

**IN THE ENVIRONMENT COURT
AT CHRISTCHURCH
I TE KŌTI TAIAO O AOTEAROA
KI ŌTAUTAHU**

Decision No. [2023] NZEnvC 162

IN THE MATTER of the Resource Management Act 1991

AND an appeal under s120 of the Act

BETWEEN ALLISON & TOKO GOLF CLUB
INCORPORATED

(ENV-2023-CHC-6)

Appellants

AND PIONEER ENERGY LIMITED

Applicant

AND CLUTHA DISTRICT COUNCIL

Respondent

Environment Judge P A Steven – sitting alone under s279 of the Act

In Chambers at Christchurch

Date of Consent Order: 7 August 2023

CONSENT ORDER

A: Under s279(1)(b) of the Resource Management Act 1991, the Environment Court, by consent, orders that the appeal is allowed (in part) and consent is granted to Pioneer Energy Limited on conditions set out in Appendix 1 and in accordance with plans as set out in Appendix 2, attached to and forming



Allison & Toko Golf Club Inc v Clutha District Council

part of this order.

B: Under s285 of the Resource Management Act 1991, there is no order as to costs.

REASONS

Introduction

[1] This proceeding concerns an appeal by Mr Alistair Allison and Toko Golf Club Incorporated (‘the appellants’) against a decision of Clutha District Council which granted resource consent (subject to conditions) to establish and operate a biomass storage and wood fuel processing facility at 464 Back Road, Milton.

[2] The appeal sought that the resource consent be declined or that conditions be amended or imposed to appropriately mitigate the adverse effects on the surrounding area including the appellants’ properties.

[3] I have read and considered the consent memorandum of the parties dated 30 June 2023 which proposes to resolve the appeal.

Other relevant matters

[4] Three parties gave notice of their intention to become a party to the proceeding under s274, RMA:

- (a) Ara Poutama Aotearoa Department of Corrections;
- (b) Avon Glen Forests Limited; and
- (c) Peter and Susan Stewart.

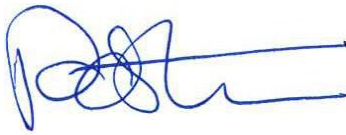
[5] The parties agree that costs should lie where they fall and accordingly no order for costs is sought.

[6] The parties advise that all matters proposed for the court’s endorsement

fall within the Environment Court's jurisdiction and conform to the relevant requirements of the RMA, including Part 2.

Outcome

[7] All parties to the proceeding have executed the memorandum requesting the orders. On the information provided to the court, I am satisfied that the orders will promote the purpose of the Act so I will make the orders sought.



P A Steven
Environment Judge



Appendix 1 – Consent Conditions

1. The proposed activity must be undertaken in general accordance with the approved plans set out below and the information provided with the resource consent application received by the Council on 25 January 2022, and further information received on 8 March 2022 and 23 June 2022 except where modified by the following conditions.
 - (a) Sheet C01, Site Layout, Revision D, dated 28/06/2023.
 - (b) Sheet C02, Cross-Section, Revision D, dated 28/06/2023.
 - (c) Sheet C03, Vehicle Site Tracking, Revision D, dated 28/06/2023.
 - (d) Sheet C04, Site Entrance, Revision D, dated 28/06/2023.
 - (e) Sheet C05, Site Entrance, RTS18 12m Rigid Truck, Revision D, dated 28/06/2023.
 - (f) Sheet C06, Site Entrance, Truck and Trailer, Revision D, dated 28/06/2023.
 - (g) Sheet C07, Site Entrance, RTS18 Semi Trailer, Revision D, dated 28/06/2023.
 - (h) Sheet C08, Hedge to be retained – Section 6 Tokomariro Survey District, Revision D, dated 28/06/2023.

Where there is a conflict between the approved information above and the conditions of consent, the conditions must prevail.

Pre-Commencement Conditions

2. Log storage, processing and wood chipping must not commence onsite until the consent holder completes the following:
 - (a) A minimum of 200,000 litres of water storage is provided onsite and kept full while this consent is being exercised. The water storage must be fitted with a 100mm Suction Coupling (Female) complying with NZS 4505:1977. Adjacent to the tank a hardstand area of a minimum dimension of 4.5 by 10 metres must be provided and kept free of obstructions at all times.
 - (b) A water pump for firefighting purposes must be located adjoining the water supply required by 2(a) capable of providing a high-pressure water supply exceeding 900 litres per minute at a pressure of 280 kpa.

- (c) The construction of the 2.5m earth bunds as shown on Sheet C01, Site Layout, Revision D, dated 28/06/2023 which must be sown with grass seed as soon as practicable following their construction.
- (d) The following catchment areas, stormwater swale, settling pond and design components as shown on Sheet C01, Site Layout, Revision D, dated 28/06/2023 and Sheet C02, Cross-Section, Revision D, dated 28/06/2023 must be completed prior to construction of impervious surfaces authorised by this consent.

<i>Works to be undertaken</i>	<i>Catchment Area</i>	<i>Design components</i>
<i>Stormwater treatment swale</i>	<i>~8ha</i>	<ul style="list-style-type: none"> • <i>6m wide trapezoidal shape</i> • <i>Grassed base and side slopes with check dams</i>
<i>Pond</i>	<i>~8ha</i>	<ul style="list-style-type: none"> • <i>At least 8m³ volume</i> • <i>Outfall structure designed in accordance with best practice to minimise local erosion</i>

- (e) A Vehicular Crossing Rural Permit Application must be submitted to Council including a plan(s) showing the plan view of the proposed surface area including any drainage culverts and surface water channels. The Permit Application must also include the proposed pavement design specifications which must be appropriate for the type and volume of traffic using the site entrance. The pavement design must extend a minimum of 40 metres along Back Road in either direction from the mid-point of the access.
- (f) The site access improvements and Back Road surfacing as shown in the plan(s) and specifications provided to Council in satisfying Condition 2(e) must be constructed.
- (g) Roadside vegetation at the site access must be removed (as necessary) to ensure 330 metres of visibility along Back Road in either direction. This sight distance must be maintained for the duration of the proposed activity.
- (h) The consent holder must provide the Site Manager's contact details in order for contact to be made to register a complaint to the owners and occupiers of the following properties: 107 West Road, 67 West Road; 395 Back Road, 196 West Road, 580 Back Road; 113 Forsyth Road and the following entities: Ara Poutama Aotearoa Department of Corrections and Avon Glen Forests Limited (including any successors to those entities).
- (i) The consent holder must submit a fire management plan (**FMP**) prepared by a suitably qualified and experienced person to Council for certification. The FMP must address, but not be limited to the following:
- (i) In order to prevent combustion of stored wood-chips onsite, management measures to be adopted to ensure that moisture content for logs prior to chipping is not less

than 20% water content and to reduce the risk of combustion as far as practicable including the regular turning of stored chip in accordance with industry best practice;

- (ii) Fire break locations and maintenance of bund vegetation;
 - (iii) Management of the site and land owned by the consent holder to prevent fire pathways in the event of a fire on the site;
 - (iv) Details of security and arson prevention measures including any fencing, sensor lighting or access control measures;
 - (v) Management measures to ensure the identification and removal of combustible debris around log storage areas and their regular removal from the site;
 - (vi) Requirement that all logs delivered to the site are to be debarked in accordance with best industry practice to avoid potential for debris build up;
 - (vii) Measures to be adopted by the consent holder to manage plant and machinery ignition;
 - (viii) Management procedures including the reticulation of water that are to be enacted during very high or extreme fire days as defined by the New Zealand Fire Danger Rating System and where relevant in accordance with the Forest Fire Risk Management Guidelines 2018 (including any replacement guidelines);
 - (ix) The location of the water storage and pump under conditions 2(a) and 2(b), including to ensure that they are not compromised in the event of a fire, and are accessible to a fire service appliance
 - (x) Other measures adopted by the consent holder through its standard procedures and processes adopted to control and mitigate ignition sources.
- (j) The consent holder must implement the FMP once certified by Council and the FMP may be updated from time to time when new guidance or advice is released and for the purpose of further avoiding, remedying or mitigating fire risk.

Operating Conditions

3. The activity (including wood-chipping and non-wood-chipping activities) must only occur in accordance with the following:
 - (a) Non-wood-chipping activities, including heavy commercial vehicle movements to and from the site, are permitted to operate between the hours of 0600 and 1900, Monday to Sunday.

- (b) Notwithstanding Condition 3(a), maintenance and administration activities that do not involve heavy machinery noise are permitted to operate at any time.
 - (c) Only one wood-chipper may be used on the site at any one time and may only be used between the hours of 0700 and 1800. Monday to Friday. Wood-chipping is not permitted on Saturdays, Sundays and Public Holidays except that Wood-chipping is permitted on Saturdays subject to the following restrictions:
 - (i) Wood-chipping on a Saturday may only occur where there has been a breakdown in the wood-chipper during that week;
 - (ii) No more than 10 Saturdays during any calendar year which may only operate during the hours 0700 and 1200.
 - (iii) Prior to any wood-chipping on a Saturday, the consent holder must give written notice to the owners and occupiers of the following properties: 107 West Road, 67 West Road; 395 Back Road, 196 West Road, 580 Back Road; 113 Forsyth Road and the following entities: Ara Poutama Aotearoa Department of Corrections and Avon Glen Forests Limited (including any successors to those entities).
 - (iv) The consent holder must give notice to the Council as soon as reasonably practicable following any wood-chipping on a Saturday for monitoring purposes.
 - (d) Logs may only be chipped where they have been fully seasoned on the site. The consent holder must keep records of the month of arrival of logs to the site and when those logs were chipped and must provide this information to Council at their request for monitoring purposes.
 - (e) Notwithstanding 3(d), during the first 8 months of wood-chipping, the consent holder may chip logs that have been partially or fully seasoned off-site.
 - (f) The wood-chipper must not operate within 75 metres of the north-western and north-eastern boundaries of the site as shown at Sheet C01, Site Layout, Revision D, dated 28/06/2023.
4. The maximum quantity of logs to be stored on site is 25,000 m³ (cubic metres).
 5. The maximum quantity of woodchips to be stored on site is 6,000 ³ (cubic metres).
 6. Logs must not be placed within 10 metres of any ephemeral stream in the site and all log stockpiles must not be higher than 6 metres in height from finished ground level.
 7. Debris in the swale and settling pond must be removed and disposed of appropriately at least once per month.

8. The earth bunds must be maintained at a minimum height of 2.5 metres. Grass on the earth bunds must be maintained to give a tidy appearance and ensure a full cover of grass.
9. The consent holder must maintain a record of all complaints relating to noise and dust caused by the activity, and must include:
 - (a) The location where the noise or dust was detected by the complainant;
 - (b) The date and time when the noise or dust was detected;
 - (c) A description of the wind speed and wind direction when the noise or dust was detected by the complainant;
 - (d) The most likely cause of the noise or dust detected; and
 - (e) Any corrective action undertaken by the consent holder to avoid, remedy or mitigate the noise or dust detected by the complainant.
 - (f) This record shall be provided to the Clutha District Council on request.
10. There must not be any permanently fixed flood lighting installed on the site. Any other external fixed lighting must operate with a sensor and be directed downwards below the horizontal.
11. Prior to the implementation of the consent the consent holder must submit an Operations Management Plan (**OMP**) prepared by a suitably qualified and experienced person to Council for certification. The OMP must address, but not be limited to the following:
 - (a) When the wood-chipper is being operated for maintenance or chipping the feed hopper/inlet must be directed to the eastern boundary of the Site.
 - (b) An obligation by the consent holder to inform heavy vehicle truck drivers of the access routes to and from the site:
 - (i) Access to the site being from State Highway 1 onto Narrowdale Road then to Back Road then to the site, except where logs are harvested from the Toko Mouth area in which case access will be from Toko Mouth Road to Back Road then to the Site (subject to any relevant bridge weight restrictions).
 - (ii) Access from the site is from Back Road, north to Narrowdale Road and onto State Highway 1.
 - (iii) To not use Forsyth Road and West Roads except where those roads must be used to access the site where other roads are closed.

- (c) An obligation by the consent holder to include as part of its induction requirements for the site's staff and heavy vehicle truck drivers in respect of the use of the Back Road and Narrowdale Road including:
 - (i) To inform heavy vehicle truck drivers of the operating hours and days of the Toko Golf Club (including Club Days);
 - (ii) The risk to patrons of the Toko Golf Club associated with increased heavy vehicle truck movements.
 - (iii) To inform heavy vehicle truck drivers to slow down when approaching and passing the Toko Golf Club.
 - (d) An obligation by the consent holder to invite the owners and occupiers of 107 West Road, 67 West Road; 395 Back Road, 196 West Road, 580 Back Road; 113 Forsyth Road and the following entities: Ara Poutama Aotearoa Department of Corrections and Avon Glen Forests Limited (including any successors to those entities) a meeting prior to construction works commencing and a meeting being prior to any wood-chipping commencing on site, and providing:
 - (i) A forum for the consent holder to introduce its staff and site manager, explain its operations and the timeline for construction works.
 - (ii) At one or both of those meetings a topic of discussion is to agree on an ongoing engagement strategy.
 - (iii) A forum for those parties to raise issues about the proposal and operation of the consent.
12. The consent holder must implement the OMP once certified by Council and the OMP may be updated from time to time for the purpose of further avoiding, remedying or mitigating adverse effects from operations on the site.
 13. A Stormwater Management Operation and Maintenance Plan (**SMOMP**) for the stormwater management and treatment system must be submitted to the Council for certification within 30 days of completion of the installation of the stormwater mitigation works set out in Condition 2(d) of this consent.
 14. The SMOMP must set out how the stormwater management and treatment system is to be operated and maintained to ensure adverse environmental effects from stormwater are minimised. The plan must include, but not be limited to:
 - (a) A programme for regular maintenance and inspection of the stormwater management system;

- (b) A programme for the collection and disposal of debris and sediment collected by the stormwater management devices or practices;
 - (c) General inspection checklists for all aspects of the stormwater management system, including visual checks.
 - (d) Log storage handling procedures including documentation of minimum separation distance to any ephemeral stream and contaminant source control (off site debarking, site bark management).
15. The consent holder must implement the SMOMP once certified by Council and the SMOMP may be updated from time to time for the purpose of further avoiding, remedying or mitigating adverse effects associated with the management of stormwater on the site.

Visual Mitigation

16. Within 6 months of, but not later than the end of the first planting season after, completion of construction of the earth bunds (in accordance with Condition 2(c)), shelterbelts must be planted on the outside of the earth bunds along the entire length of the north-western, north-eastern and south-western boundaries of the site, with the exception of the site access to Back Road as shown on Sheet C01, Site Layout, Revision D, dated 28/06/2023. The shelterbelts must comprise fast growing, evergreen species that grow to mitigate the visual impact of the activity along the boundaries to a height of at least 6 metres. The shelterbelts must be maintained and any dead or dying trees are to be replaced.
17. The existing hedge located on Section 6 Block I Tokomariro Survey District as shown on Sheet C08, Hedge to be retained – Section 6 Tokomariro Survey District, Revision D, dated 28/06/2023 must be maintained and any dead or dying trees to be replaced, at least until such time as the screening required by condition 16 above has reached a minimum height of 6 metres.

Construction Conditions

18. During all construction earthworks the consent holder must implement dust control measures, including (but not limited to) dampening areas of exposed earth, and reinstatement of areas of exposed earthworks with vegetation or gravel hardfill following completion of earthworks.
19. Noise arising from construction work of bunds and other preparation work must comply with the limits recommended in and shall be measured and assessed in accordance with New Zealand Standard NZS 6803:1999 Acoustics - Construction Noise.
20. If the consent holder:

- (a) discovers koiwi tangata (human skeletal remains), waahi taoka (resources of importance), waahi tapu (places or features of special significance) or other Māori artefact material, the consent holder must without delay:
 - (i) notify the Consent Authority, Tangata whenua and Heritage New Zealand and in the case of skeletal remains, the New Zealand Police.
 - (ii) stop work within the immediate vicinity of the discovery to allow a site inspection by Heritage New Zealand and the appropriate runanga and their advisors, who must determine whether the discovery is likely to be extensive, if a thorough site investigation is required, and whether an Archaeological Authority is required.
 - (iii) Any koiwi tangata discovered must be handled and removed by tribal elders responsible for the tikanga (custom) appropriate to its removal or preservation.
 - (iv) Site work must recommence following consultation with the Consent Authority, Heritage New Zealand, Tangata whenua, and in the case of skeletal remains, the New Zealand Police, provided that any relevant statutory permissions have been obtained.
- (b) discovers any feature or archaeological material that predates 1900, or heritage material, or disturbs a previously unidentified archaeological or heritage site, the consent holder must without delay:
 - (i) stop work within the immediate vicinity of the discovery or disturbance, and
 - (ii) advise the Consent Authority, Heritage New Zealand, and in the case of Māori features or materials, the Tangata whenua, and if required, must make an application for an Archaeological Authority pursuant to the Historic Places Act 1993, and
 - (iii) arrange for a suitably qualified archaeologist to undertake a survey of the site.

Site work must recommence following consultation with the Consent Authority.

Noise Monitoring

- 21. Within eight weeks of the commencement of chipping activity on the site the consent holder must engage a suitably qualified and experienced person to measure and assess noise from the activity in accordance with NZS6801:2008 and NZS6802:2008 to determine compliance with the relevant noise standards of the Clutha District Plan. The calculated noise rating level must be reported assuming that the woodchipper was operating for the full permitted period. A report prepared by a suitably qualified and experienced person detailing the monitoring results must be forwarded to Council within six weeks of the monitoring being undertaken.

Rehabilitation Condition

22. In the event wood storage and processing activity is discontinued on the site for a period more than two years, the site must be cleared of all wood, debris, gravel hardstand, and structures associated with the activity. Topsoil must be reinstated using soil from the bunds to achieve a flat uniform surface across the entire site and resown in a typical pasture mix.

Review Condition

23. The Clutha District Council may, during the month of May each year, review any or all of the conditions of the consent pursuant to section 128 of the Resource Management Act 1991 for all or any of the following purposes
- (a) To deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or
 - (b) To require the consent holder to adopt the best practicable option to remove, remediate or reduce any adverse effects on the environment resulting from the activity; and/or
 - (c) To review the noise limits, hours of operation and methodology of chipping should adverse, noise, dust or nuisance effects become an issue.

Advice Notes:

1. *In addition to the conditions of a resource consent, the Resource Management Act 1991 establishes through sections 16 and 17 a duty for all persons to avoid unreasonable noise, and to avoid, remedy or mitigate any adverse effect created from an activity they undertake.*
2. *Resource consents are not personal property. The ability to exercise this consent is not restricted to the party who applied and/or paid for the consent application.*
3. *It is the responsibility of any party exercising this consent to comply with any conditions imposed on the resource consent prior to and during (as applicable) exercising the resource consent. Failure to comply with the conditions may result in prosecution, the penalties for which are outlined in section 339 of the Resource Management Act 1991.*
4. *The lapse period specified above may be extended on application to the Council pursuant to section 125 of the Resource Management Act 1991.*

Appendix 2



1:1000 @ A1
1:2000 @ A3

REVISION	AMENDMENT	APPROVED	DATE
B	UPDATED VEHICLE TRACKING CURVES	S. R.	2022.03.02
C	UPDATED "CL" LOCATION	S. R.	2022.05.12
D	UPDATED CONCEPT	S. R.	2023.06.13



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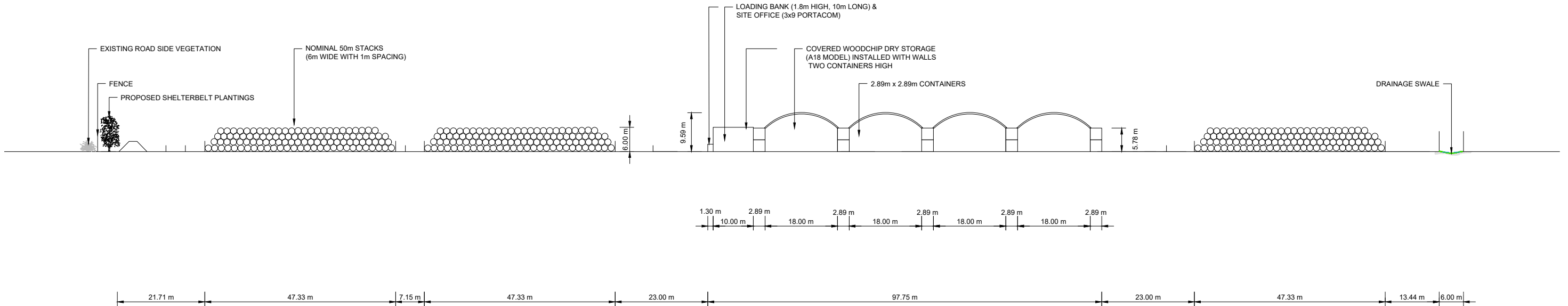
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J. WILLIAMS		S. ROBERTS
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
M. OWEN		2023/06/28

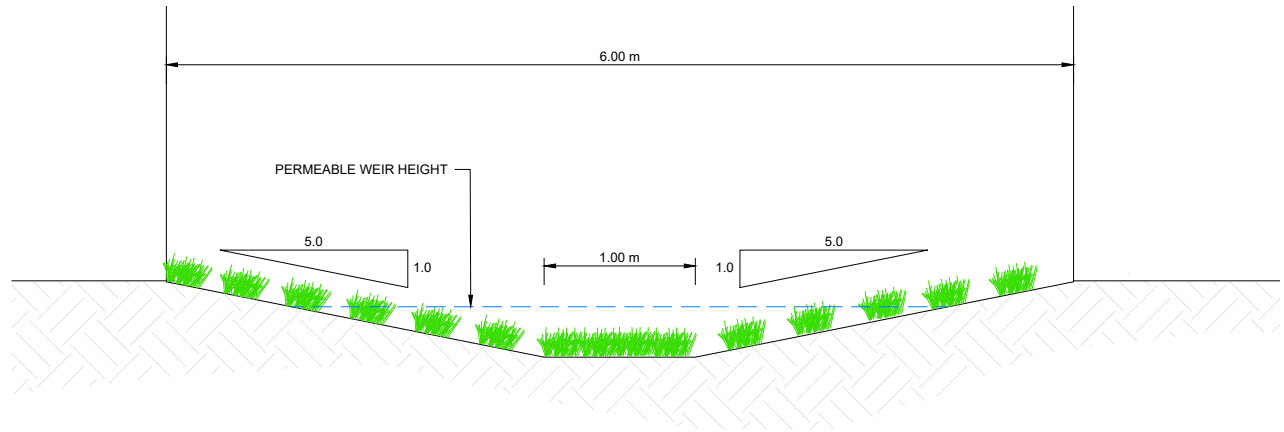
FOR CONSENT

PROJECT PIONEER ENERGY LIMITED 464 BACK ROAD, MILTON MILTON WOOD HUB		
TITLE SITE LAYOUT		
WSP PROJECT NO. (SUB-PROJECT) 6-CR058.00	SHEET NO. C01	REVISION D

300 mm
200
100
50
0 10 mm



1 SECTION
C01 SCALE: 1:500



SWALE SECTION
SCALE: 1:25

1:50 @ A1
1:100 @ A3

1:500 @ A1
1:1000 @ A3

REVISION	AMENDMENT	APPROVED	DATE
B	UPDATED VEHICLE TRACKING CURVES	S.R	2022.03.02
C	UPDATED "CL" LOCATION	S.R	2022.05.12
D	UPDATED CONCEPT	S.R	2023.06.13



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CIVIL

SCALES			ORIGINAL SIZE
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DRAWN	DESIGNED	APPROVED	
J. WILLIAMS		S. ROBERTS	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
M. OWEN		2023/06/28	

FOR CONSENT

PROJECT		
PIONEER ENERGY LIMITED 464 BACK ROAD, MILTON MILTON WOOD HUB		
TITLE		
CROSS - SECTION		
WSP PROJECT NO. (SUB-PROJECT)		SHEET NO.
6-CR058.00		C02
		REVISION
		D



VEHICLE LEGEND

Semi-Trailer
Overall Length 17.900m
Overall Width 2.500m
Overall Body Height 3.695m
Min Body Ground Clearance 9.417m
Track Width 2.500m
Lock-to-lock time 6.00s
Wall to Wall Turning Radius 10.000m

SU+T - Single Unit + Trailer
Overall Length 18.600m
Overall Width 2.500m
Overall Body Height 3.632m
Min Body Ground Clearance 9.337m
Track Width 2.500m
Lock-to-lock time 4.00s
Wall to Wall Turning Radius 10.000m

Large Rigid Truck
Overall Length 11.500m
Overall Width 2.500m
Overall Body Height 3.632m
Min Body Ground Clearance 9.427m
Track Width 2.500m
Lock-to-lock time 6.00s
Wall to Wall Turning Radius 12.000m

LEGEND

- 2.5m HIGH NOISE BUND
- LOGS
- PROPERTY BOUNDARY
- SIGN
- SWALE
- VEGETATION EXISTING
- VEGETATION PURPOSED
- VEHICLE PATH
- 75m BUFFER AREA

REVISION	AMENDMENT	APPROVED	DATE
B	UPDATED VEHICLE TRACKING CURVES	S.R	2022.03.02
C	UPDATED "CL" LOCATION	S.R	2022.05.12
D	UPDATED CONCEPT	S.R	2023.06.13





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CIVIL

SCALES
1:750 @ A1, 1:1500 @ A3

ORIGINAL SIZE
A1

DRAWN
J. WILLIAMS

DESIGNED

APPROVED
S. ROBERTS

DRAWING VERIFIED
M. OWEN

DESIGN VERIFIED

APPROVED DATE
2023/06/28

FOR CONSENT

PROJECT PIONEER ENERGY LIMITED 464 BACK ROAD, MILTON MILTON WOOD HUB
TITLE VEHICLE SITE TRACKING
WSP PROJECT NO. (SUB-PROJECT) 6-CR058.00
SHEET NO. C03
REVISION D



REVISION	AMENDMENT	APPROVED	DATE
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C	UPDATED "CL" LOCATION	S.R	2022.05.12
D	UPDATED CONCEPT	S.R	2023.06.13



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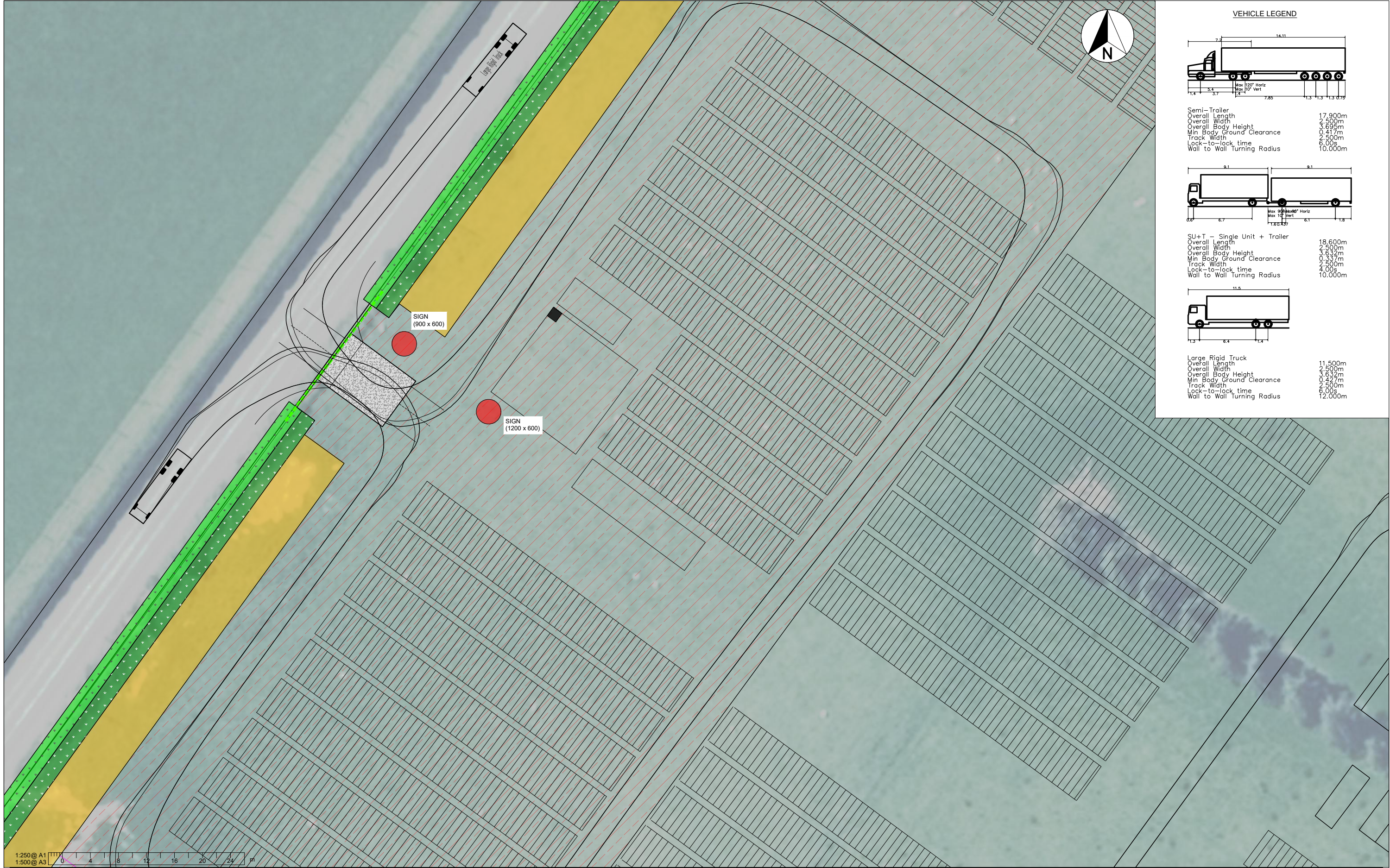
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New Zealand

CIVIL

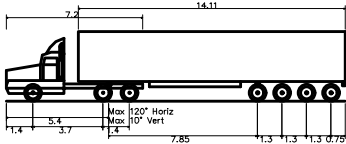
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DRAWN	DESIGNED	APPROVED
J. WILLIAMS	-	S. ROBERTS
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
M. OWEN	-	2023/06/28

FOR CONSENT

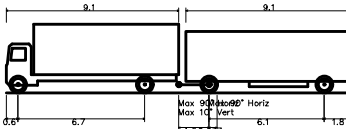
PROJECT		
PIONEER ENERGY LIMITED		
464 BACK ROAD, MILTON		
MILTON WOOD HUB		
TITLE		
SITE ENTRANCE		
WSP PROJECT NO. (SUB-PROJECT)		SHEET NO.
6-CR058.00		C04
		REVISION
		D



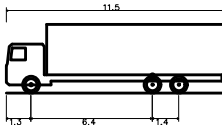
VEHICLE LEGEND



Semi-Trailer
Overall Length 17.900m
Overall Width 2.500m
Overall Body Height 3.695m
Min Body Ground Clearance 0.417m
Track Width 2.500m
Lock-to-lock time 6.00s
Wall to Wall Turning Radius 10.000m



SU+T - Single Unit + Trailer
Overall Length 18.600m
Overall Width 2.500m
Overall Body Height 3.632m
Min Body Ground Clearance 0.337m
Track Width 2.500m
Lock-to-lock time 4.00s
Wall to Wall Turning Radius 10.000m



Large Rigid Truck
Overall Length 11.500m
Overall Width 2.500m
Overall Body Height 3.632m
Min Body Ground Clearance 0.427m
Track Width 2.500m
Lock-to-lock time 6.00s
Wall to Wall Turning Radius 12.000m

REVISION	AMENDMENT	APPROVED	DATE
B	UPDATED VEHICLE TRACKING CURVES	S.R	2022.03.02
C	UPDATED "CL" LOCATION	S.R	2022.05.12
D	UPDATED CONCEPT	S.R	2023.06.13



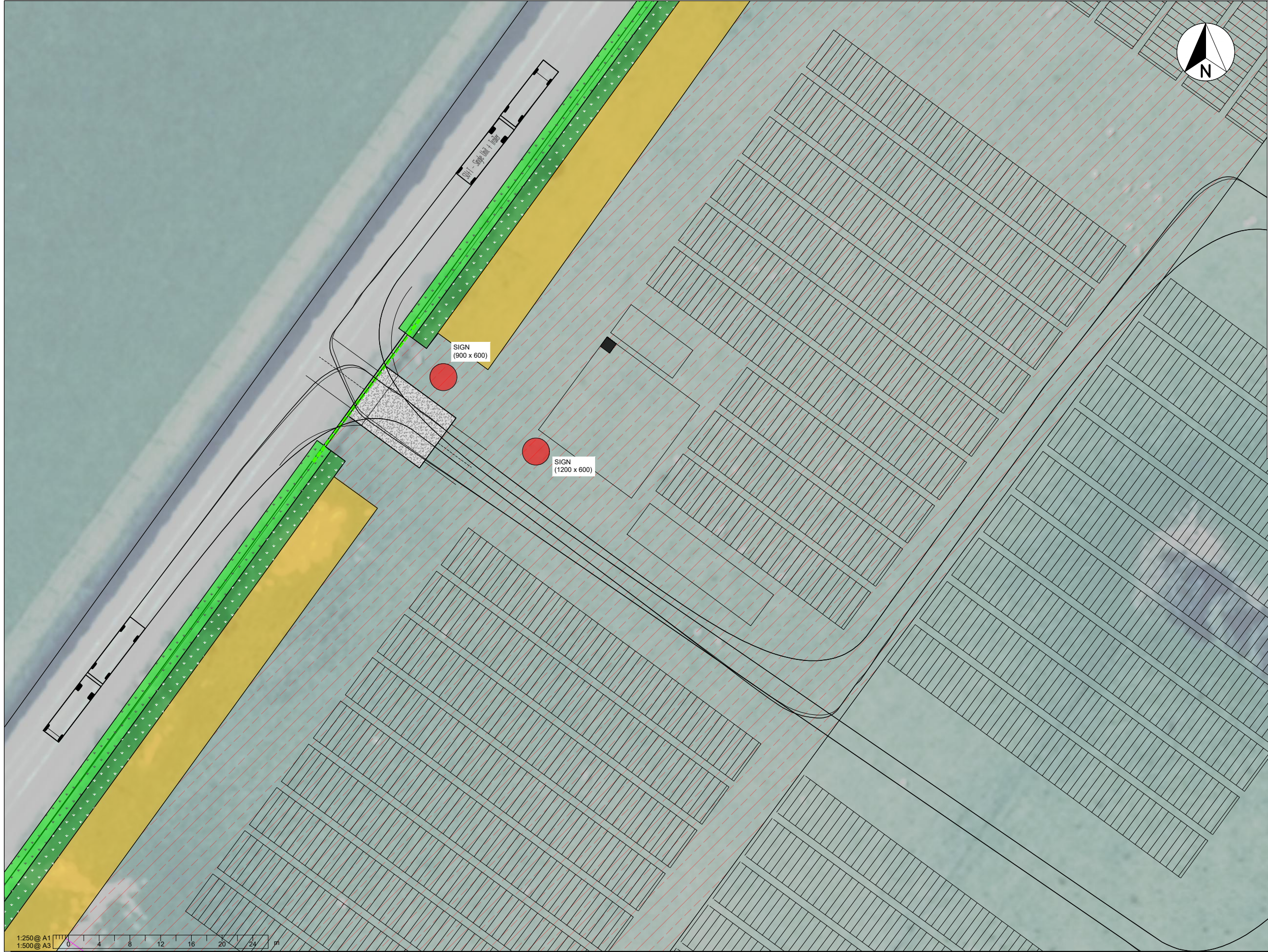
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CIVIL

SCALES		ORIGINAL SIZE
1:250 @ A1	1:500 @ A3	A1
DRAWN J. WILLIAMS	DESIGNED	APPROVED S. ROBERTS
DRAWING VERIFIED M. OWEN	DESIGN VERIFIED	APPROVED DATE 2023/06/28

FOR CONSENT

PROJECT PIONEER ENERGY LIMITED 464 BACK ROAD, MILTON MILTON WOOD HUB	SHEET NO. C05	REVISION D
TITLE SITE ENTRANCE RTS18 12m RIGID TRUCK		
WSP PROJECT NO. (SUB-PROJECT) 6-CR058.00		



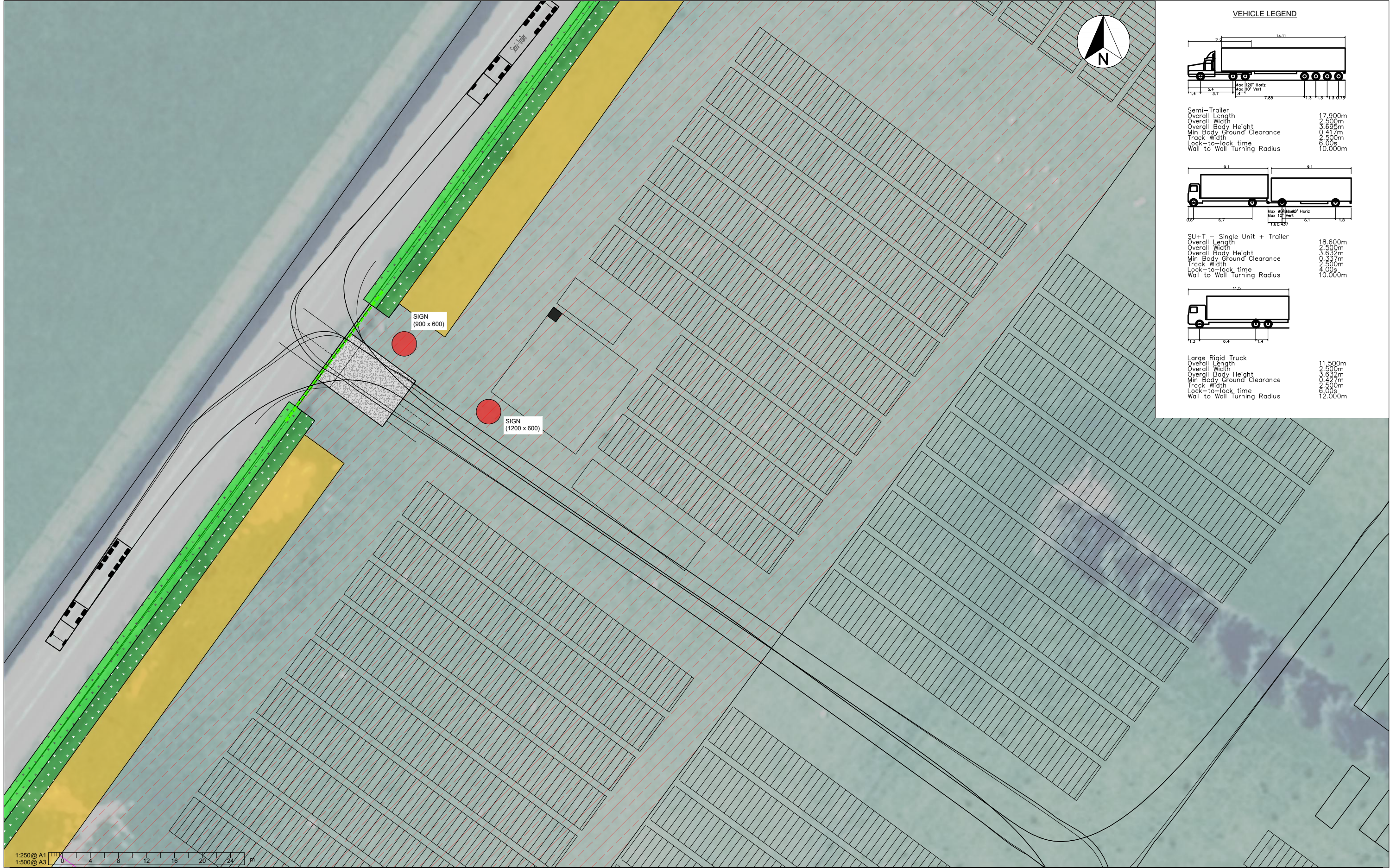
VEHICLE LEGEND

Semi-Trailer
Overall Length 17.900m
Overall Width 2.500m
Overall Body Height 3.695m
Min Body Ground Clearance 0.417m
Track Width 2.500m
Lock-to-lock time 6.00s
Wall to Wall Turning Radius 10.000m

SU+T - Single Unit + Trailer
Overall Length 18.600m
Overall Width 2.500m
Overall Body Height 3.632m
Min Body Ground Clearance 0.337m
Track Width 2.500m
Lock-to-lock time 4.00s
Wall to Wall Turning Radius 10.000m

Large Rigid Truck
Overall Length 11.500m
Overall Width 2.500m
Overall Body Height 3.632m
Min Body Ground Clearance 0.427m
Track Width 2.500m
Lock-to-lock time 6.00s
Wall to Wall Turning Radius 12.000m

REVISION	AMENDMENT	APPROVED	DATE				PROJECT		
B	UPDATED VEHICLE TRACKING CURVES	S.R	2022.03.02			Dunedin Office +64 3 471 5500	PIONEER ENERGY LIMITED		
C	UPDATED "CL" LOCATION	S.R	2022.05.12				464 BACK ROAD, MILTON		
D	UPDATED CONCEPT	S.R	2023.06.13				MILTON WOOD HUB		
							TITLE		
				CIVIL			SITE ENTRANCE		
							TRUCK AND TRAILER		
							WSP PROJECT NO. (SUB-PROJECT)		
				FOR CONSENT			6-CR058.00		
							SHEET NO.		
							C06		
							REVISION		
							D		



REVISION	AMENDMENT	APPROVED	DATE
B	UPDATED VEHICLE TRACKING CURVES	S.R	2022.03.02
C	UPDATED "CL" LOCATION	S.R	2022.05.12
D	UPDATED CONCEPT	S.R	2023.06.13



Dunedin Office
+64 3 471 5500
Private Bag 1913
Dunedin 9016
New Zealand

CIVIL

SCALES		ORIGINAL SIZE
1:250 @ A1	1:500 @ A3	A1
DRAWN J. WILLIAMS	DESIGNED	APPROVED S. ROBERTS
DRAWING VERIFIED M. OWEN	DESIGN VERIFIED	APPROVED DATE 2023/06/28

FOR CONSENT

PROJECT PIONEER ENERGY LIMITED 464 BACK ROAD, MILTON MILTON WOOD HUB
TITLE SITE ENTRANCE RTS18 SEMI TRAILER
WSP PROJECT NO. (SUB-PROJECT) 6-CR058.00
SHEET NO. C07
REVISION D



REVISION	AMENDMENT	APPROVED	DATE
1	VEHICLE TRACKING CURVES	S. R.	2022.03.02
2	VEHICLE TRACKING CURVES	S. R.	2022.05.12
3	VEHICLE TRACKING CURVES	S. R.	2023.06.13



Dunedin Office
+64 3 471 5500
Private Bag 1913
Dunedin 9016
New Zealand

CIVIL

SCALES		ORIGINAL SIZE
1:750 @ A1, 1:1500 @ A3		A1
DRAWN	DESIGNED	APPROVED
J. WILLIAMS		S. ROBERTS
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
M. OWEN		2023/06/28

FOR CONSENT

PROJECT	
PIONEER ENERGY LIMITED 464 BACK ROAD, MILTON MILTON WOOD HUB	
TITLE	
HEDGE TO BE RETAINED - SECTION 6 TOKOMAIRIRO SURVEY DISTRICT	
WSP PROJECT NO. (SUB-PROJECT)	REVISION
6-CR058.00	D
SHEET NO.	
C08	

