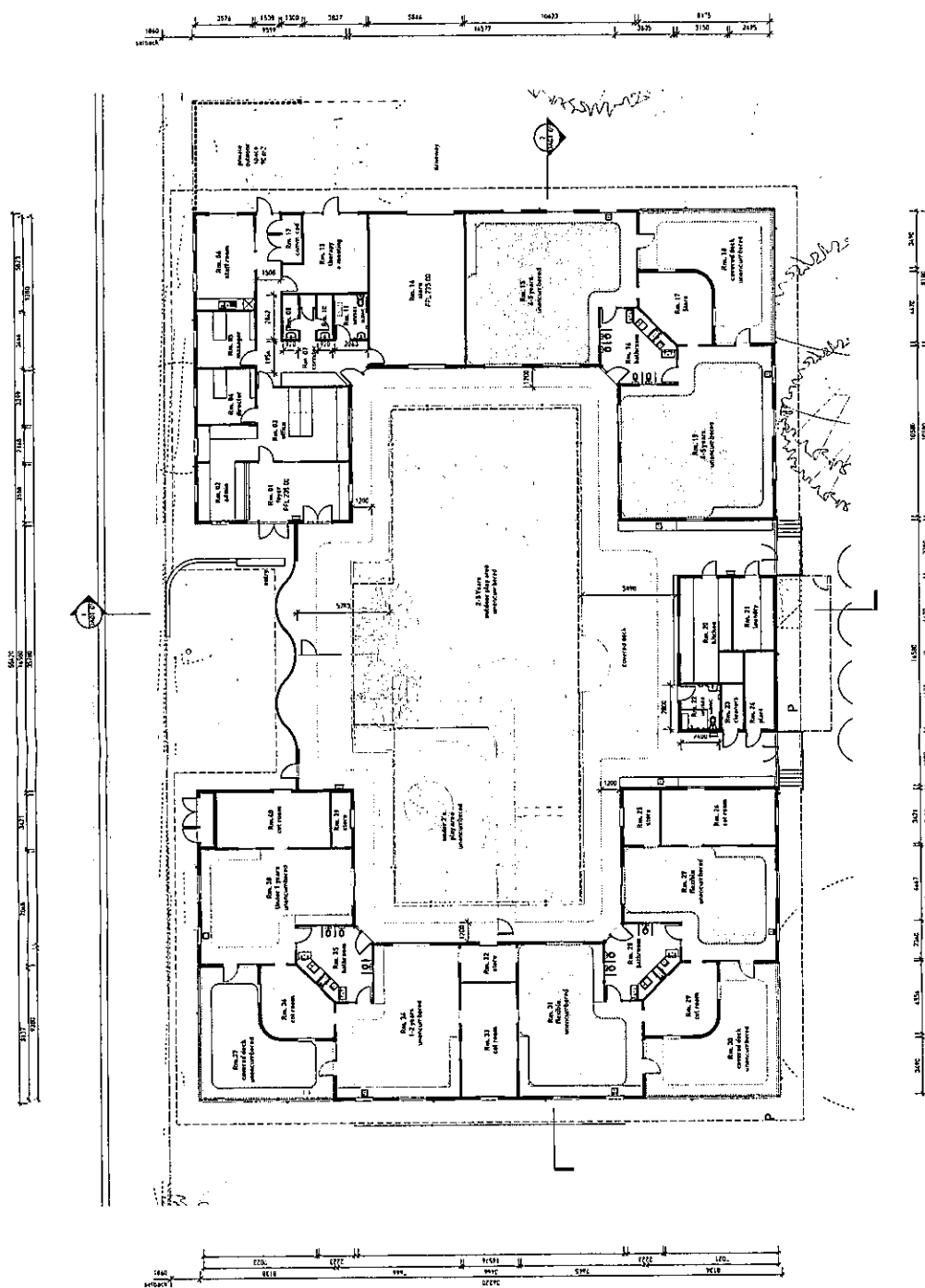
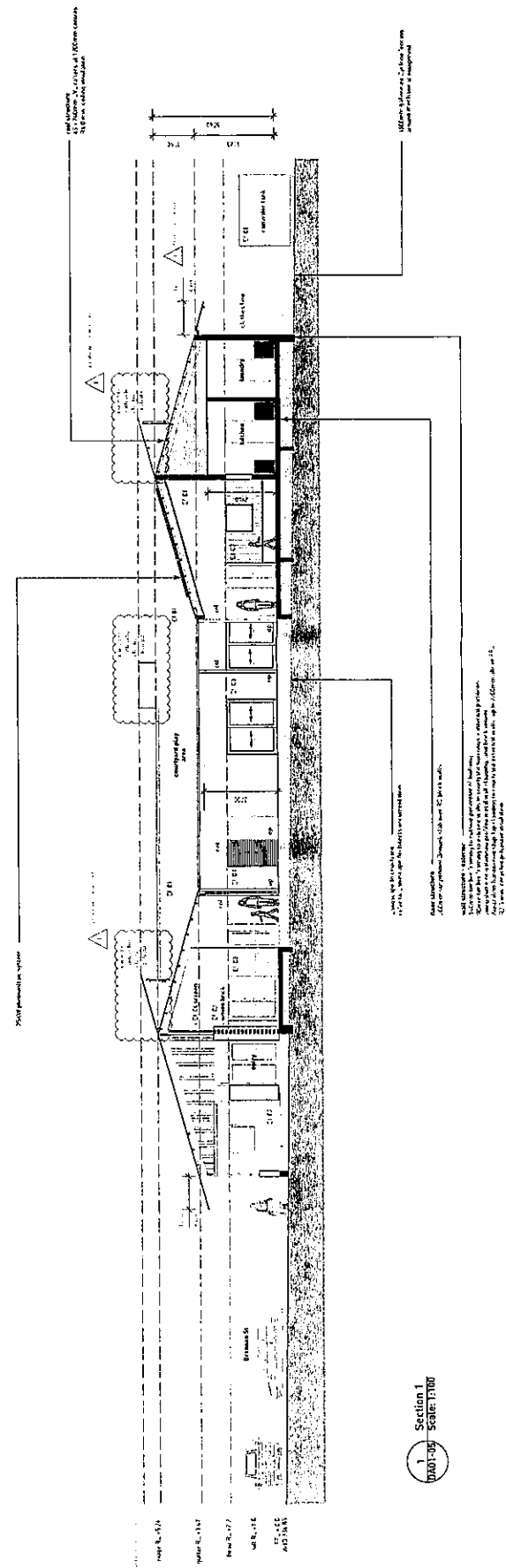
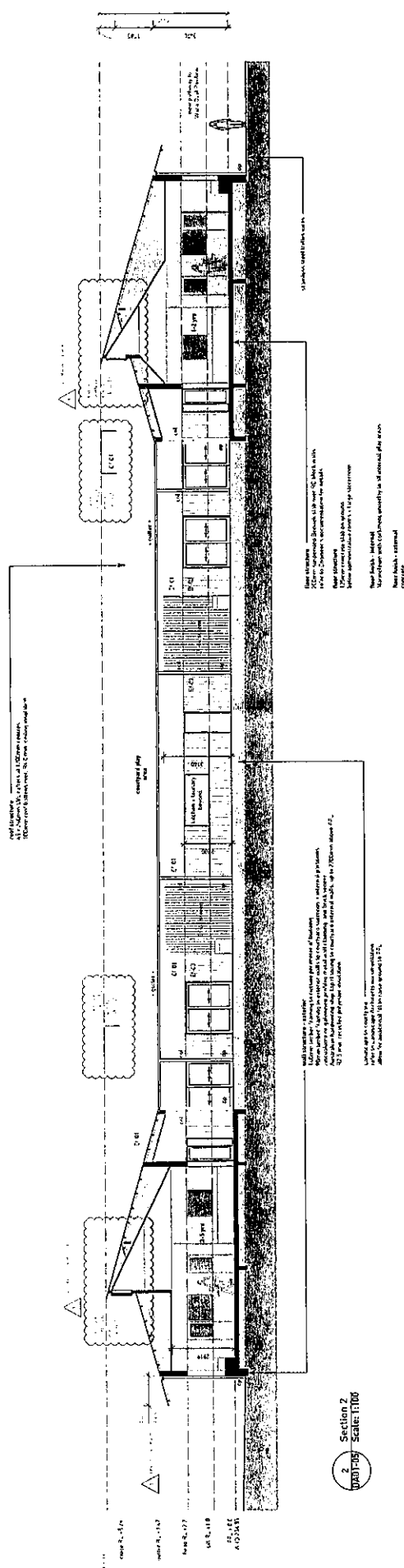


ATTACHMENT B

DOCUMENTS LISTED IN DRAFT CONDITION 1

[illegible]

Project	Issue	Date	Scale	Grading	Drive W/L	Job No.	Dr. Yr.	Chart
Colony	Colony	1927	1/10	1/10	1/10	1/10	1/10	1/10

A. W777 S2 *Openness to Development
Applic. Areas*

Row Guide By Motors

[illegible]

Consultants

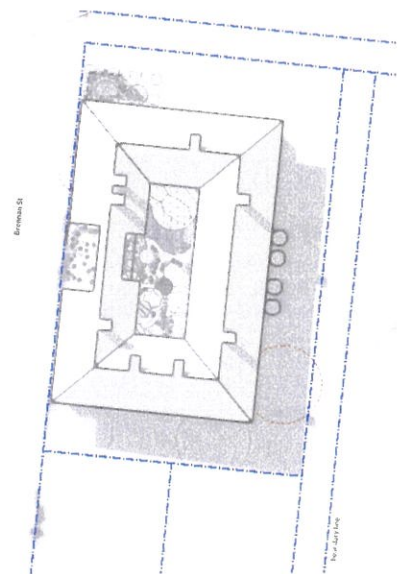
Architects • Wicks Ryan Consulting
contact ph 0428 862 984
BCA • CDA • Design Confidence
contact ph 02 9 995 1307
Carpenter • Building Certificate Australia
contact ph 02 950 16 370
Electrical engineer • Briansons
contact ph 1 800 773 626
Landscaping • Arch2000 •

Seawall Builders Landscaping Architects
contact: ph. 616/845-7626
consult ph. 616/845-7626
contact ph. 617/431-7715
Planner - SJB
(contact ph. 617/905-9411
Surveyor - Langstaff & Pomeroy
1400 St. St. Rt. 100, N. 1111
Structural Engineer - J.M. Engineers
contact ph. 617/712-0226
Surveyor, Civil, Section 2 Engineer -
JMA Consulting Engineers
contact ph. 617/417-1000
Traffic Engineer -
Lytle, Mary-Kate & Partners
contact ph. 617/319-0226

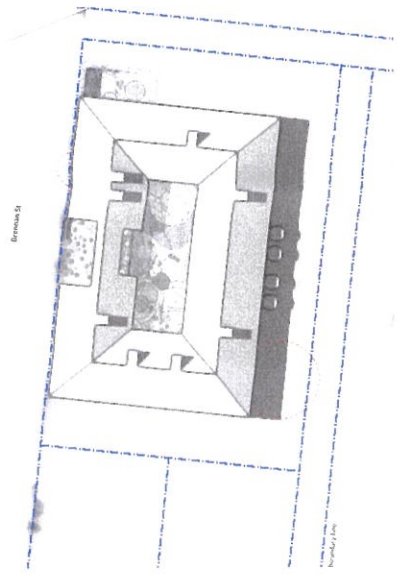
THE
HILLARY

Bentley & Pigg Ltd
P.O. Box 60, Walsby, Lincolnshire
LN11 8JH, England
Tel: 0793 752222
Fax: 0793 752223

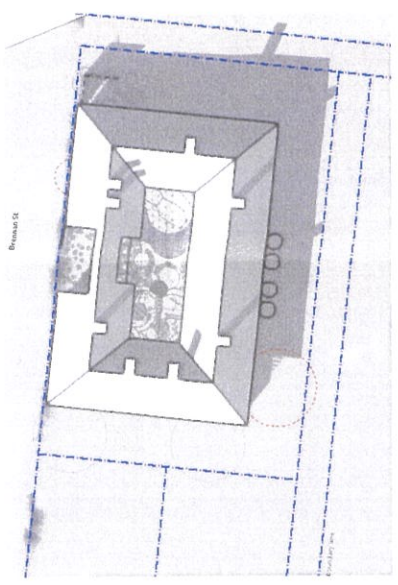
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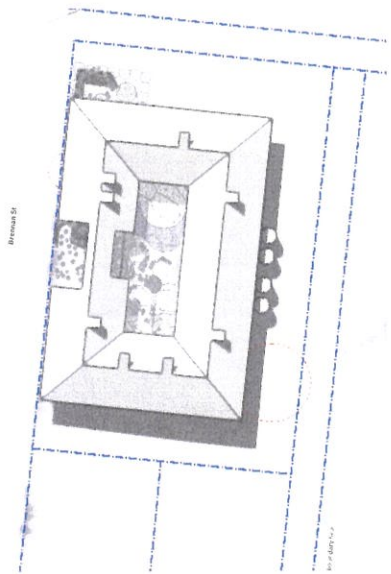
1 9am June 21
DA01-10 Scale: 1:500



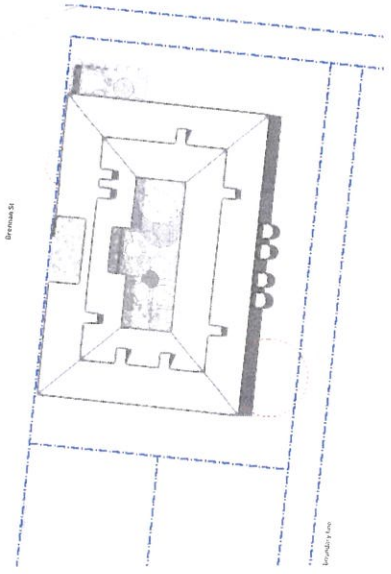
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DA01-10 Scale: 1:500



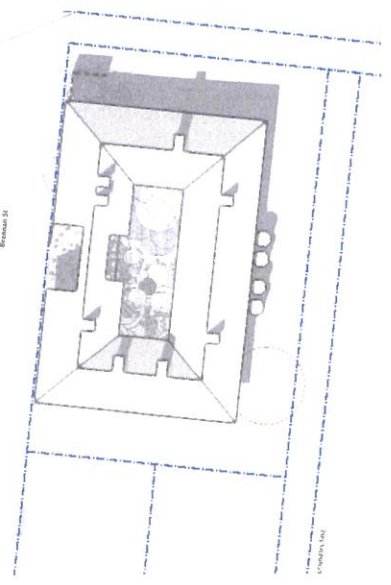
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DA01-10 Scale: 1:500



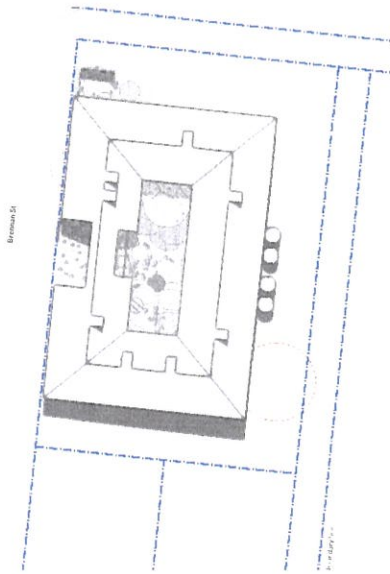
4 9am September 21
DA01-10 Scale: 1:500



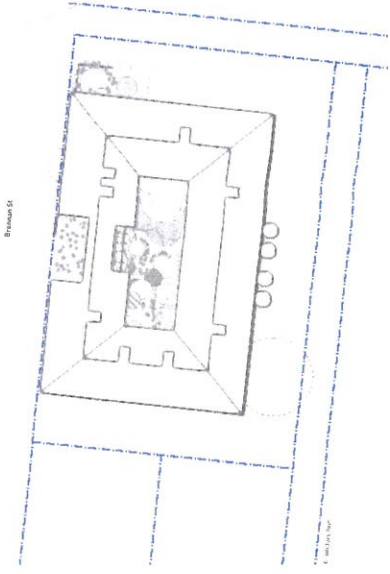
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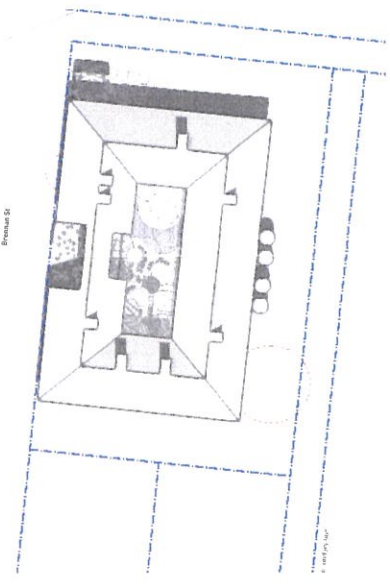
6 4pm September 21
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7 9am December 21
DA01-10 Scale: 1:500



8 12pm December 21
DA01-10 Scale: 1:500



9 4pm December 21
DA01-10 Scale: 1:500

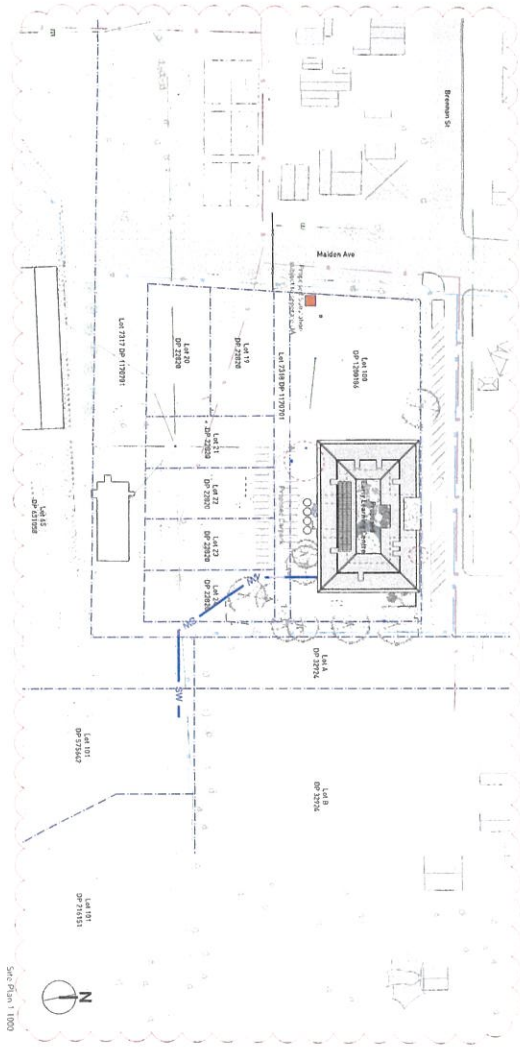
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Rev	Date By Notes
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3	01/01/10 JH Initial design
4	01/01/10 JH Initial design
5	01/01/10 JH Initial design
6	01/01/10 JH Initial design
7	01/01/10 JH Initial design
8	01/01/10 JH Initial design
9	01/01/10 JH Initial design
10	01/01/10 JH Initial design
11	01/01/10 JH Initial design
12	01/01/10 JH Initial design
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99	01/01/10 JH Initial design
100	01/01/10 JH Initial design

Proposed Cobar Early Learning Centre - Development Application

Ward Dual Precinct, Brennan St, Cobar 2835 - Lots 100 DP 1280186, Lot 2317 and Lot 2318 DP 1170701, Lot 19, 21, 22, 23 and 24 DP 22820, Lot 65 DP 651098, Lot 101 DP 575642
Cobar Shire Council - Cobar Local Environmental Plan 2012 - Joint Regional Planning Panel



Location Plan sourced from satellite - NTS



Site Plan 1:1000

Architectural Drawing List

Drawing No.	Drawing Title	Current Revision	Date
001	Site Plan	1	19/04/2023
002	Site Plan	2	19/04/2023
003	Site Plan	3	19/04/2023
004	Site Plan	4	19/04/2023
005	Site Plan	5	19/04/2023
006	Site Plan	6	19/04/2023
007	Site Plan	7	19/04/2023
008	Site Plan	8	19/04/2023
009	Site Plan	9	19/04/2023
010	Site Plan	10	19/04/2023

Supporting Documentation

Document No.	Document Title	Current Revision	Date
011	Supporting Documentation	1	19/04/2023
012	Supporting Documentation	2	19/04/2023
013	Supporting Documentation	3	19/04/2023
014	Supporting Documentation	4	19/04/2023
015	Supporting Documentation	5	19/04/2023
016	Supporting Documentation	6	19/04/2023
017	Supporting Documentation	7	19/04/2023
018	Supporting Documentation	8	19/04/2023
019	Supporting Documentation	9	19/04/2023
020	Supporting Documentation	10	19/04/2023

Door + Window Schedule

Item	Description	Material	Quantity
021	Door	Timber	10
022	Window	Timber	20
023	Door	Timber	5
024	Window	Timber	15
025	Door	Timber	10
026	Window	Timber	20
027	Door	Timber	5
028	Window	Timber	15
029	Door	Timber	10
030	Window	Timber	20

Roof Schedule

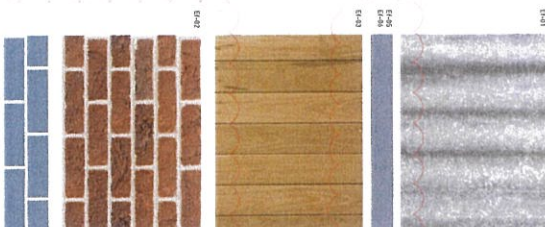
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032	Roof	Timber	20
033	Roof	Timber	5
034	Roof	Timber	15
035	Roof	Timber	10
036	Roof	Timber	20
037	Roof	Timber	5
038	Roof	Timber	15
039	Roof	Timber	10
040	Roof	Timber	20

Finishes Schedule

Item	Description	Material	Quantity
041	Finish	Timber	10
042	Finish	Timber	20
043	Finish	Timber	5
044	Finish	Timber	15
045	Finish	Timber	10
046	Finish	Timber	20
047	Finish	Timber	5
048	Finish	Timber	15
049	Finish	Timber	10
050	Finish	Timber	20

Schedule of Areas

Item	Description	Area (sqm)
051	Area	10
052	Area	20
053	Area	5
054	Area	15
055	Area	10
056	Area	20
057	Area	5
058	Area	15
059	Area	10
060	Area	20



Architect's perspective - Main entrance view from Brennan St

Notes

1. All dimensions are in meters.
2. All dimensions are to the center line of the building.
3. All dimensions are to the center line of the building.
4. All dimensions are to the center line of the building.
5. All dimensions are to the center line of the building.
6. All dimensions are to the center line of the building.
7. All dimensions are to the center line of the building.
8. All dimensions are to the center line of the building.
9. All dimensions are to the center line of the building.
10. All dimensions are to the center line of the building.

Consultants

Architect - [Name]
Structural Engineer - [Name]
Civil Engineer - [Name]
Landscape Architect - [Name]
Quantity Surveyor - [Name]
Planning Consultant - [Name]
Environmental Consultant - [Name]
Traffic Engineer - [Name]
Acoustic Consultant - [Name]
Energy Consultant - [Name]
Fire Engineer - [Name]
Health and Safety Consultant - [Name]
Construction Management - [Name]
Construction Supervision - [Name]
Construction Inspection - [Name]
Construction Monitoring - [Name]
Construction Reporting - [Name]
Construction Documentation - [Name]
Construction Administration - [Name]
Construction Coordination - [Name]
Construction Control - [Name]
Construction Compliance - [Name]
Construction Communication - [Name]
Construction Collaboration - [Name]
Construction Cooperation - [Name]
Construction Coordination - [Name]
Construction Control - [Name]
Construction Compliance - [Name]
Construction Communication - [Name]
Construction Collaboration - [Name]
Construction Cooperation - [Name]

Appendix

Appendix A - [Name]
Appendix B - [Name]
Appendix C - [Name]
Appendix D - [Name]
Appendix E - [Name]
Appendix F - [Name]
Appendix G - [Name]
Appendix H - [Name]
Appendix I - [Name]
Appendix J - [Name]
Appendix K - [Name]
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Appendix T - [Name]
Appendix U - [Name]
Appendix V - [Name]
Appendix W - [Name]
Appendix X - [Name]
Appendix Y - [Name]
Appendix Z - [Name]

Index

Index A - [Name]
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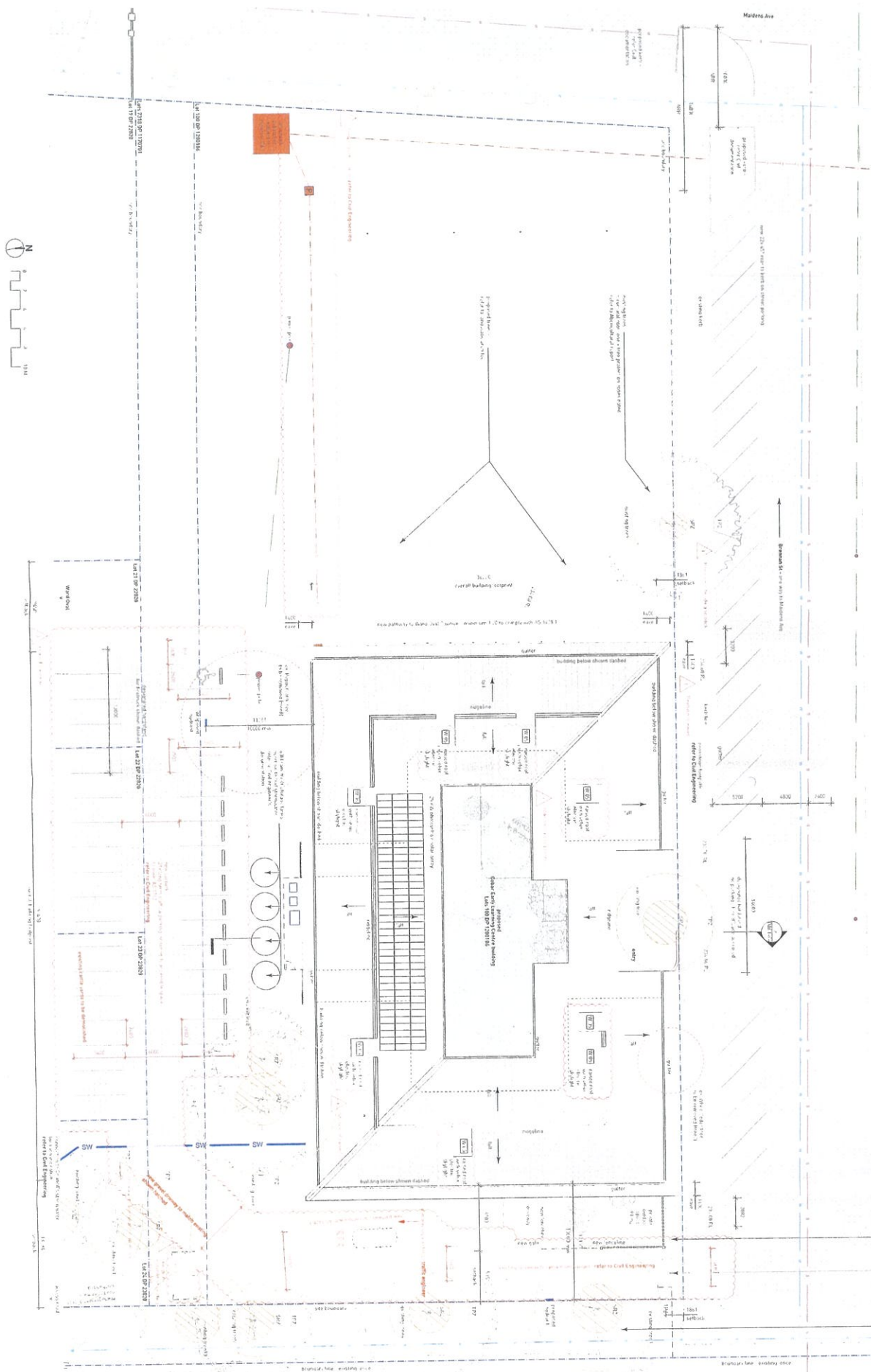
Checklist

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Checklist B - [Name]
Checklist C - [Name]
Checklist D - [Name]
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Checklist G - [Name]
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Checklist L - [Name]
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Checklist O - [Name]
Checklist P - [Name]
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Checklist R - [Name]
Checklist S - [Name]
Checklist T - [Name]
Checklist U - [Name]
Checklist V - [Name]
Checklist W - [Name]
Checklist X - [Name]
Checklist Y - [Name]
Checklist Z - [Name]

City of Ramsey
School
LAW
17-18-2018

1. This plan is a preliminary plan and is not to be used for construction purposes.
2. The plan is subject to change without notice.
3. The plan is not to be used for any other purpose without the written consent of the City of Ramsey.

residential area



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2. The plan is subject to change without notice.
3. The plan is not to be used for any other purpose without the written consent of the City of Ramsey.

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2. The plan is subject to change without notice.
3. The plan is not to be used for any other purpose without the written consent of the City of Ramsey.



Rev Date By Notes

notes

- [illegible]

Consultants

[illegible]

 Google Assistant

Worksheet 1 Page 5 of 6

Use De Moivre's theorem to calculate:

1. $(1 + i)^6$

2. $(1 - i)^6$

3. $(1 + i)^{12}$

4. $(1 - i)^{12}$

5. $(1 + i)^{18}$

6. $(1 - i)^{18}$

7. $(1 + i)^{24}$

8. $(1 - i)^{24}$

9. $(1 + i)^{30}$

10. $(1 - i)^{30}$

11. $(1 + i)^{36}$

12. $(1 - i)^{36}$

13. $(1 + i)^{42}$

14. $(1 - i)^{42}$

15. $(1 + i)^{48}$

16. $(1 - i)^{48}$

17. $(1 + i)^{54}$

18. $(1 - i)^{54}$

19. $(1 + i)^{60}$

20. $(1 - i)^{60}$

21. $(1 + i)^{66}$

22. $(1 - i)^{66}$

23. $(1 + i)^{72}$

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25. $(1 + i)^{78}$

26. $(1 - i)^{78}$

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28. $(1 - i)^{84}$

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30. $(1 - i)^{90}$

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32. $(1 - i)^{96}$

33. $(1 + i)^{102}$

34. $(1 - i)^{102}$

35. $(1 + i)^{108}$

36. $(1 - i)^{108}$

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38. $(1 - i)^{114}$

39. $(1 + i)^{120}$

40. $(1 - i)^{120}$

41. $(1 + i)^{126}$

42. $(1 - i)^{126}$

43. $(1 + i)^{132}$

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56. $(1 - i)^{168}$

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58. $(1 - i)^{174}$

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60. $(1 - i)^{180}$

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176. $(1 - i)^{528}$

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179. $(1 + i)^{540}$

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182. $(1 - i)^{546}$

183. $(1 + i)^{552}$

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187. $(1 + i)^{564}$

188. $(1 - i)^{564}$

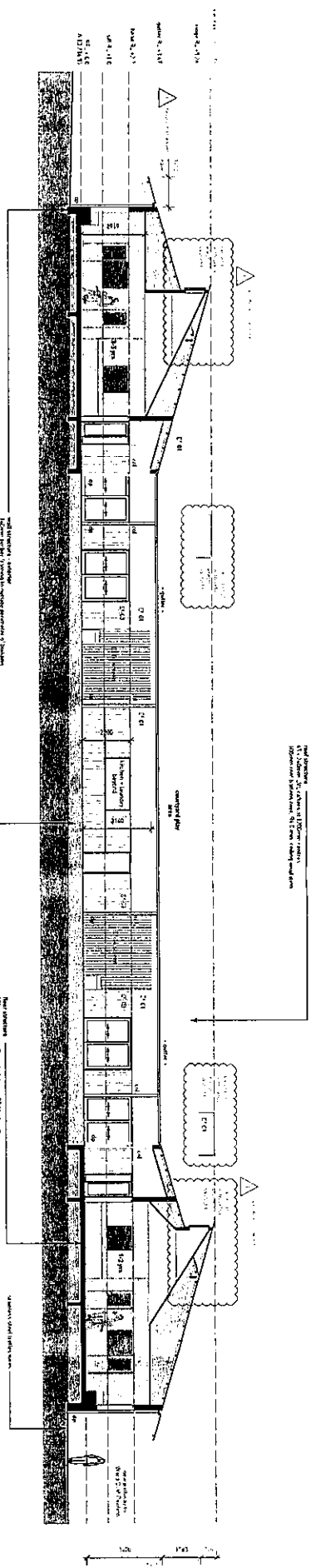
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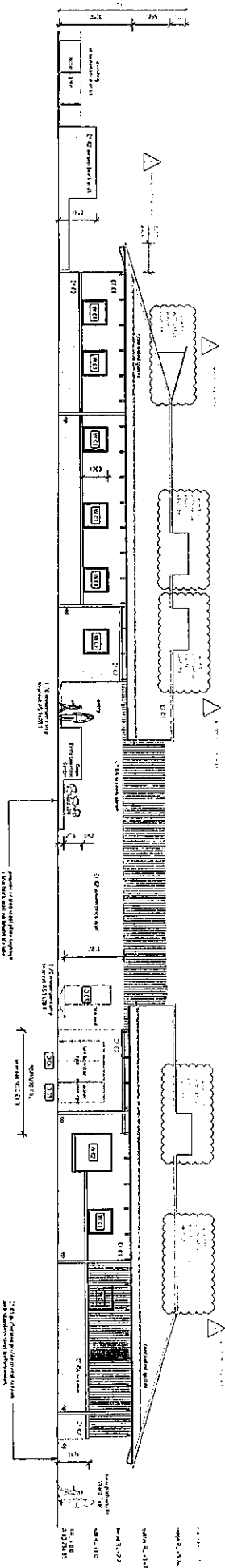
190. $(1 - i)^{570}$

191. $(1 + i)^{576}$

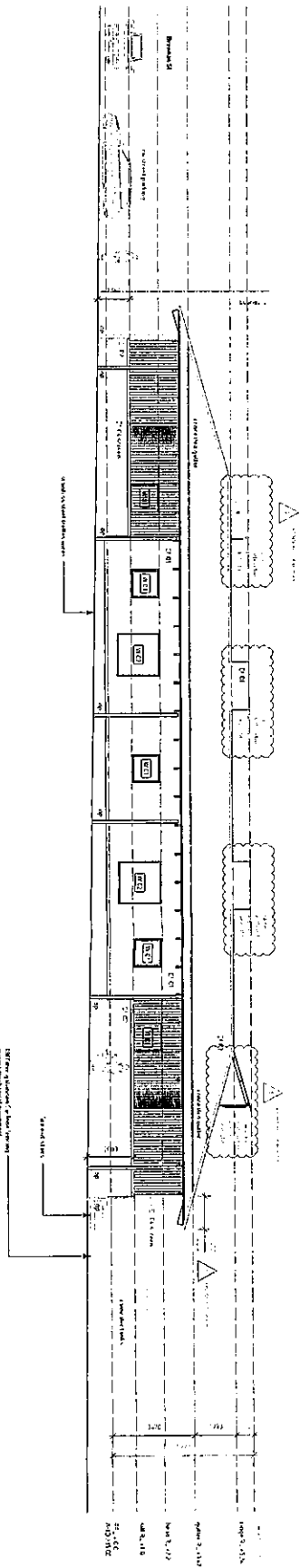
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Project	Urban Children's Center West End Project
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Drawn By	RAH/ET
Job No.	17-105
Drawn	JA
Check	





1 North Elevation
Scale: 1/8" = 1'-0"



2 Western Elevation
Scale: 1/8" = 1'-0"

Notes:
1. All dimensions are in feet and inches.
2. All dimensions are to the center of the wall unless otherwise noted.
3. All dimensions are to the finished surface unless otherwise noted.
4. All dimensions are to the exterior face of the wall unless otherwise noted.
5. All dimensions are to the interior face of the wall unless otherwise noted.
6. All dimensions are to the center of the door unless otherwise noted.
7. All dimensions are to the center of the window unless otherwise noted.
8. All dimensions are to the center of the roof unless otherwise noted.
9. All dimensions are to the center of the foundation unless otherwise noted.
10. All dimensions are to the center of the base unless otherwise noted.

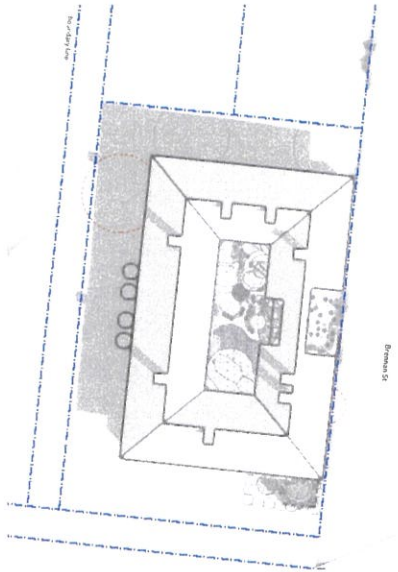
Construction

Foundation: 12" concrete footing on compacted fill.
Walls: 12" concrete block with 1/2" rebar.
Roof: 12" concrete slab on 12" steel joists.
Floor: 12" concrete slab on 12" steel joists.
Ceiling: 12" concrete slab on 12" steel joists.
Exterior: 12" concrete block with 1/2" rebar.
Interior: 12" concrete block with 1/2" rebar.
Finish: 12" concrete block with 1/2" rebar.

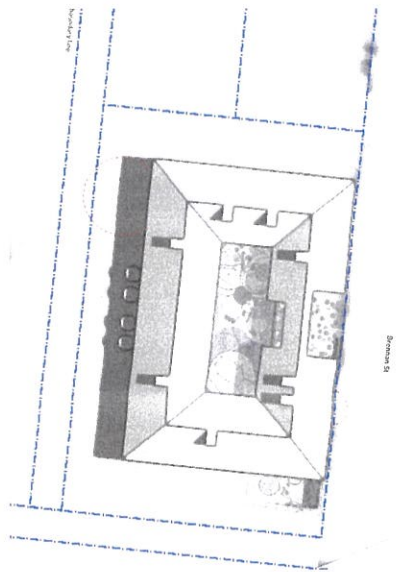
DETAILS

Window: 12" concrete block with 1/2" rebar.
Door: 12" concrete block with 1/2" rebar.
Roof: 12" concrete slab on 12" steel joists.
Floor: 12" concrete slab on 12" steel joists.
Ceiling: 12" concrete slab on 12" steel joists.

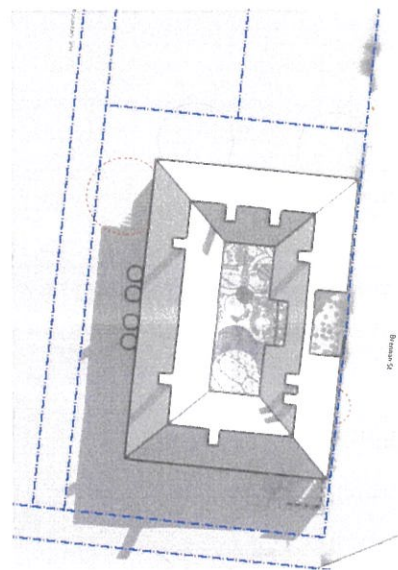
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Project:	San Diego County Regional Airport
Location:	San Diego County Regional Airport
Owner:	City of San Diego
Architect:	City of San Diego
Engineer:	City of San Diego
Contractor:	City of San Diego
Construction:	City of San Diego
Completion:	City of San Diego
Drawn:	City of San Diego
Checked:	City of San Diego
Scale:	1/8" = 1'-0"
Sheet:	1 of 1
Drawn:	City of San Diego
Checked:	City of San Diego



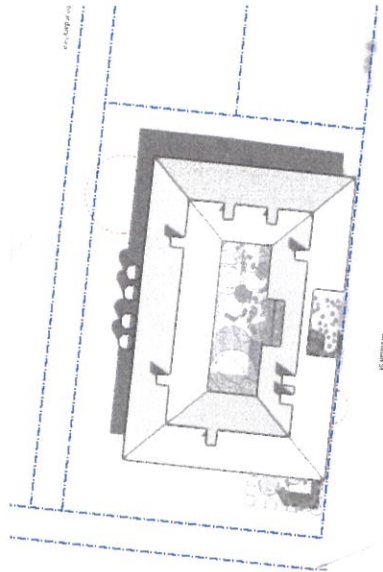
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9am June 21
DA01-10 Scale: 1:500



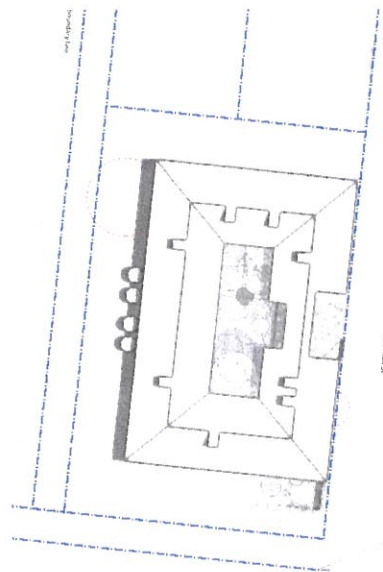
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DA01-10 Scale: 1:500



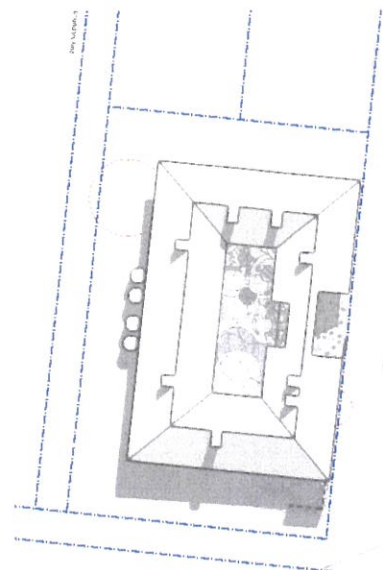
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DA01-10 Scale: 1:500



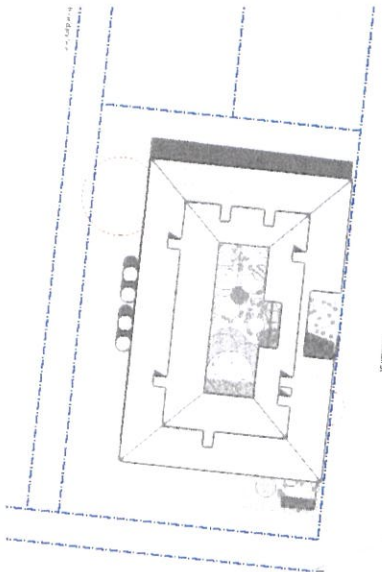
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DA01-10 Scale: 1:500



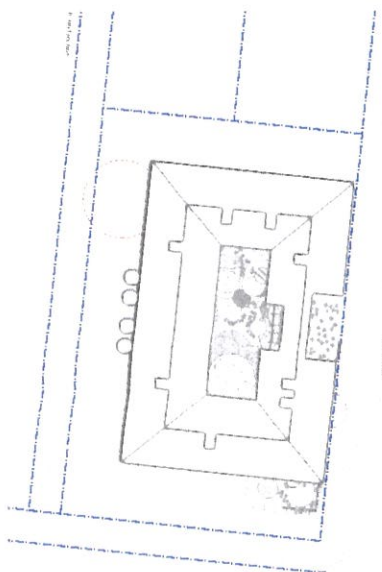
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DA01-10 Scale: 1:500



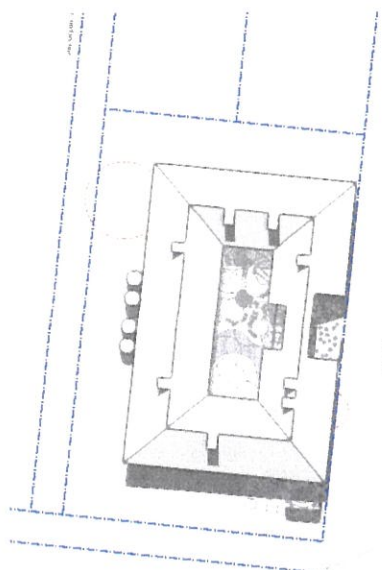
6
4pm September 21
DA01-10 Scale: 1:500



7
9am December 21
DA01-10 Scale: 1:500



8
12pm December 21
DA01-10 Scale: 1:500



9
4pm December 21
DA01-10 Scale: 1:500



Notes:
1. All dimensions are in meters.
2. The building is shown in a perspective view.
3. The building is shown in a perspective view.
4. The building is shown in a perspective view.
5. The building is shown in a perspective view.
6. The building is shown in a perspective view.
7. The building is shown in a perspective view.
8. The building is shown in a perspective view.
9. The building is shown in a perspective view.

Client Details

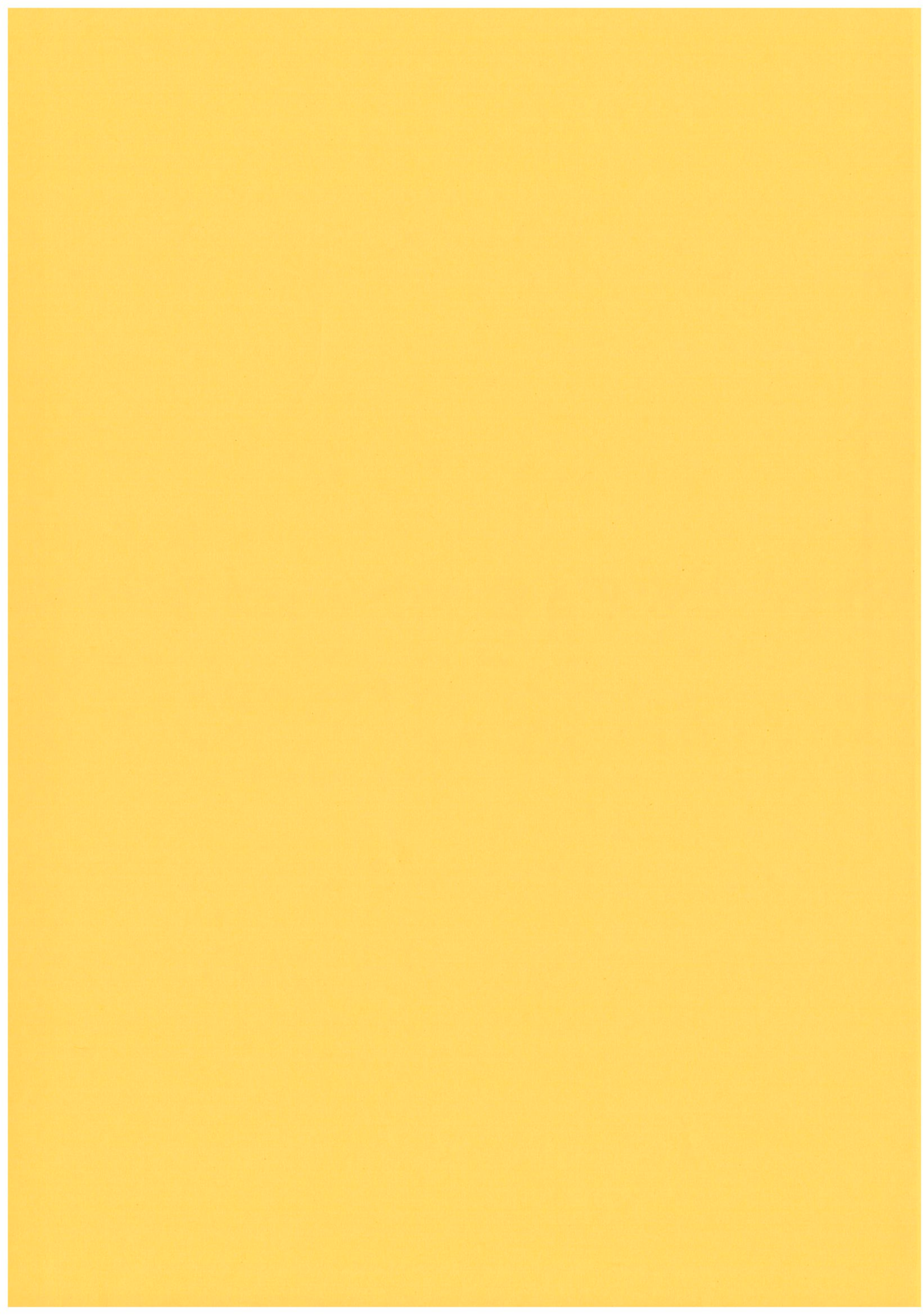
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Status: [Status]
Date: [Date]
Scale: [Scale]

Project Details

Project: [Project]
Status: [Status]
Date: [Date]
Scale: [Scale]

Design Details

Design: [Design]
Status: [Status]
Date: [Date]
Scale: [Scale]



Wade Ryan Contracting – ABN 31 159 453 891

ARBORICULTURAL IMPACT ASSESSMENT FOR DEVELOPMENT OF; NEW CHILD CARE CENTRE – BRENNAN STREET COBAR; COBAR SHIRE COUNCIL NSW – Revision 22 April 2022

1. INTRODUCTION.

Cobar Shire Council are planning the development of a new child care centre in the Ward Oval Precinct off Brennan Street Cobar. There are a number of existing trees around the development site and an assessment of the tree vegetation is required to determine what trees are on site, condition, significance and recommendations for retention (or removal); to assist the design and planning process. Impacts to trees are reported relative to the final design.

2. SCOPE AND PURPOSE.

The report has been commissioned by Carly Hunter - Project Coordinator with Cobar Shire Council (Contact 0419 506 641); and Rose Davies - Dunn & Hiram Architects (Contact 0420 820 010). The sites was formally inspected on 15 July 2021.

The report is designed to provide;

- accurate identification of tree vegetation,
- tree condition, including any hazards present
- evaluation of the trees relative to their contribution to the environment, amenity and any other identified values
- evaluation of development impacts
- recommendations for management of the issues identified.

Interpretation of impacts and recommendations are based on the author's interpretation of *Australian Standard 4970-2009 Protection of trees on development sites*.

Diagram one provides identification of the development site within the Ward Oval Precinct.

Table one provides a detailed list and evaluation of the trees surrounding the development – contained at the conclusion of the report.

The following document was provided to assist in the final assessment.

*Cobar Early Learning Centre – Ward Oval Precinct. Site Plan –Development Approval
Drawing DA01-01 Rev C. Dated 19 April 2022.*

This drawing is provided at the conclusion of this report with TPZ comments inserted.

3. Site Conditions and Background.

The Ward Oval Precinct comprises a multi-purpose sport and recreation facility – including formal sporting grounds, Showground, open space areas, stock yards and supporting buildings, including a grand stand. The proposal is to construct a Child Care Centre in a current open spaced area joining Brennan Street to the north of a set of existing stock yards.

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A scattering of amenity trees – mostly Australian Natives pieces are contained across the site. None of the trees are considered remnant or endemic to the site.



Diagram 1 – Location of the development site within the Ward Oval Precinct and tree locations.

Source - adapted from Google Maps 2021.

4. Summary of Initial Tree Assessment and Evaluation of Impacts.

- There are no significant or very significant trees identified on site.
- 12 Trees surround the proposed Child Care Centre – Tree numbers 1-12 refer.
 - **Tree 1** is proposed to be retained – there will be major impacts to manage to retain the tree condition and vigour.
 - The canopy radius – 11 m, is almost twice the calculated TPZ of 5.1 meters. The building footprint presents as 5-6 meters from the stem. The canopy will require pruning from the outside – a structured canopy

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reduction from the outer portion of the tree will be required as per Australian Standard 4373 – section 7.3.2 – *Reduction Pruning*.

- It is difficult at this point to prescribe the required amount – but the least amount of branches should be removed to allow clearance on the building. Something in the order of 30-40% may be required.
- The pruning should be conducted prior to the construction commencement so that appropriate tree protection can be installed prior to construction commencement.
- If the impact to the tree is before or during this summer period then the tree will require some assistance in the form of watering over the summer period. Exact requirements will need to be determined when all site conditions can be evaluated at the time.
- **Tree 2** is proposed to be removed to allow development. Removal of the tree is supported on the basis that it is a small tree with poor amenity values. A new tree is a far better option.
- **Trees 3** has good retention value and is recommended to be retained with some impacts to be managed.
 - It is noted that **tree 3** is a medium *Eucalyptus camaldulensis* (River Red Gum) with a significant root that is pushing up the access road within the tree protection zone. It will be important not to sever this large root.
 - The existing driveway will now be retained impact to the TPZ should be negligible.
- **Trees 4 and 5** should have limited impacts.
- **Tree 6** – Tree 6 is the largest tree and tree with the highest amenity values around the development. The proposed building will have major impacts within the TPZ in the order of 25-30%, including pathway and installation of car parking on the south edge of the TPZ. The tree canopy will likely require pruning to allow construction of the building. The canopy should be reduced on the north side the minimum amount to allow the construction and in line with *Australian Standard 4373 -2007 pruning of amenity trees* as best possible.
 - Unless significant above average rainfall is received at the time, the tree will likely require irrigation prior to, during and post construction to compensate for the root system loss from development.
 - Irrigation volumes and frequency will depend on the time of year and prevailing conditions at the time. Qualified advice should be sort on this at the time.
 - Mulching of the remaining root zone should also occur at the time of initial pruning and demolition of the stock yards.
- **Tree 7** – impacts should be limited.

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- **Tree 8** has been identified in poor structural condition and is recommended for removal on this basis.
- **Tree 9** presents as limited to no impacts and can be retained. The stem is growing hard against a chain wire fence on Brennan Street. If the fence is to be removed then the post should not be removed – it needs to be cut off and left in situ. Removal of the post will likely destabilise the tree specifically if it is contained in a concrete footing.
- **Tree 10** – impacts should be minimal.
- **Tree 11 – revised driveway and car park** – drawing indicates major impacts to root zone from driveway in the order of 20% of the TPZ. The tree vigour is already on the low side of poor due to heavy compaction from the existing driveway – and tree canopy is only about 80% of expected – some canopy dieback has occurred in recent times. If the impact of the driveway is within 2.5 meters of the stem then the tree should be considered for removal as the impost of retention will outweigh the option of a new tree.
 - **Retention.** On the basis that the tree will be retained, and the development is outside the SRZ - the tree will require irrigation and mulching as per tree 6.
- **Tree 12 – revised driveway and car park** – Impacts should be minimal.



Photo 1 – Tree 1 in location.

Note the larger canopy spread of the tree which is far greater than the TPZ of 5.1 meters. The tree will require pruning prior to construction commencing.



Photo 2 – Tree 1.

Depiction of the lower stem that has some decay and white ant activity.

The extended branching is considered a notable loading on this stem structure. Pruning the outer canopy will also alleviate the loading on the stem and reduce the likelihood of stem failure.



Photo 3 – Tree 2.

A small stunted tree with little significance. Tree is required to be removed to support the development. Its removal is recommended – a replacement tree will easily provide better amenity value within a year or two.



Photo 4 – Tree 3

Tree in location a notable tree of some stature.

A significant root is present in the edge of the access road that will require protection.

It is recommended that this root is protected to ensure tree stability and vigour.

IF the root is required to be severed then the tree will require pruning and amelioration measures developed to retain the tree.



Photo 5 – Tree 6

The largest tree around the development site. Impacts to the root zone to within 4 m of the stem – and TPZ of 8 m. Tree will require amelioration measures to ensure its ongoing vitality.

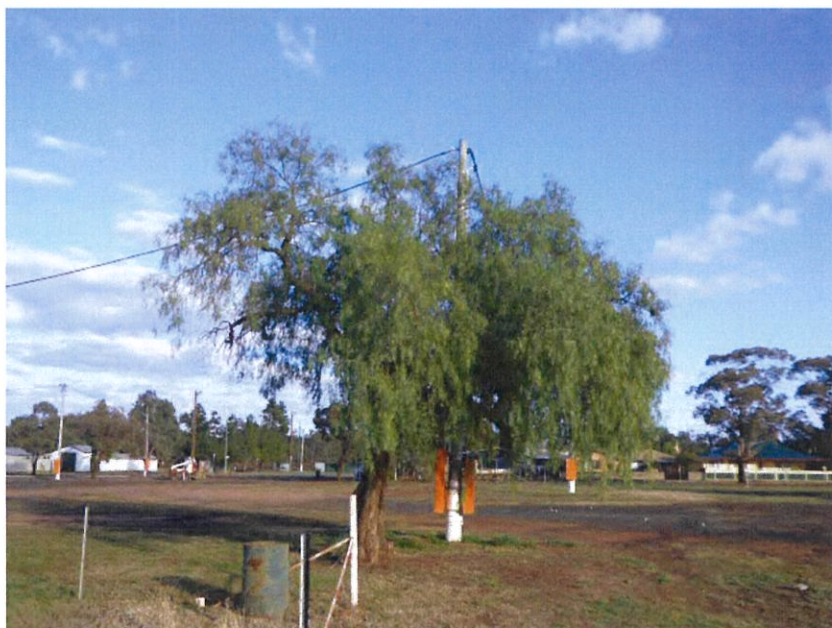


Photo 6 – Tree 8 - Schinus molle (Peppercorn) in location.



Photo 7 – Tree 8

Lower stem system that is badly degraded by borers, decay and white ant activity. Cracking extends well up the east leader as per arrow.

Sounding with a plastic mallet indicated that the stem base has very little sound wood supporting the tree.



Photo 8 – Lower stem system of Tree 9 - *Acacia salicina* (Cooba). IF the fence is to be removed then do not pull post out of the ground – cut it off and retain it. Removal this close to the tree may destabilise the tree particularly if there is a concrete footing on the post. Also noting that some root systems were likely cut on the footpath recently for some trenching activity.

Photo 9 and 10 below.

Tree 11 – driveway to impact the North West side of the tree protection zone. As per photo 10 below tree vigour is only fair and tree canopy is only about 80% of expected. The tree may not cope with a major impact – if impact is within 2.5 meters of stem then the option to remove the tree and replace it may be a better alternative.





Photo 11 and 12

Tree 12.

Medium tree with significant spreading habit – the canopy diameter is larger than the calculated TPZ – tree may require pruning prior to the demolition stage to ensure that the canopy is not damaged by plant.

The large surface root needs to be protected during the whole development and no further damage occasioned

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5. Findings and General Recommendations.

A. Tree Retention or Removal Decisions.

Existing site trees that are of some age, have good structure and longer life expectancy should be considered for retention and protection unless there is a compelling reason to remove them. New trees cannot replace such trees within short space of time. The loss of tree benefits and public amenity is immediate and replacement time frames are in the order of decades for larger trees.

Alternatively trees in poor condition and/or with short useful life expectancy are normally recommended for removal on the basis that the effort and cost of retention through the development is not commensurate with short term amenity value, or risk a tree may pose if it fails. Removal of the tree and establishing a new tree with a long life expectancy is a better option. Additionally the tree in poor condition often has little ability to cope with significant changes in its root zone from the development impact.

Where trees have major impacts to the tree protection zone then removal is likely the best alternative unless the tree is significant and specific measure can be developed to assist the tree through the development.

It should be noted that the calculated tree protection zone (TPZ) is for the most part the minimum space required for the tree to maintain viability and stability, and the actual tree root zone will in most instances extend well past the calculated TPZ; meaning that if the development encroaches up to the TPZ a large amount of roots and root space is still lost for the tree.

The footprint of the project is estimated about 4000 square meters in area. The current theoretical canopy coverage is estimated about 1100 square meters – which represents a canopy coverage of about 25%. The project presents as having significant opportunity to greatly increase the canopy area coverage from new plantings. Specifically shade trees should be considered in the Cobar Climate.

B. Trees 2 and 8 are recommended for Removal.

C. All other trees are recommended for retention and protection during construction.

D. Tree Protection Measures.

- Tree Protection measures should form part of the site project demolition and construction plan – **A tree Protection Plan**
 - The Tree protection Plan should be formulated as part of the demolition contract and reviewed as implemented by Council (or other relevant authority) prior to commencement of demolition.
 - **Trees 1, 6 and 11** have major impacts to the TPZ and amelioration or support planning needs to be identified and implemented as part of the project construction plan and post construction phase. A project arborist or suitability qualified person will need to develop irrigation and mulching

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assistance depending upon the environmental conditions at the relevant time.

- It should remain current for the demolition and construction phase.
- Trees identified for retention should have pruning identified if necessary and effective Tree Protection fencing effected prior to commencement of demolition and construction.
 - If the existing roadway on the east side of the site is to be used for access then fencing needs to be erected for trees 3, 4, 5 and 10 to ensure that the area of soil around the trees is not compacted and the root zone damaged.
- There should be no parking of vehicles, or plant or storage of any materials within the TPZ of the retained trees.
- Other specific measures outlined in *Australian Standard 4970 -2009 protection of trees on development sites* may be appropriate once final works are determined.
- There should be no trenching or excavation works within the TPZ without prior consultation with Level 5 Arboricultural consultant to evaluate the impacts on the trees. This specifically includes, trenching for services, electricity, water, gas communications sewer or irrigation pipes, general earth works, including landscaping, that disturbs the soil profile.
- Boring of post holes in the order of 150 to 200 mm diameter for the erection of boundary fence posts are identified as an acceptable impact within the TPZ, but not excavation of soil for the laying of strip footings.
- The landscaping plan for the project needs to consider the TPZ of the trees and look to maximise the opportunity for root retention and future root development – which will be important for the longevity of the trees.
 - Alleviating the heavy compaction of the soil around most of the trees should be considered.
- Any specified pruning, or clearance pruning of trees should be conducted before commencement of any works so that an effective tree protection barrier (fence) can be installed and the canopy not damaged by demolition or construction process.

There is little point in trying to preserve trees through a demolition and construction project if the development does not respect the requirements of the trees.

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Terms, Conditions and Limitations that apply.

Obviously, visual tree assessment from the ground has some limitation as every single portion of the tree cannot be observed or inspected. Most or the large majority of tree conditions, factors or issues can be observed from the ground. Where aerial inspection or other investigative means should be considered the report or email will recommend or provide those as an additional considerations. The integrity of the root zone of trees can often be difficult to determine from visual inspection – particularly on steep slopes and on shallow soil profiles. Unless there are indicators of some instability then most trees are effectively assessed as stable as part of Visual Tree Assessment.

Trees are a valuable asset and necessary part of both the urban and natural environment. They are the cornerstone of our environment and provide numerous benefits to our social wellbeing, biodiversity and ecology of any area. They provide water balance stability, salinity and erosion control, amenity, cultural, public health and aesthetic benefits; efforts should be made to preserve and plant new trees where possible. As an asset they require appropriate management and resource inputs.

It should be noted that trees cannot be guaranteed 'risk free'. All trees represent some degree of risk. Arboriculture is not an exacting science; rather it is an educated interpretation of the interaction of biotic and environmental circumstances, which change over time. It is not possible to determine or predict all limb or tree failures. This report is such an interpretation at the time of inspection.

Unless Quantified Tree Risk Assessment (QTRA) has been specifically applied and reported, then this report or email does not constitute a risk assessment. The Author does not seek to determine what level of risk any individual or organisation is prepared to accept but serves to provide tree managers with tree condition, hazards and other salient issues or factors associated with the tree or trees; and provide or recommend management options.



22 April 2022

Wade Ryan Contracting – Independent Arboriculture Consultant AQF Level 5.

BAppSc(EnvHort) – AdvDip OH&S

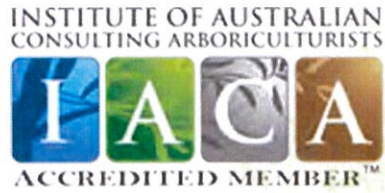
Institute of Australian Consulting Arboriculturists (IACA) Accredited Member (ACM 0622018)

QTRA – Registered Advanced User (4519).

Member - International Society of Arboriculture

Associate Member – The Arboriculture Association (UK)

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™ ISA Member : 257486



AS8205.



Quantified Tree Risk Assessment

4519

Developer: Nudge Ryan Contracting 0408 500 989 nudge@nudgecontracting.com.au www.nudgecontracting.com.au		Table 1 - Tree Data File - Cobarr Early Learning Centre Development - Ward Oval Precinct - (Reviewed 22/04/2022)																						
Tree No	Species	General Location	Species Origin	General Size	DBH (cm)	Height (m)	Canopy %	Age Class	Defects/Hazards/Issues Present Commentary on tree	Tree Vigour	General Condition	Environmental Rating	Expected Remaining Life	Significant Tree Values	Retention Value	Replacement Time Frame	Retention Recommendation	Primary Reason for Recommendation	Secondary Reason for Recommendation	Development Proposed Action	Canopy Area (m ²)	SR2	TP2	Known or Potential Impacts to Tree Other Comments
1	<i>Eucalyptus torquatus</i> Coral gum	Fence line Brennan St	Aus Native	Small	0.63	8	11	Mature	Old wound on stem at 2m mark - active white ants come decay - extended branching placing notable loading on this weak stem point	3 - Fair	3 - Fair	3 - Medium	5 to 15	Not Significant	3 - Fair	10-20	Retain if possible	Positive amenity values		Retain - Impacts to Manage	95	2.32	3.16	Tree will require canopy reduction by 30% or to remove some weight loading on the stem system - pruning from the outer canopy only - See report for instructions
2	<i>Malva australasica</i> White Cedar	Fence line Brennan St	Aus Native	Very Small	0.17	3	4	Semi Mature	Stunted small tree - unlikely to develop further dimensions	4 - Poor	4 - Poor	4 - Low	0 to 5	Not Significant	3 - Very Poor	0-5	Remove	Poor Condition	Replaced in short term	Remove	13	1.32	2.04	Poor specimen - not worth retaining equally immediately replaced with new tree. Floor Plan indicates tree will have to be removed for developments
3	<i>Eucalyptus camaldulensis</i> River Red Gum	Access road off Brennan St	Aus Native	Medium	0.55	17	18	Semi Mature	Evidence of light canopy dieback from recent low rainfall period - tree now mostly recovered foliage stem and branching structure present as sound	2 - Good	2 - Good	3 - Medium	15 plus	Not Significant	2 - Good	20+	Retain	Sound tree suited to site	Positive amenity values	Retain - Impacts to Manage	154	2.57	6.6	Raised section in sealed roadway inside TP2 indicates large structural root - do not sever this root - Roadway to be maintained - little to no impacts in TP2
4	<i>Eucalyptus torquatus</i> Coral gum	East side access road off Brennan	Aus Native	Small	0.35	7	11	Mature	Old stem failure at 2m - evidence of past white ants - Fast tree vigour only Fair	2 - Good	3 - Fair	3 - Medium	15 plus	Not Significant	3 - Fair	10-20	Retain if possible	Positive amenity values		Retain - Impacts unlikely	95	2.13	4.2	Roadway to remain - impact to TP2 negligible
5	<i>Eucalyptus camaldulensis</i> River Red Gum	East side access road off Brennan	Aus Native	Medium	0.32	15	8	Semi Mature	Sound young tree	3 - Fair	3 - Fair	3 - Medium	5 to 15	Not Significant	3 - Fair	10-20	Retain if possible	Sound tree suited to site	Positive amenity values	Retain - Impacts unlikely	50	2.03	3.84	Roadway to remain - impact to TP2 negligible
6	<i>Eucalyptus camaldulensis</i> River Red Gum	North side of Stock Yards	Aus Native	Medium	0.66	17	16	Mature	Stem and branching structure sound - medium tree in good condition	2 - Good	2 - Good	3 - Medium	15 plus	Not Significant	2 - Good	20+	Retain	Sound tree suited to site	Positive amenity values	Retain - Impacts to Manage	203	2.78	7.92	Plans indicate significant impacts to TP2 and canopy - see report full details pruning and amelioration actions required
7	<i>Eucalyptus camaldulensis</i> River Red Gum	North side of Stock Yards	Aus Native	Small	0.24	9	6	Semi Mature	Tree suppressed by tree 6 - extensive increase in dimensions unlikely	4 - Poor	3 - Fair	4 - Low	15 plus	Not Significant	3 - Fair	10-20	Retain if possible	Positive amenity values		Retain - Impacts unlikely	28	1.82	2.86	Impacts to TP2 unlikely or minimal
8	<i>Schinus molle</i> Peppercorn	West end stock yards	Exotic	Small	0.75	9	12	Over Mature	Stem system in very poor condition - decay and borers & white ants - East stem high risk of failure much of canopy has faded cracking developing into vertical fissures	3 - Fair	4 - Poor	5 - Very Low	0 to 5	Not Significant	4 - Poor	5-10	Remove	Poor Condition	Remove	113	2.93	9	Tree stem in very poor condition - the tree is not worth retaining - a new tree is a better option	
9	<i>Acacia salicina</i> Cocoba	Fence line Brennan St	Aus Native	Small	0.54	10	13	Mature	Two trees as one - Cavity in primary stem - low risk of failure - stems growing in fence wire - Spores suited to environment, but not considered endemic to this site - likely seeded in location	2 - Good	2 - Good	3 - Medium	15 plus	Not Significant	3 - Fair	10-20	Retain if possible	Sound tree suited to site	Positive amenity values	Retain - Impacts unlikely	177	2.55	6.48	If fence is to be replaced then do not remove post adjacent to stem - cut off and leave in place - Treat the two trees as one tree
10	<i>Eucalyptus camaldulensis</i> River Red Gum	East Side Access of Brennan	Aus Native	Medium	0.46		11	Mature	Compacted root system from roadway - canopy dieback about 15%	3 - Fair	3 - Fair	4 - Low	5 to 15	Not Significant	3 - Fair	10-20	Retain if possible	Sound tree suited to site	Positive amenity values	Retain - Impacts unlikely	88.5	1.8884	5.12	Direct impacts unlikely - general/protection measures required
11	<i>Eucalyptus camaldulensis</i> River Red Gum	East Side of stock yards	Aus Native	Medium	0.45		12	7	Compacted root system from roadway - canopy dieback about 15%	3 - Fair	3 - Fair	4 - Low	5 to 15	Not Significant	3 - Fair	10-20	Retain if possible	Sound tree suited to site	Positive amenity values	Retain - Impacts to Manage	88.5	1.8884	5.4	Removal of posts will require some consideration of the tree - Proposed driveway prevents or notable encroachment of the TP2 - if impact of new driveway within 2.5 metres of stem tree vigour may not support retention already struggling with roadway on east side Tree will require pruning - see report for full details
12	<i>Eucalyptus camaldulensis</i> River Red Gum	East Side of stock yards	Aus Native	Medium	0.82	10	14	Mature	Compacted root system from roadway - large exposed root that will require consideration	2 - Good	2 - Good	3 - Medium	15 plus	Not Significant	2 - Good	20+	Retain	Sound tree suited to site	Positive amenity values	Retain - Impacts unlikely	156	3.0467	8.84	Canopy may require pruning prior to development - noting that canopy extends past TP2

Assessment and Evaluation criteria - Definitions.									
Origin		General Tree Size	Age Class		General Condition - summation of all considerations. Includes Stem/Canopy Structure Defects, Form, Canopy Vigour, Extent of any decay, Pest and Disease Influences	ERL estimated remaining life in years under current Situation	Tree Vigour	Retention value	
Endemic Aus Native	Species is native to this location	Very Large > 25m	New	Recent Planting - last year or two	1 - Excellent	0	1 - Excellent	1 - Excellent	Interpretation Based on overall tree condition, species performance in local environment, expected remaining life and significance of tree in
	Species native to Australia but not this location	Large 18-25m	Young	Sapling, extended growth remaining	2 - Good	0 to 5	2 - Good	2 - Good	
Exotic	Species introduced to Australia	Medium 10-18m	Semi Mature	Some remaining growth to reach maturity for the site and species	3 - Fair	5 to 15	3 - Fair	3 - Fair	
		Small < 10m	Mature	Considered mature size for site and species - typically no sign of decline	4 - Poor	15 plus	4 - Poor	4 - Poor	
		Very Small < 3m	Over Mature	Tree has commenced to decline - obvious signs	5 - Very Poor	40 plus	5 - Very Poor	5 - Very Poor	
			Senescent	Extended signs of decline - recovery not expected					
			Dead	Little or no metabolic function remaining					

Environmental Rating	Environmental Evaluation Considerations/criteria
1 - Very High	Normally Old growth Remnant Tree, multiple hollows important to endangered fauna, replacement would be well in excess of 350 years
2 - High	Mature or semi mature Endemic Tree with or without hollows, plays an important part in local ecology, or Australian Native that has high substitute values as endemic tree replacement would take 50-100 years
3 - Medium	Young or semi mature Endemic tree or Australian native species that has some positive values for local fauna/ecosystems - replacement would take 20 or more years. Large Exotic tree with elevated general values.
4 - Low	Normally exotic species, or small, young endemic or native that could be replaced in the short term 5-10 years
5 - Very Low	Listed Weed or nuisance species, or very small value or insignificant to local ecology - could be replaced within 5 years or readily replaced with species of greater value

Significant Tree value considerations/criteria	
Very Significant	Defined as Significant Tree by regulatory or other authority or Environmental rating 1 or Heritage Listed or Very High Cultural or heritage Values
Significant	Environmental rating 2 or Medium or large tree in good/excellent condition, suited to local environment or imposing within the local landscape with long life expectancy and or strong amenity values or some cultural or heritage links

Recommended Action for DA/Primary Reasons	
Retain Priority	Very Significant tree
Retain	Significant Tree
Retain if possible	Sound tree suited to site
Remove	Positive amenity values
Remove Priority	Poor Condition
	Unsuitable for location
	Species not suited to Environment
	Condition & Safety
	Replaced in short term
	Allow development
	Exempt species
	Exempt height
	Other

Replacement tim		
0-5	1	Very significant
5-10	2	Significant
10-20	3	Not Significant
20+	4	
50+	5	Yes
100+		No
Known Development Impact		
Remove		
Retain - impacts to Manage		
Retain - impacts unlikely		
Not determined		

Tree Height and canopy spread is estimated unless otherwise specified.

Tree stem diameter is measured at approximately 1.4m above - or at a point indicative of the tree dimension where abnormal growth occurs at 1.4m above ground. Multi stemmed trees are calculated as per AS 4970

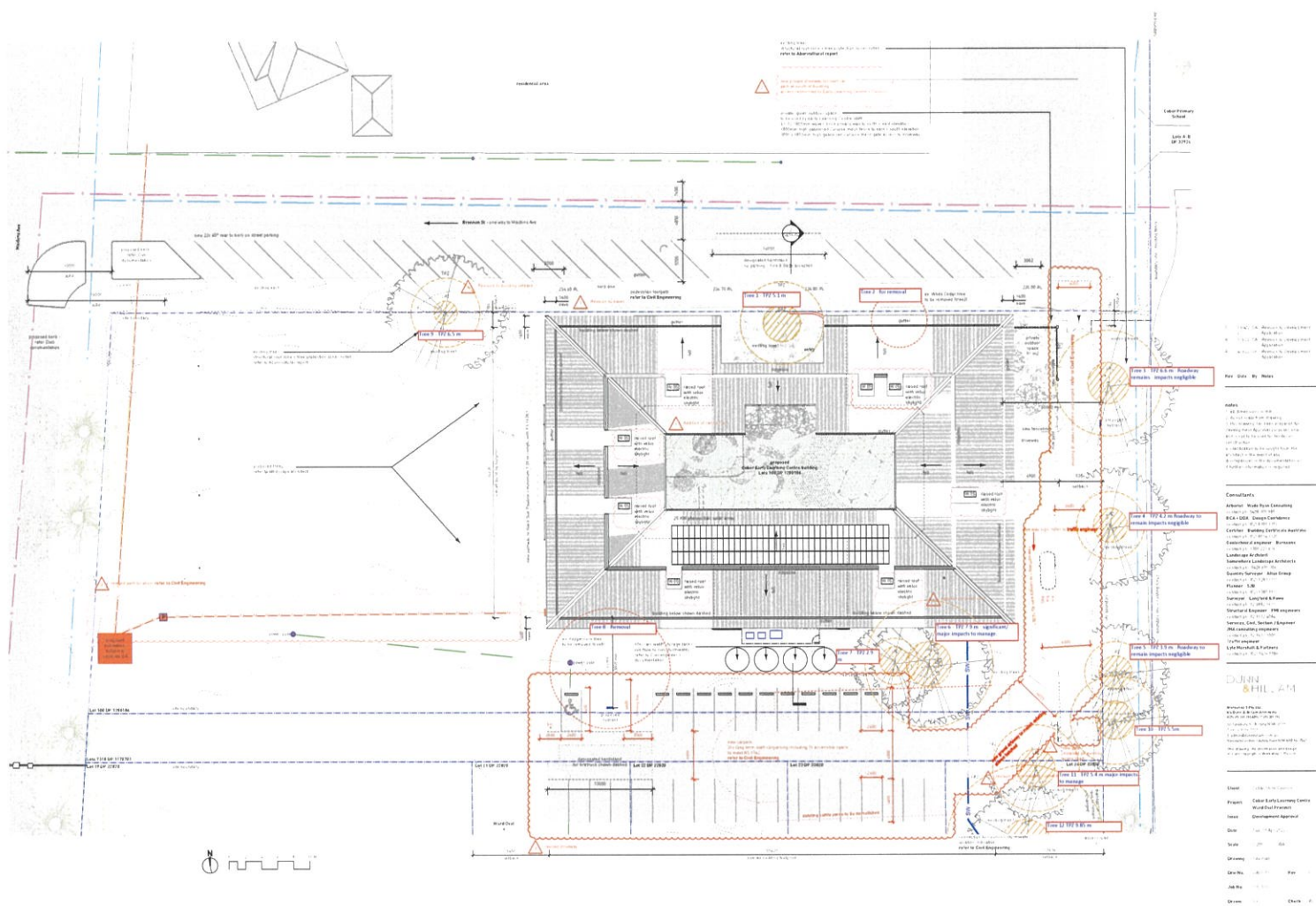
TPZ - Tree Protection Zone - specified area above and below ground and at a given distance from the trunk set aside for the protection of the tree's roots and crown to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development.

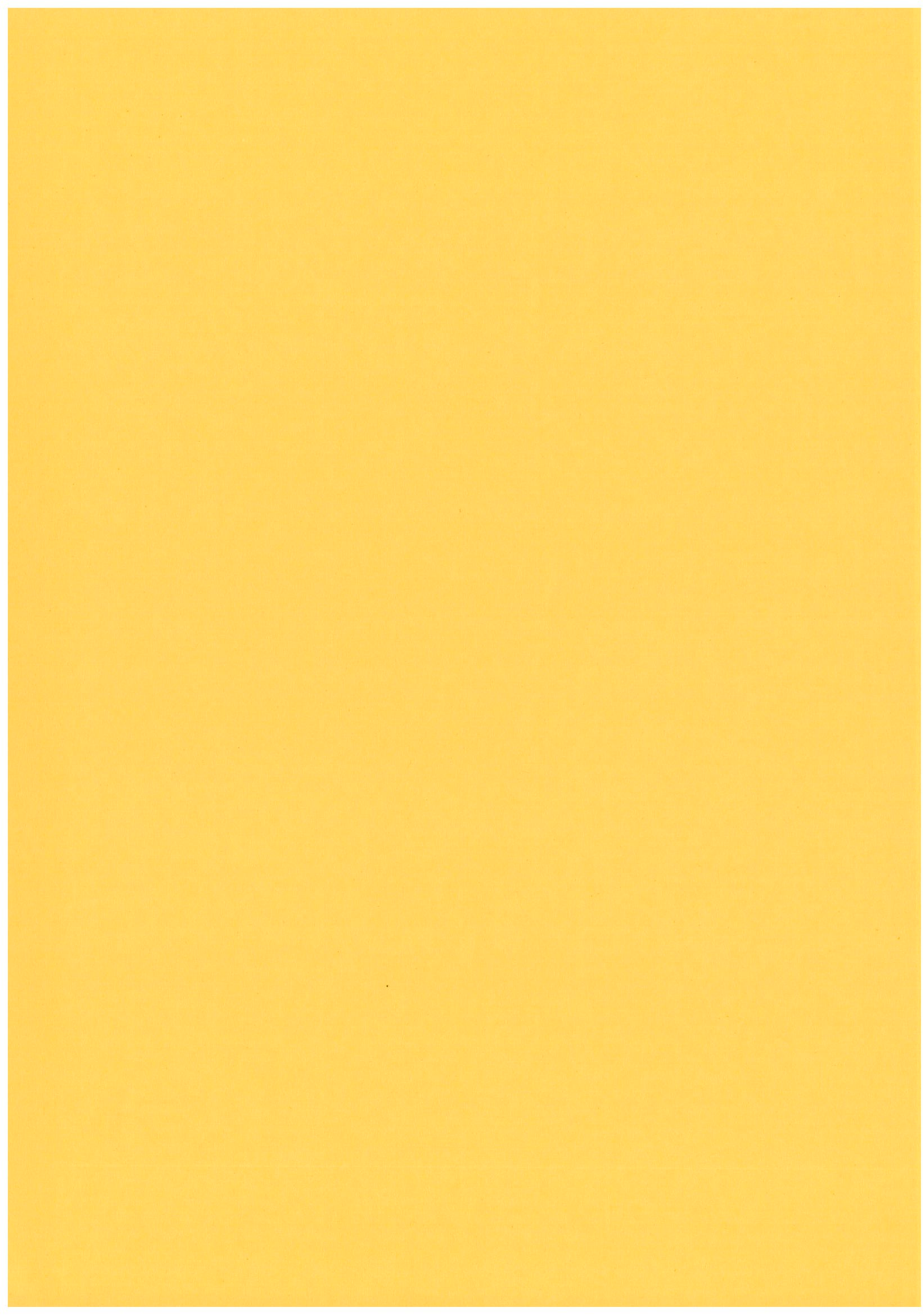
SRZ - Structural Root Zone - the area around the base of a tree required for the tree's stability in the ground - calculated in meters radially from stem centre.

From Australian Standard 4970:2009 Protection of Trees on development sites

TPZ and SRZ are calculated from AS 4970

Tree canopy area is a calculated area from the diameter of the of the canopy - some actual variation may exist in the calculation if the canopy is not symmetrical





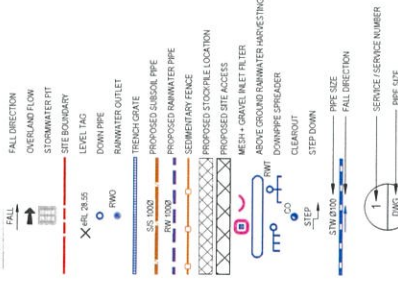
COBAR CHILD CARE CENTRE, COBAR

DISCIPLINE: CIVIL SERVICES



COBAR SHIRE COUNCIL

LEGEND



LEGEND



DRAWING LIST

C200	COVER SHEET: SITE LOCALITY PLAN AND LEGEND
C201	STORMWATER DRAINAGE PLAN SHEET 1 OF 3
C202	STORMWATER DRAINAGE PLAN SHEET 2 OF 3
C203	STORMWATER DRAINAGE PLAN SHEET 3 OF 3
C204	PUBLIC DOMAIN WORKS PLAN SHEET 1 OF 4
C205	PUBLIC DOMAIN WORKS PLAN SHEET 2 OF 4
C206	PUBLIC DOMAIN WORKS PLAN SHEET 3 OF 4
C207	PUBLIC DOMAIN WORKS PLAN SHEET 4 OF 4
C208	LINE MARKING AND SIGNAGE PLAN
C209	TOOTHPIECE SECTIONS
C210	PUBLIC DOMAIN DETAILS
C211	EROSION & SEDIMENT CONTROL PLAN
C212	EROSION & SEDIMENT CONTROL DETAILS



REVISIONS / AMENDMENTS			REVISIONS / AMENDMENTS		
Rev	Date	Description	Rev	Date	Description
P1	21.03.21	PRELIMINARY ISSUE	MJB		
P2	04.08.21	PRELIMINARY ISSUE	MJB		
P4	14.06.22	PRELIMINARY ISSUE	MJB		



All dimensions to be as noted on other project documents. The project manager is responsible for the accuracy of the information provided in this document. This drawing is prepared for the purpose of providing a visual representation of the proposed works. It is not to be used for construction purposes. The project manager is not responsible for the accuracy of the information provided in this document.

ARCHITECT
DUNN & HILLAM ARCHITECTS

CLIENT
COBAR SHIRE COUNCIL

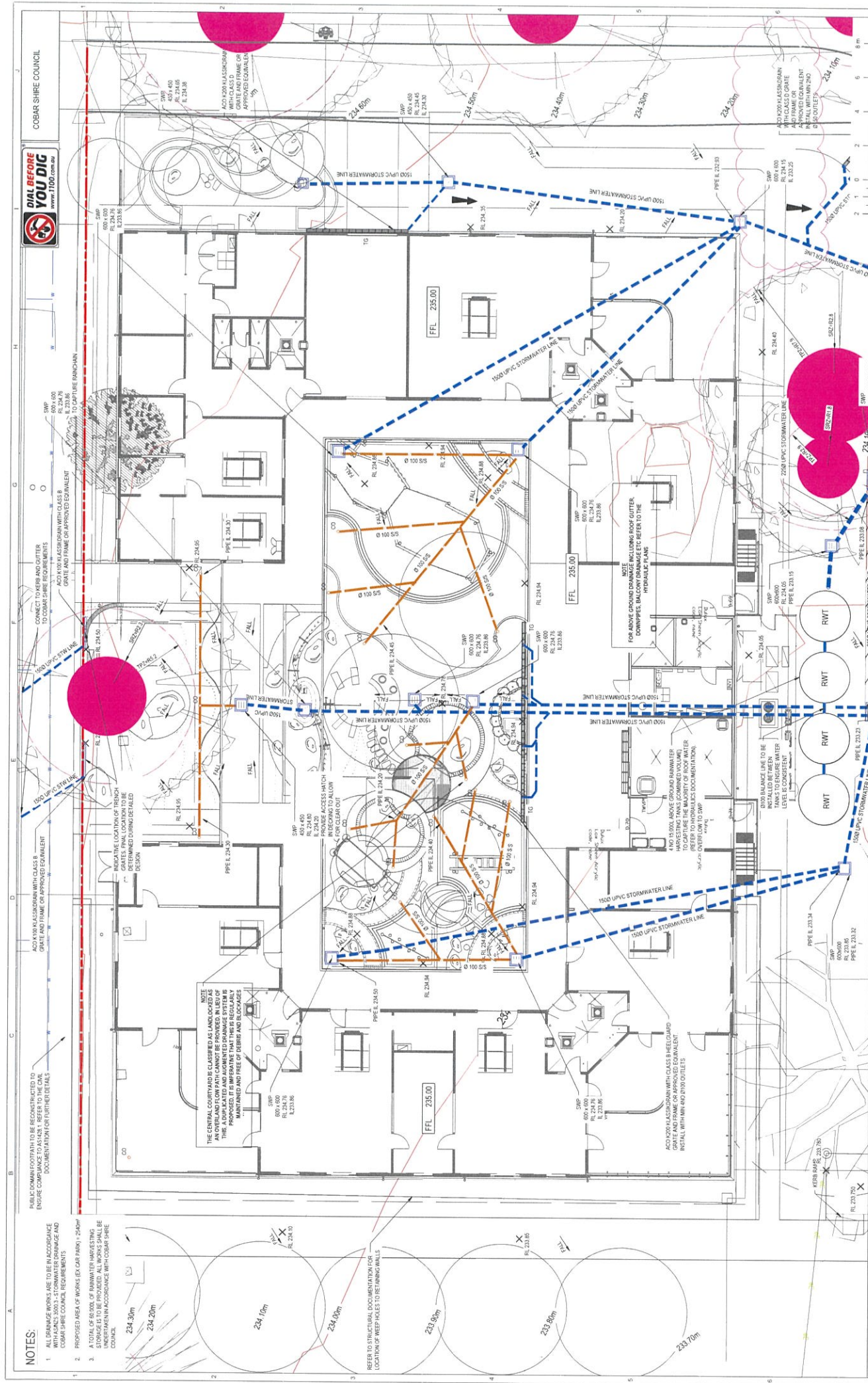
CONSULTANT
JHA

PROJECT
COBAR CHILD CARE CENTRE

TITLE
COVER SHEET: SITE LOCALITY PLAN AND LEGEND

PRELIMINARY ISSUE
NOT TO BE USED FOR CONSTRUCTION

SCALE @ A1
MJB
N.T.S.
APPROVED
MJB
JOB NO.
210032
C000
P4



NOTES:

1. ALL DRAINAGE WORKS ARE TO BE IN ACCORDANCE WITH AS/NZS 3500.3 - STORMWATER DRAINAGE AND COBAS SHIRE COUNCIL REQUIREMENTS
2. PROPOSED AREA OF WORKS (EX CAR PARK) = 2540sqm
3. A TOTAL OF 50 000L OF RAINWATER HARVESTING STORAGE IS TO BE PROVIDED. ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH COBAS SHIRE COUNCIL REQUIREMENTS

NOTE
THE CENTRAL COURTYARD IS CLASSIFIED AS LANDLOCKED AS AN OVERLAND FLOW PATH CANNOT BE PROVIDED. IN LIEU OF THIS, A DUPLICATED AND AUGMENTED DRAINAGE SYSTEM IS PROPOSED. IT IS IMPERATIVE THAT THIS IS REGULARLY MAINTAINED AND FREE OF DEBRIS AND BLOCKAGES

NOTE
FOR ABOVE GROUND DRAINAGE INCLUDING ROOF GUTTER,
DOWNPIPES, BALCONY DRAINAGE ETC REFER TO THE
HYDRAULIC PLANS

ACO K200 CLASSIC DRAIN WITH CLASS B HEEL GUARD GRATE AND FRAME OR APPROVED EQUIVALENT. INSTALL WITH MIN 4000 GUTTETS.

0100 BALANCE LINE TO BE
INSTALLED BETWEEN
TANKS TO ENSURE WATER

SWP
500 x 500 V/GRATE
234 16

[illegible]

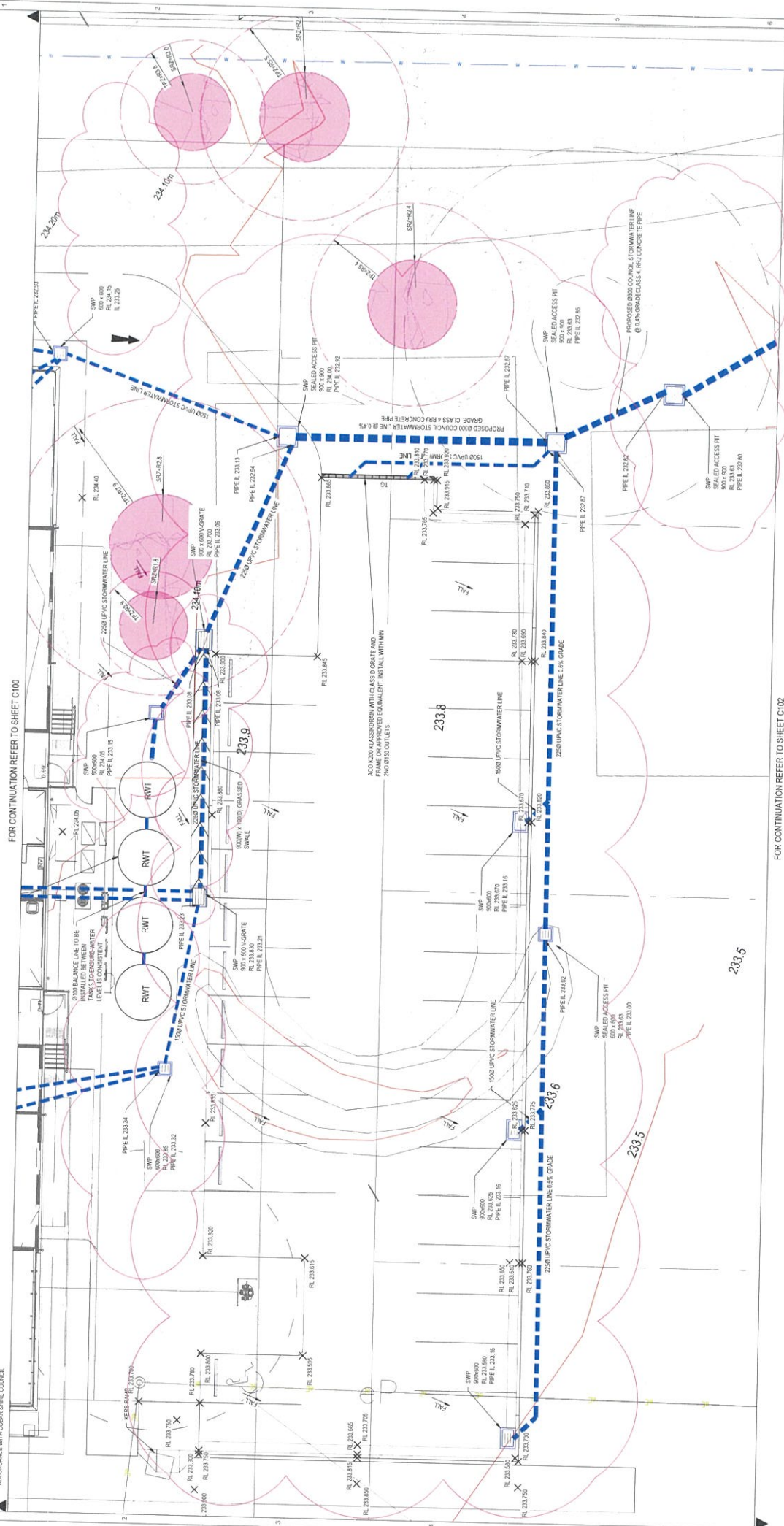
	CLIENT COBAR SHIRE COUNCIL	ARCHITECT DUNN & HILLAM ARCHITECTS
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NOTES:

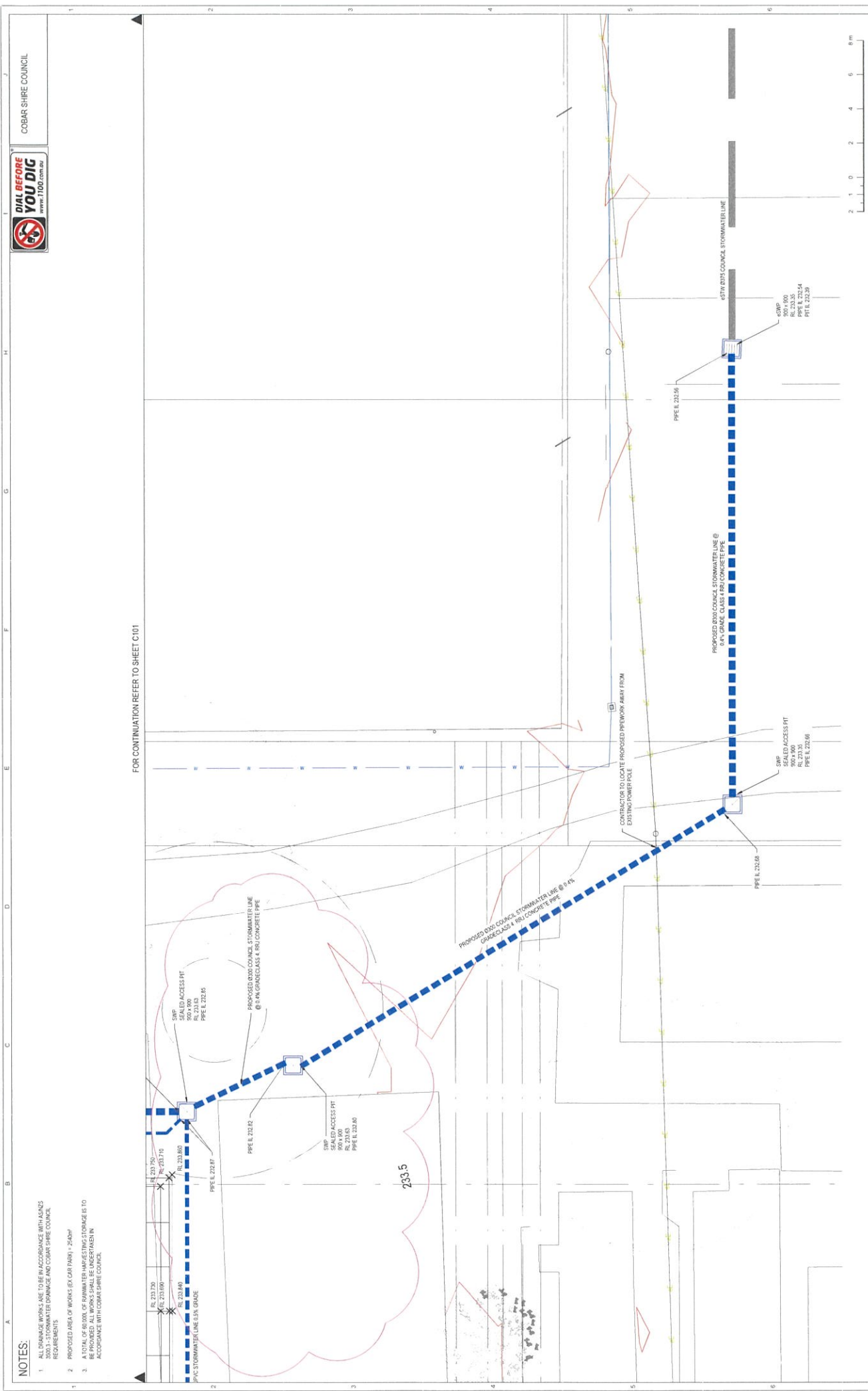
1. ALL DRAINAGE WORKS ARE TO BE IN ACCORDANCE WITH AS/NZS 3000.3 - STORMWATER DRAINAGE AND COBAR SHIRE COUNCIL REQUIREMENTS
2. PROPOSED AREA OF WORKS (EX CAR PARK) = 2540m²
3. A TOTAL OF 50 000L OF RAINWATER HARVESTING STORAGE IS TO BE PROVIDED. ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH COBAR SHIRE COUNCIL



FOR CONTINUATION REFER TO SHEET C102

[illegible]

1	100-41	1	2024-3
PRELIMINARY ISSUE NOT TO BE USED FOR CONSTRUCTION			
CIVIL SERVICES STORMWATER DRAINAGE PLAN SHEET 2 OF 3			
PROJECT COBAR CHILDCARE CENTRE			
CONSULTANT DUNN & HILLAM ARCHITECTS			
COBAR SHIRE COUNCIL			
DATE: 21/01/2024 DRAWN BY: J.A.L. CHECKED BY: M.M. APPROVED BY: N.T.S. DATE: 20/01/2024 DRAWING NO: 210032 REV: P7			
JHA			



FOR CONTINUATION REFER TO SHEET C101

NOTES:

1. ALL DRAINAGE WORKS ARE TO BE IN ACCORDANCE WITH AS/NZS 1546.1-2018 DRAINAGE DESIGN AND CONSTRUCTION REQUIREMENTS.
2. PROPOSED AREA OF WORKS (EX. CAR PARK) - 250m².
3. A TOTAL OF 60,000L OF RAINWATER HARVESTING STORAGE IS TO BE PROVIDED TO THE PROPERTY TO BE TAKEN IN ACCORDANCE WITH COBAR SHIRE COUNCIL REQUIREMENTS.



COBAR SHIRE COUNCIL

REVISIONS / AMENDMENTS			REVISIONS / AMENDMENTS		
No.	Date	Description	No.	Date	Description
P1	14.04.22	PRELIMINARY ISSUE	M.B.		
P2	24.03.22	PRELIMINARY ISSUE	M.B.		
P3	14.04.22	PRELIMINARY ISSUE	M.B.		

All dimensions to be verified on site prior to construction. If any discrepancies are found, the contractor is to advise the client immediately. The client is responsible for ensuring that the proposed works are in accordance with the relevant legislation and standards. The client is also responsible for ensuring that the proposed works are in accordance with the relevant legislation and standards.

CLIENT
COBAR SHIRE COUNCIL

ARCHITECT
DUNN & HILLAM ARCHITECTS

CONSULTANT
JHA

PROJECT
COBAR CHILDCARE CENTRE

TITLE
CIVIL SERVICES
STORMWATER DRAINAGE PLAN
SHEET 3 OF 3

PRELIMINARY ISSUE
NOT TO BE USED FOR CONSTRUCTION

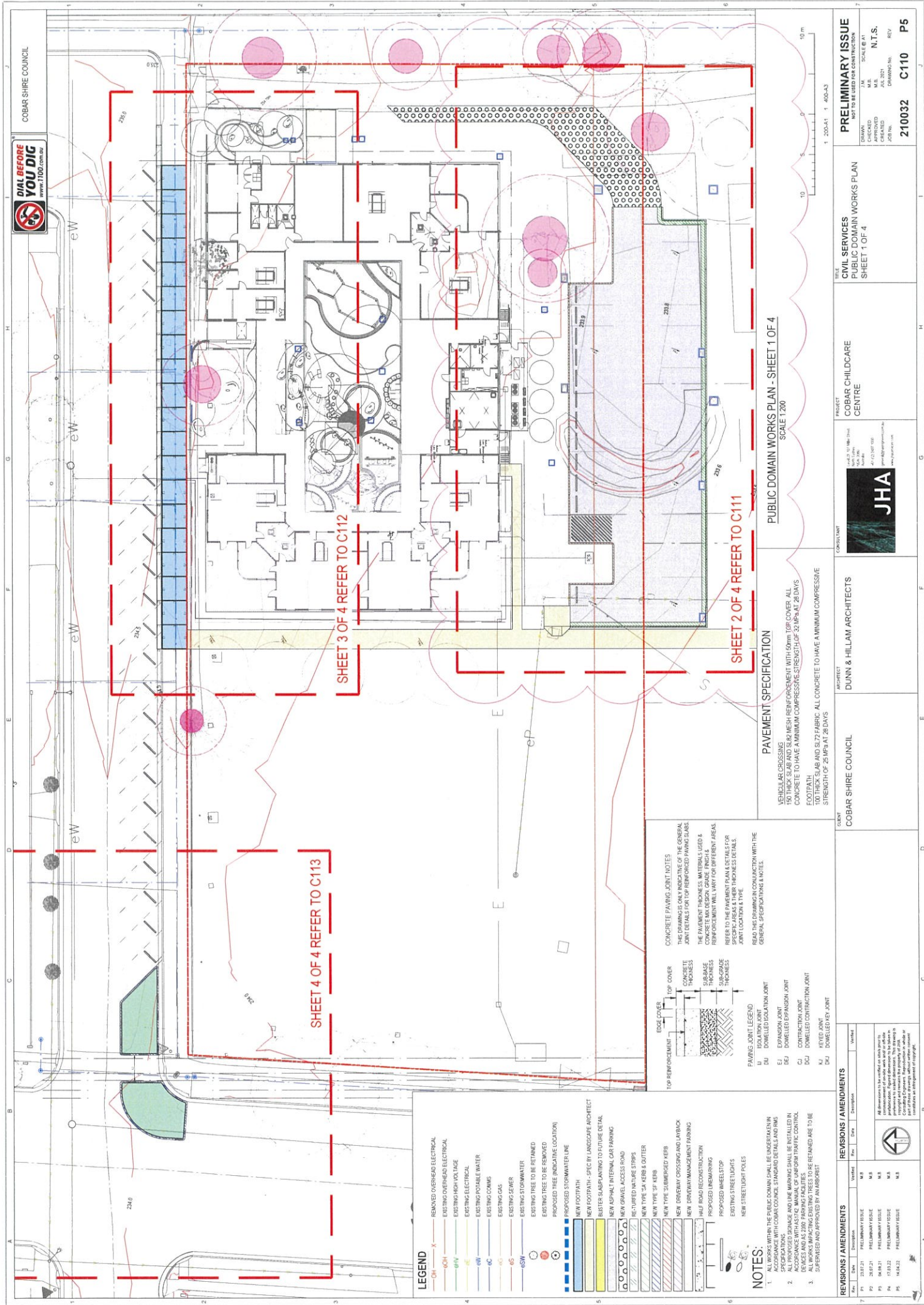
DATE
14.04.22

SCALE
1:100

JOB NO.
210032

DRAWING NO.
C102

REV
P3



LEGEND

- REMOVED OVERHEAD ELECTRICAL
- EXISTING OVERHEAD ELECTRICAL
- EXISTING HIGH VOLTAGE
- EXISTING ELECTRICAL
- EXISTING POTABLE WATER
- EXISTING COMMS
- EXISTING GAS
- EXISTING SEWER
- EXISTING STORMWATER
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PROPOSED TREE INDICATIVE LOCATION
- PROPOSED STORMWATER LINE
- NEW FOOTPATH
- NEW FOOTPATH - SPEC BY LANDSCAPE ARCHITECT
- BUSTER SLAB/PAVING TO FUTURE DETAIL
- NEW ASPHALT INTERNAL CAR PARKING
- NEW ASPHALT ACCESS ROAD
- RECURVED NATURE STRIPS
- NEW TYPE 'SA' KERB & GUTTER
- NEW TYPE 'SP' KERB
- NEW DRIVEWAY CROSSING AND LAYBACK
- NEW DRIVEWAY MANAGEMENT FASING
- HALF ROAD RECONSTRUCTION
- PROPOSED REPAIRS
- PROPOSED WHEELSTOP
- EXISTING STREETLIGHTS
- NEW STREETLIGHT POLES

NOTES:

- ALL WORKS WITHIN THE PUBLIC DOMAIN SHALL BE UNDERTAKEN IN ACCORDANCE WITH COBAR COUNCIL STANDARD DETAILS AND TMS SPECIFICATIONS.
- ALL PROPOSED SIGNAGE AND LINE MARKING SHALL BE INSTALLED IN ACCORDANCE WITH AS/ANZ STANDARDS AND TMS GUIDANCE FOR TRAFFIC CONTROL.
- ALL WORKS IMPACTING EXISTING TREES TO BE RETAINED ARE TO BE SUPERSEDED AND APPROVED BY AN ARBORIST.

CONCRETE PAVING JOINT NOTES

THIS DRAWING IS ONLY INDICATIVE OF THE GENERAL JOINT DETAILS FOR TOP REINFORCED PAVING SLAB. THE PAVEMENT THICKNESS, MATERIALS USED & CONCRETE MIX DESIGN, GRADE, FINISH, JOINT SPACING AND JOINT LOCATION SHALL BE REFERRED TO THE PAVEMENT PLAN & DETAILS FOR FINISHED SURF DETAILS.

PAVING JOINT LEGEND

- ISOLATION JOINT
- DOWELLED ISOLATION JOINT
- EXPANSION JOINT
- DOWELLED EXPANSION JOINT
- CONTRACTION JOINT
- DOWELLED CONTRACTION JOINT
- KEYED JOINT
- DOWELLED KEY JOINT

PAVEMENT SPECIFICATION

VEHICULAR CROSSING
150 THICK SLAB AND SLR2 MESH REINFORCEMENT WITH 50mm TOP COVER. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32 MPa AT 28 DAYS.

FOOTPATH
100 THICK SLAB AND SL72 FABRIC. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPa AT 28 DAYS.

REVISIONS / AMENDMENTS

No.	Date	Description	Version
P1	2023-01-21	Preliminary Issue	M.B.
P2	2023-01-21	Preliminary Issue	M.B.
P3	2023-01-21	Preliminary Issue	M.B.
P4	2023-01-21	Preliminary Issue	M.B.
P5	2023-01-21	Preliminary Issue	M.B.

CLIENT

COBAR SHIRE COUNCIL

ARCHITECT

DUNN & HILLAM ARCHITECTS

CONSULTANT

JHA

PROJECT

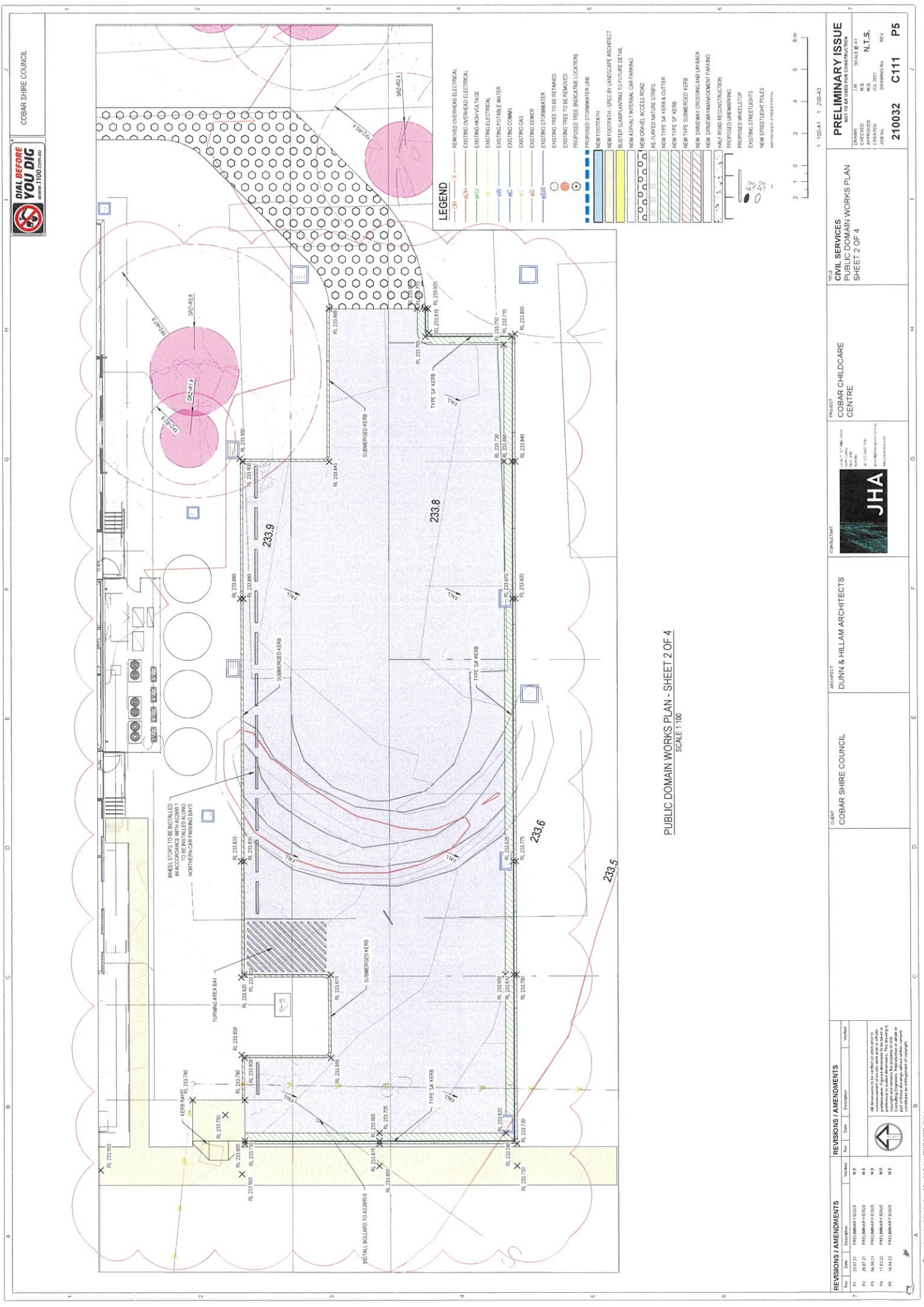
COBAR CHILD CARE CENTRE

TITLE

CIVIL SERVICES
PUBLIC DOMAIN WORKS PLAN
SHEET 1 OF 4

PRELIMINARY ISSUE

NOT TO BE USED FOR CONSTRUCTION
SCALE: 1:100
DRAWING No. 210032
JOB No. C110
REV. P5



COBAR SHIRE COUNCIL



LEGEND

- REMOVED OVERHEAD ELECTRICAL
- EXISTING OVERHEAD ELECTRICAL
- EXISTING HIGH VOLTAGE
- EXISTING ELECTRICAL
- EXISTING POTABLE WATER
- EXISTING COMMS
- EXISTING GAS
- EXISTING SEWER
- EXISTING STORMWATER
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PROPOSED TREE INDICATIVE LOCATION
- PROPOSED STORMWATER LINE
- NEW FOOTPATH
- NEW FOOTPATH - SPEC BY LANDSCAPE ARCHITECT
- WATER LAYOUTING TO DRAIN DETAIL
- NEW ASPHALT INTERNAL CARPARKING
- NEW GRAVEL ACCESS ROAD
- RE-TURFED NATURE STRIPS
- NEW TYPE SA KERB & OUTER
- NEW TYPE SP KERB
- NEW TYPE SUMMERGED KERBS
- NEW DRIVEWAY CROSSING AND LAYBACK
- NEW DRIVEWAY MANAGEMENT PAVING
- HALF ROAD RECONSTRUCTION
- PROPOSED DRAINAGE
- PROPOSED WHEELSTOP
- EXISTING STREETLIGHTS
- NEW STREETLIGHT POLES
- REMOVED STREETLIGHT



PUBLIC DOMAIN WORKS PLAN - SHEET 2 OF 4
SCALE 1:100

REVISIONS / AMENDMENTS				REVISIONS / AMENDMENTS			
No.	Date	Description	Verified	No.	Date	Description	Verified
1	18.02.21	PRELIMINARY ISSUE	M.B.	1	18.02.21	PRELIMINARY ISSUE	M.B.
2	28.02.21	PRELIMINARY ISSUE	M.B.	2	28.02.21	PRELIMINARY ISSUE	M.B.
3	04.03.21	PRELIMINARY ISSUE	M.B.	3	04.03.21	PRELIMINARY ISSUE	M.B.
4	17.03.21	PRELIMINARY ISSUE	M.B.	4	17.03.21	PRELIMINARY ISSUE	M.B.
5	18.03.21	PRELIMINARY ISSUE	M.B.	5	18.03.21	PRELIMINARY ISSUE	M.B.

All dimensions to be verified on site prior to construction. If any discrepancies are found, the contractor is to advise the client immediately. The client is responsible for ensuring that the plan is accurate and that the contractor is aware of any changes. The client is also responsible for ensuring that the contractor is aware of any changes to the plan.

APR 14, 2021 - 12:00pm C:\Users\joshua\Documents\Public Domain Works Plan - Sheet 2 of 4.dwg 25/03/2021-12:00pm

CLIENT
COBAR SHIRE COUNCIL

ARCHITECT
DUNN & HILLAM ARCHITECTS

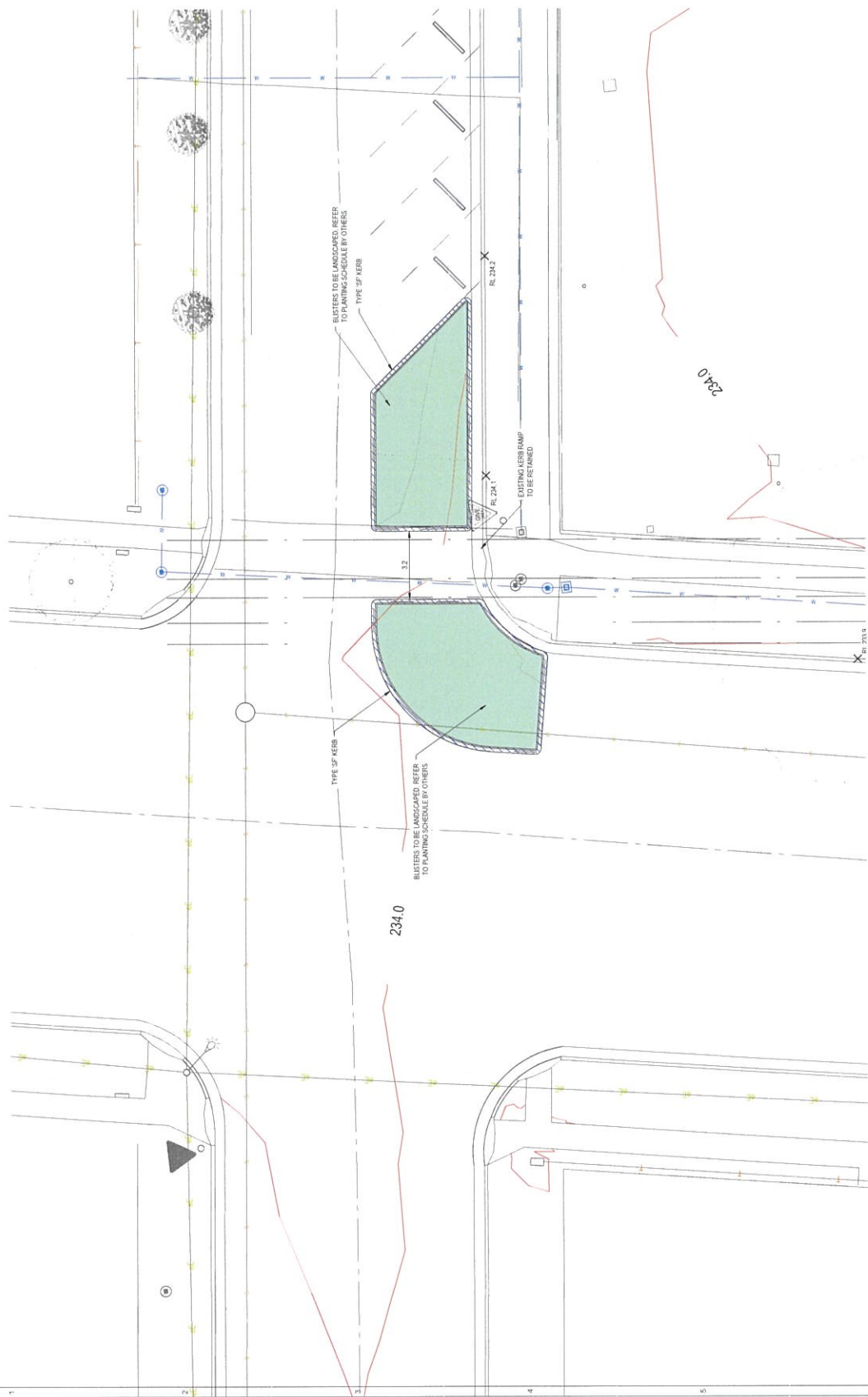
CONSULTANT
JHA

PROJECT
COBAR CHILD CARE CENTRE

CIVIL SERVICES
PUBLIC DOMAIN WORKS PLAN
SHEET 2 OF 4

PRELIMINARY ISSUE
NOT TO BE USED FOR CONSTRUCTION

DRAWN: J.M. SCALE: A1
CHECKED: M.B.
DESIGNED: J.M.
DATE: JUL 2021
JOB NO.:
DRAWING NO.:
REV: N.T.S.
210032 C111 P5

PUBLIC DOMAIN WORKS PLAN - SHEET 4 OF 4
SCALE 1"=100'[illegible]

All dimensions to be verified on actual pour to commencement of inside walls being laid or before preplacement. Figured dimension to be taken in preference to scaled dimensions. This drawing is copyright and remains the property of J. H. Consulting Engineers. Reproduction in whole or part of these drawings without written consent constitutes an abridgment of contract.

CLIENT	COBAR SHIRE COUNCIL
ARCHITECT	DUNN & HILLAM ARCHITECTS

JHA

401 625 5475 (Toll Free)
1651 228
Australia

www.jha.com.au

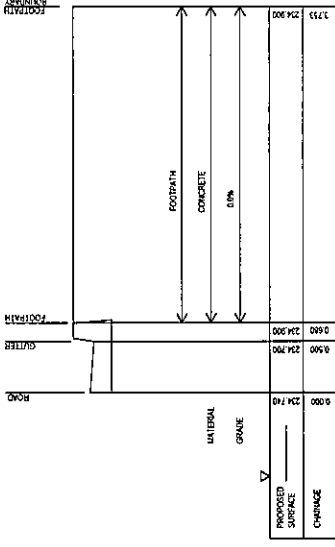
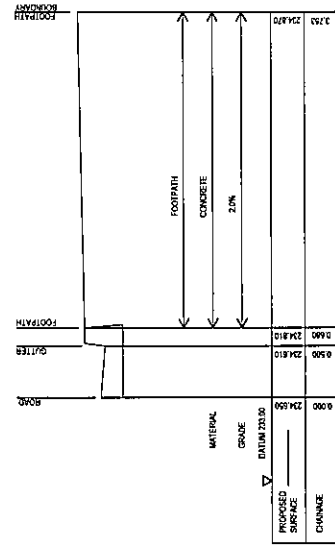
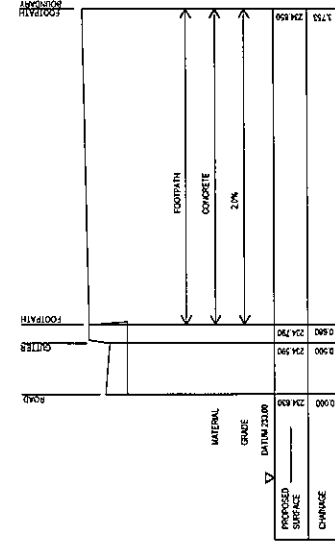
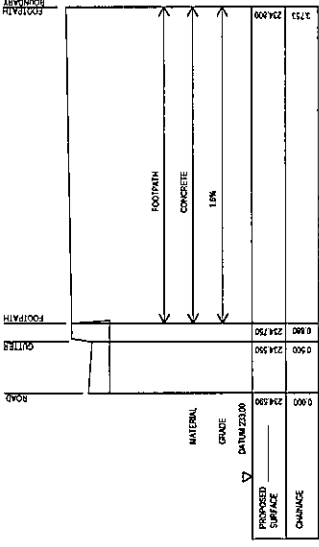
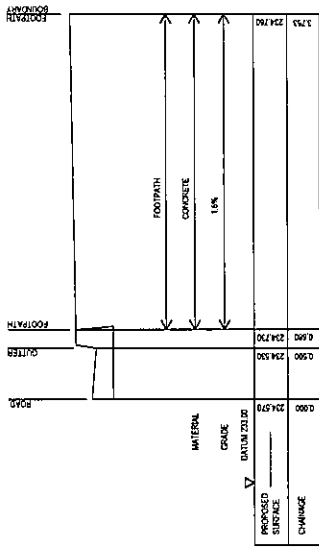
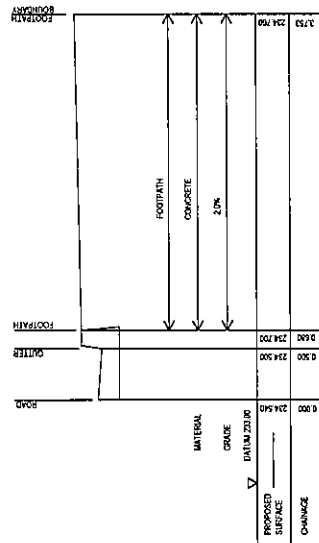
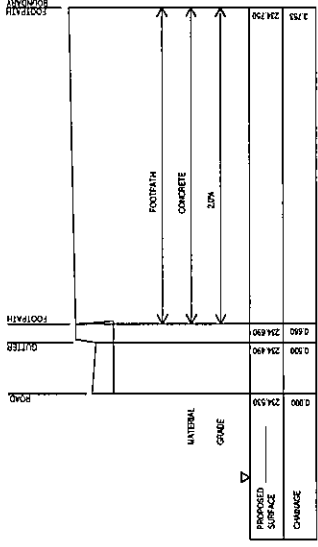
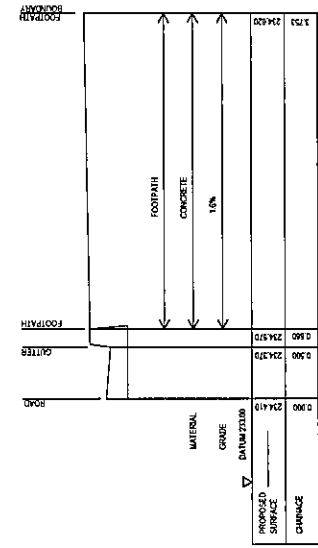
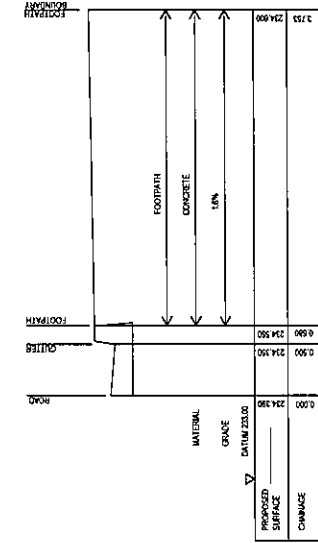
PROJECT
COBAR CHILDCARE
CENTRE

CIVIL SERVICES
PUBLIC DOMAIN WORKS PLAN

PRELIMINARY ISSUE
NOT TO BE USED FOR CONSTRUCTION

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CHECKED	M.B.	N.T.S.
APPROVED	M.B.	
TREATED	JUL 2021	
DATE	DRAWING NO.	REV
18 Nov		

210032 C113 P5



FOOTPATH SCALE 1:25 C112

FOOTPATH SCALE 1:25 C112

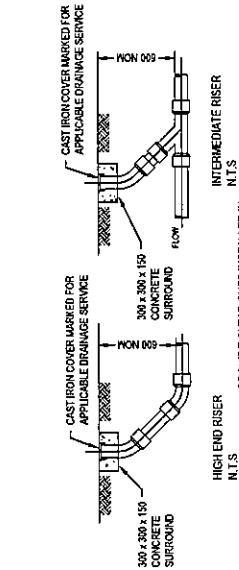
FOOTPATH SCALE 1:25 C112

FOOTPATH SCALE 1:25 C112

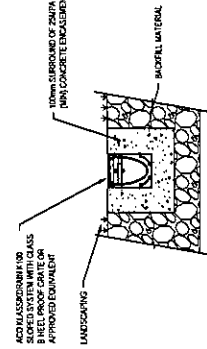
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No.	Date	Description	By	No.	Date	Description	By
1	20/01/21	PRELIMINARY ISSUE	M.S.	1	20/01/21	PRELIMINARY ISSUE	M.S.
2	20/01/21	PRELIMINARY ISSUE	M.S.	2	20/01/21	PRELIMINARY ISSUE	M.S.
3	20/01/21	PRELIMINARY ISSUE	M.S.	3	20/01/21	PRELIMINARY ISSUE	M.S.
4	20/01/21	PRELIMINARY ISSUE	M.S.	4	20/01/21	PRELIMINARY ISSUE	M.S.

PROJECT				PROJECT			
CLIENT	COBAR SHIRE COUNCIL	ARCHITECT	DUNN & HILLAM ARCHITECTS	CLIENT	COBAR SHIRE COUNCIL	ARCHITECT	DUNN & HILLAM ARCHITECTS
COMMITTEE	JHA	COMMITTEE	JHA	COMMITTEE	JHA	COMMITTEE	JHA
PREPARED BY	JHA	CHECKED BY	JHA	PREPARED BY	JHA	CHECKED BY	JHA
DATE	20/01/21	DATE	20/01/21	DATE	20/01/21	DATE	20/01/21

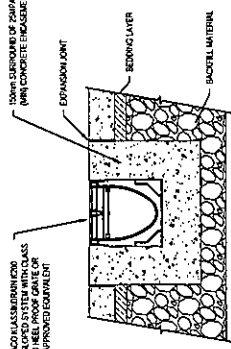
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PROJECT NO.	210032	PROJECT NO.	210032	PROJECT NO.	210032	PROJECT NO.	210032
CLIENT	COBAR SHIRE COUNCIL	CLIENT	COBAR SHIRE COUNCIL	CLIENT	COBAR SHIRE COUNCIL	CLIENT	COBAR SHIRE COUNCIL



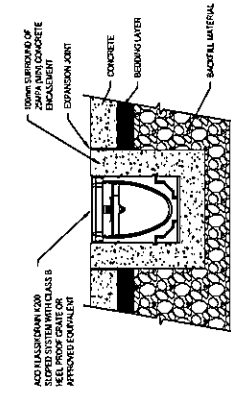
PROVIDE CLEAR OUTS INSTALLED IN ACCORDANCE WITH A.S. 3500 AT LOCATIONS WHERE NOTED ON PLAN
TYPICAL DRAINAGE CLEAR OUT (INSPECTION OPENING)
N.T.S.



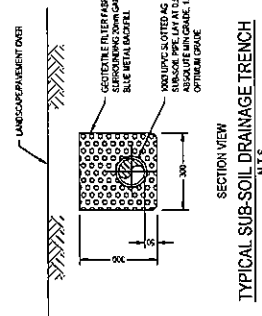
SECTION VIEW
TRENCH GRATE (100mm WIDE) CLASS B
N.T.S.



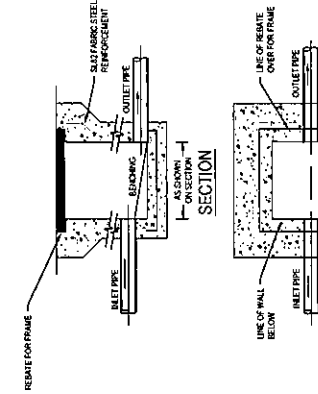
SECTION VIEW
TRENCH GRATE (200mm WIDE) CLASS D
N.T.S.



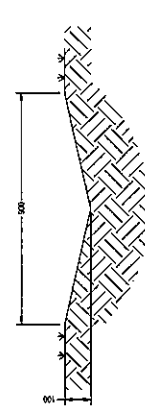
SECTION VIEW
TRENCH GRATE (200mm WIDE) CLASS B
N.T.S.



SECTION VIEW
TYPICAL SUB-SOIL DRAINAGE TRENCH
N.T.S.



SECTION VIEW
TYPICAL GRATED INLET PIT
N.T.S.



SECTION VIEW
GRASSED DRAINAGE SWALE WITH SUBSOIL
N.T.S.

REVISIONS / AMENDMENTS		REVISIONS / AMENDMENTS	
No.	Date	Description	By
1	20/01/21	PRELIMINARY ISSUE	M.B.
2	28/02/21	PRELIMINARY ISSUE	M.B.
3	04/03/21	PRELIMINARY ISSUE	M.B.
4	24/03/21	PRELIMINARY ISSUE	M.B.
5	18/04/21	PRELIMINARY ISSUE	M.B.



CLIENT
COBAR SHIRE COUNCIL

ARCHITECT
DUNN & HILLAM ARCHITECTS

CONSULTANT
JHA

PROJECT
COBAR CHILD CARE CENTRE

THE CIVIL SERVICES
STORMWATER DETAILS

PRELIMINARY ISSUE

SCALE 1:100

CHECKED
M.B.

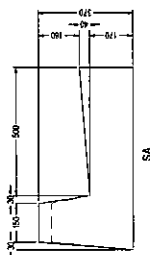
DESIGNED
M.B.

DATE
20/01/21

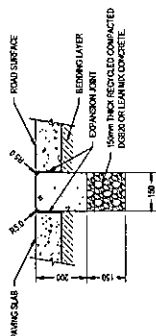
JOB NO.
210032

DRAWING No.
C300

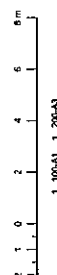
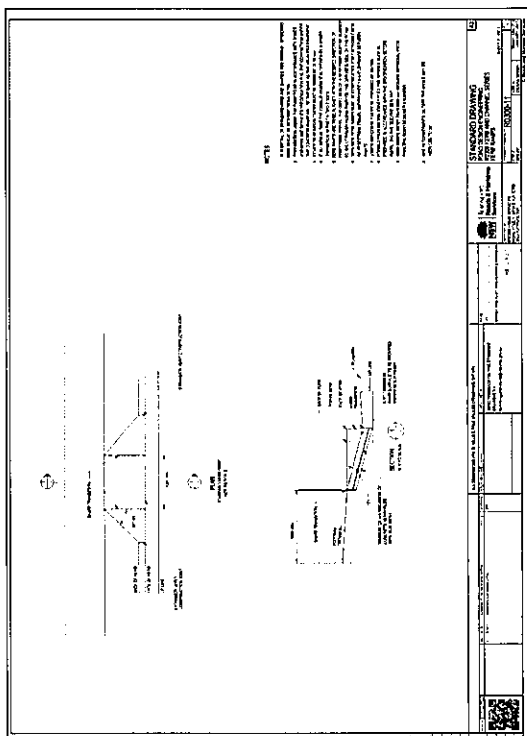
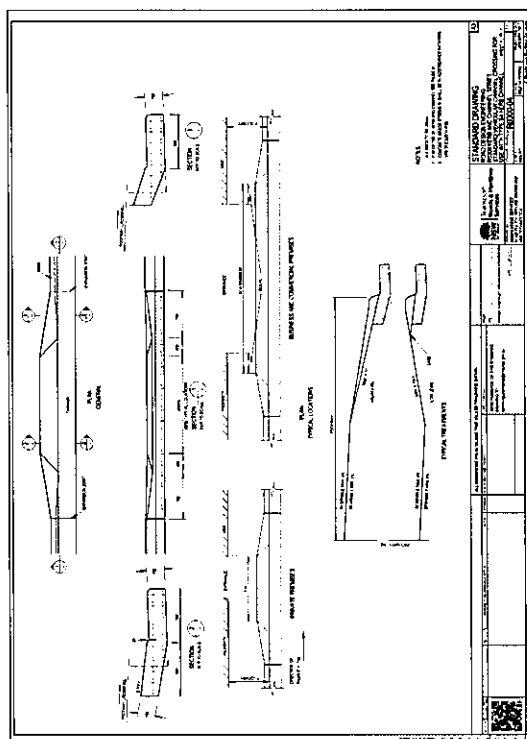
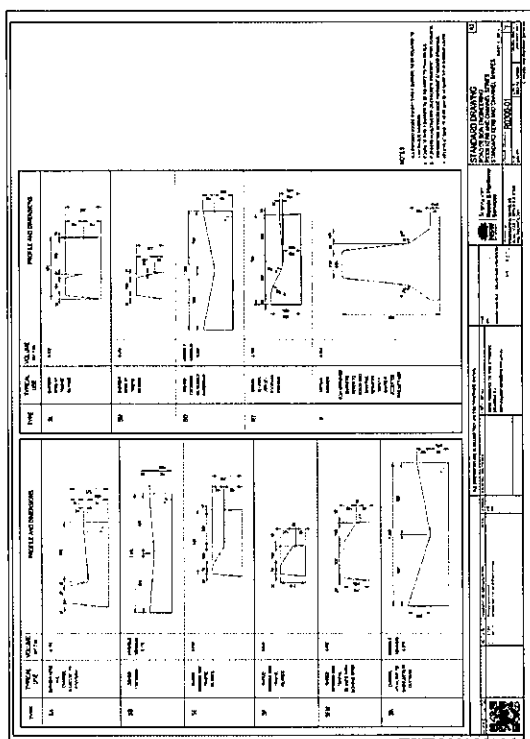
REV
P5



ADJUSTED TYPE 'SA' KERB (200mm HIGH KERB)



SUBMERGED KERB (EDGE STRIP) DETAIL
N.T.S



REVISIONS / AMENDMENTS				REVISIONS / AMENDMENTS			
No.	Date	Description	Verified	No.	Date	Description	Verified
#1	23-07-23	PET/Security CTS/ESE	M.B.				
#2	28-07-23	PET/Security CTS/ESE	M.B.				
#3	06-08-23	PET/Security CTS/ESE	M.B.				
#4	14-08-23	PET/Security CTS/ESE	M.B.				

ARCHITECT
DUNN & HILLAM ARCHITECTS

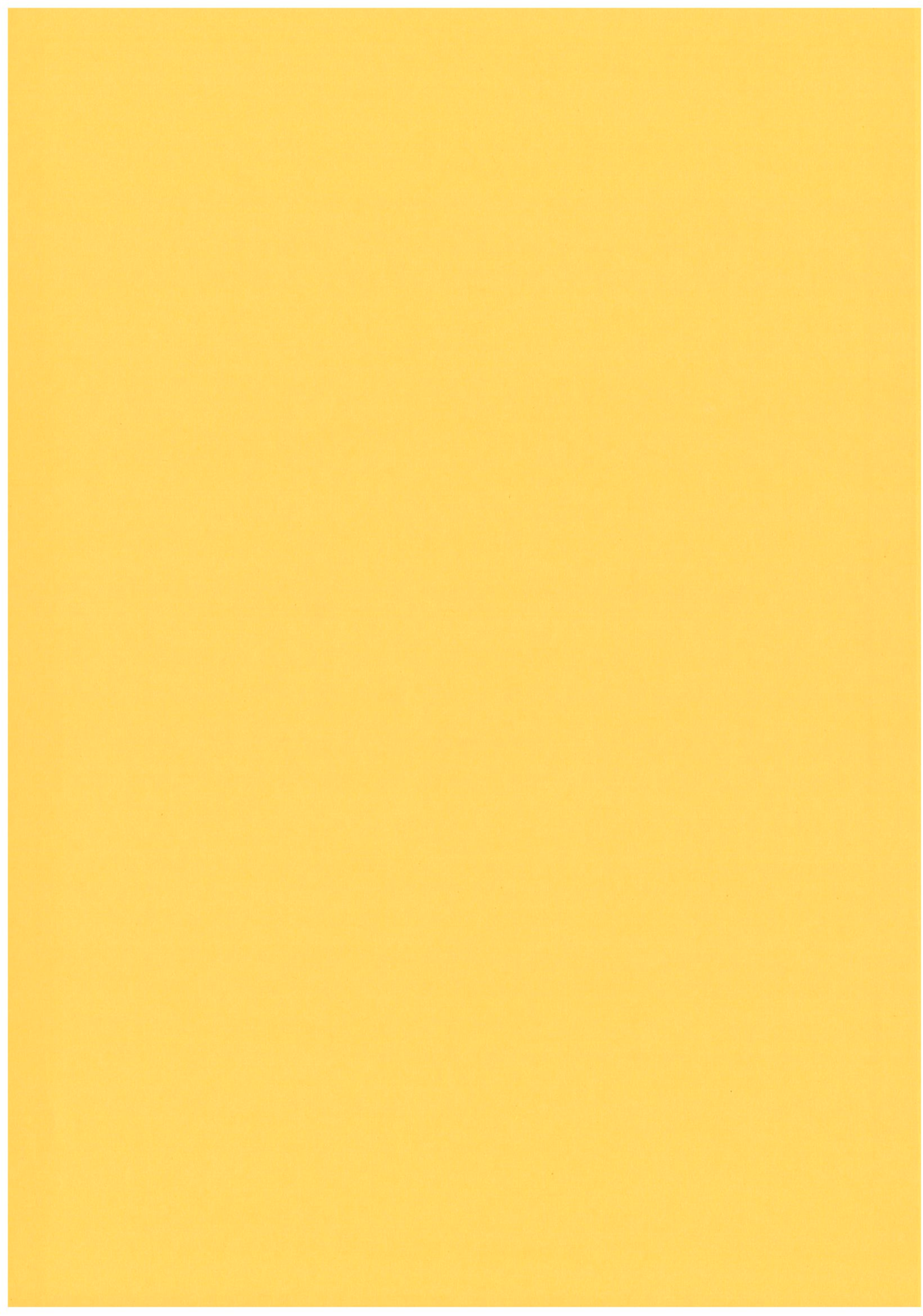
JHA

1000 J. Edgar Hoover Dr.
New Library
Stam 200
Arling Hs
47 12 600 800
jha@jha.org

PROJECT
COBAR CHILDCARE
CENTRE

CIVIL SERVICES
PUBLIC DOMAIN DETAILS

PRELIMINARY ISSUE NOT TO BE USED FOR CONSTRUCTION	DRAWING CHECKED APPROVED CIRCULATED JOB NO.	JAL M.B. P.A. 2023 DRAWING No.	SCALE @ A1 N.T.S. REV	210032 C301 P4
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107



Somewhere.

LANDSCAPE ARCHITECTS, DESIGNERS AND DREAMERS

CUSTOMER	Cobar Shire Council	SCALE	1:100 at A1
DATE	14.07.21	REVISION	B
PROJECT	J581	STATUS	Draft for comment

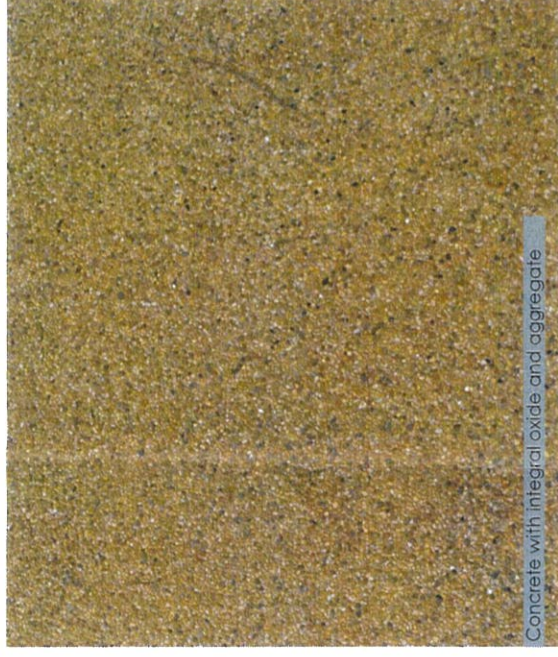




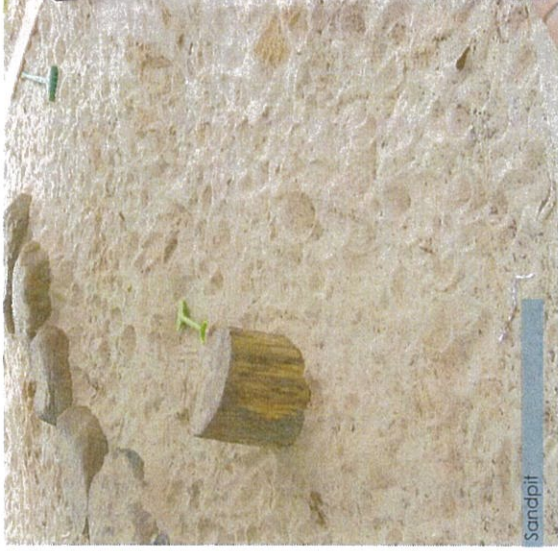
Synthetic turf - Cool Play Burnt Orange



Recycled red bricks



Concrete with integral oxide and aggregate



Sandpit



Timber platform



Decomposed granite



Natural softfall

Cobar Childcare Centre
Ward Oval, Cobar
Wangaaypuwan Country

somewhere.
LANDSCAPE ARCHITECTS, DESIGNERS AND DREAMERS

CLIENT Cobar Shire Council
DATE 14.07.21
PROJECT J581
SCALE NA
REVISION B
STATUS FOR COMMENT



Balance objects



Oversized rocks



Timber stumps



Talking tubes



Peep holes through fence



Rock lined swale



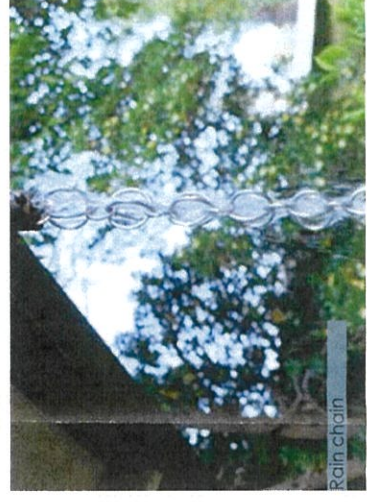
Blige pump



Rain chain



Vegetable garden



Rain chain

Cobar Childcare Centre
Ward Oval, Cobar
Wangaaypuwan Country

somewhere.
LANDSCAPE ARCHITECTS, DESIGNERS AND DREAMERS

CLIENT Cobar Shire Council
DATE 14.07.21
PROJECT J581
SCALE NA
REVISION B
STATUS FOR COMMENT