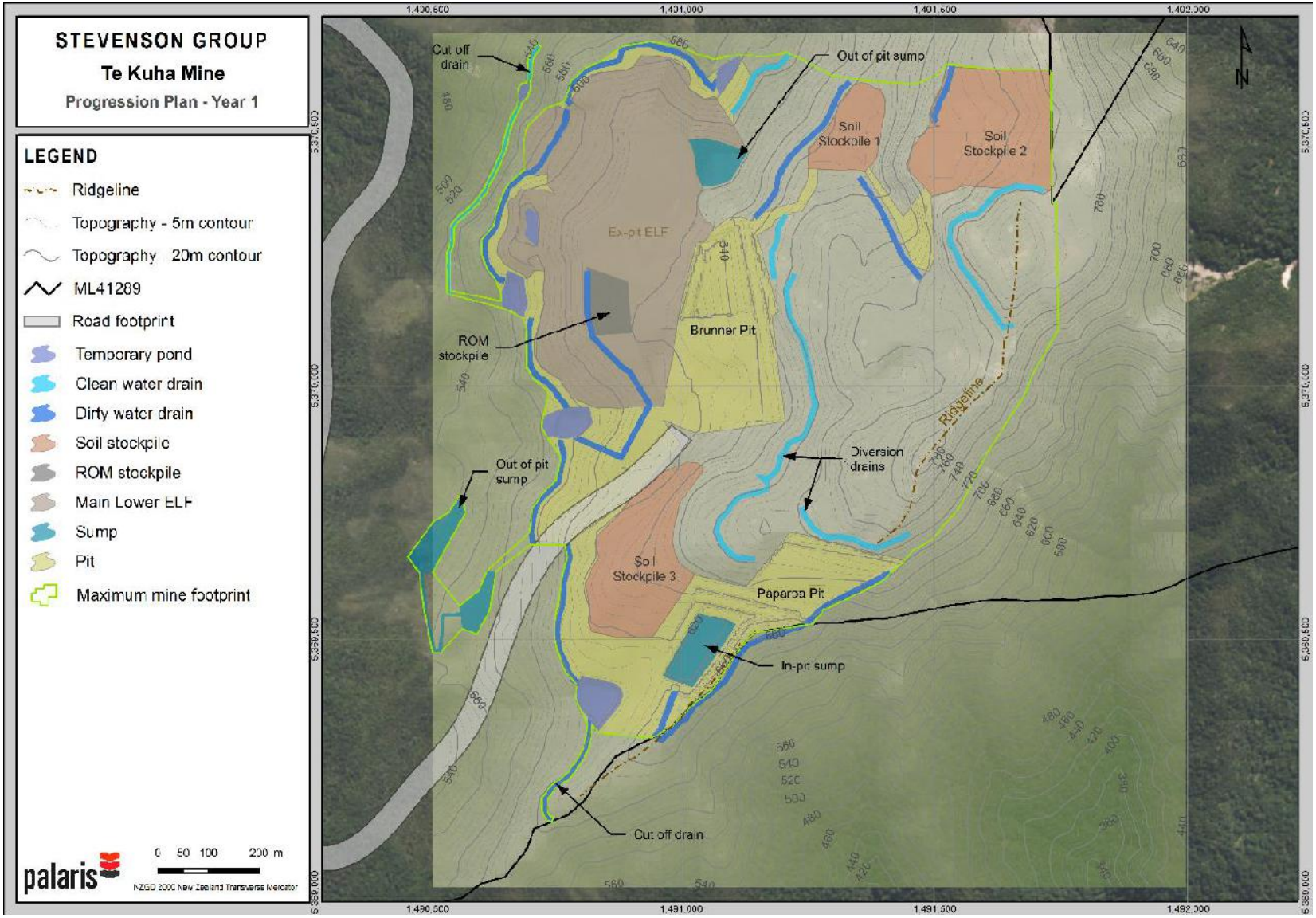

STEVENSON GROUP
Te Kuha Mine
Progression Plan - Year 1
LEGEND
Ridgeline
Topography - 5m contour
Topography - 20m contour
ML41289
Road footprint
Temporary pond
Clean water drain
Dirty water drain
Soil stockpile
ROM stockpile
Main Lower ELF
Sump
Pit
Maximum mine footprint
palaris
0 50 100 200 m
NZGD 2000 New Zealand Transverse Mercator
Cut off drain
Out of pit sump
Soil Stockpile 1
Soil Stockpile 2
Ex-pit ELF
ROM stockpile
Brunner Pit
Ridgeline
Diversion drains
Out of pit sump
Soil Stockpile 3
Paparoa Pit
In-pit sump
Cut off drain
1,490,500
1,491,000
1,491,500
1,492,000
5,370,500
5,370,000
5,369,500
5,369,000
N

Figure 7

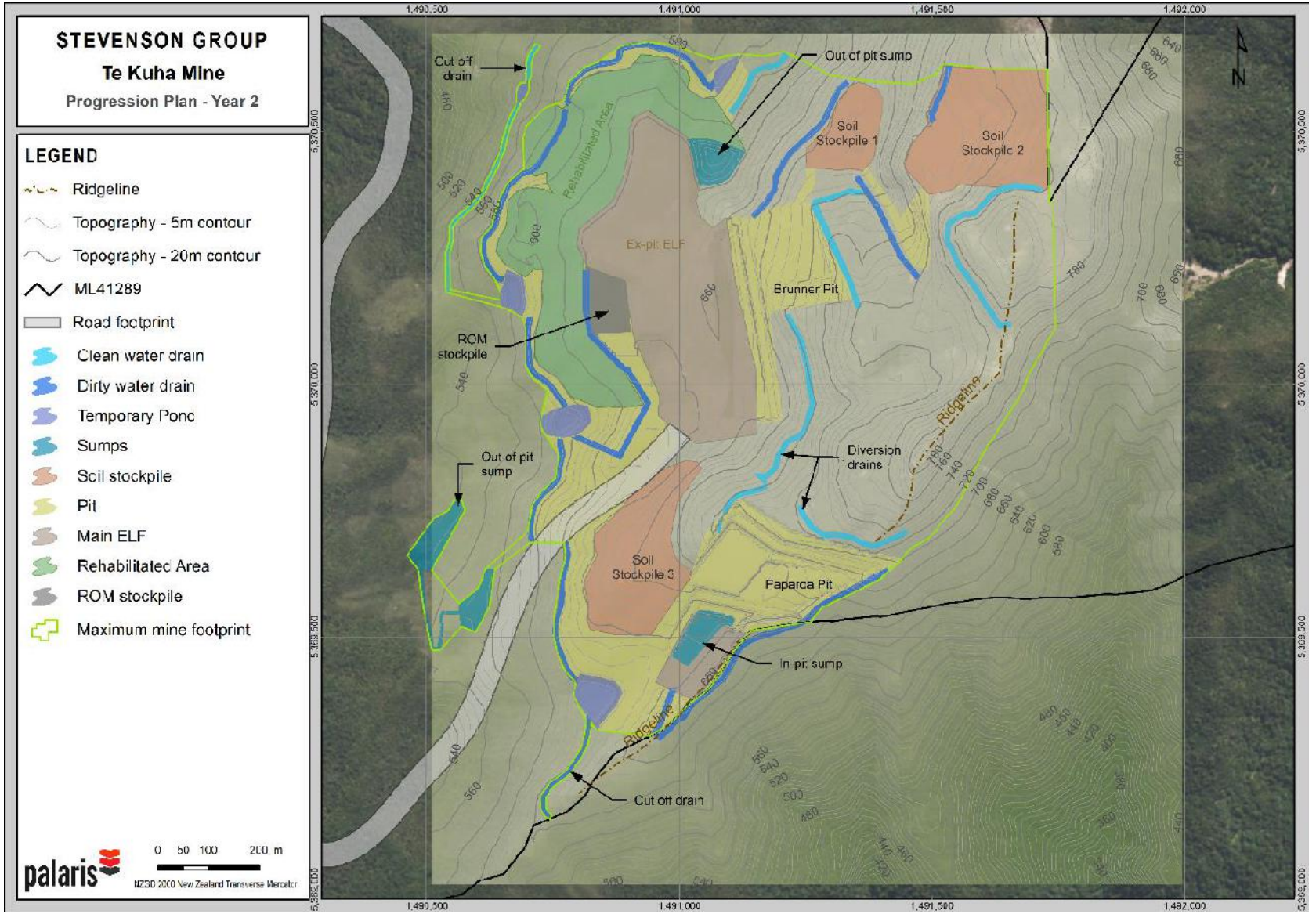

STEVENSON GROUP
Te Kuha Mine
Progression Plan - Year 2
LEGEND
Ridgeline
Topography - 5m contour
Topography - 20m contour
ML41289
Road footprint
Clean water drain
Dirty water drain
Temporary Ponc
Sumps
Soil stockpile
Pit
Main ELF
Rehabilitatec Area
ROM stockpile
Maximum mine footprint
palaris
0 50 100 200 m
NZGD 2000 New Zealand Transverse Mercator
Cut off drain
Out of pit sump
Soil Stockpile 1
Soil Stockpile 2
Rehabilitated Area
Ex-pit ELF
Brunner Pit
ROM stockpile
Ridgeline
Diversion drains
Out of pit sump
Soil Stockpile 3
Paparca Pit
In pit sump
Ridgeline
Cut off drain
1,490,500
1,491,000
1,491,500
1,492,000
5,370,500
5,370,000
5,369,500
5,369,000
N

Figure 8

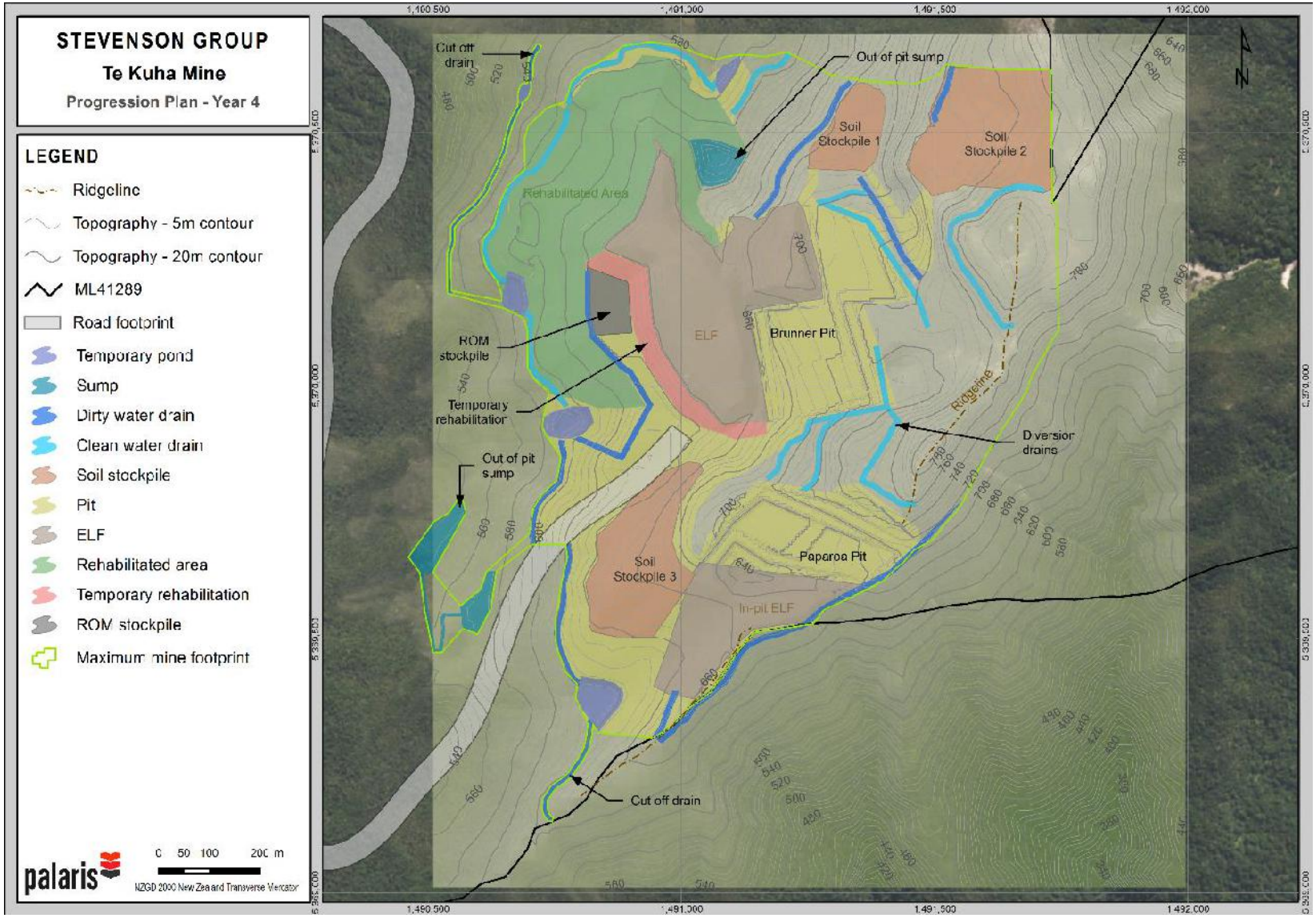

STEVENSON GROUP
Te Kuha Mine
Progression Plan - Year 4
LEGEND
Ridgeline
Topography - 5m contour
Topography - 20m contour
ML41289
Road footprint
Temporary pond
Sump
Dirty water drain
Clean water drain
Soil stockpile
Pit
ELF
Rehabilitated area
Temporary rehabilitation
ROM stockpile
Maximum mine footprint
palaris
0 50 100 200 m
NZGD 2000 New Zealand Transverse Mercator
Cut off drain
Out of pit sump
Soil Stockpile 1
Soil Stockpile 2
Rehabilitated Area
ELF
Brunner Pit
ROM stockpile
Temporary rehabilitation
Ridgeline
Diversion drains
Out of pit sump
Soil Stockpile 3
Paparoa Pit
In-pit ELF
Cut off drain
N

Figure 9

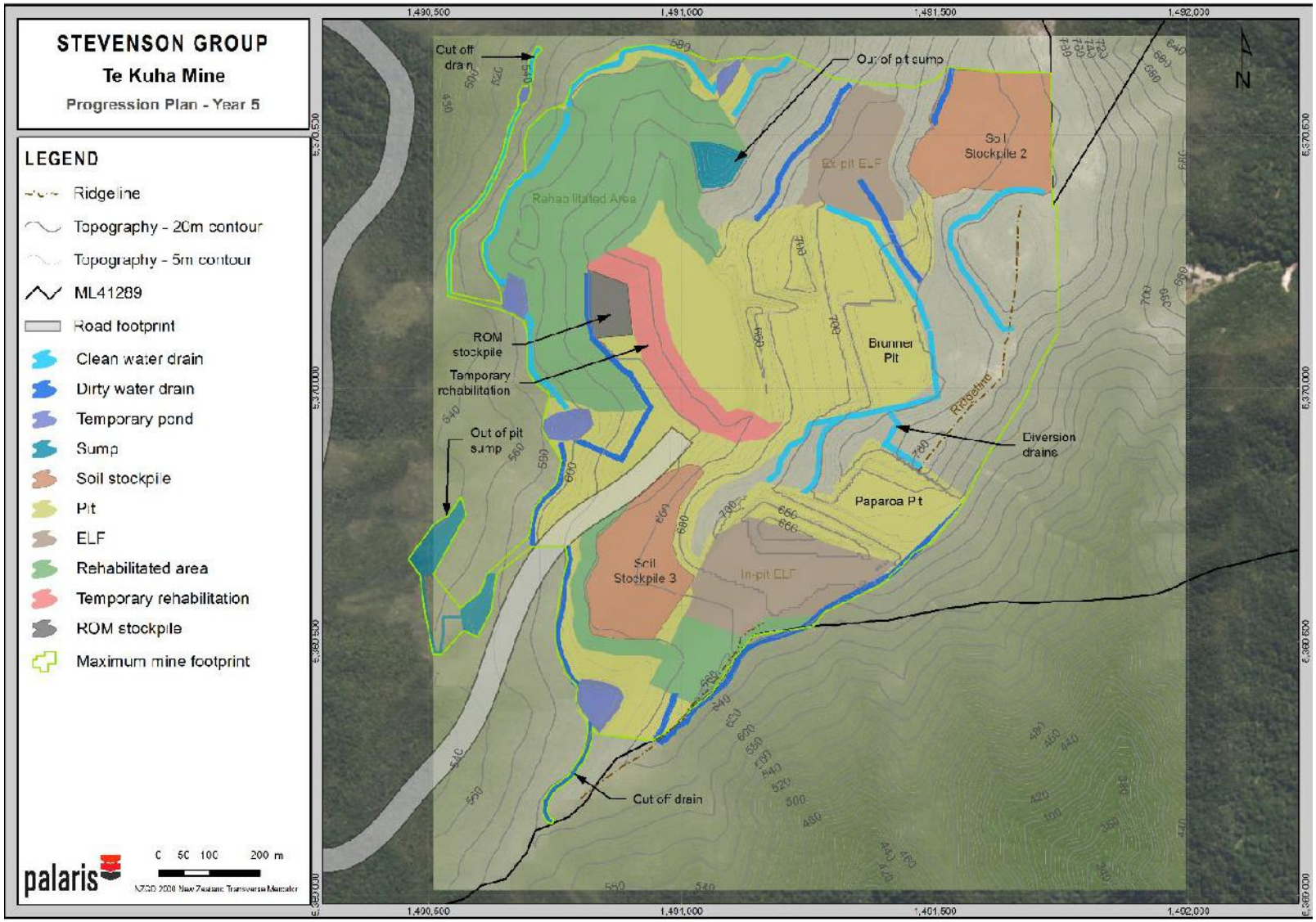

STEVENSON GROUP
Te Kuha Mine
Progression Plan - Year 5
LEGEND
Ridgeline
Topography - 20m contour
Topography - 5m contour
ML41289
Road footprint
Clean water drain
Dirty water drain
Temporary pond
Sump
Soil stockpile
Pit
ELF
Rehabilitated area
Temporary rehabilitation
ROM stockpile
Maximum mine footprint
palaris
0 50 100 200 m
1,490,500
1,491,000
1,491,500
1,492,000
5,370,500
5,370,000
5,369,500
5,369,000
N
Cut off drain
Out of pit sump
Soil Stockpile 2
Ex-pit ELF
Rehabilitated Area
ROM stockpile
Temporary rehabilitation
Out of pit sump
Brunner Pit
Ridgeline
Diversion drains
Paparoa Pit
Soil Stockpile 3
In-pit ELF
Cut off drain

Figure 10

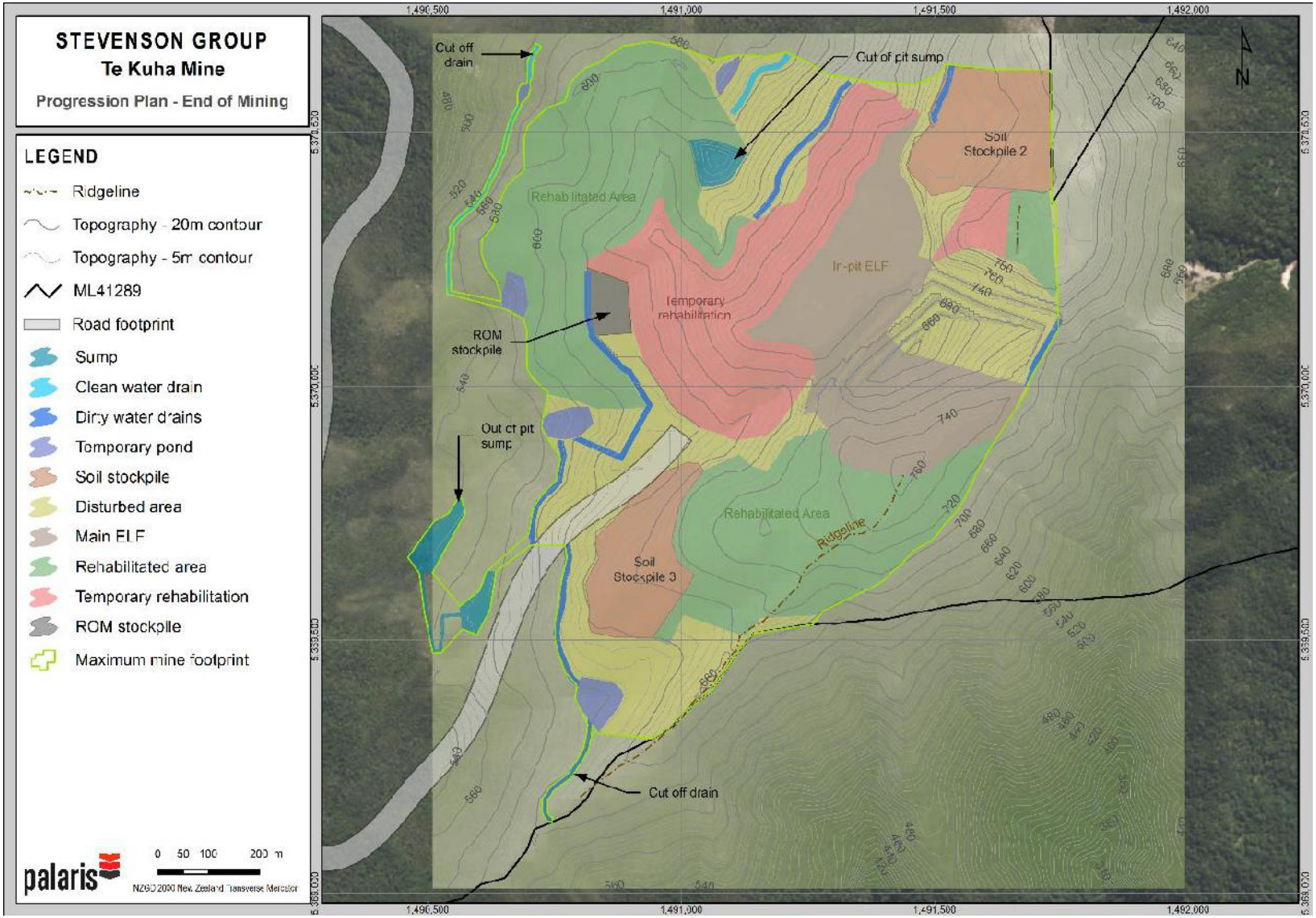
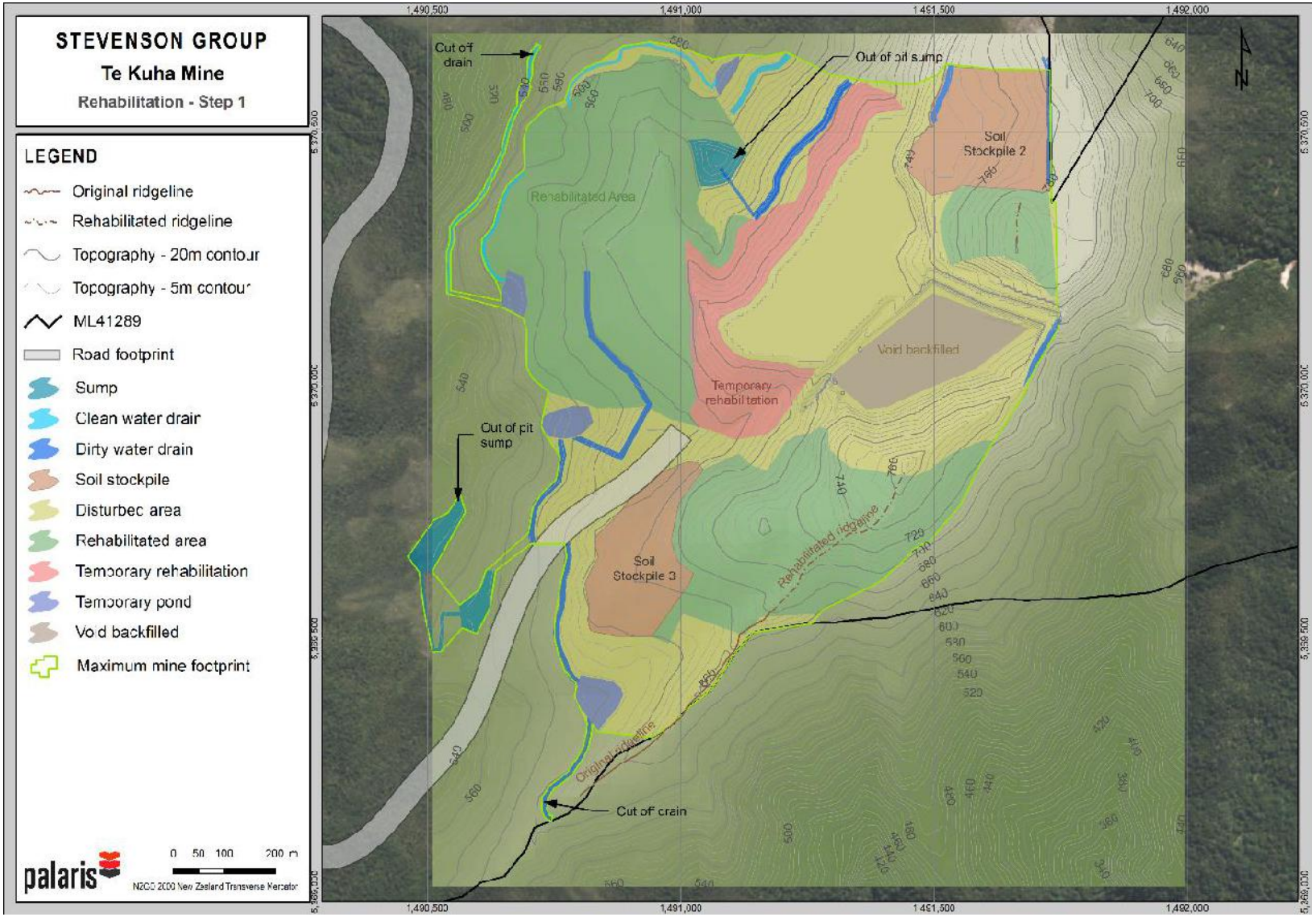

STEVENSON GROUP
Te Kuha Mine
Progression Plan - End of Mining
LEGEND
Ridgeline
Topography - 20m contour
Topography - 5m contour
ML41289
Road footprint
Sump
Clean water drain
Dirty water drains
Temporary pond
Soil stockpile
Disturbed area
Main ELF
Rehabilitated area
Temporary rehabilitation
ROM stockpile
Maximum mine footprint
palaris
0 50 100 200 m
NZGD2000 New Zealand Transverse Mercator
1,490,500
1,491,000
1,491,500
1,492,000
5,370,500
5,370,000
5,369,500
5,369,000
Cut off drain
Cut of pit sump
Soil Stockpile 2
Rehabilitated Area
In-pit ELF
Temporary rehabilitation
ROM stockpile
Out of pit sump
Rehabilitated Area
Ridgeline
Soil Stockpile 3
Cut off drain
N

Figure 11a


STEVENSON GROUP
Te Kuha Mine
Rehabilitation - Step 1
LEGEND
Original ridgeline
Rehabilitated ridgeline
Topography - 20m contour
Topography - 5m contour
ML41289
Road footprint
Sump
Clean water drain
Dirty water drain
Soil stockpile
Disturbed area
Rehabilitated area
Temporary rehabilitation
Temporary pond
Void backfilled
Maximum mine footprint
palaris
0 50 100 200 m
NZGD 2000 New Zealand Transverse Mercator
Cut off drain
Out of pit sump
Soil Stockpile 2
Rehabilitated Area
Void backfilled
Temporary rehabilitation
Out of pit sump
Soil Stockpile 3
Rehabilitated ridgeline
Original ridgeline
Cut off drain
1,490,500
1,491,000
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1,492,000
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5,370,000
5,369,500
5,369,000
N

Figure 11b

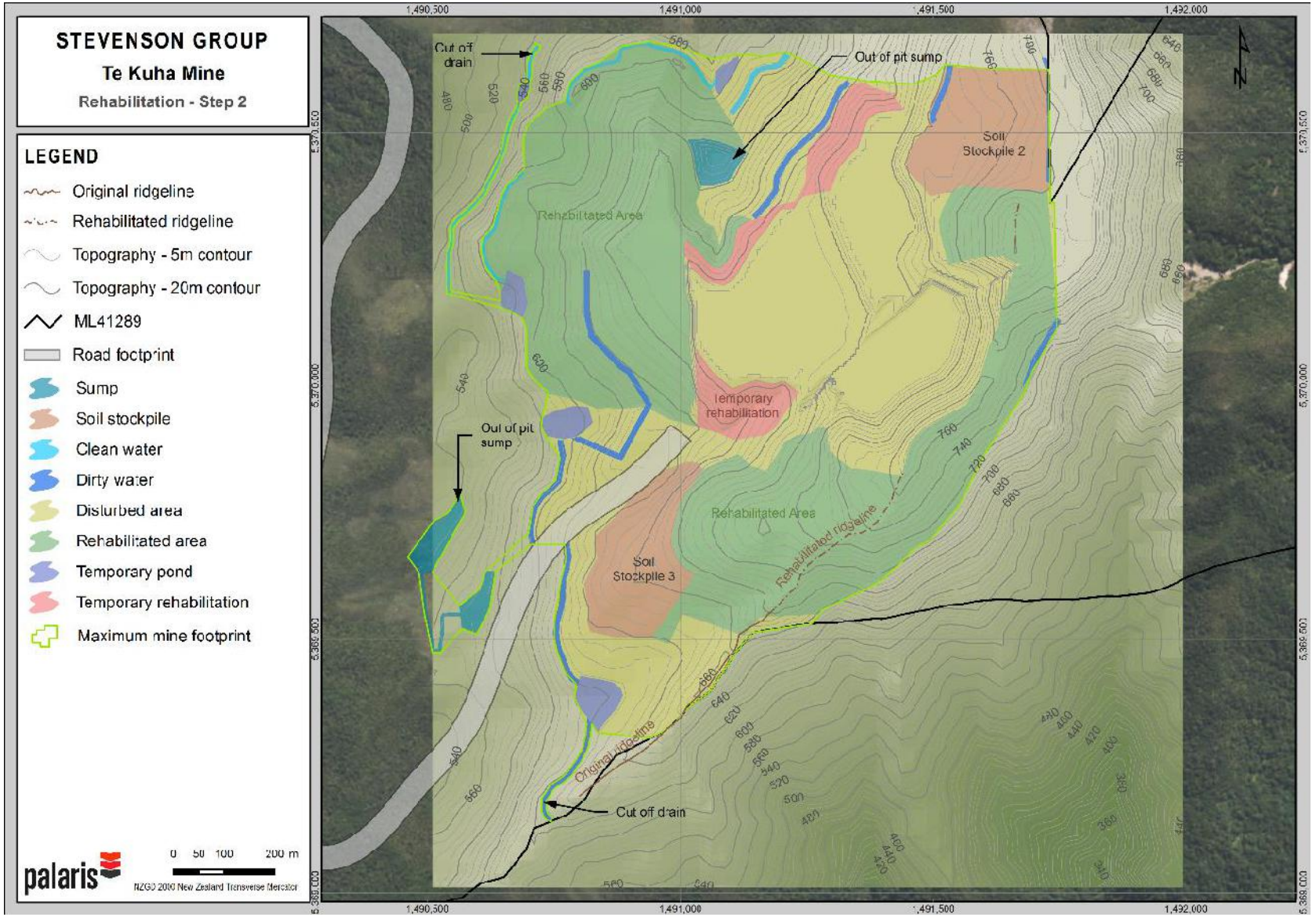
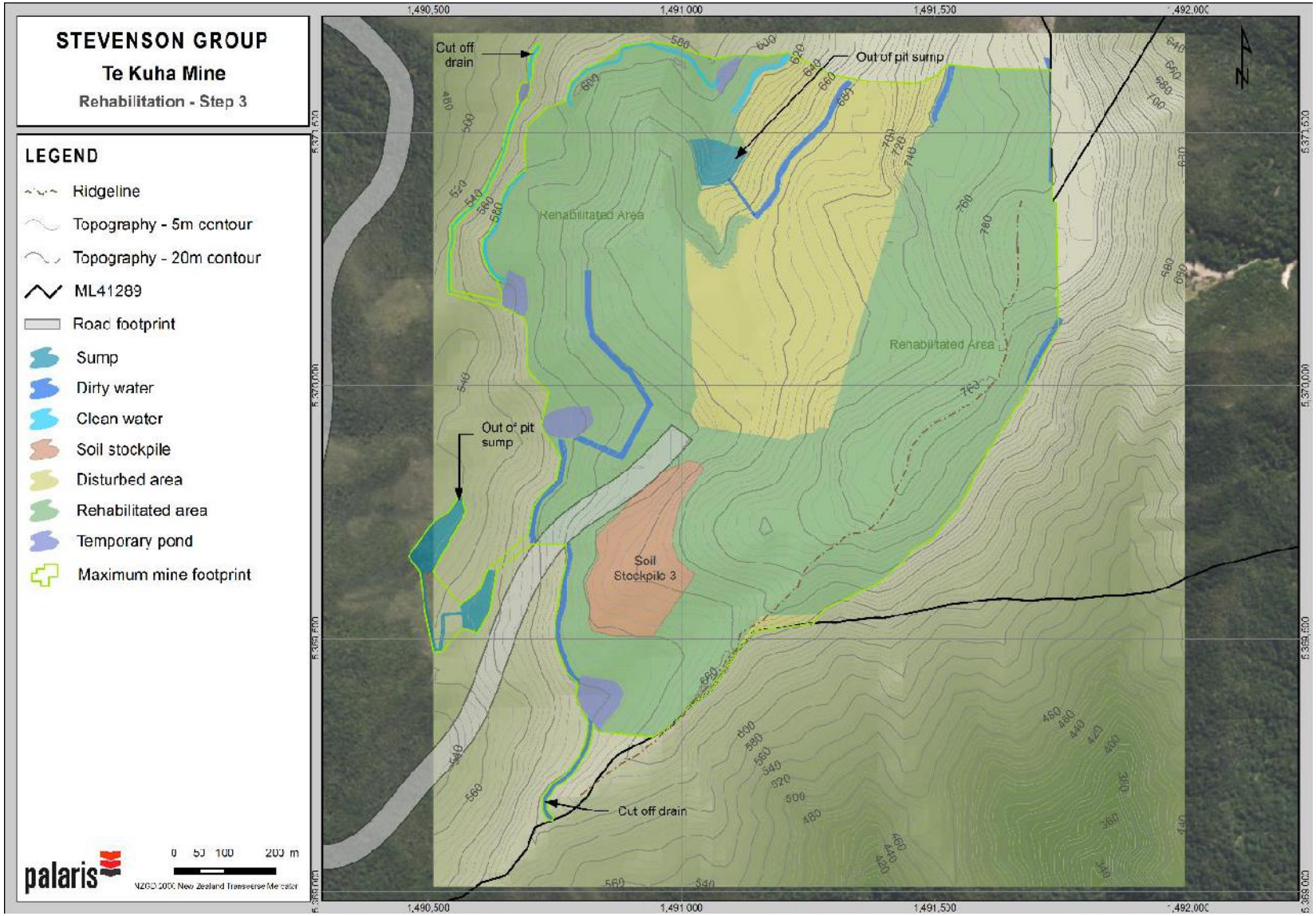

STEVENSON GROUP
Te Kuha Mine
Rehabilitation - Step 2
LEGEND
Original ridgeline
Rehabilitated ridgeline
Topography - 5m contour
Topography - 20m contour
ML41289
Road footprint
Sump
Soil stockpile
Clean water
Dirty water
Disturbed area
Rehabilitated area
Temporary pond
Temporary rehabilitation
Maximum mine footprint
palaris
0 50 100 200 m
NZGD 2000 New Zealand Transverse Mercator
1,490,500
1,491,000
1,491,500
1,492,000
5,370,500
5,370,000
5,369,500
5,369,000
Cut off drain
Out of pit sump
Soil Stockpile 2
Rehabilitated Area
Temporary rehabilitation
Out of pit sump
Rehabilitated Area
Rehabilitated ridgeline
Soil Stockpile 3
Original ridgeline
Cut off drain
N

Figure 11c


STEVENSON GROUP
Te Kuha Mine
Rehabilitation - Step 3
LEGEND
Ridgeline
Topography - 5m contour
Topography - 20m contour
ML41289
Road footprint
Sump
Dirty water
Clean water
Soil stockpile
Disturbed area
Rehabilitated area
Temporary pond
Maximum mine footprint
palaris
0 50 100 200 m
NZGD 2000 New Zealand Transverse Mercator
Cut off drain
Out of pit sump
Rehabilitated Area
Rehabilitated Area
Out of pit sump
Soil Stockpile 3
Cut off drain
1,490,500
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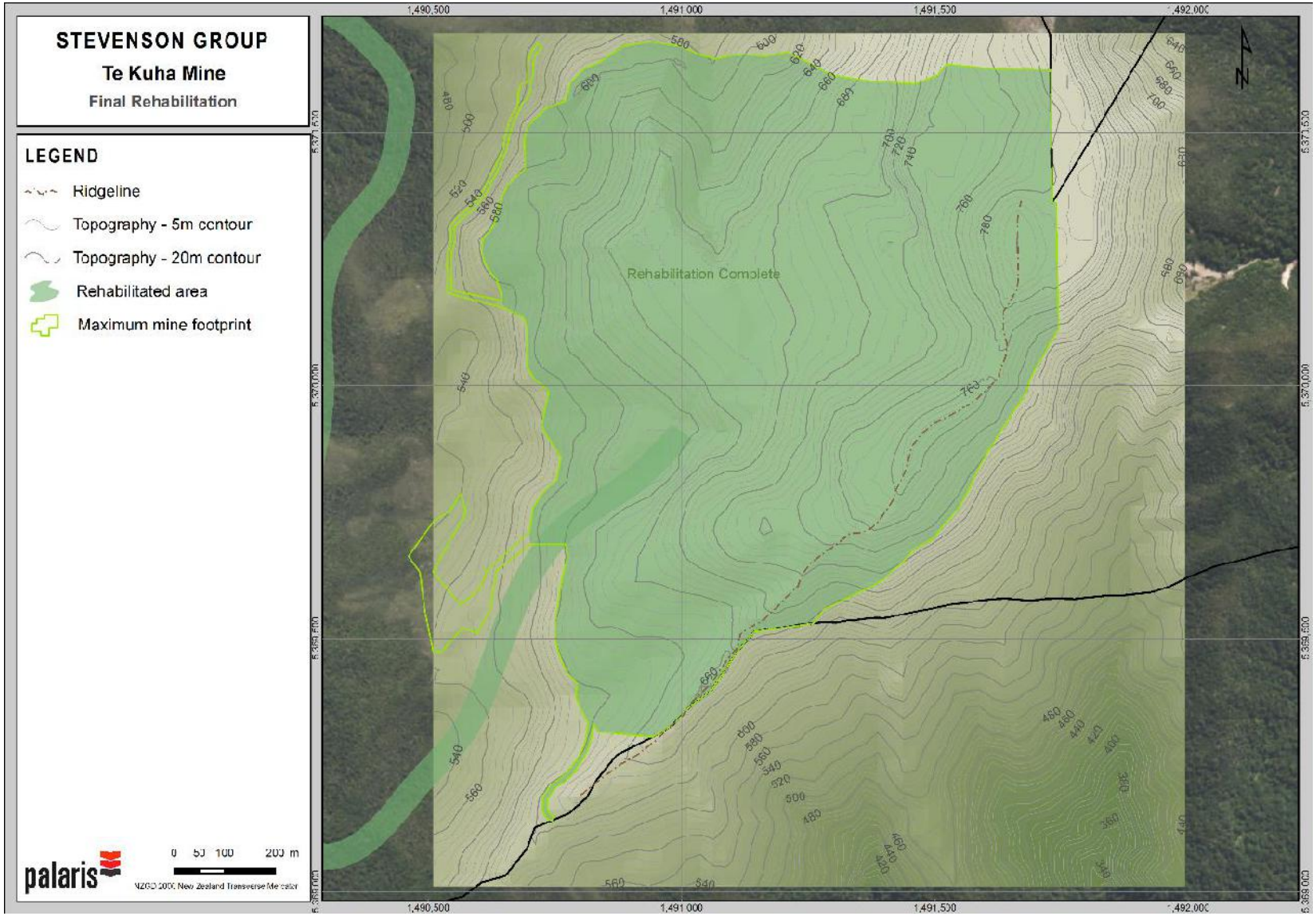
5,370,000
5,369,500
5,369,000

Figure 11d


STEVENSON GROUP
Te Kuha Mine
Final Rehabilitation
LEGEND
Ridgeline
Topography - 5m contour
Topography - 20m contour
Rehabilitated area
Maximum mine footprint
Rehabilitation Complete
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1,491,000
1,491,500
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5,371,500
5,370,000
5,369,500
5,369,000
palaris
0 50 100 200 m
NZGD 2000 New Zealand Transverse Mercator

Figure 12

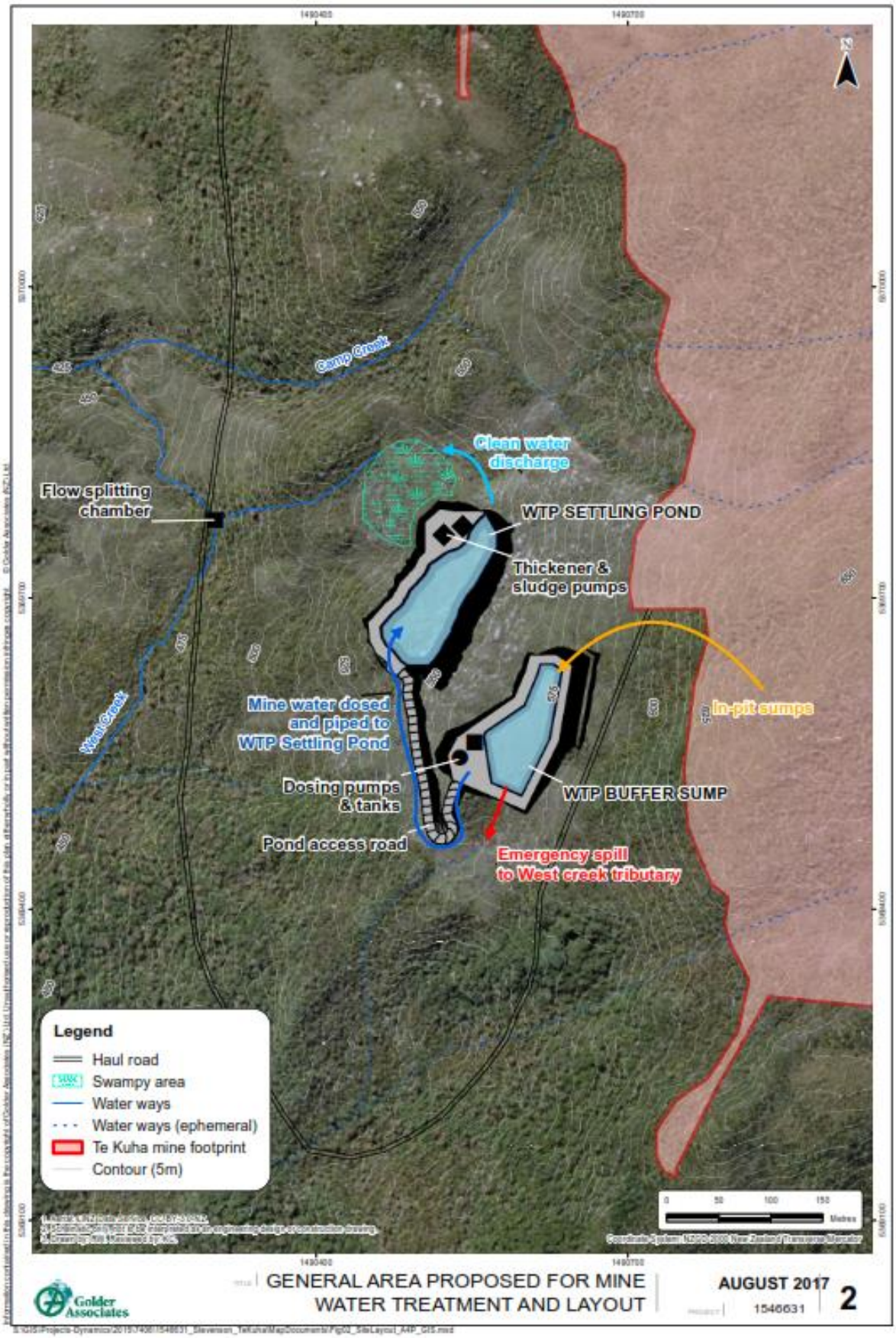
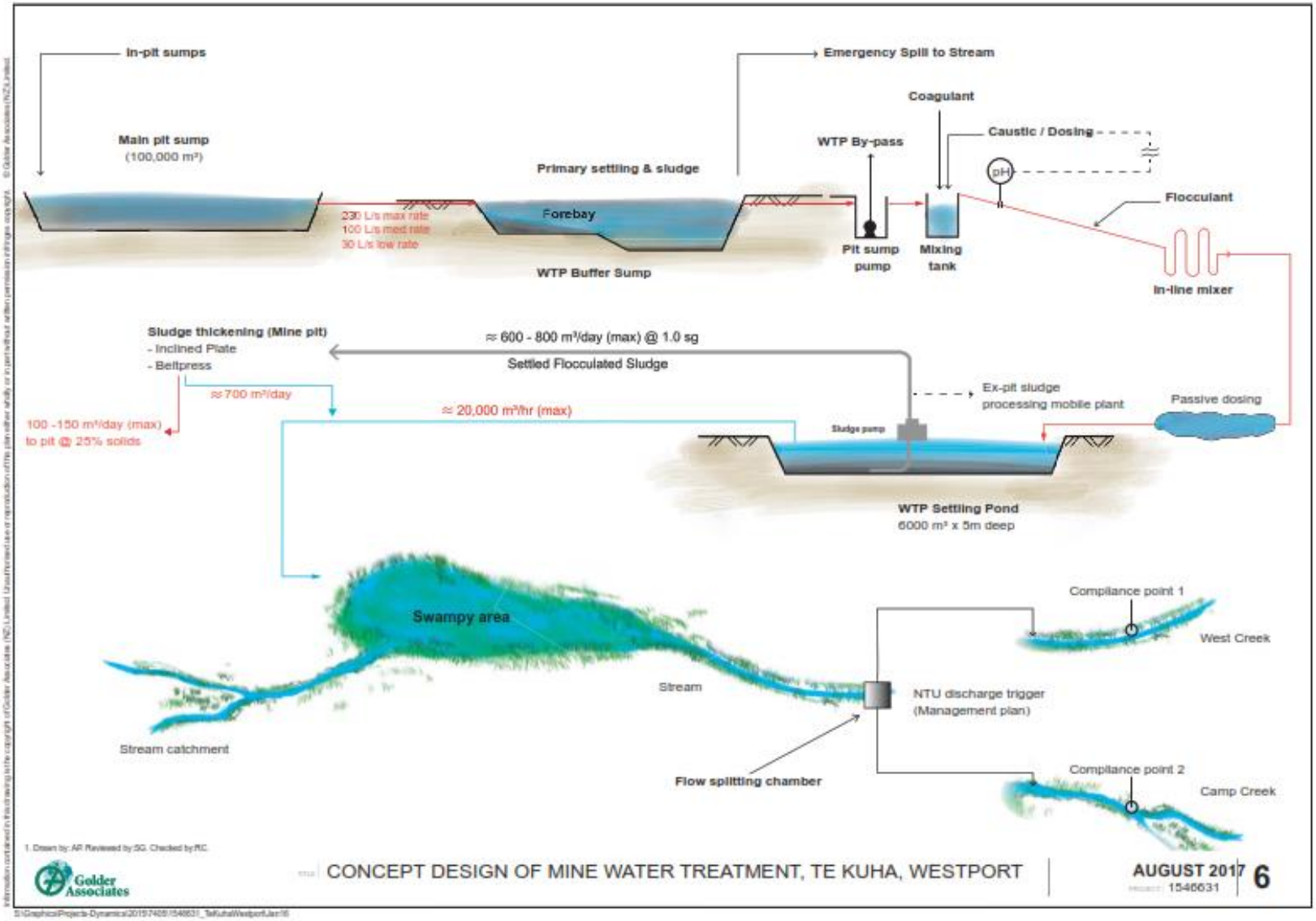
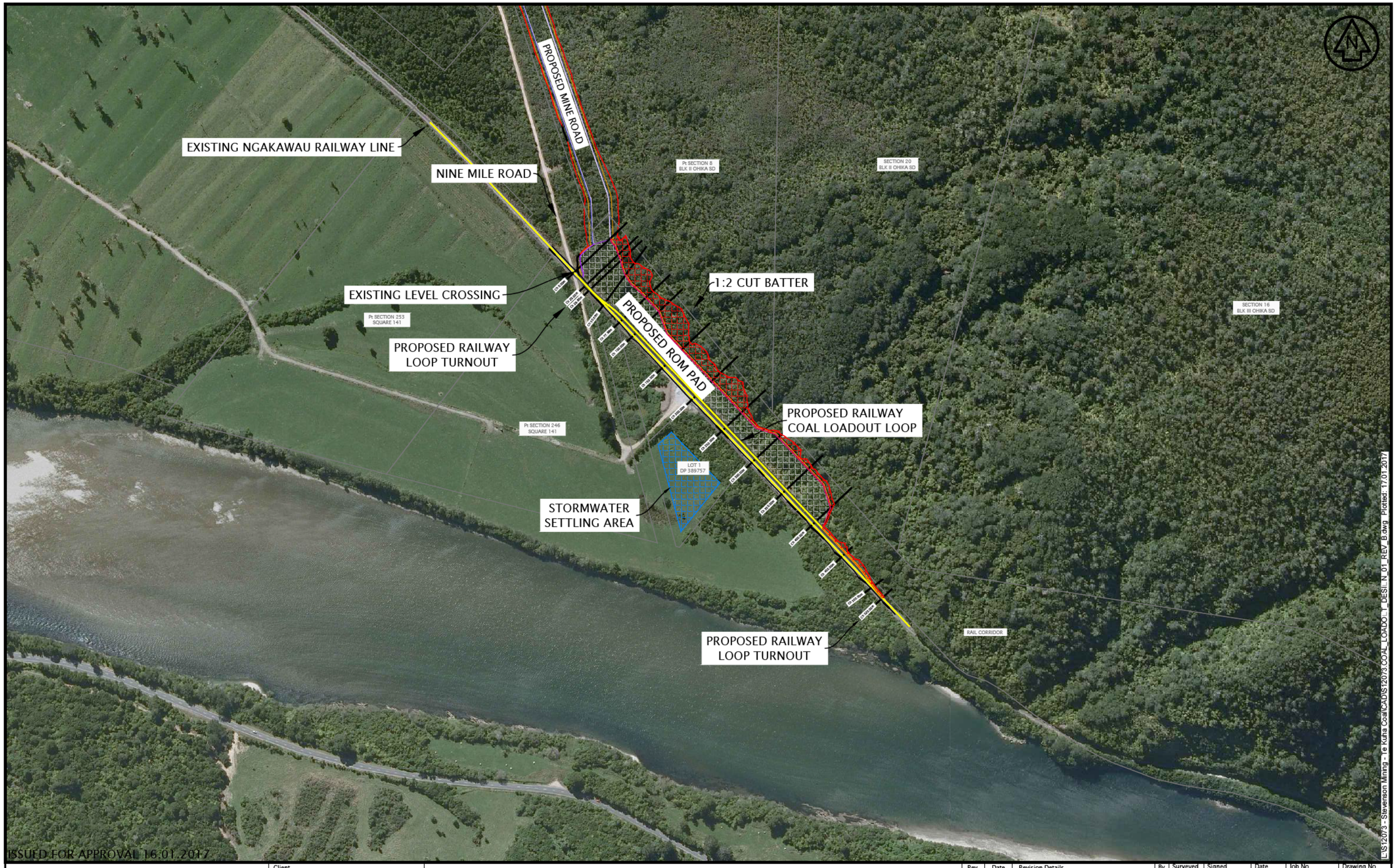

Camp Creek
Clean water discharge
Flow splitting chamber
WTP SETTLING POND
Thickener & sludge pumps
In-pit sumps
Mine water dosed and piped to WTP Settling Pond
West Creek
Dosing pumps & tanks
WTP BUFFER SUMP
Pond access road
Emergency spill to West creek tributary
Legend
Haul road
Swampy area
Water ways
Water ways (ephemeral)
Te Kuha mine footprint
Contour (5m)
GENERAL AREA PROPOSED FOR MINE WATER TREATMENT AND LAYOUT
AUGUST 2017
1546631
2

Figure 13


In-pit sumps
Emergency Spill to Stream
Coagulant
Caustic / Dosing
Main pit sump
(100,000 m³)
WTP By-pass
Primary settling & sludge
pH
Flocculant
230 L/s max rate
100 L/s med rate
30 L/s low rate
Forebay
Pit sump pump
Mixing tank
WTP Buffer Sump
In-line mixer
Sludge thickening (Mine pit)
- Inclined Plate
- Beltpress
≈ 600 - 800 m³/day (max) @ 1.0 sg
Settled Flocculated Sludge
≈ 700 m³/day
Ex-pit sludge processing mobile plant
Passive dosing
≈ 20,000 m³/hr (max)
100 -150 m³/day (max) to pit @ 25% solids
Sludge pump
WTP Settling Pond
6000 m³ x 5m deep
Compliance point 1
Swampy area
West Creek
Stream
NTU discharge trigger (Management plan)
Stream catchment
Flow splitting chamber
Compliance point 2
Camp Creek
CONCEPT DESIGN OF MINE WATER TREATMENT, TE KUHA, WESTPORT
AUGUST 2017
1546631
6



ISSUED FOR APPROVAL 16.01.2017

L:\S12073 - Stevenson Mining - Te Kuha Coal\CAD\S12073 COAL_LOADOUT_DESIGN_01_REV_B.dwg Plotted: 17/01/2017

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Client
STEVENSON MINING LTD

NOTES
- All dimensions shown are in metres unless otherwise shown
- Copyright on this drawing is reserved
- Check any electronic data against the hardcopy plan to ensure it is the latest version
-If this plan is being used as part of sale and purchase agreement then it is done so on the basis that it is preliminary only, final dimensions and areas may vary on final survey

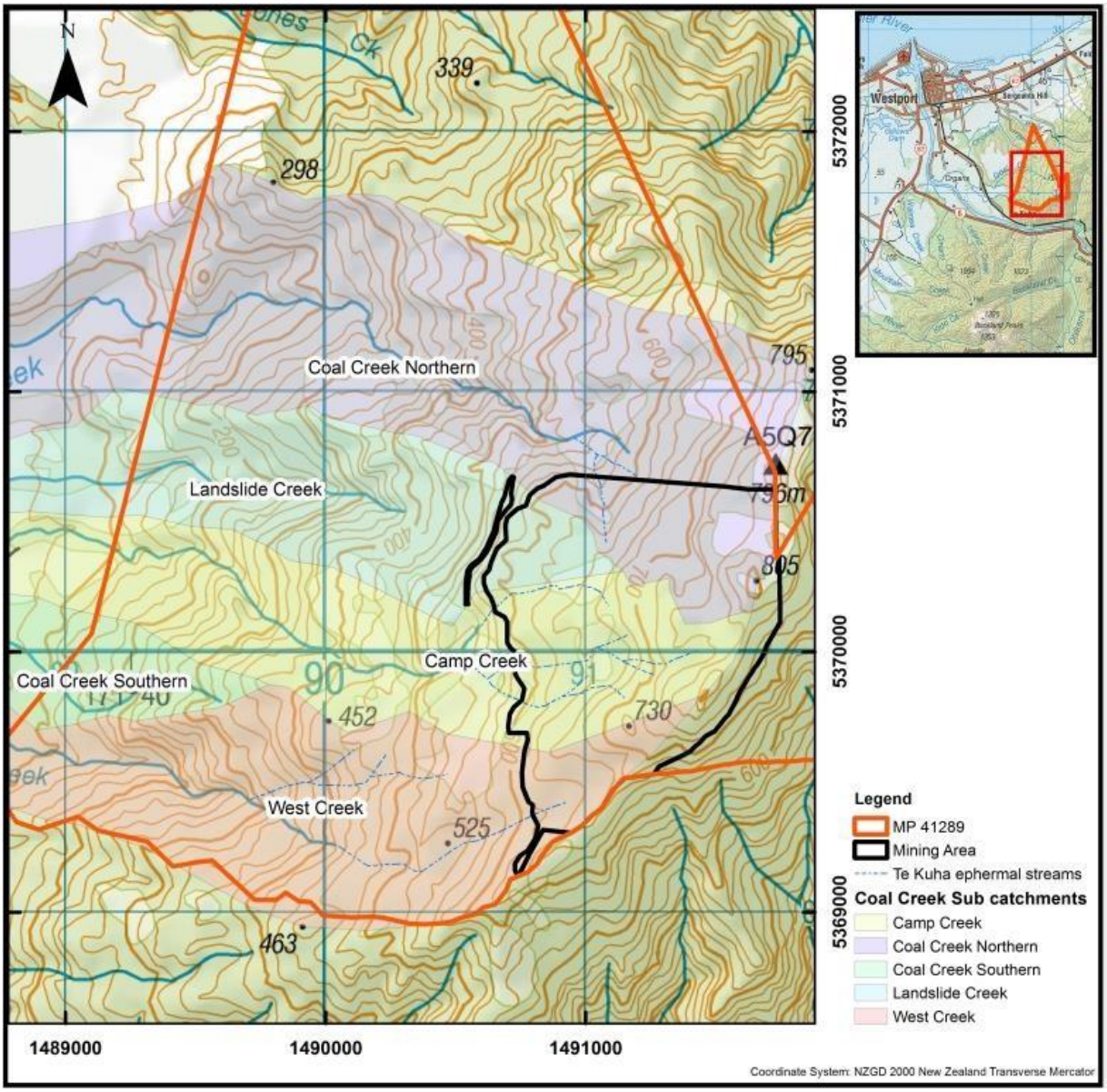
PROPOSED COAL LOAD OUT
TE KUHA MINE

SHEET 1 OF 9

Rev.	Date	Revision Details	By
A	23.12.16	UPDATE RAIL LOOP AND ROM PAD DESIGN	RAF
B	16.01.17	AMEND ROM PAD WIDTH	RAF

Surveyed	Signed	Date	Job No.	Drawing No.
Lidar		-	S12073	01_01
Drawn	Signed	Date	Scale	
SLC		16.12.16	1:2000 @ A1 1:4000 @ A3	
Designed	Signed	Date	Datum & Level	Rev.
RAF		22.12.16	NZTM 2000 & MSL	B

Figure 15


N
Coal Creek Northern
Landslide Creek
Camp Creek
Coal Creek Southern
West Creek
339
298
795
805
730
452
525
463
A5Q7
756m
Westport
5372000
5371000
5370000
5369000
1489000
1490000
1491000
Legend
MP 41289
Mining Area
Te Kuha ephermal streams
Coal Creek Sub catchments
Camp Creek
Coal Creek Northern
Coal Creek Southern
Landslide Creek
West Creek
Coordinate System: NZGD 2000 New Zealand Transverse Mercator

5374000 mN | 5373000 mN | 5372000 mN | 5371000 mN | 5370000 mN | 5369000 mN

1491000 mE | 1490000 mE | 1489000 mE

BDC WATER SUPPLY INTAKE

TRIG M

CROWN LAND
State Forest
Gaz 1970 Pg 1135

SECTION 14
WATER CONSERVATION RESERVE
Gaz 1951 Pg 1185

PROPOSED WATERWORKS ROUTE 2

JOINS BULLER DISTRICT COUNCIL WATERWORKS ROAD

LARGE TARN

HUTS

SECTION 14
WATER CONSERVATION RESERVE
Gaz 1951 Pg 1185

PROPOSED TE KUHA ROUTE 6

SEC 17
WATER CONSERVATION RESERVE
Gaz 1951 Pg 1185

PROPOSED TE KUHA ROUTE 1

SEC 16
SCENIC RESERVE
Gaz 1981 Pg 1335

SEC 1

SEC 2

SEC 3

PART SEC 13

PART SEC 13

PT SEC 13

PT SEC 13

Jones Creek

SEC 4

SECTION 24

LEGAL ROAD

SECTION 30

SEC 31 DoC

SEC 17
WATER CONSERVATION RESERVE
Gaz 1951 Pg 1185

PT SEC 5 DoC

DoC

PT SEC 6

PT SEC 7 DoC

SEC 20
SCENIC RESERVE
Gaz 1981 Pg 1335

PT SEC 25

SEC 37

LEGAL ROAD

DoC

SEC 38

PT SEC 4

SEC 21
P&E. Ltd
(FORMERLY TE KUHA FARMS LTD)

PT SEC 8
Stevenson Properties 2015 Ltd.

Ballarat Creek

LEGEND

- 10 CONTOUR INTERVAL 10m
- CADASTRAL BOUNDARY
- TE KUHA ROUTE 1
- WATERWORKS ROUTE 2
- TE KUHA ROUTE 6
- TRIG STATION

DATUM NOTE

COORDINATE DATUM : GEODETIC 2000
IN TERMS OF NZTM 2000

HEIGHT DATUM : MSL LYTTELTON
ORIGIN: BM NN84 RL 27.54m
ALL ELEVATIONS ARE IN METRES

Prepared for:

STEVENSON MINING LTD.

VARIOUS PROPOSED ACCESS ROUTES FROM WATERWORKS AND TE KUHA (PREFERRED ROUTE BEING ROUTE 6)

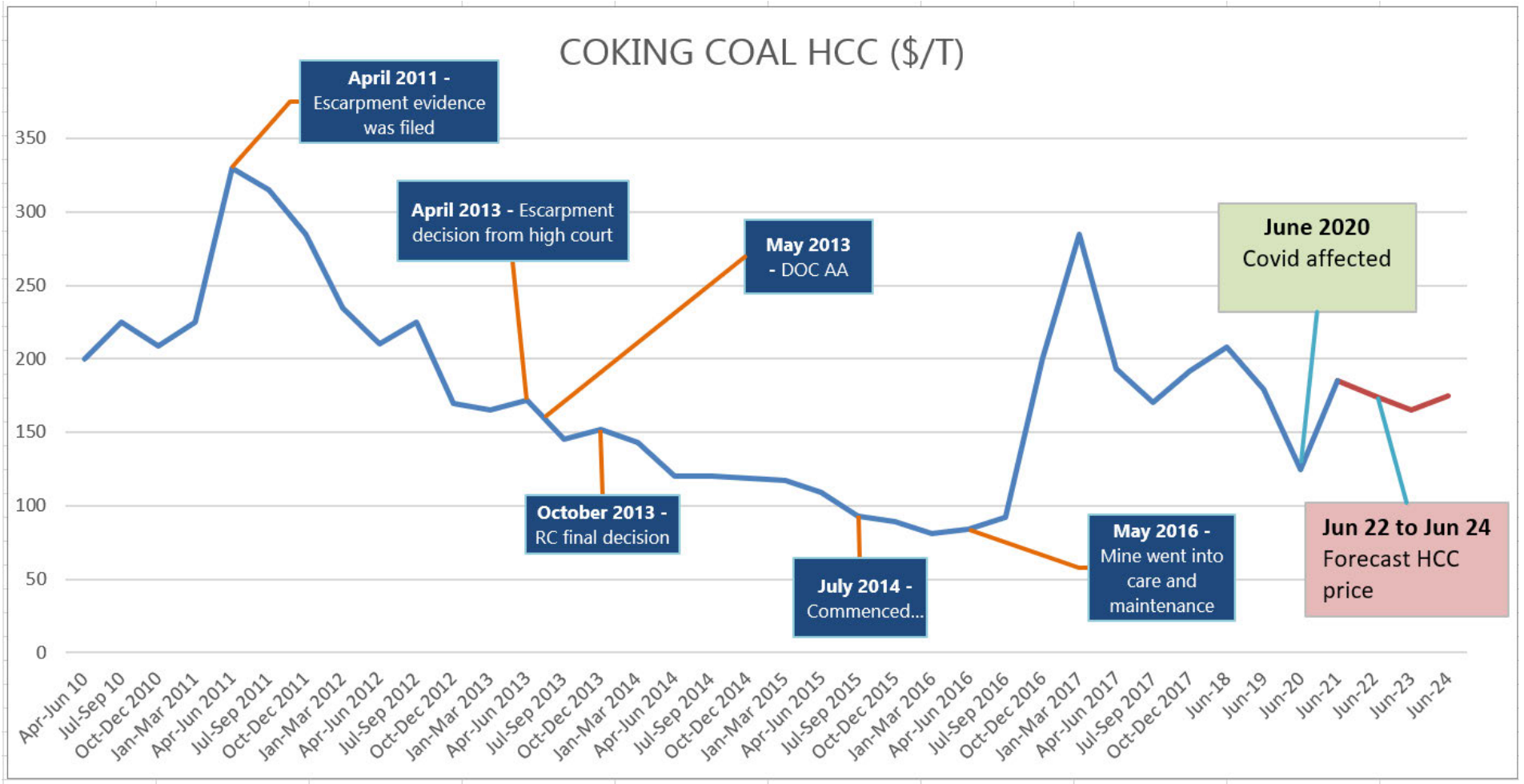
CHRIS J COLL SURVEYING Ltd.
Regd Land Surveyor, Resource Management Consultant
19 BROUGHAM STREET PO BOX 204 WESTPORT

DRAWN	WARREN KEOGHAN.	CHECKED	CHRIS J COLL.
DATE	JANUARY 2016.	REF	ACCESS ROAD 6C

SCALES 1:7,500 (A1)
1:15,000 (A3)

SHEET 1
SERIES 1 OF 24

Figure 17


COKING COAL HCC ($/T)
April 2011 - Escarpment evidence was filed
April 2013 - Escarpment decision from high court
May 2013 - DOC AA
October 2013 - RC final decision
July 2014 - Commenced...
May 2016 - Mine went into care and maintenance
June 2020 Covid affected
Jun 22 to Jun 24 Forecast HCC price
350
300
250
200
150
100
50
0
Apr-Jun 10
Jul-Sep 10
Oct-Dec 2010
Jan-Mar 2011
Apr-Jun 2011
Jul-Sep 2011
Oct-Dec 2011
Jan-Mar 2012
Apr-Jun 2012
Jul-Sep 2012
Oct-Dec 2012
Jan-Mar 2013
Apr-Jun 2013
Jul-Sep 2013
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Oct-Dec 2014
Jan-Mar 2015
Apr-Jun 2015
Jul-Sep 2015
Oct-Dec 2015
Jan-Mar 2016
Apr-Jun 2016
Jul-Sep 2016
Oct-Dec 2016
Jan-Mar 2017
Apr-Jun 2017
Jul-Sep 2017
Oct-Dec 2017
Jun-18
Jun-19
Jun-20
Jun-21
Jun-22
Jun-23
Jun-24

Figure 18


NORTH
Hector
Granity
Millerton
Ngakawau
Mt Stockton 748
Mt Augustus 1010
Birchfield
Waimangaroa River
Mt Frederick 1106
Waimangaroa
Buller River
Fairdown
Denniston
Carters Beach
Westport
Sergeants Hill
Lake Rochfort
Mt Rochfort
Burnetts Face
Mt William 1062
Gillows Dam
Orowaiti River
Organs
Flat
Te Kuha
Newtons Ck
Cascade Creek
MT WILLIAM RANGE
Mt Waller 786
Lake Rahui
Rahui
Mt Courtney 873
Blackburn
Mt Berners 729
Orikaka
Blue Duck Ck
Walshman Ck
Sinclair Castle
Mt Cassin 705
Rocklands
0 1 2 4 6 8 Kilometres
Legend
Buller Plateau Area

STEVENSON

STEVENSON MINING LIMITED
895b Rotowaro Road, Huntly, 3771
P O Box 23, Huntly 3740, New Zealand
Tel: + 64 7 560 5260
www.stevenson.co.nz

7 July 2017

Department of Conservation
Hokitika Office
2 Sewell St
HOKITIKA 7810
Attention: Judi Brennan

By email: s 9(2)(a)

Dear Judi

Te Kuha Project – Proposed Measures to Address Effects on Conservation Values

Further to our discussions on the proposed measures to minimise effects and address the residual effects of our Te Kuha project, we are advised that the distinction between mitigation and offsets/compensation developed in decisions under the Resource Management Act may not be applicable to decisions under the Conservation Act and Crown Minerals Act, where the statutory tests are different. The measures we are proposing in summary are:

- Application of the 'mitigation hierarchy' (avoidance, remediation, mitigation, and then consideration of biodiversity offsets, and environmental compensation for any residual effects). This approach includes minimising the project footprint to the extent reasonably practicable and particularly avoiding high value habitats where achievable (e.g. for overburden storage).
- Direct Transfer ("VDT") of 10 – 20% of the existing vegetation, including "high value" habitats where practicable.
- Achieving best practice site rehabilitation post mining, including the creation of variable topography, well buffered riparian areas and predominantly native plant communities.
- Buffering VDT vegetation with dense native plantings.
- Use of local species and prioritisation of locally significant species as well as avoidance of exotic species in plantings.
- Attention to site biosecurity and weed control.
- Ecosystem management within the Orikaka Ecological Area located north east of Te Kuha. This site was selected in consultation with, and on the preference of, the Department of Conservation.

We have based the proposed package of positive conservation measures on what is recommended by our relevant experts to be appropriate to address the effects of the proposed Te Kuha mine on conservation values and resources. The reason we are proposing a package of measures for the project

as a whole is that the effects of the project have been considered as a whole and these elements are not mutually exclusive. It is neither practical nor appropriate to attempt to distinguish the measures to address the effects on those values found within the stewardship land from the wider package of effects to address the overall effects on conservation values of the mine proposal as a whole.

Please refer to the attached letter from our terrestrial ecologist, Gary Bramley, which outlines in more detail the basis for how the package of measures for the project has been derived.

In addition to we are proposing to fund the mining heritage project, Charming Creek Coal mine, which is the project proposed by DoC. We will work with DOC on the details of this project and how much this will cost, our understanding is that the costs for this project would be between $60,000 to $100,000.

For the Orikaka ecosystem management, using proven industry practices the estimated cost of the work would be approximately $2.9m. This is based on a work program including 1080 drops, ground based trappings and hunting where appropriate, and relevant monitoring. A management plan for the work to be undertaken at Orikaka would be put in place, this would be done in conjunction with DoC.

While our preference is that Stevenson manage and be accountable for the ecosystem management at Orikaka we are open to further discussions with DoC on this.

Any package of positive conservation measures would of course be finalised as part of the resource consent process and conditions that are derived from this.

In addition to any package of positive conservation measures, the Te Kuha project will be paying royalties to the government and compensation to Buller District Council for access to the land administered by BDC, which makes up the majority, 92%, of the mine footprint.

Please contact me if you have any questions in regards to this. I trust this provides the necessary information as requested.

Yours sincerely

Anne Brewster

For Rangitira Developments Ltd and Stevenson Mining Ltd

BULLER COAL PLATEAUX MEMORANDUM OF UNDERSTANDING
BETWEEN :

BULLER COAL LIMITED (*Buller Coal*)

TE RUNANGA O NGATI WAEWAE (*TRNWW*)

SOLID ENERGY NEW ZEALAND LIMITED *(SENZ)*

ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND INCORPORATED *(RFBPS)*

NEW ZEALAND HISTORIC PLACES TRUST (POUHERE TAONGA) *(NZHPT)*

DIRECTOR-GENERAL OF CONSERVATION *(DOC)*

CHIEF EXECUTIVE OF THE MINISTRY FOR BUSINESS, INNOVATION AND EMPLOYMENT *(MBIE)*

WEST COAST TAI POUTINI CONSERVATION BOARD *(WCCB)*

BULLER DISTRICT COUNCIL *(BDC)*

WEST COAST REGIONAL COUNCIL *(WCRC)*

STEVENSON MINING LTD *(SM)*

KAITIAKI STEWARDSHIP GROUP *(KSG)*

(Collectively the Signatory Parties)

1 BACKGROUND

1.1 The Signatory Parties wish to engage in discussions together about areas to be open for mining and related activities and areas to be set aside for enduring protection of conservation, heritage and community values on the Buller Coal Plateaux to make recommendations to relevant Ministers of the Crown (*the Discussions*).

1.2 The Signatory Parties are; however, conscious that at the same time as the Discussions are occurring they are, or may be involved, as advisers, decision makers, applicants, respondents or submitters in separate statutory processes such as under the Resource Management Act 1991, Conservation Act 1987, Crown Minerals Act 1991, the Historic Places Act 1993 and the like. In particular there are separate processes currently underway relating to Buller Coal's Escarpment Project and SENZ's Mt William North Project including Environment Court appeals.

1.3 In order for the Discussions to be constructive the Signatory Parties wish to be able to have free and frank dialogue and to exchange information but without prejudicing their statutory duties, functions or roles or rights in any other forum or process.

1.4 The Signatory Parties desire that the Discussions to be confidential and without prejudice to their statutory duties, functions or roles, or rights

in any other fora including any process under the Resource Management Act 1991, Conservation Act 1987, Crown Minerals Act or Historic Places Act 1993 or the like.

1.5 In addition, information that is provided to a party (*disclosee*) as part of the Discussions may be of a confidential nature or is of commercial value to the disclosing party (*disclosing party*) or may be information that has not been separately produced in any other forum or process.

1.6 Ngāi Tahu as tangata whenua, and in particular Te Rūnanga o Ngāti Waewae as mana whenua, have a significant interest in the protection, management and restoration of indigenous ecosystems and biodiversity. This stems from their close interaction with indigenous biodiversity over centuries of occupation and the importance of it to their culture, heritage and identity.

Memorandum of Understanding

1.7 In order to encourage free and frank without prejudice discussions by Signatory Parties, and to protect and maintain the confidentiality and value of such information exchanged in the Discussions, and to enable the Signatory Parties to protect their positions in any other fora or process the Signatory Parties have agreed to enter into this MOU.

2 PURPOSE OF THE PROCESS

This MOU commits the Signatory Parties to engage in a process to reach consensus about areas to be open for mining and related activities and areas to be set aside for enduring protection of conservation, heritage and community values on the Buller Coal Plateaux to make recommendations to relevant Ministers of the Crown.

3 PRINCIPLES

3.1 The Signatory Parties will act in good faith and in a spirit of cooperation to work constructively with each other in Discussions and in relation to the Purpose.

3.2 Consultation, collaboration and communication between all Signatory Parties will be a feature of the working relationship between the Signatory Parties at all times.

3.3 Nothing in this process will derogate from any rights, legal duties, functions and roles of the Signatory Parties or from legal obligations under the Official Information Act 1982 and the Local Government Official Information and Meetings Act 1987.

3.4 The Signatory Parties commit to recommend to their governance bodies or decisions makers the consensus achieved by participants in the process.

4 SCOPE

4.1 The scope of the Discussions includes:

a. The geographic area of the Buller Coal Plateaux as delineated on the map in Annex 1.

b. Any surface activities associated with mining within the area of interest that have more than a minor effect within the geographic area delineated on the map in Annex 1.

c. All processes involved in giving effect to the purpose.

4.2 For the purposes of clause 4.1(c) definition the term:

a. "Conservation" refers to the full range of values included in the Conservation Act including, but not limited to, natural character, biodiversity, ecological systems, landscape, recreational, geological and historic values.

b. "Historic heritage" means those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, deriving from any of the following qualities: archaeological, architectural, cultural, historic, scientific, technological; and includes historic sites, structures, places, and areas; archaeological sites; sites of significance to Māori, including wāhi tapu; surroundings associated with the natural and physical resources.

c. "Community" refers to all those things valued by the community including, but not limited to, its well being, culture, and economic and social values.

4.3 Broader matters of environmental and economic concern such as the role of the use of coal in contributing to climate change may be valid matters for some of the Signatory Parties to be engaged in outside the scope of the Discussions defined by this MOU but are not within the scope of these Discussions.

5. DISCUSSIONS

5.1 The Discussions carried out under this MOU should:

a. Be fair and equitable between all Signatory Parties.

b. Have appropriate accountability and reporting to the governing entities of the Signatory Parties.

c. Be transparent to all Signatory Parties in the process.

d. Be based on robust and comprehensive information.

e. Result in a "whole package" (i.e. no cherry picking).

5.2 Notwithstanding the agreement for transparency it is recognised that the content of internal decision making processes of each organisation does not need to be revealed to other Signatory Parties, and that some

processes between Signatory Parties, such as commercial negotiations, need to take place in private.

5.3 The Signatory Parties may agree to set up working groups.

5.4 The Signatory Parties may refer information to external experts for advice. Such individuals must agree to the same standards of confidentiality as Signatories are bound to and sign confidentiality agreements to that effect.

6. Freedom of Signatory Parties (following any agreement) to promote/discuss the implications for their "group" is recognised and provided for.

6. RESOURCES

6.1 The Signatory Parties shall each meet their own costs for activities associated with this MOU. Additional work may be funded by mutual agreement between the Signatory Parties taking into account both cash and in-kind contributions.

6.2 The costs of the facilitator will be met by DOC and MBIE unless the Signatory Parties agree to some other costs sharing arrangement.

7. COMMENCEMENT, EXTENSION, AND TERMINATION

7.1 It is expected that this MOU will run for a period of one year where it has been signed by the Signatory Parties. There will be a right to extend by mutual agreement between all of the Signatory Parties (for a period that is agreed to be all Signatory Parties.

7.2 Participation in this MOU may be terminated by any Signatory Party giving one month's written notice to the other Signatory Parties, and after due discussion.

7.3 Confidentiality agreements survive and will continue to apply to any Signatory Party, regardless of their withdrawal from or termination of this MOU.

8. EXECUTION (Dated 2 October 2013)

BULLER COAL LIMITED by:

_____

SOLID ENERGY NEW ZEALAND LIMITED by:

_____

ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND INCORPORATED by:

_____

NEW ZEALAND HISTORIC PLACES TRUST (POUHERE TAONGA) by:

_____

DIRECTOR-GENERAL OF CONSERVATION by:

_____

CHIEF EXECUTIVE OF THE MINISTRY OF BUSINESS, INNOVATION AND EMPLOYMENT by:

_____

WEST COAST CONSERVATION BOARD by:

_____

WEST COAST REGIONAL COUNCIL by:

_____

BULLER DISTRICT COUNCIL by:

_____

TE RUNANGA O NGATI WAEWAE by:

_____

STEVENSON MINING LIMITED by:

_____

KAITIAKI STEWARDSHIP GROUP FOR THE ESCARPMENT MINE PROJECT by:

_____

15 October 2013

To: Minister of Conservation
Minister of Energy and Resources

From: Peter Lawless
Facilitator
Buller Coal Plateau Process

Buller Coal Plateau – Interim Report to Ministers

1. Summary

1.1 This interim report sets out progress on reaching agreement in the Buller Coal Plateau process. This report is my assessment of the current situation. It is not an agreed report from the parties, though all were given opportunity to comment on drafts. The process is on track to deliver an agreed final report to Ministers in December 2013, and there are matters on which Ministerial guidance may support the process to a conclusion.

1.2 The parties are agreed that:

a. They all want a greater degree of certainty and less litigation;

b. Lands available for mining and lands to be protected should be clearly delineated;

c. Lands to be protected should all be Crown land, all this land should have the same status to aid effective administration, and this status should be no lower than that given to Scenic Reserves or Conservation Parks;

d. All lands to be protected need to be kept free of all mining and mine-related activity and all need to be included in Schedule 4 of the Crown Minerals Act;

e. Protection of 60% of the estimated original extent of all ecological associations and species habitat that originally occupied the area has been accepted as a working goal for reserve design, but partiers agree this is a guide rather than an absolute target, and accept that it could not be met in practice;

f. Other valid considerations in defining a pragmatic set of boundaries include historic, landscape, cultural and recreation values;

g. Lands to be mined or used for ancillary mining activities need to be designated for this purpose, and unreasonable impediments to mining should be removed – leaving detailed conditions to be defined in the relevant permitting processes;

h. A viable solution would include commitments by the parties to cooperate and avoid unnecessary litigation, and to commit to specific things such as the intention to designate land that has been rehabilitated after mining as "protected" where it merits such protection;

i. Changes are likely to be required to the Buller District Plan to create suitable zones and rules for mining areas and for protected areas.

1.3 What is not yet clear in the legal framework are:

a. How to ensure that agreement now would not be affected by future decisions on "offsets" and compensation as specific permissions are sought for mining activity;

b. Whether a change to the Buller District Plan would provide sufficient certainty to the parties about the areas to be mined. Further work may well show that changes are also required to regional plans to implement the proposed agreement and other mechanisms may also be required;

c. Whether changes to the West Coast Conservation Management Strategy would be required;

d. Whether changes to existing permissions, concessions and agreements might be required;

e. How costs of implementing solutions would be shared by the parties.

1.4 The parties have developed maps to define the areas proposed to be:

a. Used for opencast mining, overburden disposal and other ancillary mining activities;

b. Used for underground mining;

c. Used for haul roads and utilities; and

d. Fully protected.

1.5 The maps, definition of zones, the rules to be applied to them, and the details of future commitments and cost consequences, are now

being developed at a conceptual level to allow consequences for mining and protection to be better understood.

1.6 What is not yet clear in the spatial framework are:

a. How to reconcile competing mining and protection interests in a few critical areas;

b. How the trade-offs involved in more detailed mine design, such as changing pit boundaries or moving from opencast to underground mining, can resolve outstanding issues;

c. How compromises to achieve biodiversity protection satisfy other criteria, such as landscape and recreational opportunities.

2. Background

2.1 The parties to the Buller Coal Plateau process are:

a. Buller Coal Ltd;

b. Te Runanga o Ngati Waewae;

c. Solid Energy New Zealand Ltd;

d. Royal Forest and Bird Protection Society Incorporated;

e. New Zealand Historic Places Trust (Pouhere Taonga);

f. Director-General of Conservation;

g. Chief Executive of the Ministry for Business, Innovation and Employment;

h. West Coast Tai Poutini Conservation Board;

i. Buller District Council;

j. West Coast Regional Council; and

k. Stevenson Mining Ltd.

l. Kaitiaki Stewardship Group for Buller Coal Limited

2.2 The parties wish to reach consensus about areas to be open for mining and related activities and areas to be set aside for enduring protection of conservation, heritage and community values on the Buller Coal Plateau to make recommendations to relevant Ministers of the Crown.

2.3 The parties have acted in good faith and in a spirit of cooperation working constructively with each other. Consultation, collaboration and two-way communication have characterised the parties' working relationship. The parties have agreed that nothing in this process will derogate from any of their rights, legal duties, functions and roles, or from legal obligations under the Official Information Act 1982 and the Local Government Official Information and Meetings Act 1987.

2.4 The parties have signed a Memorandum of Understanding and a Confidentiality Agreement to support their work together.

2.5 The parties have committed to recommend to their governance bodies or decisions makers the consensus achieved by participants in the process.

2.6 The scope of the agreement covers the geographic area of the Buller Coal Plateau.

2.7 The parties have agreed that broader matters of environmental and economic concern, such as the role of the use of coal in contributing to climate change, may be valid matters for some of the parties to be engaged in outside the scope of this process.

3. Legal mechanisms

3.1 A wide range of legal mechanisms were considered for their potential to create the certainty the parties seek about protection and mining.

3.2 Creating certainty for long term protection of Crown lands would be relatively straightforward under statute law.

3.3 Creating certainty for the enablement of sustainable mining was more problematic, and could only be fully achieved by special legislation. However, the parties are mindful of the time and uncertainty associated with obtaining special legislation. They therefore are developing solutions that use existing mechanisms. They recognise that this approach does not deliver absolute certainty, and are working realistically with what this means for the agreements they may reach.

3.4 Three primary mechanisms are proposed with options for two secondary mechanisms should they prove necessary.

3.5 The primary mechanisms are:

a. A Deed of Agreement between the parties;

b. Plan changes under the Resource Management Act; and

c. Reclassification of Crown lands, and addition of some of these lands to Schedule 4.

3.6 The two secondary mechanisms, that require further analysis, are:

a. Changes to the West Coast Conservation Management Strategy; and

b. Variations to mining access arrangement, concessions and mining permits.

3.7 The Deed of Agreement would be signed by all parties (where parties include agencies rather than Ministers). Where assets or companies

changed ownership the agreement would need to be extended to the incoming party. The Deed could set out:

a. The reasons the parties have for agreeing;

b. Purpose of the agreement;

c. Principles for ongoing cooperation;

d. Commitment to implement the agreements reached;

e. Agreement not to further litigate the matters agreed to;

f. Intentions for the future protection of lands rehabilitated after mining;

g. Agreement to processes to work together to resolve outstanding and emerging issues;

h. Disputes resolution; and

i. Agreements of cost sharing.

3.8 The parties anticipate that Plan changes that might be required would be to the Buller District Plan, although the Regional Plan may also be affected. A Plan change would give greater certainty to mining by making it easier to obtain resource consents. A Plan change could also contain rules to protect areas of high conservation value – including from non-mining activities. The changes would define standards and consent requirements for areas to be mined or used for haul road and utilities. The proposed details of these Plan changes are being developed by the parties. This analysis will inform the need for changes to regional level plans and the Regional Policy Statement.

3.9 The currently preferred pathway for the Plan change(s) is that they be:

a. Introduced as private Plan changes; and

b. Adopted by the relevant councils (if the financial consequences for the councils can be alleviated);

It may also be desirable for the Plan change to be called in by the Minister for the Environment to be considered by a Board of Inquiry. This is under discussion by the parties. The parties are working through these issues with the relevant agencies so joint recommendations can be made to Ministers.

3.10 The intention is that Crown lands would be reclassified so that all lands would be protected under one classification (Scenic Reserve or Conservation Park). All lands to be used for mining or ancillary activity would be left with their current status and administration until after mining and rehabilitation. There will be survey costs in bringing boundary definitions to the standards required by the

Surveyor General. The parties are working together to define the amounts involved, and how costs might be shared.

3.11 It is proposed that the Plan changes and reclassification of Crown lands would define four zones:

a. Open cast mining – includes all open cast mining, overburden disposal areas and ancillary mining activities;

b. Underground mining - together with limited ancillary mining activities at surface;

c. Haul road and utilities corridor – allows for haul roads to convey coal from mining areas and the provision of utilities e.g. power to mining sites; and

d. Clearly protected lands.

3.12 For category "d." land the objective is to apply long term protection for the values for which the land is held. On this land all mining activity would be prohibited under the Resource Management Act.

3.13 For land in categories "a", "b", and "c" the objective is that all unreasonable impediments to the proposed mining or ancillary activity are removed. It would be clear that the land will be expected to be used for mining purposes. All mining proposals will still be subject to the Resource Management Act, the Conservation Act and any other regulatory obligation. Activity status would range from permitted to restricted discretionary depending on the zone and the level of the activity proposed.

3.14 Decision makers could not decline consent to permitted and controlled activities. The impacts of the scale of these activities would be taken into account when allocating them to a permitted or controlled activity status. Conditions could be applied to controlled activities. Decision makers would be able give or to decline consent for restricted discretionary, discretionary, non-complying or prohibited activities and place conditions on these.

3.15 For all land in categories "a", "b", and "c" no changes in classification, ownership or agency management are proposed. Changes to the rules for the use of these lands would come from changes to the rules in the District Plan, and likely the Regional Plans, and possibly by changes to the West Coast Conservation Management Strategy. The Plan changes would make it clear that the expectation is that the land can be mined, or used for the ancillary purposes. Such uses would still be subject to conditions that protect the wider environment, including those portions of the mining activity areas that are not required for mining purposes once detailed mine planning is completed.

3.16 The intention is that the protected lands would comprise all lands currently held as Scenic Reserves and Ecological Areas together with

such other Crown lands that the parties agree should be protected under the spatial delineation described in "4" below. The reclassification would be subject to, and dependent on, due process not preventing it.

3.17 If allowed by the process, all protected lands would be reclassified as either Scenic Reserve under the Reserves Act or Conservation Park under the Conservation Act. Such lands are currently held as a mosaic of Scenic Reserve, deemed Stewardship area, and unallocated Crown land and land administered for coal mining purposes. The reclassification processes would differ depending on current status and would need the co-operation of LINZ.

3.18 All protected lands would be added to Schedule 4, and, under the agreements being considered, would be unavailable for mining activity of any type. Rules would be required in the District Plan to ensure that these lands were clearly protected from all mining and ancillary mining activities as not all of these are precluded by Schedule 4.

4. Spatial delineation

4.1 The process for reserve design involves using spatial data layers, and then relating them using the algorithms DOC uses in its decision support systems, to produce a proposed "Zonation" of areas for protection and areas for mining. The base criterion built into the zonation by Department of Conservation was to include 60% representation of the original extent of each feature used in the biodiversity data layers in the protected areas.

4.2 The Department of Conservation gives highest value to endemic species and communities. Other biological communities that characterise the plateau are also found elsewhere, but are important to the overall ecology and landscape of the plateau. This risk has been quantified by the Department of Conservation which recommends 60% retention by area of each habitat type. Below this threshold, the Department says that risk of irreversible loss increases exponentially. It is clear that a compromise will increase the risk of loss, but different compromises will lead to different levels of risk.

4.3 This information was then combined with data from the mining interests that defined their prospects for open cast and underground mining and requirements for ancillary activities. Compromises are now being worked through to optimise opportunities for protection and mining, and other factors, to produce a pragmatic and agreed spatial delineation.

4.4 The other factors used in the Department of Conservation zonation and considered in reserve design were:

a. The data layers included sufficient identification of surface historic features. These were refined by NZHPT for the category 1 site. They did not, however, include underground features, so these needed to be explicitly considered in reserve design.

b. The zonation software was able to include some consideration of ecological connectivity (in an algorithm that deals with the proximity of polygons to other similar polygons). This on its own did not adequately deal with connectivity so this needs to be further refined in reserve planning.

c. Vegetation type was accepted as a proxy of animal habitat, except for *Powelliphanta augusta* for which 100% of remaining habitat should be included in reserves if possible, and *Powelliphanta patrickensis* for which 90% of remaining habitat should be included in reserves if possible.

d. Buffer requirements differ for different ecological types and need to be further considered in reserve design.

e. In terms of landscape, the sandstone pavement still needs to be considered for preservation of "contiguous vastness", pattern, and with a view to key sight-lines and perspectives. Special account still needs to be taken of rare features such as seepages/flushes, tarns, and boulder fields.

f. Cliffs and scarps still need to be considered as significant special habitats, and these have been mapped over part of the area for consideration in reserve design.

g. Reservation planning would also aim to enhance recreational opportunities over time, maintaining meaningful access and providing for interpretation for the public. The overall goal is to, at least, not diminish the aggregate access opportunities.

h. Tourism opportunities are accepted as generally being dealt with if recreation is provided for, while noting that periods of closure can have a bigger affect on commercial tourism operators than on recreational users.

i. Community values still need to be taken into account in reserve design. This includes cultural associations, existence values, and a sense of place and connection that could also imply particular access requirements, and protection of features and places.

j. The future of rehabilitated land was explicitly considered out of scope for reserve design, but those lands clearly have value that affect the negotiating positions of the parties.

4.5 There is now good mine planning and coal resource information from both coal companies. This has allowed areas for different forms of mining and ancillary activities to be overlaid with biodiversity data. It has been agreed that the modelling via zonation has reached a

point at which broad judgement is required to enable compromises to be made about the areas for protection and mining. It is clear that :

a. The 60% target for protection of biological communities will not be met in all cases; and

b. Not all coal that can be opencast-mined will be mined. Opportunities to underground mine or to adjust pit boundaries are being explored. Areas of less value for mining and conservation have been identified. This has allowed possible compromises to be identified. Some areas, however will remain with high value for both conservation and mining and hard trade-offs will have to be escalated to decision makers.

4.6 The parties wish to reach full agreement amongst themselves rather than leave the final determination for difficult areas with Ministers.

5. Guidance from Ministers

5.1 A consideration for Ministers is to indicate the level of risk they are willing to accept to biodiversity values. Compromises amongst the parties as a result of negotiation will inevitably lead to losses in conservation values. Those losses could include the risk of extinction for coal plateau endemic species and communities, and the Department of Conservation says that these cannot be recovered or compensated for offsite. The Department of Conservation approach seeks a 95% probability that no species extinctions would occur due to mining, but this would not be achieved if any further mining was permitted. So Ministers will need to decide the degree and type of compromise acceptable to Government.

5.2 Compromises will also lead to long term certainty that a portion of the Crown's coal assets will not be mined, or will be mined at a lower level of use. The Ministry of Business, Innovation and Employment has quantified the value of these resources, and how they differ for the various deposits on the coal plateau. Ministers might want to consider the level of coal value that it is willing to forego to sustain conservation values.

5.3 This report seeks Ministerial guidance to aid the negotiating process to a productive conclusion. Guidance from you will help the parties to avoid possible compromises that you, on behalf of the Crown interest, would not accept. This would provide boundaries for the parties' discussions in November.

5.4 These are not simple matters to express given the range of factors that must be considered. Guidance might be better expressed qualitatively than quantitatively, so long as it is clear with officials what you want to achieve.

5.5 The negotiations could take a different course were you to signal that you would be willing to support the use of special legislation to implement an agreement.

5.6 It would assist the parties to have your view on the process being proposed under the Resource Management Act. In particular, whether you have any objection to the idea of proposed plan change to the Buller District Plan, including indicating whether the Crown would consider contributing towards a portion of the costs.

5.7 In terms of costs it would also assist the parties to understand whether the Crown would consider bearing the costs of surveying out the areas for long term protection.

5.8 For the parties to agree, they need assurance about how requirements for compensation or offsets, whether monetary or in kind, in respect of future resource consents granted under the Resource Management Act, in respect of access arrangements under the Crown Minerals Act, and in respect of concessions granted under the Conservation Act would relate to the agreements they reach. In particular, they need to understand whether agreement would see the Crown foregoing, or significantly reducing, such compensation in relation to future access arrangements or concessions. This would be done in recognition of the value forgone by mining interests in reaching agreement on areas to be protected. Officials need to be in a position to advise the parties about this on 11 November 2013 for the process to reach a conclusion in December.

5.9 Finally, it would assist the parties to have confirmed that land subject to Schedule 4 of the Crown Minerals Act is not going to be subject to any mining activities, even though the law only exempts these from opencast and not underground mining.

Peter Lawless
Facilitator

18 December 2013

To: Minister of Conservation
Minister of Energy and Resources

From: Peter Lawless
Facilitator
Buller Coal Plateau Process

Buller Coal Plateau – Final Report to Ministers

1.1 The Buller Coal Plateau facilitated process has reached its end without the parties agreeing on a package of measures to provide certainty about mining and reservation on the Buller Coal Plateau. While considerable progress was made, at the end of the allotted time there was no one set of solutions that all parties could agree to.

1.2 Obligations of confidentiality continue in full force and effect for a period of five years, or until all the confidential information has become information in the public domain, whichever is the sooner.

1.3 The Memorandum of Understanding between the parties lasts for one year from the point of signing, although any party may void its participation after discussing this with the other parties and giving one month's written notice of its intent to terminate. That discussion occurred at the meeting on 17 December, and all parties present indicated their agreement to terminate, and their intent to issue the required notices to the other parties to give effect to this.

1.4 The parties agreed on 17 December that, apart from the obligations cited above, each party is now free to pursue its own course in relation to mining and reservation in respect of the Buller Coal Plateau.

Peter Lawless
Facilitator