



Snowy 2.0 – Marica Site Specific Rehabilitation Plan

Version: S2-SHL-ENV-PLN-0008 - Rev 4

Date: 24/09/2024

Ben Croome
Senior Environmental Advisor
Snowy Hydro Limited
Via email

25/10/2024

Subject: Snowy 2.0 - Main Works – Marica Rehabilitation Plan

Dear Mr Croome

I refer to your submission requesting review and approval of the Marica Rehabilitation Plan for Snowy 2.0 main Works (SSI-9687).

I note the Marica Rehabilitation Plan:

- has been prepared in consultation with NPWS; and
- contains the information required by the conditions of approval.

Accordingly, as nominee of the Planning Secretary, I approve the Marica Rehabilitation Plan (Rev 4, dated 24 September 2024), which forms part of Appendix N of the Rehabilitation Management Plan for Snowy 2.0 - Main Works, in accordance with Schedule 3, Condition 10 of the Infrastructure Approval for Snowy 2.0 - Main Works (SSI-9687).

Please ensure you make the document publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Wayne Jones on (02) 6575 3406.

Yours sincerely



Nicole Brewer
Director
Energy Assessments

As nominee of the Planning Secretary

Date of Issue:

Title	Snowy 2.0 - Marica Rehabilitation Plan	
Document Number	S2-SHL-ENV-PLN-0007 Rev 4	
	Name	Position
Originator	Ben Croome	Senior Environmental Advisor
Review	Elizabeth MacPhee	Rehabilitation Specialist
Approval	Chris Buscall	Environmental Manager

Document Revision Table

Revision	Date	Description	Record of Review (Names)
1	17/08/2023	Updated to address NPWS/BCD comments	Ben Croome
2	03/10/2023	Updated to address NPWS/BCD comments	Ben Croome
3	15/05/2024	Updated to address NPWS/BCD comments from other site-specific plans	Ben Croome Chris Buscall Richard Clarke
4	24/09/2024	Updated to close out final comments with NPWS (NS) during meeting	Ben Croome

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1. Background

Schedule 3, condition 10 (G) of the Snowy 2.0 Main Works Conditions of Approval (COA) requires a detailed plan for the rehabilitation of the disturbance area of Marica. The condition describes the measures to be implemented to comply with the rehabilitation objectives in Table 3 of the COA.

The Marica portion of the project is located between Tantangara and Talbingo storages in north-western corner of the plateau, the site is used to link the other sections of the project. A large proportion of the initial Geotechnical Investigation Program (GIP) program was also undertaken in the area utilising upgrades to existing NPWS fire trails (Coppermine and Wallace Creek Fire Trails) and the construction of temporary tracks. Permanent infrastructure located at the now main Marica site includes the new Marica Trail, upstream surge shaft and trunk services, including a pad used for the transition of the underground services to directional drilling. In addition to the permanent infrastructure, the Marica site has a camp, the pad used for the transition of the underground services to directional drilling and laydown areas for the period of construction. For project context see Figure 1. Plan to be updated if MOD 3 is approved.



Figure 1: Region location

The area to be rehabilitated is approximately 20 Ha after excluding permanent infrastructure and roads. Figure 2 details the Marica layout.



Figure 2: Marica Layout

1.1 Site Description

The site is currently comprised of a main access road (constructed for Snowy 2.0) (Marica Trail) that links the camp, temporary offices and stockpile areas with the surge shaft and directional drilling sites. Prior to Snowy 2.0 construction works, the area consisted of an existing fire trail (Coppermine/Wallace Creek fire trail) and native open montane forest, primarily snow gum and mountain gum. Marica Trail has been sealed as far as the surge shaft and the area is an active construction site with works being conducted at the surge shaft and Horizontal Directional Drilling (HDD) site that links underground services between Lobs Hole and Tantangara. The site also includes temporary access tracks that were associated with the initial GIP and pioneer tracks for site access. Refer to Appendix A.

2. Scope of rehabilitation works

Rehabilitation of the majority of the Marica site is to be undertaken following completion of Snowy 2.0 construction. There are 3 main areas or scopes of rehabilitation:

1. Marica Trail – road verge rehabilitation predominately Dip Creek and Eucumbene River crossings. See Table 1 for timing.
2. Camp, surge shaft & HDD pad – compaction relief and full rehabilitation. See Table 2 for timing.
3. Temporary access tracks – compaction relief and full rehabilitation. See Table 3 for timing.

Most of the Marica Trail road works have been completed, with primarily revegetation works left to be completed. The camp, surge shaft, HDD, laydowns, and temporary access tracks are established and will remain in use until construction is completed. Below are the different phases of rehabilitation, what scope or area they apply to and where further details can be found in the document.

Earthworks (camp, surge shaft & HDD pad and temporary access tracks)

- **Erosion and sediment control** - camp, surge shaft & HDD pad & access tracks (refer Section 3.1)
- **Landforming** - camp, surge shaft & HDD pad (refer Section 3.3)
- **Topsoil/growth medium placement** - camp, surge shaft & HDD pad & temporary access tracks (refer Section 3.4)

Revegetation and short-term maintenance (all areas)

- Hydro mulch and dominant native grass seed applied (refer Section 4.2)
- Thatching of the site with local dead branches and shrubs
- Revegetation treatment consisting of direct seeding and tubestock planting as advised by past and future monitoring (refer Section 4.2 & Appendix A & B)
- Weed treatment and ongoing maintenance (refer Section 6.2 & 6.5)
- Access control (refer Section 3.5)

Long term maintenance and monitoring (all areas)

- Supplementary plantings and seeding (refer Section 5.4 & 6.3)
- Weed treatment and ongoing maintenance (refer Section 6.5)

- Quarterly site checks to monitor performance and detect any failed measures (refer Section 7 & Appendix E)
- Annual monitoring and reporting (refer Section 7)

Tables 1 to 3 below summarise the rehabilitation activities required for the forementioned areas/scopes and the associated timing.

Table 1: Revegetation timing main access road verge

Sequence	Task	Timing
1	Tubestock planting – Dip Creek and Eucumbene River	November 2024
2	Temporary access track compaction relief	Following construction
3	Topsoil and mulching	(As required if any rework identified)
4	Weed control	(November – April) plus ongoing as required
5	Revegetation (direct seeding/hydro mulching)	Following topsoil application (November – April)
6	Supplementary tube stock	November – April

Table 2: Revegetation timing laydowns Marica camp, surge shaft & offices

Sequence	Task	Timing
1	Demobilisation (not rehab)	TBA
2	Landform shaping	TBA
3	Topsoil application	(As required)
4	Weed control	(November – April) ongoing
5	Revegetation (direct seeding/hydro mulching/tube stock planting)	(November – April)
6	Supplementary tube stock	(November – April)

Table 3: Revegetation timing for temporary access tracks

Sequence	Task	Timing
1	Demobilisation (not rehab)	TBA
2	Topsoil and mulching	TBA
3	Weed control	(November – April) ongoing
4	Revegetation (tubestock planting & direct seeding/hydromulching)	(November – April)
5	Supplementary tube stock	(November – April)

3. Earthworks

3.1 Erosion and sediment control materials

An Erosion and Sediment Control Plan (ESCP) will be prepared by a Certified Practitioner in Erosion and Sediment Control (CPESC) prior to conducting works that existing controls installed for construction are not capable of mitigating. The controls identified in the ESCP will remain in place during shaping and topsoiling of the site. Controls will be then reassessed by a CPESC prior to the application of mulch and the plan updated where required. Controls to remain in place until the site is stable.

3.2 Drainage

Marica trail was a new road constructed specifically for Snowy 2.0 which intersected two creeks (Dip Creek and Eucumbene River) and several drainage lines. Natural flow has been re-established in the creeks and minor drainage lines that intersect the disturbance footprint with the installation of permanent culverts detailed in Appendix D (Marica Trail Road Design). Figure 3 shows a high-level overview of waterways interface within the project footprint. Riparian zones are to be planted out in accordance with Section 4.1 and Appendix A - Marica sub plans.

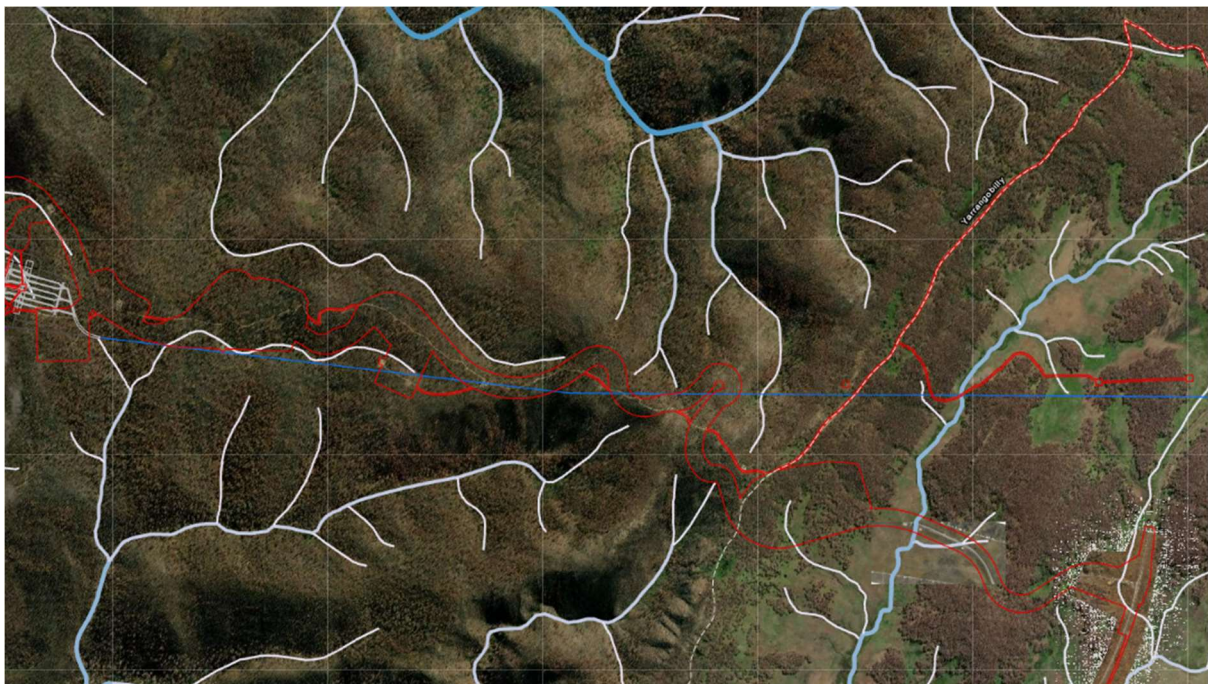


Figure 3: Waterways intersecting the site (Class 1 or greater)

Note – Class 1 waterways (white), Tunnel alignment (dark blue), Class 2 waterways and above (light blue), EIS boundary and Coppermine trail and Wallace creek trail (red)

3.3 Landform reshaping

Roads and access tracks

Marica Trail - no further reshaping is required as it is now complete. There is a combination of batter types along the permanent access that require different treatments (e.g. application of site won

mulch and hydromulch) as shown in Appendix D (Marica Trail Road Design). Batters have been stabilised utilising measures commensurate with those outlined in Figure 4 (based on slope gradient). The majority of the road verges have already been topsoiled and mulched, with some of the steeper sections having had structural reinforcement in the form of rock bolting, mesh and shotcreting.

Temporary access tracks and drill pads – as they are no longer required they have and will be returned to their natural profile. The gradients and locations of these tracks is detailed in Appendix A – Marica sub plans. Compaction will be addressed by crazy ripping on the contour no less than 200mm deep, with the surface left roughened.

Marica camp & other temporary stockpile laydowns

When the operational requirement for the Marica camp and stockpile/laydown areas cease, they will be shaped to blend into the surrounding environment using material from the existing pad and subsoil stockpiles. See Appendix A – Marica sub plans for further details regarding indicative gradients of natural ground to be reinstated.

Surge shaft & HDD pad

The surge shaft and HDD pad will be shaped to blend into the surrounding environment using material from the existing pad and subsoil stockpiles. Any sections of the existing pads required for ongoing operational requirements will be incorporated into the landscape. Final design for these areas is not currently available, final designs will be in accordance with the Visual Impact Management Plan (VIMP). See Appendix A – Marica sub plans for further details regarding indicative gradients of natural ground to be reinstated including a visualisation of the final surge shaft design. This subplan will be updated following final design for these two areas.

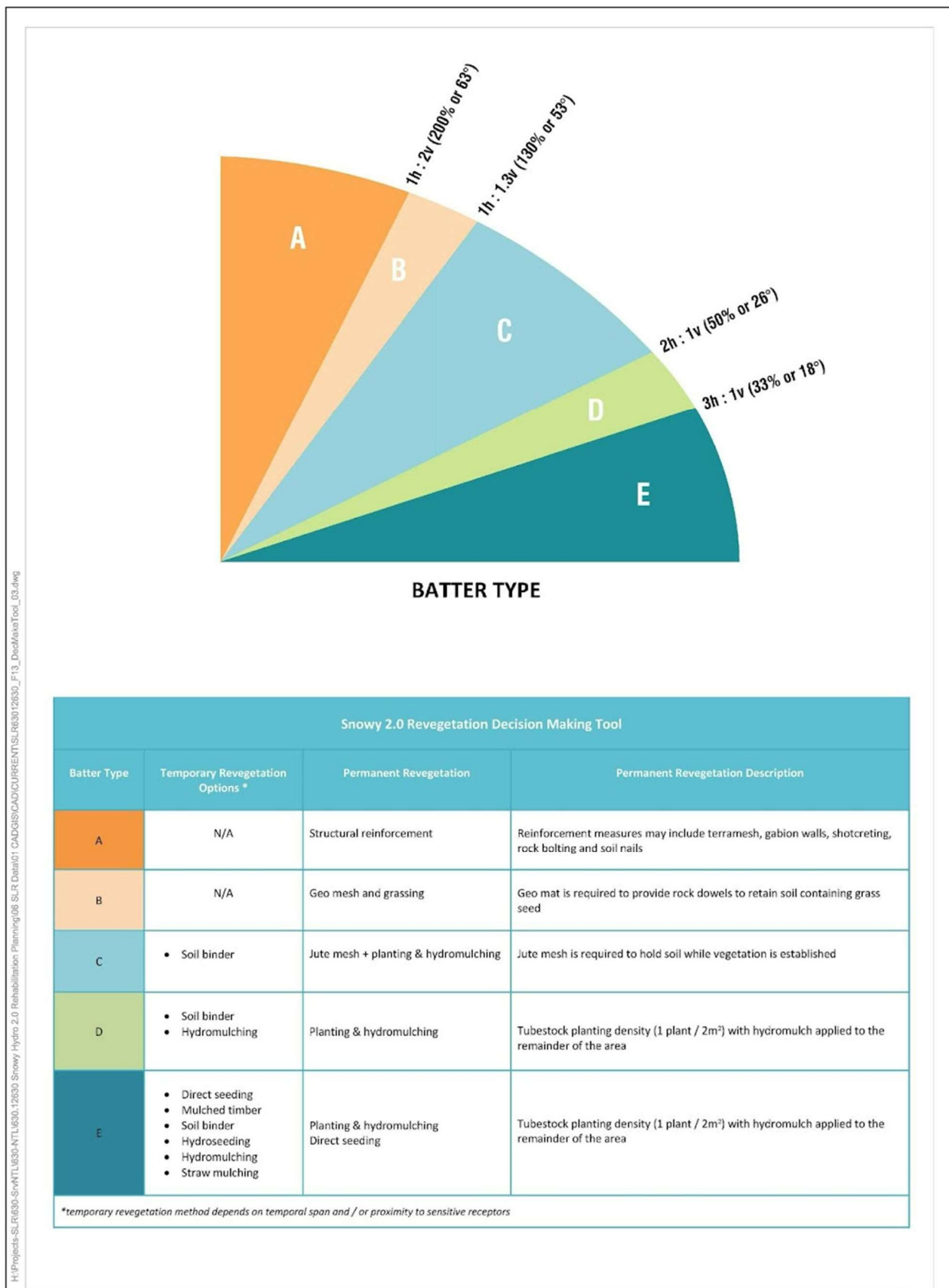


Figure 4: Vegetation Decision making tool

Marica camp and laydowns will be shaped to be sympathetic with the surrounding topography.

3.4 Topsoil/growth medium amendment and placement

Site won topsoil has been reapplied at between 50 and 100mm along the entirety of Marica Trail Road verges (excluding cut batters where rock was encountered). Further topsoil application at the depth it was stripped (between 50 and 100mm depth) will be undertaken as other areas become available for rehabilitation. Topsoil will be sourced from the Snowy 2.0 stockpiles where it will be returned to the area from which it has been stripped. See Appendix C for stockpile locations and current volumes. If in the event there is not sufficient topsoil available and site made topsoil cannot be produced, a propriety compost blanket or similar will be utilised. The surface will be left rough after application of topsoil prior to mulch application.

3.5 Access control

Marica Trail will be a Snowy Hydro exclusive road under the Long Term Roads Strategy and will only be accessible to Snowy Hydro Limited (SHL) and National Parks and Wildlife Services (NPWS) personnel (for lease management and emergency operations). A locked gate (with appropriate safety signage) will be installed at the Snowy Mountains Highway. Pre-existing NPWS tracks (Coppermine and Wallace Creek Fire Trails) will remain for NPWS use only. See section 6.1 and the Long Term Road Strategy for further detail. Provision of suitable access for vehicles and/or all-terrain vehicles for rehabilitation, weed control and for large areas such as the camp, is to be retained.

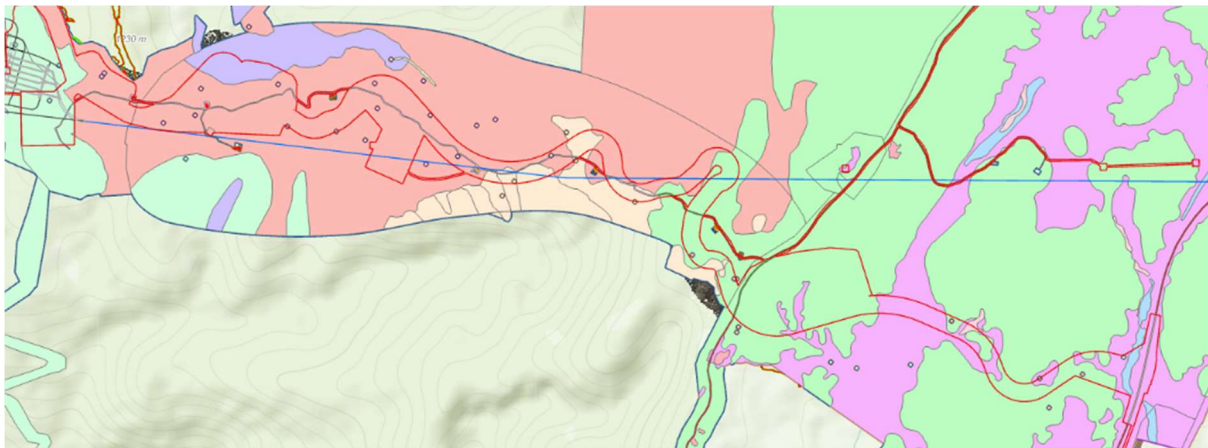
4. Revegetation

The site will be vegetated using a combination of tubestock planting and direct seeding to ensure ground cover and plant community structure/species composition is comparable to reference vegetation communities as required by Table 4.4 of the Main Works Rehabilitation Management Plan (RMP). The Plant Community Types (PCTs) within the construction envelope are outlined in Table 4 (PCT composition) and Figure 4 (PCT map of disturbance footprint). Further detail is available in Appendix A for specific areas of the Marica site.

Table 4: PCT composition including permanent roads, laydowns, camp, and permanent infrastructure

PCT	HA	Major area
1196 	15	Surge shaft area (~5.7 ha)
1224 	2.6	Permanent and temporary access roads & creek crossings
1225 	0.89	Dip Creek
953 	2.7	HDD pad (~2.4ha)
639 	1.78	Access road
644 	13	Camp (~5 ha)
300 	0.81	Nil (small section of main access road)

Figure 4: Marica PCT map



*See Table 4 for PCT key

4.1 Species use and type

. Appendix J PCT Target Species List of the Main Works RMP details a broad species list for the PCTs that will be used for the final composition of the planting design. This final planting design will be prepared following establishment of an interquartile range for the relevant PCTs, determined by the ecological monitoring results from the monitoring program outlined in Section 7 and Section 8 of the Main Works RMP. This plan will be updated, if required, following approval of the Main Works RMP to ensure consistency.

Until the interquartile range is established, revegetation will be guided by the floristics from the Biodiversity Development Assessment Report (BDAR), local reference sites and surrounding vegetation detailed in the following section. The list of species to be used for initial planting and seeding are provided in Section 4.2

This plan will be updated following completion of monitoring to include specific planting rates for all species to be used at the camp and laydowns, in addition to the initial interim rates described in Appendix A.

4.2 Planting and seeding specification

Tube stock will be randomly planted at a density initially guided by the floristics from local reference sites and current surrounding vegetation detailed in Appendix A – Marica sub plans and the PCT BDAR plot Tables in Appendix B. Following establishment of an interquartile range for the relevant PCTs, supplementary planting will be undertaken if required to achieve the specific benchmarks of native plant species composition outlined in Table 4.4 Rehabilitation completion criteria for the Snowy 2.0 Main Works - Main Works RMP.

Note no trees will be planted in the Marica Trail road verge as this is an operational road.

A native seed mix has been used for the Marica Trail road batters see Table 5 below for composition.

Table 5: Marica Trail road batters native seed mix

Species (PCT 1224 ,644,1196)	KG per Ha
Anthosachne scabra	4
Microlaena stipoides	0.5
Poa labillardierei	0.25
Poa sieberiana	4
Poa Helmsii	0.25
Rytidosperma pilosum	1
Rytidosperma caespitosum	0.5
Themeda triandra	1
Total	11.5

4.3 Water requirements

Planting will occur where soil moisture content is optimised (following rainfall) and be followed with limited watering in after planting. Limited watering is proposed to be undertaken after initial planting but will be done as required to ensure survival of the plants. Water crystals will be utilised during planting.

5. Resource specification

5.1 Compost/topsoil/growth medium

Compost will only be used in planting holes for tube stock. One litre of compost per planting hole will be used.

Site won topsoil has and will be applied over the site at ~100mm depth. Topsoil will be sourced from the 2.0 stockpiles. An Inspection Test Plan (ITP) for topsoil application will be developed and utilised. See Appendix C for topsoil and subsoil stockpile locations and volumes.

If there is a shortfall of topsoil that is restricting vegetation growth, a compost blanket / organic matt may be utilised prior to the hydromulch layer.

The compost blanket is an organic layer sprayed over the subsoil to provide additional growth medium. Products used will be certified pathogen free.

5.2 Mulch

Site won mulch has and will continue to be utilised at a rate ~100mm following topsoil placement. Mulch placement has been undertaken on the majority of the Marica Trail road verges following completion of the road batter shaping. The remaining areas will be mulched as they become available, application will be reviewed pending availability with alternative mulch types such as straw mulch permitted on batters less than 3H:1V. For slopes steeper than 3H:1V, hydro mulch will be utilised. An ITP for hydro mulching/seeding will be prepared using Table 6 as the basis, with final products and application rates approved through the ITP review process.

Table 6: Hydro mulch mix

Seed Application	Erosion Protection	Topsoil depth	Application Rate	Comments
Native Seed	Straw	50 -100mm	4 t/ha	<p>Guar Gum tackifier to be applied @ 125 kg/ha if straw mulch has no tackifier included in each bale</p> <p>Binder applied @ 300 litres/ha</p> <p>Native seed/mix applied as per ITP</p> <p>Roughened/ripped surface on the contour compaction relief</p>

Notes:

***NO NON-NATIVE COVER CROP TO BE INCLUDED IN ANY MIX.**

(*Poa fawcettiae*, *Poa sieberiana*, *Poa helmsii* & *Poa ensiformis*), *Anthosachne scabra*, *Microlaena*, *Rytidosperma penicillatum*, *Rytidosperma pilosum*, *Rytidosperma caespitosum* mix to be used. See Table 5 above for composition discussed in Section 4.2.

*Hydro mulching/seeding contractor to ensure even application of native seed can be achieved

5.3 Tube stock

Tubestock will be supplied by SHL as part of the tubestock propagation program grown from seed collected as part of the Snowy 2.0 seed collection program or from local nurseries that support revegetation in Kosciuszko National Park (KNP).

5.4 Seed

Initial seeding of the Marica Trail road verges has been undertaken with the native grass seed mix in combination with hydro mulch as described in Sections 5.2. Additional native seed will be sown after treatment of weeds and tubestock planting of shrubs and trees in the major works areas such as the camp, surge shaft and stockpile areas. Seed will be sourced from the Snowy 2.0 seed picking program.

5.5 Fencing/tree guards

No fencing or tree guards will be used unless monitoring indicates grazing species are having an impact.

5.6 Fertilisers

A small handful of slow-release phosphorus organic fertiliser will be added to all planting holes in the planting process. Once native species have germinated and begun to grow, additional slow-release organic fertiliser may be used in the maintenance process to augment the growth of the sown species. No fertiliser will be used for direct seeding or near drainage lines.

5.7 Signage and safety

Rehabilitation signage with a Snowy 2.0 logo will be erected with relevant site-specific information provided and requesting people remain off the area.

6. Post rehabilitation

Both short-term and long-term maintenance programs will be implemented to ensure the site trends towards the final land use. This maintenance program will begin within 3 weeks after the rehabilitation work has been completed and continue until handover to NPWS.

6.1 Final land use

It is envisaged that the future use of this site is a combination of native vegetation, operational access road with cabling running underground and permanent infrastructure. See Figure 5.

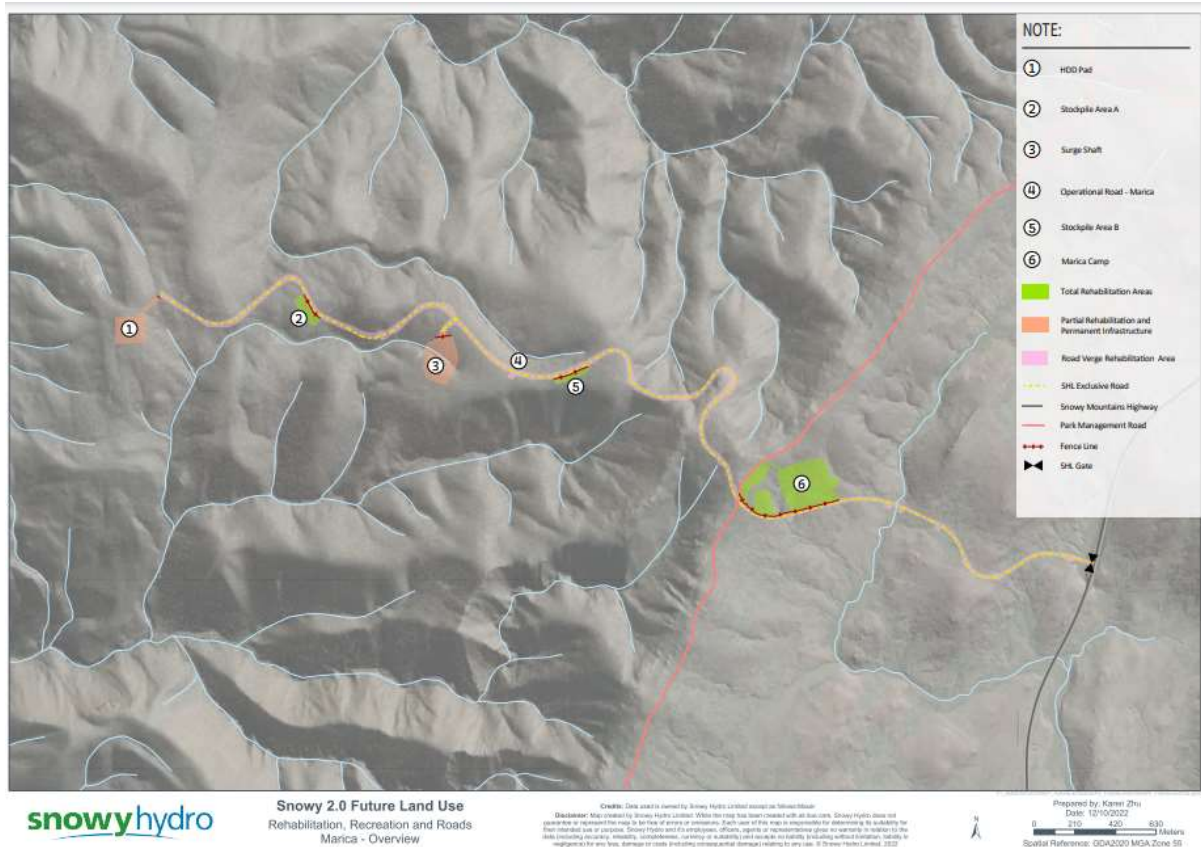


Figure 5: Final land use mapping for Marica

(Whilst fences are shown in Figure 5 they are not currently planned for installation)

6.2 Short-term maintenance

Several short-term maintenance activities (3 weeks to 6 months) will be required guided by quarterly monitoring and may include activities such as:

- Access track maintenance
- Sediment and erosion control

- Weed control

If a prolonged dry period occurs after the planting, additional watering will be required 4 to 6 weeks after sowing. Watering is best done with a mobile water cart.

6.3 Long -term maintenance

It is envisaged long-term maintenance activities (+6 months ongoing) such as erosion control and replanting will be undertaken. Maintenance will be guided by monitoring described in Section 7 of this plan and the Trigger Action Response Plan outlined in Table 10.2 of the Main Works RMP.

6.4 Weed control

All weed species will be sprayed at the appropriate time with the appropriate herbicide. Weeds that are close to newly germinated seedlings will be weeded by hand.

Annual weed monitoring will be scheduled with weed control programs occurring on a biannual basis as per the Biodiversity Management Plan Appendix F (Weed, Pest, and Pathogen Management Plan Section 5.1.2.1 – Chemical Weed Control. Weeds identified at the site and in the surrounding area include:

- *Anthoxanthum_odoratum* (sweet vernal grass)
- *Dactylis glomerata* (cocks' foot)
- *Hypochaeris radicata* (cats' ear)
- *Acetosella vulgaris* (sheeps sorrel)
- *Holcus lanatus* (Yorkshire fog)
- *Rumex acetosella* (sheep sorrel)
- *Trifolium_repens* (white clover)

6.5 Fertiliser augmentation

Additional slow-release fertiliser (N, P, K) may be applied to established seedlings if seedlings show any signs of nutrient deficiencies.

6.6 Re-mulching

To be undertaken if required for seedlings planted in the revegetation process until they are sufficiently grown to provide their own biomass. Hydro mulching of areas that are showing signs of erosion to be utilised where appropriate.

7. Rehabilitation monitoring

Monitoring will be undertaken to provide information on the success of the rehabilitation regarding tubestock growth and mortality, seed germination and establishment, weed invasion, erosion, natural recruitment, and disturbance from grazing animals.

Monitoring will be carried out in accordance with Section 8.2 of the Main Works RMP. This will include observational monitoring (quarterly), unmanned aerial vehicle (UAV) (annually) and ecological monitoring (three yearly)

Quarterly observational monitoring

Quarterly observation checks of rehabilitation sites to be undertaken (4 times per year). A checklist will be used to evaluate performance and detect any failures and will generate maintenance programs and further rehabilitation works (if measures are failing). This checklist will include the measures linked to the Trigger Action Response Plan outlined in Section 10.2 of the Main Works RMP. See Appendix E for template or the below link to a digital checklist that will form the basis for the quarterly observational monitoring:

Appendix E - [Quarterly Observational Monitoring Form](#)

Photo points will be established as part of the quarterly monitoring.

Annual monitoring

Annual monitoring (UAV) will occur as described in Table 7 below and in accordance with Section 8.2 of the Main Works RMP:

Table 7: Annual rehab monitoring – Unmanned Aerial Vehicle (UAV)

Monitoring parameter	Description
PCT variation	(1 digital 20m x 20 quadrant per Ha) 5 PCT characteristic species and weeds with species added over time
Weeds	Weed abundance and species
Native species	Species composition, cover, structure, and health
Bare ground	% Area and location
Erosion	Depth, width, length, change over time
Habitat features	Logs and rock
Pest species	Track and individual at time of survey
Human Disturbance	Wheel tracks, waste
Legacy Items	Infrastructure for removal

Conducted using UAV and ecologist for species ground truthing.

Three yearly monitoring

Ecological recovery will be measured every 3 years during the same monitoring period as the reference sites. This monitoring will consist of on the ground assessment of species, composition and abundance as described in Table 8 below:

Table 8: PCT ecological monitoring – on ground monitoring

Method number	Monitoring method
1	Permanent, full floristic plots (i.e., 20x20m; cover and abundance estimate for all species present). Sites will have a GPS point recorded and 2 permanent corner posts for plots. Data to be collected is: full scientific name, estimated % foliage cover. If less than 1% cover then decimals to be used (0.1, 0.2, 0.3...). Estimated abundance of each species to be recorded from 1 to 10, 10 to 100 with intervals of 10 and 100 to 1000 in intervals of 100 and so on. Species type, i.e., native, exotic, or high threat exotic to be recorded. Threatened species will be recorded per plot.
2	Permanent 50m midline transect located through the middle of the 20m x20m plot. A way point recorded at 0m and 50m and posts used to mark the points.
3	Measurement of all trees for Diameter at Breast Height (DBH) per plot.
4	Recording of all hollow bearing trees per plot.
5	Habitat resources (coarse woody debris, ponds, rocks) per plot. Type and size of coarse woody debris to be recorded.
6	Evidence of vertebrate pests and native species (scats, digging, chewing) per plot to be recorded.
7	Soil surface characteristics will be recorded along the 50m line transect at 5m intervals. Characteristics recorded will be: Native vascular plant (living), Exotic vascular plant (living), Litter (type, depth, and origin), Cryptograms, Logs (standing or dead), Rock, Water, Bare ground
8	Soil characteristics - field tests - pH, EC, texture (Samples taken in accordance with steps 1-6 of Section 5.4.1 of Biodiversity Conservation Trust Ecological Monitoring Module Operational Manual February 2022)
9	Soil characteristics - Laboratory tests - Nitrogen, Total Carbon, Available Phosphorus, pH, EC (Samples taken in accordance with steps 1-6 of Section 5.4.1 of Biodiversity Conservation Trust Ecological Monitoring Module Operational Manual February 2022)

Reporting will be undertaken as per Section 8.3 of the Main Works RMP. This requires an annual public report and a separate annual report to NPWS and Biodiversity Conservation Division (BCS).

7.1 Local reference sites

Until set metrics are confirmed following implementation of the monitoring program the reference sites nominated in Table 9 below will be used to provide initial species type and numbers for initial revegetation in addition to tracking progress of vegetation cover and abundance.

Table 9: Local reference site (BDAR)

PCT	Reference site	Condition
1196	90	High
1224	2044	High
1225	120	High
953	5206	High
639	105	High
644	2150	High
300	87	High

Map of these sites are provided in Appendix B and Appendix I of the Main Works RMP.

Where SHL & NPWS agree operational changes are required; the plan may be updated without DPHI approval.

Appendix A – Marica sub plans

Dip Creek –



Area - (400m² waterway) 1500m² batters

Earthworks Status – Complete

Growth medium– Topsoil applied

Cover – Jute mesh and hydro mulch applied on batters, decommissioned sediment basins hydro mulched

Revegetation – Native seed mix included in initial hydro mulch application and tubestock

PCT – 1224 (batters) & 1225 (waterway)

This site will be sown and planted with primary species on the batters and in the waterway zone.

All species selected for the first pass of rehabilitation are considered primary species for this PCT.

These sites will be monitored, and additional planting and sowing will be done with secondary species as part of the maintenance program.

Below is the Tubestock Table (primary species only) 1,500m² for the batters and 400m² for the rocky area. Plant in both areas.

Botanical Name	Common Name	Number of tubestock	Notes
Hakea microcarpa	Small fruit Hakea	475	Plant close to the rock edge - 4m apart.

Ozothamnus cupressoides	Kerosene Bush	380	Plant on batter and riparian zones - 5m apart.
Olearia myrsinoides		380	Plant in well drained areas of batter - 5m apart.
Richea continentis	Candle Heath	40	Plant right of water's edge in ow flows – 3m apart.
Stellaria pungens	Prickly Starwort	316	Plant in all areas - 6m apart.

Direct Seeding Table – sowing rate of 2g per m2 for a mix of the species below – 3.8kg of seed required (0.8kg of riparian species to be zone in rocked area only).

Botanical Name	Common Name	Notes
Bulbine bulbosa	Chocolate Lily	Sow on batter
Chrysocephalum apiculatum	Yellow Buttons	Sow on batter
Microseris lanceolata	Native Dandelion	Sow on batter
Senecio gunnii	Gunns Senecio	Sow on batter
*Poa clivicola	Fine leaved Snow Grass	Sow in riparian zone
*Poa costiniana	Horny Grass	Sow in riparian zone
*Poa helmsii	Broad Leaved Snow Grass	Sow in riparian zone
*Poa labillardierei	Tall Tussock Grass	Sow in riparian and batter zones
*Poa phillipsiana	Blue Snow Grass	Sow on batter
*Poa sieberiana	Grey Tussock Grass	Sow on batter
Themeda triandra	Kangaroo Grass	Sow on batter

*Can be planted as tubestock

Typical Gradient – (Class D batter)



PCT Composition (1224 & 1225)



Eucumbene River



Area – 2000m²

Earthworks – Complete

Growth medium – Topsoil applied

Cover – Jute mesh or similar applied on batters, decommissioned sediment basins hydro mulched

Revegetation – Native seed mix included in hydro mulch and tubestock

PCT 1224

Plant tubestock into the jute areas and sow riparian species in the rock. All species selected for the first pass of rehabilitation are considered primary species for this PCT. These sites will be monitored, and additional planting and sowing will be done with secondary species as part of the maintenance program.

Tubestock Table (primary species only) – 1400m², Trees @ 5m apart, shrubs @ 1–2 m apart.

Botanical Name	Common Name	Number of tubestock	Notes
Cassinia aculeata	Sticky Cassinia	50	Plant in well drained areas
Daviesia ulicifolia	Gorse Bitter Pea	50	
Grevillea australis	Alpine Grevillea	25	Cutting grown
Grevillea lanigera	Woolly Grevillea	25	Cutting grown

Hakea microcarpa	Small fruit Hakea	50	Plant close to the rock edge
Kunzea muelleri	Yellow Kunzea	25	Cutting grown
Leptospermum myrtifolium	Myrtle Tea Tree	40	Plant close to the rock edge
Mirbelia oxylobioides	Mountain Mirbelia	30	
Ozothamnus cupressoides	Kerosene Bush	25	
Ozothamnus secundiflorus	Cascade Everlasting	25	
Podolobium alpestre	Shaggy Bush Pea	25	
Stellaria pungens	Prickly Starwort	50	Cutting grown
Eucalyptus lacrimans		25	
Eucalyptus pauciflora	Snow Gum	50	Top of the batter
Eucalyptus stellulata	Black Sallee	100	Plant close to the rock edge

Direct Seeding Table (primary species only) required to sow in the rocked area – 600m². With a sowing rate of mixed seed of 2g per m² – then 1.2 kg of seed is required from a mix of the following species.

Botanical Name	Common Name	Notes
Bulbine bulbosa	Chocolate Lily	Sow on batters
Microseris lanceolata	Native Dandelion	Sow on batters
Podolepis jaceoides	Showy Copper Wire Daisy	Sow on batters
*Carex breviculmis	Short Stem Sedge	Sow in riparian zone
*Anthosachne scabra	Common Wheat Grass	Sow on batters
Microlaena stipoides	Weeping Grass	Sow on batters
Poa clivicola	Fine Leaved Snow Grass	Sow on batters
*Poa costiniana	Horny Grass	Sow in riparian zone
*Poa sieberiana	Grey Tussock Grass	Sow on batters
Themeda triandra	Kangaroo Grass	Sow on batters

*Can be planted as tubestock

Typical Gradient (Class E batter)



PCT Composition - (1224)



Marica Camp – Area to be rehabilitated: 6.36ha

Status – In use to 2027

Growth medium – Topsoil

Cover – Mulch

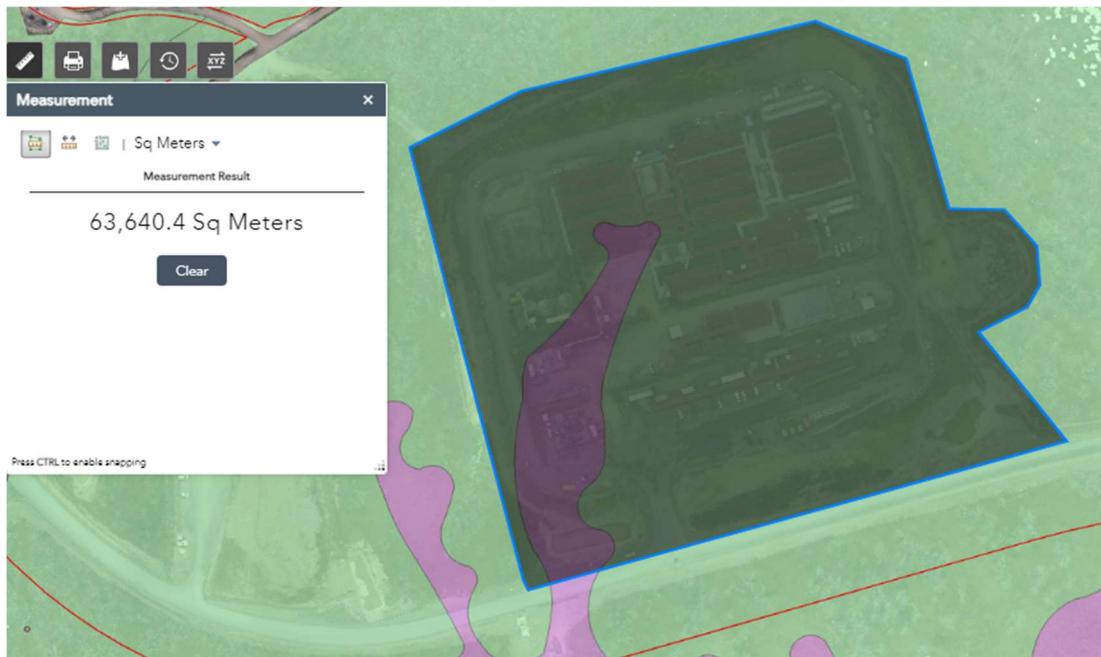
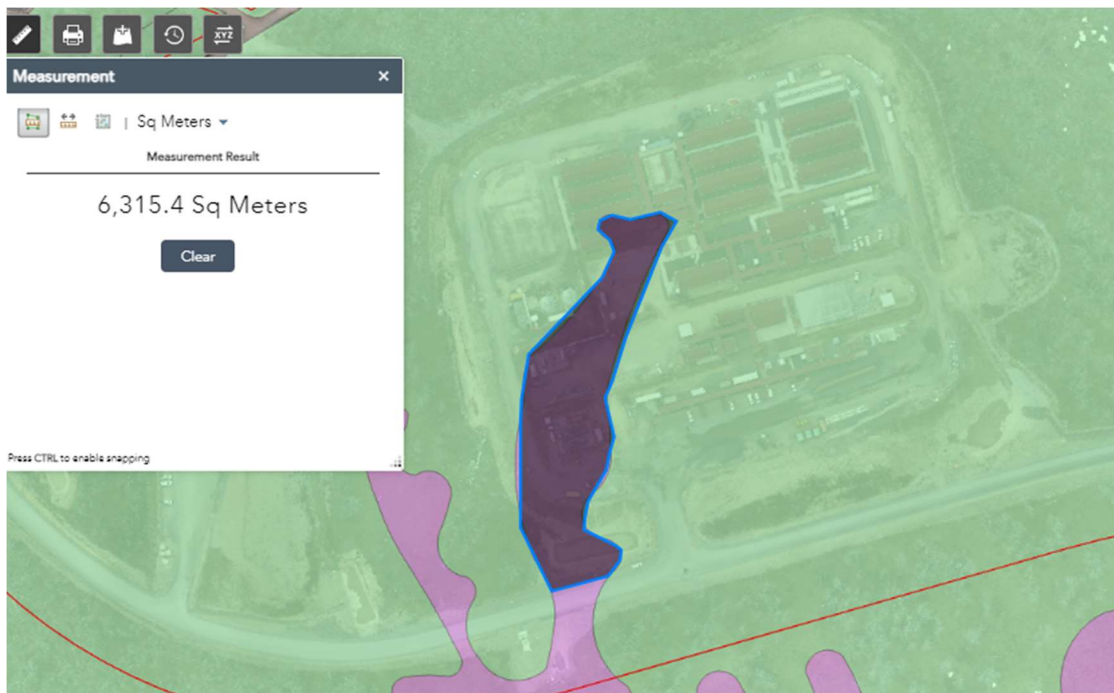
Revegetation - Tube stock & direct seeding see Table 6 & 10 of Appendix B for species list and below for interim planting schedule

PCT – 644 and 1224

Landform - (original landform to be restored) Entire area to be rehabilitated – (Class E batter)



PCT Composition 644 ■ 57,325m³ 1224 ■ 6,315m³



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
644	<i>Eucalyptus pauciflora</i>	450
644	<i>Acrothamnus hookeri</i>	375
644	<i>Podolobium alpestre</i>	125
644	<i>Olearia erubescens</i>	50

Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
1224	Hovea_montana	200
1224	Microseris_lanceolata	500
1224	Cassinia monticola	450

Marica Office Pad & camp topsoil storage – Area to be rehabilitated: 1.2ha

Status – In use to 2027

Growth medium – Topsoil (April 2024 topsoil volume) 7007m³

Cover – Mulch

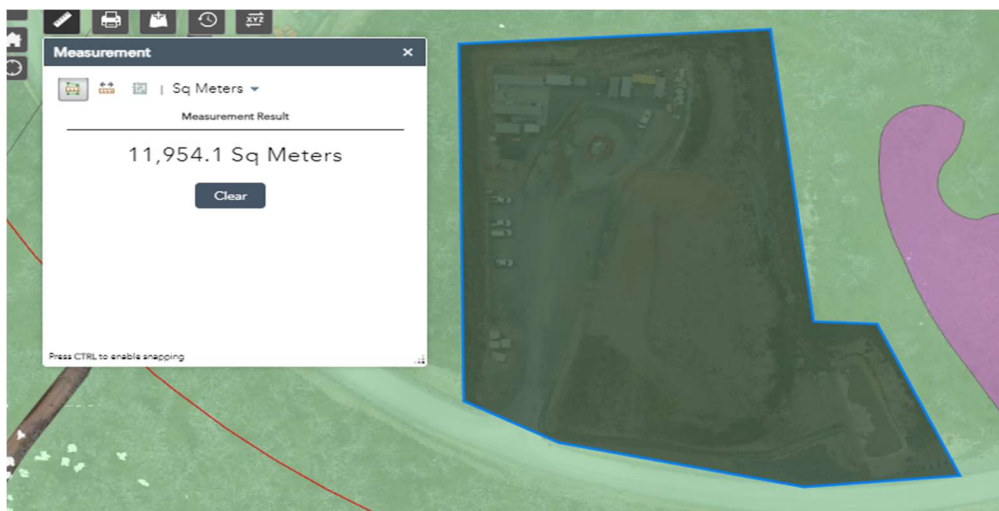
Revegetation - Tube stock & direct seeding – See Table 10 of Appendix B for species list and below for interim planting schedule

PCT – 644

Landform - (original landform to be restored) Entire area to be rehabilitated – (Class E batter)



PCT Composition - 644



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
644	Eucalyptus pauciflora	450
644	Acrothamnus hookeri	375
644	Podolobium alpestre	125
644	Olearia erubescens	50

Surge Shaft – Area to be rehabilitated: 6.5ha

Status – In use to 2027

Growth medium – Topsoil

Cover – Mulch

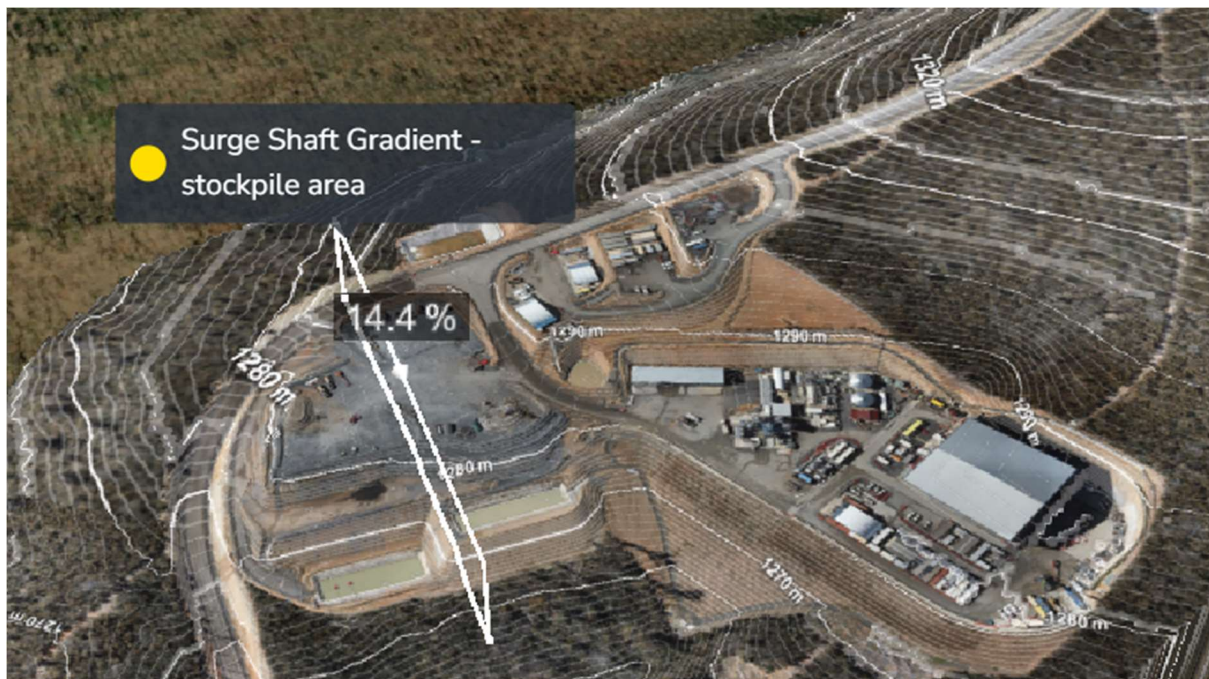
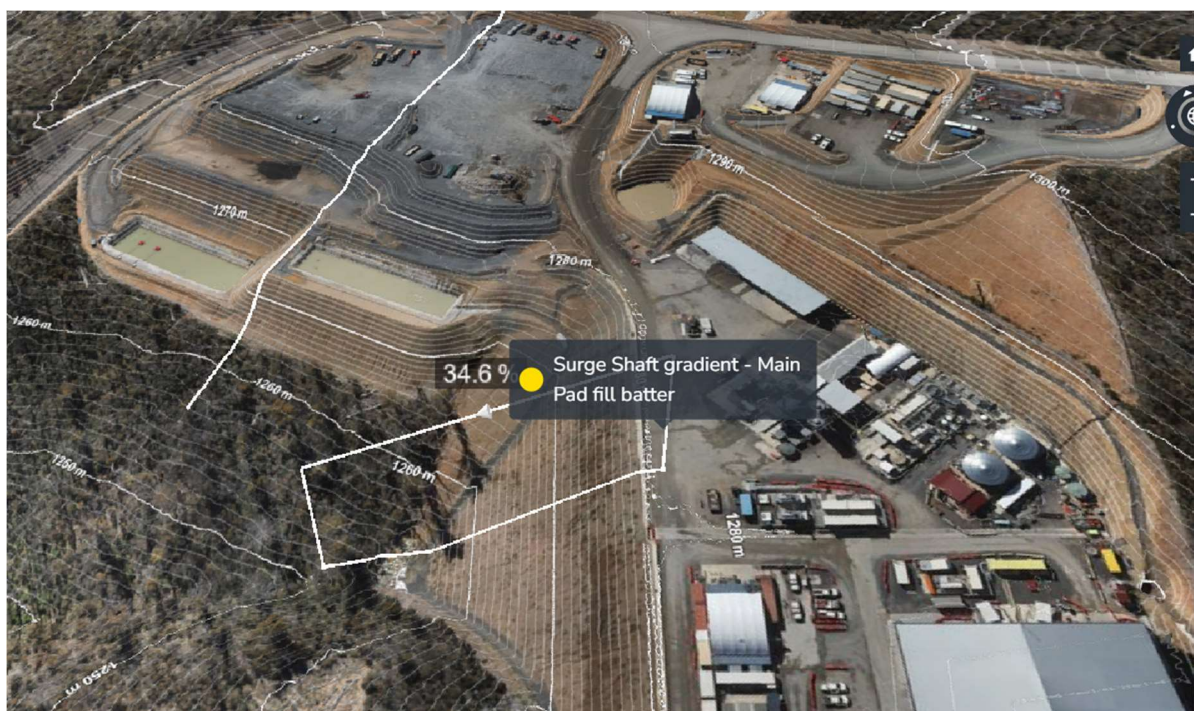
Revegetation - Tube stock & direct seeding – See Table 5 of Appendix B for species list and below for interim planting schedule

PCT – 1196

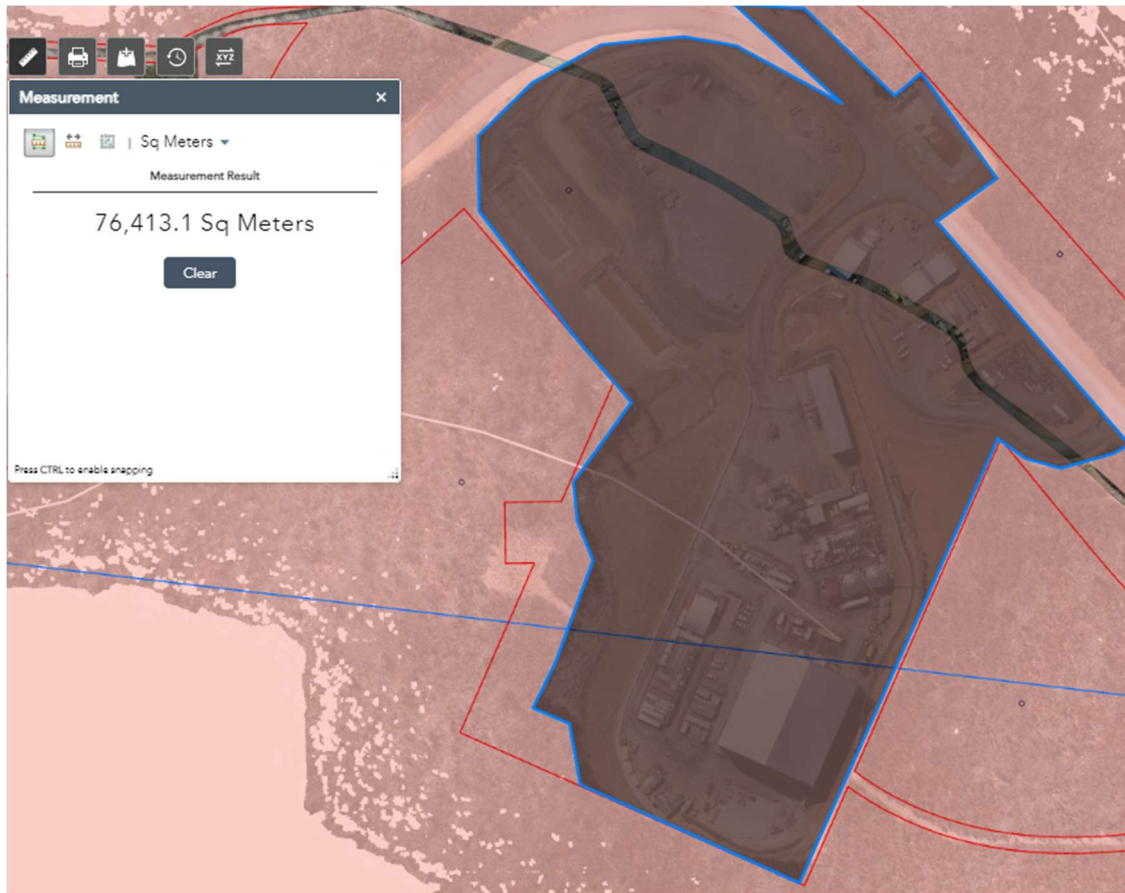
Landform - Rehabilitation to be undertaken with spoil emplacement against above ground surge shaft (see visualisation of rehabilitated state below and current site)



Below shows examples of existing gradients that will be incorporated in final design.



PCT Composition - 1196 ■



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
1196	<i>Eucalyptus_pauciflora</i>	625
1196	<i>Eucalyptus_dalrympleana</i>	250
1196	<i>Eucalyptus_radiata_subsp_robertsonii</i>	50
1196	<i>Cassinia_aculeata</i>	200
1196	<i>Daviesia_latifolia</i>	500
1196	<i>Lomandra_longifolia</i>	350

Marica Topsoil Subsoil Stockpile 1 – Area to be rehabilitated: 1.36ha

Status – In use to 2027

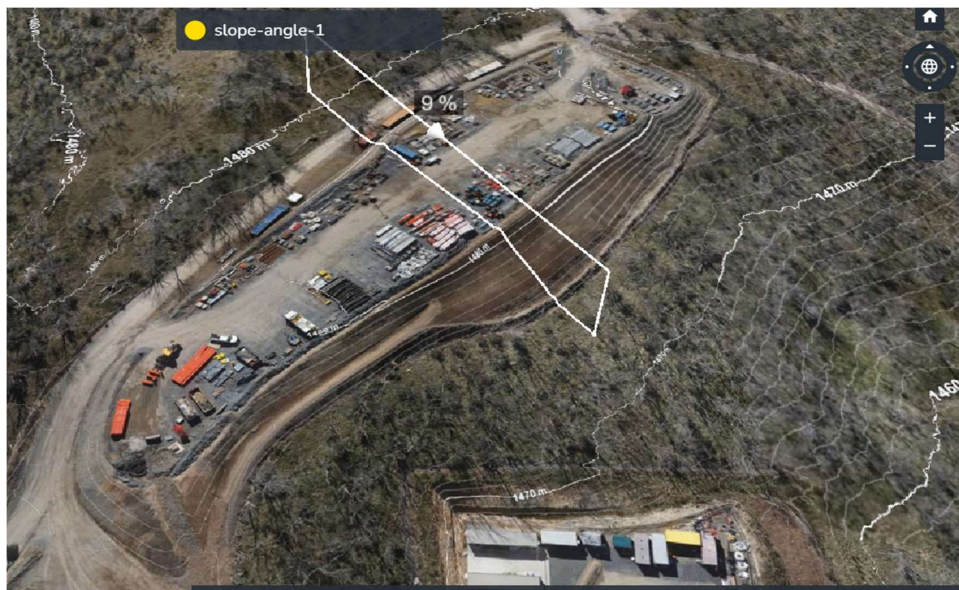
Growth medium – Topsoil (April 2024 stockpile volume 30,683m3)

Cover – Mulch

Revegetation - Tube stock & direct seeding – See Table 10 of Appendix B for species list and below for interim planting schedule

PCT – 644

Landform - (original landform to be restored) Entire area to be rehabilitated (Class E batter)



PCT Composition – 644



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
644	Eucalyptus_pauciflora	450
644	Acrothamnus_hookeri	375
644	Podolobium_alpestre	125
644	Olearia_erubescens	50

Marica Topsoil Stockpile 2 – Area to be rehabilitated: 0.6ha

Status – In use to 2027

Growth medium – Topsoil (**April topsoil volume – 7,598 m3**)

Cover – Mulch

Revegetation Tube stock & direct seeding – See Tables 5 & 10 of Appendix B for species list and below for interim planting schedule

PCT – 1196 and 639

Landform - (original landform to be restored) Entire area to be rehabilitated



PCT Composition 1196 2,247m3 639 3,736m3



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
1196	Eucalyptus_pauciflora	625
1196	Eucalyptus_dalrympleana	250
1196	Eucalyptus_radiata_subsp_robertsonii	50
1196	Cassinia_aculeata	200
1196	Daviesia_latifolia	500
1196	Lomandra_longifolia	350

Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
639	Eucalyptus_delegatensis	450
639	Eucalyptus_pauciflora	25
639	*Daviesia_ulicifolia_	500
639	*Acacia_obliquinervia	250
639	Cassinia_aculeata	75

Marica Topsoil stockpile 3 to be incorporated into the road batter

Marica Topsoil / Subsoil Stockpile 4 - Area to be rehabilitated: 1.06ha

Status – In use to 2027

Growth medium – Topsoil - (April volume - 13,185m³)

Cover – Mulch

Revegetation - Tube stock & direct seeding – See Table 5 of Appendix B for species list and below for interim planting schedule

PCT – 1196

Landform - (original landform to be restored as per below gradient) Entire area to be rehabilitated



PCT Composition – 1196



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
1196	Eucalyptus_pauciflora	625
1196	Eucalyptus_dalrympleana	250
1196	Eucalyptus_radiata_subsp_robertsonii	50
1196	Cassinia_aculeata	200
1196	Daviesia_latifolia	500
1196	Lomandra_longifolia	350

HDD Pad – Area to be rehabilitated: 1.7ha

Status – In use to 2027

Growth medium – Topsoil

Cover – Mulch

Revegetation Tube stock & direct seeding – See Table 8 of Appendix B for species list and below for interim planting schedule

PCT – 953

Landform - Original landform to be restored as per below gradient in area not retained for operations



PCT Composition – 953



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
953	*Eucalyptus_pauciflora_White_Sally	75
953	*Eucalyptus_dalrympleana_Mountain_Gum	125
953	*Eucalyptus_dives_Broad_leaved_Peppermint	500
953	Eucalyptus_viminalis_Ribbon_Gum	50
953	*Daviesia_latifolia_Bitter_pea	300
953	Platylobium_formosum	300
953	Olearia_erubescens	50
953	Banksia_canei_Mountain_Banksia	175
953	Eucalyptus_robertsonii_	25
953	Mirbelia_oxylobioides_Mountain_Mirbelia	500
953	*Acacia_pravissima	250

Access Tracks – Area to be rehabilitated: Approx 1.25ha

Status – Access track either in use or with temporary overground services preventing rehabilitation until construction is complete.

Growth medium – Topsoil

Cover – Mulch/hydro mulch

Revegetation Tube stock & direct seeding

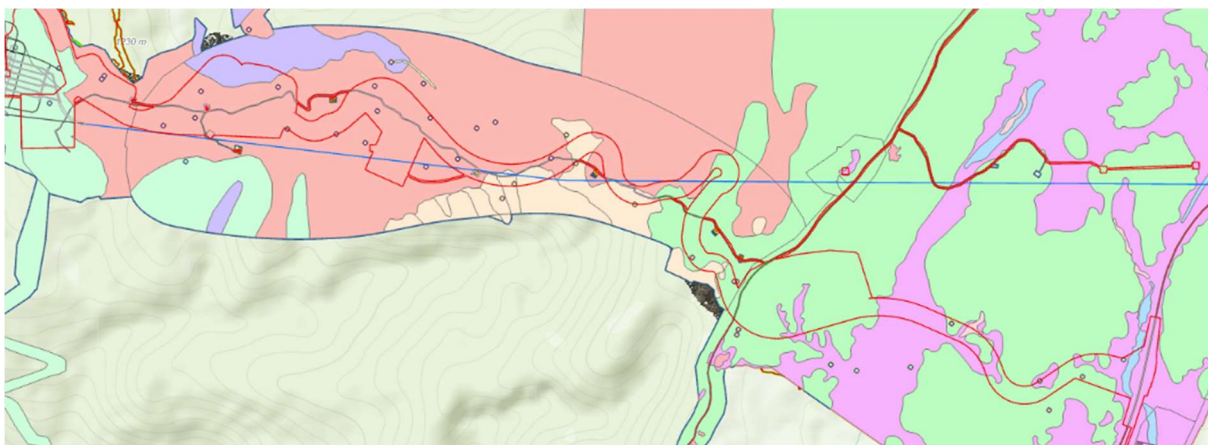
Landform - Original landform to be restored as existing adjoining vegetation commensurate with slope with deep ripping on the contour to at least 200m.

The gradient of all tracks either classified as slope E or D as described in Section 3.3 per Figure 3, meaning no further stabilisation controls outside of mulch/ hydro mulch application seeding and tubestock planting are required.

Map of track to be rehabilitated

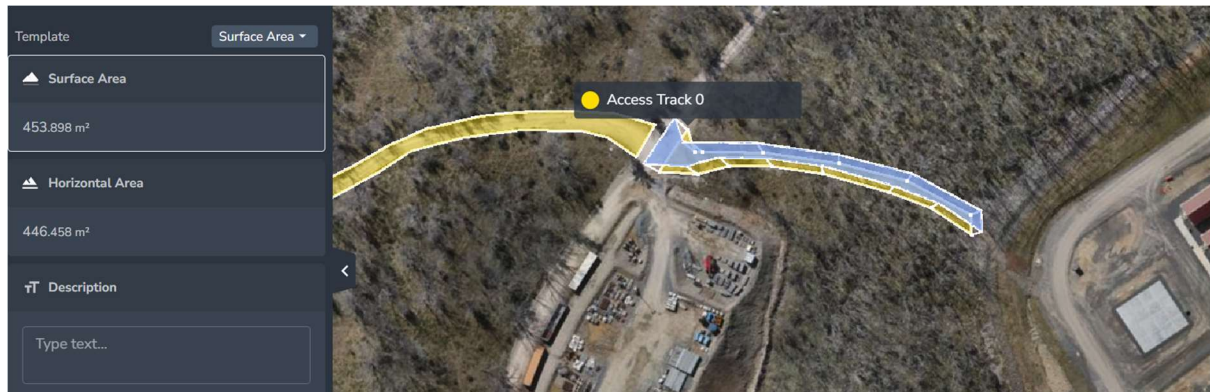


PCT Mapping of Marica

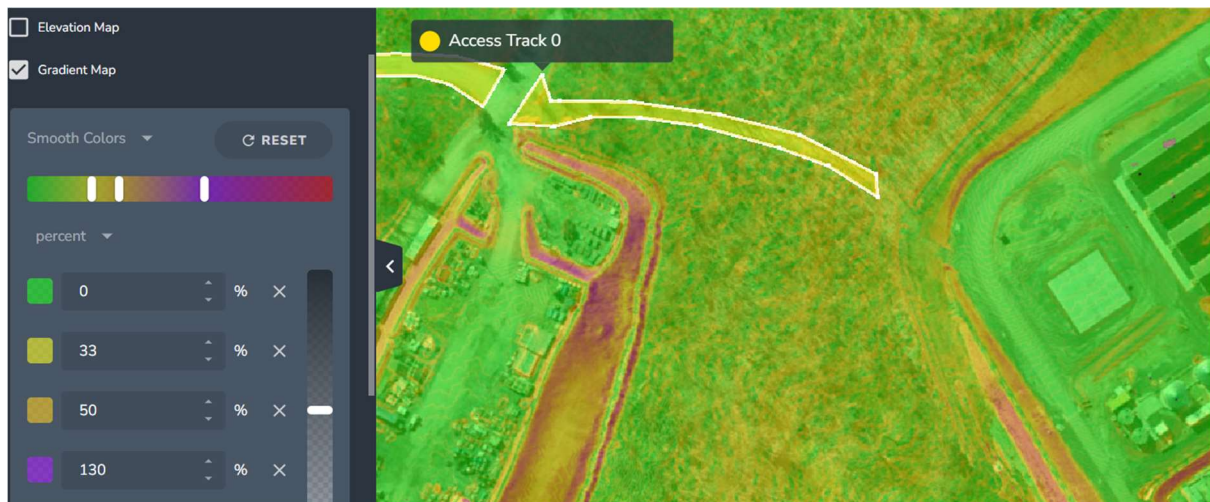


Access Track 0 - Area – 453m2

PCT 644 – See Table 10 of Appendix B



Site gradient – Average Class E



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
644	<i>Eucalyptus_pauciflora</i>	450
644	<i>Acrothamnus_hookeri</i>	375
644	<i>Podolobium_alpestre</i>	125
644	<i>Olearia_erubescens</i>	50

Access Track 1 – Area 2,822m²

PCT – 644 – See Table 10 of Appendix B for species list and below for interim planting schedule

Rehabilitation timing – At completion of construction



Site gradient – Average Class E



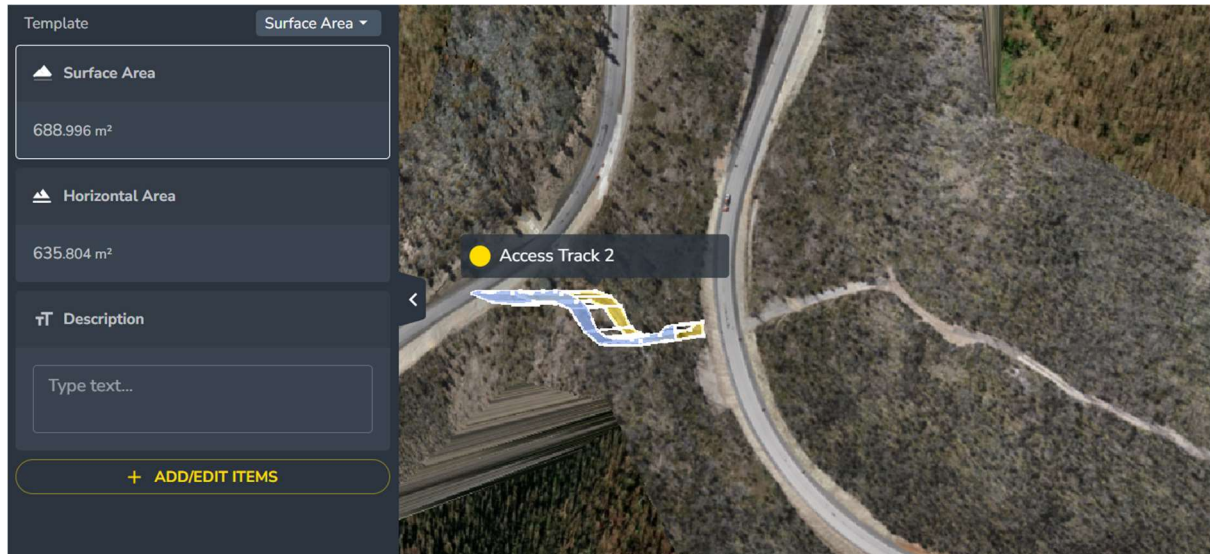
Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
644	<i>Eucalyptus_pauciflora</i>	450
644	<i>Acrothamnus_hookeri</i>	375
644	<i>Podolobium_alpestre</i>	125
644	<i>Olearia_erubescens</i>	50

Access Track 2 – Area 688m2

PCT – 644 – See Table 10 of Appendix B for species list and below for interim planting schedule

Rehabilitation timing – At completion of construction



Site gradient – Average Class D



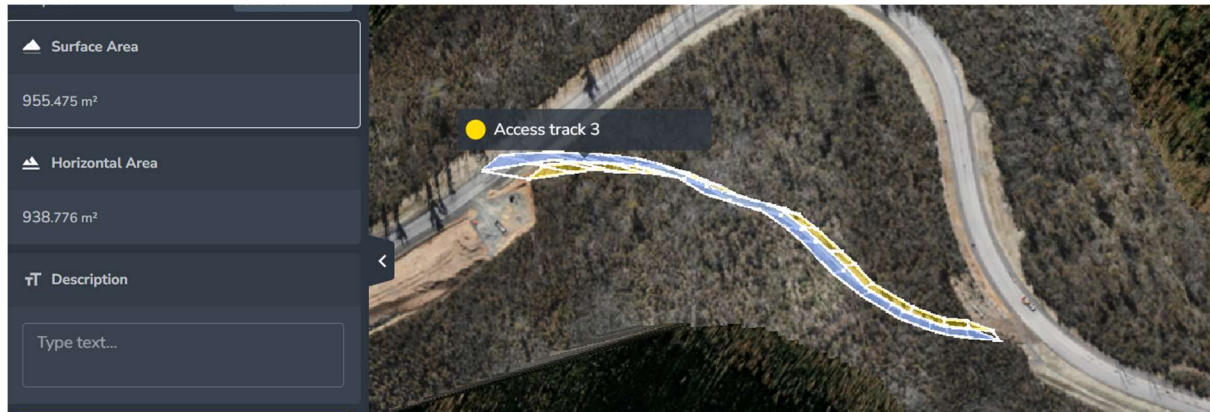
Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
644	Eucalyptus_pauciflora	450
644	Acrothamnus_hookeri	375
644	Podolobium_alpestre	125
644	Olearia_erubescens	50

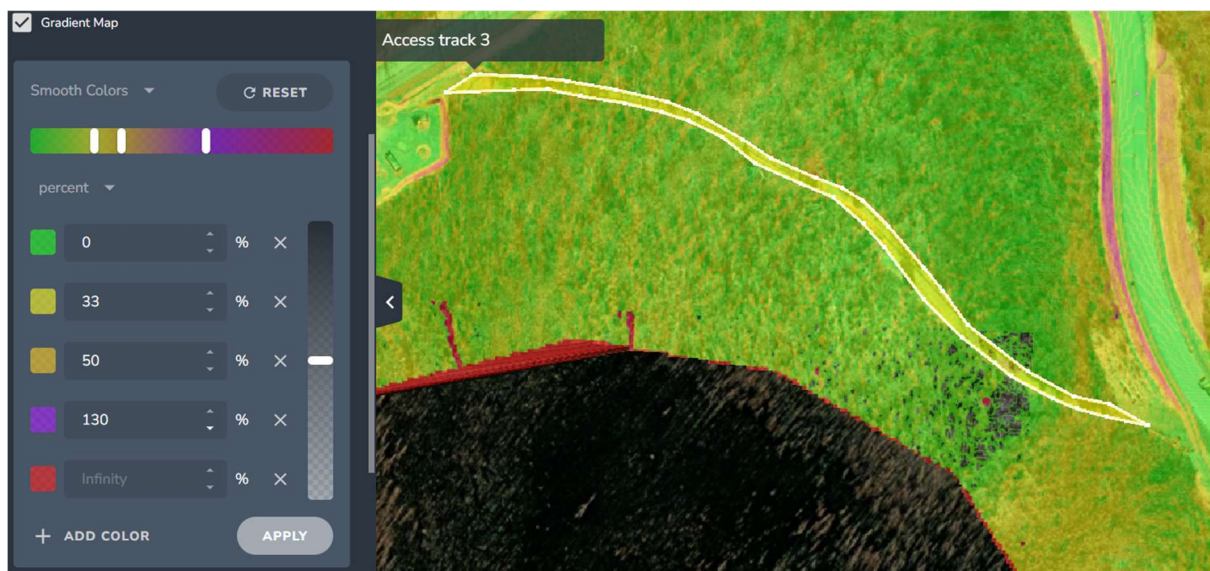
Access Track 3 – Area 955m2

PCT – 1196 See Table 5 of Appendix B for species list and below for interim planting schedule and Table 5 in Section 4.3

Rehabilitation timing – At completion of construction



Site gradient – Average Class E



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
1196	<i>Eucalyptus_pauciflora</i>	625
1196	<i>Eucalyptus_dalrympleana</i>	250
1196	<i>Eucalyptus_radiata_subsp_robertsonii</i>	50
1196	<i>Cassinia_aculeata</i>	200
1196	<i>Daviesia_latifolia</i>	500
1196	<i>Lomandra_longifolia</i>	350

Access Track 4 – Area 1,587m²

PCT – 1196 See Table 5 of Appendix B for species list and below for interim planting schedule

Rehabilitation timing – At completion of construction



Site gradient – Average Class E



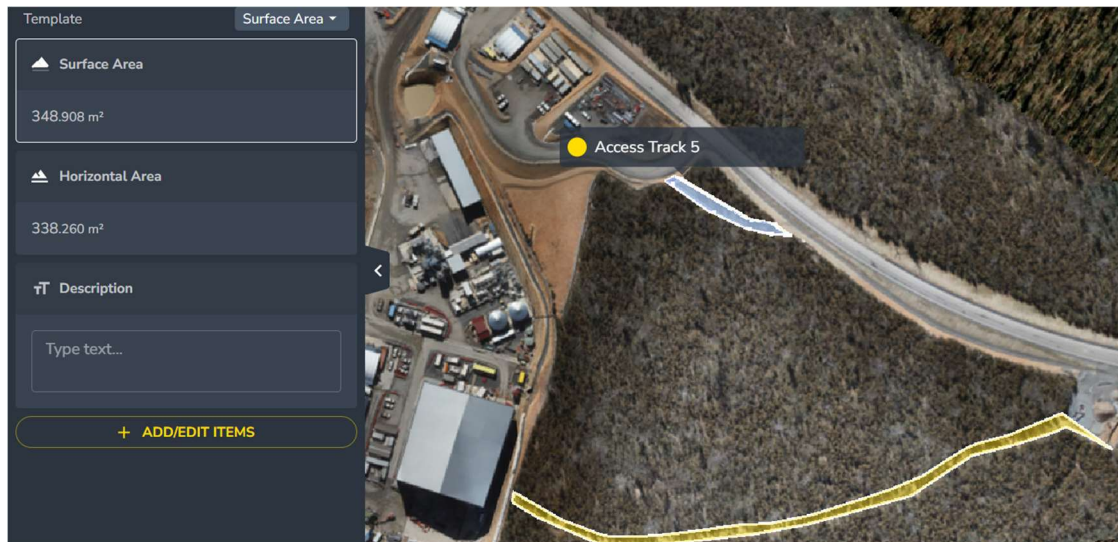
Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
1196	<i>Eucalyptus_pauciflora</i>	625
1196	<i>Eucalyptus_dalrympleana</i>	250
1196	<i>Eucalyptus_radiata_subsp_robertsonii</i>	50
1196	<i>Cassinia_aculeata</i>	200
1196	<i>Daviesia_latifolia</i>	500
1196	<i>Lomandra_longifolia</i>	350

Access Track 5 – Area 349m2

PCT – 1196 See Table 5 of Appendix B for species list and below for interim planting schedule

Rehabilitation timing – At completion of construction



Site gradient – Average Class E



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
1196	<i>Eucalyptus_pauciflora</i>	625
1196	<i>Eucalyptus_dalrympleana</i>	250
1196	<i>Eucalyptus_radiata_subsp_robertsonii</i>	50
1196	<i>Cassinia_aculeata</i>	200
1196	<i>Daviesia_latifolia</i>	500
1196	<i>Lomandra_longifolia</i>	350

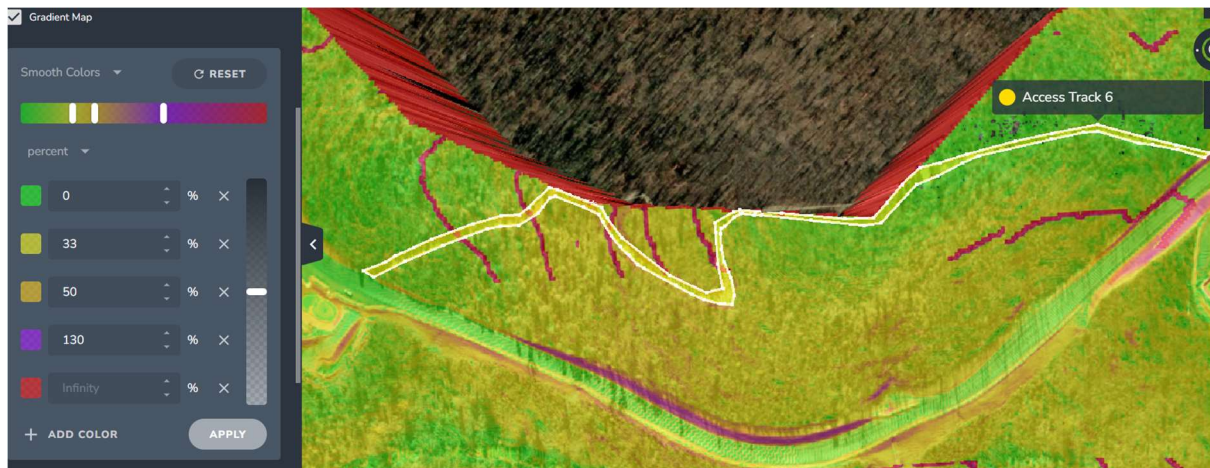
Access Track 6 – Area 2,627m²

PCT – 1196 See Table 5 of Appendix B for species list and below for interim planting schedule

Rehabilitation timing – At completion of construction



Site gradient – Average Class D



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
1196	<i>Eucalyptus_pauciflora</i>	625
1196	<i>Eucalyptus_dalrympleana</i>	250
1196	<i>Eucalyptus_radiata_subsp_robertsonii</i>	50
1196	<i>Cassinia_aculeata</i>	200
1196	<i>Daviesia_latifolia</i>	500
1196	<i>Lomandra_longifolia</i>	350

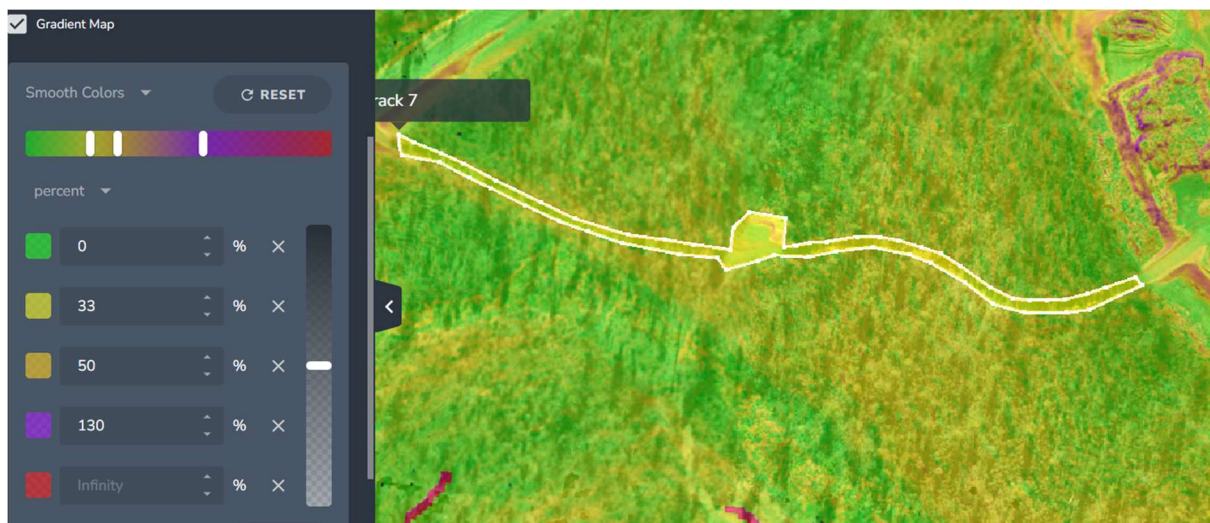
Access Track 7 – Area 1600m2

PCT – 1196 See Table 5 of Appendix B for species list and below for interim planting schedule

Rehabilitation timing – At completion of construction



Site gradient – Average Class E



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
1196	Eucalyptus_pauciflora	625
1196	Eucalyptus_dalrympleana	250
1196	Eucalyptus_radiata_subsp_robertsonii	50
1196	Cassinia_aculeata	200
1196	Daviesia_latifolia	500
1196	Lomandra_longifolia	350

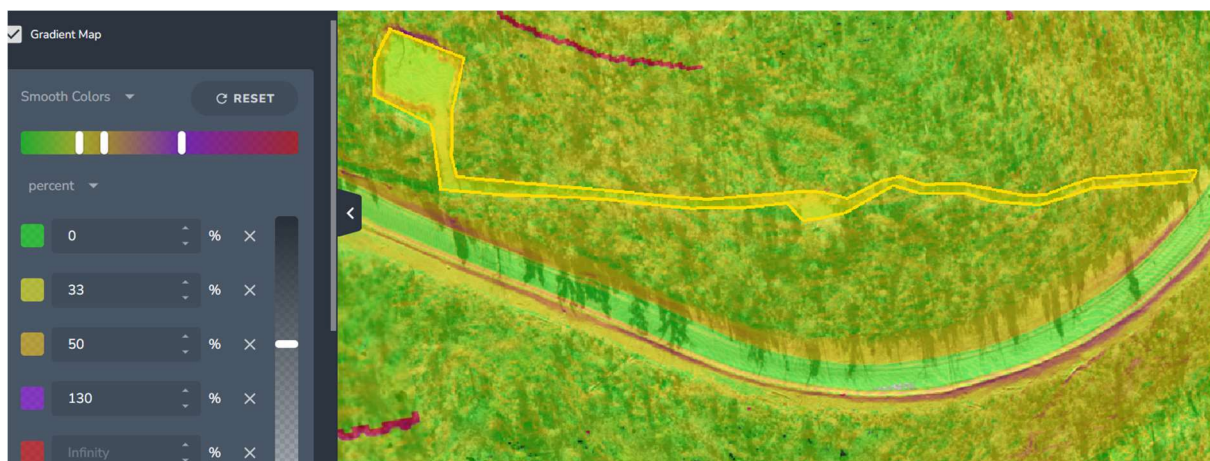
Access Track 8– Area- 2020m2

PCT – 1196 See Table 5 of Appendix B for species list and below for interim planting schedule.

Rehabilitation timing – At completion of construction



Site gradient – Average Class E



Interim planting schedule (prior to establishment of interquartile range)

PCT	Priority Species	Number per ha
1196	<i>Eucalyptus_pauciflora</i>	625
1196	<i>Eucalyptus_dalrympleana</i>	250
1196	<i>Eucalyptus_radiata_subsp_robertsonii</i>	50
1196	<i>Cassinia_aculeata</i>	200
1196	<i>Daviesia_latifolia</i>	500
1196	<i>Lomandra_longifolia</i>	350

Appendix B – Marica Interim Completion Criteria (based on Ecological rehabilitation objectives (Table 4) from Main Works planning approval)

Table 10: Interim Completion Criteria

Rehab Objective / Characteristic	Indicator	Benchmark for Indicator	Measure (note interim measures taken from BDAR plot 2145 field sheets)
The vegetation composition of the rehabilitation is recognisable as the target vegetation community contained within the BioNet Vegetation Classification and which was present on site prior to the project's temporary disturbance.	All native vascular plant species are monitored to species level from fixed 0.04 ha monitoring plots in accordance with Table 8.	<p>(a) Native plant species composition is characteristic of the target PCT based on suitable analysis against a reference data set</p> <p>(b) The target PCT composition score is within or greater than the inter-quartile range of local reference site values for the assigned PCT.</p>	<p>Rehabilitation monitoring reports.</p> <p>Final Independent ecological reports that validate rehabilitation completion criteria have been met.</p> <p>See Table 11 for species composition from BDAR floristics for specific measures.</p>

Rehab Objective / Characteristic	Indicator	Benchmark for Indicator	Measure (note interim measures taken from BDAR plot 2145 field sheets)
The vegetation structure of the rehabilitation is recognisable as, or shows a substantial trend towards, a PCT contained within the BioNet Vegetation Classification, and which was present on site prior to the project's temporary disturbance.	The cover, abundance and height range of all native vascular plant species are monitored from fixed 0.04 ha monitoring plots in accordance with Table 8.	Cover, abundance, and height range of native plant growth forms are characteristic of the target PCTs and within or greater than the inter-quartile range of local reference site values for the assigned PCT.	<p>Rehabilitation monitoring reports.</p> <p>Final Independent ecological reports that validate rehabilitation completion criteria have been met.</p> <p>See Table 12 for species cover and abundance of growth forms data from BDAR floristics.</p> <p>Height range to be included after first round of monitoring as described in Table 8.</p>

Rehab Objective / Characteristic	Indicator	Benchmark for Indicator	Measure (note interim measures taken from BDAR plot 2145 field sheets)
Levels of ecosystem function have been established that demonstrate the rehabilitation is self-sustainable or shows a substantial trend towards a self-sustaining state.	Growth medium, covering both subsoil and topsoil properties, and soil processes are monitored using methods specified in Table 8.	<p>Growth medium, including topsoil, is suitable for target PCTs establishment, and indicators of nutrient cycling are suitable for sustaining the target PCTs.</p> <p>All priority attributes of nutrient cycling, soil processes and both subsoil and topsoil properties should be within or greater than the interquartile range of local reference site values for the assigned PCT.</p> <p>Attributes include; depth of leaf litter, cryptograms Total Carbon and total Nitrogen.</p>	<p>See Table 13 for ecosystem function measure where available from BDAR field sheets.</p> <p>Measure to be updated after first round of monitoring as majority of nutrient cycling processes not were not captured at time of BDAR.</p> <p>Rehabilitation monitoring reports.</p> <p>Final Independent ecological reports that validate rehabilitation completion criteria have been met.</p>
	All species are monitored for establishment of second-generation juveniles /immatures and capacity for recruitment from fixed 0.04 ha monitoring plots in accordance with Table 8.	Rehabilitation vegetation communities are maturing, and natural recruitment is occurring for species within each growth form at rates within or greater than the interquartile range of local reference site values for the assigned PCT.	Measure to be updated after first round of monitoring as it was not captured at time of BDAR.

Rehab Objective / Characteristic	Indicator	Benchmark for Indicator	Measure (note interim measures taken from BDAR plot 2145 field sheets)
	Number and ground cover of weed species are monitored from fixed 0.04 ha monitoring plots in accordance with Table 8 and input from annual UAV monitoring outlined in Table 7.	The number and ground cover of weed species is comparable to, or less than, the interquartile range of local reference site values for the assigned PCT. Monitoring program to feed into annual weed control program.	See Tables 14,15,16,17,18,19,20 for cover and abundance of individual species for different PCTs / reference sites from initial BDAR floristics. Measure to be updated after first round of monitoring described in Table 8.
	Presence/absence of some fauna habitat features (e.g. flowering plant, decorticated bark, stags with hollows and/or nest boxes) and quantitative assessment of other features (e.g. leaf litter cover, bare ground, wood debris) are monitored from fixed 0.04 ha monitoring plots in accordance with Table 8.	Fauna habitat features and resources (food and shelter characteristics) within the rehabilitation vegetation communities are present and within or greater than the interquartile range of local reference site values for the assigned PCT.	Rehabilitation monitoring reports. Final Independent ecological reports that validate rehabilitation completion criteria have been met. Measure to be updated after first round of monitoring described in Table 8.

Table 11: Native Richness by growth form - BDAR

PCT	BAM Plot	Trees	Shrubs	Grasses	Forbs	Ferns	Other
1196	90 D	3	9	5	20	0	3
1224	2044 D	0	9	4	19	0	0
1225	120	0	3	10	14	0	0
953	5206 D	5	15	4	10	0	3
639	105 D	2	11	5	11	0	1
644	2150 D	1	7	4	28	1	0
300	87 D	4	15	4	7	0	1

Table 12: Sum of Cover of Native vascular plants by growth form - BDAR

PCT	BAM Plot	Trees	Shrubs	Grasses	Forbs	Ferns	Other
1196	2044	17	15	20.5	7.8	0	0.7
1224	2044	0	61.2	8603	21.7	0	0
1225	120	0	16	90.7	80.5	0	0
953	5206	79	15.7	51.2	1.3	0	0.4
639	105	37	10.4	21	5	0	0.3
644	2150	70	41.1	70.5	29.1	0.1	0
300	87	44	15	11.5	0.9	0	0.1

Table 13: Ecosystem Function - BDAR (To be updated following first round monitoring)

PCT	Litter cover %	Bare ground cover %	Cryptogram cover %	Rock cover %	Stems with hollows
1196	NA	NA	NA	NA	NA
1224	NA	NA	NA	NA	NA
1225	NA	NA	NA	NA	NA
953	NA	NA	NA	NA	NA
639	NA	NA	NA	NA	NA
644	9	0	0	0	6
300	NA	NA	NA	NA	NA

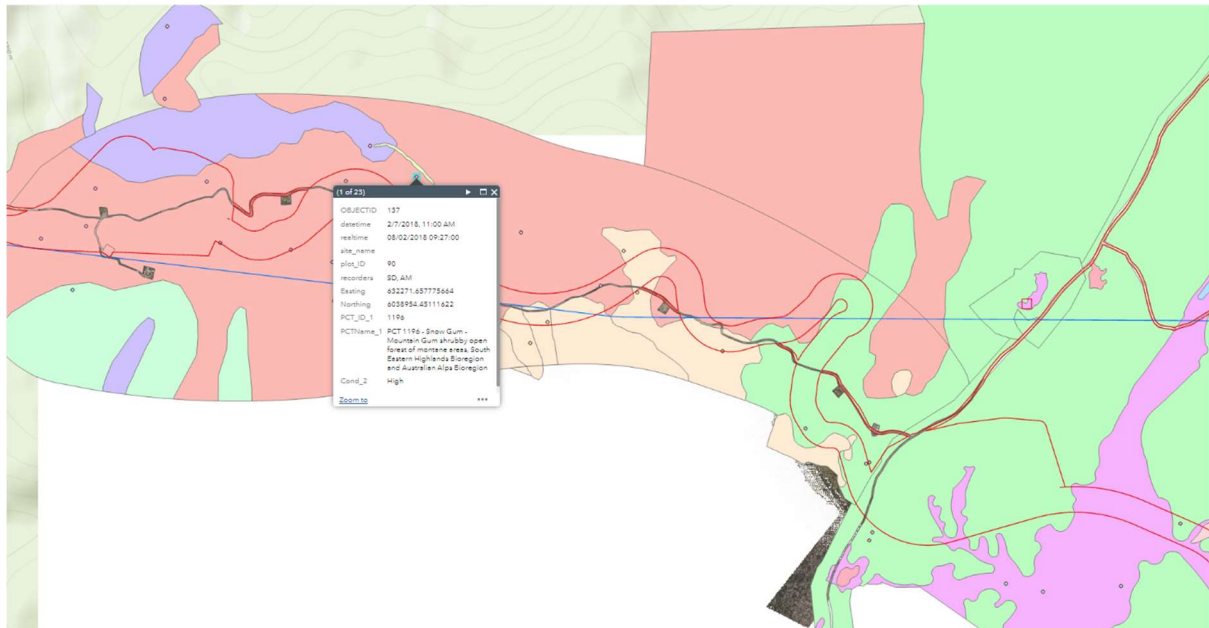
Table 14: Species cover and abundance - PCT 1196 - Plot 90 – BDAR

Species	Growth form	Cover%	Abundance
*Eucalyptus_pauciflora	Tree	10	25
*Eucalyptus_dalrympleana	Tree	5	10
*Eucalyptus_radiata_subsp_robertsonii	Tree	2	2
*Cassinia_aculeata	Shrub	5	20
*Daviesia_latifolia	Shrub	6	200
Platylobium_formosum_subsp_formosum	Shrub	3	300
Pimelea_linifolia	Shrub	0.2	40
Viola_betonicifolia	Forb	0.2	50
*Poa_sieberiana_var_sieberiana	Tussock Grass	20	1000
Arthropodium_milleflorum	Forb	0.7	100
Stellaria_pungens	Forb	0.1	10
Glycine_clandestina	Vine	0.1	30
Clematis_glycinoides	Vine	0.1	20
Glycine_tabacina	Vine	0.5	200
Geranium_solanderi	Forb	0.1	10
Poranthera_microphylla	Forb	0.3	200
Olearia_phlogopappa	Shrub	0.2	10
Veronica_plebeia	Forb	0.1	10
*Lomandra_longifolia	Rush	0.2	30
Oreomyrrhis_eriopoda	Forb	0.1	20
Veronica_subtilis	Forb	0.1	5
Wahlenbergia_stricta	Forb	0.1	1
Hypericum_japonicum	Forb	0.1	5
Wahlenbergia_gloriosa	Forb	0.1	2
*Poa_sieberiana_var_cyanophylla	Tussock Grass	0.1	5
Stylidium_graminifolium	Forb	0.1	10
Viola_hederacea	Forb	0.1	30
Hypochaeris_radicata	Introduced	0.1	1
Acaena_ovina	Forb	0.1	2
Senecio_quadridentatus	Forb	0.1	1
Persoonia_chamaepeuce	Shrub	0.2	3
Asperula_scoparia	Forb	5	1000
Arrhenechthites_mixta	Forb	0.1	1
Stackhousia_monogyna	Forb	0.1	1
Olearia_alpicola	Shrub	0.1	1

Lomandra_bracteata	Rush	0.1	10
Ranunculus_lappaceus	Forb	0.1	10
Microlaena_stipoides	Tussock Grass	0.1	1
Craspedia_variabilis	Forb	0.1	1
Tetratheca_bauerifolia	Shrub	0.2	20
Coronidium_rutidolepis	Shrub	0.1	20

* Denotes primary use

Initial planting rate - 1000m2 = abundance

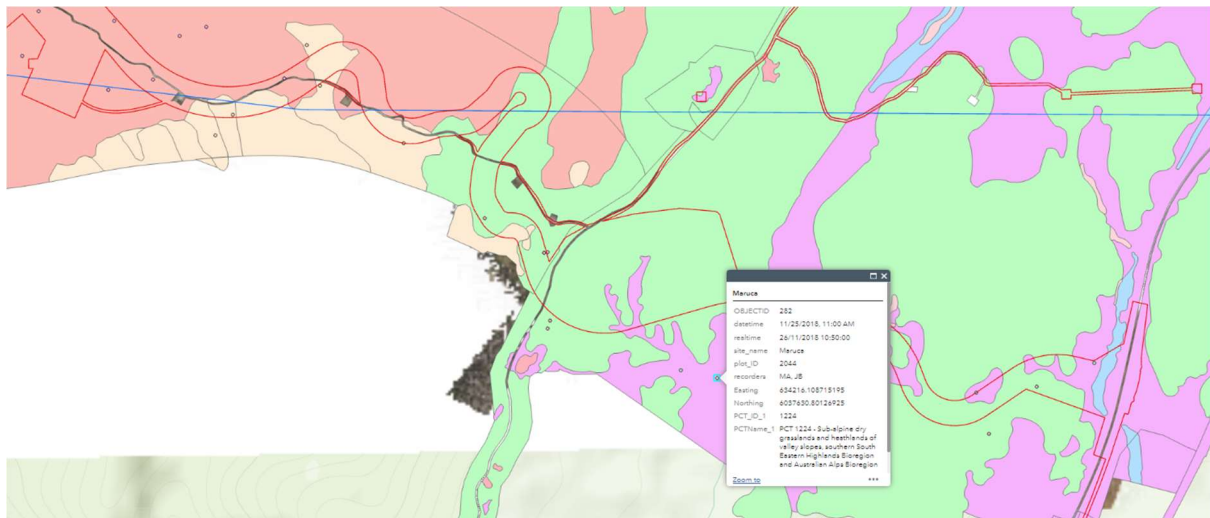


BAM Plot location

Table 15: Species cover and abundance - PCT 1224 - Plot 2044 - BDAR

Species	Growth form	Cover%	Abundance
Coronidium_monticola	Shrub	0.1	20
Poa_sp	Tussock Grass	80	900
Geranium_antrorsum	Forb	0.1	20
*Hovea_montana	Shrub	2	40
*Dillwynia_sp	Shrub	30	500
Grevillea_parviflora	Shrub	10	100
Epacris_gunnii	Heath shrub	10	150
Stylidium_graminifolium	Forb	0.4	150
Craspedia_aurantia	Forb	5	80
Celmisia_sp	Forb	0.2	60
Aciphylla_simplicifolia	Forb	0.1	40
Pimelea_biflora	Shrub	1	50
Cassinia_monticola	Shrub	5	20
Acetosella_vulgaris	Introduced	0.5	80
Craspedia_jamesii	Forb	10	150
Scleranthus_biflorus	Forb	0.4	30
*Microseris_lanceolata	Forb	1	250
Olearia_algida	Shrub	3	6
Brachyscome_decipiens	Forb	0.8	100
Ranunculus_graniticola	Forb	0.2	50
Carex_breviculmis	Sedge	0.1	250
Chiloglottis_sp	Forb	0.1	6
Hypericum_japonicum	Forb	0.1	50
Hypochaeris_radicata	Introduced	0.1	25
Leptorhynchos_squamatus	Forb	2	300
Xerochrysum_sp	Forb	0.2	40
Craspedia_crocata	Forb	0.6	50
Luzula_modesta	Rush	0.2	25
Poranthera_microphylla	Forb	0.1	10
Senecio_gunnii	Forb	0.1	2
Dillwynia_prostrata	Shrub	0.1	2
Mitrasacme_serpyllifolia	Forb	0.1	1
Empodisma_minus	Rush	5	500
Holcus_lanatus	Introduced	0.1	1
Brachyscome_scapigera	Forb	0.2	40

* Denotes primary use



BAM Plot location

Table 16: Species cover and abundance PCT 1225 - Plot 120 - BDAR

Species	Growth form	Cover%	Abundance
Epacris_breviflora	Heath shrub	15	100
Pimelea_pauciflora	Shrub	0.5	4
Myosotis_australis	Forb	0.1	20
*Poa_labillardierei	Tussock Grass	80	700
Baloskion_australe	Rush	0.2	30
Cardamine_paucijuga	Forb	0.1	100
Geum_urbanum	Forb	0.3	200
Acetosella_vulgaris	Introduced	0.1	30
Taraxacum_officinale	Introduced	0.2	50
Senecio_gunnii	Forb	0.1	10
*Carex_appressa	Sedge	5	40
Geranium_neglectum	Forb	0.1	30
Epilobium_billardiereum	Forb	0.2	300
*Richea_continentis	Heath shrub	0.5	20
Empodisma_minus	Rush	3	50
Hydrocotyle_algida	Forb	1	1000
Gonocarpus_micranthus	Forb	0.1	200
*Poa_costiniana	Tussock Grass	2	100
Trifolium_repens	Introduced	0.3	100
Luzula_modesta	Rush	0.1	20
Acaena_novae-zelandiae	Forb	0.2	30
Asperula_gunnii	Forb	2	500
Hypericum_japonicum	Forb	2	1000
Lachnagrostis_filiformis	Tussock Grass	0.1	10
Juncus_sp	Rush	0.1	20
Ranunculus_pimpinellifolius	Forb	0.2	100
Stellaria_angustifolia	Forb	2	1000
Cerastium_glomeratum	Introduced	0.1	20
*Carex_sp	Sedge	0.1	50
Ranunculus_graniticola	Forb	0.1	20
Carex_jackiana	Sedge	0.1	10

* Denotes primary use



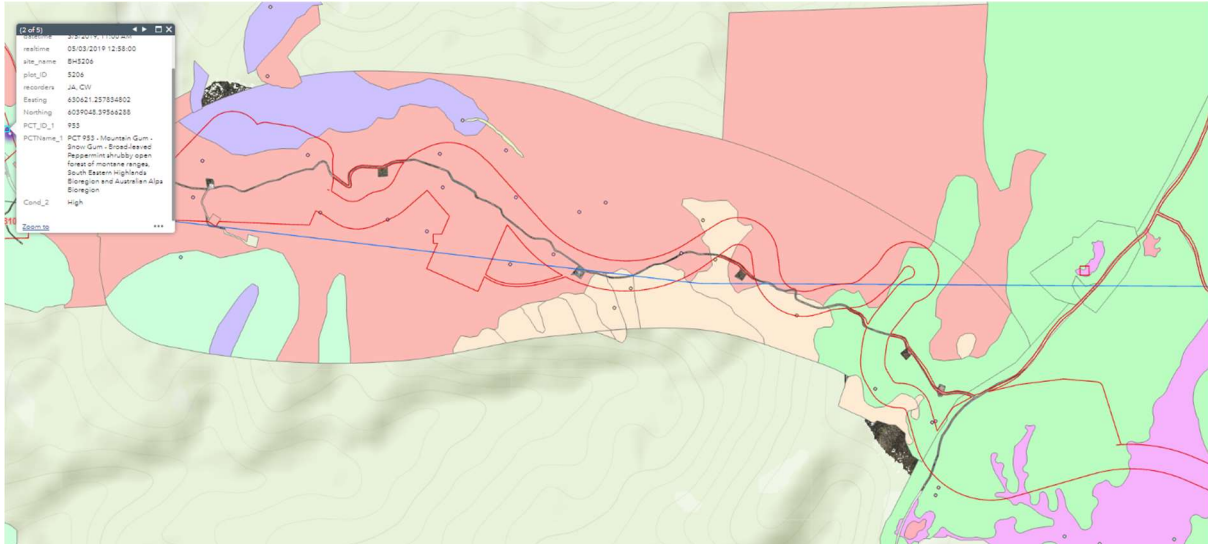
BAM Plot location

Table 17: Species cover and abundance PCT 953 - Plot 5206 - BDAR

Species	Growth form	Cover%	Abundance
*Eucalyptus_pauciflora_White_Sally	Tree	3	3
*Eucalyptus_dalrympleana_Mountain_Gum	Tree	15	5
*Eucalyptus_dives_Broad_leaved_Peppermint	Tree	55	30
Stackhousia_monogyna_Creamy_Candles	Forb	0.1	10
Veronica_plebeia_Trailing_Speedwell	Forb	0.3	50
Hypericum_gramineum_Small_St_Johns_Wort	Forb	0.1	20
Hibbertia_obtusifolia_Hoary_Guinea_Flower	Shrub	0.3	20
Persoonia_chamaepeuce	Shrub	2	50
*Eucalyptus_viminalis_Ribbon_Gum	Tree	5	2
*Daviesia_latifolia_Bitter_pea	Shrub	2	60
Polyscias_sambucifolia_Elderberry_Panax	Shrub	0.5	10
*Poa_sieberiana_Snowgrass	Tussock Grass	50	500
*Platylobium_formosum	Shrub	1	300
Viola_betonicifolia_Native_Violet	Forb	0.1	20
Gonocarpus_tetragynus_Poverty_Raspwort	Forb	0.1	50
*Olearia_erubescens_Pink_tip_Daisy_bush	Shrub	0.1	2
Clematis_aristata_Old_Mans_Beard	Vine	0.1	5
*Banksia_canei_Mountain_Banksia	Shrub	3	7
Hypochaeris_radicata_Catsear	Introduced	0.1	1
*Eucalyptus_robertsonii_Robertsons_Peppermint	Tree	1	1
Arthropodium_milleflorum_Pale_Vanilla_lily	Forb	0.1	5
*Mirbelia_oxylobioides_Mountain_Mirbelia	Shrub	1	20
*Acacia_pravissima_Wedge_leaved_Wattle	Shrub	0.3	10
Tetratheca_bauerifolia	Shrub	0.1	30
Cassinia_aculeata_Dolly_Bush	Shrub	5	25
Glycine_clandestina_Twining_glycine	Vine	0.2	100
Leucopogon_virgatus	Heath shrub	0.1	5
Acrotriche_serrulata_Honeypots	Heath shrub	0.1	10
Asperula_sp_Stiff_Woodruff	Forb	0.2	100
Brachyscome_sp_Hill_Daisy	Forb	0.1	5
Rytidosperma_sp_Southern_Sheep_grass	Tussock Grass	0.1	1
Pimelea_sp	Shrub	0.1	2
Euchiton_sp	Forb	0.1	1
Cassytha_sp	Vine	0.1	5
Leucopogon_fletcheri	Heath shrub	0.1	5

*Lomandra_filiformis_Wattle_Matt_rush	Rush	1	250
*Lomandra_multiflora_Many_flowered_Mat_rush	Rush	0.1	20
Ranunculus_sp	Forb	0.1	10

* Denotes primary use

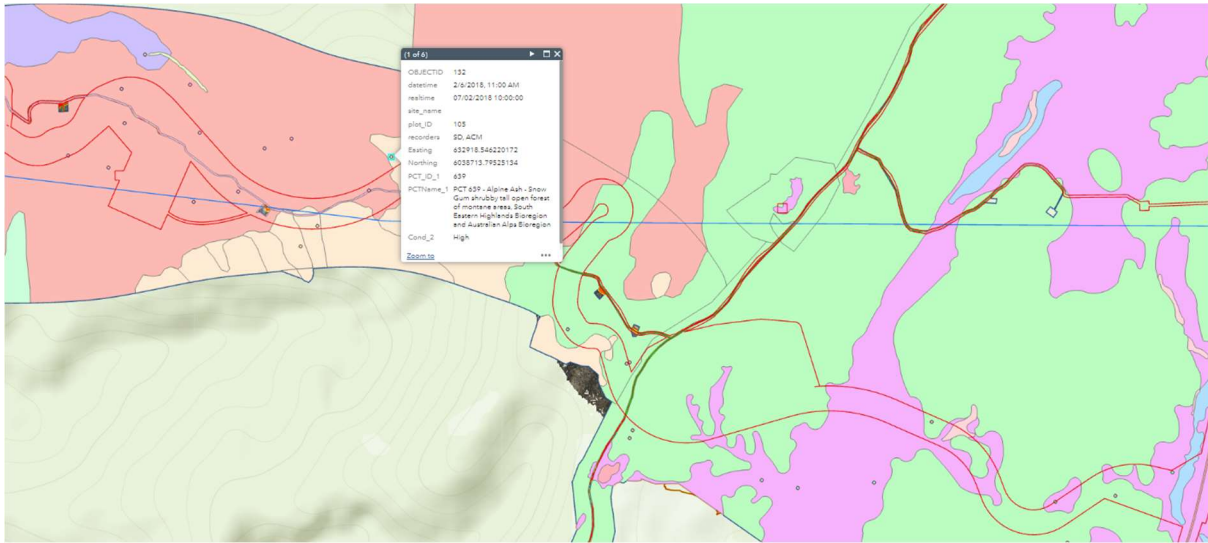


BAM Plot location

Table 18: Species cover and abundance PCT 639 - Plot 105 - BDAR

Species	Growth form	Cover%	Abundance
*Eucalyptus_delegatensis	Tree	35	20
*Eucalyptus_pauciflora	Tree	2	1
*Daviesia_ulicifolia_subsp_ruscifolia	Shrub	1	40
*Poa_sieberiana_var_sieberiana	Tussock Grass	20	1000
Stellaria_pungens	Forb	0.4	80
Goodenia_hederacea_subsp_alpestris	Forb	1	100
Arthropodium_milleflorum	Forb	2	300
Tetratheca_bauerifolia	Shrub	3	300
Persoonia_chamaepeuce	Shrub	1	40
Asperula_scoparia	Forb	0.8	100
Galium_propinquum	Forb	0.1	10
Wahlenbergia_gloriosa	Forb	0.1	5
*Acacia_obliquinervia	Shrub	0.5	10
*Cassinia_aculeata	Shrub	0.4	3
Gompholobium_huegelii	Shrub	0.6	40
*Lomandra_longifolia	Rush	0.5	20
Pimelea_linifolia	Shrub	0.1	10
Stylidium_graminifolium	Forb	0.1	10
Clematis_glycinoides	Vine	0.3	30
Viola_betonicifolia	Forb	0.1	20
Acacia_verniciflua	Shrub	0.5	1
Brachyscome_aculeata	Forb	0.1	10
Senecio_gunnii	Forb	0.1	5
Hypochaeris_radicata	Introduced	0.1	1
Olearia_phlogopappa	Shrub	0.1	5
Deyeuxia_quadriseta	Tussock Grass	0.1	5
*Poa_sieberiana_var_cyanophylla	Tussock Grass	0.1	5
Dianella_tasmanica	Forb	0.2	5
Coronidium_rutidolepis	Shrub	0.2	20
Platylobium_montanum	Shrub	3	200
*Daviesia_ulicifolia_subsp_ruscifolia	Shrub	1	40
*Poa_sieberiana_var_sieberiana	Tussock Grass	20	1000
Stellaria_pungens	Forb	0.4	80
Goodenia_hederacea_subsp_alpestris	Forb	1	100

* Denotes primary use



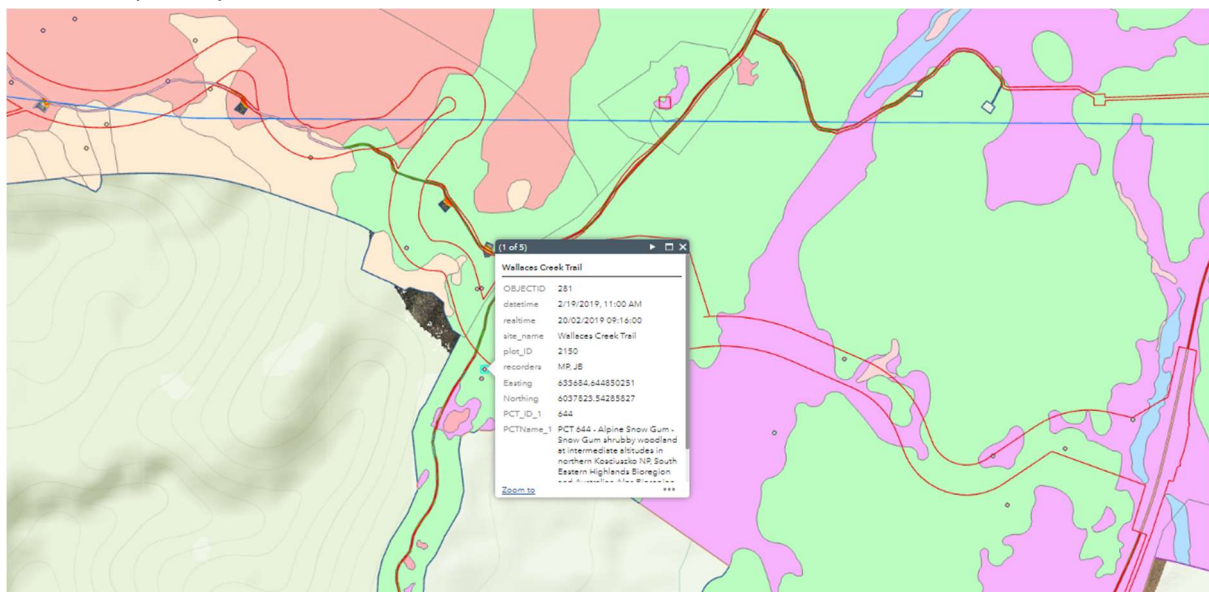
BAM Plot location

Table 19: Species cover and abundance - PCT 644 - Plot 2150 - BDAR

Species	Growth form	Cover%	Abundance
Coronidium_monticola	Shrub	0.8	150
*Eucalyptus_pauciflora	Tree	70	18
Gompholobium_huegelii	Shrub	5	40
Bossiaea_foliosa	Shrub	30	150
Ranunculus_lappaceus	Forb	0.1	30
*Poa_sp	Tussock Grass	30	300
Galium_sp	Forb	0.4	1000
Arthropodium_milleflorum	Forb	2	1000
Trifolium_sp	Introduced	0.1	50
Geranium_sp	Forb	0.1	30
Caladenia_alpina	Forb	0.2	200
Craspedia_variabilis	Forb	0.5	60
Asperula_scoparia	Forb	0.2	250
Podolepis_robusta	Forb	0.1	25
Trifolium_repens	Introduced	0.1	70
Acaena_novae-zelandiae	Forb	1	150
Brachyscome_decipiens	Forb	1	80
Daviesia_ulicifolia	Shrub	3	40
Botrychium_lunaria	Fern and fern allies	0.1	5
Carex_breviculmis	Sedge	0.4	30
Luzula_densiflora	Rush	0.1	50
Xerochrysum_sp	Forb	20	1000
Grevillea_parviflora	Shrub	1	20
Poa_sieberiana_var_sieberiana	Tussock Grass	40	500
*Acrothamnus_hookeri	Heath shrub	0.5	15
Celmisia_sp	Forb	0.1	30
Hypochaeris_radicata	Introduced	0.1	10
Stellaria_pungens	Forb	0.1	30
Viola_betonicifolia	Forb	0.1	50
Acetosella_vulgaris	Introduced	0.1	6
*Olearia_erubescens	Shrub	0.1	2
*Podolobium_alpestre	Shrub	1.5	5
Chiloglottis_sp	Forb	0.1	15
Brachycome_spathulata	Forb	0.8	8
Epilobium_sp	Forb	0.1	12

Bulbine_bulbosa	Forb	0.1	15
Acaena_echinata	Forb	0.1	10
Cymbonotus_preissianus	Forb	0.1	1
Craspedia_sp	Forb	0.1	6
Wahlenbergia_sp	Forb	0.1	10
Senecio_gunnii	Forb	0.1	5
Microseris_lanceolata	Forb	0.4	50
Euchiton_sp	Forb	0.2	150
Poranthera_microphylla	Forb	0.1	2
Lobelia_pedunculata	Forb	0.1	10

* Denotes primary use

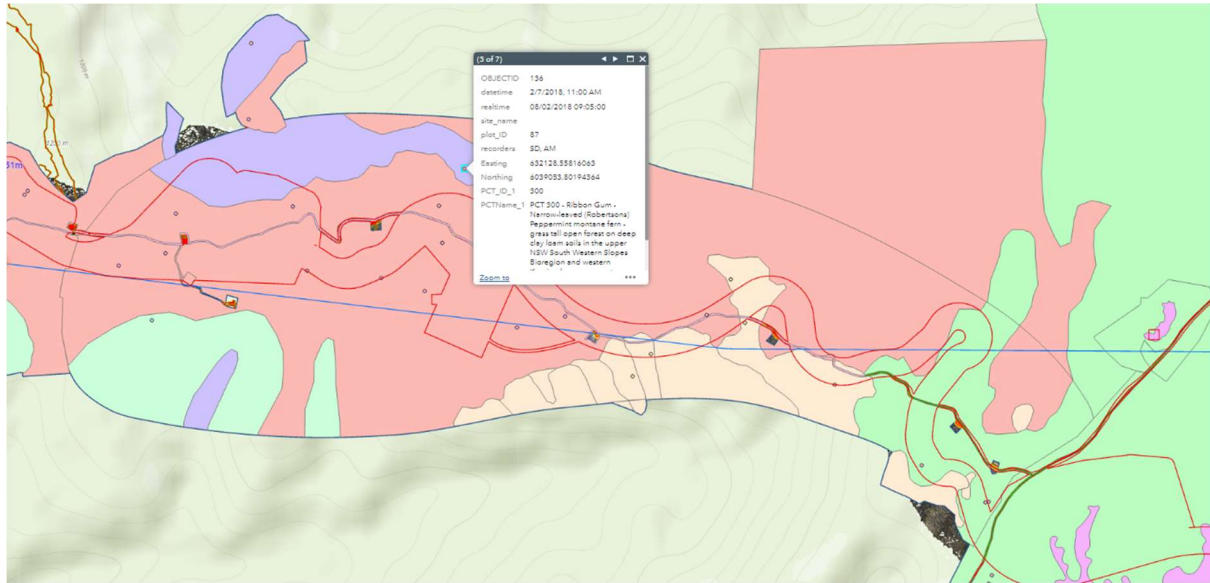


BAM Plot location

Table 20: Species cover and abundance PCT 300 - Plot 87 - BDAR

Species	Growth form	Cover%	Abundance
Eucalyptus_pauciflora	Tree	30	10
Eucalyptus_robertsonii	Tree	3	15
Eucalyptus_delegatensis	Tree	1	3
Eucalyptus_dalrympleana	Tree	10	10
Acacia_obliquinervia	Shrub	0.2	4
Daviesia_latifolia	Shrub	10	200
Daviesia_ulicifolia_subsp_ruscifolia	Shrub	0.2	10
Exocarpos_strictus	Shrub	0.5	10
Poa_sieberiana_var_sieberiana	Tussock Grass	10	1000
Lomandra_longifolia	Rush	1	50
Tetratheca_bauerifolia	Shrub	1	200
Platylobium_formosum	Shrub	1	100
Persoonia_chamaepeuce	Shrub	0.3	10
Pimelea_linifolia	Shrub	0.2	20
Senecio_quadridentatus	Forb	0.1	1
Lomandra_bracteata	Rush	0.2	20
Stylidium_graminifolium	Forb	0.2	20
Hibbertia_obtusifolia	Shrub	0.3	5
Cassinia_longifolia	Shrub	0.2	1
Viola_betonicifolia	Forb	0.1	20
Lagenifera_stipitata	Forb	0.1	10
Stellaria_pungens	Forb	0.2	20
Clematis_glycinoides	Vine	0.1	5
Polyscias_sambucifolia	Shrub	0.2	5
Poranthera_microphylla	Forb	0.1	5
Stackhousia_monogyna	Forb	0.1	1
Olearia_phlogopappa	Shrub	0.3	10
Daviesia_mimosoides	Shrub	0.2	5
Poa_sieberiana_var_cyanophylla	Tussock Grass	0.3	20
Cassinia_aculeata	Shrub	0.2	2
Leucopogon_fletcheri_subsp_brevisepalus	Heath shrub	0.2	3

* Denotes primary use



BAM Plot location

Appendix C – Marica topsoil locations and volumes



Appendix D – Marica Trail IFC Road Design

ORIGINAL SIZE A1
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150mm

OWNER IFC STAMP



Document Number
S2-CIV-RO-MRT-0001

Revision
02

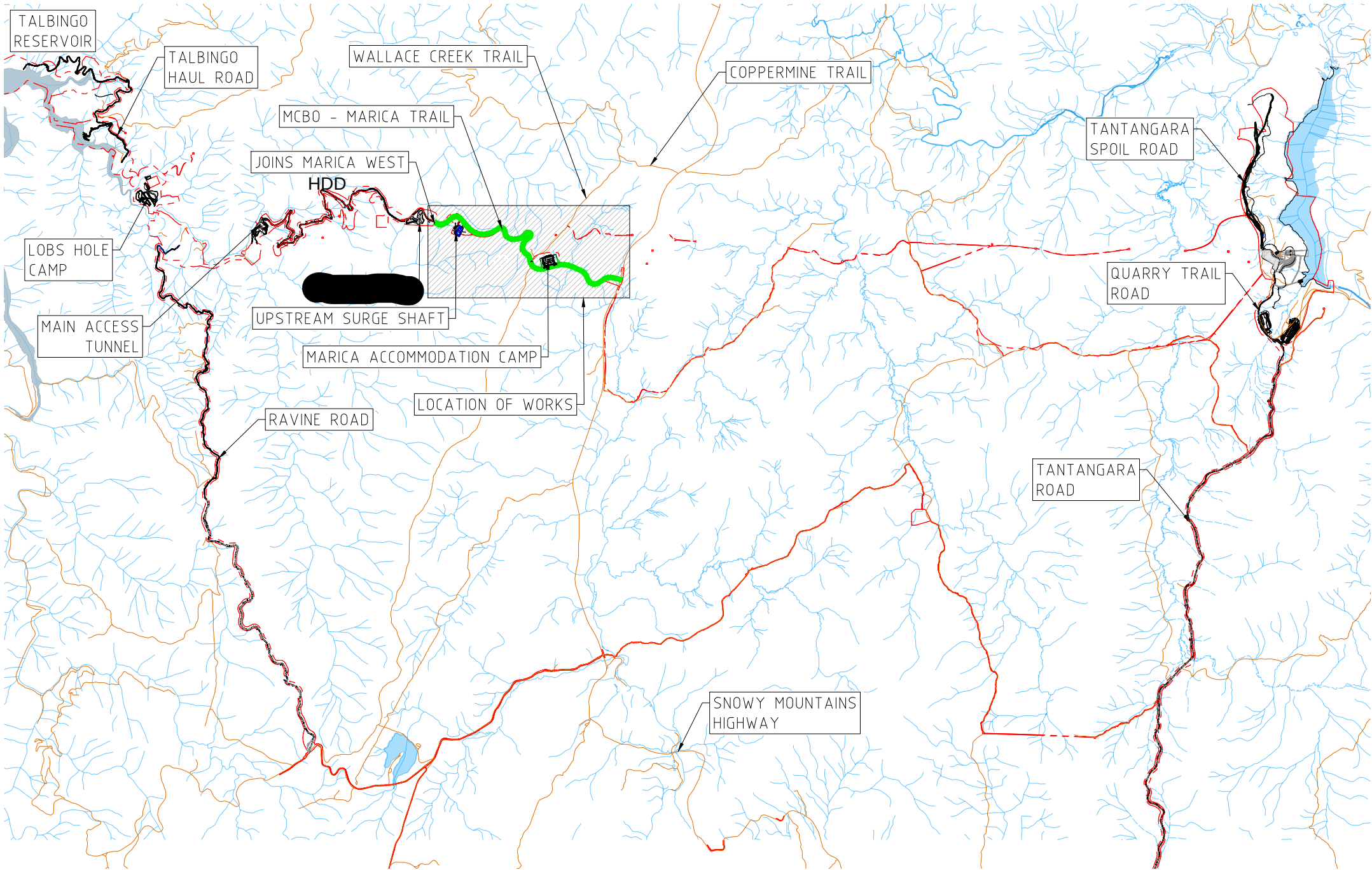
No-objection with minor comments (Notice)

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SNOWY 2.0

AR02 - MARICA TRAIL

ROAD DESIGN



LOCALITY PLAN
SCALE 1:50,000

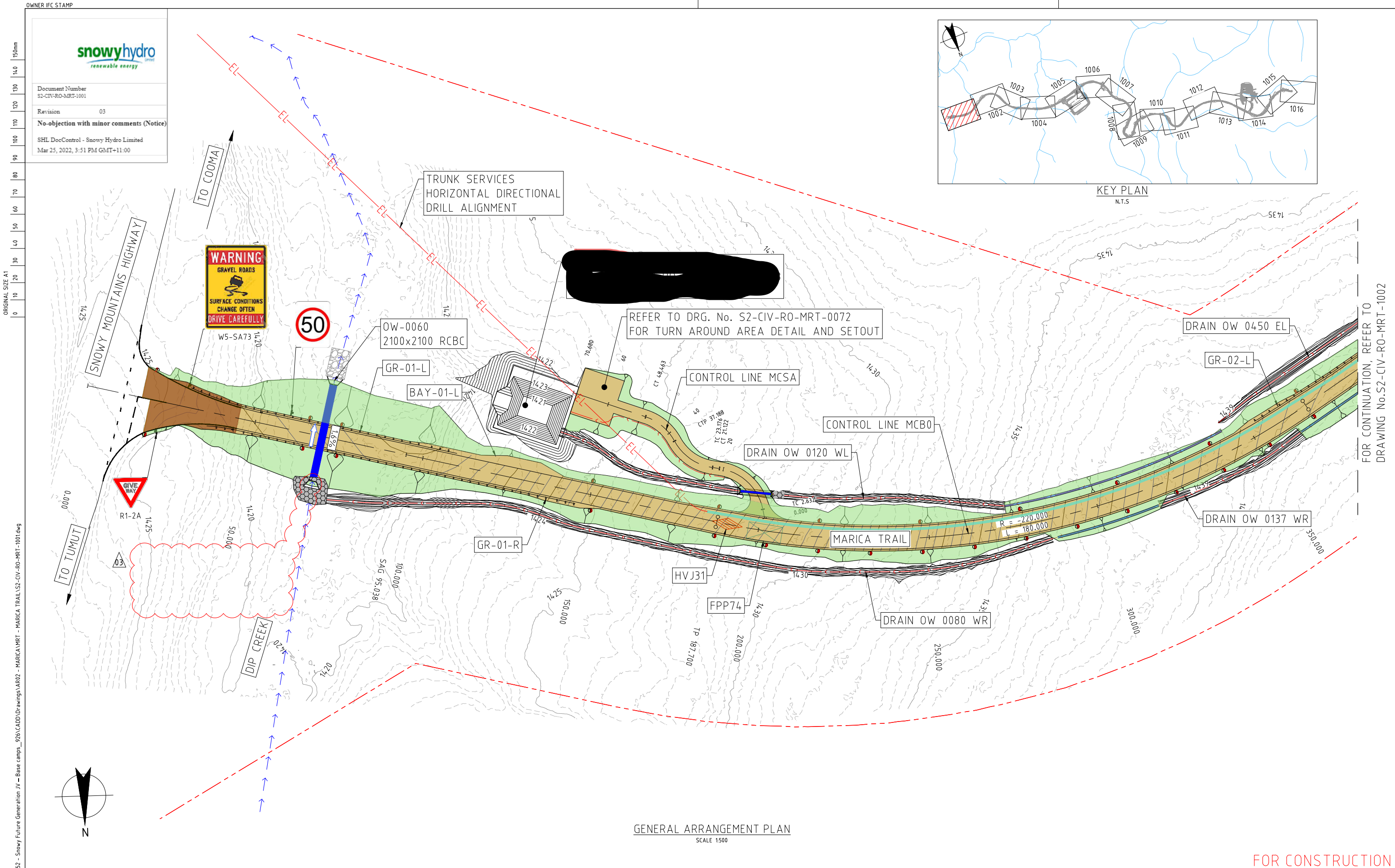
FOR CONSTRUCTION

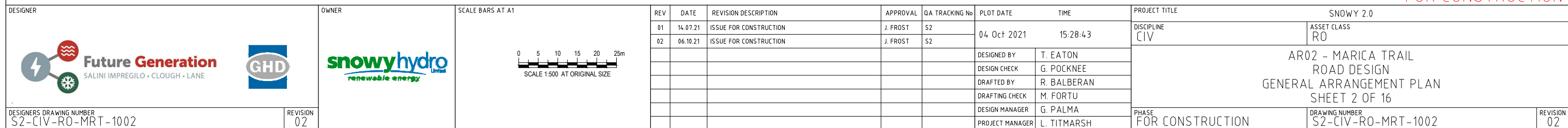
DRAWING FILE LOCATION / NAME C:\2024\SW\data\p-00-72D-001\21-125390		DESIGNER <div><div>Future Generation SALINI IMPREGILO • CLOUGH • LANE</div></div>		OWNER 		SCALE BARS AT A1 <div> SCALE 1:50,000 AT ORIGINAL SIZE</div>		REV		DATE	REVISION DESCRIPTION	APPROVAL	QA TRACKING No	PLOT DATE		TIME	PROJECT TITLE SNOWY 2.0			
DESIGNERS DRAWING NUMBER S2-CIV-RO-MRT-0001		REVISION 02						01	14.07.21	ISSUE FOR CONSTRUCTION	J. FROST	S2	06 Oct 2021		13:49:56		DISCIPLINE CIV		ASSET CLASS RO	
								02	06.10.21	RE - ISSUE FOR CONSTRUCTION	J. FROST	S2					AR02 - MARICA TRAIL ROAD DESIGN COVER SHEET			
														DESIGNED BY	T. EATON					
														DESIGN CHECK	G. POCKNEE					
														DRAFTED BY	R. BALBERAN					

LEGEND:

	PROPOSED CULVERT - CLEAN WATER
	EXISTING CULVERT (NOT SURVEYED)
	MAJOR CONTOUR - PROPOSED DESIGN SURFACE (1.0 INT)
	MINOR CONTOUR - PROPOSED DESIGN SURFACE (0.25 INT)
	MAJOR CONTOUR & LABEL - EXISTING SURFACE (5.0m INT)
	MINOR CONTOUR - EXISTING SURFACE (0.50m INT)
	EIS BOUNDARY - MAIN WORKS CONSTRUCTION
	EXISTING WATERCOURSE
	SAFETY BARRIER
	ROCK FENCE
	PROPOSED BOREHOLE
	SNOW POLE
	EXISTING BOREHOLE
	CULVERT INLET/OUTLET PROTECTION
	SHOTCRETE AND ROCK
	FLOW ARROW
	PROPOSED BATTER
	EXISTING GULLY
	WATERCOURSE

DESIGNER  		OWNER			SCALE BARS AT A1		REV	DATE	REVISION DESCRIPTION	APPROVAL	QA TRACKING No	PLOT DATE		TIME	PROJECT TITLE			
DESIGNERS DRAWING NUMBER S2-CIV-RO-MRT-0015		REVISION 02					01	14.07.21	ISSUE FOR CONSTRUCTION	J. FROST	S2	30 Sep 2021		18:43:24	DISCIPLINE CIV		SNOWY 2.0 ASSET CLASS RO	
							02	06.10.21	RE - ISSUE FOR CONSTRUCTION	J. FROST	S2							
													DESIGNED BY	T. EATON	AR02 - MARICA TRAIL ROAD DESIGN LEGEND			
													DESIGN CHECK	G. POCKNEE				
													DRAFTED BY	R. BALBERAN				
													DRAFTING CHECK	M. FORTU				
													DESIGN MANAGER	G. PALMA				
						PROJECT MANAGER	L. TITMARSH	PHASE FOR CONSTRUCTION		DRAWING NUMBER S2-CIV-RO-MRT-0015		REVISION 02						





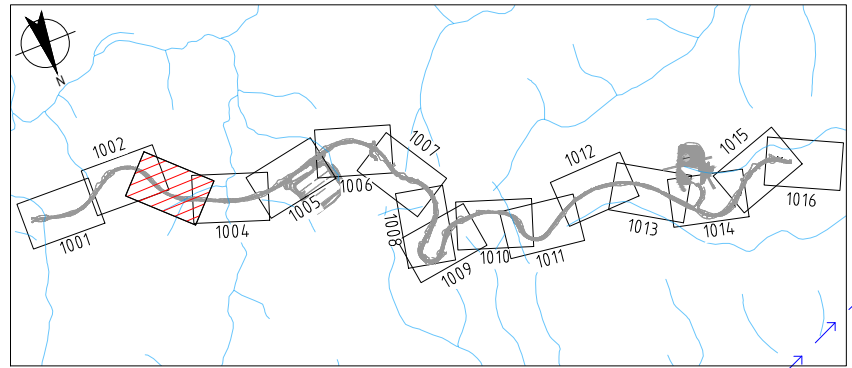
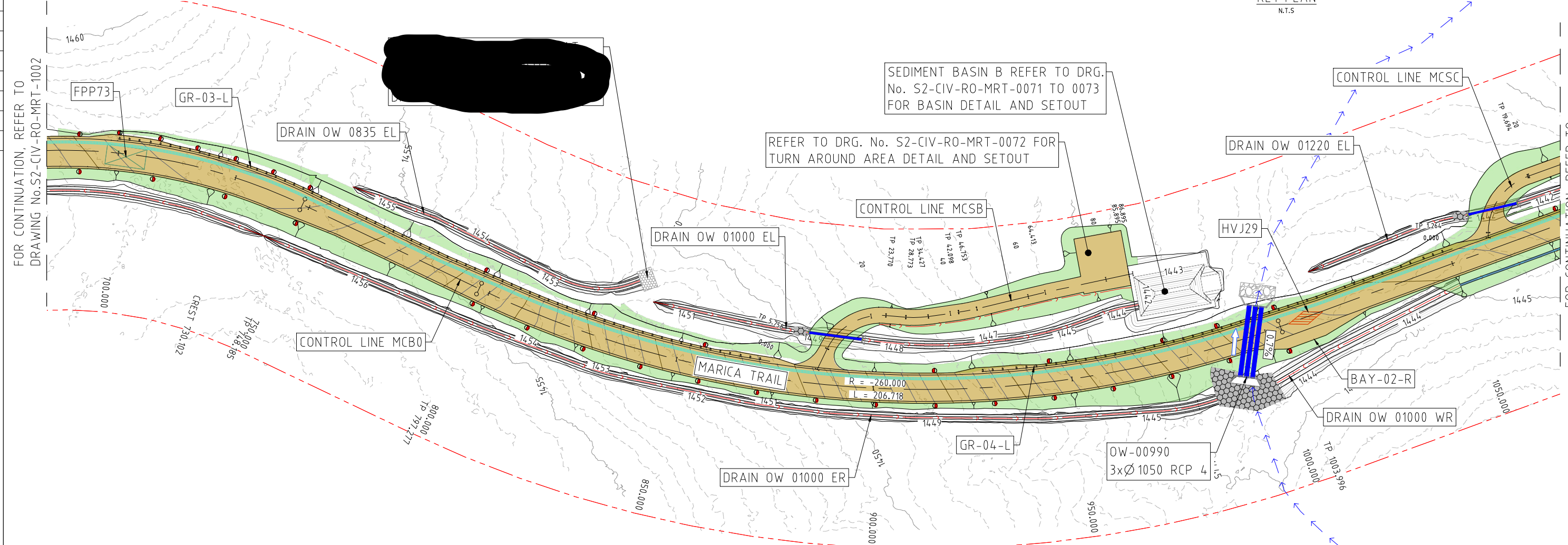


Document Number
S2-CIV-RO-MRT-1003

Revision
02

No-objection with minor comments (Notice)

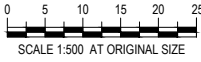
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- NOTES:
1. REFER TO DRG. No. S2-CIV-RO-MRT-0010 TO 0011 FOR GENERAL NOTES.
 2. REFER TO DRG. No. S2-CIV-RO-MRT-0015 FOR LEGEND.
 3. REFER TO DRG. No. S2-CIV-RO-MRT-0071 TO 0073 FOR SEDIMENT BASIN DETAILS.
 4. REFER TO DRG. No. S2-CIV-RO-MRT-4101 TO 4107 FOR DRAINAGE SETOUT TABLES.
 5. REFER TO DRG. No. S2-CIV-RO-MRT-4301 FOR DRAINAGE SCHEDULE.
 6. FOR NATURALLY OCCURRING ASBESTOS. REFER TO S2-FGJV-ENV-PLN-0062 MAIN WORKS ASBESTOS MANAGEMENT PLAN.

GENERAL ARRANGEMENT PLAN
SCALE 1:500

FOR CONSTRUCTION

DESIGNER		OWNER	SCALE BARS AT A1		REV		DATE	REVISION DESCRIPTION	APPROVAL	QA TRACKING No	PLOT DATE		TIME	PROJECT TITLE		
<div><div></div><div></div></div>			 SCALE 1:500 AT ORIGINAL SIZE		01	14.07.21	ISSUE FOR CONSTRUCTION	J. FROST	S2		30 Sep 2021		19:31:51		SNOWY 2.0	
					02	06.10.21	RE - ISSUE FOR CONSTRUCTION	J. FROST	S2							
DESIGNERS DRAWING NUMBER S2-CIV-RO-MRT-1003		REVISION 02									DESIGNED BY	T. EATON		AR02 - MARICA TRAIL ROAD DESIGN GENERAL ARRANGEMENT PLAN SHEET 3 OF 16		
											DESIGN CHECK	G. POCKNEE				
											DRAFTED BY	R. BALBERAN				
											DRAFTING CHECK	M. FORTU				
											DESIGN MANAGER	G. PALMA				
											PROJECT MANAGER	L. TITMARSH				
											PHASE FOR CONSTRUCTION		DRAWING NUMBER S2-CIV-RO-MRT-1003		REVISION 02	

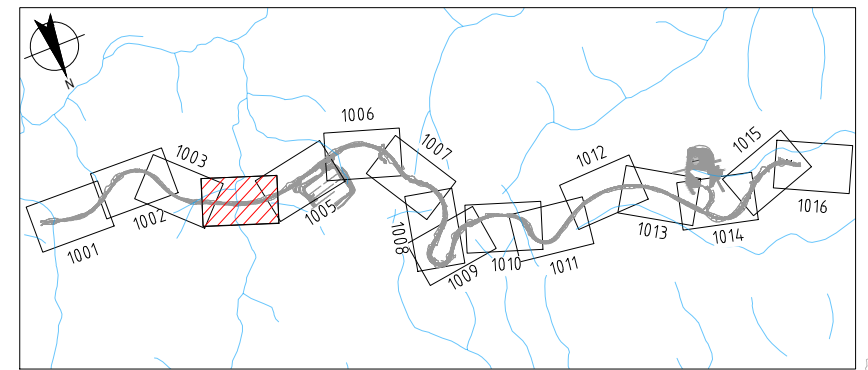


Document Number
S2-CIV-RO-MRT-1004

Revision
02

No-objection with minor comments (Notice)

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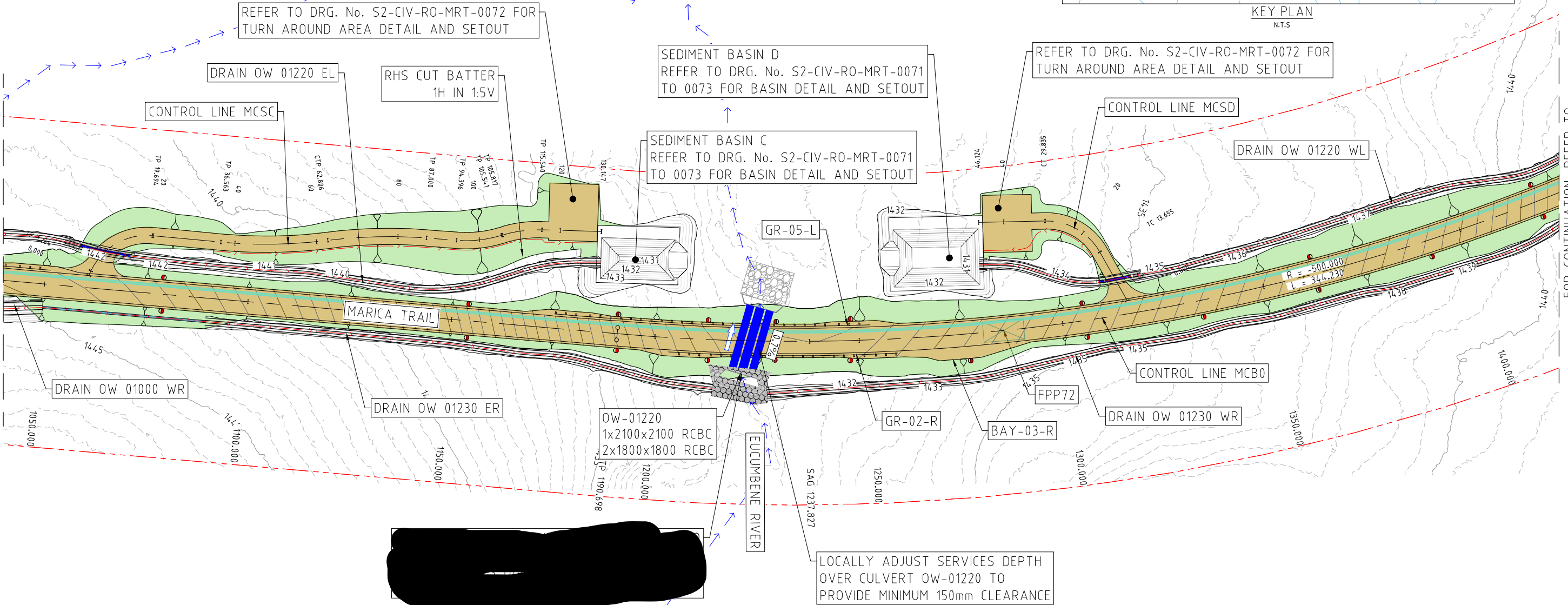


ORIGINAL SIZE A1

DRAWING FILE LOCATION / NAME
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FOR CONTINUATION, REFER TO
DRAWING No.S2-CIV-RO-MRT-1003

FOR CONTINUATION, REFER TO
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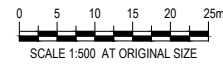


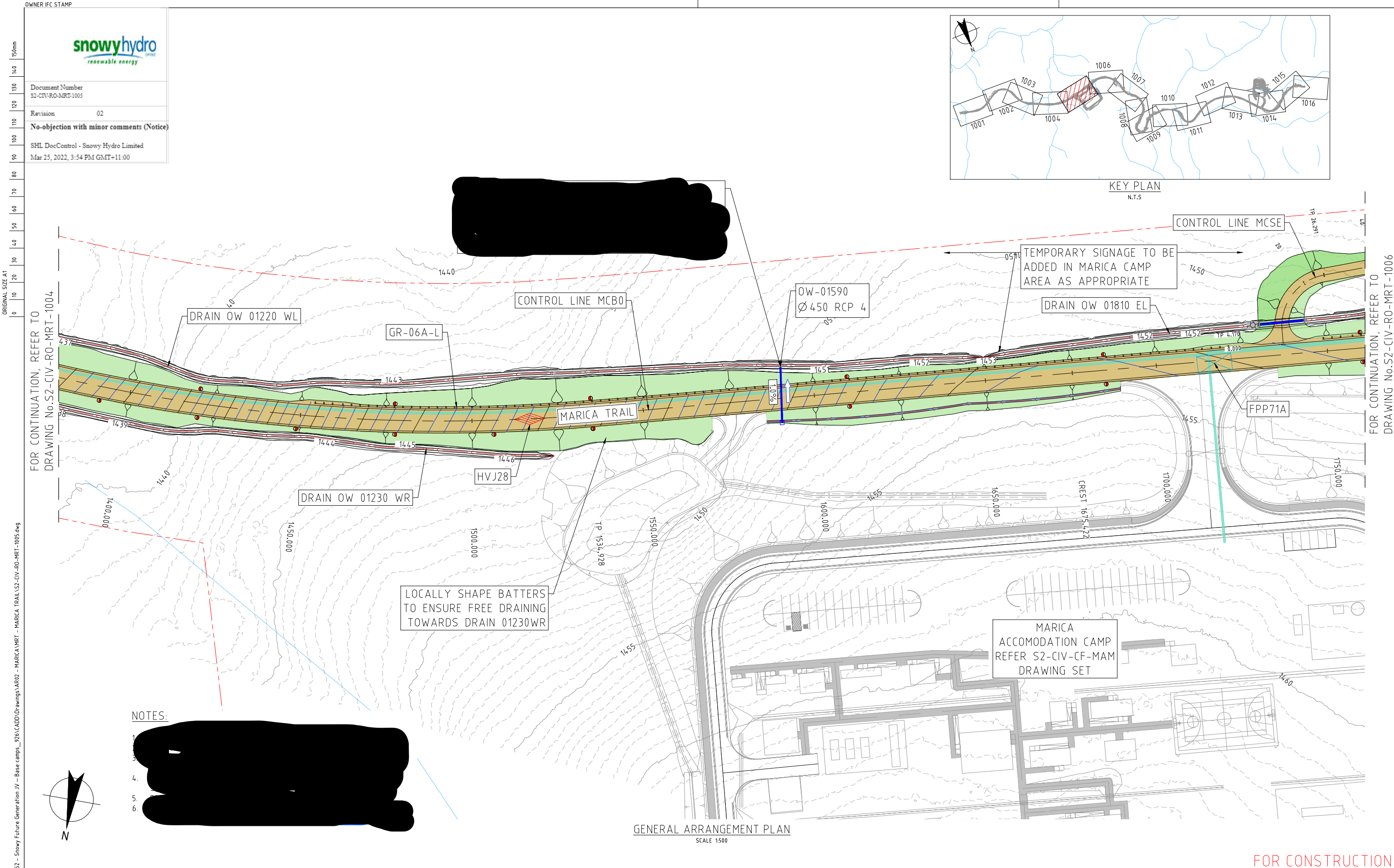
GENERAL ARRANGEMENT PLAN
SCALE 1:500

NOTES:

1. REFER TO DRG. No. S2-CIV-RO-MRT-0010 TO 0011 FOR GENERAL NOTES.
2. REFER TO DRG. No. S2-CIV-RO-MRT-0015 FOR LEGEND.
3. REFER TO DRG. No. S2-CIV-RO-MRT-0071 TO 0073 FOR SEDIMENT BASIN DETAILS.
4. REFER TO DRG. No. S2-CIV-RO-MRT-4101 TO 4107 FOR DRAINAGE SETOUT TABLES.
5. REFER TO DRG. No. S2-CIV-RO-MRT-4301 FOR DRAINAGE SCHEDULE.
6. FOR NATURALLY OCCURRING ASBESTOS, REFER TO S2-FGJV-ENV-PLN-0062 MAIN WORKS ASBESTOS MANAGEMENT PLAN.

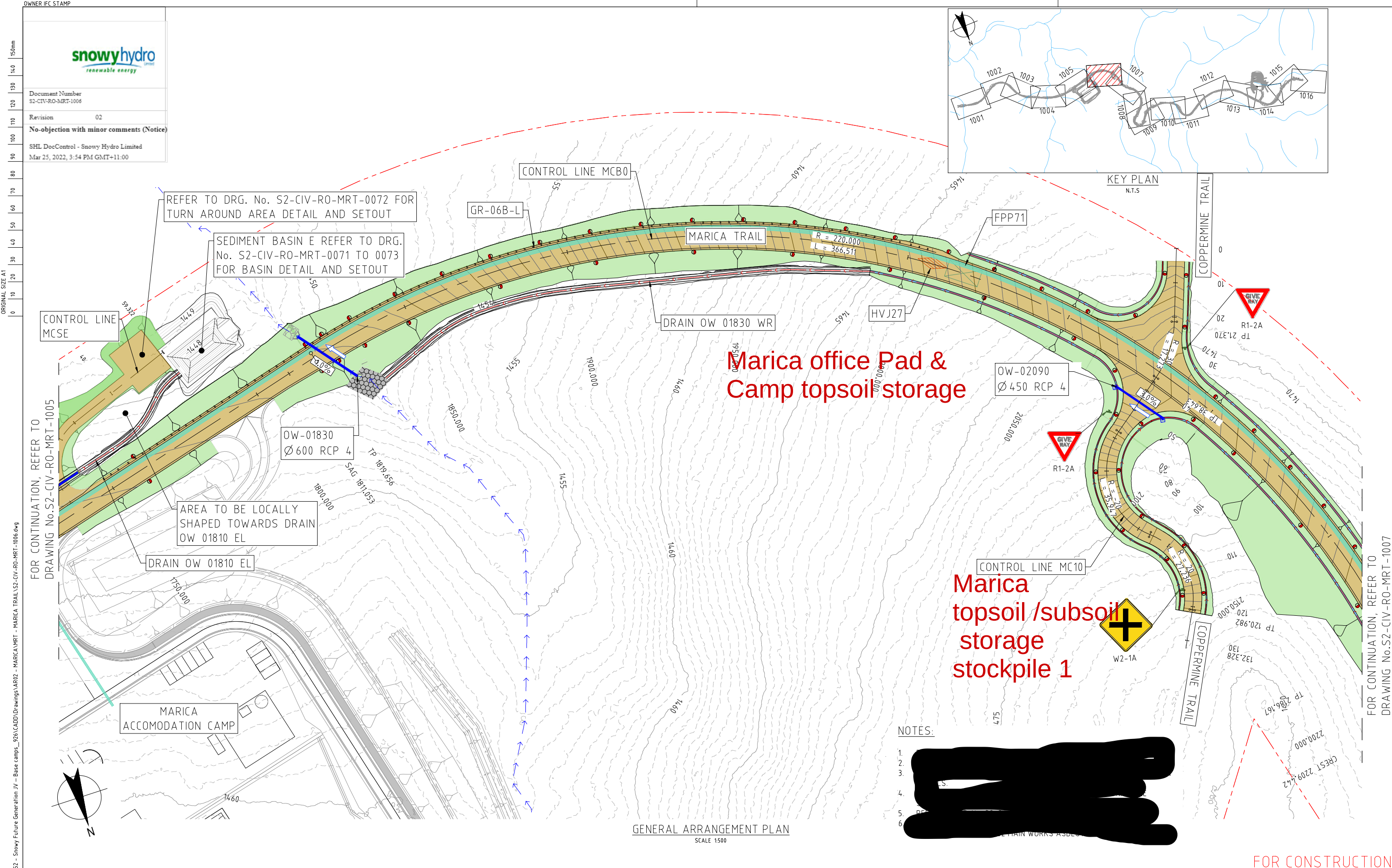
FOR CONSTRUCTION

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DESIGNER		OWNER	SCALE BARS AT A1		REV				APPROVAL		QA TRACKING No	PLOT DATE	TIME	PROJECT TITLE	
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												DRAFTED BY R. BALBERAN			
												DRAFTING CHECK M. FORTU			
												DESIGN MANAGER G. PALMA		PHASE FOR CONSTRUCTION	DRAWING NUMBER S2-CIV-RO-MRT-1005
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															REVISION 02

FOR CONSTRUCTION

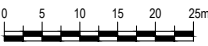


GENERAL ARRANGEMENT PLAN
SCALE 1:500

NOTES:

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FOR CONSTRUCTION

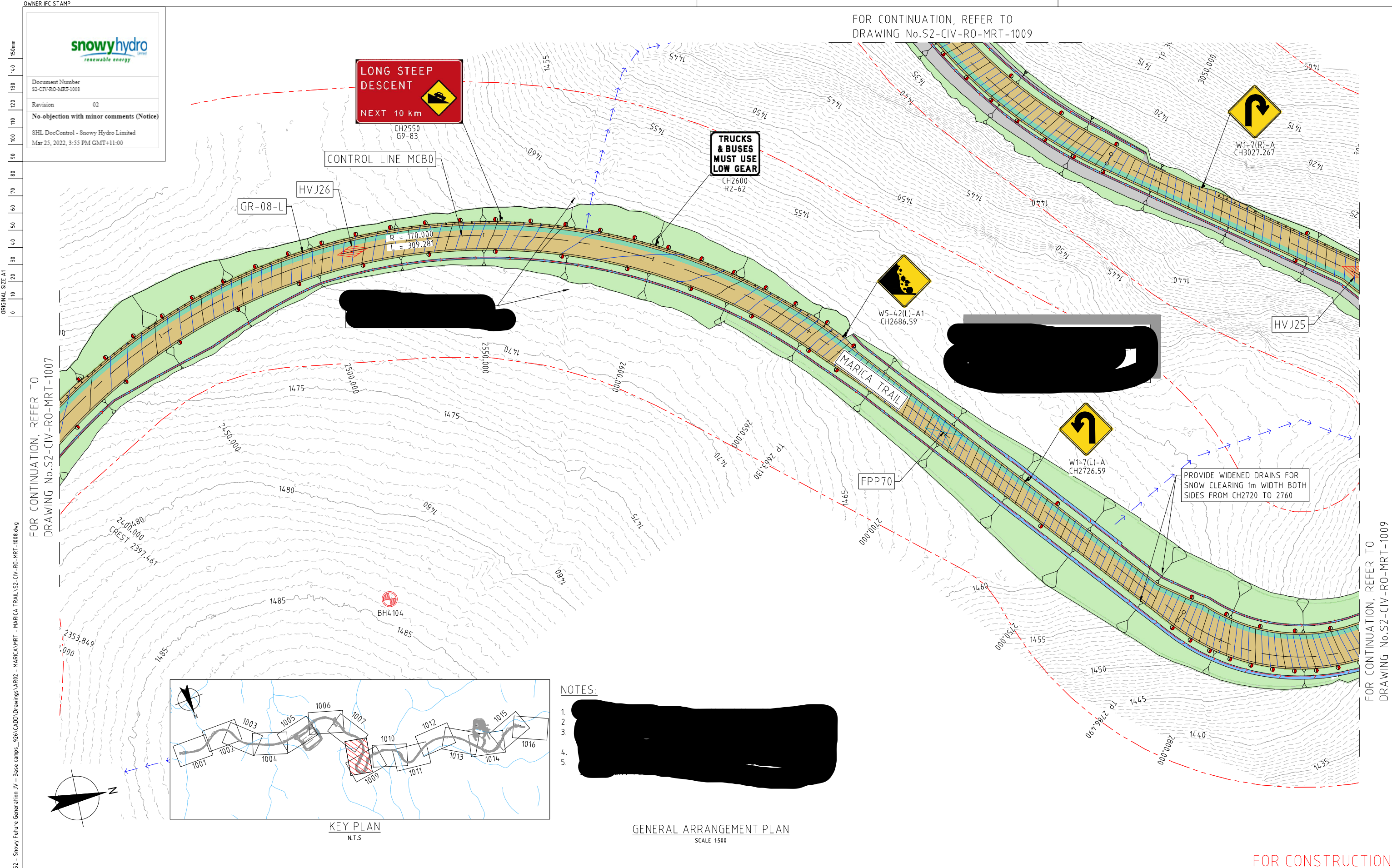
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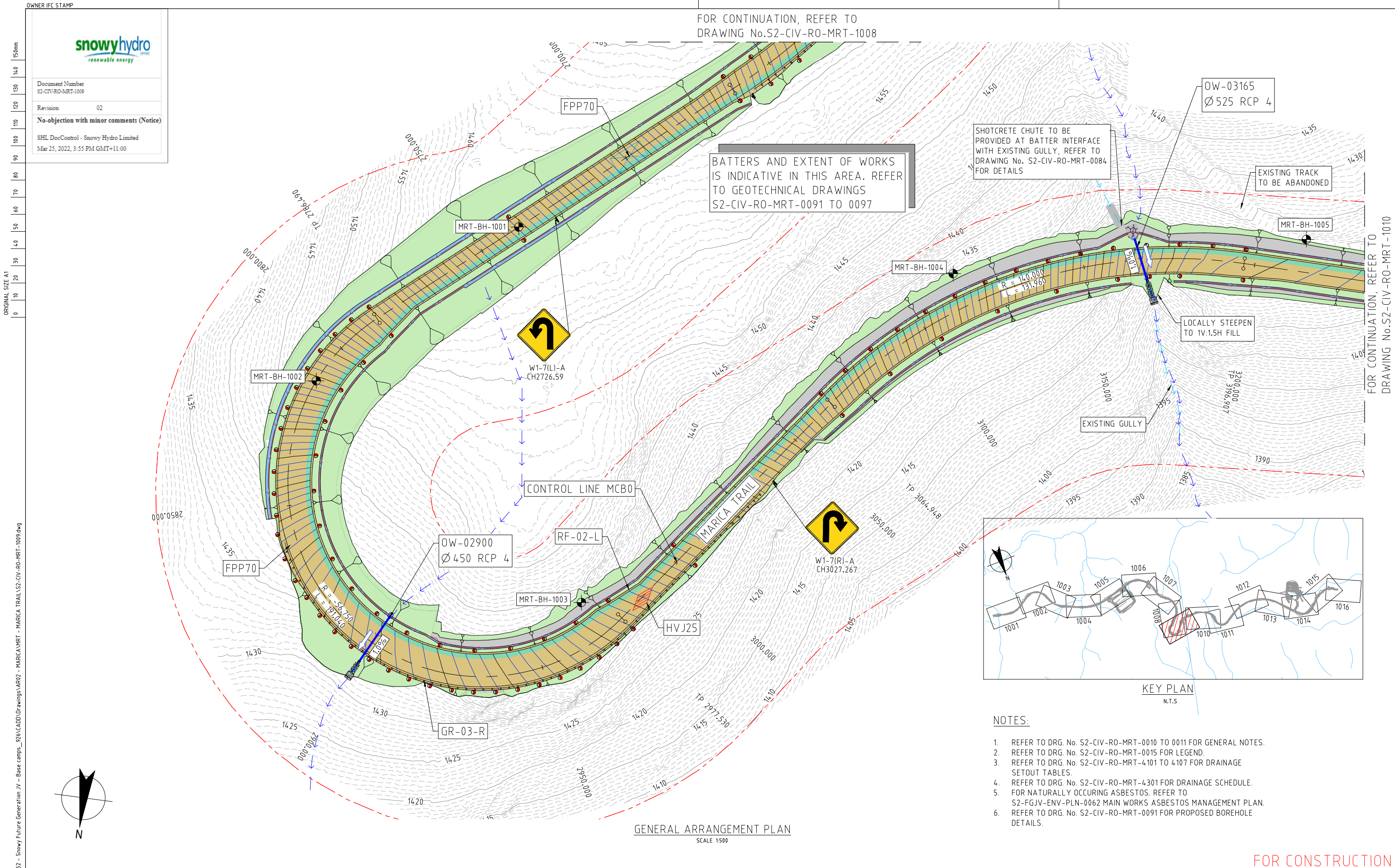

Document Number
S2-CIV-RO-MRT-1006
Revision
02
No-objection with minor comments (Notice)
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Mar 25, 2022, 3:54 PM GMT+11:00

ORIGINAL SIZE A1
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150mm



DESIGNER		OWNER		SCALE BARS AT A1		REV		DATE		REVISION DESCRIPTION		APPROVAL		QA TRACKING No		PLOT DATE		TIME		PROJECT TITLE		SNOWY 2.0							
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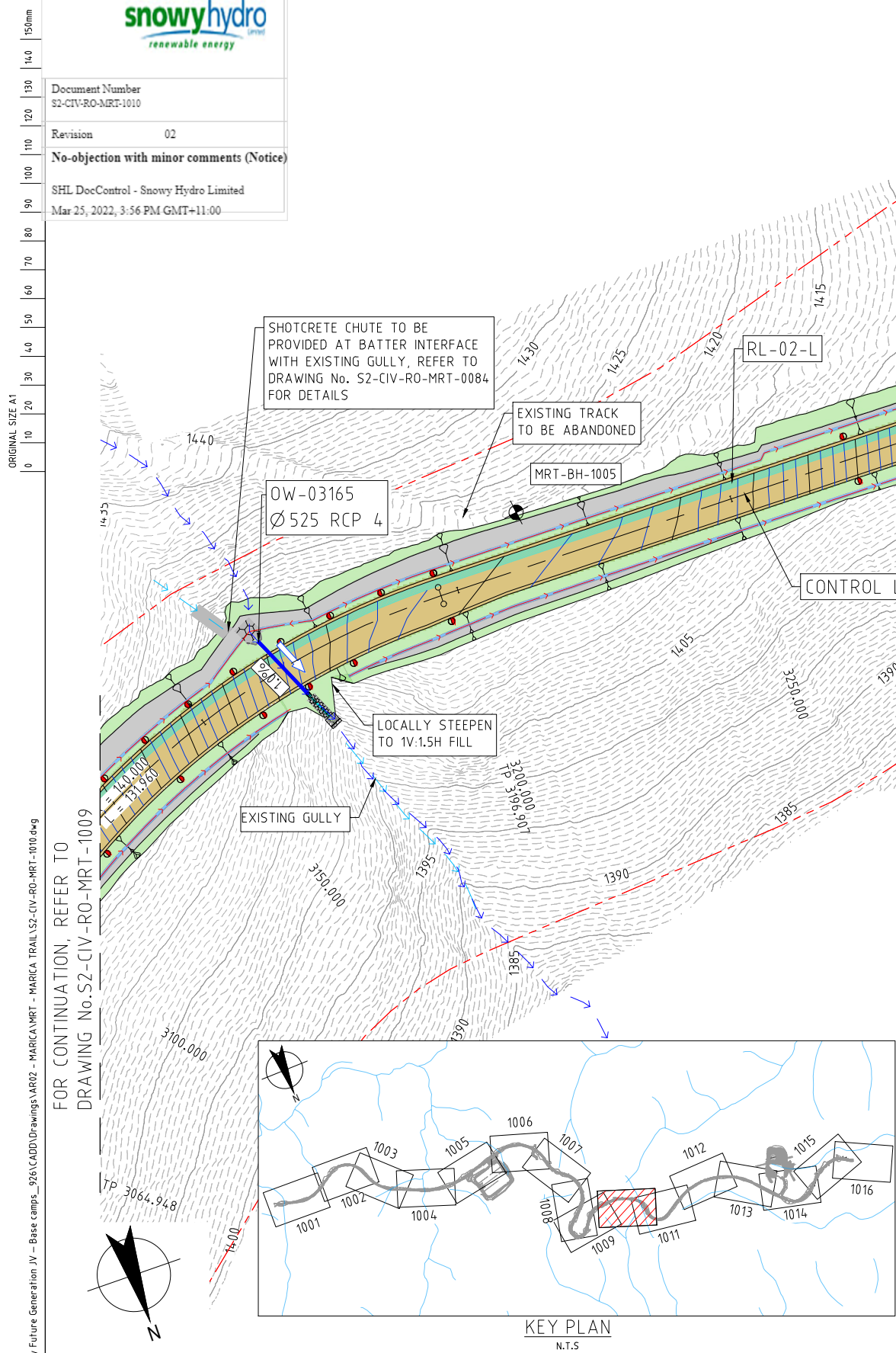
FOR CONSTRUCTION



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FOR CONSTRUCTION

Document Number S2-CIV-RO-MRT-1010	
Revision 02	
No-objection with minor comments (Notice)	
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GENERAL ARRANGEMENT PLAN
SCALE 1:500

NOTES:

FOR CONSTRUCTION

DESIGNER		OWNER		SCALE BARS AT A1		REV		DATE		REVISION DESCRIPTION		APPROVAL		QA TRACKING No		PLOT DATE		TIME		PROJECT TITLE									
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																		DRAFTING CHECK		M. FORTU									
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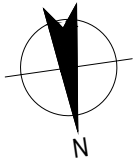
OWNER IFC STAMP



Document Number
S2-CIV-RO-MRT-1011
Revision
02
No-objection with minor comments (Notice)
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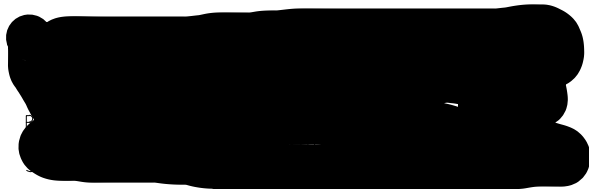
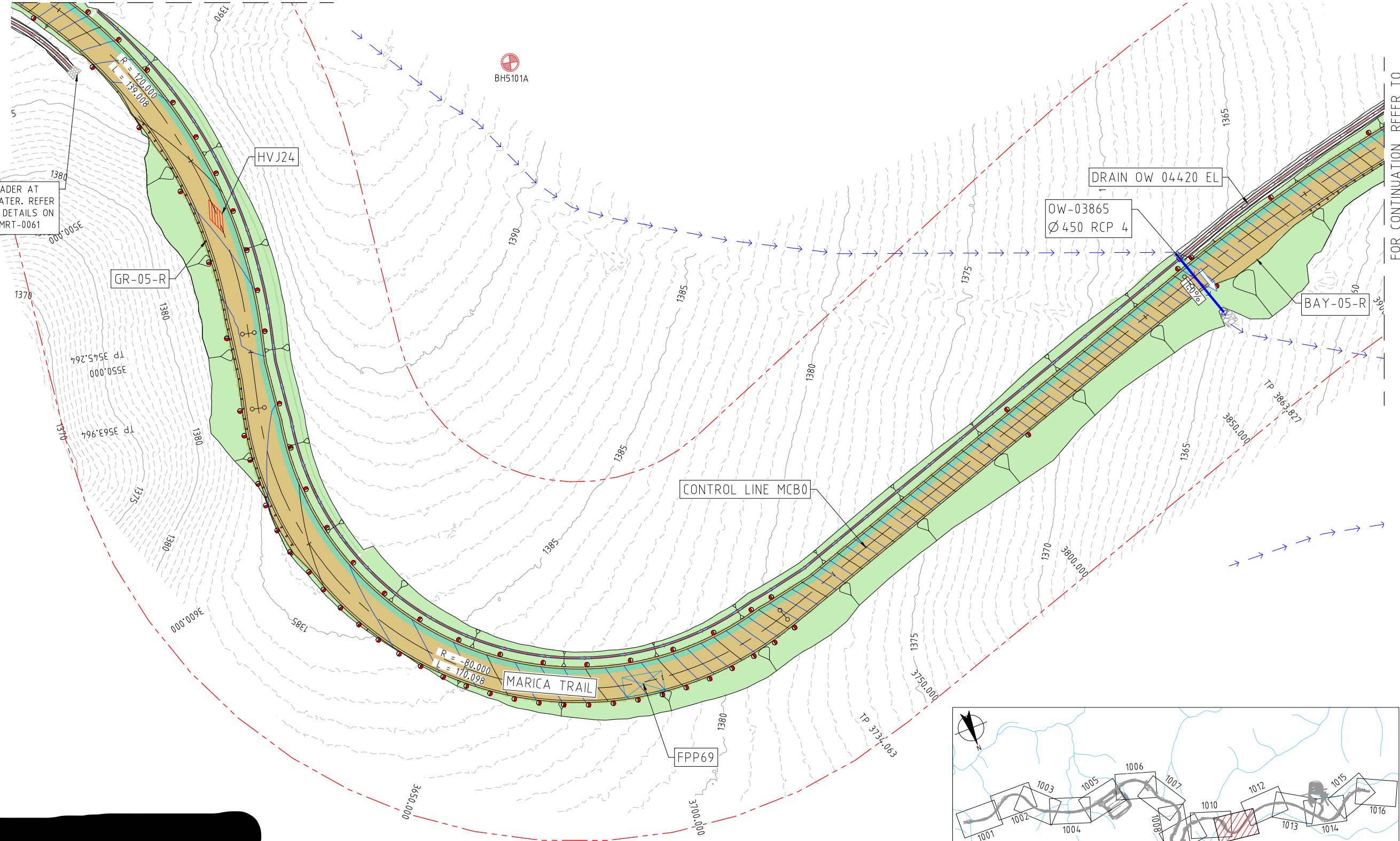
FOR CONTINUATION, REFER TO
DRAWING No.S2-CIV-RO-MRT-1010

PROVIDE LEVEL SPREADER AT
OUTLET OF CLEAN WATER. REFER
TO LEVEL SPREADER DETAILS ON
DRG. No. S2-CIV-RO-MRT-0061

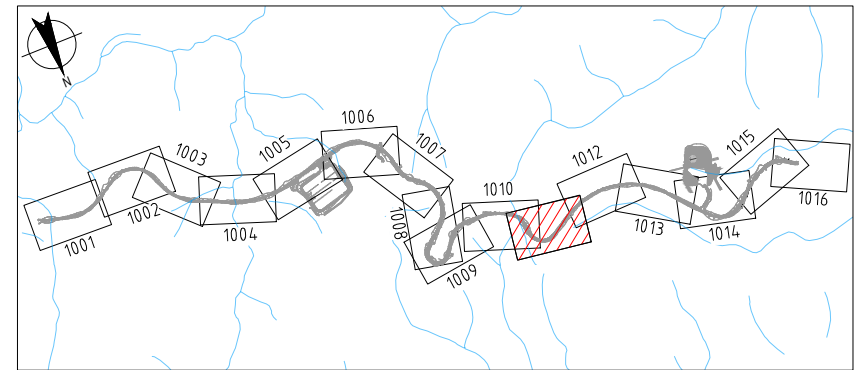


NOTES:

- 1.
- 2.
- 3.
- 4.
- 5.



GENERAL ARRANGEMENT PLAN
SCALE 1:500



KEY PLAN
N.T.S.

FOR CONSTRUCTION

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						02		06.10.21		RE - ISSUE FOR CONSTRUCTION		J. FROST		S2													
												DESIGNED BY		T. EATON													
												DESIGN CHECK		G. POCKNEE													
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SNOWY HYDRO TEMPLATE S2-SYS-06-TEK-0001 REV B - LAST UPDATED MAY 2020

OWNER IFC STAMP



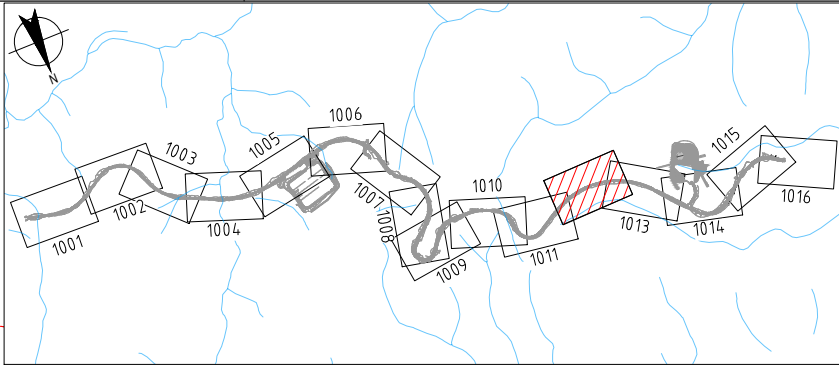
Document Number
S2-CIV-RO-MRT-1012

Revision
02

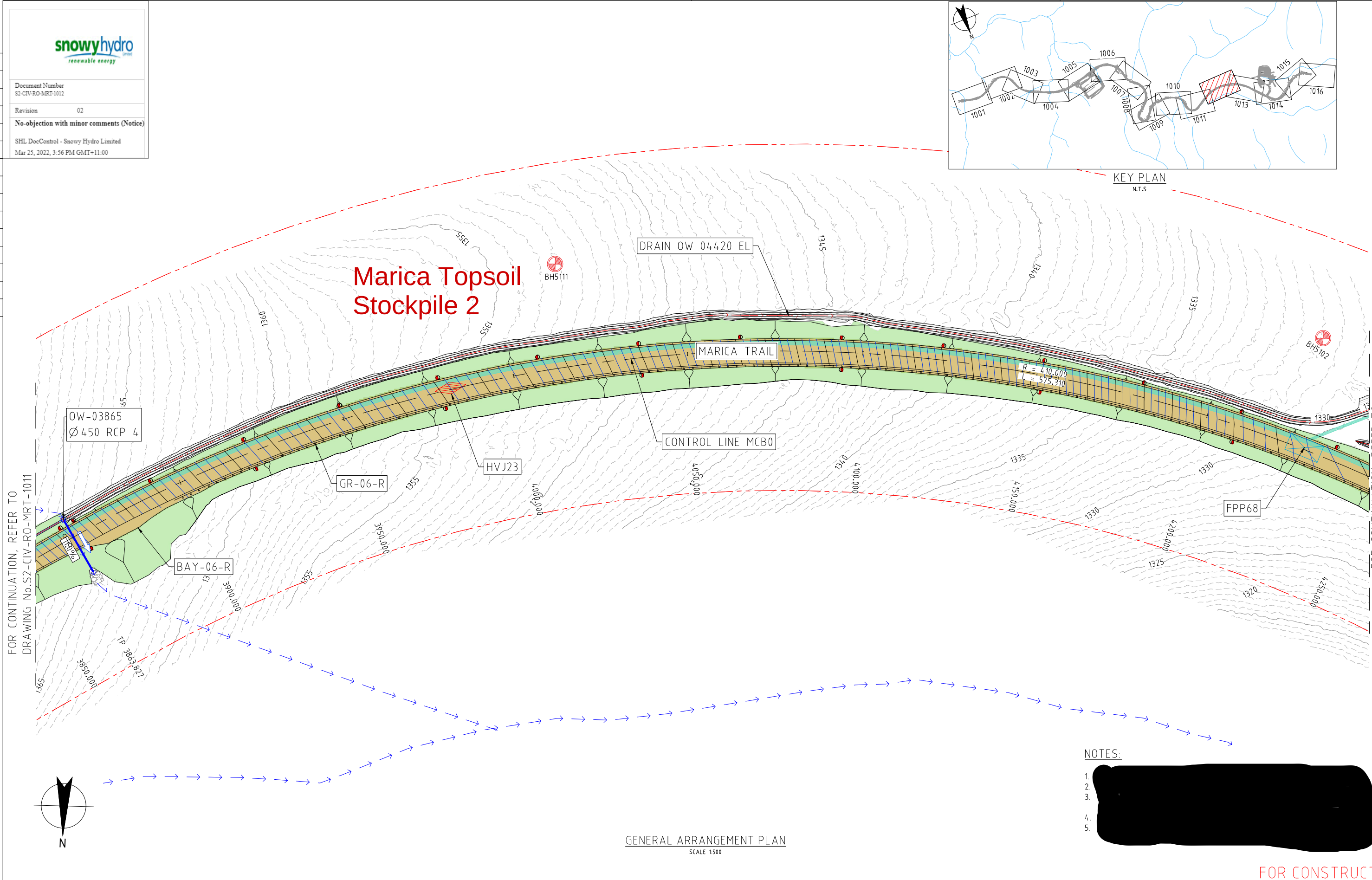
No-objection with minor comments (Notice)

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Mar 25, 2022, 3:56 PM GMT+11:00

ORIGINAL SIZE A1
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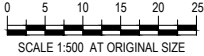
KEY PLAN
N.T.S



GENERAL ARRANGEMENT PLAN
SCALE 1:500

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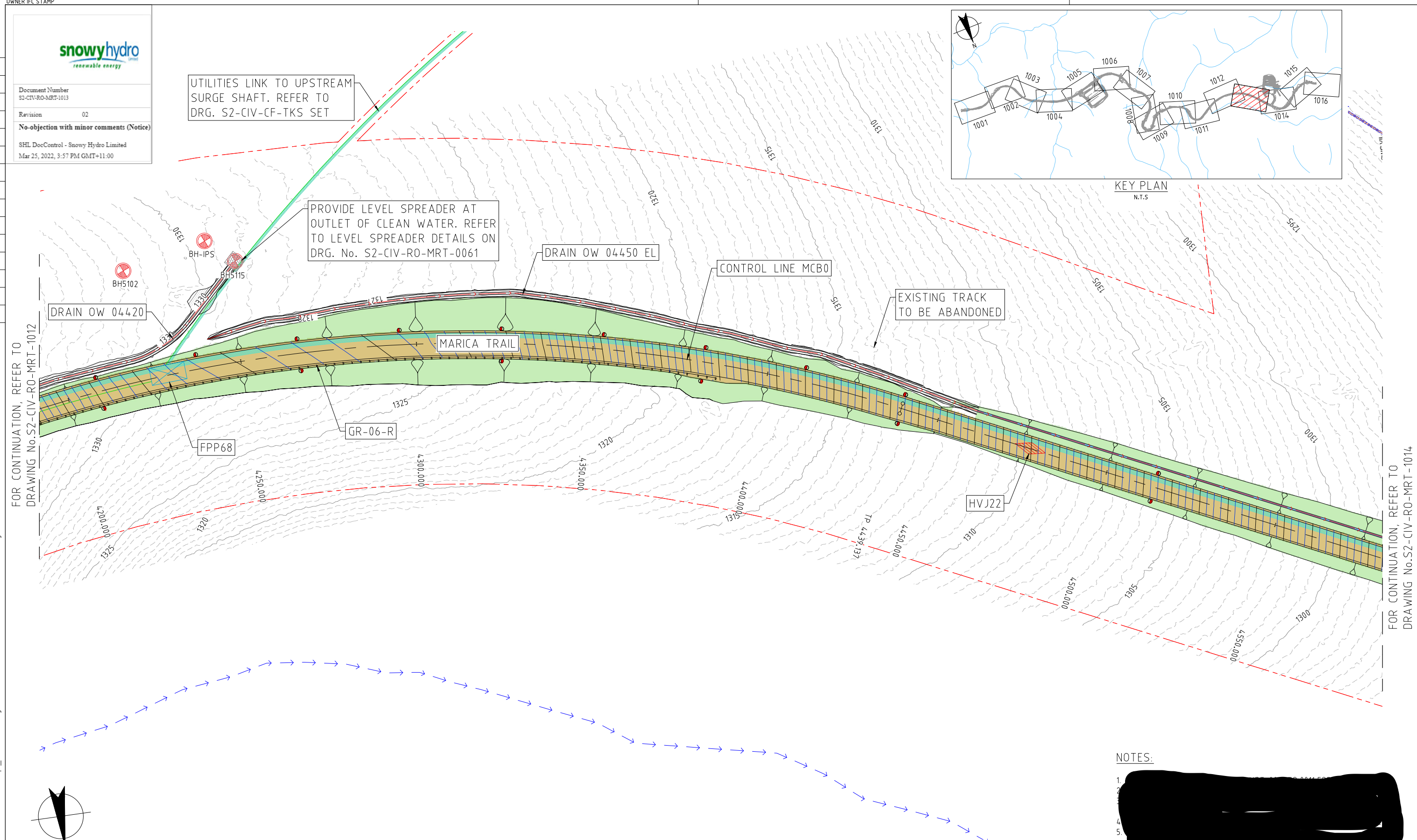
FOR CONSTRUCTION

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SNOWY HYDRO TEMPLATE S2-SYS-06-TEK-001 REV B - LAST UPDATED MAY 2020

OWNER IFL STAMP	
	
Document Number S2-CIV-RO-MRT-1013	
Revision	02
No-objection with minor comments (Notice)	
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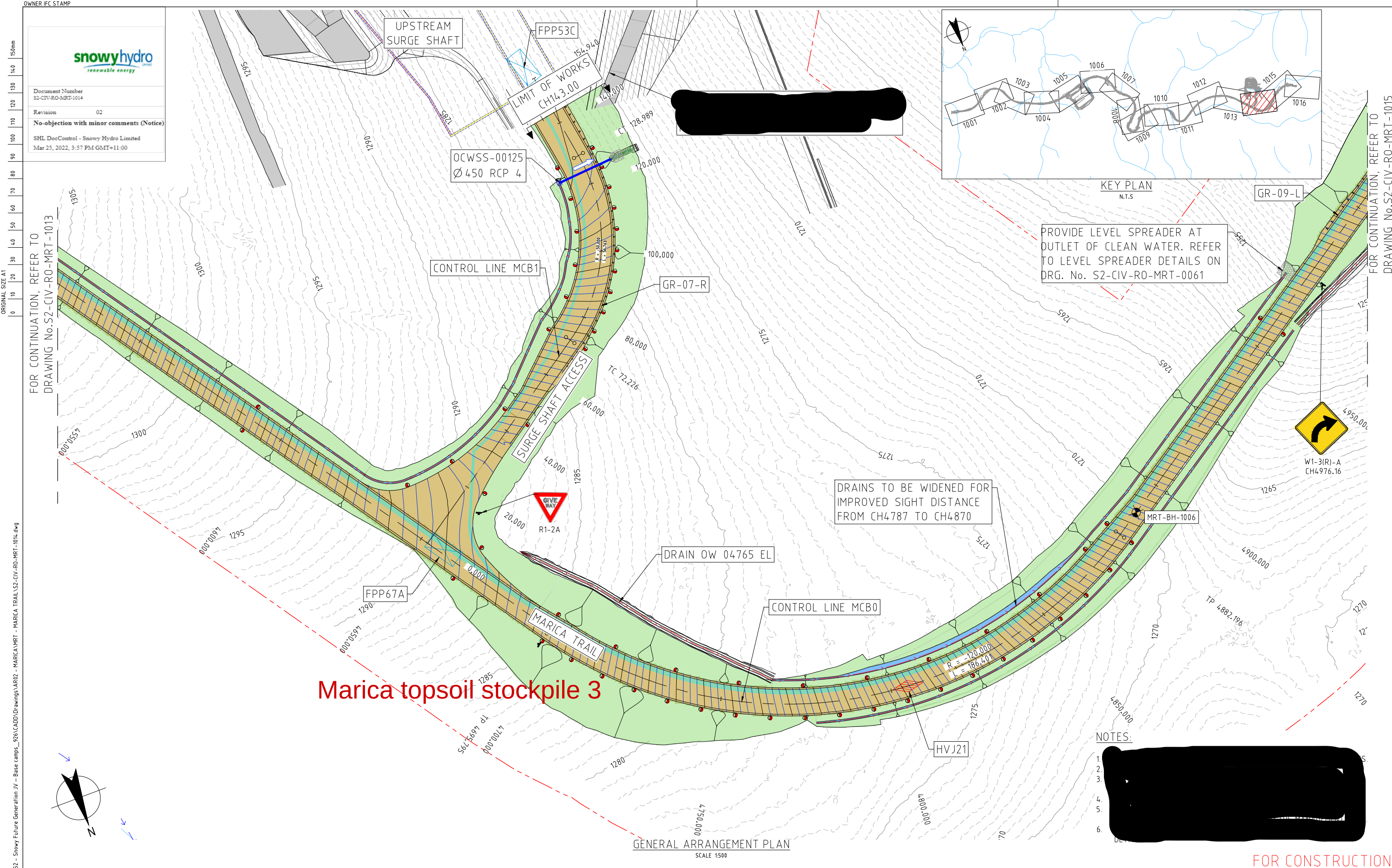


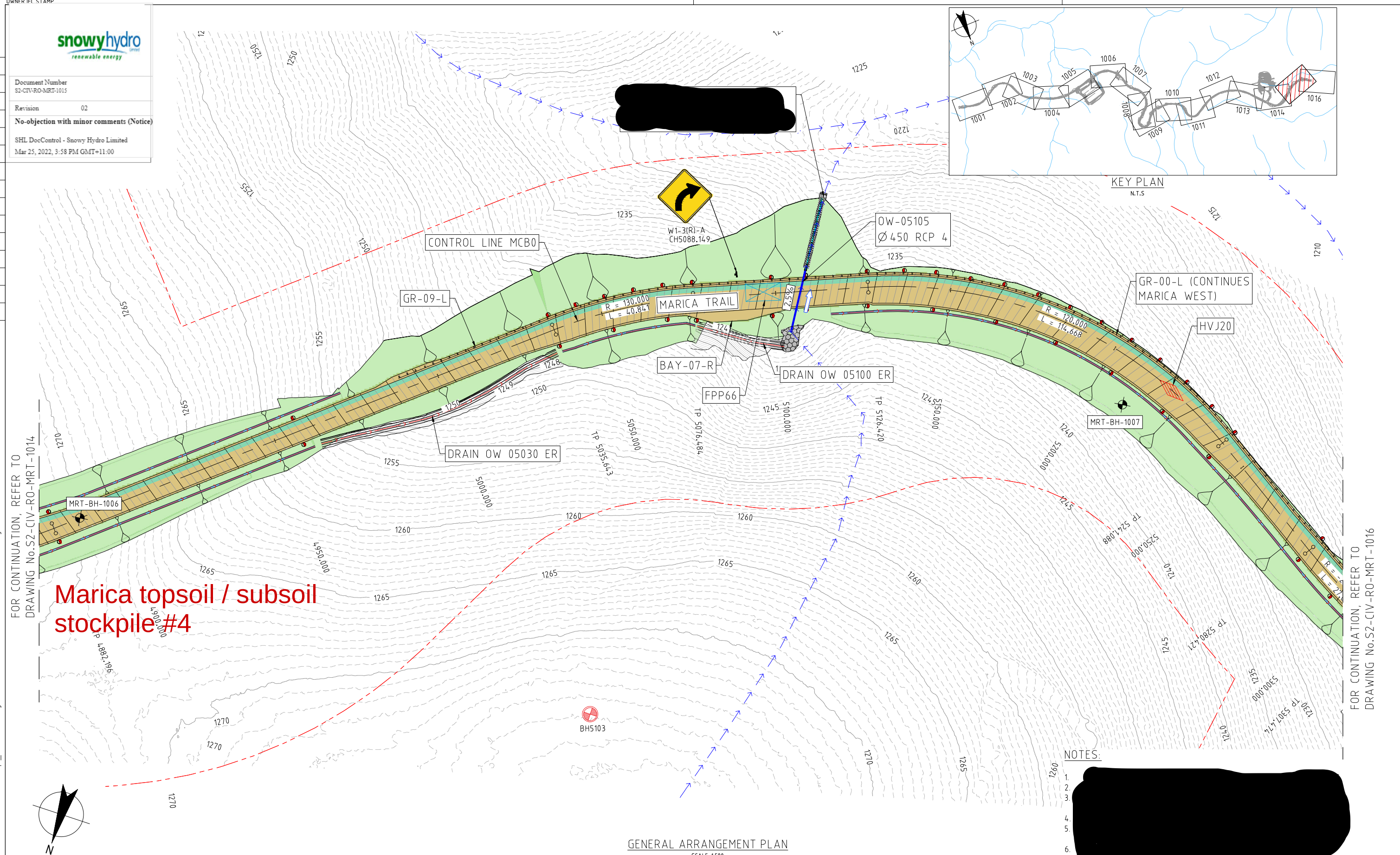
GENERAL ARRANGEMENT PLAN
SCALE 1:500

NOTES:

FOR CONSTRUCTION

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										DRAFTED BY	R.BALBERAN					
						DRAFTING CHECK	M. FORTU									
DESIGNERS DRAWING NUMBER S2-CIV-RO-MRT-1013		REVISION 02								DESIGN MANAGER	G. PALMA	PHASE		DRAWING NUMBER		
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																REVISION 02





GENERAL ARRANGEMENT PLAN
SCALE 1:500

NOTES

FOR CONSTRUCTION

OWNER IFC STAMP



Document Number
S2-CIV-RO-MRT-1016

Revision
02

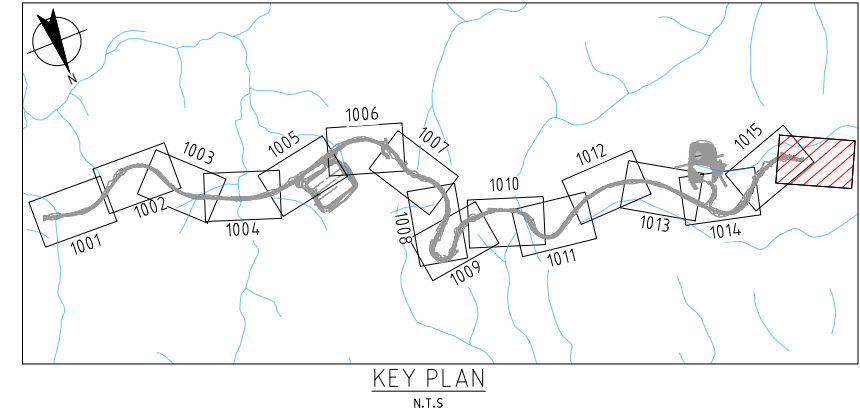
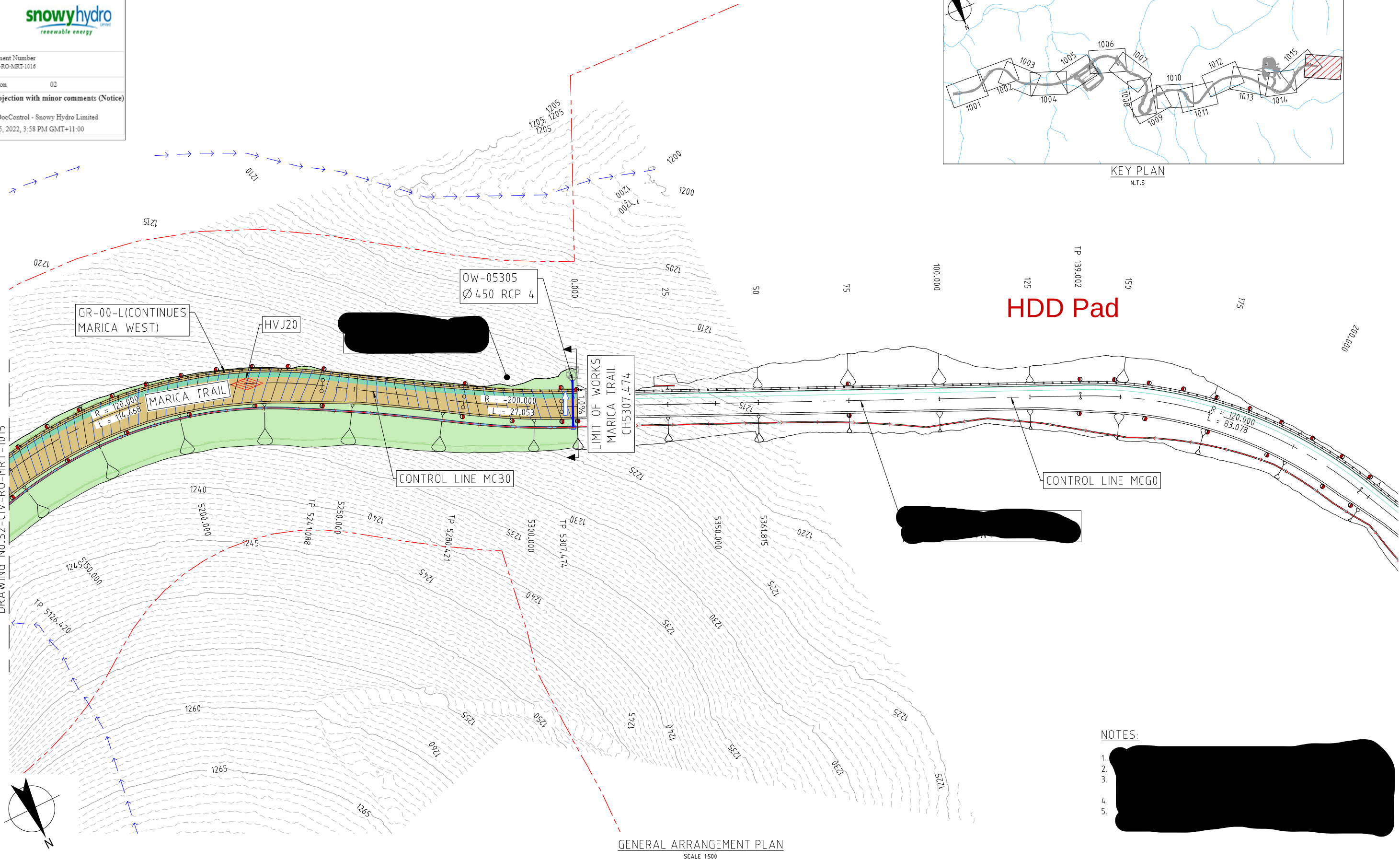
No-objection with minor comments (Notice)

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Mar 25, 2022, 3:58 PM GMT+11:00

ORIGINAL SIZE A1

FOR CONTINUATION, REFER TO
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- NOTES:
- -
 -
 -
 -

FOR CONSTRUCTION

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											PROJECT MANAGER	L. TITMARSH	PHASE FOR CONSTRUCTION	DRAWING NUMBER S2-CIV-RO-MRT-1016		REVISION 02

SNOWY HYDRO TEMPLATE S2-SYS-GH-TEN-001 REV 8 - LAST UPDATED MAY 2020

Appendix E – Quarterly Observational Monitoring Form

Quarterly Rehabilitation Inspection (June 2024)

Form completed for each rehabilitation area and submitted to rehab manager - Photos required for each question

* Indicates required question

1. Date *

Example: 7 January 2019

2. Person completing inspection

3. Site *

4. Weather conditions

5. Site Access *

Mark only one oval.

- ☐ Site accessible for monitoring
- ☐ Monitoring access requires action
- ☐ Access control not in place - Action required
- ☐ Access control in place
- ☐ Other: _____

6. Comments

7. Action

8. Photo monitoring points established *

Mark only one oval.

☐ Yes

☐ No - Action required

☐ Other: _____

9. Action

10. Landform Stability / Erosion *

Mark only one oval.

☐ No erosion present

☐ Minor surface erosion less than growth medium depth

☐ Minor erosion less than 300 mm - Action required

☐ Major erosion more than 300 mm - Immediate action required

☐ Sediment not controlled leaving area - Immediate action required

11. Comments

12. Action

13. Bare Ground / Ground Cover (excluding rocks and logs) *

Mark only one oval.

- ☐ No bare ground
- ☐ Bare ground - less than 5%
- ☐ Minimal bare ground - less than 15% - Monitor
- ☐ Bare patches - Between 15 and 30% - Action required
- ☐ Bare patches - over 30% - Action required

14. Comments

15. Action

16. Vegetation Health *

Mark only one oval.

- ☐ Minimal mortality / sickness observed - Less than 5%
- ☐ Mortality / sickness 5 - 20% - Action required
- ☐ Mortality / sickness more than 20% - Action required
- ☐ Minimal germination following direct seeding - Action required

17. Comments

18. Action

19. Weeds *

Mark only one oval.

- ☐ No weeds presents
- ☐ Individuals weeds present - Action required
- ☐ Weed infestation present - Action required
- ☐ Colonising weeds of area present - Action required

20. Comments - Weed species present

21. Action

22. Pests *

Mark only one oval.

- ☐ No evidence of pest species observed
- ☐ Presence observed minimal impact
- ☐ Pest species causing damage to rehabilitation - Action required

23. Comments (What pest, what impact , what species)

24. Action

25. Hydrological Integrity and function of bogs and fens *

Mark only one oval.

☐

No issue

☐

Incision forming - Action required

☐

Drying of bog identified - Action required

☐

NA

26. Comments

27. Action

28. Waterways and drainage lines *

Mark only one oval.

- ☐ No issue
- ☐ Bank erosion observed - Action required
- ☐ Sedimentation observed - Action required
- ☐ NA

29. Comments

30. Action

31. Human interference *

Mark only one oval.

- ☐ Wheel tracks
- ☐ Litter

32. Action

33. Comments

34. Site Signage ^{*}

Tick all that apply.

☐ Yes

☐ No - Action required

35. Comments

36. Action

37. Other comments

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