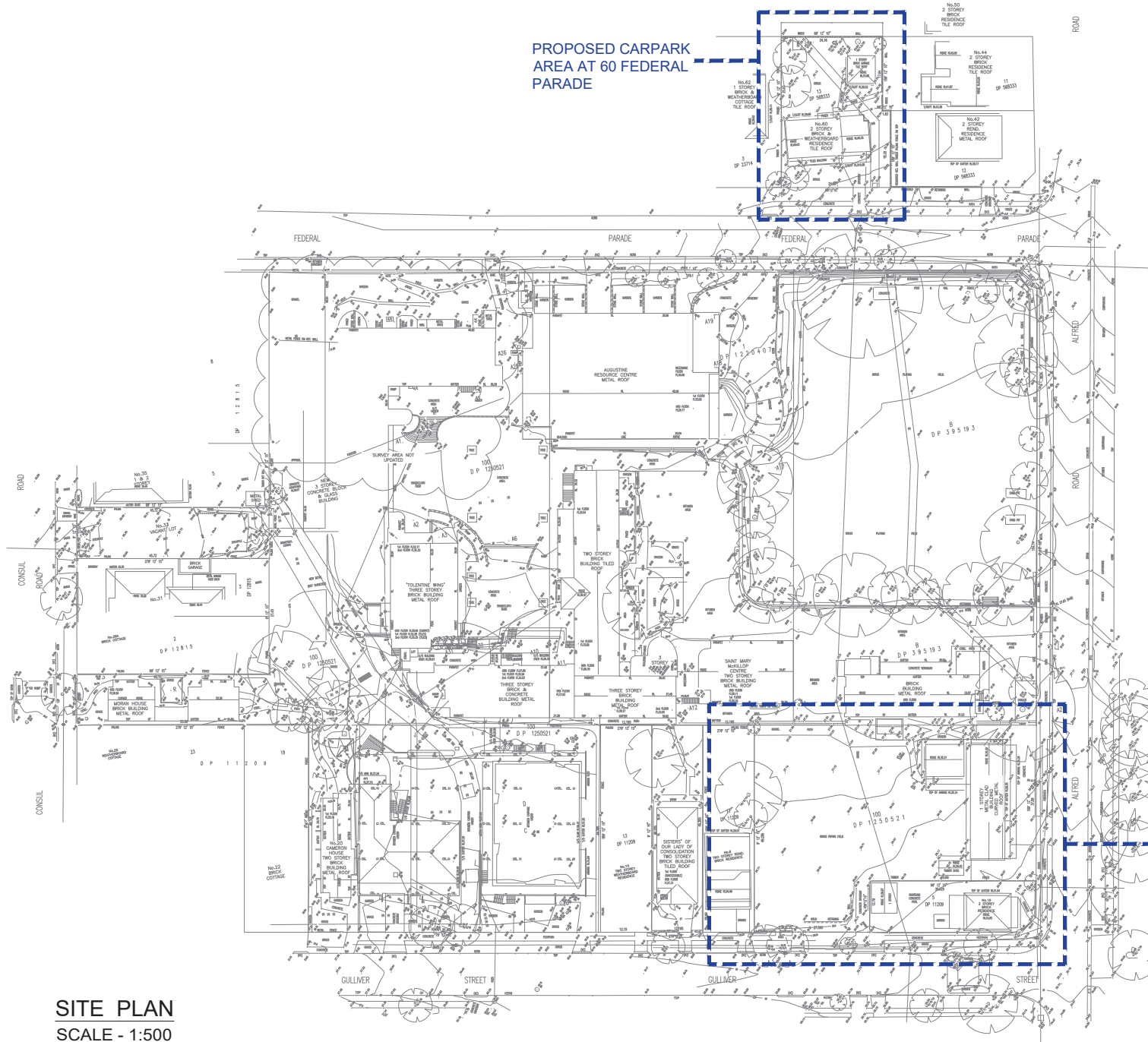


PROPOSED CARPARK
AREA AT 60 FEDERAL
PARADE



PROPOSED CARPARK
AREA AT JUNCTION OF
ALFRED ROAD & GULLIVER
STREET

SITE PLAN
SCALE - 1:500

ISSUE FOR DA

ISSUE	DATE	AMENDMENT
00	08.10.2021	ISSUE FOR DISCUSSION
01	15.10.2021	ISSUE FOR DISCUSSION
02	29.10.2021	ISSUE FOR DA
03	29.11.2021	ISSUE FOR DA
04	06.12.2021	ISSUE FOR DA

CLIENT / BUILDER / ARCHITECT



CIVIL

5 / 45-55 Epsom Road
Rosebery NSW 2018
P 02 8862 9300
E info@core-engineering
W core-engineering
ABN 34 620 484 802

ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

NORTH:

SCALE:

SCALE 1:500

© Copyright
This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a workshop drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by any anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

VERIFIED:	AC	DRAWING TITLE:	SITE PLAN
DESIGNED:	HR	PROJECT:	PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW
DRAWN:	RQ		

DATE:	06/12/2021	SCALE:	1:500
PROJECT No:	CPC 2760	REVISION:	04
DRAWING No:	C002		



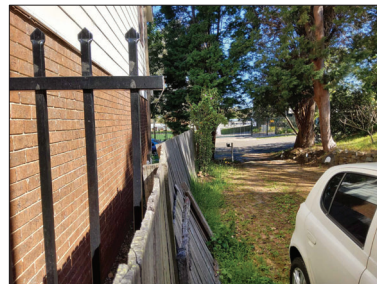
NORTHERN BOUNDARY NEAR COUNCIL DRAINAGE ASSET. MASONRY WALL TO BE RETAINED AND REPAIRED



EXISTING CONDITION OF COUNCIL DRAINAGE ASSET TO BE RETAINED



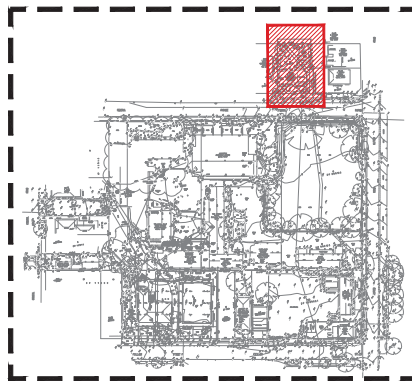
EXISTING BRICK MASONRY ALONG EASTERN BOUNDARY TO BE RETAINED AND REPAIRED FOR REUSE



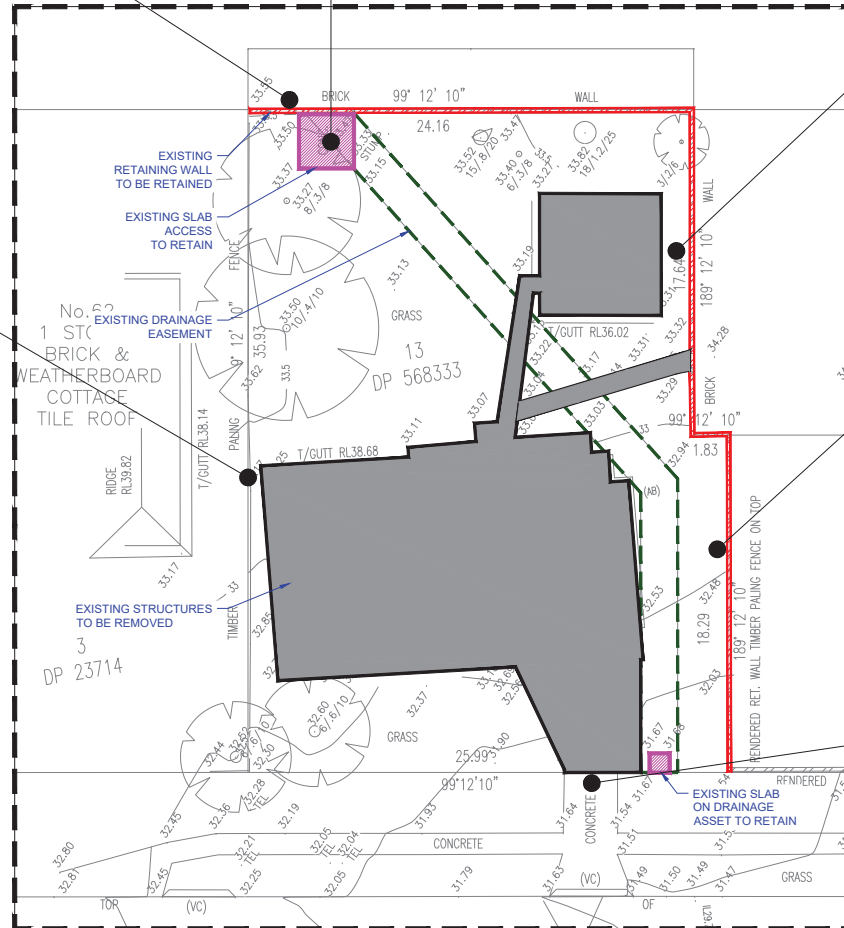
REPLACE EXISTING FENCE, WITH 1.8M HIGH ACOUSTIC BARRIER



EXISTING BRICK MASONRY ALONG EASTERN BOUNDARY TO BE RETAINED AND REPAIRED FOR REUSE



KEY PLAN
SCALE - 1:2000



DEMOLITION & SITE MANAGEMENT PLAN
SCALE - 1:150



EXISTING DRIVEWAY AND EXISTING BUILDING, TO BE DEMOLISHED FOR PROPOSED DRIVEWAY AND HARDSTAND AREA

ISSUE FOR DA

ISSUE	DATE	AMENDMENT
00	08.10.2021	ISSUE FOR DISCUSSION
01	15.10.2021	ISSUE FOR DISCUSSION
02	29.10.2021	ISSUE FOR DA
03	29.11.2021	ISSUE FOR DA
04	06.12.2021	ISSUE FOR DA

CLIENT / BUILDER / ARCHITECT



CIVIL

5 / 45-55 Epsom Road
Rosebery NSW 2018
P 02 8862 9300
E info@core-engineering
W core-engineering
ABN 34 620 484 802

ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

NORTH:

SCALE:

SCALE 1:150

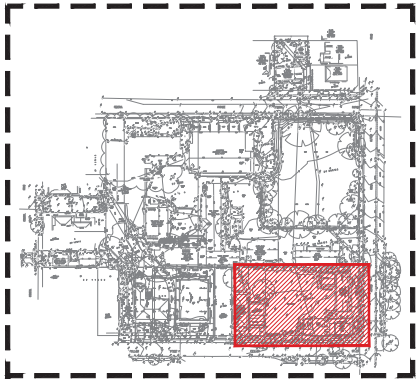
© Copyright
This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a working drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by any anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

VERIFIED: AC
DESIGNED: HR
DRAWN: RQ

DRAWING TITLE:
DEMOLITION & SITE MANAGEMENT PLAN-60 FEDERAL PARADE

PROJECT:
PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW

DATE:	SCALE:
06/12/2021	1:150
PROJECT No:	REVISION:
CPC 2760	04
DRAWING No:	C100



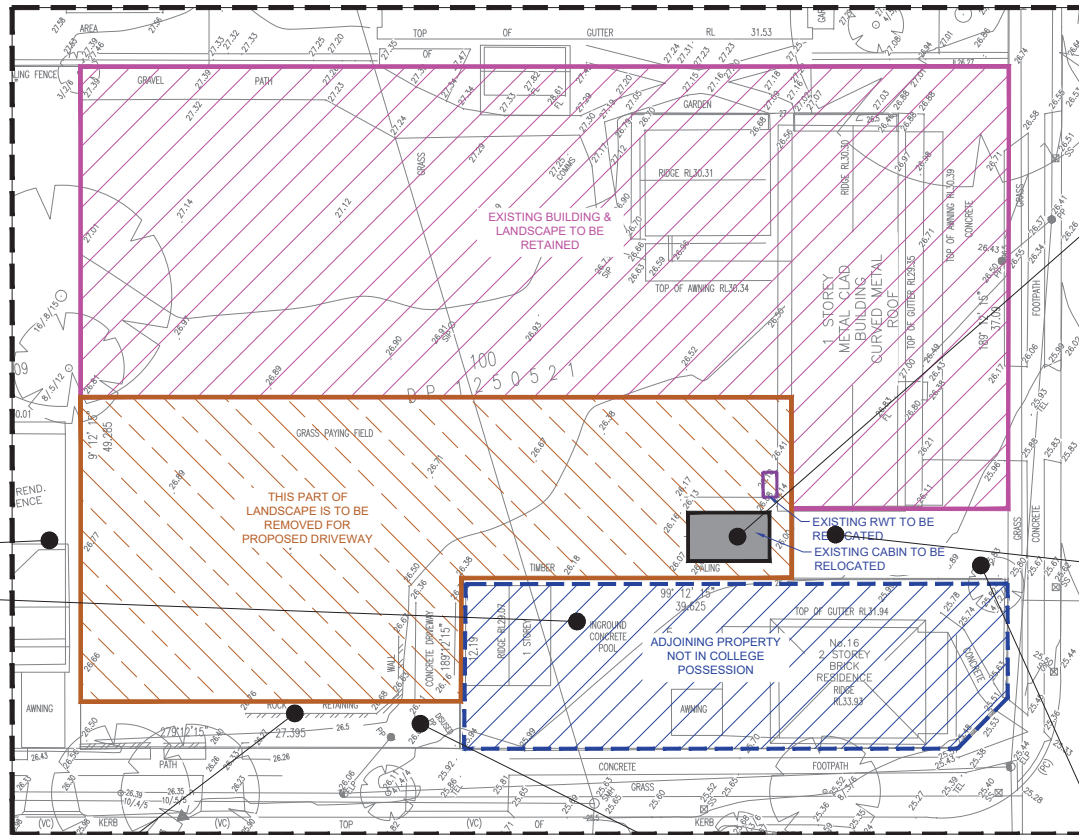
KEY PLAN
SCALE - 1:2000



EXISTING FENCE ON WESTERN SIDE



EXISTING ROCK RETAINING WALL ALONG SOUTHERN BOUNDARY TO BE REMOVED. FENCE TO BE RETAINED



DEMOLITION & SITE MANAGEMENT PLAN
SCALE - 1:200



EXISTING HARDSTAND ALONG NEIGHBOURING PROPERTY TO BE DEMOLISHED AND GATE TO BE RELOCATED TO THE NEW EGRESS



EXISTING STRUCTURE TO BE RELOCATED



VIEW OF THE PASSAGE AND FENCE ALONG THE EASTERN BOUNDARY FROM INSIDE



EXISTING SITE PASSAGE TO THE SOUTH OF COLLEGE BUILDING. LANDSCAPE TO BE REMOVED AND REPLANTED AS PER LANDSCAPE PLAN

ISSUE FOR DA

ISSUE	DATE	AMENDMENT
00	08.10.2021	ISSUE FOR DISCUSSION
01	15.10.2021	ISSUE FOR DISCUSSION
02	29.10.2021	ISSUE FOR DA
03	29.11.2021	ISSUE FOR DA
04	06.12.2021	ISSUE FOR DA

CLIENT / BUILDER / ARCHITECT



CIVIL

5 / 45-55 Epsom Road
Rosebery NSW 2018
P 02 8862 9300
E info@core.engineering
W core.engineering
ABN 34 620 484 802

ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

NORTH:

SCALE:

SCALE 1:200

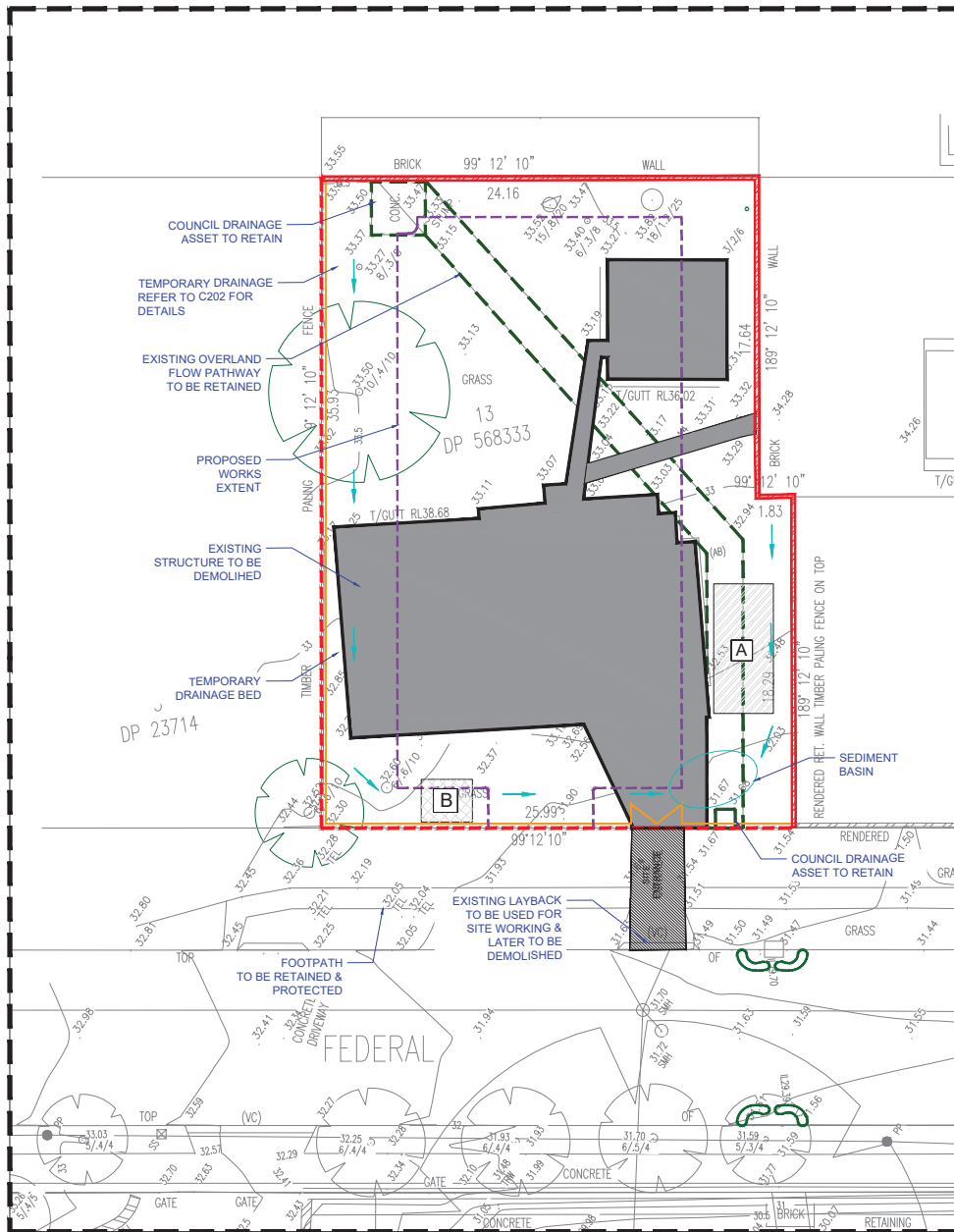
© Copyright
This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a working drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by any anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

VERIFIED: AC
DESIGNED: HR
DRAWN: RQ














DRAWING TITLE:
DEMOLITION & SITE MANAGEMENT PLAN ALFRED ROAD

PROJECT:
PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW

DATE:	SCALE:
06/12/2021	1:200
PROJECT No:	REVISION:
CPC 2760	04
DRAWING No:	C101



LEGEND

-  SITE ENTRANCE
-  SEDIMENT FENCE
-  BARRIER FENCE
-  PROPOSED DEVELOPMENT
-  EXISTING STRUCTURES TO BE DEMOLISHED
-  MATERIAL STORAGE
-  TOILET FACILITY
-  SANDBAGS
-  TREE TO BE RETAINED
-  TREE TO BE REMOVED
-  TEMPORARY DRAINAGE
-  ASSET TO RETAIN
-  EXISTING WALL TO BE RETAINED

SEDIMENTATION & EROSION CONTROL PLAN
SCALE - 1:150

ISSUE FOR DA

ISSUE	DATE	AMENDMENT
00	08.10.2021	ISSUE FOR DISCUSSION
01	15.10.2021	ISSUE FOR DISCUSSION
02	29.10.2021	ISSUE FOR DA
03	29.11.2021	ISSUE FOR DA
04	06.12.2021	ISSUE FOR DA

CLIENT / BUILDER / ARCHITECT





CIVIL



5 / 45-55 Epsom Road
Rosebery NSW 2018
P 02 8862 9300
E info@core-engineering.com.au
W core-engineering.com.au
ABN 34 620 484 802

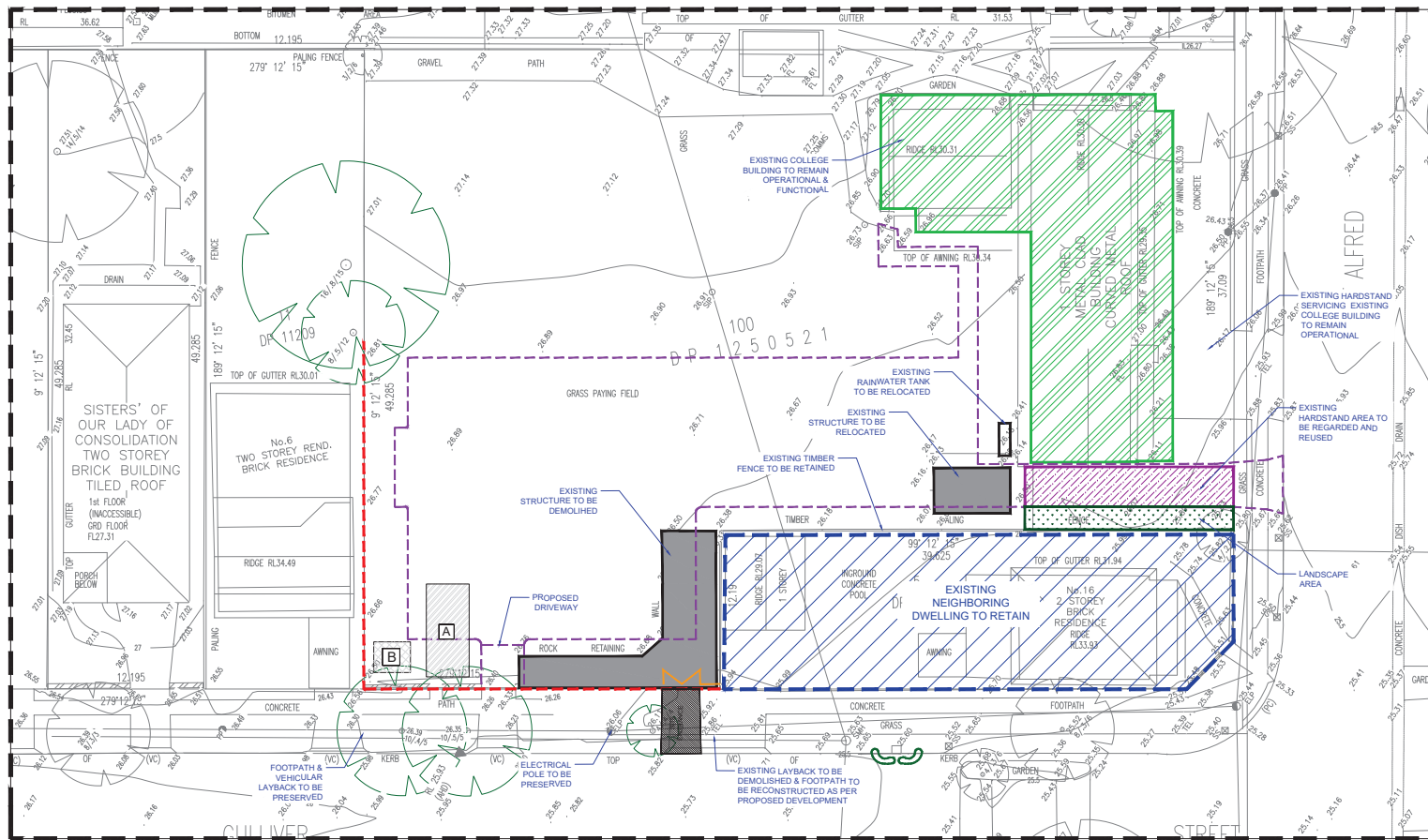
ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

NORTH: 

SCALE: 
SCALE 1:150

© Copyright
This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a workshop drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by any anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

VERIFIED:	DRAWING TITLE:	DATE:	SCALE:
AC	SEC PLAN & DETAILS 60 FEDERAL PARADE	06/12/2021	1:150
DESIGNED:	PROJECT: PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW	PROJECT No:	REVISION:
HR		CPC 2760	04
DRAWN:		DRAWING No:	C200
RQ			



LEGEND

-  SITE ENTRANCE
-  SEDIMENT FENCE
-  BARRIER FENCE
-  PROPOSED DEVELOPMENT
-  EXISTING STRUCTURES TO BE DEMOLISHED
-  MATERIAL STORAGE
-  TOILET FACILITY
-  SANDBAGS
-  TREE TO BE RETAINED
-  TREE TO BE REMOVED

SEDIMENTATION & EROSION CONTROL PLAN
SCALE - 1:200

ISSUE FOR DA

ISSUE	DATE	AMENDMENT
00	08.10.2021	ISSUE FOR DISCUSSION
01	15.10.2021	ISSUE FOR DISCUSSION
02	29.10.2021	ISSUE FOR DA
03	29.11.2021	ISSUE FOR DA
04	06.12.2021	ISSUE FOR DA

CLIENT / BUILDER / ARCHITECT





CIVIL



5 / 45-55 Epsom Road
Rosebery NSW 2018
P 02 8862 9300
E info@core-engineering.com.au
W core-engineering.com.au
ABN 34 620 484 802

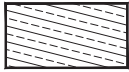
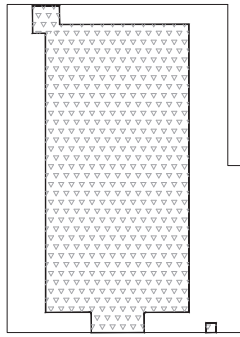
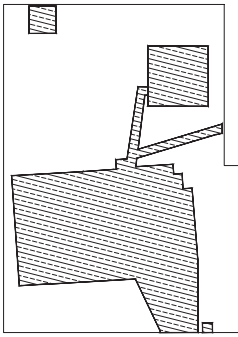
ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

NORTH: 

SCALE: 
SCALE 1:200

© Copyright
This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a workshop drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by an anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

VERIFIED:	DRAWING TITLE:	DATE:	SCALE:
AC	SEC PLAN & DETAILS ALFRED ROAD	06/12/2021	1:200
DESIGNED:	PROJECT: PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW	PROJECT No:	REVISION:
HR		CPC 2760	04
DRAWN:		DRAWING No: C201	
RQ			



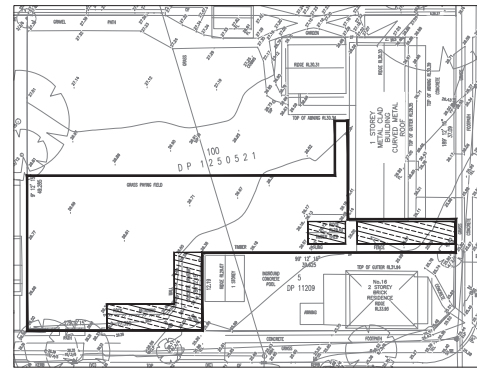
PRE DEVELOPMENT PAVED AREA



POST DEVELOPMENT PAVED AREA

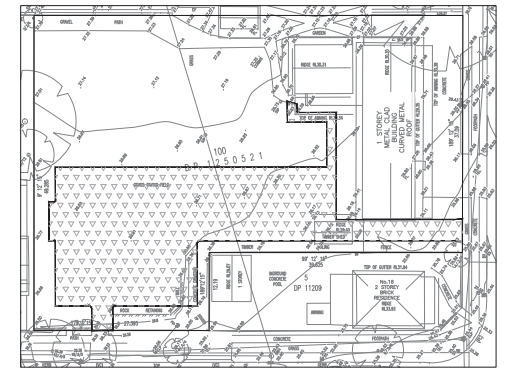
SITE AREA	901.53 m ² (AS PER CAD)
IMPERVIOUS AREA	342.52 m ² (37.99%)
PERVIOUS AREA	559.01 m ² (62.01%)

SITE AREA	901.53 m ² (AS PER CAD)
IMPERVIOUS AREA	515.18m ² (57.14%)
PERVIOUS AREA	386.35 m ² (42.86%)



PRE DEVELOPMENT PAVED AREA

SITE AREA	926.69 m ² (AS PER CAD)
IMPERVIOUS AREA	171.04 m ² (18.45%)
PERVIOUS AREA	755.65 m ² (81.55%)



POST DEVELOPMENT PAVED AREA

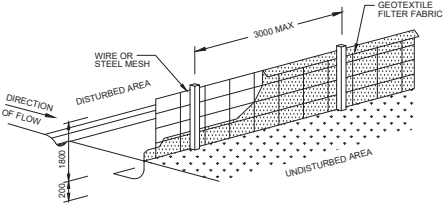
SITE AREA	926.96 m ² (AS PER CAD)
IMPERVIOUS AREA	841.02m ² (90.73%)
PERVIOUS AREA	85.94 m ² (09.27%)

CATCHMENTS ANALYSIS

AS PER CATCHMENT ANALYSIS OF PRE AND POST DEVELOPMENT IT IS EVALUATED THAT THERE IS 19.15% INCREASE IN THE IMPERVIOUS AREA. THE SITE HAS AN EXISTING DWELLING WITH AN OUTBUILDING WHICH WILL BE DEMOLISHED. DUE TO THIS INCREASE IN IMPERVIOUS AREA STORMWATER MANAGEMENT IS PROPOSED IN ACCORDANCE WITH COUNCIL DCP.

CATCHMENTS ANALYSIS

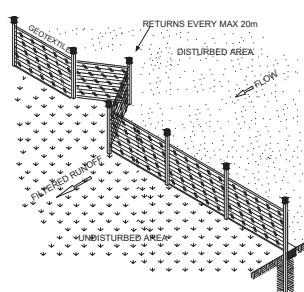
AS PER CATCHMENT ANALYSIS OF PRE AND POST DEVELOPMENT IT IS EVALUATED THAT THERE IS 72.28% INCREASE IN THE IMPERVIOUS AREA. BEFORE DEVELOPMENT THE MAJORITY OF THE AREA WAS A PART OF LANDSCAPE AREA. DUE TO THIS INCREASE IN IMPERVIOUS AREA STORMWATER MANAGEMENT IS PROPOSED IN ACCORDANCE WITH COUNCIL DCP.



SEDIMENT FENCE

- TO BE USED AS A TEMPORARY BARRIER TO INTERCEPT SEDIMENT LAIDEN RUN OFF FROM SMALL DRAINAGE AREAS
- MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO A SILT FENCE SHALL NOT EXCEED 0.6ha PER LINE OF FENCE
- DO NOT USE IF CONCENTRATED FLOW IS DIRECTED TO SILT FENCE
- MAXIMUM ALLOWABLE DISTANCE BETWEEN SILT FENCE FOR VARIOUS GRADES LISTED BELOW:

SLOPE V:H	MAX SLOPE LENGTH (m)
1:2	15
1:3	25
1:4	40
1:5	50
FLATTER THAN 1:5	60



SEDIMENT FENCE ISOMETRIC

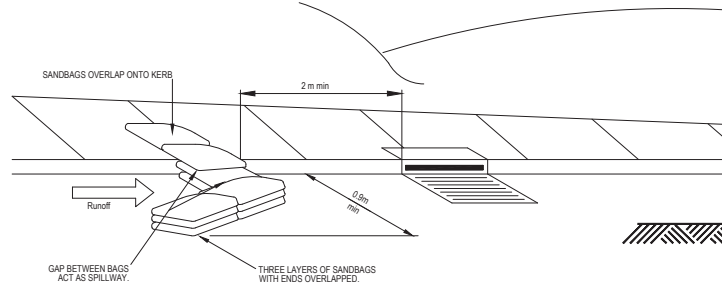
NOT TO SCALE

SEDIMENT CONTROL DEVICES

- IF SILT FENCE IS NOT USED HAY BALES CAN BE USED FOR SURFACE INLET PIT PROTECTION
- ALL HAY BALES SHALL BE BOUND WITH WIRE. HAY BALES SHALL BE PLACED END TO END IN A SINGLE ROW AND EMBEDDED INTO THE SOIL TO A DEPTH OF 100mm. EACH BALES SHALL BE SECURELY ANCHORED WITH TWO STEEL STAKES DRIVEN 600mm INTO THE GROUND AND LOCATED ON THE BALE CENTERLINE.
- FILTER FENCE SHALL BE CONSTRUCTED BY STRETCHING A FILTER FABRIC (PROPEX OR SIMILAR) BETWEEN POSTS AT 3m CENTERS MAXIMUM. FABRIC SHALL BE BURIED INTO THE GROUND 200mm ALONG ITS LOWER EDGE.

TEMPORARY SITE CONTROL FOR ENTRY / EXIT AREAS

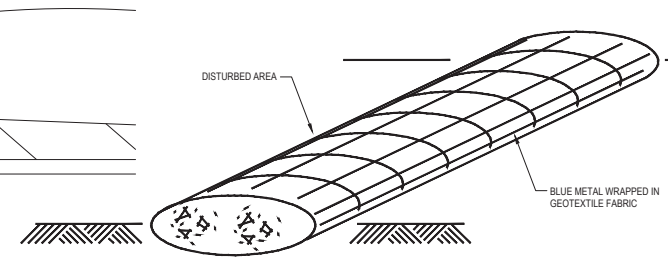
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC ROADS.
- PERIODIC TOP DRESSING WITH ADDITIONAL AGGREGATE MAY BE REQUIRED TO KEEP THE SITE CONTROL IN A USEABLE STATE.
- ALL SEDIMENT SPILLED, DROPPED OR WASHED ONTO PUBLIC ROADS MUST BE REMOVED IMMEDIATELY AND CHECKED DAILY.
- REMOVAL AND CLEANING OF PUBLIC ROADS BY BROOMS AND SHOVELS ETC. WASHING DOWN ROADS IS NOT PERMITTED.



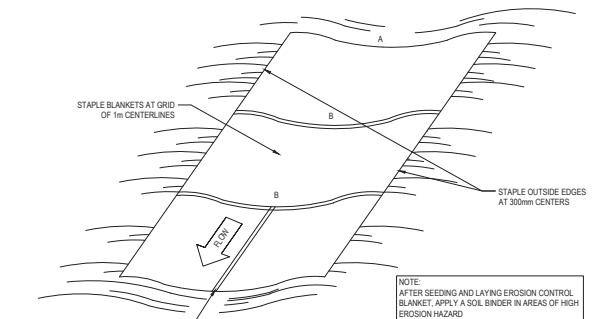
SANDBAG KERB INLET SEDIMENT TRAP

EARTH WET BASIN (EARTH BANK)

- REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
- CONSTRUCT A CUT-OFF TRENCH 500mm DEEP AND 1200mm WIDE ALONG THE CENTERLINE OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER GREST.
- MAINTAIN THE TRENCH FREE WATER AND RE-COMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE SWMP TO 95% STANDARD PROCTOR DENSITY.
- SELECT FILL FOLLOWING THE SWMP THAT IS FREE ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
- PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100mm TO HELP BOND COMPACTED FILL TO EXISTING SUBSTRATE.
- SPREAD THE FILL IN 100mm TO 150mm LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP.
- CONSTRUCT THE EMERGENCY SPILLWAY.
- REHABILITATE THE STRUCTURE FOLLOWING THE SWMP.



SEDIMENT BARRIE



TEMPORARY DRAINAGE BED

ISSUE FOR DA

EROSION CONTROL MEASURES.

- ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING RE-VEGETATION AND STORAGE OF SOIL AND TOP SOIL, SHALL BE IMPLEMENTED TO THE DEPARTMENT OF CONSERVATION OF NEW SOUTH WALES STANDARDS.
- TOPSOIL FROM ALL AREAS TO BE DISTURBED, SHALL BE STOCK PILED AND LATER RESPREAD TO AID VEGETATION AS SHOWN IN C102
- ALL DRAINAGE WORKS SHALL BE CONSTRUCTED AND STABILIZED AS EARLY AS POSSIBLE DURING DEVELOPMENT.
- SEDIMENT TRAPS SHALL BE CONSTRUCTED AROUND ALL PITS.
- DISTURBANCE TO VEGETATION SHALL BE LIMITED TO FILL AREAS, ROADWAYS AND DRAINAGE LINES. AREAS OTHER THAN SPECIFIED SHALL BE DISTURBED ONLY WITH PRIOR APPROVAL FROM THE COUNCIL ENGINEER.
- ALL DISTURBED AREAS SHALL BE REVEGETATED AS SOON AS THE RELEVANT WORKS ARE COMPLETED.
- ALL SEDIMENT BASINS AND TRAPS SHALL BE CLEANED WHEN THE STRUCTURES ARE A MAXIMUM OF 60% FULL OF SOLID MATERIALS, INCLUDING DURING MAINTENANCE PERIOD.
- A STRIP OF TURF BEHIND AND FOR TOTAL LENGTH OF ALL THE KERBS SHALL BE PROVIDED.
- PIT GUARDS SHALL BE INSTALLED AROUND DRAINAGE PITS AT THE COMPLETION OF ROAD WORKS.

ISSUE	DATE	AMENDMENT	CLIENT / BUILDER / ARCHITECT
00	08.10.2021	ISSUE FOR DISCUSSION	
01	15.10.2021	ISSUE FOR DISCUSSION	
02	29.10.2021	ISSUE FOR DA	
03	29.11.2021	ISSUE FOR DA	
04	06.12.2021	ISSUE FOR DA	



CIVIL

5 / 45-55 Epsom Road
Rosebery NSW 2018

P 02 8862 9300
E info@core-engineering.com.au
W core-engineering.com.au

ABN 34 620 484 802

CORE PROJECT CONSULTING

ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

NORTH:

SCALE: **NTS**

© Copyright
This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a workshop drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by any anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

VERIFIED: **AC**

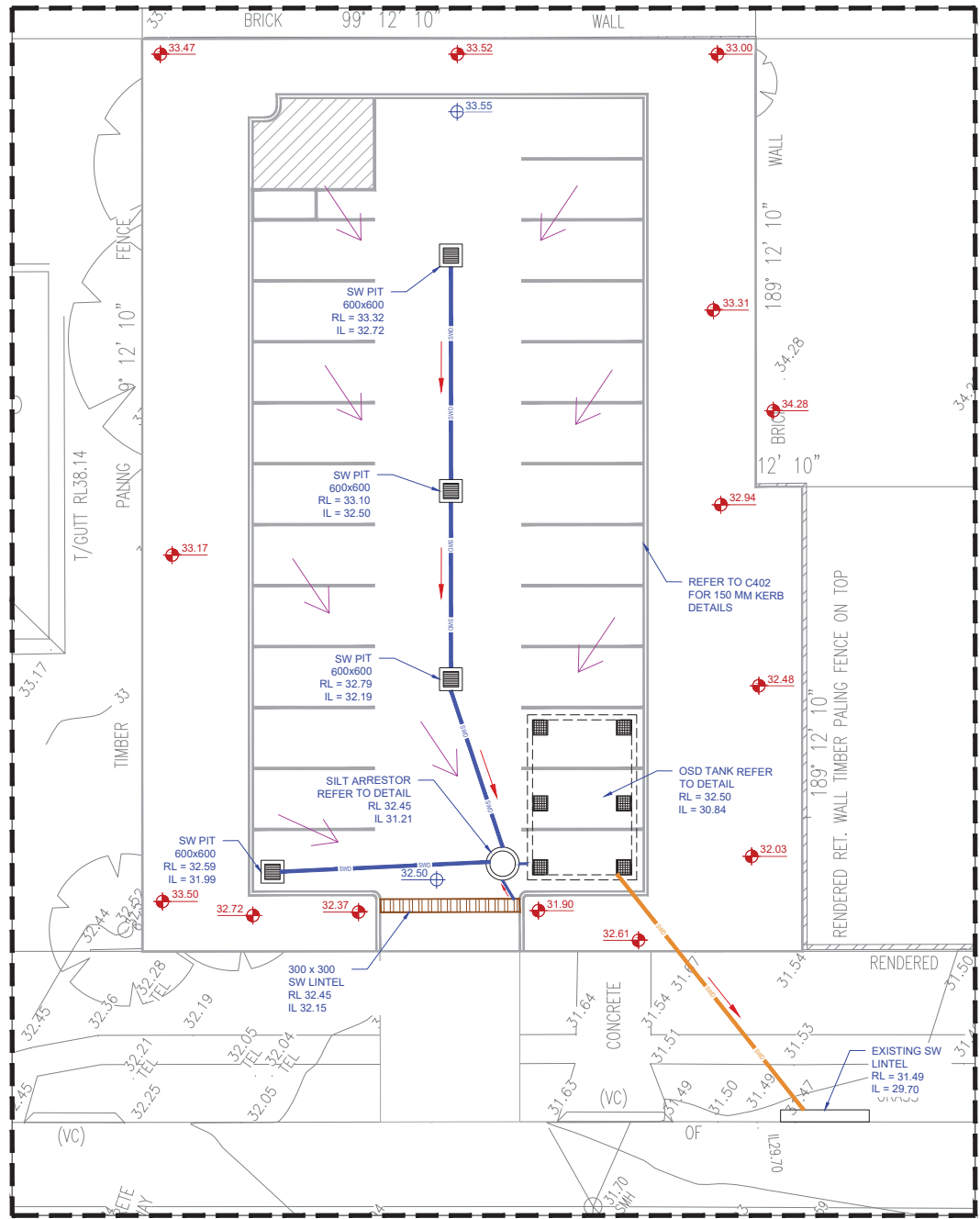
DESIGNED: **HR**

DRAWN: **RQ**



DRAWING TITLE: **AREA ANALYSIS & SEC DETAILS**

PROJECT: **PROPOSED CARPARK DESIGN
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW**

DATE: 06/12/2021	SCALE: NTS
PROJECT No: CPC 2760	REVISION: 04
DRAWING No: C202	

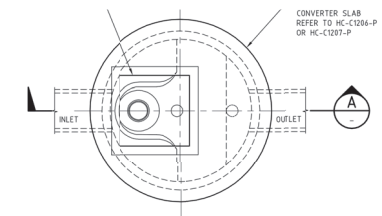


LEGENDS

- SWD STORM WATER DRAIN LINE (Ø150)
- SWD Ø 225 UPVC PIPE
- FLOW DIRECTION
-  SILT ARRESTOR
-  SW PITS
- 32.03 EXISTING LEVELS
- ⊕ 32.79 PROPOSED LEVELS
- OVERLAND FLOW



HUMECEPTOR STC 2 (INLET) MODEL
PROPOSED SILT ARRESTOR



PLAN VIEW

NOTE:

REFER TO LANDSCAPE PLAN FOR ASSOCIATED PLANTATION AND RELATED INFORMATION

STORMWATER MANAGEMENT PLAN

SCALE - 1:100

ISSUE FOR DA

ISSUE	DATE	AMENDMENT
00	08.10.2021	ISSUE FOR DISCUSSION
01	15.10.2021	ISSUE FOR DISCUSSION
02	29.10.2021	ISSUE FOR DA
03	29.11.2021	ISSUE FOR DA
04	06.12.2021	ISSUE FOR DA

CLIENT / BUILDER / ARCHITECT





CIVIL



5 / 45-55 Epsom Road
Rosebery NSW 2018
P 02 8862 9300
E info@core-engineering.com.au
W core-engineering.com.au
ABN 34 620 484 802

ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

NORTH: 

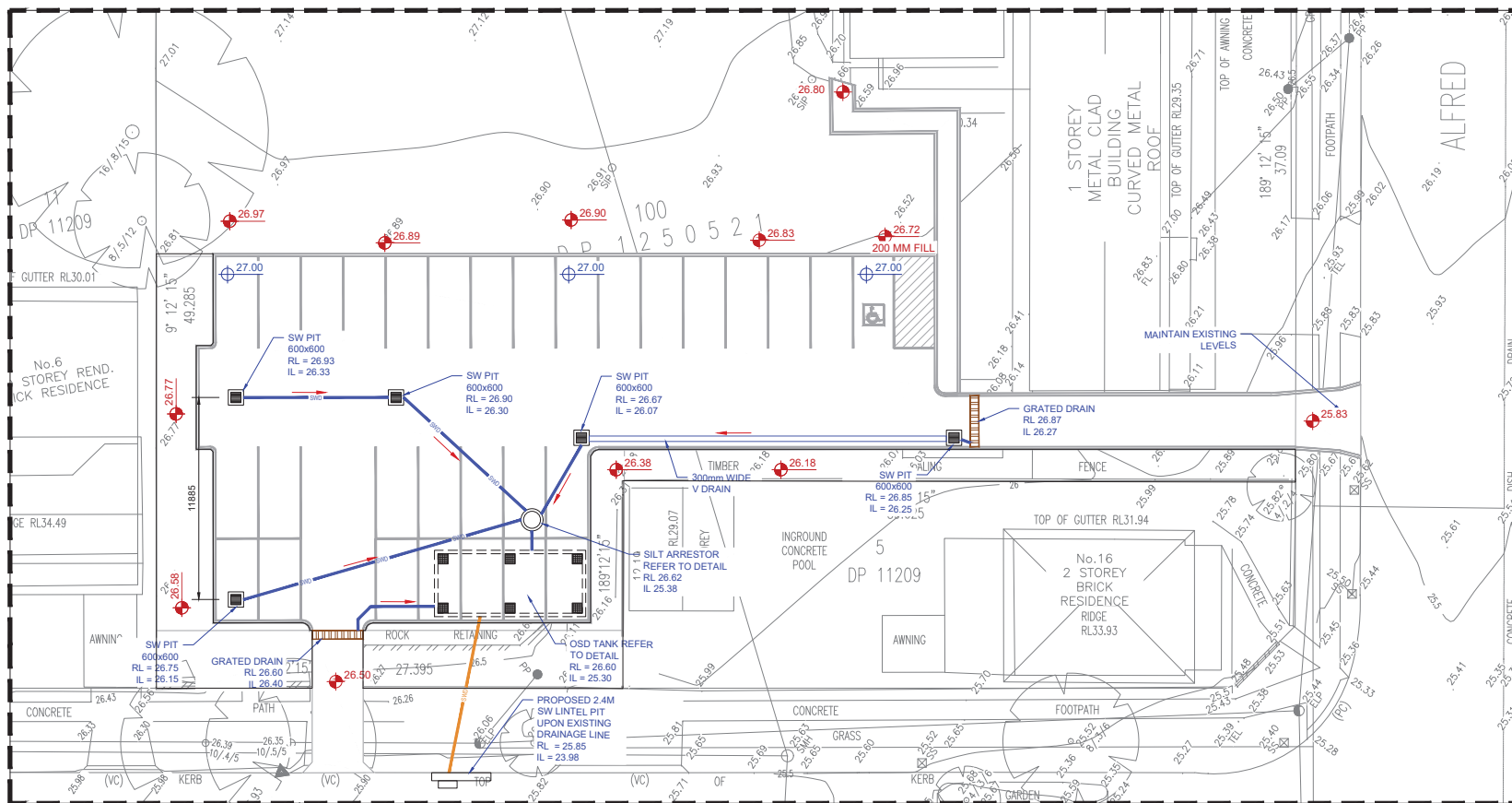
SCALE: 

0 1000 2000 3000 4000 5000
SCALE 1:100

© Copyright
This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a workshop drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by any anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

VERIFIED: AC	DRAWING TITLE: STORMWATER MANAGEMENT PLAN 60 FEDERAL PARADE	DATE: 06/12/2021	SCALE: 1:100
DESIGNED: HR	PROJECT: PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW	PROJECT No: CPC 2760	REVISION: 04
DRAWN: RQ		DRAWING No: C300	

DATE: 06/12/2021	SCALE: 1:100
PROJECT No: CPC 2760	REVISION: 04
DRAWING No: C300	

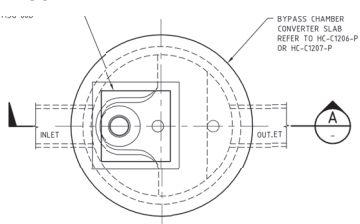


STORMWATER MANAGEMENT PLAN
SCALE - 1:150



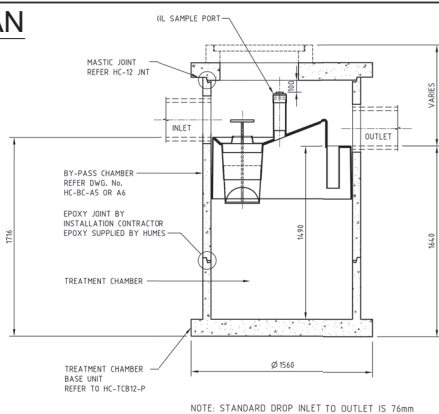
HUMECEPTOR STC 2 (INLET) MODEL
PROPOSED SILT ARRESTOR

NOTE:
CONCEPT PROVIDED FOR ILLUSTRATION
DETAIL DECOMENTATION.



PLAN VIEW

NOTE:
THE PRODUCT SPECIFICATIONS ARE AS PER MANUFACTURER / PROVIDER INFORMATION



SECTION A-A
SCALE 1:20

LEGENDS

- SWD STORM WATER DRAIN LINE (Ø150)
- SWD Ø 225 UPVC PIPE
- FLOW DIRECTION
- SILT ARRESTOR
- SW PITS
- 32.03 LAWN / LANDSCAPE
- 32.79 PROPOSED LEVELS

NOTE:

- TO AVOID EXCESSIVE CUT & FILL EXISTING LANDSCAPE LEVEL ARE NOT DISTURBED AND PROPOSED TO BE REMAINED AS IT IS. REFER TO LANDSCAPE LEVELS TO BE CONFIRMED BY LANDSCAPE CONSULTANT.
- THE ENTRANCE ARE FROM ALFRED AREA NEEDS TO HAVE A RAISED RAMP OF 5% GRADE. LANDSCAPE LEVEL ALONG THE ENTRY RAMP CAN BE RAISED TO SUIT THE PROPOSED RAMP. FURTHER RETAINING WALL CAN ALSO BE PROPOSED IF DEPTH IS MORE THAT 250MM.

ISSUE FOR DA

ISSUE	DATE	AMENDMENT
00	08.10.2021	ISSUE FOR DISCUSSION
01	15.10.2021	ISSUE FOR DISCUSSION
02	29.10.2021	ISSUE FOR DA
03	29.11.2021	ISSUE FOR DA
04	06.12.2021	ISSUE FOR DA

CLIENT / BUILDER / ARCHITECT



CIVIL

CORE PROJECT CONSULTING

5 / 45-55 Epsom Road
Rosebery NSW 2018

P 02 8862 9300
E info@core.engineering
W core.engineering
ABN 34 620 484 802

ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

NORTH:

SCALE:

SCALE 1:150

© Copyright
This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a workshop drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by any anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

VERIFIED: AC

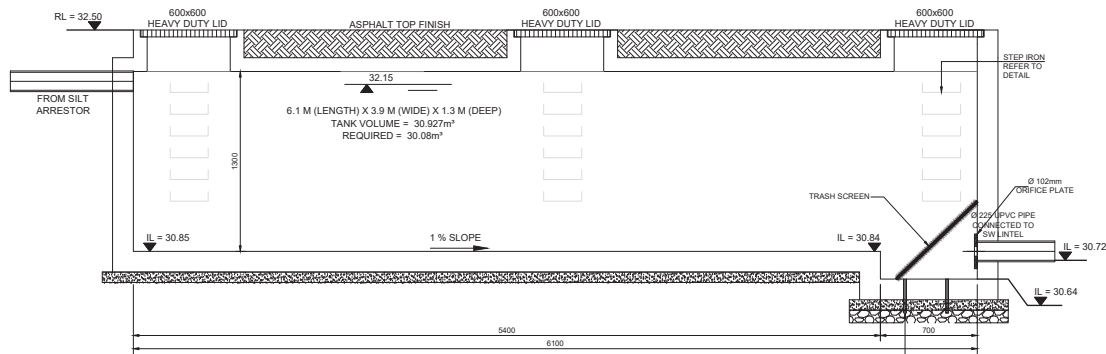
DESIGNED: HR

DRAWING: RQ

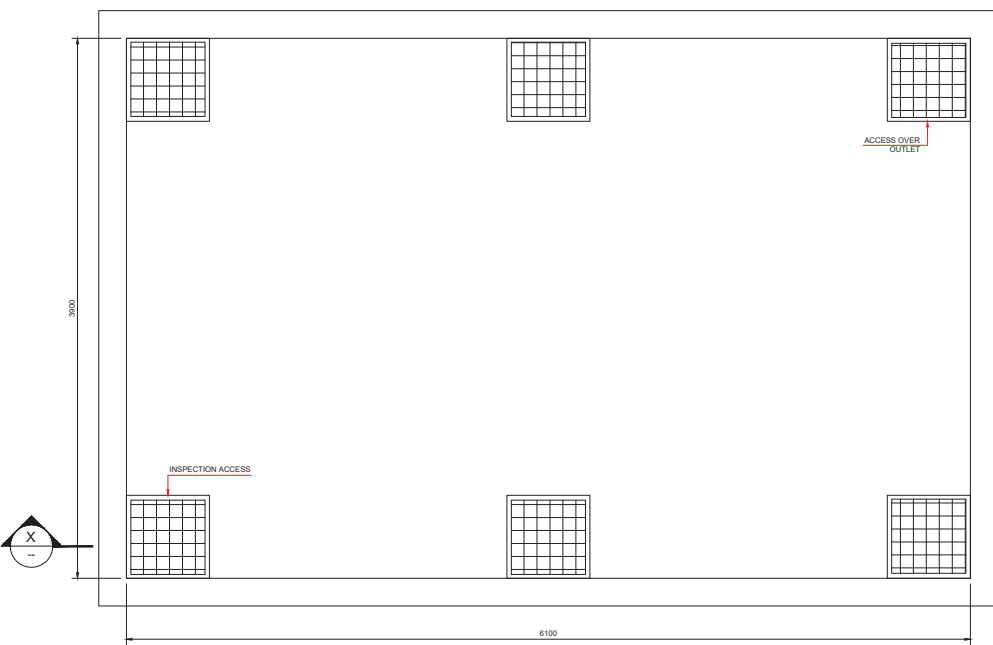
DRAWING TITLE: STORMWATER MANAGEMENT PLAN ALFRED ROAD

PROJECT: PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW

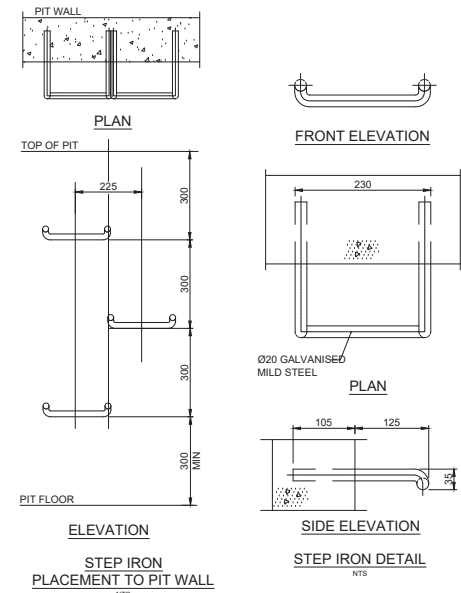
DATE:	SCALE:
06/12/2021	1:150
PROJECT No:	REVISION:
CPC 2760	04
DRAWING No:	C301



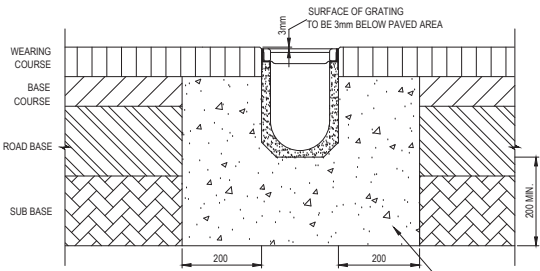
SECTION X-X
OSD TANK SECTION DETAIL
SCALE= 1:20



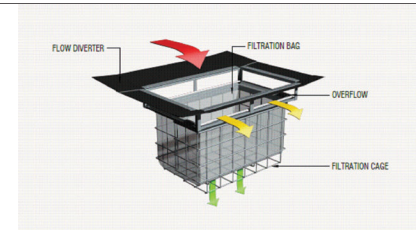
OSD TANK
SCALE= 1:20



ELEVATION
STEP IRON
PLACEMENT TO PIT WALL
NTS



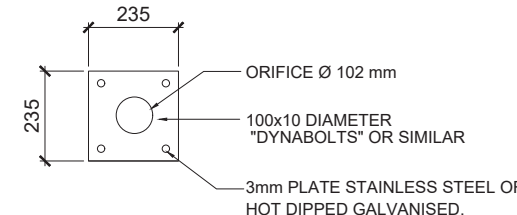
NOTES
1. THE CHANNEL MUST NOT BE TRAFFICKED UNTIL WEARING COURSE IS LAID
2. IT IS THE CUSTOMER'S RESPONSIBILITY TO ENSURE THAT THE MINIMUM DIMENSIONS SHOWN ARE SUITABLE FOR THE GROUND CONDITIONS
HEAVY DUTY TYPICAL DETAIL (FLEXIBLE PAVEMENT)
REFER TO MANUFACTURER SPECS FOR DETAILS



TYPICAL ENVIROPOD
DETAIL
(TO BE INSTALLED IN ALL EXISTING PIT TAKING STORMWATER FROM GRATE)



PIPE FLOW
CONFIGURATION



ORIFICE PLATE DETAIL
NTS

ON SITE DETENTION NOTE:

- AS PER COUNCIL DCP & WATER MANAGEMENT POLICY.
- THE SITE LIES IN ZONE REGION 2. AND THE LOT AREA IS GREATER THAN 450 sqm.
- AS SITE IMPERVIOUS AREA IS MORE THAN 40% SO OSD IS REQUIRED.
- AS PER TABLE 2B OF ONSITE STORMWATER TECHNICAL SPECIFICATION FOR A 900 sqm SITE WE REQUIRED.
30.8 m³ OSD
Q5 (EXISTING) 25 l/s
Q100 (EXISTING) 49 l/s
- FROM TABLE 3, FOR 25 l/sec 102mm ORIFICE PLATE IS REQUIRED WITH 1.3 M DEEP OSD.

ORIFICE PLATE NOTES

- HOLE IN ORIFICE PLATE TO BE PRECISION CUT WITH SHARP EDGES TO THE SPECIFIED DIAMETER.
- ORIFICE PLATE TO BE PLACED CENTRALLY OVER THE OUTLET PIPE.
- ORIFICE PLATE TO BE MADE FROM STAINLESS STEEL HOT DIPPED GALVANIZED OR OTHERS NOT ACCEPTABLE.
- OUTLET PIPE TO BE CAST INTO THE WALL OF THE PIT.
- HOLE IN THE PLATE TO BE CENTRALLY PLACED.

IMPORTANT NOTE:

INTERMEDIATE ACCESS IS PROVIDED BECAUSE THE LENGTH OF OSD IS GREATER THAN 3M.
THE DRAIN DEATIL IS SHOWN INDICATIVELY. MINIMUM 300 WIDE GRATE IS PROPOSED TO INTAKE SURFACE RUN OFF. FURTHER REFER TO MANUFACTURER SPECS FOR DETAILS.

ISSUE FOR DA

ISSUE	DATE	AMENDMENT	CLIENT / BUILDER / ARCHITECT
00	08.10.2021	ISSUE FOR DISCUSSION	
01	15.10.2021	ISSUE FOR DISCUSSION	
02	29.10.2021	ISSUE FOR DA	
03	29.11.2021	ISSUE FOR DA	
04	06.12.2021	ISSUE FOR DA	



CIVIL

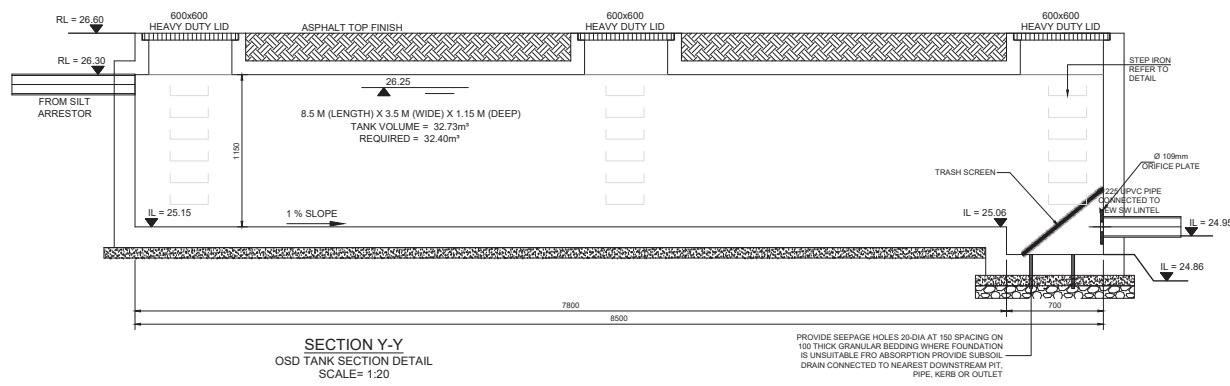
5 / 45-55 Epsom Road
Rosebery NSW 2018
P 02 8862 9300
E info@core.engineering
W core.engineering
ABN 34 620 484 602

ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

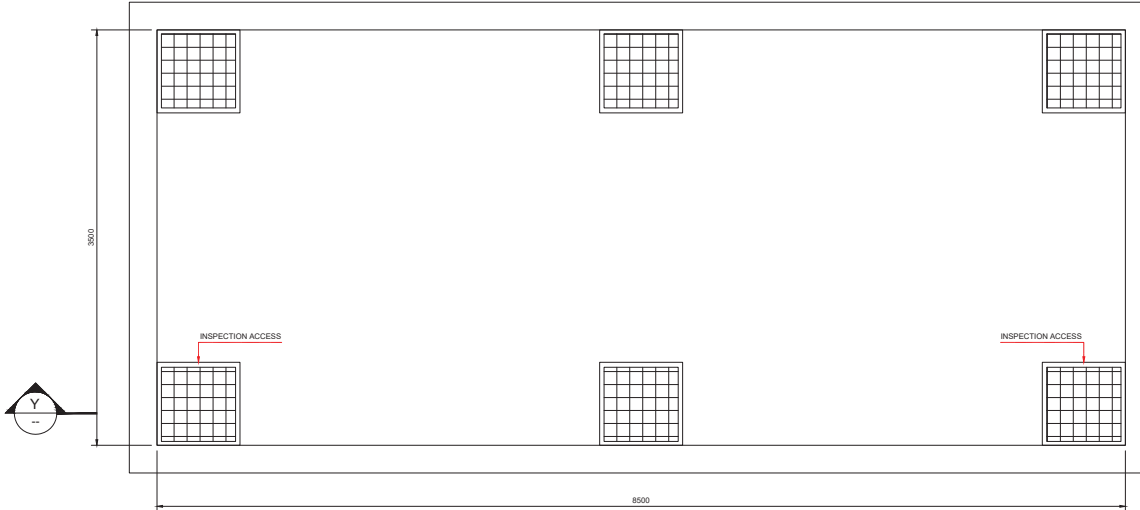
NORTH:	SCALE:	NTS
© Copyright This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a workshop drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by any anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.		

VERIFIED:	AC	DESIGNED:	HR	DRAWN:	RQ
DRAWING TITLE: OSD DETAILS 60 FEDERAL PARADE					
PROJECT: PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW					

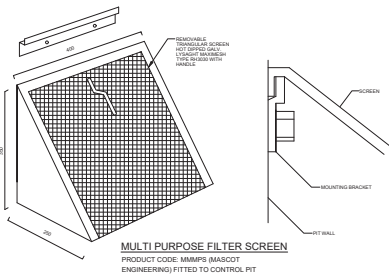
DATE:	06/12/2021	SCALE:	A.P.S
PROJECT No:	CPC 2760	REVISION:	04
DRAWING No:	C302		



SECTION Y-Y
OSD TANK SECTION DETAIL
SCALE= 1:20



OSD TANK
SCALE= 1:20



MULTI PURPOSE FILTER SCREEN
PRODUCT CODE: MMPS (MASCOT ENGINEERING) FITTED TO CONTROL PIT PRIOR TO OUTLET

TRASH SCREEN NOTES:

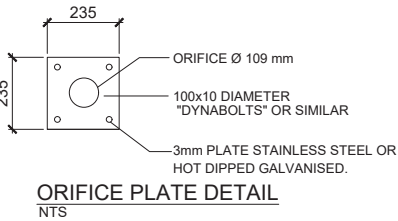
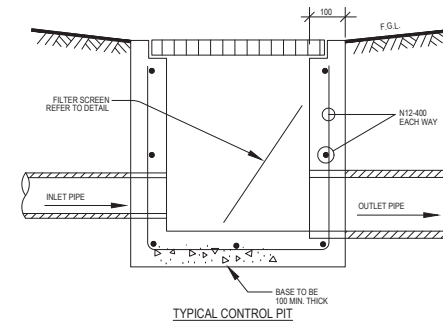
1. MAXIMUM SCREENS MUST BE PLACED SUCH THAT THE LONG AXIS OF THE OVAL SHAPED HOLES ARE ORIENTATED HORIZONTALLY WITH THE PROTRUDING LIP ANGLED UPWARDS AND FACING TOWARDS THE OUTLET.
2. THE SCREEN IS TO BE FORMED BY WELDING TWO TRIANGULAR MAXIMESH (OR EQUIVALENT) PANELS TO A RECTANGULAR FRONT MAXIMESH PANEL (OR EQUIVALENT)

ON SITE DETENTION NOTE:

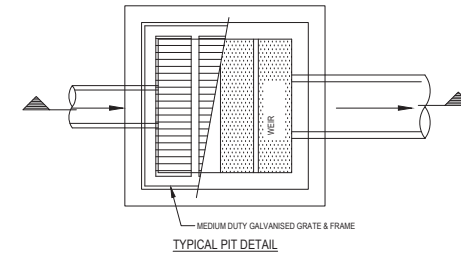
1. AS PER COUNCIL DCP & WATER MANAGEMENT POLICY.
2. THE SITE LIES IN ZONE REGION 2. AND THE LOT AREA IS GREATER THAN 450 sqm.
3. AS SITE IMPERVIOUS AREA IS MORE THAN 60% SO OSD IS REQUIRED.
4. AS PER TABLE 2B OF ONSITE STORMWATER TECHNICAL SPECIFICATION FOR A 950 sqm (ACTUAL 926.69 sqm) SITE WE REQUIRED. 32.4 m³ OSD Q5 (EXISTING) 26 l/s Q100 (EXISTING) 53 l/s
5. FROM TABLE 3, FOR 26 l/sec 109mm ORIFICE PLATE IS REQUIRED WITH 1.15 M DEEP OSD.

ORIFICE PLATE NOTES

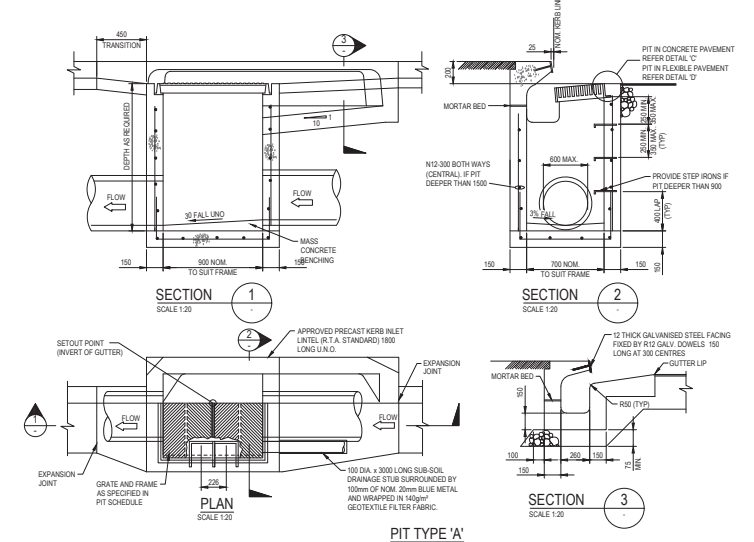
1. HOLE IN ORIFICE PLATE TO BE PRECISION CUT WITH SHARP EDGES TO THE SPECIFIED DIAMETER.
2. ORIFICE PLATE TO BE PLACED CENTRALLY OVER THE OUTLET PIPE.
3. ORIFICE PLATE TO BE MADE FROM STAINLESS STEEL HOT DIPPED GALVANIZED OR OTHERS NOT ACCEPTABLE.
4. OUTLET PIPE TO BE CAST INTO THE WALL OF THE PIT. HOLE IN THE PLATE TO BE CENTRALLY PLACED.



ORIFICE PLATE DETAIL
NTS



CONFINED SPACE WARNING SIGN



PIT TYPE 'A'

IMPORTANT NOTE:

INTERMEDIATE ACCESS IS PROVIDED BECAUSE THE LENGTH OF OSD IS GREATER THAN 3M.

ISSUE FOR DA

ISSUE	DATE	AMENDMENT	CLIENT / BUILDER / ARCHITECT
00	08.10.2021	ISSUE FOR DISCUSSION	
01	15.10.2021	ISSUE FOR DISCUSSION	
02	29.10.2021	ISSUE FOR DA	
03	29.11.2021	ISSUE FOR DA	
04	06.12.2021	ISSUE FOR DA	



CIVIL

5 / 45-55 Epsom Road
Rosebery NSW 2018
P 02 8862 9300
E info@core.engineering
W core.engineering
ABN 34 620 484 802

ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

NORTH:

SCALE: **NTS**

© Copyright. This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a workshop drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by any anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

VERIFIED: **AC**

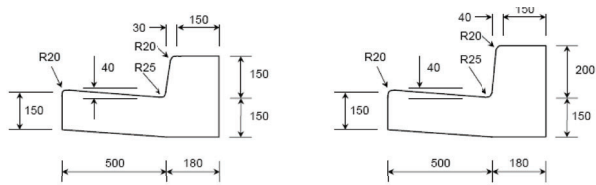
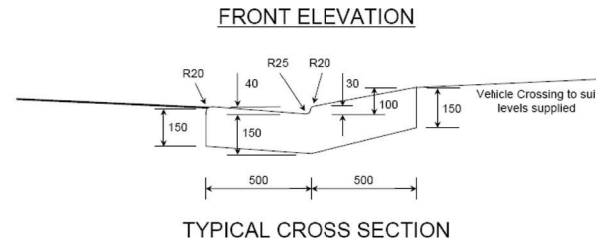
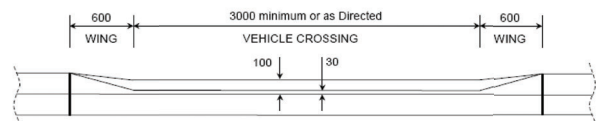
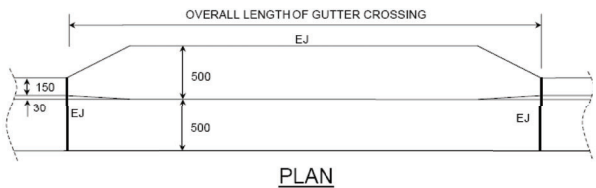
DESIGNED: **HR**

DRAWING: **RQ**

DRAWING TITLE: **OSD DETAILS ALFRED ROAD**

PROJECT: **PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW**

DATE:	SCALE:
06/12/2021	1:100
PROJECT No:	REVISION:
CPC 2760	04
DRAWING No:	C303

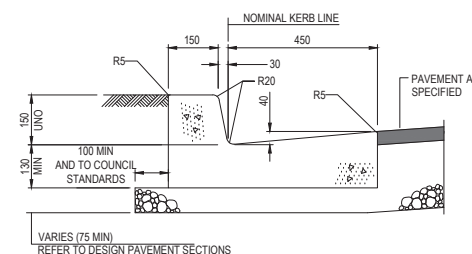


150mm KERB & GUTTER

200mm KERB & GUTTER

- NOTES:**
- Kerb and gutter shall be poured in **PLAIN CONCRETE** and finished with a steel trowel. Minimum compressive strength of concrete shall be 25MPa at 28 days.
 - The subgrade shall be thoroughly compacted by the use of vibratory compaction equipment until it shows no signs of movement, or as directed by Council.
 - Where Council or an Accredited Certifier (Civil Works) directs that the gutter be retained, the contractor shall place a 75mm deep saw cut in the gutter invert and remove kerb and/or layback.
 - Where Council or an Accredited Certifier (Civil Works) directs that the gutter be removed, a Road Opening Permit must be obtained from Council's Customer Service Centre prior to commencing work. Once the permit is established the contractor may commence vehicle crossing works. Upon completion of the works, temporary restoration shall be provided as set out in the 'Specification For Trench Construction Within Council Roads'.
 - The construction of all vehicle crossings and associated works on the road reserve must be completed by a Council approved concrete contractor.

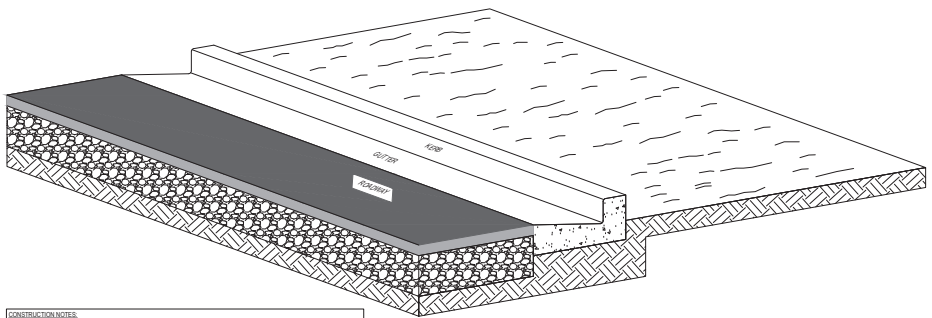
THIS DRAWING & DETAILS ARE TAKEN FROM COUNCIL DRAWING No. A4 2276/A



- NOTES:**
- Layback and gutter shall be poured in **PLAIN CONCRETE** and finished with a steel trowel. Minimum compressive strength of concrete shall be 25MPa at 28 days. Industrial/commercial properties shall increase the depth of concrete to 180mm and provide SL82 mesh with 30mm top cover.
 - The subgrade shall be thoroughly compacted by the use of vibratory compaction equipment until it shows no signs of movement, or as directed by Council.
 - Vehicle crossing to be constructed in accordance with levels and specifications issued by Council.
 - Kerbing to be constructed in accordance with Council Plan A4 2276/A and specifications.
 - Where Council or an Accredited Certifier (Civil Works) directs that the gutter be retained, the contractor shall place a 75mm deep saw cut in the gutter invert and remove kerb and/or layback.
 - Where Council or an Accredited Certifier (Civil Works) directs that the gutter be removed, a Road Opening Permit must be obtained from Council's Customer Service Centre prior to commencing work. Once the permit is established the contractor may commence vehicle crossing works. Upon completion of the works, temporary restoration shall be provided as set out in the 'Specification For Trench Construction Within Council Roads'.
 - The construction of all vehicle crossings and associated works on the road reserve must be completed by a Council approved concrete contractor.
 - EJ - Expansion Joint - 10mm Mastic.
R - Radius

Not to Scale. All Dimensions in Millimetres.

THIS DRAWING & DETAILS ARE TAKEN FROM COUNCIL DRAWING No. A4 2276/B



- CONSTRUCTION NOTES:**
- INSTALL A 600mm MINIMUM WIDE ROLL OF TURF ON THE FOOTPATH NEXT TO THE KERB AND AT THE SAME LEVEL AS THE TOP OF THE KERB.
 - LAY 1.4m LONG TURF STRIPS NORMAL TO THE KERB EVERY 10m
 - REHABILITATE DISTURBED SOIL BEHIND THE KERB

KERBSIDE TURF STRIP

NOT TO SCALE

TYPICAL DETAIL FOR ILLUSTRATION

FORMWORK

THE FORMS SHALL BE ALIGNED TRUE TO GRADE AND WITH OUT IRREGULARITIES. THE TOLERANCE SHALL BE ±15mm PROVIDED THAT VARIATIONS IN LEVELS ARE NOT LOCAL AND ORE OVER LENGTH OF 3 METERS OR MORE.

FORMS SHALL BE CONSTRUCTED SO THAT THEY CAN BE REMOVED WITHOUT DAMAGING THE CONCRETE AND SHALL BE ADEQUATELY BRACED. THE INNER SURFACE OF FORMS SHALL BE ADEQUATELY OILED TO ENSURE THE NON-ADHESION OF THE CONCRETE. THE MATERIAL USED FOR FORMS FOR THE EXPOSED SURFACES SHALL BE DRESSED SOFT WOOF TIMBER.

TIMBER PEGS OF 50mm x 50mm-DIMENSION MINIMUM MUST BE PROVIDED FOR THE SUPPORT OF ALL FORMWORK. THE USE OF STEEL PEGS FOR THE SUPPORT OF FORMWORK IS PROHIBITED.

MATERIALS

READY MIXED CONCRETE SHALL CONFORM TO THE PROVISIONS OF AS 1379 - 2007 * READY MIXED CONCRETE*

THE MINIMUM COMPRESSIVE STRENGTH F_c OF THE CONCRETE SHALL BE 25 MPa AT 28 DAYS IN ACCORDANCE WITH AS 3600 - 2009 * CONCRETE STRUCTURES*

JOINTS

FOR HAND PLACED KERB AND GUTTER EXPANSION JOINT 10mm THICK FOR THE FULL DEPTH OF THE KERB AND GUTTER SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 6m.

FOR MACHINE PLACED KERB AND GUTTER, EXPANSION JOINTS 6mm THICK SHALL BE PROVIDED AT INTERVALS OF 6m AND CONSTRUCTION JOINTS SHALL BE FORMED EVERY 3m FOR THE FULL DEPTH OF THE KERB AND GUTTER.

JOINTS ARE ALSO REQUIRED WHERE THE GUTTER ABUTS GULLY PITS AND GUTTER CROSSINGS. EXPANSION JOINTS SHALL CONSIST OF PERFORMED JOINTING MATERIAL BITUMINOUS FIBERBOARD.

TOLERANCE

TOLERANCE ON THE LEVEL OF KERB AND GUTTER CONSTRUCTION BOTH HORIZONTAL AND VERTICAL SHALL BE PLUS OR MINUS 10mm.

KERB AND GUTTER

THE CONSTRUCTION OF CONCRETE KERB AND GUTTER IS TO BE IN ACCORDANCE WITH AS 2876 - 2000 * CONCRETE KERBS AND CHANNELS (GUTTERS) - MANUALLY OR MACHINE PLACED * UNLESS OTHERWISE INDICATED BELOW.

KERB AND GUTTER DETAIL
KERB AND GUTTER SHALL BE IN ACCORDANCE WITH COUNCIL DRAWING NUMBER A4 2267/A/

LEVELS

- DESIGN PLAN ARE TO BE PREPARED BY THE APPLICANT AND APPROVED BY THE COUNCIL PRIOR TO CONSTRUCTION.
- GENERALLY THE FOLLOWING CRITERIA SHOULD MET PREPARING A DESIGN OF KERB AND GUTTER.
- A MINIMUM LONGITUDINAL GRADE OF 1% IS REQUIRED.
 - THE CROSS FALL FROM THE EDGE OF THE EXISTING PAVEMENT SHOULD GENERALLY BE 3%.
 - RECONSTRUCTION OF EXISTING KERB AND GUTTER MAY BE REQUIRED TO ENSURE THAT A SATISFACTORY CONNECTION IS PROVIDED.

PLACING CONCRETE

THE CONCRETE SHALL BE PLACED SO AS TO AVOID SEGREGATION AND SHALL BE ADEQUATELY COMPACTED. CARE SHALL BE TAKEN TO FILL EVERY PART OF THE FORMS AND TO WORK TO COARSER AGGREGATE BACK FROM THE FACE. EXPOSED SURFACES SHALL BE FINISHED WITH A STEEL FLOAT, AND CORNERS AND EDGES SHALL BE NEATLY ROUNDED WITH A NOISING TOOL. CONCRETE SHALL NOT BE DISTURBED AFTER IT HAS BEEN IN THE FORMS FOR TWENTY (20) MINUTES.

FINISH

AFTER REMOVAL OF THE FORMS, MINOR OR POROUS SECTIONS OR HOLES SHALL BE REPAIRED WITH A 3 TO 1 SAND AND CEMENT MORTAR MIX. THE EXPOSED SURFACES SHALL THEN BE RUBBED WITH A WOODEN FLOAT AND CLEAN WATER TO LEAVE THE SURFACES SMOOTH AND UNIFORM IN COLOR AND APPEARANCE.

BACKFILLING

AFTER REMOVAL OF FORMWORK THE FOOTWAY BEHIND THE KERB SHALL BE NEATLY TRIMMED, FILLED AND OR TURFED TO MAKE A SMOOTH CONNECTION TO THE UNDISTURBED NATURE STRIP.

ISSUE FOR DA

ISSUE	DATE	AMENDMENT
00	08.10.2021	ISSUE FOR DISCUSSION
01	15.10.2021	ISSUE FOR DISCUSSION
02	29.10.2021	ISSUE FOR DA
03	29.11.2021	ISSUE FOR DA
04	06.12.2021	ISSUE FOR DA

CLIENT / BUILDER / ARCHITECT



CIVIL

5 / 45-55 Epsom Road
Rosebery NSW 2018

P 02 8862 9300
E info@core.engineering
W core.engineering
ABN 34 620 484 802

ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

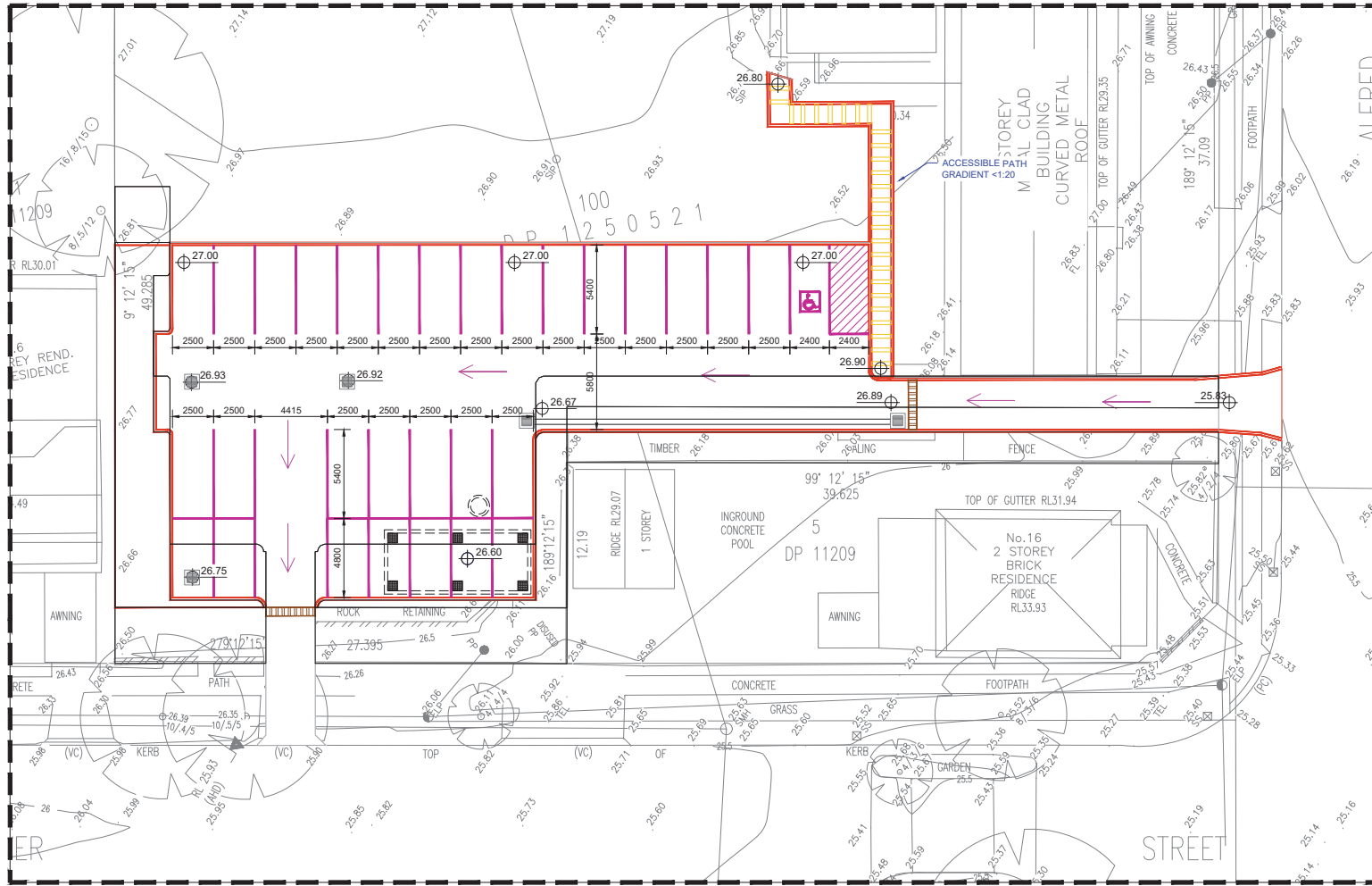
NORTH:

SCALE: **NTS**

© Copyright
This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a workshop drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

VERIFIED:	AC	DESIGNED:	HR	DRAWN:	RQ
DRAWING TITLE: STANDARD DETAIL CAR PARK					
PROJECT: PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW					

DATE:	06/12/2021	SCALE:	NTS
PROJECT No:	CPC 2760	REVISION:	04
DRAWING No:	C402		

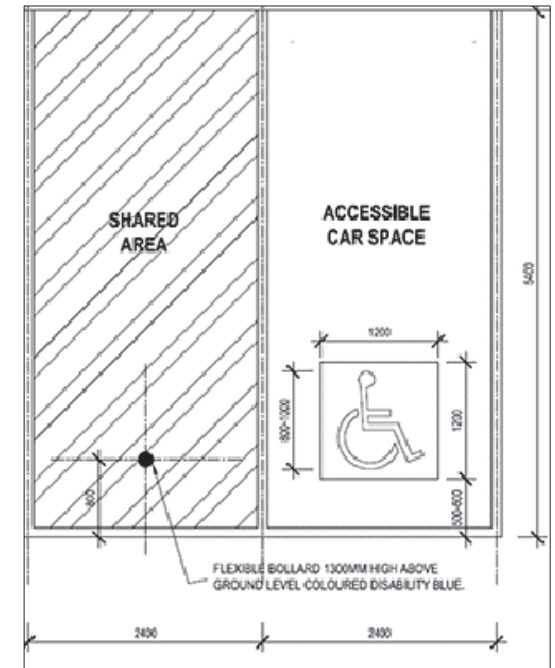


DELINEATION & LINE MARKING

SCALE - 1:150

LINEMARKING NOTES

- LM1 ALL LINEMARKING WORKS TO BE IN ACCORDANCE WITH EITHER THE CURRENT AUSTRALIAN STANDARD AS1742.2-2009-MANUAL UNIFORM TRAFFIC CONTROL DEVICES, OR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE SUPERINTENDENT.
- LM2 THE SCOPE OF WORK SHALL INCLUDE ALL PAVEMENT MARKINGS TO ROADS AND CARPARKS.
- LM3 THE WORK CARRIED OUT AND TESTING PERFORMED SHALL COMPLY WITH THE CURRENT, RELEVANT AUSTRALIAN STANDARDS AND RTA STANDARDS WHERE NECESSARY.
- LM4 ALL MARKINGS SHALL BE SPOTTED OUT AND APPROVED BY THE SUPERINTENDENT PRIOR TO APPLICATION.
- LM5 PAINT SHALL BE APPLIED AT A WET THICKNESS OF BETWEEN 0.35mm - 0.45mm.
- LM6 PAINT SHALL ONLY BE APPLIED TO CLEAN AND DRY SURFACES.
- LM7 ALL LONGITUDINAL LINES SHALL BE APPLIED BY A SELF-PROPELLED MACHINE.
- LM8 LINEMARKING REMOVAL SHALL BE CARRIED OUT BY GRINDING OR SANDBLASTING. REMOVAL BY BURNING WILL NOT BE PERMITTED.
- LM9 THE EXTENT OF LINEMARKING TO BE ERADICATED SHALL BE CONFIRMED ON SITE PRIOR TO REMOVAL. ANY MARKINGS INCORRECTLY REMOVED SHALL BE REINSTATED AT THE CONTRACTOR'S EXPENSE.
- LM10 ALL MARKINGS SHALL BE COMPLETED IN A WORKMANLIKE MANNER AND BE STRAIGHT, SMOOTH AND WITH EVEN CURVES. ANY NON-CONFORMING WORK SHALL BE REMOVED AND REINSTATED AT THE DIRECTION OF THE SUPERINTENDENT AT THE CONTRACTOR'S EXPENSE.



SINGLE-DISABLED-CAR-PARK

ISSUE FOR DA

ISSUE	DATE	AMENDMENT
00	08.10.2021	ISSUE FOR DISCUSSION
01	15.10.2021	ISSUE FOR DISCUSSION
02	29.10.2021	ISSUE FOR DA
03	29.11.2021	ISSUE FOR DA
04	06.12.2021	ISSUE FOR DA

CLIENT / BUILDER / ARCHITECT



CIVIL

5 / 45-55 Epsom Road
Rosebery NSW 2018
P 02 8662 9300
E info@core-engineering.com.au
W core-engineering.com.au
ABN 34 620 484 802

ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • FACADES

NORTH:

SCALE:

SCALE 1:150

© Copyright
This document and Design remains the copyright of Core Consulting Engineers Pty Ltd and cannot be reproduced in any way without prior consent. The contractor shall verify all dimensions and levels on site as this is not a working drawing. The contractor shall refer any discrepancies to the engineer before proceeding with the work. This drawing shall be read in conjunction with other contract documents, drawings and project specifications. This file has been checked by an anti-virus program with the latest virus update. However as new viruses are discovered everyday we recommend that this file is scanned upon receipt.

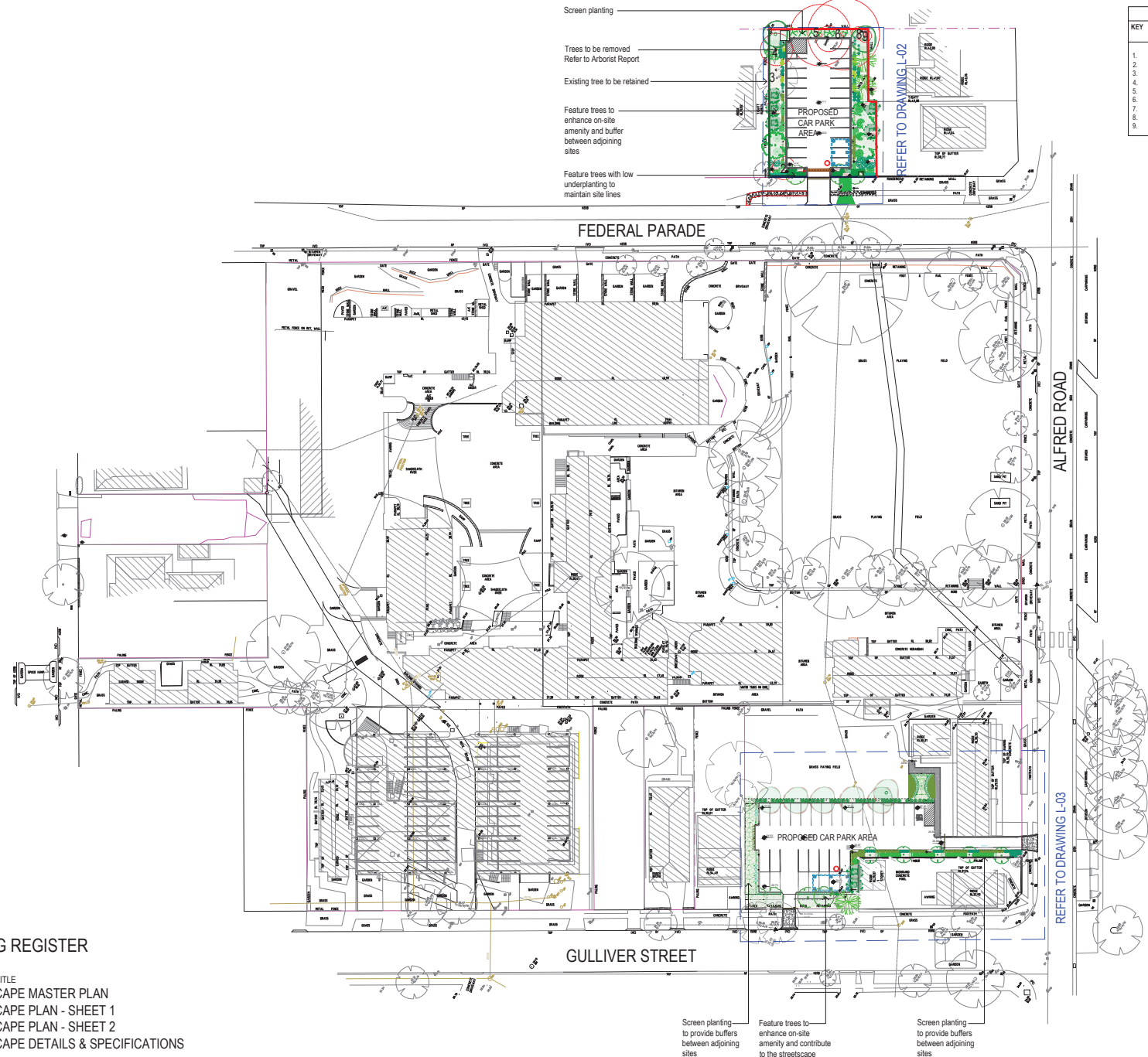
VERIFIED:	DRAWING TITLE:	DATE:	SCALE:
AC	DELINEATION & LINE MARKING ALFRED ROAD	06/12/2021	1:150
DESIGNED:	PROJECT: PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW	PROJECT No:	REVISION:
HR		CPC 2760	04
DRAWN:		DRAWING No:	C501
RQ			

LEGEND

	BOUNDARY
	EXISTING SPOT LEVELS
	PROPOSED SPOT LEVELS
	EXTENT OF NEW WORKS
	ALUMINIUM EDGE
	CONCRETE
	ASPHALT
	MULCH
	TURF
	TREE TO BE RETAINED
	TREE TO BE REMOVED REFER TO ARBORIST REPORT

EXISTING TREE SCHEDULE

KEY	BOTANICAL NAME	DBH (mm)	Height (m)	Canopy Spread Radius (m)	Status
1.	CUPRESSUS SEMPERVIRENS	650	18	12	RETAIN
2.	CITHAREXYLUM SPINOSUM	350,350,400	9	6	REMOVE
3.	LOPHOSTEMON CONFERTUS	400	12	9	RETAIN
4.	FICUS BENJAMINA	250	7	8	REMOVE
5.	EUCALYPTUS SALIGNA	850	23	15	REMOVE
6.	EUCALYPTUS SALIGNA	1150	25	18	REMOVE
7.	ARCHONTOPHOENIX CUNNINGHAMIANA	250	6	4	REMOVE
8.	ARCHONTOPHOENIX CUNNINGHAMIANA	250	3	3	REMOVE
9.	ARCHONTOPHOENIX CUNNINGHAMIANA	300	5	4	REMOVE



LANDSCAPE DESIGN INTENT

The main objective of the landscape is to provide shade and improve the visual amenity of the car park and streetscape.

Car park trees have been carefully considered and based on their ability to withstand compaction, suitable for their location and have reliable growth and perform well in an urban environment. The selection adheres to the principle of minimising water consumption by the use of low-water native plant species.

In adhering to design principles, consideration has been given to site specific conditions to determine individual tree's placements with underplanting of low grasses to ensure sight lines are maintained upon entering and exiting the car park. Landscape buffers have been provided alongside boundaries that adjoin residential lots.

The design increases the existing tree canopies for the sites providing shade and a more aesthetically pleasing streetscape. The streetscape treatment buffer contains a suitable combination of trees, shrubs and groundcovers to create visual diversity and enhance the streetscape character.

The species selection has been derived from the Northern Beaches Council native species list for Curti Curti Ward.

Water Sensitive Urban Design (WSUD) opportunities have been identified with the recommendation of permeable paving for the car park and pedestrian pathways.

The proposed landscape contributes to the development and will improve the site by providing increased amenities and by adding biodiversity with additional native canopy trees.

LANDSCAPE DRAWING REGISTER

DRAWING NO.	DRAWING TITLE
L-01	LANDSCAPE MASTER PLAN
L-02	LANDSCAPE PLAN - SHEET 1
L-03	LANDSCAPE PLAN - SHEET 2
L-04	LANDSCAPE DETAILS & SPECIFICATIONS

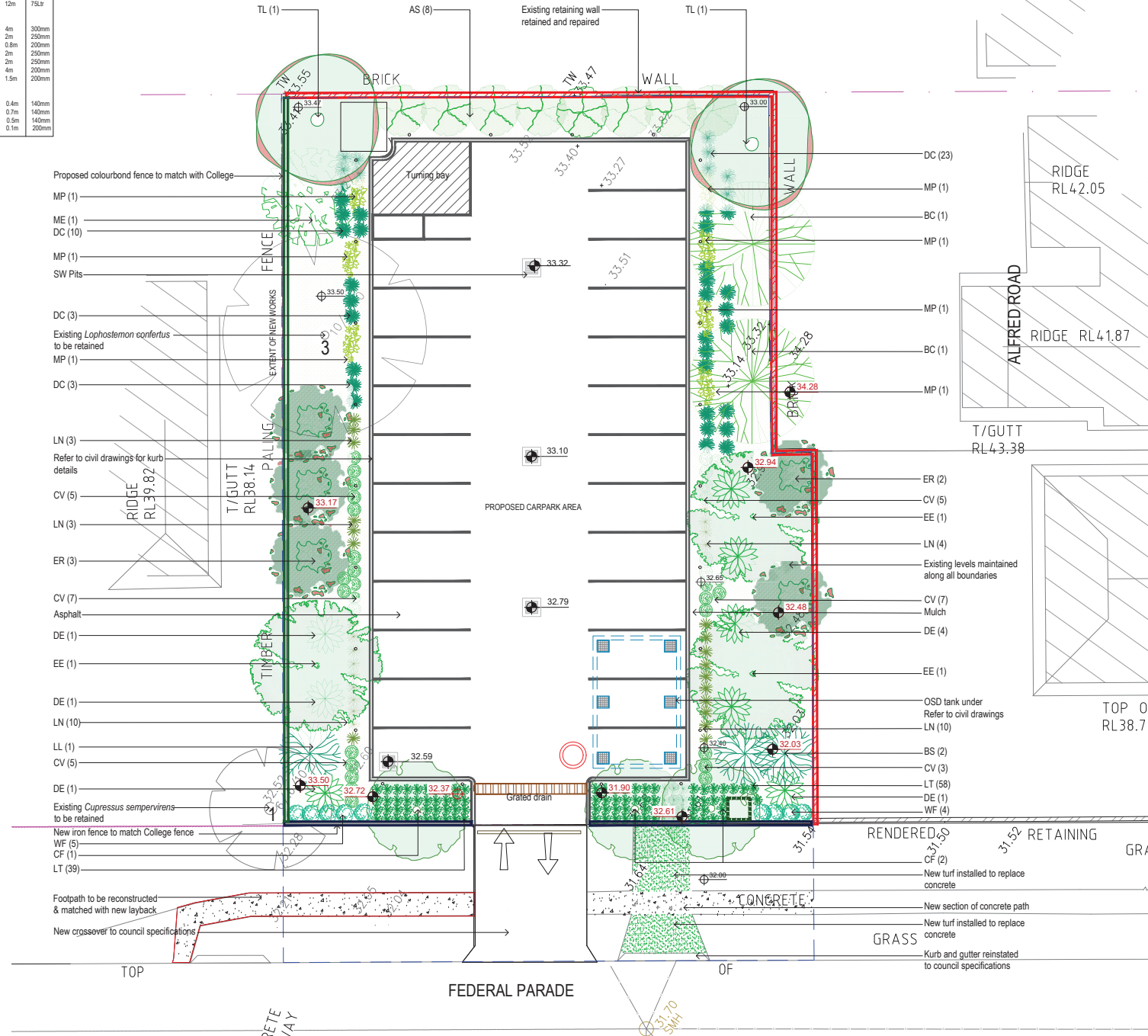
LEGEND

- BOUNDARY
- EXISTING SPOT LEVELS
- PROPOSED SPOT LEVELS
- EXTENT OF NEW WORKS
- ALUMINUM EDGE
- CONCRETE
- ASPHALT
- MULCH
- TURF
- TREE TO BE RETAINED

PROPOSED PLANT SCHEDULE				
KEY	BOTANICAL NAME	COMMON NAME	QTY	POT SIZE
TREES				
BC	BADENIA CITRIGODORA	LEMON MYRTLE	3	5m 75Lr
CF	CORYMBIA FICIFOLIA 'SUMMER RED'	SUMMER RED	3	5m 75Lr
EE	ELAEOCARPUS EUMUNDI	EUMUNDI QUANDONG	3	7m 75Lr
ER	ELAEOCARPUS RETICULATUS	BLUBERRY ASH	5	7m 45Lr
TL	TRISTANOPSIS LAURINA	WATER GUM	2	12m 75Lr
SHRUBS				
AS	ACMENA SMITHII 'SUBLIME'	SUBLIME LILLY PILLY	8	4m 300mm
BS	BANKSIA SPINULOSA	HARPIN BANKSIA	3	2m 250mm
CV	CALLISTEMON VIMINALIS 'GREEN JOHN'	GREEN JOHN BOTTLEBRUSH	32	0.8m 200mm
DE	DORYANTHES EXCELSA	COYNEA LILLY	8	2m 250mm
LL	LEPTOSPERMUM LAEVIGATUM	COASTAL TEA-TREE	1	2m 250mm
ME	MELALEUCA ERICIFOLIA	SWAMP PAPERBARK	1	4m 200mm
WF	WESTRINGIA FRUTICOSA	COASTAL ROSEMARY	9	1.5m 200mm
GRASSES / GROUND COVERS				
DC	DANIELLA CAERULEA 'LITTLE JESS'	LITTLE JESS	39	0.4m 140mm
LN	LOMANDRA LONGIFOLIA 'NYALLA'	NYALLA	30	0.7m 140mm
LT	LOMANDRA LONGIFOLIA 'TANIKA'	TANIKA	97	0.5m 140mm
MP	MYOPORUM PARVIFOLIUM 'YAREENA'	YAREENA	7	0.1m 200mm

*NATIVE SPECIES TO CURLI CURL WARD *NATIVE SPECIES

PLANTING PALETTE



NOTES

- Consultation to be held with all stakeholders and approved on 10/10/21.
- All dimensions shown are to be maintained unless otherwise stated.
- Dimensions are to be maintained unless otherwise stated.
- Dimensions are to be maintained unless otherwise stated.

Rev	Date	Issue	Checked
A	09/10/21	Preparatory Issue	CW
B	09/10/21	Preparatory Issue	CW
C	09/10/21	Preparatory Issue	CW
D	09/10/21	Preparatory Issue	CW



Space Landscape Designs Pty Ltd
 ABN 68 799 053 674 ACN 118 316 251
 11/12-13/14 The Arcade, Brookvale NSW 1520
 Phone: 02 9550 7810 Fax: 02 9550 7827
 Suite 126, 117 Old Pittwater Rd, Brookvale NSW 2100

PROJECT: Proposed Carpark
 SITE ADDRESS: Federal Parade, Brookvale 2100

CLIENT: St Augustine's College
 DRN: A.Elzob (ALZLN 635)
 SCALE: 1:100@A1
 PROJECT NO: 211930

DRAWING TITLE: LANDSCAPE PLAN-SHEET 1
 L-02
 Rev: D

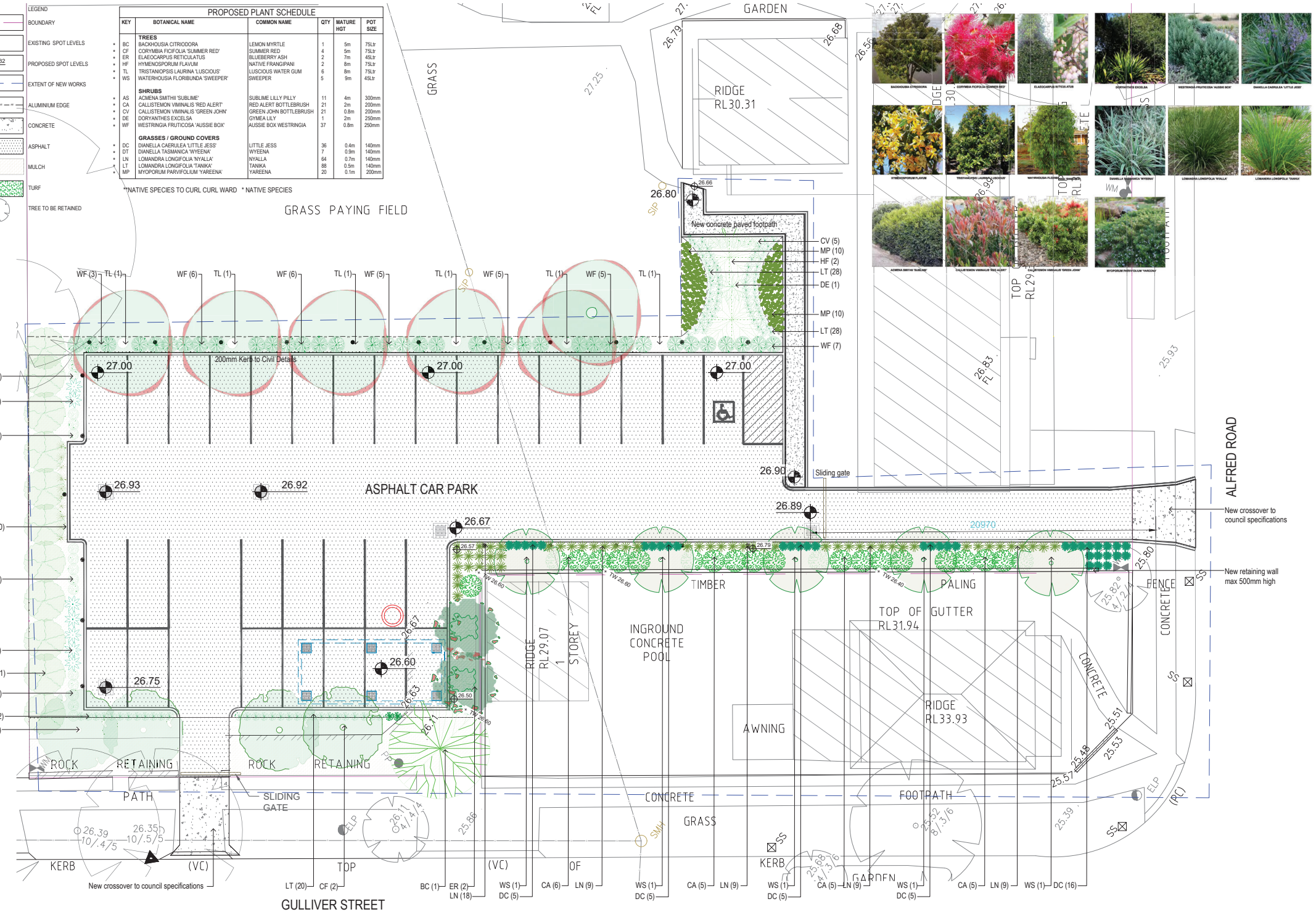
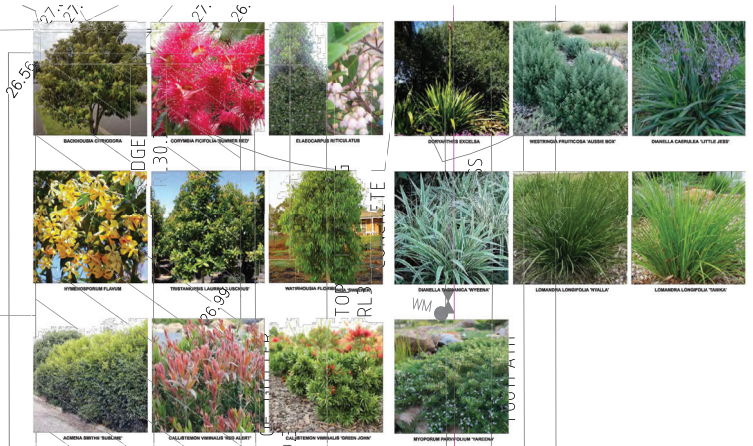
LEGEND

- BOUNDARY
- EXISTING SPOT LEVELS
- PROPOSED SPOT LEVELS
- EXTENT OF NEW WORKS
- ALUMINIUM EDGE
- CONCRETE
- ASPHALT
- MULCH
- TURF
- TREE TO BE RETAINED

PROPOSED PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	QTY	MATURE HGT	POT SIZE
TREES					
BC	BACKHOUSIA CITRIDODORA	LEMON MYRTLE	1	5m	75Lr
CF	CORYMBIA FICIFOLIA 'SUMMER RED'	SUMMER RED	4	5m	75Lr
ER	ELAEOCARPUS RETICULATUS	BLUEBERRY ASH	2	7m	45Lr
HF	HYDROSPORIUM FLAVUM	NATIVE FRANGIPANI	2	8m	75Lr
TL	TRISTANOPSIS LAURINA 'LUSCIOUS'	LUSCIOUS WATER GUM	6	8m	75Lr
WS	WATERHOUSIA FLORIBUNDA 'SWEEPER'	SWEEPER	5	9m	45Lr
SHRUBS					
AS	ACMENA SMITHII 'SUBLIME'	SUBLIME LILLY PILLY	11	4m	300mm
CA	CALLISTEMON VIMINALIS 'RED ALERT'	RED ALERT BOTTLEBRUSH	21	2m	200mm
CV	CALLISTEMON VIMINALIS 'GREEN JOHN'	GREEN JOHN BOTTLEBRUSH	21	0.8m	200mm
DE	DORYANTHES EXCELSA	GYMEA LILY	1	2m	250mm
WF	WESTRINGIA FRUTICOSA 'AUSSIE BOX'	AUSSIE BOX WESTRINGIA	37	0.8m	250mm
GRASSES / GROUND COVERS					
DC	DIANELLA CAERULEA 'LITTLE JESS'	LITTLE JESS	36	0.4m	140mm
DT	DIANELLA TASMANICA 'NYEENA'	NYEENA	7	0.5m	140mm
LN	LOMANDRA LONGIFOLIA 'NYALLA'	NYALLA	64	0.7m	140mm
LT	LOMANDRA LONGIFOLIA 'TANIKA'	TANIKA	88	0.5m	140mm
MP	MYOPORUM PARVIFOLIUM 'YAREENA'	YAREENA	20	0.1m	200mm

* NATIVE SPECIES TO CURL CURL WARD * NATIVE SPECIES



NOTES

- Consultation to be held with council and other relevant authorities.
- All dimensions are to be checked and approved by the relevant authorities.
- Dimensions are to be checked and approved by the relevant authorities.
- Dimensions are to be checked and approved by the relevant authorities.

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW

Rev	Date	Issue	Checked
A	20/12/21	Preparatory Issues	AW
B	20/12/21	Preparatory Issues	AW
C	09/12/21	DA Issue	AW



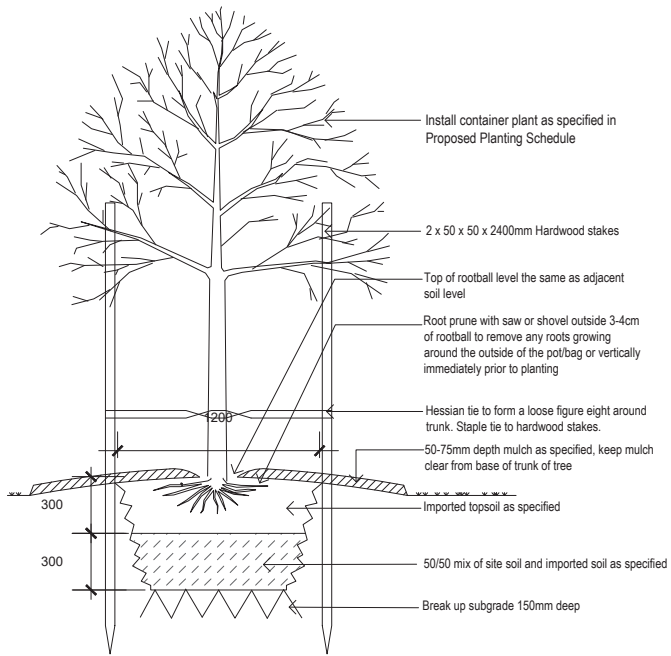
Space Landscape Design Pty Ltd
 ABN 65 799 052 674 ACN 139 530 251
 P: 02 9500 7610 F: 02 9500 7657
 Suite 105, 117 Old Pittwater Rd, Brookvale NSW 2100

PROJECT: Proposed Carpark
 SITE ADDRESS: Federal Parade, Brookvale 2100

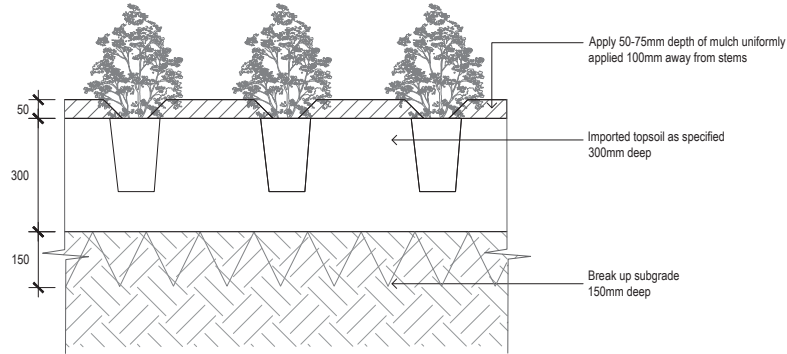
CLIENT: St Augustine's College
 DRAWN: A.Elboz (ALDM 655)
 SCALE: 1:100@A1
 PROJECT NO: 211930



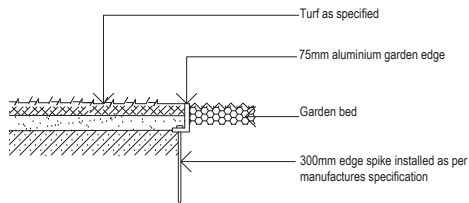
DRAWING TITLE: LANDSCAPE PLAN-SHEET 2
 DATE: 09/12/21
 L-03



01 TYPICAL TREE PLANTING DETAIL
SCALE 1:20



02 TYPICAL GARDEN BED DETAIL
SCALE 1:10



03 ALUMINIUM GARDEN EDGE DETAIL
SCALE 1:10

LANDSCAPE SPECIFICATION NOTES

SITE PREPARATION

Locate any underground and overground services & ensure no damage occurs. Levels on plan are nominal only & all dimensions to be checked on site prior to commencement. Final structural integrity of all items shall be the sole responsibility of landscape contractor.

WORKMANSHIP AND MATERIAL QUALITY

Materials and workmanship are to the current applicable Australian Standard Specifications and Codes. Any work or materials, which, in the opinion of the Site Manager do not meet appropriate industry standards should be rejected. Where works are adjacent to existing works, make proper junctions between new and existing works and make good any damage caused to adjoining existing and retained works.

PROTECTION OF EXISTING TREES:

Prior to construction, the builder shall erect tree protection fencing to the drip line of existing trees to be retained. The fence shall be constructed of star pickets at 2.4m spacings and connected by three strands of 2mm wire at 300mm spacings to a minimum height of 1500mm. Protect all trees affected by demolition & construction. Take necessary precautions to protect the Structural Root Zone(SRZ) as per AS 4970-2009 Australian Standard for Protection of Trees on Development Sites. Tree protection measures shall remain intact until the completion of all construction works.

Prohibited Works or material storage within the TPZ as per AS 4970-2009 except with approval of council:

- entry of machinery or storage of building materials, parking of any kind of vehicle
- erection or placement of site facilities, removal or stockpiling of soil or site debris
- disposal of liquid waste including paint & concrete wash
- excavation or trenching of any kind (including irrigation or electrical connections).
- attaching any signs or any other objects to the tree, placement of waste disposal or skip bins
- pruning and removal of branches, other than those by a qualified Arborist

Compacted Ground/Coring: Avoid compaction of the ground under trees. If compaction nevertheless occurs loosen the soil by Coring. Coring to be carried out by a qualified Arborist.

REMOVAL OF EXISTING TREES

All trees to be removed shall be carried out by a qualified arborist and work shall conform to the provisions of AS4373-2007 Australian Standards for The Pruning of Amenity Trees.

ELIMINATE WEEDS

Remove all existing weeds by hand, wiping or spraying with a glyphosate based herbicide. Weed control shall never be performed by mechanical cultivation or by scraping. Herbicide spraying is to be used to eliminate all existing weeds 30 days prior to planting.

EXCAVATION & SUB SOIL PREPARATION

Excavate garden beds to the depth required and rip or scarify base & sides of pit to a minimum depth of 150mm.

SUB SOIL DRAINAGE

Install drainage layer where there is surface water runoff draining into garden bed areas & where the existing sub-soil has more than 50% clay composition & there is a risk of subsurface water ponding.

Install perforated corrugated ag. line 75-100mm Dia. with geotextile filter sock & backfill to a minimum 200mm using free draining material, reclaimed/recycled where available. Direct flows at a minimum 0.5% fall to SW system. In areas isolated from stormwater system excavate & backfill an appropriate water dispersion pit.

REUSE EXISTING TOPSOIL

Existing site topsoil should be salvaged & appropriately stockpiled where possible.

IMPORTED TOPSOIL

All construction must comply with AS 4419-2003 Soils for Landscaping and Garden Use. Turf Areas: 'Turf Underlay', Tree Pit and Shrub Planting; 'Premium Garden Mix' as supplied by, ANL p: 02 9450 1444 or approved alternative. Spread the topsoil on the prepared subsoil and grade evenly, making allowances, if appropriate, for the following:

- Required finished levels and contours after light compaction.
- Compact lightly and uniformly in 150 mm layers. Avoid differential subsidence and excess compaction and produce a finished topsoil surface which has the following characteristics:
- Finished to design levels, smooth and free from stones or lumps of soil. Graded to drain freely, without ponding, to catchment points. Grade evenly into adjoining ground surfaces ready for planting.

PLANTING AREA

Remove weeds, rubbish, mulch and other debris. Do not disturb tree roots or services and if necessary cultivate these areas by hand. Spread topsoil on the prepared subsoil and grade evenly, making the necessary allowance to permit the required finished levels and contours after a light compaction. Spread topsoil to the typical depth of 300mm.

Feather edges into adjoining undisturbed ground.

TREE STOCK

Tree stock to be supplied by production nurseries in accordance with AS 2303:2018 Tree Stock for Landscape Use.

Health & Vigour: Supply plants with foliage size, texture & colour consistent with that shown in healthy specimens of the species. Balance of Crown: Supply plants with max. variation in crown bulk on opposite sides of stem axis, +/- 20%. Stock selection should also be based on NATSPEC Guide *Specifying Trees: a Guide to Assessment of Tree Quality*.

STAKING

Install 2 x 2400mm x 50mm x 50mm hardwood timber stakes with hessian ties to all trees. Provide appropriate support considering exposure to prevailing winds. Stakes and hessian ties to be removed as soon as the tree is self supporting.

ALUMINIUM GARDEN EDGING

Supply and install Link Edge 75mm as per Landscape Plan with safety top and flush to ground. Compact and level the base in the required area as indicated on Landscape Plan. Half hammer spikes into pre-punched holes (approx 4 spikes every 3m length) starting from the first hole in the end of the Link Edge. Use spike washers supplied by manufacturer. Half hammer subsequent spikes in pivotal areas along the length. (Especially at points where a curve is required). Connect lengths together by using fish-plate connectors supplied by manufacturer. Check position of Link Edge is correct before hammering spikes firmly into ground.

MULCHING

All landscaping must comply with AS 4454-2003 Compost, soil conditioners and mulches. All planting areas to receive 50-75mm of garden Mulch, Droughtmaster, ANL p: 02 9450 1444 or approved alternative. Keep mulch 100mm away from plant stem & form a well to stop excessive water runoff. Finish flush with adjacent surfaces.

WATERING

Water in immediately after plant installation & allow for soil settlement. Watering program: Minimum 3 complete waterings, soaking to a depth of 150 mm at fortnightly intervals for the first 6 weeks of plant establishment irrespective of natural rainfall. Manually water all lawn and planting areas in absence of an irrigation system or until the proposed irrigation system is fully operational. Avoid frequent dampening of the surface. Allow the surface of the soil to partially dry out between waterings.

NOTES:
 - Contractors to check and verify all dimensions and all levels on site prior to any works.
 - Any discrepancies should be immediately referred to Space Landscape Designs.
 - All work to comply with B.C.A. Statutory Authorities and relevant Australian Standards.
 - Dimensions recognised over scaling. All measurements are in millimetres.

Rev.	Date	Issue
A	25/10/21	Preliminary Issue
B	09/12/21	DA Issue

Checked
CW
CW



Space Landscape Designs Pty Ltd
 ABN 62 799 663 674 ACN 139 316 251
 info@spacedesigns.com.au
 spacedesigns.com.au
 P 02 9905 7870 F 02 9905 7657
 Suite 138, 117 Old Pittwater Rd,
 Brookvale NSW 2100

PROJECT:
Proposed Carpark
 SITE ADDRESS:
Federal Parade, Brookvale 2100

CLIENT: St Augustine's College
 DRN: A.ElboZ (A/LDM 625)
 SCALE: 1:100@A2
 PROJECT NO: 211930

DRAWING TITLE: LANDSCAPE DETAILS & SPECIFICATION
 DRAWING NO: L-04
 Rev: B