

Environmental Approval EP2022/022-001

Holtze Development Area

2024 Annual Compliance Report

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Endorsement

I Louise delegate of the Chief Executive Officer of the Northern Territory of Australia Department of Logistics and Infrastructure and Approval Holder of EP2022/022-001 endorse that this Compliance Report to the best of my knowledge is true and correct.

Signature: *Louise Minni*

Date: *14 April 2025*

1. Introduction

This Compliance Report has been prepared by the Department of Logistics and Infrastructure (DLI) in accordance with Condition 10 of Environmental Approval Number EP2022/022-001 issued pursuant to Section 69 of the *Environment Protection Act 2019* for the Holtze Development Area.

2. Reporting period

This compliance report covers the period from 1 January 2024 to 31 December 2024.

3. Action summary

During this reporting period, the following works were undertaken within the Holtze Development Area:

1. Land Remediation tender awarded 26 April 2024 to NTEX Pty Ltd for Darwin – Holtze – Land Remediation Works (T23-1690) with commencement on site 20 May 2024 and practical completion 2 October 2024
2. Construction Tender awarded to AKJ Services Pty Ltd for Darwin Region – Holtze – Part A Land Release Infrastructure (T23-1346)
3. Tender Award 24 September 2024
4. Possession of site given 30 October 2024
5. CEMP and ESCP accepted 1 November 2024 and implemented on site
6. 'Typhonium protection area' fence constructed
7. Temporary site compound constructed
8. Glyde Point Road duplication commencement (clearing and grubbing, survey and formation)
9. Linco Road duplication commencement (clearing and grubbing, survey and formation)
10. Clearing of 4.5 ha in the Holtze Land Release area

4. Compliance with conditions

4.1. Condition 1 – Limitations and extent of action

4.1.1. Compliance statement

Condition No.	Condition	Compliance statement
1	Limitations and extent of action	
1-1	<p>When implementing the action, the approval holder must ensure the action does not exceed the following extent:</p> <ol style="list-style-type: none"> 1. Land clearing – No more than 116 ha in total to be cleared within the approved extent shown in Figure 1. Avoid clearing significant and sensitive vegetation within the approved extent, to the maximum extent practicable. 	Compliant

Condition No.	Condition	Compliance statement
	<p>2. Direct disturbance of <i>Typhonium praetermissum</i> - All individual <i>Typhonium praetermissum</i> plants within the Typhonium protection area shown at Figure 2 must be retained and protected.</p> <p>3. Direct disturbance of <i>Cycas armstrongii</i> - No clearing of very high density or high density occurrences of <i>Cycas armstrongii</i> as shown at Figure 3.</p>	

4.1.2. Supporting evidence

Under condition 1-1 (1) approximately 4.5ha of native vegetation clearing has occurred in 2024 to accommodate the road duplication works and temporary site compound. Appendix A includes drone footage imagery of the area of disturbance. Appendix B detailed design drawings include the extent of works under the contract.

The Typhonium protection area identified within Figure 2 requiring protection under condition 1-1 (2) has been fenced as per Figure 2. Appendix C includes images of the completed fence and design drawing R23-3178 showing the location.

The 2023 Holtze Development Area Compliance Report provided an updated density map with the refined survey area results, and supporting letter to ensure compliance with condition 1-1 (3). The Part B 75% design drawings have overlayed this information and Drawing C08, C204, C450, C451, C452 and C453 identify the location of the protected Cycad area and the proposed temporary construction fence location (Appendix D). Part B works are yet to commence, Part A works do not intersect the cycad protection area. Temporary fencing will be undertaken under the Part B contract works between the services corridor limit of works and cycad protection area.

4.1.3. Non-compliance details

There were no non-compliances relevant to these approval conditions during the reporting period.

4.1.4. Achievement of environmental objective

Based on the statement of compliance and supporting information, the approval holder believes that the Condition 1, limitations and extent of action has been met. It is noted that condition 1-1 (3) on ground protection works will be undertaken under Part B development works.

4.2. Condition 2 – Terrestrial ecosystems

4.2.1. Compliance statement

Condition No.	Condition	Compliance statement
2	Terrestrial ecosystems	
2-1	The approval holder must implement the action to meet the following environmental objective:	Compliant

Condition No.	Condition	Compliance statement
	protect terrestrial habitats to maintain flora and fauna values including biodiversity, ecological integrity and ecological functioning.	
2-2	<p>To support achievement of condition 2-1, the approval holder must implement the action in such a manner that:</p> <ol style="list-style-type: none"> (1) the condition of habitat within the Typhonium protection area for <i>Typhonium praetermissum</i> is maintained or improved; (2) the long-term security of <i>Typhonium praetermissum</i> plants within the Typhonium protection area is maintained, through implementing measures such as restrictions on land use and access; (3) habitat quality and condition within the Typhonium protection area is monitored and assessed periodically to measure the viability of the protection area and its capacity to support conservation of capacity to support conservation of <i>Typhonium praetermissum</i> and demonstrate that condition 2-2(1) is achieved; (4) is consistent with any <i>Typhonium praetermissum</i> regional conservation management strategy developed by the Northern Territory Government; (5) the long term security of retained occurrences of high and very high density <i>Cycas armstrongii</i> areas, is maintained through implementing measures such as restrictions on land use and access; (6) is consistent with any regional conservation strategy for woodland species developed by the Northern Territory Government; and (7) controls the introduction and spread of declared weeds and invasive exotic plants. 	Compliant

4.2.2. Supporting evidence

A Typhonium Management Plan (TMP) for the Typhonium Protection Area is in draft and is available on request. DLI intends to work with Department of Lands Planning and Environment (DLPE) Crown Lands Division and Flora and Fauna Division to finalise the TMP in 2025. This TMP details management measures to ensure the protection of the plants in accordance with the approval conditions. Fencing undertaken by the Contractor awarded Part A, AKJ between November and December 2024, contributes to addressing condition 2-2 (2). Other actions within the management plan did not commence before 31 December 2024. All future compliance reports provided under this approval will detail actions undertaken during the reporting period as part of the TMP implementation.

Compliance against conditions 2-2 (1), (3) will be demonstrated via full implementation of the TMP over coming years. Information will be contained in future compliance reporting.

Condition 2-2 (4) and (6) can only be demonstrated once these regional strategies exist. Currently they do not exist.

Condition 2-2 (5) has been partially met. The Cycad protection area has been refined and identified on design drawings (Appendix D). Temporary fencing works will be installed under Part B works to restrict land use and access and will be reported on as per annual compliance reporting requirements.

4.2.3. Non-compliance details

There were no non-compliances relevant to these approval conditions during the reporting period.

4.2.4. Achievement of environmental objective

Based on the statement of compliance and supporting information, the approval holder believes that the environmental objective to protect terrestrial habitats to maintain flora and fauna values including biodiversity, ecological integrity and ecological functioning has been met.

4.3. Condition 3 – Inland water environmental quality

4.3.1. Compliance statement

Condition No.	Condition	Compliance statement
3	Inland water environmental quality	
3-1	<p>The approval holder must prepare an Erosion and Sediment Control Plan (ESCP) prior to substantial implementation that:</p> <ul style="list-style-type: none"> (1) has been developed by a Certified Professional in Erosion and Sediment Control (CPESC) in accordance with International Erosion Control Association (IECA) 2008 <i>Best Practice Erosion and Sediment Control</i> document; and (2) provides detail of the design, implementation, monitoring, maintenance and removal of erosion, sediment and drainage controls in all exposed soil areas during construction; (3) reviewed by a CPESC within 12 months of substantial implementation, or at any time if: <ul style="list-style-type: none"> a. ongoing monitoring identifies a failure of the ESCP; or b. an accelerated or changed work program is required. 	Compliant

4.3.2. Supporting evidence

The Contractor CEMP and ESCP was assessed and accepted on 1 November 2024 for Part A - Land Release Infrastructure (T23-1346). A copy of the Part A works ESCP is attached in Appendix E. Implementation of the ESCP has occurred on site. On 21 January 2025, a site inspection was conducted by a licenced CPESC and a site inspection report is included in Appendix F. Future reporting will include details to support condition 3-1 (2) and (3).

The certified ESCP implemented for works conducted in this reporting period is titled:

Greater Holtze - Holtze Headworks ESCP, drawing date 13/02/2025, CPESC number – 9681.

4.3.3. Non-compliance details

There were no non-compliances relevant to these approval conditions during the reporting period.

4.3.4. Achievement of environmental objective

Based on the statement of compliance and supporting information, the approval holder believes that the environmental objective to protect inland water environmental quality has been met. It is noted that future compliance reporting will further address condition 3-1. (2) and (3).

4.4. Condition 4 – Community and economy

4.4.1. Compliance statement

Condition No.	Condition	Compliance statement
4	Community and economy	
4-1	<p>The approval holder must implement measures, to mitigate construction noise and vibration, that meet:</p> <ul style="list-style-type: none"> (1) construction noise management levels established using the Northern Territory Noise Management Framework Guideline (NT EPA 2018); (2) vibration criteria established using the Assessing vibration: a technical guideline (NSW Department of Environment and Conservation 2006) (for human exposure); (3) BS 7385 Part 2-1993 “Evaluation and measurement for vibration in buildings Part 2” as applicable to Australian conditions; and (4) the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage). 	Compliant
4-2	In addition to the performance outcomes, commitments and mitigation measures specified in the referral , all reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during the construction and operation of the action.	Compliant

4.4.2. Supporting evidence

Section 16 – Risk Assessment of the Contractor CEMP includes a desktop assessment of potential environmental risks. The Contractor states: *The Risk Assessment conducted for the Project has been undertaken in accordance with Australian and International Standards (AS/NZS ISO 9001, AS/NZS 4801 and AS/NZS 14001) and is applicable to the assessment of the workplace and environmental risks associated with the Project areas.* (DLI note there are typographic errors in the references to Australian standards within the CEMP). The CEMP is included in Appendix G.

The Contractor CEMP includes subsection 1.10.10 Noise and Vibration Control. The CEMP subsection 1.10.10 includes mitigation measures to reduce the risk of impact to sensitive receptors.

Subsection 1.10.9 Air Quality includes mitigation measures to reduce the risk of dust generation and other air pollutant emissions associated with construction works.

CEMP section 7 Community Consultation and Complaints Handling includes details on the recording and handling of complaints. This procedure relates to any complaints and is a tool for gauging compliance with condition 4-1 and 4-2.

No complaints were registered during construction works in 2024.

4.4.3. Non-compliance details

There were no non-compliances relevant to these approval conditions during the reporting period.

4.4.4. Achievement of environmental objective

Based on the statement of compliance and supporting information, the approval holder believes that the environmental objective to protect community and economy values including noise and vibration, and dust and air pollutants has been met.

4.5. Condition 5 – Culture and heritage

4.5.1. Compliance statement

Condition No.	Condition	Compliance statement
5	Cultural and heritage	
5-1	<p>Prior to substantial implementation, the approval holder must:</p> <ul style="list-style-type: none"> (1) undertake further archaeological investigation and review within the proposal area in proximity to Mitchell Creek (in the southern part of Section 4231); and (2) implement to the extent practicable, the outcomes of the archaeological investigation and review, including recommendations for measures to avoid or minimise disturbance to Aboriginal heritage places or objects where objects are found to be present. 	Compliant
5-2	<p>The scope of works for the further archaeological investigation and review required by condition 5-1(1), must:</p> <ul style="list-style-type: none"> (1) include protocols for the survey, a review of mitigation measures and provisions to recommend new mitigation measures, if required; and (2) be developed in consultation with, and to the satisfaction of, the Heritage Branch of DTFHC. 	Compliant

4.5.2. Supporting evidence

Condition 5-1 (1) and (2) and 5-2 (1) and (2) was addressed in the 2023 Compliance Report and is closed out.

Current Part A construction works are not in the vicinity of the archaeological features identified in the survey works undertaken in 2023.

The current Aboriginal Areas Protection Authority Certificate is referenced in the Contractor CEMP and it is noted that the restricted works areas identified in the certificate are not in the vicinity of project works.

4.5.3. Non-compliance details

There were no non-compliances relevant to these approval conditions during the reporting period.

4.5.4. Achievement of environmental objective

Based on the statement of compliance and supporting information, the approval holder believes that the environmental objective to protect culture and heritage values has been met.

4.6. Conditions 6-10 – Administrative conditions

4.6.1. Compliance statement

Condition No.	Condition	Compliance statement
6	Commencement of action	
6-1	This approval expires five (5) years after the date on which it is granted, unless substantial implementation has commenced on or before that date.	Compliant
6-2	Within 10 business days of substantial implementation of the action the approval holder must provide notification in writing to the Minister .	Non-compliant
7	Completion of action	
7-1	The approval holder must provide notification in writing to the Minister within 10 business days of completion of the action .	NA
8	Change of contact details	
8-1	The approval holder must provide notification in writing to the Minister of any change of its name, physical address or postal address for the serving of notices or other correspondence within 10 business days of such change.	Non-compliant
9	Staging, combining and updating plans or programs	
9-1	The approval holder may: <ul style="list-style-type: none"> (1) prepare and submit any plan or program required by this approval on a staged basis (if a clear description is provided as to the specific stage and scope of the action to which the plan or program applies, the relationship of the stage to any future stages and the trigger for updating the plan or program); (2) combine any plan or program required by this approval (if a clear relationship is demonstrated between the plans or programs that are proposed to be combined); and (3) update any plan or program required by this approval (to ensure the plans and programs required under this approval are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the action) 	Compliant
9-2	Updated plans or programs supersede the previous versions of them and must be implemented in accordance with the conditions of this approval that require the plan or program.	NA
10	Annual compliance reporting	
10-1	The approval holder must provide an annual compliance report to the Minister for the purpose of determining whether the conditions of this environmental approval are being complied with.	Compliant
10-2	Unless a different date or frequency is approved by the Minister, the first annual compliance report must be submitted by 30 April addressing the period of the preceding calendar year from 1 January to 31 December, and subsequent reports must be submitted annually from that date.	Compliant
10-3	Each annual compliance report must be endorsed by the approval holder, or a person approved by approval holder to be delegated to sign on the approval holder's behalf.	Compliant

Condition No.	Condition	Compliance statement
10-4	Each annual compliance report must: <ol style="list-style-type: none"> (1) state whether each condition of this approval has been complied with, including: <ol style="list-style-type: none"> a. exceedance of any limits and extents; b. achievement of environmental objectives; c. requirements to implement the action; d. monitoring requirements; and e. reporting requirements. (2) include the results of monitoring (inclusive of any raw data) in order to demonstrate compliance with the each condition of this approval; (3) provide evidence to substantiate statements of compliance, or details of where there has been a non-compliance; (4) include the corrective, remedial and preventative actions taken in response to any potential non-compliance; and (5) be provided in a form suitable for publication online by the DEPWS. 	Compliant
11	Provision of environmental data	
11-1	All environmental monitoring data required to be collected or obtained under this environmental approval and the approval holder's commitments, standards and management plans must be retained by the approval holder for a period of not less than 10 years commencing from the date that the data is collected or obtained.	Compliant
11-2	The approval holder must, as and when directed by the Minister, provide any environmental data (including sampling design, sampling methodologies, empirical data and derived information products such as maps) relevant to the assessment of the action and implementation of this environmental approval, to the Minister in the form and manner and at the intervals specified in the direction.	NA

4.6.2. Supporting evidence

Condition 6-1 – Works commenced within 5 years of the Environmental Approval determination. Tender awarded 24 October 2024 to AKJ Services Pty Ltd for Darwin Region – Holtze – Part A Land Release Infrastructure (T23-1346). Possession of site given 30 October 2024.

Condition 9-1 (1), (2) and (3) have been addressed for Part A construction works. Refer to Appendix H for the project schedule and staging plans for works. Part B works are in the planning phase with tender release to be confirmed.

DLI as the approval holder provide this endorsed 2024 annual compliance report within the reporting timeframes as per condition 10-1, 10-2, 10-3 and 10-4.

DLI Land Servicing and Engineering as the agency delivering the Part A and B construction works will be responsible for record keeping and data collection. An NTG Content Manager folder has been set up for the collection of this data. TRM File – Part A: LPD10172 and Part B: LPD10242. Data will be held and be available on request which meets condition 11-1 and 11-2.

4.6.3. Non-compliance details

Non-compliance against Condition 6-2

DLI did not notify the regulator of proposed substantial implementation of the project (i.e. commencement) within 10 business days of the action being taken. This compliance report is provided identifying the commencement date on site for substantial implementation. That is: Darwin Region – Holtze – Part A Land Release Infrastructure (T23-1346) construction works.

Non-compliance against Condition 8-1

Under the change of Government following the Northern Territory election on 24 August 2024, the following months saw substantial changes in government department structures and ministerial portfolios.

As a result of the Machinery of Government changes, the previously known Department of Infrastructure Planning and Logistics (DIPL) is now identified as Department of Logistics and Infrastructure (DLI). DIPL were the approval holder of EP2022/022-001, and by default DLI have inherited the approval.

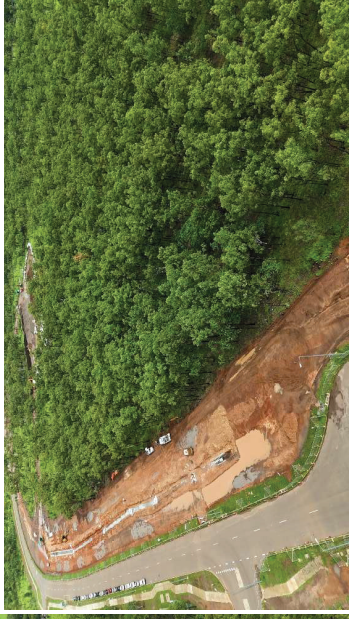
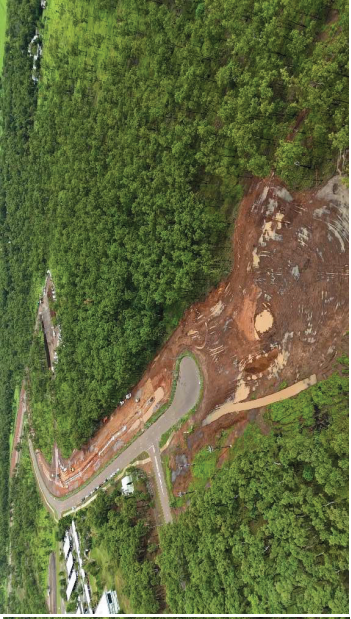
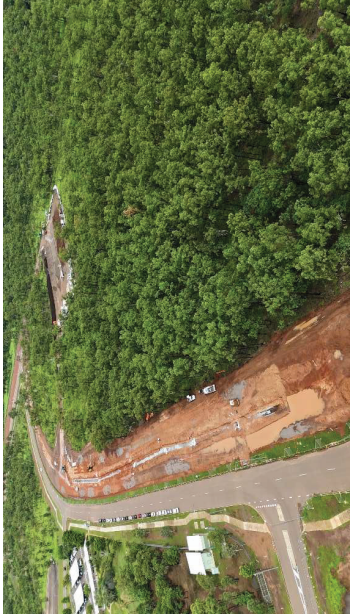
Land release construction works are being delivered by the DLI Land Servicing and Engineering team.

Appendix A – Extent of works and clearing

Site Drone Footage

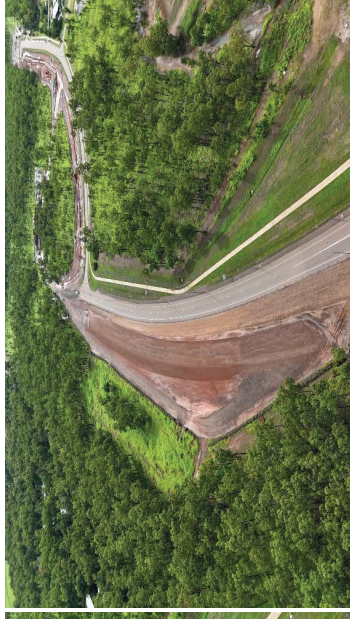
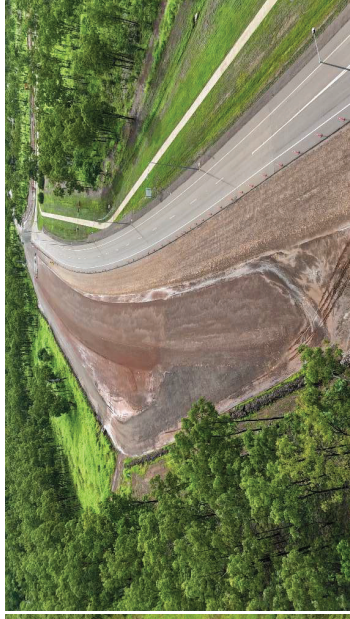
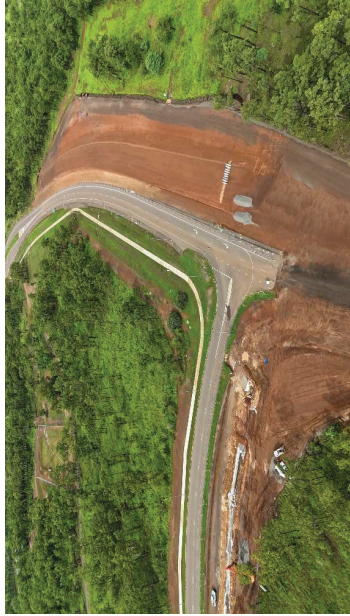
Linco Road

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Glyde Point Road

[Link to Video: DJI_20250131090701_0024_D.MP4](#)



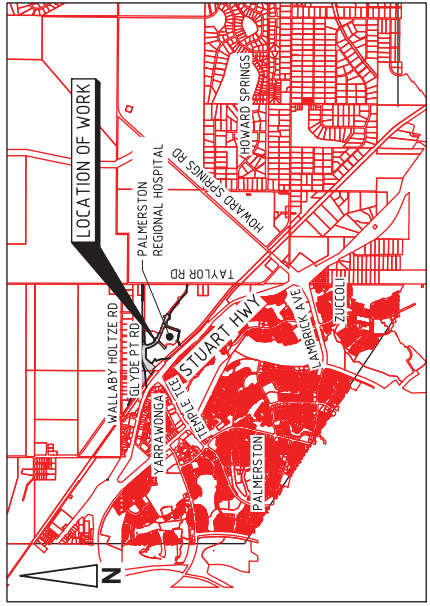
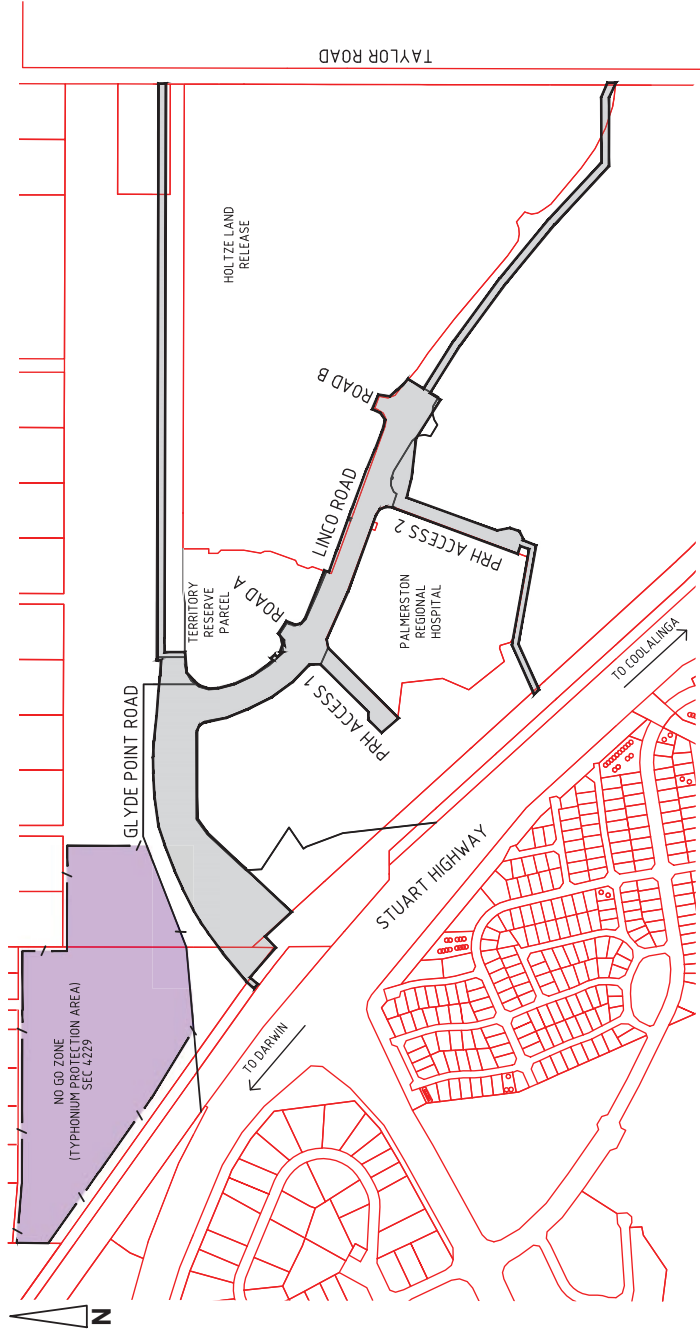
Appendix B – Detailed Design Drawings, Part A

PART A - LAND RELEASE INFRASTRUCTURE

Road Agency Approval No. 2023-0075-D1
 Department of Logistics and Infrastructure
 Transport and Civil Services

Permission to use for construction purposes within Northern Territory Government controlled road reserves. This approval does not absolve the Developer and/or Certifying Consultant from full responsibility for the correctness, accuracy and appropriateness of the design and/or associated documents.

Approved as per Road Agency Approval 2023-0075-D1 dated 11/12/2024
 General Manager, Transport and Civil Services



WARNING
 BEWARE OF UNDERGROUND SERVICES
 The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown.

		DARWIN REGION GREATER HOLTZE PART A - LAND RELEASE INFRASTRUCTURE LOCALITY AND SITE PLAN	
Drawn Date: Designed Date: Design Project Leader Date:	Checked Date: Checked Date: NTC Project Manager Date:	GB JM	NTC Asset No. M1331
byrne. ABN 78 124 386 192 Ph. 08 89472475 Fax. 08 89475098		NTC Project No. LPD10172	
Byrns Consultants Project No. NT22001-WE16		Sheet Reference 1 OF 133	
0 CONTRACT DRAWING AMENDMENT DESCRIPTION		NTC Drawing No. R23-3173	
No. DATE INT. DEPT/COMPANY		Amendment 0 A1	

NOTES
GENERAL

- ALL DRAWINGS TO BE PRINTED IN COLOUR.
- ALL LEVELS SHOWN ARE TO AUSTRALIAN HEIGHT DATUM AND ALL SETTING OUT CO-ORDINATES ARE TO PLAN MGA94. (ZONE 52).
- ALL DIMENSIONS ARE IN METRES UNLESS SHOWN OTHERWISE.
- ALL WORKS SHALL COMPLY WITH THE SPECIFICATION TO THE SATISFACTION OF SUPERINTENDENT.
- THE CONTRACTOR SHALL CHECK THE LOCATION OF ALL UNDERGROUND SERVICES PRIOR TO COMMENCEMENT OF WORK. CHECK LEVELS OF SERVICES IN CRITICAL AREAS. IT IS NOT GUARANTEED THAT ALL SERVICES HAVE BEEN SHOWN ON THE DRAWINGS, OR THAT CLASHES BETWEEN THE DESIGN AND EXISTING SERVICES ARE NOT PRESENT. IF CLASHES OCCUR THE CONTRACTOR SHALL NOTIFY THE SUPERINTENDENT.
- THE CONTRACTOR SHALL OBTAIN PERMIT(S) FROM THE RELEVANT AUTHORITY AS AND WHEN REQUIRED.
- THE CONTRACTOR SHALL REINSTATE ALL SURFACES UPON COMPLETION OF THE WORKS AS DIRECTED BY AND TO THE SATISFACTION OF SUPERINTENDENT.

SIGNS & LINEMARKING

- ALL SIGNS SHALL BE SIZE 'A' U.N.O.
- ALL LINE MARKING, SIGNPOSTING, AND RETRO REFLECTIVE PAVEMENT MARKERS (RRPMs) SHALL BE INSTALLED IN ACCORDANCE WITH AS1742 U.N.O. AND STD DRGS CS3400 TO CS3403 INCLUSIVE.
- THE CONTRACTOR SHALL REMOVE EXISTING LINEMARKING WHERE REQUIRED IN ACCORDANCE WITH SPECIFICATION, BLACKING OUT WITH PAINT IS NOT ACCEPTABLE.
- ALL PAVEMENTS SHALL BE LINEMARKED AS PER PLAN DRAWINGS AND TYPICAL CROSS SECTIONS. ALL LINEMARKING SHALL HAVE RRPMs AS PER STD DRG CS3401 UNLESS NOTED OTHERWISE.

SETOUT

- TO ASSIST THE PLAN SETOUT FOR THIS PROJECT A 2D DIGITAL COPY OF THESE ENGINEERING DRAWINGS WILL BE MADE AVAILABLE FOR USE BY THE CONTRACTOR. ALL DRAWING NOTATION TAKES PRECEDENCE OVER ALL DIGITAL INFORMATION PROVIDED.
- 3D DIGITAL FILES ARE ISSUED ONLY TO ASSIST THE CONTRACTOR WITH TASKS AND ARE NOT TO BE USED AS A GUIDE ONLY. A GUARANTEE IS GIVEN THAT THE DESIGN HAS BEEN FULLY PROTECTED AND THAT ALL DESIGN ENDS ARE INCLUDED. DRAWING NOTATION TAKES PRECEDENCE OVER ANY 3D DIGITAL INFORMATION PROVIDED.
- ALL SETOUT AND LEVELLING SHALL COMPLY WITH WHAT IS SPECIFIED ON THE DRAWINGS AND THE LEVEL TOLERANCES NOTED IN THE SPECIFICATION.
- FOR BOUNDARY AND SERVICE CORRIDOR SETOUT PLAN REFER TO DRG R23-3304 AND R23-3305.

Road Agency Approval No. 2023-0075-D1

Department of Logistics and Infrastructure
Transport and Civil Services

Permission to use for construction purposes within Northern Territory Government controlled road reserves. This approval does not absolve the Developer and/or Certifying Consultant from full responsibility for the correctness, accuracy and appropriateness of the design and/or associated documents.

Approved as per Road Agency Approval 2023-0075-D1 dated 11/12/2024

General Manager, Transport and Civil Services

ROADS & DRAINAGE

- THE CONTRACTOR SHALL GRADE FINISHED SURFACE EVENLY BETWEEN LEVELS SUPPLIED. ENSURE ALL WORKS ARE FREE DRAINING.
- WHERE ROAD CONSTRUCTION JOINS EXISTING PAVEMENT SAW CUT BACK 300mm MIN INTO SOUND UNCONTAMINATED PAVEMENT MATERIAL AND MAKE GOOD, UNLESS SHOWN OTHERWISE.
- DRAINAGE PIPES SHALL BE R.C.P CLASS '2' FLUSH JOINT (FJ) WITH EXTERNAL BAND UNLESS SHOWN OTHERWISE.
- WHERE CAPPED PIPES ARE SHOWN FOR FUTURE DRAINAGE CONNECTIONS, TIMBER END CAPS ARE NOT PERMITTED.
- ALL PITS SHALL HAVE CLASS 'D' (HEAVY DUTY) GRATES & LIDS UNLESS NOTED OTHERWISE.
- DRAINAGE STRUCTURES SETTING OUT REFER TO:
 - SEP'S - CENTRE OF MAIN CHAMBER AT INVERT LINE U.N.O.
 - HEADWALL'S - CENTRE OF HEADWALL U.N.O.
 - LETTERBOX, GP, AND MH'S - CENTRE OF PIT U.N.O.
- TOP OF DRAINAGE STRUCTURES SHALL BE FINISHED SUCH THAT COVERS AND SURROUNDS MATCH THE ADJACENT FINISHED SURFACE U.N.O.
- ALL BATTERS AND TABLE DRAINS SHALL BE COMPACTED TO ACHIEVE A TIGHT FINISH, COMPACTED TO 95% MDD OR AS SHOWN ON TYPICAL SECTIONS.
- ALL OPEN DRAINS SHALL BE CLEAN AND FREE DRAINING ON COMPLETION OF WORKS.
- THE CATCH POINTS OF FILL BATTERS AND TOP OF CUT BATTERS SHALL BE A NEAT, REGULAR ALIGNMENT IRRESPECTIVE OF THE DIMENSIONS SHOWN, THOUGH NOT LESS THAN THE MINIMUM DIMENSIONS GIVEN.
- THE CONTRACTOR SHALL CONSTRUCT SUBSOIL DRAINAGE BEHIND THE BACK OF KERB REFER STD DRG CS3121 SUBSOIL DRAINAGE PIPE BEHIND THE KERB SHALL BE CLASS 400 (400kN/m²).

COMMUNICATIONS


- THE CONTRACTOR SHALL LAISE WITH TELSTRA / NBN / VOCUS OR ANY OTHER PROVIDER AS REQUIRED.

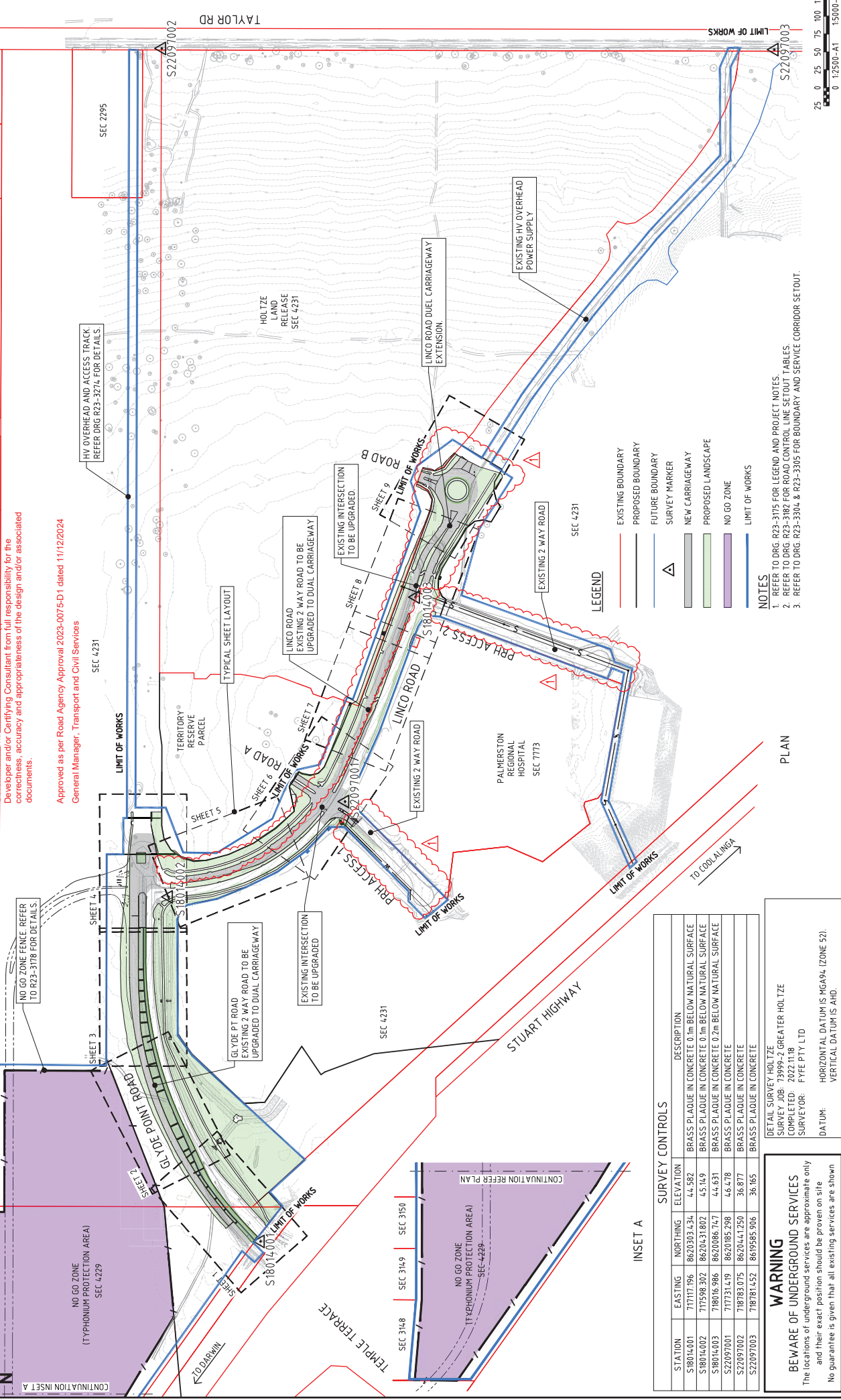
EROSION AND SEDIMENT CONTROL

- THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.

CONTRACT DRAWING

LEGEND	EXISTING FEATURES	PROPOSED WORKS	ABBREVIATIONS
PROPERTY BOUNDARY	ROAD CROWN	PROPOSED BOUNDARY	ACCESS CHAMBER
WATER MAIN UNDERGROUND	SEWER RISING MAIN UNDERGROUND	FUTURE BOUNDARY	ABOVE GROUND
TELECOMMUNICATIONS CABLE UNDERGROUND	OPTICAL FIBRE CABLE UNDERGROUND	DESIGN CENTRELINE	BENCH MARK
STORMWATER DRAINAGE PIPE (DBYD)	ELECTRICAL CABLE UNDERGROUND	KERB AND GUTTER (K&G)	CURVE TO CURVE
ELECTRICAL CABLE UNDERGROUND	WATER MAIN UNDERGROUND (DBYD)	KERB ONLY (KO)	CAST IRON CEMENT LINED
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	MOUNTABLE KERB (MK)	CAST IRON EPOXY LINED
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	OPTICAL FIBRE CABLE UNDERGROUND (DBYD)	MOUNTABLE KERB AND GUTTER (MK&G)	CITY OF PALMERSTON
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	CONCRETE INVERT (CI)	CURVE TO TANGENT
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	STORMWATER SUBSOIL DRAIN	COPPER PIPEWORK
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	WATER MAIN DEAD END
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	DUCTILE IRON CEMENT LINED
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	DUCTILE IRON EPOXY LINED
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	DIAMETER NOMINAL
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	DOWN PIPE
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	DOWNSTREAM
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	ENDWALL
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	FINE CRUSHED ROCK
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	FINISHED FLOOR LEVEL
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	FLUSH KERB
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	FLUSH POINT
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	FLASHING POINT
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	FLUSH SURFACE LEVEL
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	HEAVY DUTY
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	HEADWALL
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	SPECIAL GRATED PIT
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	WATER MAIN UNDERGROUND
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	WATER MAIN UNDERGROUND
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	ELECTRICAL LOW VOLTAGE
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	ELECTRICAL HIGH VOLTAGE
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	OVERHEAD POWER
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	TELECOMMUNICATIONS
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	CCTV CONDUIT
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	TRAFFIC SIGNALS
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	WATER IRRIGATION MAIN UNDERGROUND
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	ROAD SIGN
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	KERB RAMP
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	DRAINAGE PIT
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	ELECTRICAL LINE UNDERGROUND
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	ELECTRICAL PIT
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	STREET LIGHT POLES
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	ABANDON EXISTING SERVICE
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	REMOVE EXISTING SERVICE
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	REMOVE EXISTING LINEMARKING
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	LIMIT OF WORKS
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	FENCE
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	NEW CABLE PIT WITH CONCRETE SURROUNDING
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	DIST. PILLAR
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	ROAD OWNER DIST. PILLAR (RODP) - STRIPPLE FUSE TYPE
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	SAND PIT
SEWER RISING MAIN UNDERGROUND (DBYD)	SEWER RISING MAIN UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	RING MAIN UNIT
TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	TELECOMMUNICATIONS CABLE UNDERGROUND (DBYD)	REFER NTS STD DRG CS3121	PACKAGE SUBSTATION

		DARWIN REGION GREATER HOLTZE PART A - LAND RELEASE INFRASTRUCTURE STANDARD NOTES, LEGEND AND ABBREVIATIONS	
		NTG Project No. LPD10172 NTG Asset No. M1331	Sheet Reference 3 of 133 R23-3175
Drawn: UA Date:	Checked: GB Date:	Design Project Leader: RM Date:	NTC Project Manager: JIM Date:
DEPT/COMPANY: BYRNE DATE: 25/10/24 INT: SL NIT: GB	BYRNE DATE: 20/03/24 INT: GB	BYRNE DATE: 25/10/24 INT: SL	BYRNE DATE: 25/10/24 INT: SL



SURVEY CONTROLS

STATION	EASTING	NORTHING	ELEVATION	DESCRIPTION
S18014001	71717.956	8620303.434	44.582	BRASS PLAQUE IN CONCRETE 0.1m BELOW NATURAL SURFACE
S18014002	717598.302	8620431.802	45.149	BRASS PLAQUE IN CONCRETE 0.1m BELOW NATURAL SURFACE
S18014003	718016.986	8620086.747	44.631	BRASS PLAQUE IN CONCRETE 0.2m BELOW NATURAL SURFACE
S22097001	717731.419	8620885.298	46.478	BRASS PLAQUE IN CONCRETE
S22097002	718783.075	8620444.250	36.877	BRASS PLAQUE IN CONCRETE
S22097003	718781.452	8619585.906	36.165	BRASS PLAQUE IN CONCRETE

WARNING
BEWARE OF UNDERGROUND SERVICES
 The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown.

DETAIL SURVEY HOLTZE
 SURVEY JOB: 13999-2 GREATER HOLTZE
 COMPLETED: 2022.11.18
 SURVEYOR: FYFE PTY LTD
 DATUM: HORIZONTAL DATUM IS MGA94 (ZONE 52)
 VERTICAL DATUM IS AHD.

Northern Territory Government

DARWIN REGION GREATER HOLTZE PART A - LAND RELEASE INFRASTRUCTURE GENERAL ARRANGEMENT AND SURVEY PLAN

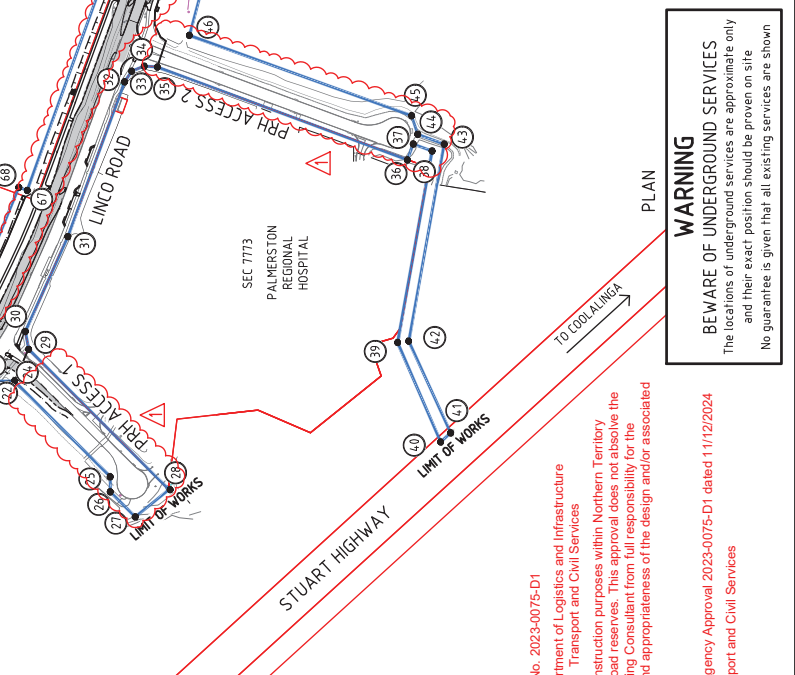
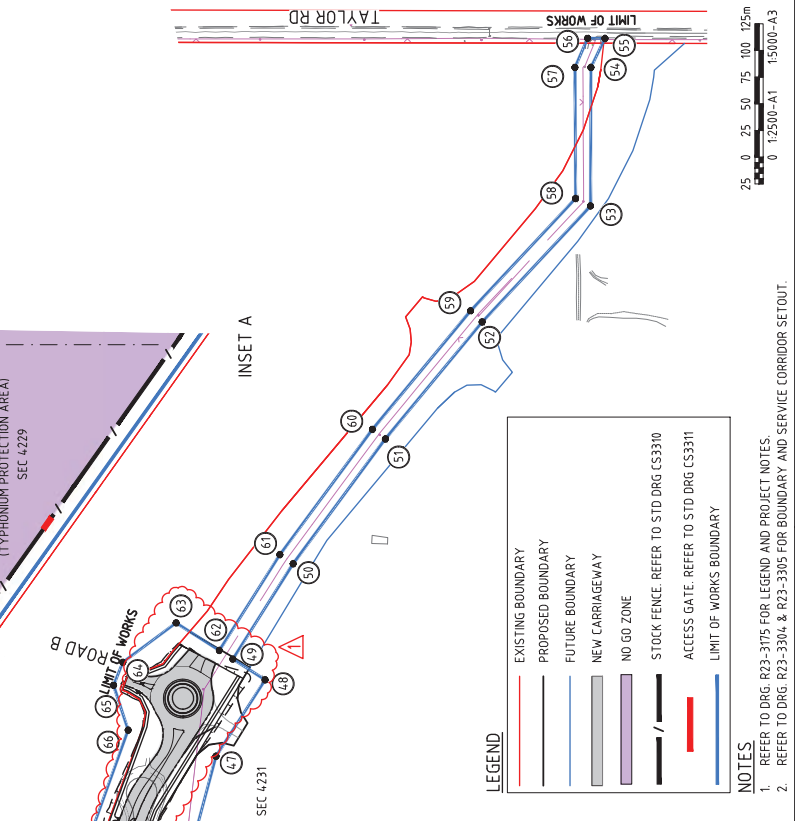
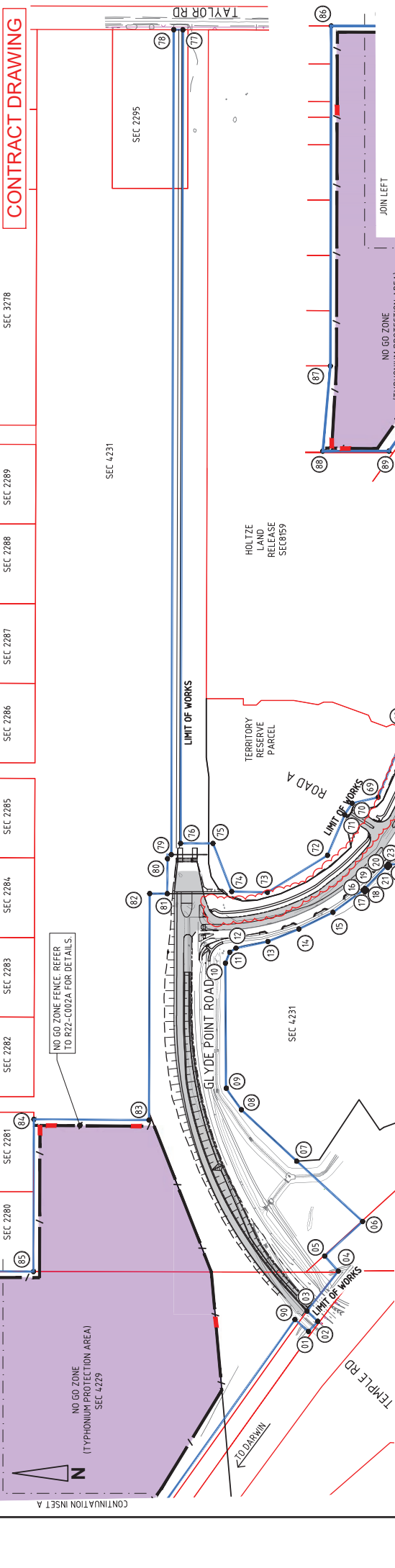
NTG Project No. LPD10172
 NTC Asset No. M1331
 Sheet Reference: 4 OF 133 R23-3176
 Amendment: 1 A1
 Version: March 2023

Drawn	Checked	GB
UA	GB	
Date:	Date:	Date:
Designed	Checked	
RM	JIM	
Date:	Date:	Date:
Design Project Leader	NTG Project Manager	
GB		
Date:	Date:	Date:

ABN 78 124 388 992
 100 Sturt Street, Darwin, NT 0811
 Ph. 08 89472475 Fax. 08 89475098

byrme.
 Byrme Consultants Project No. NT22001-WE16

AMENDMENT DESCRIPTION	DATE	INT.	DEPT/COMPANY
1 MINOR CHANGES TO CONTRACT DRAWINGS	25/10/24	SL	BYRME
0 CONTRACT DRAWING	20/03/24	GB	BYRME



LIMIT OF WORKS SETOUT			
POINT	EASTING	NORTHING	
01	717088.340	8620311.771	
02	717101.608	8620299.522	
03	717114.839	8620313.542	
04	717166.902	8620272.928	
05	717186.375	8620290.659	
06	717231.397	8620242.124	
07	717303.868	8620327.008	
08	717376.741	8620398.929	
09	717404.670	8620418.724	
10	717561.279	8620449.796	
11	717581.947	8620414.115	
12	717586.763	8620405.995	
13	717595.458	8620364.482	
14	717611.661	8620374.162	
15	717662.238	8620279.818	
16	717660.082	8620240.448	
17	717664.324	8620236.142	
18	717664.324	8620238.291	
19	717693.355	8620210.241	
20	717691.588	8620208.474	
21	717694.211	8620208.041	
22	717695.855	8620186.478	
23	717695.855	8620186.478	
24	717695.855	8620186.478	
25	717695.855	8620186.478	
26	717695.855	8620186.478	
27	717695.855	8620186.478	
28	717695.855	8620186.478	
29	717695.855	8620186.478	
30	717695.855	8620186.478	
31	717695.855	8620186.478	
32	717695.855	8620186.478	
33	717695.855	8620186.478	
34	717695.855	8620186.478	
35	717695.855	8620186.478	
36	717695.855	8620186.478	
37	717695.855	8620186.478	
38	717695.855	8620186.478	
39	717695.855	8620186.478	
40	717695.855	8620186.478	
41	717695.855	8620186.478	
42	717695.855	8620186.478	
43	717695.855	8620186.478	
44	717695.855	8620186.478	
45	717695.855	8620186.478	
46	717695.855	8620186.478	

LIMIT OF WORKS SETOUT			
POINT	EASTING	NORTHING	
47	718112.164	8619997.953	
48	718183.633	8619951.980	
49	718203.074	8619982.203	
50	718292.248	8619925.762	
51	718409.054	8619839.477	
52	718518.510	8619748.890	
53	718627.069	8619647.047	
54	718756.734	8619647.047	
55	718783.849	8619633.909	
56	718783.849	8619633.909	
57	718756.660	8619642.047	
58	718634.079	8619661.649	
59	718528.960	8619759.711	
60	718417.982	8619838.115	
61	718300.744	8619938.115	
62	718211.138	8619984.850	
63	718236.007	8620035.264	
64	718200.049	8620085.129	
65	718178.524	8620093.779	
66	718156.562	8620080.147	
67	718174.386	8620174.581	
68	717877.191	8620210.927	
69	717883.065	8620210.927	
70	717775.088	8620254.954	
71	717760.354	8620264.571	
72	717701.515	8620286.984	
73	717659.437	8620365.002	
74	717640.149	8620115.649	
75	717733.003	8620135.923	
76	717733.003	8620178.082	
77	718141.084	8620178.082	
78	718198.384	8620186.051	
79	718198.384	8620186.051	
80	718198.384	8620186.051	
81	718217.145	8620186.051	
82	718217.145	8620186.051	
83	718217.145	8620186.051	
84	718217.145	8620186.051	
85	718217.145	8620186.051	
86	718217.145	8620186.051	
87	718217.145	8620186.051	
88	718217.145	8620186.051	
89	718217.145	8620186.051	
90	718217.145	8620186.051	

LEGEND

- EXISTING BOUNDARY
- PROPOSED BOUNDARY
- FUTURE BOUNDARY
- NEW CARRIAGEWAY
- NO GO ZONE
- STOCK FENCE. REFER TO STD DRG CS3310
- ACCESS GATE. REFER TO STD DRG CS3311
- LIMIT OF WORKS BOUNDARY

NOTES

- REFER TO DRG. R23-3175 FOR LEGEND AND PROJECT NOTES.
- REFER TO DRG. R23-3304 & R23-3305 FOR BOUNDARY AND SERVICE CORRIDOR SETOUT.

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site
No guarantee is given that all existing services are shown

Road Agency Approval No. 2023-0075-D1
Department of Logistics and Infrastructure
Transport and Civil Services
Permission to use for construction purposes within Northern Territory Government controlled road reserves. This approval does not absolve the Developer and/or Certifying Consultant from full responsibility for the correctness, accuracy and appropriateness of the design and/or associated documents.
Approved as per Road Agency Approval 2023-0075-D1 dated 11/12/2024
General Manager, Transport and Civil Services

Northern Territory Government

DARWIN REGION
GREATER HOLTZE
PART A - LAND RELEASE INFRASTRUCTURE
LIMIT OF WORKS PLAN

NTG Project No. LPD10172
NTG Asset No. M1331
Sheet Reference 5 OF 133 R23-3177
Attachment 1 A1
Version March 2023

Drawn: UA
Checked: GB
Date: _____

Designed: RM
Checked: JIM
Date: _____

Design Project Leader: GB
NTG Project Manager: _____
Date: _____

ABN 78 124 388 992
140 Sturt Street, Darwin, NT 0811
Ph. 08 89472475 Fax. 08 89475088

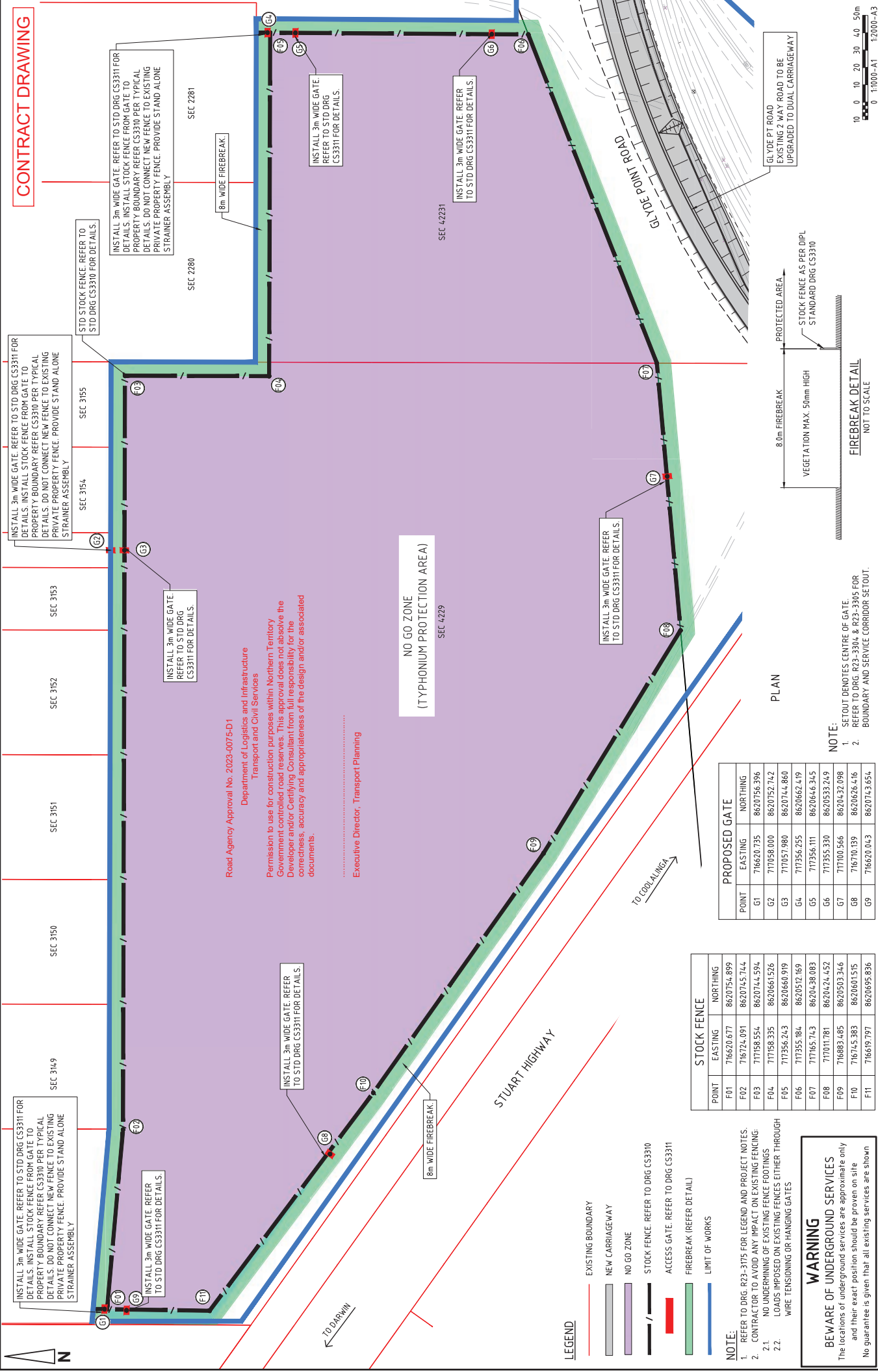
byrne.

Byrne Consultants Project No. NT22004-WE16

NO.	AMENDMENT DESCRIPTION	DATE
1	MINOR CHANGES TO CONTRACT DRAWINGS	25/10/24
0	CONTRACT DRAWING	20/03/24

Appendix C – Typhonium Protection Area

CONTRACT DRAWING



INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

INSTALL 3m WIDE GATE. REFER TO STD DRG CS3311 FOR DETAILS. INSTALL STOCK FENCE FROM GATE TO PROPERTY BOUNDARY REFER CS3310 PER TYPICAL DETAILS. DO NOT CONNECT NEW FENCE TO EXISTING PRIVATE PROPERTY FENCE. PROVIDE STAND ALONE STRAINER ASSEMBLY

NO GO ZONE (TYPHONIUM PROTECTION AREA)

Department of Logistics and Infrastructure
Transport and Civil Services

Road Agency Approval No. 2023-0075-D1

Permission to use for construction purposes within Northern Territory Government controlled road reserves. This approval does not absolve the Developer and/or Certifying Consultant from full responsibility for the correctness, accuracy and appropriateness of the design and/or associated documents.

Executive Director, Transport Planning

STOCK FENCE

POINT	EASTING	NORTHING
F01	716620.677	8620756.899
F02	716724.091	8620745.744
F03	717158.554	8620744.594
F04	717758.335	8620661.526
F05	717356.243	8620660.919
F06	717355.184	8620517.169
F07	717165.743	8620438.083
F08	716883.485	8620424.452
F09	716745.383	8620503.346
F10	716745.383	8620601.515
F11	716619.797	8620695.836

PROPOSED GATE

POINT	EASTING	NORTHING
G1	716620.735	8620756.396
G2	717058.000	8620752.742
G3	717057.980	8620744.860
G4	717356.255	8620662.419
G5	717356.111	8620646.345
G6	717355.330	8620533.249
G7	717100.566	8620432.098
G8	716710.139	8620626.416
G9	716620.043	8620743.654

- LEGEND**
- EXISTING BOUNDARY
 - NEW CARRIAGE WAY
 - NO GO ZONE
 - STOCK FENCE. REFER TO DRG CS3310
 - ACCESS GATE. REFER TO DRG CS3311
 - FIREBREAK (REFER DETAIL)
 - LIMIT OF WORKS
- NOTE:**
- REFER TO DRG. R23-3175 FOR LEGEND AND PROJECT NOTES.
 - CONTRACTOR TO AVOID ANY IMPACT ON EXISTING FENCING.
 - NO UNDERMINING OF EXISTING FENCE FOOTINGS
 - LOADS IMPOSED ON EXISTING FENCES EITHER THROUGH WIRE TENSIONING OR HANGING GATES

WARNING

BWARE OF UNDERGROUND SERVICES

The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown.

NOTE:

- SETOUT DENOTES CENTRE OF GATE. REFER TO DRG. R23-3304 & R23-3305 FOR BOUNDARY AND SERVICE CORRIDOR SETOUT.

FIREBREAK DETAIL
NOT TO SCALE

8.0m FIREBREAK
VEGETATION MAX. 50mm HIGH
STOCK FENCE AS PER DIPL
STANDARD DRG CS3310

PROTECTED AREA

PLAN

8.0m FIREBREAK
VEGETATION MAX. 50mm HIGH
STOCK FENCE AS PER DIPL
STANDARD DRG CS3310

PROTECTED AREA

GLVDE PT ROAD
GLVDE 2 WAY ROAD. TO BE UPGRADED TO DUAL CARRIAGEWAY

10 0 10 20 30 40 50m
0 1:1000-A1 1:2000-A3

DARWIN REGION
GREATER HOLTZE
PART A - LAND RELEASE INFRASTRUCTURE
NO GO ZONE FENCE DETAILS AND SETOUT PLAN

NTG Project No. LPD10172
NTG Asset No. M1331
Sheet Reference: 6 OF 133
R23-3178
Amendment: 0
A1
Version: March 2023



Checked: GB
Date:
Drawn: UA
Date:
Design Project Leader: GB
Date:
Design Project Manager: JIM
Date:

ABN 78 124 388 992
140/15A, NT 0811
Ph: 08 89472475 Fax: 08 89475098



Byrme Consultants Project No. NT22004-WE16

No.	CONTRACT DRAWING	DATE	INT.	DEPT/COMPANY	BYRME
0		20/03/24	GB	BYRME	

FILE LOCATION: C:\1256\9\data\BAYRME-TM\5\NT22001-WE16 - Detailed Design\HR\Lineo Rd Extension (Part A)_1231104 CAD\DWG\R23-3178.dwg

PLOTTED ON: 20/03/2024 3:48 PM
USER: SHM\LEE

52L 0717164... 8620665... DIRECTION South-West 12° 28.195' S 130° 59.884' E ACCURACY 4m



iPad ID: -1527129805 Palmerston hospital 20 Mar 2025 11:02:17 (ACST)

52L 0717162... 8620736... DIRECTION South 12° 28.156' S 130° 59.883' E ACCURACY 5m



iPad ID: -1527129805 Palmerston hospital 20 Mar 2025 11:01:53 (ACST)

52L 0717112... 8620744... DIRECTION East 12° 28.152' S 130° 59.855' E ACCURACY 4m



iPad ID: -1527129805 Palmerston hospital 20 Mar 2025 11:01:22 (ACST)

52L 0717047... 8620744... DIRECTION North-East 12° 28.153' S 130° 59.819' E ACCURACY 4m



iPad ID: -1527129805 Palmerston hospital 20 Mar 2025 11:00:51 (ACST)

52L 0716968... 8620743... DIRECTION East 12° 28.153' S 130° 59.776' E ACCURACY 5m



iPad ID: -1527129805 Palmerston hospital 20 Mar 2025 10:59:59 (ACST)

52L 0716900... 8620745... DIRECTION East 12° 28.153' S 130° 59.738' E ACCURACY 4m



iPad ID: -1527129805 Palmerston hospital 20 Mar 2025 10:59:31 (ACST)

52L 0716612... 8620749... DIRECTION East 12° 28.152' S 130° 59.580' E ACCURACY 4m



iPad ID: -1527129805 Palmerston hospital 20 Mar 2025 10:58:07 (ACST)

52L 0716616... 8620686... DIRECTION North 12° 28.186' S 130° 59.582' E ACCURACY 4m



iPad ID: -1527129805 Palmerston hospital 20 Mar 2025 10:57:30 (ACST)

52L 0716712... 8620619... DIRECTION North-West 12° 28.222' S 130° 59.635' E ACCURACY 3m



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52L 0716862... 8620504... DIRECTION North 12° 28.283' S 130° 59.719' E ACCURACY 4m



iPad ID: -1527129805 Palmerston hospital 20 Mar 2025 10:54:26 (ACST)

52L 0717016... 8620417... DIRECTION North-West 12° 28.330' S 130° 59.804' E ACCURACY 3m



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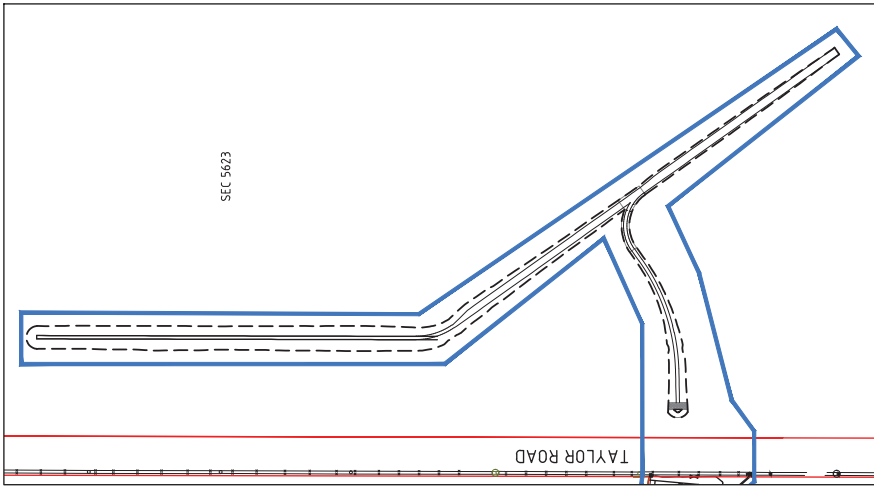
52L 0717048... 8620415... DIRECTION North 12° 28.331' S 130° 59.821' E ACCURACY 10m



iPad ID: -1527129805 Palmerston hospital 20 Mar 2025 10:52:43 (ACST)

Appendix D – Cycad Protection Area

PRELIMINARY
NOT FOR CONSTRUCTION



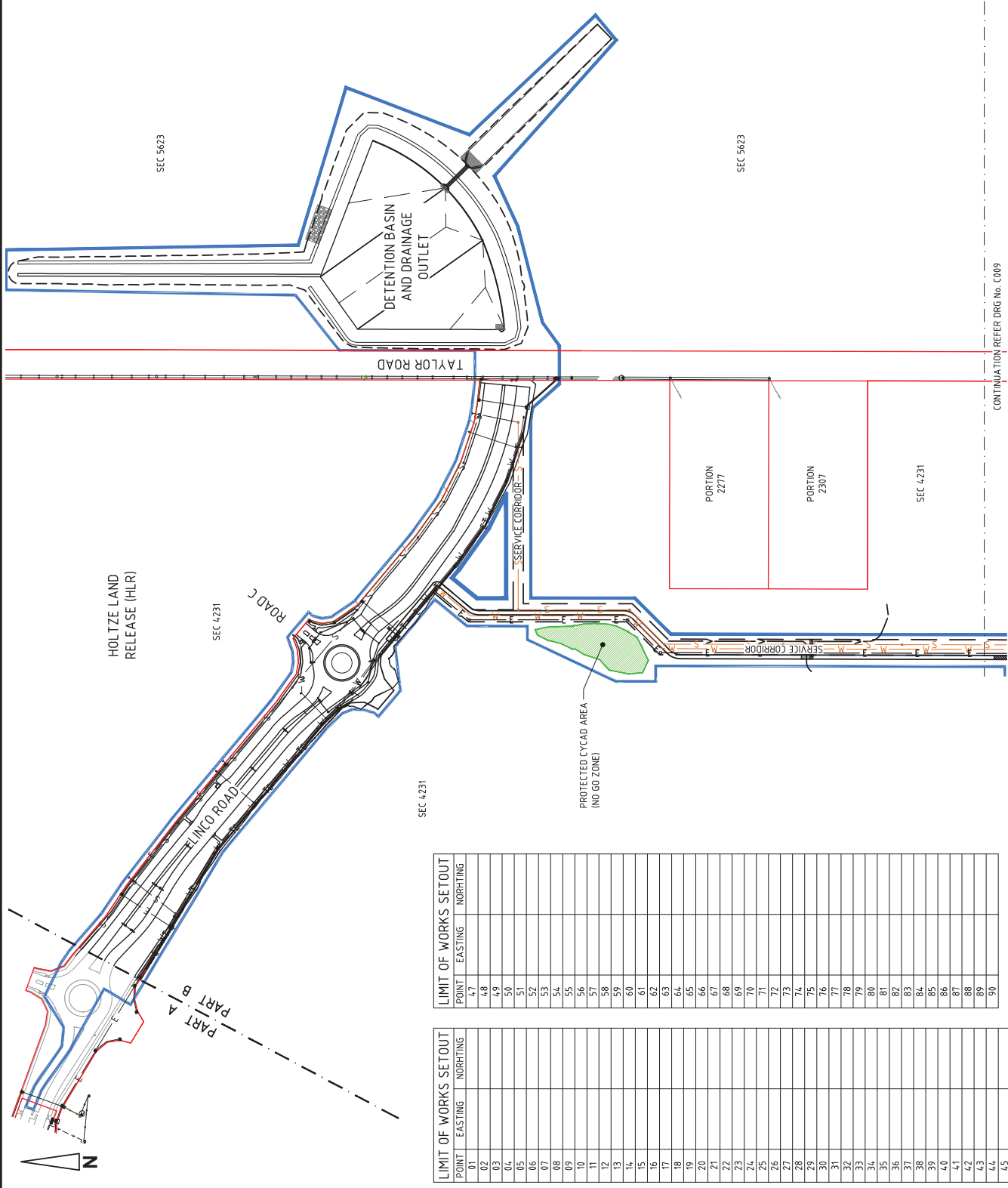
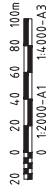
ALTERNATIVE DRAINAGE OUTLET OPTION

LEGEND

- EXISTING BOUNDARY
- - - PROPOSED BOUNDARY
- - - PROPOSED EASEMENT OR SERVICE CORRIDOR
- LIMIT OF PART B WORKS

WARNING

BEWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown.



CONTINUATION REFER DRG No. C009

LIMIT OF WORKS SETOUT		
POINT	EASTING	NORTHING
01	4.7	
02	4.8	
03	4.9	
04	5.0	
05	5.1	
06	5.2	
07	5.3	
08	5.4	
09	5.5	
10	5.6	
11	5.7	
12	5.8	
13	5.9	
14	6.0	
15	6.1	
16	6.2	
17	6.3	
18	6.4	
19	6.5	
20	6.6	
21	6.7	
22	6.8	
23	6.9	
24	7.0	
25	7.1	
26	7.2	
27	7.3	
28	7.4	
29	7.5	
30	7.6	
31	7.7	
32	7.8	
33	7.9	
34	8.0	
35	8.1	
36	8.2	
37	8.3	
38	8.4	
39	8.5	
40	8.6	
41	8.7	
42	8.8	
43	8.9	
44	9.0	
45		
46		

LIMIT OF WORKS SETOUT		
POINT	EASTING	NORTHING
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90		

Northern Territory Government

ABN 78 624 388 192
 PO BOX 9118 Darwin NT 0811
 Ph: 08 84174247 Fax: 08 89457598

byrne.
 Byrne Consultants Project No. NTZ2001

DEPT/COMPANY: BYRNE
 INT: JCM
 DATE: 16/09/24

DARWIN REGION
 GREATER HOLTZE
 PART B - LAND RELEASE INFRASTRUCTURE
LIMIT OF WORKS
SHEET 1 OF 4

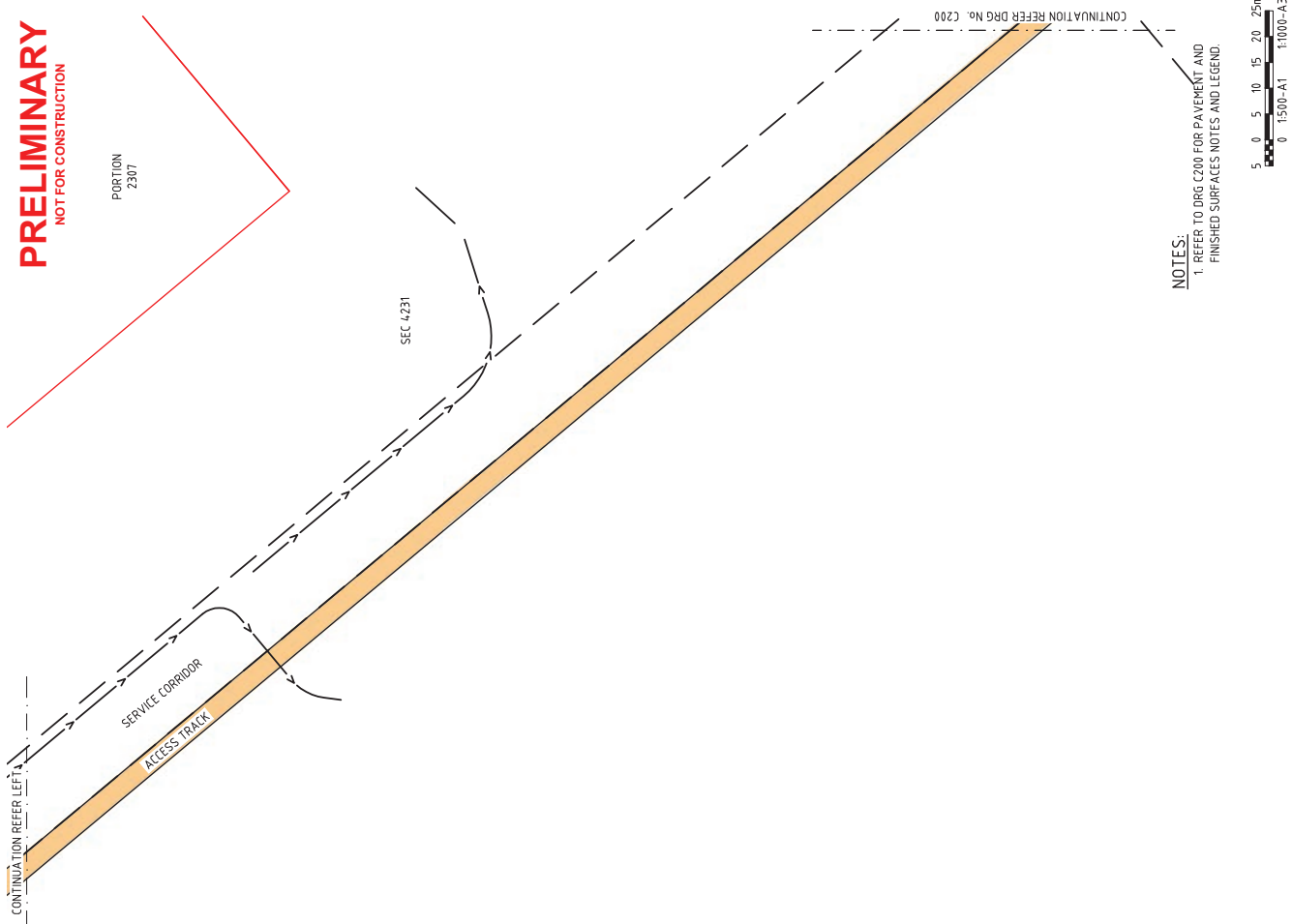
Drawn: JCM
 Date: 16/09/2024
 Designed: JCM
 Date: 16/09/2024
 Design Checker: SPB
 Date: 16/09/2024

Checked: SPB
 Date: 16/09/2024
 Checked: SPB
 Date: 16/09/2024
 NTG Project Manager: NTG Project Manager
 Date: -

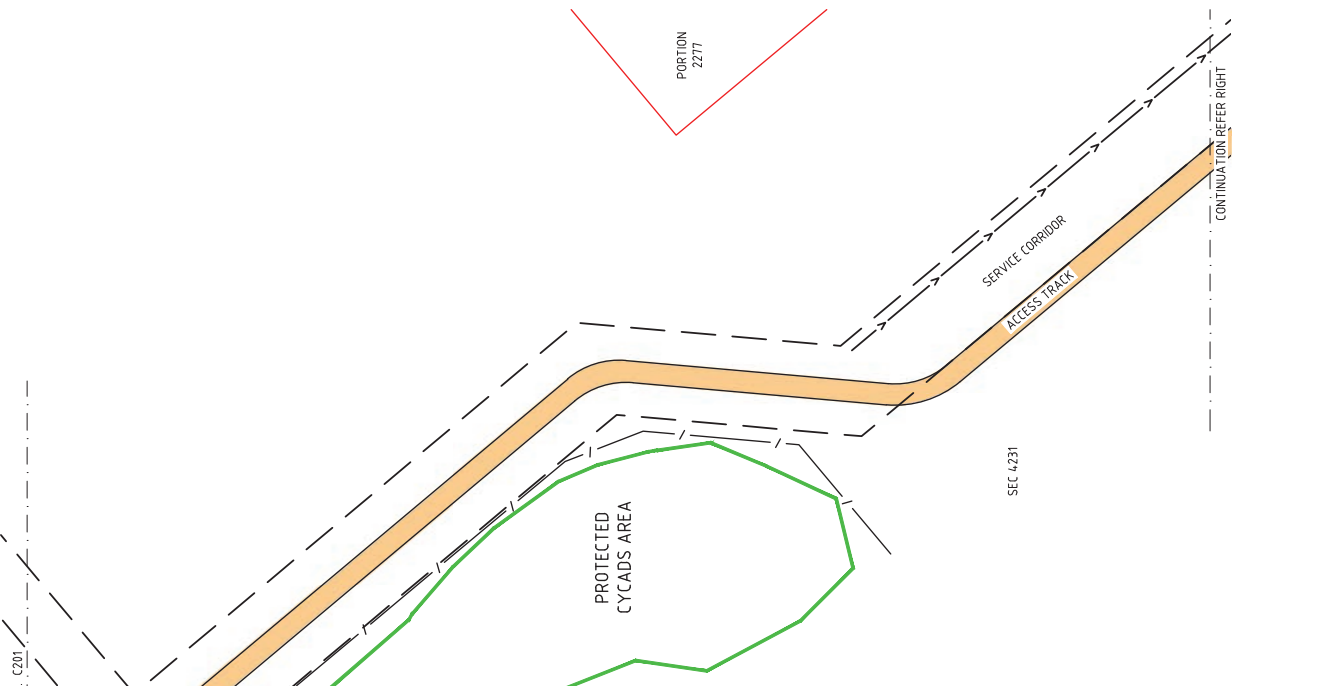
NTG Project No. -
 NTG Asset No. -
 Sheet Reference -
 - OF -
 C008
 Amendment B
 A1

PRELIMINARY
NOT FOR CONSTRUCTION

PORTION
2307



PORTION
2277



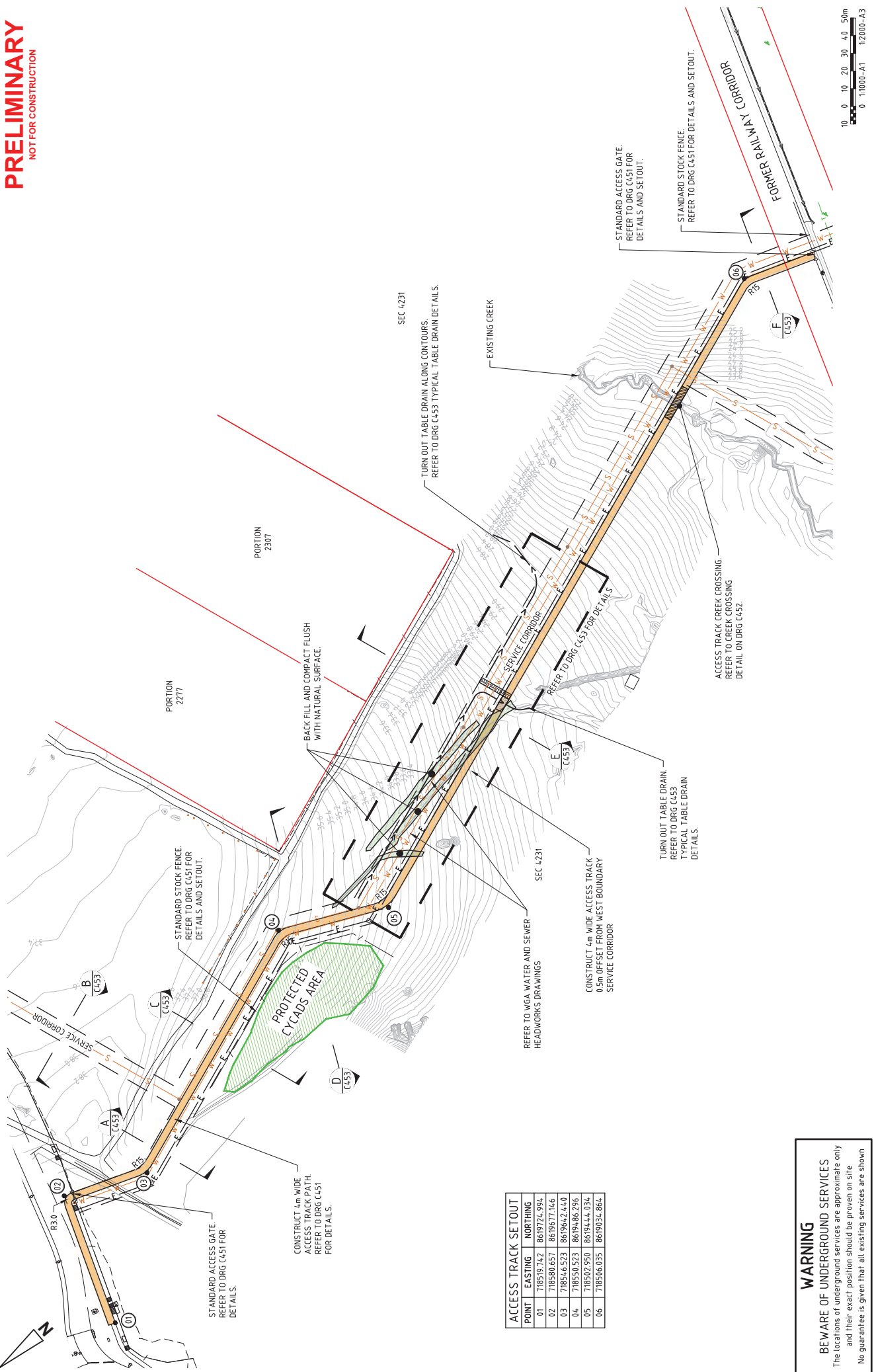
WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only
and their exact position should be proven on site
No guarantee is given that all existing services are shown

NOTES:
1. REFER TO DRG C200 FOR PAVEMENT AND
FINISHED SURFACES NOTES AND LEGEND.



PRINT IN COLOUR

		DARWIN REGION GREATER HOLTZE PART B - LAND RELEASE INFRASTRUCTURE PAVEMENT AND FINISHED SURFACES PLAN SHEET 5 OF 6 NTG Project No. - NTG Asset No. -	
Drawn JCM Date: 16/09/2024 Designed JCM Date: 16/09/2024 Design Leader SPB Date: 16/09/2024	Checked SPB Date: 16/09/2024 Checked SPB Date: 16/09/2024 NTG Project Manager Date: -	ABN 78 624 388 192 PO BOX 894724 DARWIN NT 0811 Ph: 08 894724 Fax: 08 89475988 Byrne Consultants Project No. NTZ2001	
No.	AMENDMENT DESCRIPTION	DATE	BY
B	ISSUED FOR 75% DESIGN	24/03/25	JCM
A	ISSUED FOR 50% DESIGN	16/09/24	JCM
SHEET REFERENCE: - OF - C204 NTG Drawing No. - Amendment B A1		Version: 16/09/2024	



POINT	EASTING	NORTHING
01	718519.742	8619724.994
02	718580.657	8619677.146
03	718546.523	8619642.440
04	718530.323	8619486.296
05	718502.950	8619444.034
06	718506.035	8619034.864

WARNING
BEWARE OF UNDERGROUND SERVICES
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Northern Territory Government

DARWIN REGION
GREATER HOLTZE
PART B - LAND RELEASE INFRASTRUCTURE
SERVICE CORRIDOR AND ACCESS TRACK
LAYOUT PLAN

NTG Project No. -
NTG Asset No. -
Sheet Reference - OF -
NTG Drawing No. - C450
Amendment - A1

Version: March 2021

Checked: SPB
Date: 16/09/2024

Checked: SPB
Date: 16/09/2024
NTG Project Manager

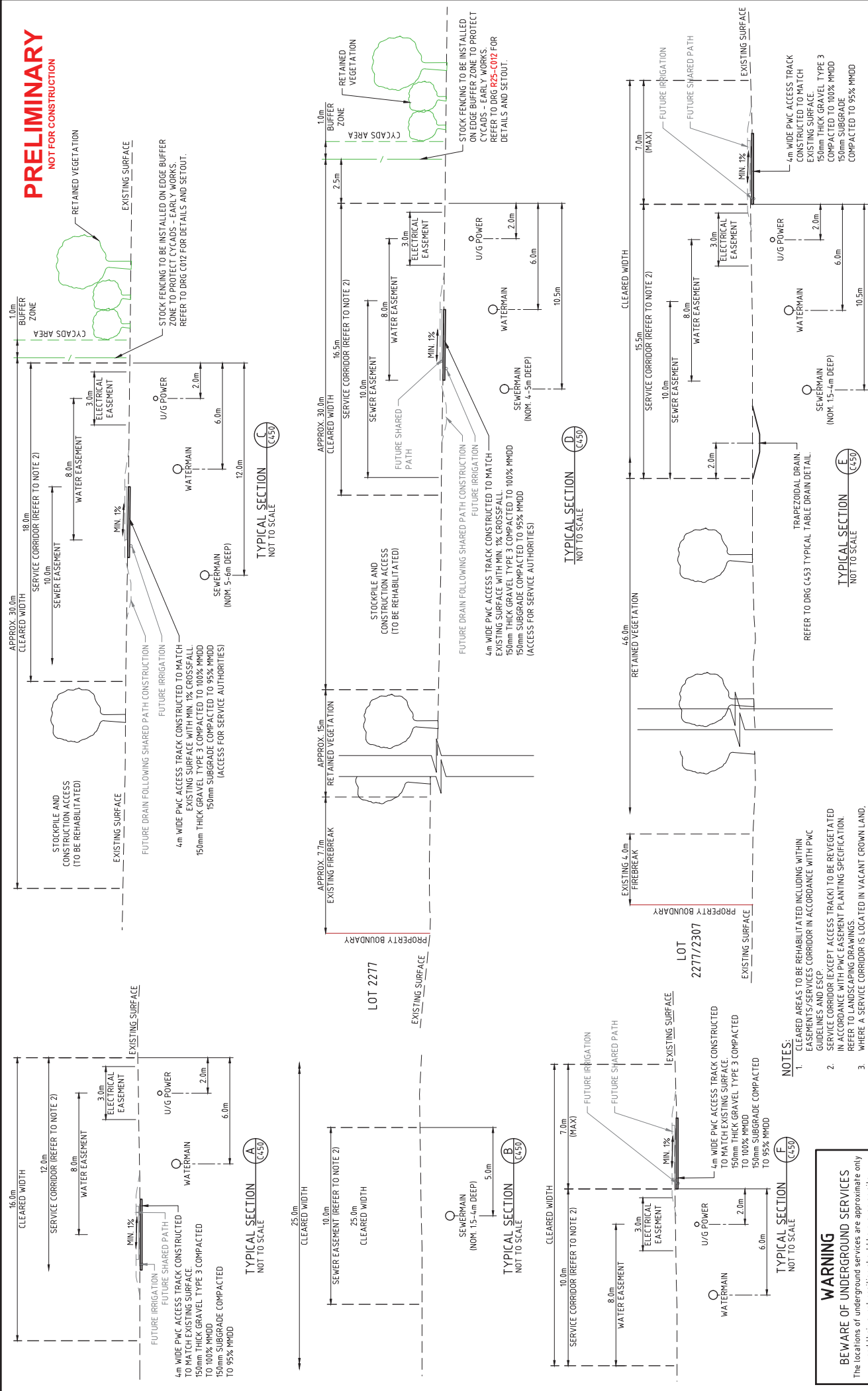
Design: JCM
Date: 16/09/2024
Leader

Date: 16/09/2024

ABN 78 624 388 192
100 St Johns Road, Darwin NT 0811
Ph: 08 84724474 Fax: 08 89475988

byrne.
Byrne Consultants Project No. NTZ2001

No.	DATE	BY	DEPT/COMPANY	AMENDMENT DESCRIPTION
A	16/09/24	JCM	BYRNE	ISSUED FOR 75% DESIGN
B	24/03/25	JCM	BYRNE	ISSUED FOR 90% DESIGN



WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown

- NOTES:**
1. CLEARED AREAS TO BE REHABILITATED INCLUDING WITHIN EASEMENTS/SERVICES CORRIDOR IN ACCORDANCE WITH PWC GUIDELINES AND ESCP.
 2. SERVICE CORRIDOR (EXCEPT ACCESS TRACK) TO BE REVEGETATED IN ACCORDANCE WITH PWC EASEMENT PLANTING SPECIFICATION. REFER TO LANDSCAPING DRAWINGS.
 3. WHERE A SERVICE CORRIDOR IS LOCATED IN VACANT GROWN LAND, REFERENCES TO 'EASEMENTS' REFLECT DIMENSIONS FOR FUTURE EASEMENTS IN FAVOUR OF PWC.

No.	AMENDMENT DESCRIPTION	DATE	INT.	BYRNE	JCM	24/03/25	BYRNE	BYRNE	16/09/24	JCM	16/09/24	SPB	16/09/2024	SPB	16/09/2024
B	ISSUED FOR 75% DESIGN														
A	ISSUED FOR 50% DESIGN														

Byrne Consultants Project No. NTZ2001

ABN 78 24 388 192
PO BOX 842324 QLD 4811
Ph. 08 84232474 Fax. 08 84232498

Drawn: JCM
Date: 16/09/2024
Designed: JCM
Date: 16/09/2024
Checked: SPB
Date: 16/09/2024
NTC Project Manager
Date: 16/09/2024

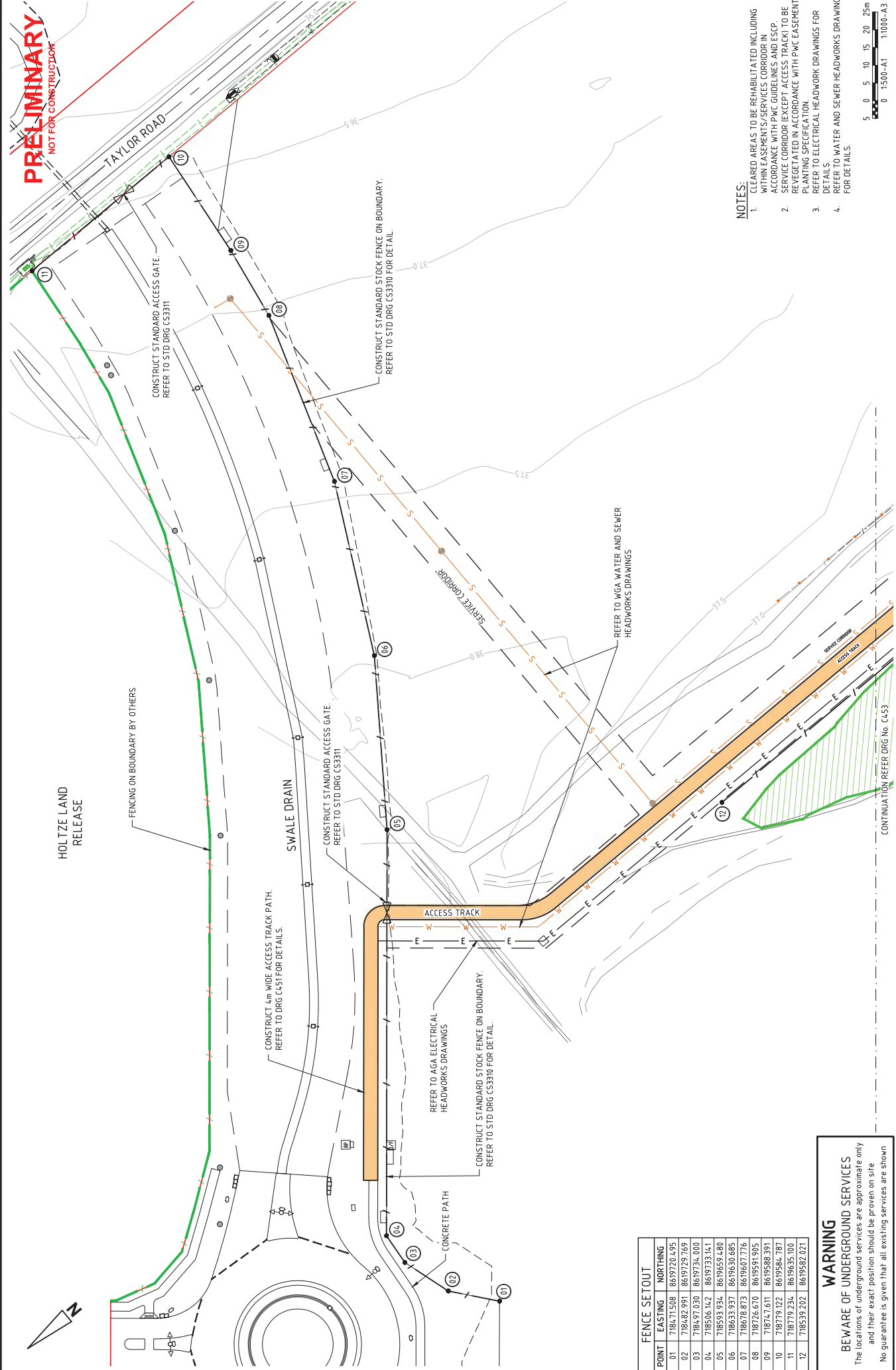
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Date: 16/09/2024

DARWIN REGION
GREATER HOLTZE
PART B - LAND RELEASE INFRASTRUCTURE
SERVICE CORRIDOR AND ACCESS TRACK
TYPICAL SECTIONS

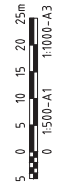
NTG Project No. -
NTG Asset No. -
Sheet Reference - OF -
NTG Drawing No. - C451
Amendment B
A1

Version: March 2021

PRELIMINARY
NOT FOR CONSTRUCTION



- NOTES:**
1. CLEARED AREAS TO BE REHABILITATED INCLUDING WITHIN EASEMENTS/SERVICES CORRIDOR IN ACCORDANCE WITH PMC GUIDELINES AND ESCP
 2. SERVICE CORRIDOR (EXCEPT ACCESS TRACK) TO BE REVEGETATED IN ACCORDANCE WITH PMC EASEMENT PLANTING SPECIFICATION
 3. REFER TO ELECTRICAL HEADWORK DRAWINGS FOR DETAILS
 4. REFER TO WATER AND SEWER HEADWORKS DRAWING FOR DETAILS.



HOLTZE LAND
RELEASE

FENCING ON BOUNDARY BY OTHERS

CONSTRUCT 4m WIDE ACCESS TRACK PATH.
REFER TO DRG C451 FOR DETAILS.

SWALE DRAIN

CONSTRUCT STANDARD ACCESS GATE.
REFER TO STD DRG CS3311

CONSTRUCT STANDARD STOCK FENCE ON BOUNDARY.
REFER TO STD DRG CS3310 FOR DETAIL.

CONSTRUCT STANDARD STOCK FENCE ON BOUNDARY.
REFER TO STD DRG CS3310 FOR DETAIL.

REFER TO AGA ELECTRICAL
HEADWORKS DRAWINGS

REFER TO WGA WATER AND SEWER
HEADWORKS DRAWINGS

CONTINUATION REFER DRG No. C453

FENCE SETOUT	
POINT	EASTING NORTHING
01	718471.508 8619720.495
02	718482.991 8619729.769
03	718497.030 8619734.000
04	718506.142 8619733.141
05	718593.934 8619659.480
06	718633.937 8619630.685
07	718678.873 8619607.776
08	718726.670 8619591.905
09	718747.611 8619588.391
10	718779.122 8619584.787
11	718779.234 8619635.100
12	7186539.202 8619582.021

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown

Northern Territory Government

SPB
Date: 16/09/2024
Checked: JCM
Date: 16/09/2024
Designed: JCM
Date: 16/09/2024
Design Leader: SPB
Date: 16/09/2024

NTG Project No. -
NTG Asset No. -
Sheet Reference - OF - C452
Amendment - B A1

byrne.
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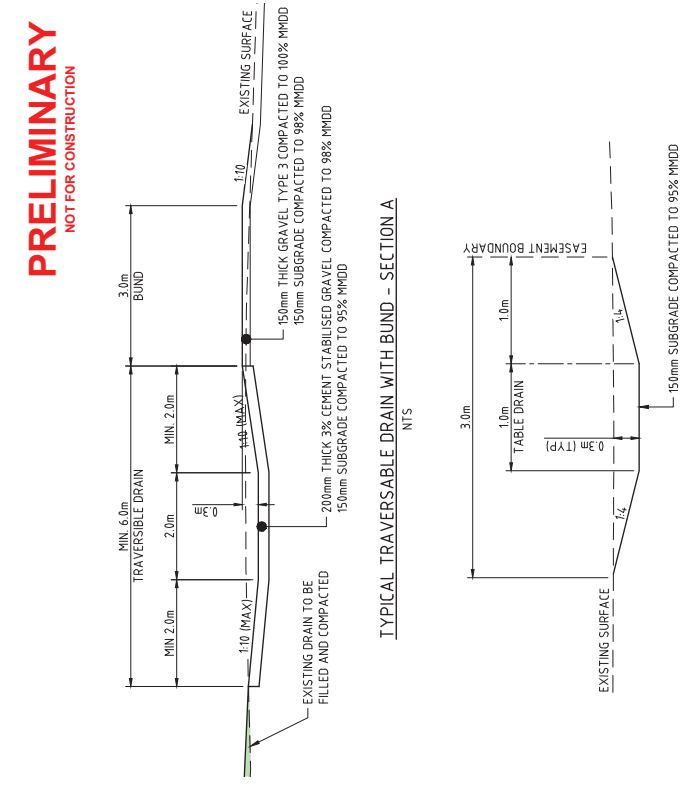
Byrne Consultants Project No. NTZ2001

DATE	BY	DESCRIPTION
24/03/25	JCM	ISSUED FOR 75% DESIGN
16/09/24	JCM	ISSUED FOR 50% DESIGN

DARWIN REGION
GREATER HOLTZE
PART B - LAND RELEASE INFRASTRUCTURE
SERVICE CORRIDOR AND ACCESS TRACK
FENCING AND DETAILS PLAN - SHEET 1 OF 3

Version: March 2021

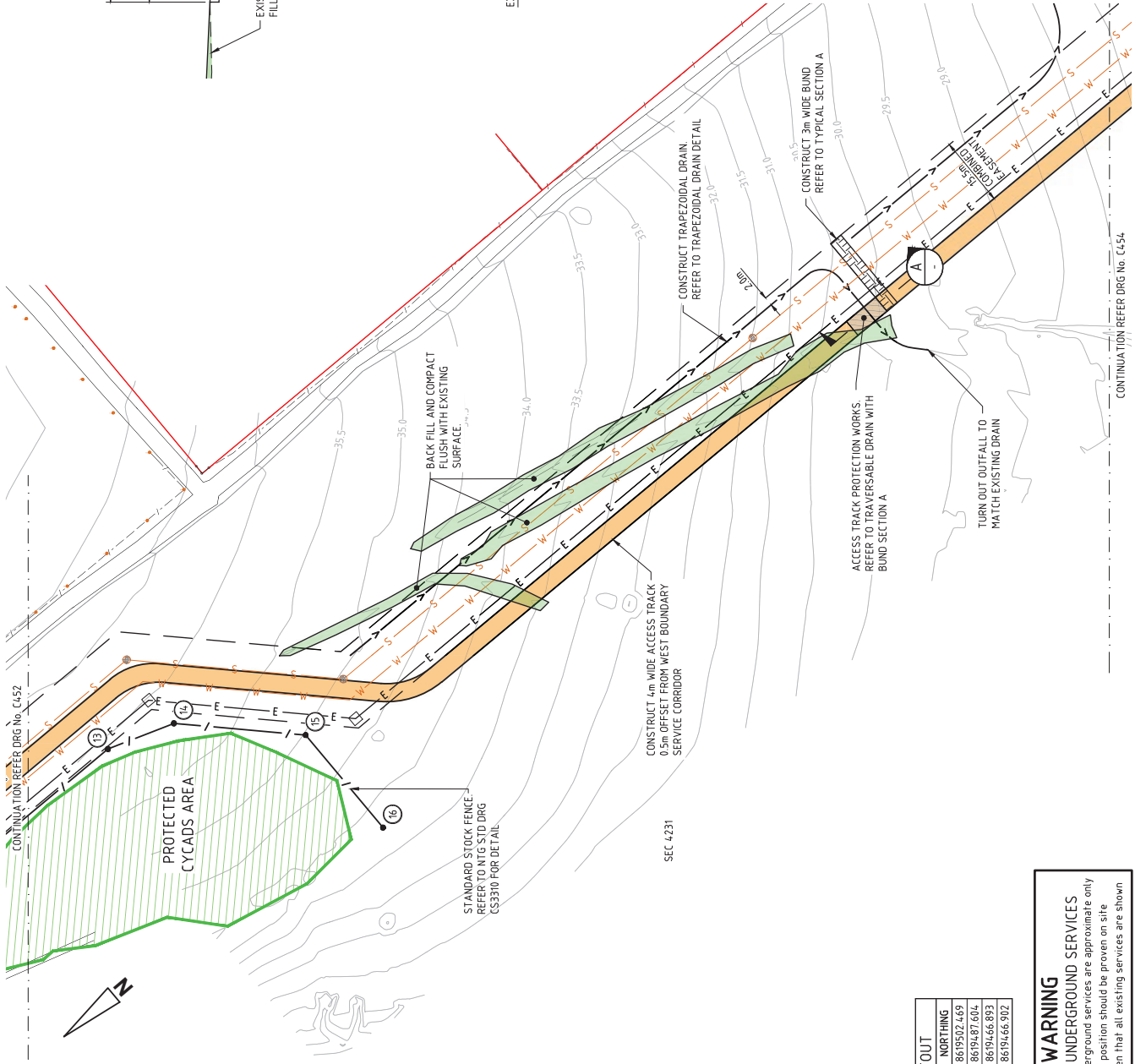
PRELIMINARY
NOT FOR CONSTRUCTION



TYPICAL TRAVERSABLE DRAIN WITH BUND - SECTION A
NTS

TYPICAL TRAPEZOIDAL DRAIN DETAIL
NTS

- NOTES:**
1. CLEARED AREAS TO BE REHABILITATED INCLUDING WITHIN EASEMENTS/SERVICES CORRIDOR IN ACCORDANCE WITH PMC GUIDELINES AND ESCP
 2. SERVICE CORRIDOR (EXCEPT ACCESS TRACK) TO BE REVEGETATED IN ACCORDANCE WITH PMC EASEMENT PLANTING SPECIFICATION
 3. REFER TO ELECTRICAL HEADWORK DRAWINGS FOR DETAILS
 4. REFER TO WATER AND SEWER HEADWORKS DRAWING FOR DETAILS.



FENCE SETOUT	
POINT	NORTHING
13	8619502.469
14	8619487.604
15	8619466.893
16	8619466.902

WARNING
BE AWARE OF UNDERGROUND SERVICES
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Northern Territory Government

DARWIN REGION
GREATER HOLTZE
PART B - LAND RELEASE INFRASTRUCTURE
SERVICE CORRIDOR AND ACCESS TRACK
FENCING AND DETAILS PLAN - SHEET 2 OF 3

NTG Project No. -
NTG Asset No. -
Sheet Reference - OF - C453
Amendment B A1

Drawn: JCM
Date: 16/09/2024

Designed: JCM
Date: 16/09/2024

Checked: SPB
Date: 16/09/2024

NTG Project Manager
Date: 16/09/2024

ABN 78 624 388 192
PO BOX 84274 DARWIN NT 0811
Ph: 08 84274249 Fax: 08 85475988

byrme.
Byrme Consultants Project No. NTZ2001

NO.	DATE	BY	DESCRIPTION
A	24/03/25	JCM	ISSUED FOR 75% DESIGN
B	16/09/24	JCM	ISSUED FOR 50% DESIGN



Appendix B – Aerial Imagery of Cycad protection area and adjacent services corridor

Appendix E – Part A, Erosion and Sediment Control Plan

GENERAL NOTES

- THIS IS A 'WET SEASON' ESCP FOR A SITE IN THE VICINITY OF PALMERSTON, NT.
- NOMINATED CONTROLS ARE BASED ON RECOMMENDATIONS FOLLOWING BYRNE/AKJ SITE ESC AUDIT INSPECTION CONDUCTED ON 21 JANUARY 2025.
- ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE APPROVED ESCP AND ASSOCIATED DEVELOPMENT CONDITIONS.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS CONTAINED IN:
 - THE APPROVED ESCP AND SUPPORTING DOCUMENTATION; AND
 - THE LATEST VERSION OF INTERNATIONAL EROSION CONTROL ASSOCIATION (IECA) GUIDELINES; IF THE STANDARDS AND SPECIFICATIONS ARE NOT CONTAINED IN THE APPROVED ESCP.
- CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION, MONITORING AND MANAGEMENT OF ALL EROSION AND SEDIMENT CONTROL MEASURES TO THE SATISFACTION OF DEPWS.
- CONTRACTOR SHALL TAKE ALL REASONABLE AND PRACTICABLE MEASURES TO CONTROL STORM WATER FLOW VELOCITIES; MINIMISE SOIL EROSION AND SEDIMENT RUNOFF; AND MITIGATE ENVIRONMENTAL HARM.
- UNEXPECTED CIRCUMSTANCES OR LARGE STORM EVENTS MAY NECESSITATE AMENDMENT OF THE ESCP IN THE EVENT THAT SITE CONDITIONS CHANGE SIGNIFICANTLY FROM THOSE CONSIDERED WITHIN THE APPROVED ESCP. A REVISITED EROSION AND SEDIMENT CONTROL PLAN (ESCP) MUST BE SUBMITTED FOR APPROVAL TO DEPWS AND ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MUST BE IMPLEMENTED.
- WHERE THERE IS HIGH PROBABILITY OF ENVIRONMENTAL HARM OCCURRING DUE TO SEDIMENT LEAVING THE SITE, CONTRACTOR MUST IMPLEMENT ALL REASONABLE AND PRACTICABLE MEASURES REQUIRED TO MITIGATE SUCH HARM, INCLUDING IMPLEMENTATION OF APPROPRIATE ADDITIONAL CONTROL MEASURES WITH THE ESCP. AMENDMENTS AS SOON AS POSSIBLE, AND RE-SUBMITTED FOR APPROVAL TO DEPWS.
- CONTRACTOR MUST MAINTAIN SUFFICIENT EROSION AND SEDIMENT CONTROL MATERIALS ON SITE FOR SHORT NOTICE REPAIRS.
- CONTRACTOR MUST MONITOR THE WORKS AREA WEEKLY, OR DAILY DURING RAINFALL, AND ADAPT EST. PRACTICES AS REQUIRED TO MAINTAIN THE REQUIRED PERFORMANCE STANDARD.

GENERIC INSTALLATION SEQUENCE

THE FOLLOWING TABLE INDICATES MINIMUM EROSION AND SEDIMENT CONTROL MEASURES FOR THE WORKS. SITE CONDITIONS, SUCH AS THE PRESENCE OF DISPERSIVE SOILS, MAY WARRANT HIGHER EROSION AND SEDIMENT CONTROL STANDARDS.

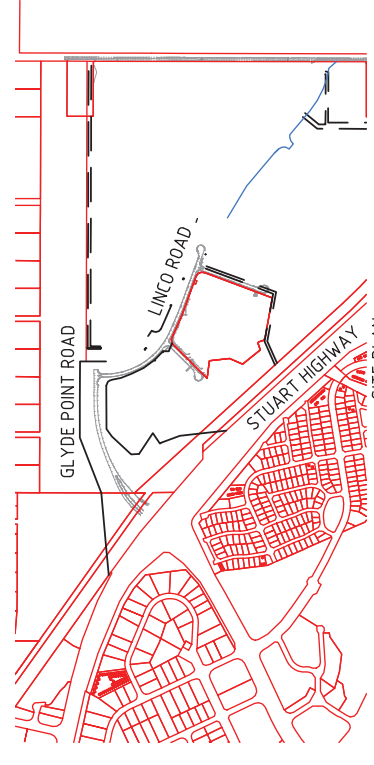
ITEM	INSTALLED	REMOVED
ENTRY/EXIT ROCK PAD	PRIOR OR IN CONJUNCTION WITH SITE CLEARING.	ONCE SITE IS STABILISED AND ALL TEMPORARY FACILITIES HAVE BEEN REMOVED.
CLEAN WATER DIVERSION CHANNELS/BERMS	PRIOR OR IN CONJUNCTION WITH SITE CLEARING.	ONCE SITE IS STABILISED AND ALL TEMPORARY FACILITIES HAVE BEEN REMOVED.
SEDIMENT FENCE	PRIOR OR IN CONJUNCTION WITH SITE CLEARING.	ONCE SITE IS STABILISED AND ALL TEMPORARY FACILITIES HAVE BEEN REMOVED.
GRAVELLING OF TEMP FACILITIES	UPON ESTABLISHMENT OF SITE ACCESS/EGRESS TRACK, SITE OFFICES AND CONCRETE AND TEMPORARY FACILITIES CARPARK / LAYDOWN AREA.	ONCE WORKS ARE COMPLETE AND TEMPORARY FACILITIES HAVE BEEN DECOMMISSIONED.
ROCK CHECK DAMS	INSTALLED IN DRAINS IMMEDIATELY AFTER DRAIN CONSTRUCTION (UNLESS 80% GROUND COVER IS ESTABLISHED PRIOR TO 30-SEP-2023).	REMOVED ONCE DRAINS ARE DECOMMISSIONED
FIELD AND KERB INLET SEDIMENT TRAPS	INSTALLED UPON COMPLETION OF STORMWATER PITS (GIPS, LBPS AND SEPS)	ONCE SITE IS STABILISED AND ALL TEMPORARY FACILITIES HAVE BEEN REMOVED.
REVEGETATION	IMMEDIATELY FOLLOWING COMPLETION OF WORKS PROGRESSIVELY AS GROUND DISTURBANCE ACTIVITIES ARE COMPLETED.	N/A

STAGING OF WORKS

ITEM OF WORKS	TIMING SCHEDULE
1. SITE MOBILISATION AND ESTABLISHMENT	NOVEMBER 2024
2. ACCESS / ENTRY AND EXIT CONTROLS	NOVEMBER 2024
3. SITE PREPARATION/EARTHWORKS	DECEMBER 2024 TO JANUARY 2025
4. SERVICES	FEBRUARY 2025 TO APRIL 2025
5. STORMWATER AND DRAINAGE	FEBRUARY 2025 TO APRIL 2025
6. ROADWORKS	MAY 2025 TO AUGUST 2025
7. LANDSCAPING AND REHABILITATION	PROGRESSIVE

EROSION RISK ASSESSMENT

CATCHMENT	AREA (ha)	R	K	LS	P	C	A (t/ha/month)	A (t/month)	CONTROL
GLYDE POINT ROAD NO GROUND COVER	3.39	3512	0.044	0.34	1.3	1.0	68	231	TYPE 1
GLYDE POINT ROAD WITH GROUND COVER	3.39	3512	0.044	0.34	1.0	0.10	5	18	TYPE 3
LINCO ROAD NO GROUND COVER	3.88	3512	0.044	0.34	1.3	1.0	68	265	TYPE 1
LINCO ROAD WITH GROUND COVER	3.88	3512	0.044	0.34	1.0	0.10	3	12	TYPE 3
SITE COMPOUND	2.00	3512	0.042	0.17	1.0	0.2	5	10	TYPE 3



SCHEDULE OF DRAWINGS

DRAWING No.	DRAWINGS (FOR INFORMATION ONLY)
ESC001	EROSION AND SEDIMENT CONTROL COVER SHEET
ESC002	EROSION AND SEDIMENT CONTROL NOTES
ESC003	EROSION AND SEDIMENT CONTROL'S LAYOUT PLAN SHEET 1 OF 6
ESC004	EROSION AND SEDIMENT CONTROL'S LAYOUT PLAN SHEET 2 OF 6
ESC005	EROSION AND SEDIMENT CONTROL'S LAYOUT PLAN SHEET 3 OF 6
ESC006	EROSION AND SEDIMENT CONTROL'S LAYOUT PLAN SHEET 4 OF 6
ESC007	EROSION AND SEDIMENT CONTROL'S LAYOUT PLAN SHEET 5 OF 6
ESC008	EROSION AND SEDIMENT CONTROL'S LAYOUT PLAN SHEET 6 OF 6
ESC009	EROSION AND SEDIMENT CONTROL'S FINISHES PLAN SHEET 1 OF 4
ESC010	EROSION AND SEDIMENT CONTROL'S FINISHES PLAN SHEET 2 OF 4
ESC011	EROSION AND SEDIMENT CONTROL'S FINISHES PLAN SHEET 3 OF 4
ESC012	EROSION AND SEDIMENT CONTROL'S FINISHES PLAN SHEET 4 OF 4
DRAWING No.	STANDARD DRAWINGS
DB-01	IECA STANDARD DRAWINGS – DRAINAGE CONTROLS
	FLOW DIVERSION BANKS
	GRAVELLING
	REVEGETATION - GENERAL
R-01	IECA STANDARD DRAWINGS – EROSION CONTROLS
	GRAVELLING
	REVEGETATION - GENERAL
	IECA STANDARD DRAWINGS – SEDIMENT CONTROLS
EXIT-01	CONSTRUCTION EXIT - ROCK PAD
EXIT-02	CONSTRUCTION EXIT - ROCK PAD (NOTES)
SF-01	SEDIMENT FENCE
SF-02	SEDIMENT FENCE (NOTES)
ESC-02	GRATED STORMWATER (FIELD) INLET SEDIMENT TRAP
ESC-03	KERB INLET SEDIMENT TRAPS
RFD-03	ROCK FILTER DAM (INSTREAM)
RFD-04	ROCK FILTER DAM (INSTREAM)

STANDARD DRAWINGS

- IECA STANDARD DRAWINGS – DRAINAGE CONTROLS
- FLOW DIVERSION BANKS
- GRAVELLING
- REVEGETATION - GENERAL
- IECA STANDARD DRAWINGS – EROSION CONTROLS
- GRAVELLING
- REVEGETATION - GENERAL
- IECA STANDARD DRAWINGS – SEDIMENT CONTROLS
- CONSTRUCTION EXIT - ROCK PAD
- CONSTRUCTION EXIT - ROCK PAD (NOTES)
- SEDIMENT FENCE
- SEDIMENT FENCE (NOTES)
- GRATED STORMWATER (FIELD) INLET SEDIMENT TRAP
- KERB INLET SEDIMENT TRAPS
- ROCK FILTER DAM (INSTREAM)
- ROCK FILTER DAM (INSTREAM)

REF: IECA STANDARD DRAWINGS - <https://www.austlii.com.au/publications/book-6-standard-drawings>
 REF: DERM TECHNICAL NOTE 8 - https://nt.gov.au/_data/assets/pdf_file/0015/212553/diversion-banks.pdf

WARNING

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 The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown.

DRAWINGS APPROVED BY CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL.
 NAME: PAUL BRANDIS
 CPESCC No: 9681
 SIGNATURE:

0	13/02/25	PC	ISSUED FOR CONSTRUCTION	AMENDMENT
<p>CLIENT</p> <p>AKJ SERVICES ABN 78 124 388 92 P.O. Box 43420 Casuarina NT 0811 Ph. 08 89472176 Fax. 08 89475998</p>				
<p>DARWIN REGION GREATER-HOLTZE POLICE HEADWORKS ESCP EROSION AND SEDIMENT CONTROL COVER SHEET</p>				
SCALE	AS SHOWN	PROJECT No	NT25008	DRAWING No
AS SHOWN	AS SHOWN	AS SHOWN	AS SHOWN	AS SHOWN
APPROVED	DESIGNED	CHECKED	CHECKED	AMOUNT
PC	AD	AD	PC	0
PC	AD	AD	PC	0
PC	AD	AD	PC	0

SITE MANAGEMENT

- CONSTRUCTION ACTIVITIES MUST BE STAGED SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF MANAGEABLE SIZE AND THE EXTENT AND DURATION OF SOIL EXPOSURE IS LIMITED. EROSION AND SEDIMENT CONTROL MEASURES MUST BE PROGRESSIVELY IMPLEMENTED TO SUIT.
- ALL OFFICE AND OPERATIONAL ACTIVITIES MUST BE LOCATED SUCH THAT ALL LIQUID EFFLUENT (E.G. WASH-DOWN WATER) IS TOTALLY CONTAINED AND TREATED WITHIN THE SITE.
- ALL LIQUIDS AND CHEMICALS MUST BE STORED AND HANDLED ON-SITE IN ACCORDANCE WITH RELEVANT STANDARDS, INCLUDING AS1940 – THE STORAGE AND HANDLING OF FLAMMABLE AND COMBUSTIBLE LIQUIDS.
- SITE SPOILS MUST BE LAWFULLY DISPOSED OF IN A MANNER THAT DOES NOT RESULT IN ONGOING SOIL EROSION OR ENVIRONMENTAL HARM.
- EXCAVATION WORKS MUST BE STAGED SO THAT THE DURATION OF EXPOSED OPEN TRENCHES IS LIMITED. DURING THE "WET SEASON", TRENCHING MUST ONLY BE OPENED UP WHERE IT IS INTENDED TO BE BACKFILLED IN THE SAME WORKING DAY.
- NO LIQUID EFFLUENT IS PERMITTED TO BE DISPOSED OF ON SITE.
- ACCESS TRACKS ARE TO BE GRADED TO A CROWN OR WITH GROSSFALL DRAINAGE.
- ACCESS TRACKS ARE TO INCORPORATE STABILISED EXIT POINTS.
- ACCESS TRACKS ARE TO BE MONITORED FOR EXCESSIVE SEDIMENT TRACKING INTO ADJACENT PUBLIC ROADS. A REVIEW OF THE CONTROLS WILL BE UNDERTAKEN AND ADDITIONAL MEASURES MAY BE EMPLOYED WHERE SEDIMENT BUILD-UP OCCURS ON PUBLIC ROADS AT VEHICLE EXIT POINTS.

CLEARING AND GRUBBING

- MINIMISE DISTURBANCE TO ONLY THOSE AREAS REQUIRED FOR CONSTRUCTION. ALL OTHER AREAS WILL BE FLAGGED AS "NO-GO ZONE"
- ALL CLEARING MUST BE CONDUCTED IN ACCORDANCE WITH FEDERAL, TERRITORY AND LOCAL GOVERNMENT ENVIRONMENTAL POLICIES.
- BEFORE CLEARING COMMENCES, AREAS OF VEGETATION NOMINATED FOR PROTECTION MUST BE CLEARLY IDENTIFIED AND MARKED ON SITE (BY FLAGGING OR FENCING) AND INSPECTED BY THE SUPERINTENDENT. CLEARING OF VEGETATION MUST BE RESTRICTED TO THE NOMINATED AREAS. CONTRACTOR MUST TAKE ALL REASONABLE AND PRACTICABLE MEASURES TO MITIGATE RISK OF UNNECESSARY LAND CLEARING AND PREVENT REMOVAL OR DISTURBANCE OF ALL VEGETATION AND GROUND COVERS (ORGANIC OR INORGANIC) INTENDED TO BE RETAINED.
- WHERE CLEARING IS REQUIRED FOR THE PURPOSE OF INSTALLING EROSION AND SEDIMENT CONTROL MEASURES, EXTENTS OF CLEARING MUST BE KEPT TO A MINIMUM.
- DISTURBANCE OF THE NATURAL ENVIRONMENT MUST BE LIMITED TO THE MINIMUM IN KEEPING WITH THE SITE CLEARING PLANS.
- CONTRACTOR MUST TAKE ALL PRACTICABLE AND REASONABLE MEASURES DURING CLEARING OPERATIONS TO PREVENT THE FORMATION OF FLOW PATHS THAT CAN CONCENTRATE SURFACE RUNOFF AND CREATE POTENTIAL FOR EROSION.

TOPSOIL AND STOCKPILE MANAGEMENT

- SITE OF STOCKPILES, INCLUDING EXTENT AND LIMIT OF CLEARING, TO BE AGREED WITH SUPERINTENDENT.
- STRIPPED TOPSOIL MUST BE STOCKPILED FOR REUSE. TOPSOIL STOCKPILE HEIGHTS MUST BE 15m MAX. ALL OTHER STOCKPILE HEIGHTS MUST BE 3m MAX WITH 1 IN 4 BATTERS MAX.
- TOPSOIL STOCKPILE MUST NOT BE COMPACTED OR WHEEL ROLLED
- AVOID PLACEMENT OF STOCKPILES (WHERE PRACTICABLE) WITHIN 50m OF ANY DRAINS, DRAINAGE LINE OR OTHER WATERWAYS. SUITABLE TYPE 2/3 EROSION AND SEDIMENTATION CONTROLS TO BE IMPLEMENTED WHERE NOT PRACTICABLE.
- THE FOLLOWING CONTROLS MUST BE IMPLEMENTED FOR STOCKPILES OF ERODIBLE MATERIAL:
 - A STOCKPILES MUST BE LOCATED AT LEAST 2m FROM ANY RETAINED VEGETATION AND CONCENTRATED DRAINAGE LINES.
 - BEAR EARTH DIVERSION BUNDS MUST BE INSTALLED IMMEDIATELY UP-SLOPE OF THE STOCKPILE, WHERE THE CONTRIBUTING CATCHMENT EXCEEDS 150m² AND MUST BE MANAGED TO AVOID CONCENTRATING FLOW CAUSING EROSION.
 - SEDIMENT CONTROL MEASURES MUST BE INSTALLED DOWNSTREAM OF THE STOCKPILE (E.G. MULCH BERMS OR SEDIMENT FENCES).
 - TRENCH SPOIL AND BACKFILL MATERIAL MUST GENERALLY BE STOCKPILED A MINIMUM OF 10m FROM OPEN TRENCHES.
- STOCKPILE OF MATERIALS VULNERABLE TO SEDIMENTATION TO BE COVERED IF REQUIRED.
- LONG-TERM STOCKPILES (10 DAYS OR MORE) MUST BE ADEQUATELY STABILISED (E.G. COVER, VEGETATION, SOIL BINDER, OR OTHER) AS DEEMED APPROPRIATE BY THE SUPERINTENDENT.
- ALL DISTURBED AREAS OF STOCKPILES MUST BE SUITABLY STABILISED.

SURFACE WATER AND DRAINAGE CONTROL

- ALL DRAINAGE CONTROL MEASURES MUST BE APPLIED AND MAINTAINED IN ACCORDANCE WITH APPROVED ESCP DRAWINGS.
- DURING THE CONSTRUCTION PHASE, ALL REASONABLE AND PRACTICABLE MEASURES MUST BE IMPLEMENTED TO:
 - A. DIVERT CLEAN SURFACE WATERS AWAY FROM THE SITE IN A MANNER THAT MINIMISES EROSION OR CONTAMINATION OF WATER.
 - B. CONTROL FLOW VELOCITIES AND PREVENT SOIL EROSION ALONG DRAINAGE PATHS, INCLUDING ENTRY/EXIT POINTS; AND ENSURE ALL WATERS ARE DISCHARGED ONTO STABLE LAND, IN A NON-EROSIVE MANNER, AND AT A LEGAL POINT OF DISCHARGE.
 - C. MANAGEMENT OF DRAINAGE IS TO AVOID CONCENTRATION OF FLOW.
 - D. OPEN PROFILE TRAPEZOIDAL DRAINS INSTEAD OF "V" DRAINS ARE TO BE USED.
- CONTROL WATER MOVEMENT THROUGH THE WORKS AREA; FLOW DIVERSION BANKS AND CATCH DRAINS ARE TO BE INSTALLED AS PER DRAWINGS.

EROSION CONTROL AND SURFACE STABILISATION

- ALL EROSION CONTROL MEASURES MUST BE APPLIED AND MAINTAINED IN ACCORDANCE WITH APPROVED ESCP DRAWINGS.
- SYNTHETIC EROSION CONTROL TREATMENTS MUST NOT BE USED IF SUCH MATERIALS ARE LIKELY TO CAUSE ENVIRONMENTAL HARM.
- SUITABLY STABILISE AREAS WHERE WORKS ARE EXPECTED TO BE SUSPENDED FOR A PERIOD EXCEEDING 30 DAYS IN THE DRY SEASON AND 10 DAYS IN THE WET SEASON (WHEN RAINFALL IS REASONABLY POSSIBLE).

DUST CONTROL

- ALL DUST CONTROL MEASURES MUST BE APPLIED AND MAINTAINED IN ACCORDANCE WITH APPROVED ESCP DRAWINGS.
- CONTRACTOR MUST BE RESPONSIBLE FOR THE EFFECTIVE CONTROL OF ALL DUST AND WINDBORNE MATERIAL EMANATING FROM THE SITE THROUGHOUT THE PERIOD OF THE CONTRACT.
- CONTRACTOR MUST IMPLEMENT ALL MEASURES NECESSARY TO MINIMISE WIND EROSION AND PREVENT MATERIAL FROM THE SITE BEING BLOWN OVER OR ONTO PROPERTY OUTSIDE OF THE SITE. MEASURES MUST INCLUDE BUT NOT BE LIMITED TO:
 - A. MINIMISING TRAFFIC MOVEMENTS ON DISTURBED SURFACES AND LIMITING VEHICLE SPEEDS TO 25KPH;
 - B. MAINTAINING EXPOSED SURFACES IN A MOIST CONDITION THROUGH FREQUENT WATERING;
 - C. PROGRAMMING WORKS TO MINIMISE THE LIFE OF SOIL STOCKPILES, OR TEMPORARILY STABILISING LONG TERM STOCKPILES.
- DURING DRY PERIODS, UTILISE WATER TRUCK TO WATER DOWN WORKS SURFACES TO MINIMISE DUST GENERATION. DUST SUPPRESSION IS TO BE IMPLEMENTED BY SITE SUPERVISOR AS REQUIRED BY VISUAL INSPECTION.

DEWATERING

- CONTRACTOR MUST MITIGATE SEDIMENT RELATED ENVIRONMENTAL HARM AND/OR IMPACT TO STORMWATER INFRASTRUCTURE RESULTING FROM DEWATERING ACTIVITIES.
- FLOW DIVERSION BARRIERS, OR OTHER APPROPRIATE SYSTEMS, MUST BE USED TO MINIMISE THE QUANTITY OF WATER ENTERING EXCAVATIONS.
- DEWATERING CONTROL MAY INCLUDE GEOTEXTILE FILTERS AND NON-WOVEN FILTERING FENCING.
- SEDIMENT LADEN WATER MUST NOT BE DISCHARGED OFF-SITE WITHOUT FIRST BEING TREATED SATISFACTORILY TO REQUIREMENTS OF THE SUPERINTENDENT.

REVEGETATION AND REHABILITATION

- ALL DISTURBED AREAS AND EARTHWORKS MUST BE PROGRESSIVELY REHABILITATED WITH GRASS, OR OTHER COVER.

TRENCHING

- EXCAVATION WORKS MUST BE STAGED SO THAT THE DURATION OF EXPOSED OPEN TRENCHES IS LIMITED. TRENCHING MUST ONLY BE OPENED UP WHERE IT IS INTENDED TO BE BACKFILLED WITHIN 5 DAYS DURING THE DRY SEASON AND ON THE SAME DAY DURING THE WET SEASON.
- ALL STORMWATER, HYDRAULIC, AND ELECTRICAL SERVICE TRENCHES: NOT LOCATED WITHIN ROADWAYS, MUST BE MULCHED AND SEEDED OR APPROPRIATELY STABILISED VIA OTHER MEANS WITHIN 7 DAYS AFTER BACKFILL.

SEDIMENT CONTROL

- ALL SEDIMENT CONTROL MEASURES MUST BE APPLIED AND MAINTAINED IN ACCORDANCE WITH APPROVED ESCP DRAWINGS.
- ALL REASONABLE AND PRACTICABLE MEASURES MUST BE TAKEN TO PREVENT, OR AT LEAST MINIMISE, THE RELEASE OF SEDIMENT FROM THE SITE. SEDIMENT CONTROL DEVICES MUST BE INSTALLED TO TRAP SEDIMENT AS CLOSE TO THE SOURCE AS PRACTICABLE.
- SEDIMENT CONTROL DEVICES MUST NOT PRESENT A SAFETY HAZARD FOR SITE WORKERS AND/OR THE PUBLIC.
- SEDIMENT FENCES AND/OR MULCH FILTER BERMS ARE TO BE INSTALLED ALONG THE DOWN SLOPE SIDE OF THE EARTHWORK ACTIVITIES AS PER ICA STANDARD DRAWINGS SF-01, SF-02 AND MB-01. ENSURE RETURNS ARE PROVIDED WHERE APPLICABLE.
- SEDIMENT CONTROLS ARE TO REMAIN IN PLACE UNTIL THE ACTIVITIES ARE FINISHED AND AREAS ARE STABILISED.
- TRACKING OF SEDIMENTS ONTO ROADS EXTERNAL OF THE SITE IS NOT PERMITTED. ENTRY/EXIT TO SITE MUST BE RESTRICTED TO DEFINED POINTS, WITH SUPPLEMENTARY ENTRY/EXIT SEDIMENT CONTROLS INSTALLED.
- SEDIMENT CONTROL DEVICES MUST BE DE-SILTED WHEN CAPACITY IS REDUCED BELOW 80%.
- SEDIMENT CONTROLS MUST BE INSPECTED WEEKLY DURING CONSTRUCTION AND IMMEDIATELY AFTER EACH RAINFALL EVENT.

MONITORING

- EROSION AND SEDIMENT CONTROLS ARE DESIGNED IN ACCORDANCE WITH ICA BEST PRACTICE GUIDELINES, USING AN EROSION RISK ASSESSMENT TO CONFIRM THE TYPE OF CONTROLS REQUIRED AROUND EACH SUB-CATCHMENT OF THE SITE.
- ANY FAILURE IN APPLIED DRAINAGE, EROSION AND SEDIMENT CONTROLS MUST BE REPORTED TO THE SUPERINTENDENT WITHIN 24 HOURS OF THE INCIDENT OCCURRING.
- ANY INCIDENT WHICH RESULTS IN UNAUTHORISED DISCHARGE OF SEDIMENT OR SEDIMENT LADEN WATER TO A WATERWAY, OR HAS POTENTIAL TO RESULT IN SERIOUS ENVIRONMENTAL HARM, MUST BE REPORTED TO THE NT ENVIRONMENT PROTECTION AUTHORITY (EPA) WITHIN 24 HOURS VIA THE POLLUTION HOTLINE ON 1800 064 567.
- ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED:
 - A. AT LEAST DAILY (WHEN WORK IS OCCURRING ON-SITE);
 - B. AT LEAST WEEKLY (WHEN WORK IS NOT OCCURRING ON-SITE);
 - C. WITHIN 24 HOURS PRIOR TO EXPECTED RAINFALL; AND
 - D. WITHIN 18 HOURS FOLLOWING A RAINFALL EVENT OF SUFFICIENT INTENSITY AND DURATION TO CAUSE RUNOFF ON-SITE.

MAINTENANCE

- THE CONTRACTOR MUST ENSURE CONSTRUCTION ACCESS IS AVAILABLE FOR THE INSTALLATION AND ONGOING MAINTENANCE OF SEDIMENT CONTROL DEVICES.
- ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING DRAINAGE CONTROL MEASURES, MUST BE MAINTAINED IN PROPER WORKING ORDER AT ALL TIMES DURING THEIR OPERATIONAL LIVES.
- CONTRACTOR MUST REPAIR ANY DAMAGED EROSION AND SEDIMENT CONTROL MEASURES, AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.
- CONTRACTOR MUST ENSURE SEDIMENT CONTROL DEVICES ARE DE-SILTED AND MADE FULLY OPERATIONAL AS SOON AS PRACTICABLE AFTER SEDIMENT-PRODUCING EVENTS, TO ENSURE THE SEDIMENT RETENTION CAPACITY IS MAINTAINED ABOVE 80% OF ITS DESIGN RETENTION CAPACITY.
- ALL MATERIALS, WHETHER LIQUID OR SOLID, REMOVED FROM SEDIMENT CONTROL DEVICES AND PLACES OF SEDIMENT DEPOSITION, MUST BE DISPOSED OF IN AN APPROVED MANNER THAT DOES NOT CAUSE FURTHER SOIL EROSION OR ENVIRONMENTAL HARM. MATERIALS MUST BE DISPOSED OF IN A LOCATION THAT PREVENTS MATERIALS RE-ENTERING THE SYSTEM.
- ALL SEDIMENT DEPOSITED OFFSITE AS A DIRECT RESULT OF CONSTRUCTION ACTIVITIES MUST BE REMOVED AND THE AREA APPROPRIATELY CLEANED / REHABILITATED AS SOON AS PRACTICABLE.
- EROSION AND SEDIMENT CONTROL MEASURES MUST BE MAINTAINED UNTIL AFTER THE STOCKPILE IS REMOVED FROM THE SITE.
- ALL TEMPORARY CONTROL MEASURES MUST BE REMOVED AFTER ACHIEVING A SATISFACTORY "OFF-MAINTENANCE INSPECTION" BY SUPERINTENDENT'S REPRESENTATIVE.

ISSUED FOR CONSTRUCTION

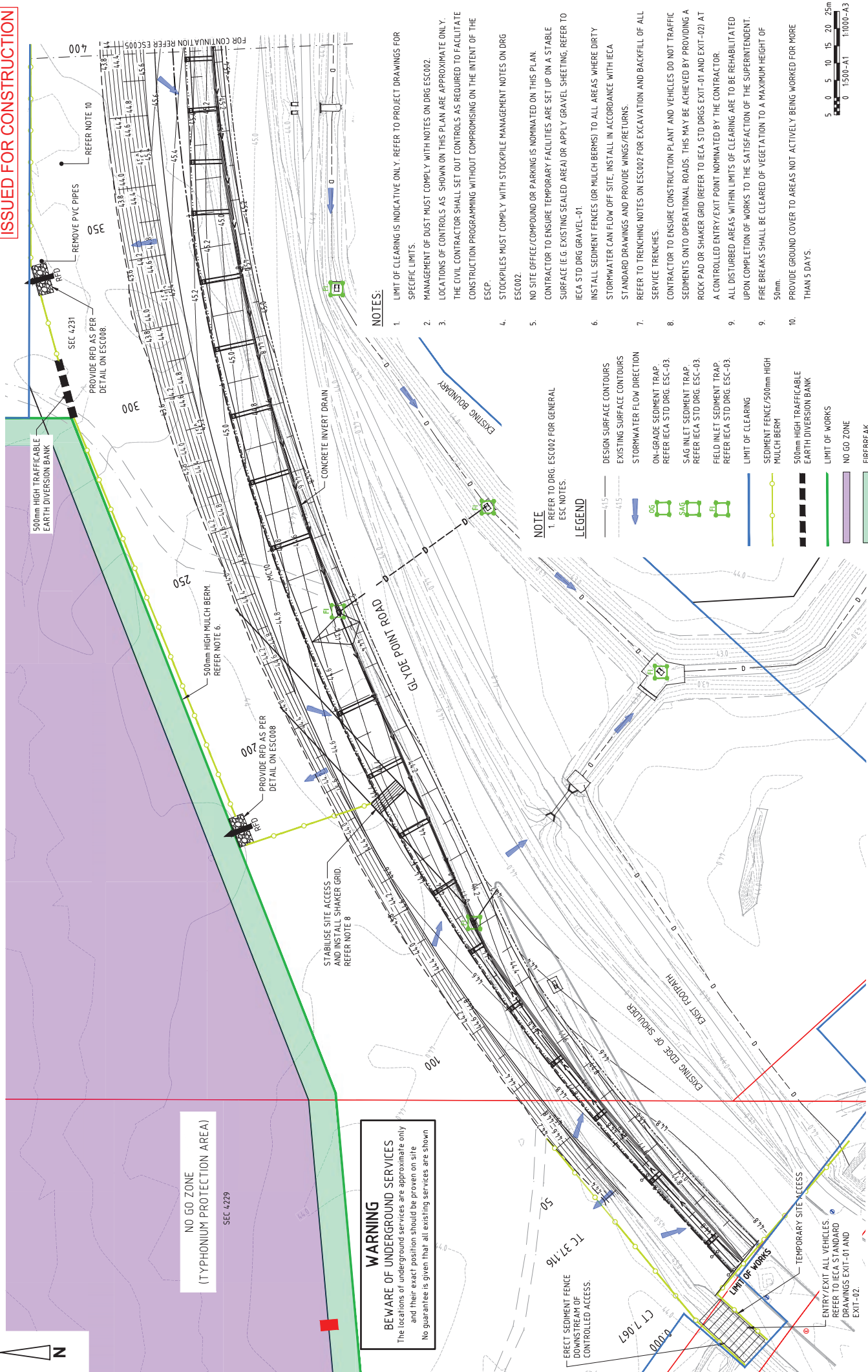
No.		DATE		PC	ISSUED FOR CONSTRUCTION	AMENDMENT
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CLIENT						
APPROVED		PB		DARWIN REGION GREATER-HOLTZE POLICE HEADWORKS ESCP		
DRAWN		CHECKED		EROSION AND SEDIMENT CONTROL NOTES		
DESIGNED		AD		SCALE AS SHOWN		
PC		PB		PROJECT No. NT25008		
				DRAWING No. ESC002		
				AMOUNT 0		

ISSUED FOR CONSTRUCTION



NO GO ZONE
(TYPHONIUM PROTECTION AREA)
SEC 4229

WARNING
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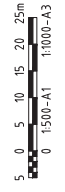
NOTES:

- LIMIT OF CLEARING IS INDICATIVE ONLY. REFER TO PROJECT DRAWINGS FOR SPECIFIC LIMITS.
- MANAGEMENT OF DUST MUST COMPLY WITH NOTES ON DRG ESC002.
- LOCATIONS OF CONTROLS AS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CIVIL CONTRACTOR SHALL SET OUT CONTROLS AS REQUIRED TO FACILITATE CONSTRUCTION PROGRAMMING WITHOUT COMPROMISING ON THE INTENT OF THE ESCP.
- STOCKPILES MUST COMPLY WITH STOCKPILE MANAGEMENT NOTES ON DRG ESC002.
- NO SITE OFFICE/COMPOUND OR PARKING IS NOMINATED ON THIS PLAN. CONTRACTOR TO ENSURE TEMPORARY FACILITIES ARE SET UP ON A STABLE SURFACE (E.G. EXISTING SEALED AREA) OR APPLY GRAVEL SHEETING, REFER TO IECA STD DRG GRAVEL-01.
- INSTALL SEDIMENT FENCES (OR MULCH BERMS) TO ALL AREAS WHERE DIRTY STORMWATER CAN FLOW OFF SITE. INSTALL IN ACCORDANCE WITH IECA STANDARD DRAWINGS AND PROVIDE WINGS/RETURNS.
- REFER TO TRENCHING NOTES ON ESC002 FOR EXCAVATION AND BACKFILL OF ALL SERVICE TRENCHES.
- CONTRACTOR TO ENSURE CONSTRUCTION PLANT AND VEHICLES DO NOT TRAFFIC SEDIMENT ONTO OPERATIONAL ROADS. THIS MAY BE ACHIEVED BY PROVIDING A ROCK PAD OR SHAKER GRID (REFER TO IECA STD DRG EXT-01 AND EXT-02) AT A CONTROLLED ENTRY/EXIT POINT NOMINATED BY THE CONTRACTOR.
- ALL DISTURBED AREAS WITHIN LIMITS OF CLEARING ARE TO BE REHABILITATED UPON COMPLETION OF WORKS TO THE SATISFACTION OF THE SUPERINTENDENT.
- FIRE BREAKS SHALL BE CLEARED OF VEGETATION TO A MAXIMUM HEIGHT OF 50mm.
- PROVIDE GROUND COVER TO AREAS NOT ACTIVELY BEING WORKED FOR MORE THAN 5 DAYS.

NOTE
1. REFER TO DRG. ESC002 FOR GENERAL ESC NOTES.

LEGEND

- DESIGN SURFACE CONTOURS
- EXISTING SURFACE CONTOURS
- STORMWATER FLOW DIRECTION
- ON-GRADE SEDIMENT TRAP
- SAG INLET SEDIMENT TRAP
- FIELD INLET SEDIMENT TRAP
- LIMIT OF CLEARING
- SEDIMENT FENCE/500mm HIGH MULCH BERM
- 500mm HIGH TRAFFICABLE EARTH DIVERSION BANK
- LIMIT OF WORKS
- NO GO ZONE
- FIREBREAK



<p>APPROVED</p> <p>PB DRAWN</p> <p>AD DESIGNED</p> <p>PC CHECKED</p>		<p>CLIENT</p> <p>AKJ SERVICES</p>		<p>BYRNE CONSULTANTS</p> <p>ABN 78 124 388 892 P.O. Box 43420 Casuarina NT 0811 Ph. 08 89472476 Fax. 08 89475998</p>		<p>DARWIN REGION GREATER HOLTZE POLICE HEADWORKS ESCP EROSION AND SEDIMENT CONTROL LAYOUT PLAN SHEET 2 OF 6</p>		<p>PROJECT No. NT25008</p> <p>AS SHOWN</p>		<p>DRAWING No. ESC004</p> <p>AMOUNT 0</p>	
No.	DATE	INITIAL	PC	ISSUED FOR CONSTRUCTION	AMENDMENT						
0	13/02/25	PC		ISSUED FOR CONSTRUCTION	AMENDMENT						

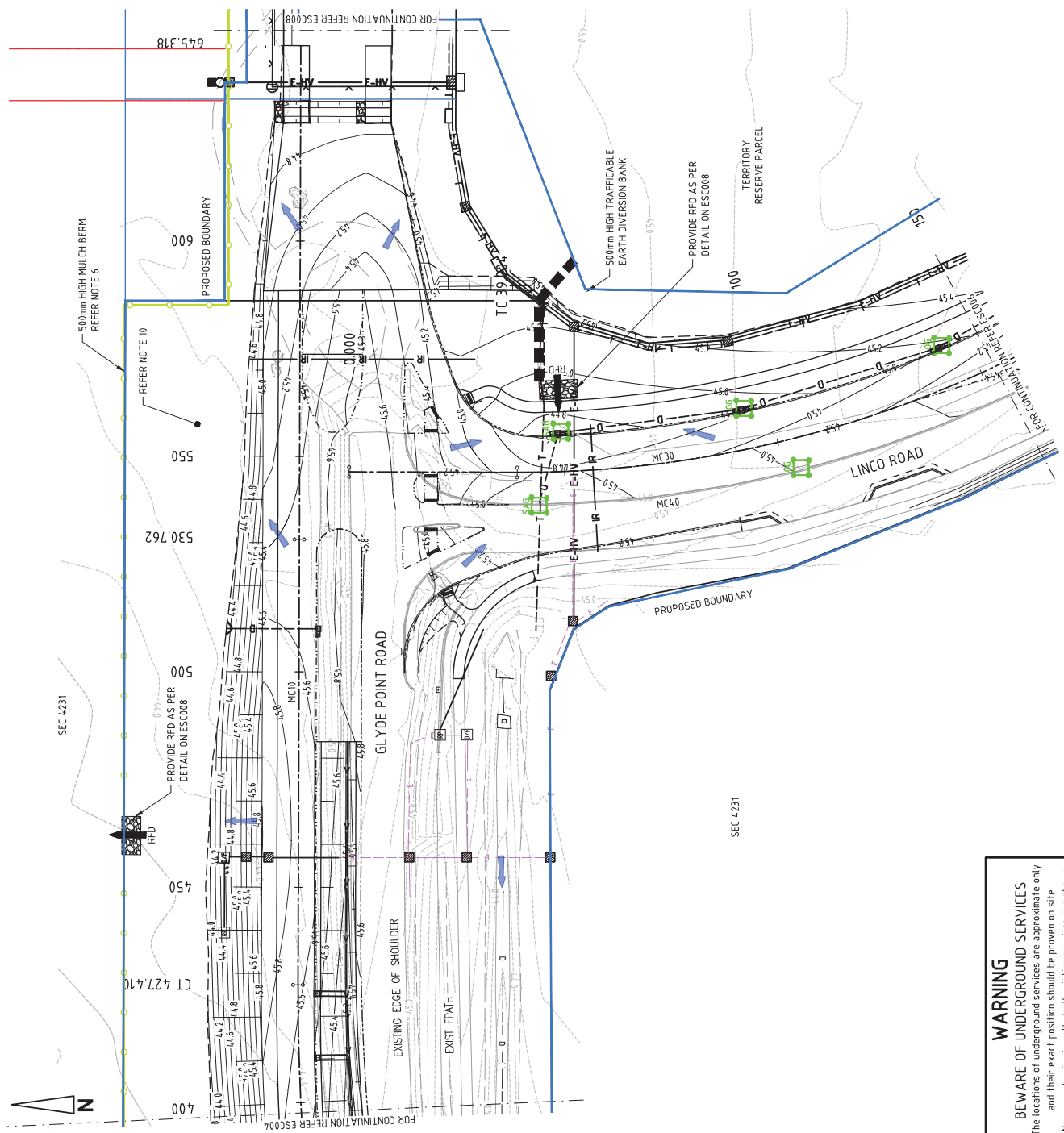
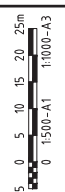
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NOTE
1. REFER TO DRG. ESC002 FOR GENERAL ESC NOTES.

- LEGEND**
- DESIGN SURFACE CONTOURS
 - EXISTING SURFACE CONTOURS
 - STORMWATER FLOW DIRECTION
 - ON-GRADE SEDIMENT TRAP
 - SAG INLET SEDIMENT TRAP
 - FIELD INLET SEDIMENT TRAP
 - LIMIT OF CLEARING
 - SEDIMENT FENCE/500mm HIGH MULCH BERM
 - 500mm HIGH TRAFFICABLE EARTH DIVERSION BANK

- NOTES:**
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 3. LOCATIONS OF CONTROLS AS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CIVIL CONTRACTOR SHALL SET OUT CONTROLS AS REQUIRED TO FACILITATE CONSTRUCTION PROGRAMMING WITHOUT COMPROMISING ON THE INTENT OF THE ESCP.
 4. STOCKPILES MUST COMPLY WITH STOCKPILE MANAGEMENT NOTES ON DRG ESC002.
 5. NO SITE OFFICE/COMPOUND OR PARKING IS NOMINATED ON THIS PLAN. CONTRACTOR TO ENSURE TEMPORARY FACILITIES ARE SET UP ON A STABLE SURFACE (E.G. EXISTING SEALED AREA) OR APPLY GRAVEL SHEETING, REFER TO IECA STD DRG GRAVEL-01.
 6. INSTALL SEDIMENT FENCES (OR MULCH BERMS) TO ALL AREAS WHERE DIRTY STORMWATER CAN FLOW OFF SITE, INSTALL IN ACCORDANCE WITH IECA STANDARD DRAWINGS AND PROVIDE WINGS/RETURNS.
 7. REFER TO TRENCHING NOTES ON ESC002 FOR EXCAVATION AND BACKFILL OF ALL SERVICE TRENCHES.
 8. CONTRACTOR TO ENSURE CONSTRUCTION PLANT AND VEHICLES DO NOT TRAFFIC SEDIMENTS ONTO OPERATIONAL ROADS. THIS MAY BE ACHIEVED BY PROVIDING A ROCK PAD OR SHAKER GRID (REFER TO IECA STD DRGS EXIT-01 AND EXIT-02) AT A CONTROLLED ENTRY/EXIT POINT NOMINATED BY THE CONTRACTOR.
 9. ALL DISTURBED AREAS WITHIN LIMITS OF CLEARING ARE TO BE REHABILITATED UPON COMPLETION OF WORKS TO THE SATISFACTION OF THE SUPERINTENDENT.
 10. PROVIDE GROUND COVER TO AREAS NOT ACTIVELY BEING WORKED FOR MORE THAN 5 DAYS.



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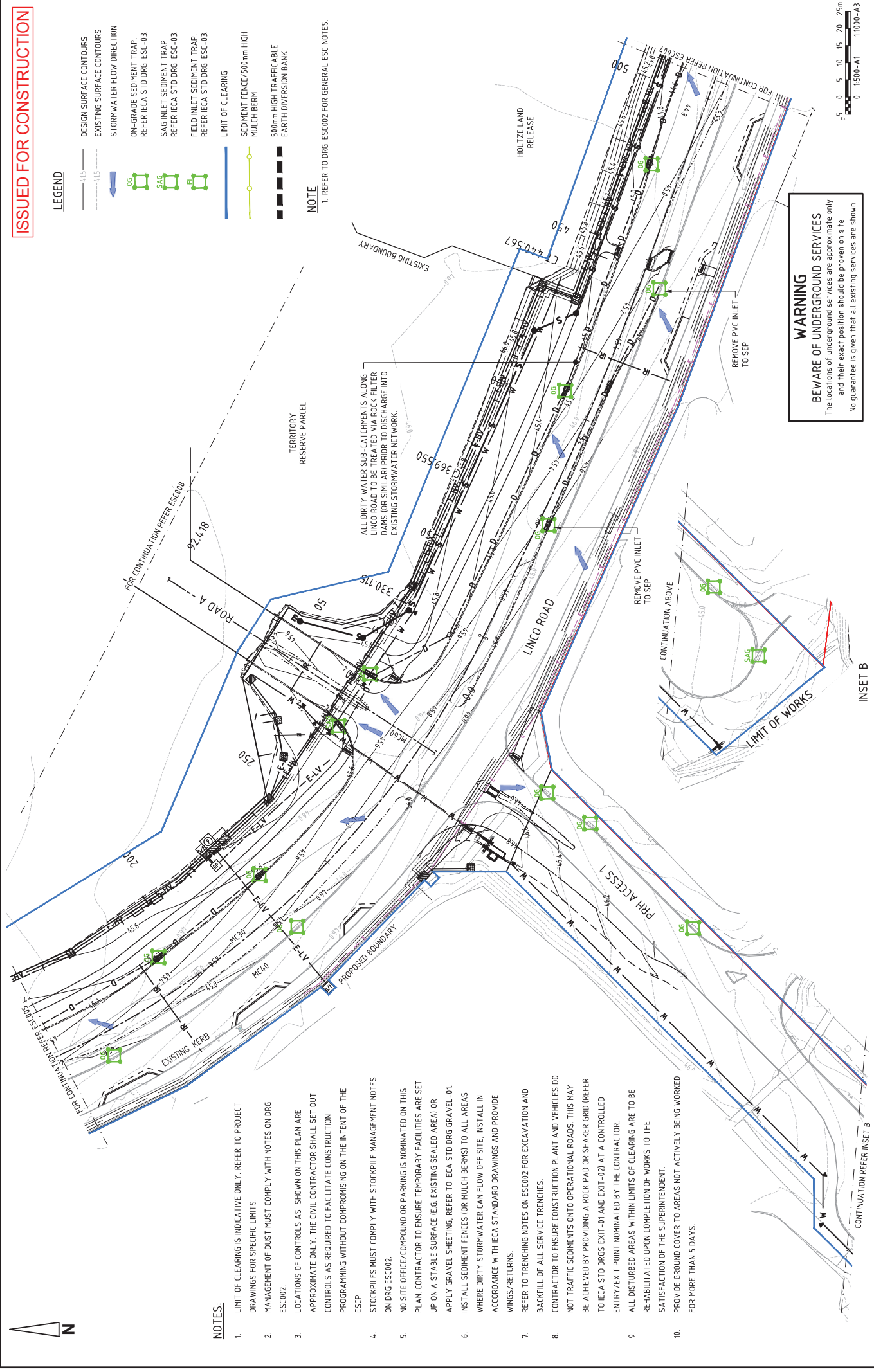
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PB		AD		PC		PB		AS SHOWN		NT25008		ESC005		0	
<p>DARWIN REGION GREATER HOLTZE POLICE HEADWORKS ESCP EROSION AND SEDIMENT CONTROL LAYOUT PLAN SHEET 3 OF 6</p>															
<p>ABN 78 124 388 892 P.O. Box 43420 Casuarina NT 0811 Ph. 08 89472476 Fax. 08 89475998</p>															
<p>byrne.</p>															
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0	13/02/25	PC	ISSUED FOR CONSTRUCTION	AMENDMENT											

ISSUED FOR CONSTRUCTION

- LEGEND**
- 415 ——— DESIGN SURFACE CONTOURS
 - - - 415 - - - EXISTING SURFACE CONTOURS
 - STORMWATER FLOW DIRECTION
 - OG ON-GRADE SEDIMENT TRAP. REFER IECA STD DRG. ESC-03.
 - SAG SAG INLET SEDIMENT TRAP. REFER IECA STD DRG. ESC-03.
 - EL FIELD INLET SEDIMENT TRAP. REFER IECA STD DRG. ESC-03.
 - LIMIT OF CLEARING
 - SEDIMENT FENCE/500mm HIGH MULCH BERM
 - 500mm HIGH TRAFFICABLE EARTH DIVERSION BANK

NOTE

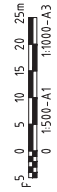
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4. STOCKPILES MUST COMPLY WITH STOCKPILE MANAGEMENT NOTES ON DRG ESC002.
5. NO SITE OFFICE/COMPOUND OR PARKING IS NOMINATED ON THIS PLAN. CONTRACTOR TO ENSURE TEMPORARY FACILITIES ARE SET UP ON A STABLE SURFACE (E.G. EXISTING SEALED AREA) OR APPLY GRAVEL SHEETING. REFER TO IECA STD DRG GRAVEL-01
6. INSTALL SEDIMENT FENCES (OR MULCH BERMS) TO ALL AREAS WHERE DIRTY STORMWATER CAN FLOW OFF SITE. INSTALL IN ACCORDANCE WITH IECA STANDARD DRAWINGS AND PROVIDE WINGS/RETURNS.
7. REFER TO TRENCHING NOTES ON ESC002 FOR EXCAVATION AND BACKFILL OF ALL SERVICE TRENCHES.
8. CONTRACTOR TO ENSURE CONSTRUCTION PLANT AND VEHICLES DO NOT TRAFFIC SEDIMENTS ONTO OPERATIONAL ROADS. THIS MAY BE ACHIEVED BY PROVIDING A ROCK PAD OR SHAKER GRID (REFER TO IECA STD DRGS EXIT-01 AND EXIT-02) AT A CONTROLLED ENTRY/EXIT POINT NOMINATED BY THE CONTRACTOR.
9. ALL DISTURBED AREAS WITHIN LIMITS OF CLEARING ARE TO BE REHABILITATED UPON COMPLETION OF WORKS TO THE SATISFACTION OF THE SUPERINTENDENT.
 PROVIDE GROUND COVER TO AREAS NOT ACTIVELY BEING WORKED FOR MORE THAN 5 DAYS.



<p>AKJ SERVICES</p>		<p>byrne.</p>		<p>DARWIN REGION GREATER HOLTZE HOLTZE HEADWORKS ESCP EROSION AND SEDIMENT CONTROL LAYOUT PLAN SHEET 4 OF 6</p>	
<p>CLIENT</p>		<p>APPROVED</p>		<p>SCALE AS SHOWN</p>	
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0	13/02/25	PC		ES006	0

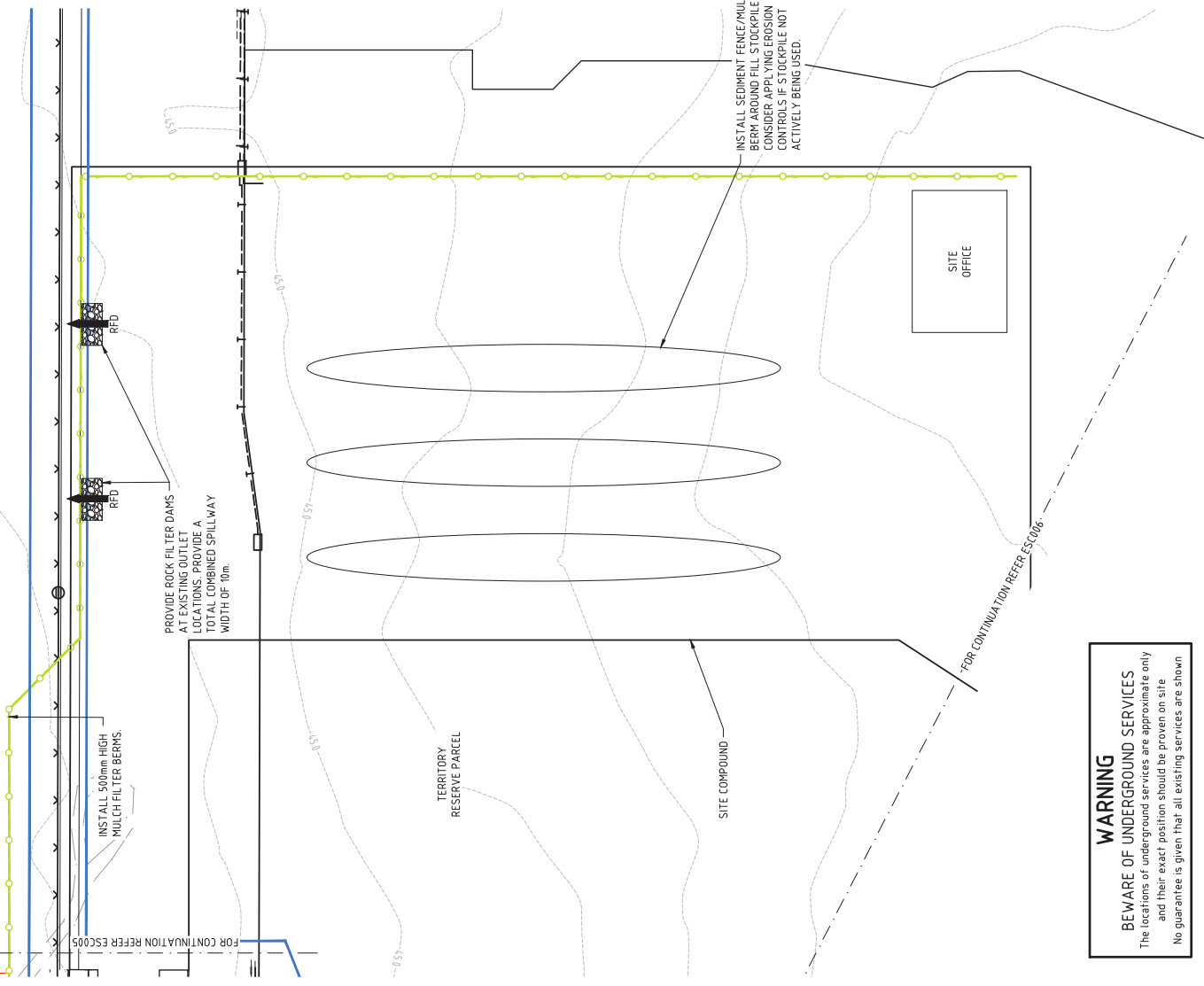
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NOTES:

- LIMIT OF CLEARING IS INDICATIVE ONLY. REFER TO PROJECT DRAWINGS FOR SPECIFIC LIMITS.
- MANAGEMENT OF DUST MUST COMPLY WITH NOTES ON DRG ESC002.
- LOCATIONS OF CONTROLS AS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CIVIL CONTRACTOR SHALL SET OUT CONTROLS AS REQUIRED TO FACILITATE CONSTRUCTION PROGRAMMING WITHOUT COMPROMISING ON THE INTENT OF THE ESCP.
- STOCKPILES MUST COMPLY WITH STOCKPILE MANAGEMENT NOTES ON DRG ESC002.
- NO SITE OFFICE/COMPOUND OR PARKING IS NOMINATED ON THIS PLAN. CONTRACTOR TO ENSURE TEMPORARY FACILITIES ARE SET UP ON A STABLE SURFACE (E.G. EXISTING SEALED AREA) OR APPLY GRAVEL SHEETING. REFER TO IECA STD DRG GRAVEL-01.
- INSTALL SEDIMENT FENCES (OR MULCH BERMS) TO ALL AREAS WHERE DIRTY STORMWATER CAN FLOW OFF SITE. INSTALL IN ACCORDANCE WITH IECA STANDARD DRAWINGS AND PROVIDE WINGS/RETURNS. REFER TO TRENCHING NOTES ON ESC002 FOR EXCAVATION AND BACKFILL OF ALL SERVICE TRENCHES. CONTRACTOR TO ENSURE CONSTRUCTION PLANT AND VEHICLES DO NOT TRAFFIC SEDIMENTS ONTO OPERATIONAL ROADS. THIS MAY BE ACHIEVED BY PROVIDING A ROCK PAD OR SHAKER GRID (REFER TO IECA STD DRGS EXIT-01 AND EXIT-02) AT A CONTROLLED ENTRY/EXIT POINT NOMINATED BY THE CONTRACTOR.
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- PROVIDE GROUND COVER TO AREAS NOT ACTIVELY BEING WORKED FOR MORE THAN 5 DAYS.

NOTE

- REFER TO DRG. ESC002 FOR GENERAL ESC NOTES.



PROVIDE ROCK FILTER DAMS AT EXISTING OUTLET LOCATIONS PROVIDE A TOTAL COMBINED SPILLWAY WIDTH OF 10m.

INSTALL 500mm HIGH MULCH FILTER BERMS.

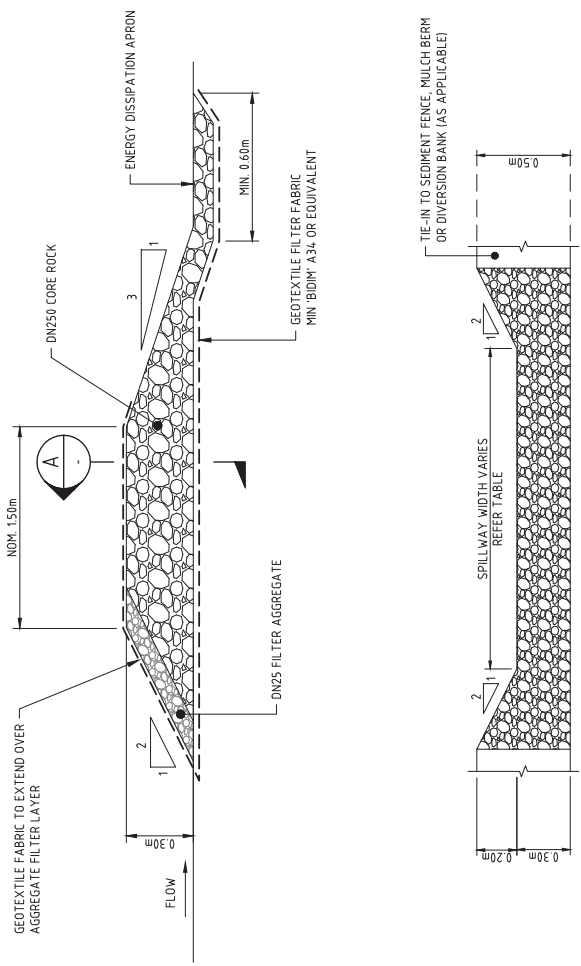
INSTALL SEDIMENT FENCE/MULCH BERM AROUND FILL STOCKPILE. CONSIDER APPLYING EROSION CONTROLS IF STOCKPILE NOT ACTIVELY BEING USED.

FOR CONTINUATION REFER ESC006

WARNING
BEWARE OF UNDERGROUND SERVICES
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LEGEND

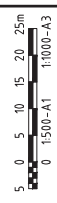
- DESIGN SURFACE CONTOURS
- EXISTING SURFACE CONTOURS
- STORMWATER FLOW DIRECTION
- ON-GRADE SEDIMENT TRAP. REFER IECA STD DRG. ESC-03.
- SAG INLET SEDIMENT TRAP. REFER IECA STD DRG. ESC-03.
- FIELD INLET SEDIMENT TRAP. REFER IECA STD DRG. ESC-03.
- LIMIT OF CLEARING
- SEDIMENT FENCE/500mm HIGH MULCH BERM
- 500mm HIGH TRAFFICABLE EARTH DIVERSION BANK



SECTION A-A

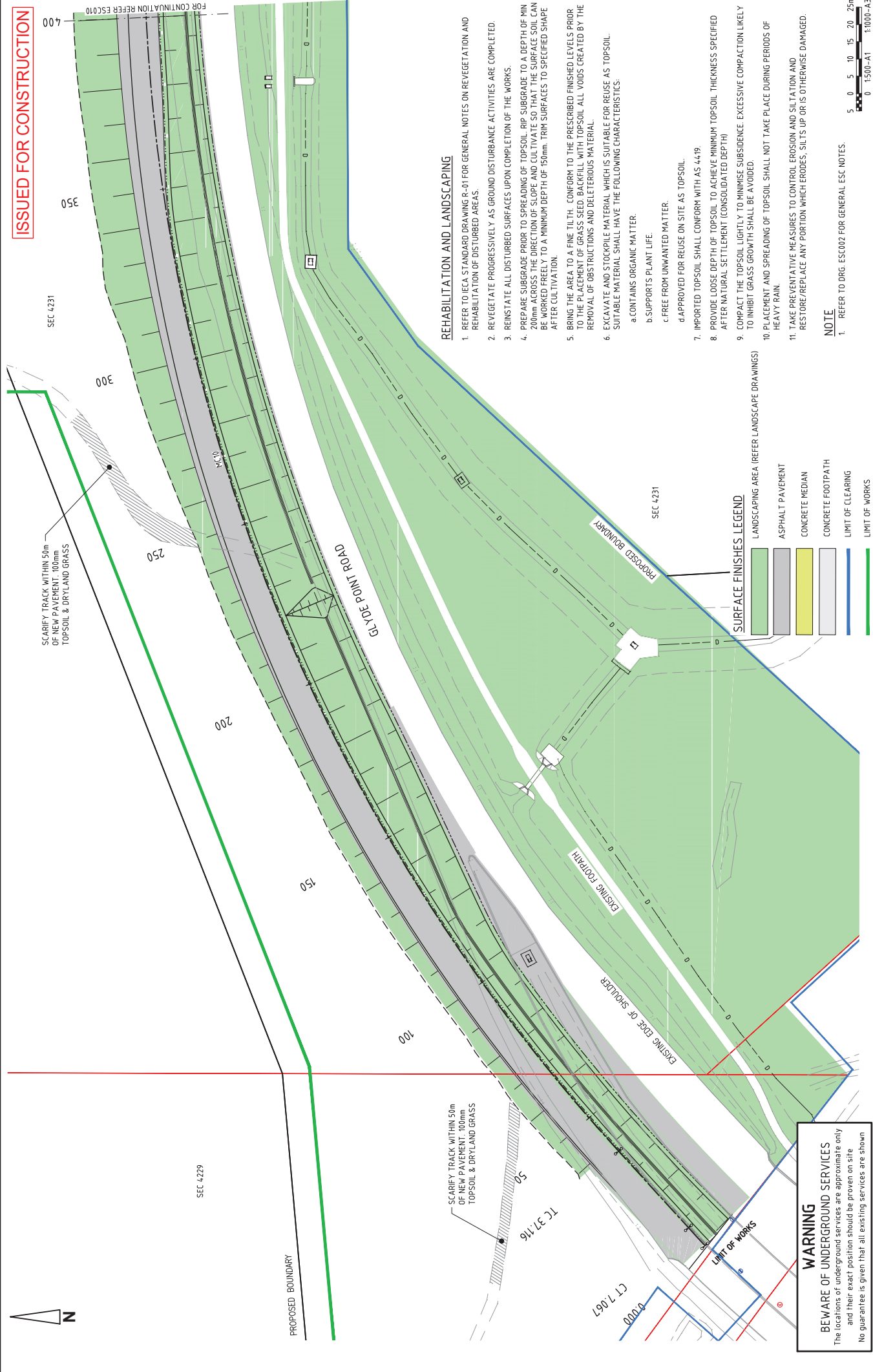
TYPICAL ROCK FILTER DAM SPILLWAY

AREA ON SITE	SPILLWAY WIDTH
GLYDE POINT ROAD	6m
PIT 3/5	4m
LINCO ROAD SEP	2m



				DARWIN REGION GREATER HOULTZE POLICE HEADWORKS ESCP EROSION AND SEDIMENT CONTROL LAYOUT PLAN SHEET 6 OF 6	
CLIENT		APPROVED		SCALE AS SHOWN	
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No. DATE INITIAL		CHECKED PC		DRAWING No ESC008	
0 13/02/25 PC		DESIGNED PC		AMOUNT 0	

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REHABILITATION AND LANDSCAPING

- REFER TO ICA STANDARD DRAWING R-01 FOR GENERAL NOTES ON REVEGETATION AND REHABILITATION OF DISTURBED AREAS.
- REVEGETATE PROGRESSIVELY AS GROUND DISTURBANCE ACTIVITIES ARE COMPLETED.
- REINSTATE ALL DISTURBED SURFACES UPON COMPLETION OF THE WORKS.
- PREPARE SUBGRADE PRIOR TO SPREADING OF TOPSOIL. RIP SUBGRADE TO A DEPTH OF MIN 200mm ACROSS THE DIRECTION OF SLOPE AND CULTIVATE SO THAT THE SURFACE SOIL CAN BE WORKED FREELY TO A MINIMUM DEPTH OF 150mm. TRIM SURFACES TO SPECIFIED SHAPE AFTER CULTIVATION.
- BRING THE AREA TO A FINE TILT, CONFORM TO THE PRESCRIBED FINISHED LEVELS PRIOR TO THE PLACEMENT OF GRASS SEED. BACKFILL WITH TOPSOIL ALL VOIDS CREATED BY THE REMOVAL OF OBSTRUCTIONS AND DELETERIOUS MATERIAL.
- EXCAVATE AND STOCKPILE MATERIAL WHICH IS SUITABLE FOR REUSE AS TOPSOIL. SUITABLE MATERIAL SHALL HAVE THE FOLLOWING CHARACTERISTICS:
 - CONTAINS ORGANIC MATTER.
 - SUPPORTS PLANT LIFE.
 - FREE FROM UNWANTED MATTER.
 - APPROVED FOR REUSE ON SITE AS TOPSOIL.
- IMPORTED TOPSOIL SHALL CONFORM WITH AS 4419.
- PROVIDE LOOSE DEPTH OF TOPSOIL TO ACHIEVE MINIMUM TOPSOIL THICKNESS SPECIFIED AFTER NATURAL SETTLEMENT (CONSOLIDATED DEPTH)
- COMPACT THE TOPSOIL LIGHTLY TO MINIMISE SUBSIDENCE. EXCESSIVE COMPACTION LIKELY TO INHIBIT GRASS GROWTH SHALL BE AVOIDED.
- PLACEMENT AND SPREADING OF TOPSOIL SHALL NOT TAKE PLACE DURING PERIODS OF HEAVY RAIN.
- TAKE PREVENTATIVE MEASURES TO CONTROL EROSION AND SILTATION AND RESTORE/REPLACE ANY PORTION WHICH ERODES, SILTS UP OR IS OTHERWISE DAMAGED.

NOTE

- REFER TO DRG. ESC002 FOR GENERAL ESC NOTES.

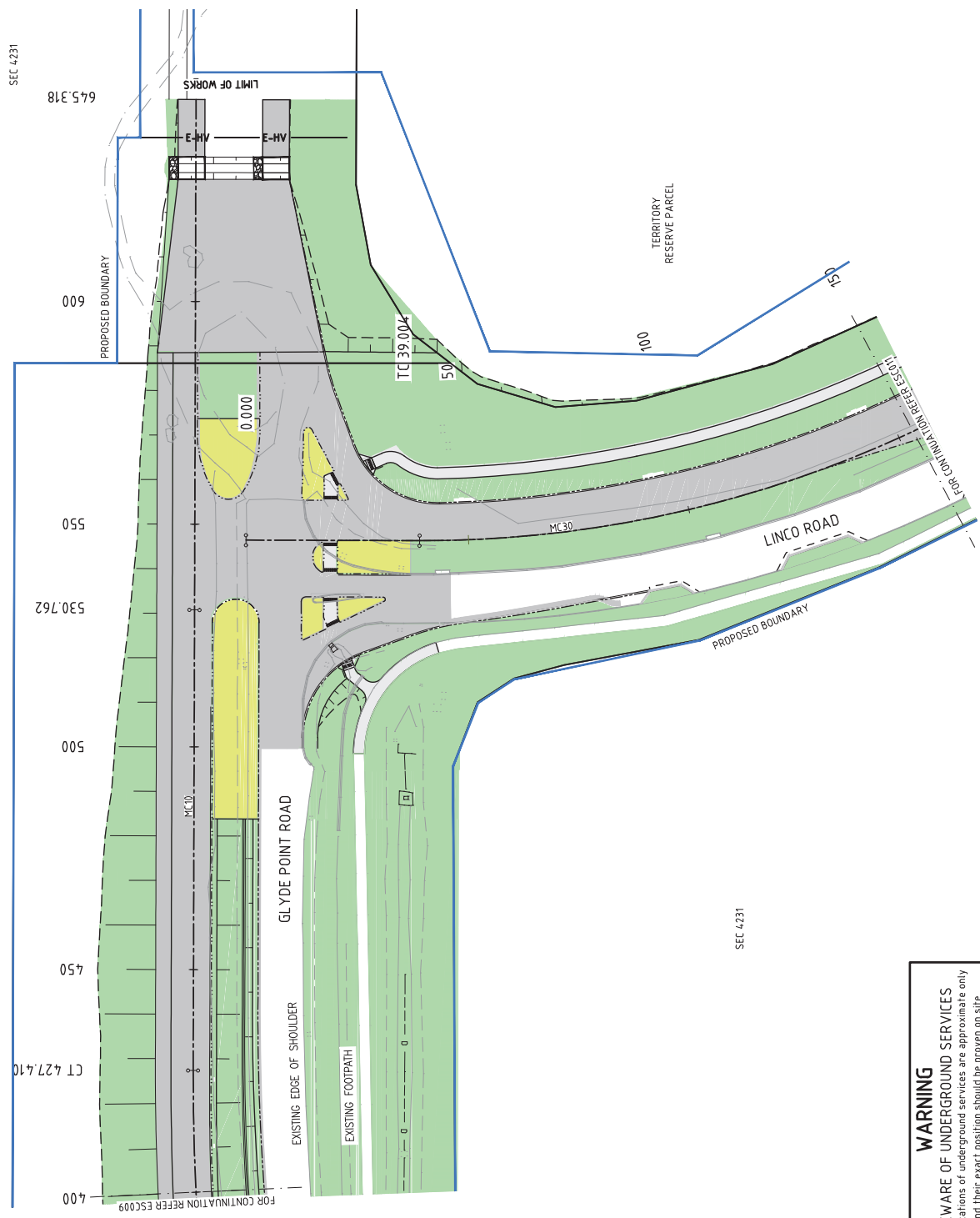
SURFACE FINISHES LEGEND

- LANDSCAPING AREA (REFER LANDSCAPE DRAWINGS)
- ASPHALT PAVEMENT
- CONCRETE MEDIAN
- CONCRETE FOOTPATH
- LIMIT OF CLEARING
- LIMIT OF WORKS

WARNING
BEWARE OF UNDERGROUND SERVICES
 The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown.

<p>APPROVED</p> <p>PB DRAWN AD DESIGNED</p> <p>PC CHECKED</p>		<p>DARWIN REGION GREATER HOLTZE POLICE HEADWORKS ESCP EROSION AND SEDIMENT CONTROL FINISHES PLAN SHEET 1 OF 4</p>	<p>SCALE AS SHOWN PROJECT No. NT25008 DRAWING No. ESC009 AMOUNT 0</p>
<p>CLIENT</p>		<p>ABN 78 124 388 892 P.O. Box 43420 Casuarina NT 0811 Ph. 08 89472476 Fax. 08 89475998</p>	<p>byrne.</p>
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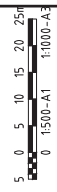
SURFACE FINISHES LEGEND

[Green Box]	LANDSCAPING AREA (REFER LANDSCAPE DRAWINGS)
[Grey Box]	ASPHALT PAVEMENT
[Yellow Box]	CONCRETE MEDIAN
[Light Grey Box]	CONCRETE FOOTPATH
[Blue Line]	LIMIT OF CLEARING

NOTE
 1. REFER TO DRG. ESC002 FOR GENERAL ESC NOTES.

REHABILITATION AND LANDSCAPING

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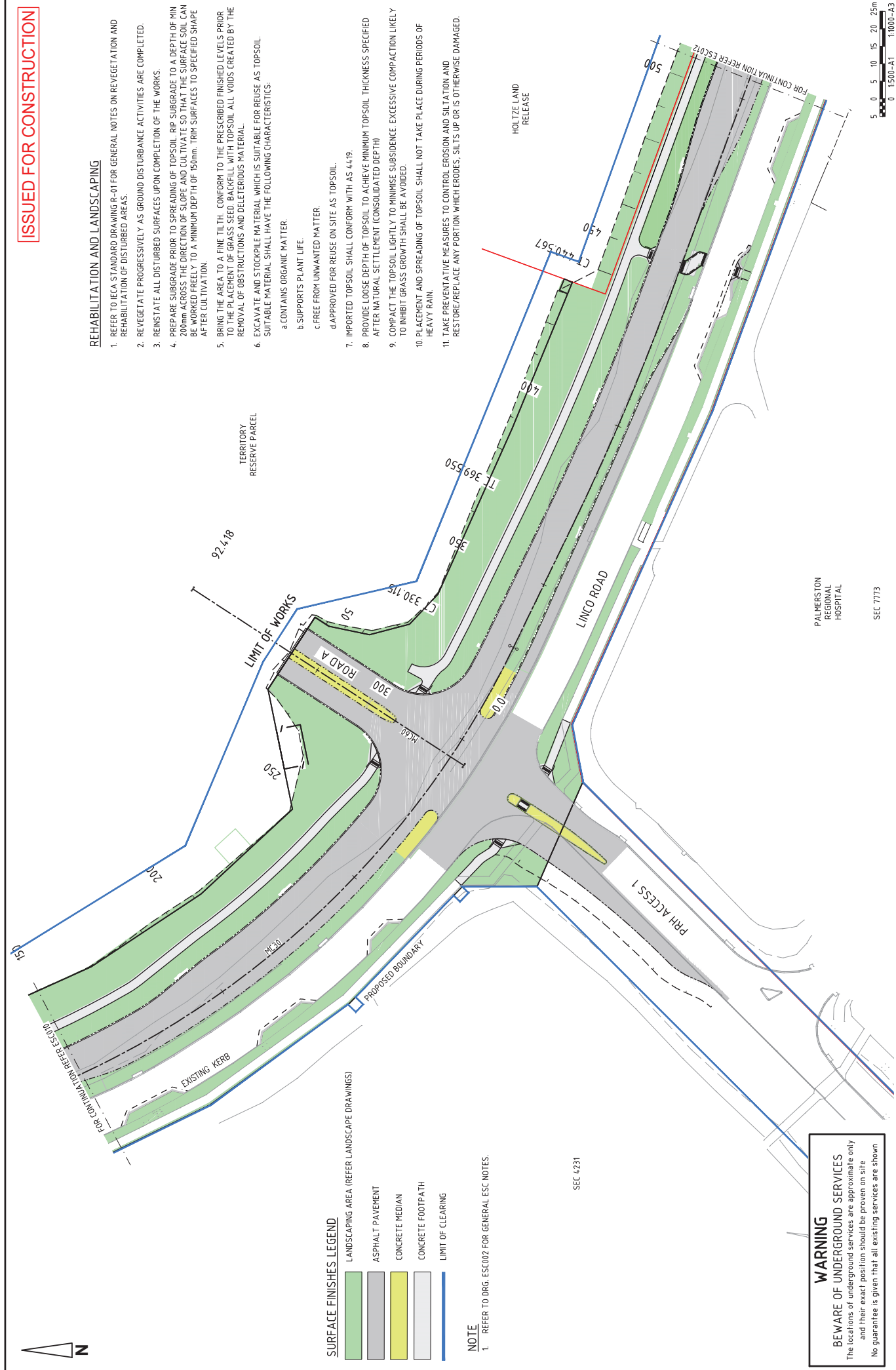
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<p>ARWIN REGION GREATER HOLTZE POLICE HEADWORKS ESCP EROSION AND SEDIMENT CONTROL FINISHES PLAN SHEET 2 OF 4</p>		<p>ABN 78 124 388 892 P.O. Box 43420 Casuarina NT 0811 Ph: 08 89472476 Fax: 08 89475998</p>		<p>BYRNE CONSULTANTS</p>	
<p>SCALE AS SHOWN PROJECT No. NT25008 DRAWING No. ESC010 AMDT 0</p>		<p>No. DATE INITIAL AMENDMENT</p>			

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REHABILITATION AND LANDSCAPING

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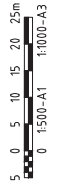
SURFACE FINISHES LEGEND

- LANDSCAPING AREA (REFER LANDSCAPE DRAWINGS)
- ASPHALT PAVEMENT
- CONCRETE MEDIAN
- CONCRETE FOOTPATH
- LIMIT OF CLEARING

NOTE

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PALMERSTON REGIONAL HOSPITAL

SEC 7173

SEC 4231

<p>AKJ SERVICES</p>		<p>byrne.</p>		<p>DARWIN REGION GREATER HOLTZE POLICE HEADWORKS ESCP EROSION AND SEDIMENT CONTROL FINISHES PLAN SHEET 3 OF 4</p>	
<p>CLIENT</p>		<p>APPROVED</p>		<p>SCALE AS SHOWN</p>	
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