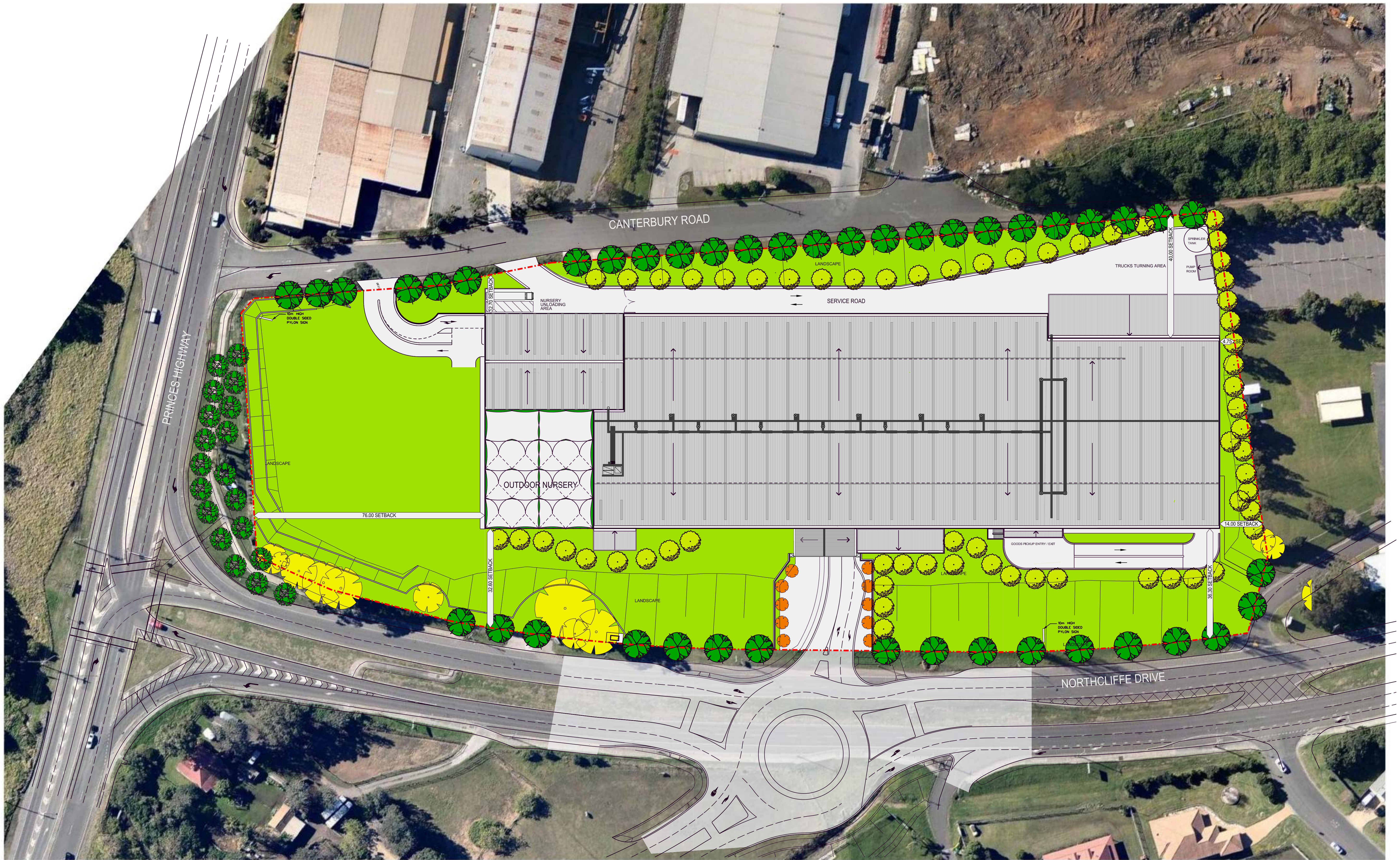
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PROJ. NO.
1352
DRG. NO.
010
AMD NO.
C

CAD REF: Microstation V8 SS2 PROPOSED BUNNINGS WAREHOUSE, KEMBLA GRANGE, N.S.W. 2526 - PLOTTED December 2017



DETAIL ROAD DESIGN UPDATE
TO HDD PTY LTD LAYOUT
DATED 22 NOV 17

DA ISSUE
NOT FOR CONSTRUCTION

NO.	AMENDMENT	DATE	NO.	AMENDMENT	DATE
A	DA ISSUE	08.03.18			
B	DA ISSUE - DRAFT	18.07.17			
C	DA ISSUE - INTERIM	10.08.17			
D	DA ISSUE	15.08.17			
E	ROAD DESIGN UPDATE	04.12.17			

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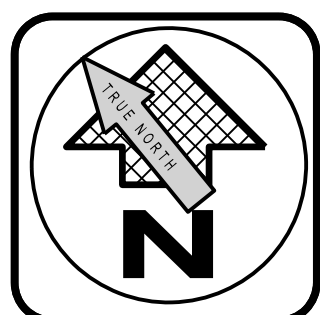




JOHN R. BROGAN & ASSOCIATES
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A.B.N. 93 003 284 759



PROPOSED BUNNINGS WAREHOUSE
KEMBLA GRANGE
CNR NORTHCLIFFE DR & PRINCES HWY
KEMBLA GRANGE NSW 2526

SITE PLAN

SCALE :
1:600

DATE :
OCT 13

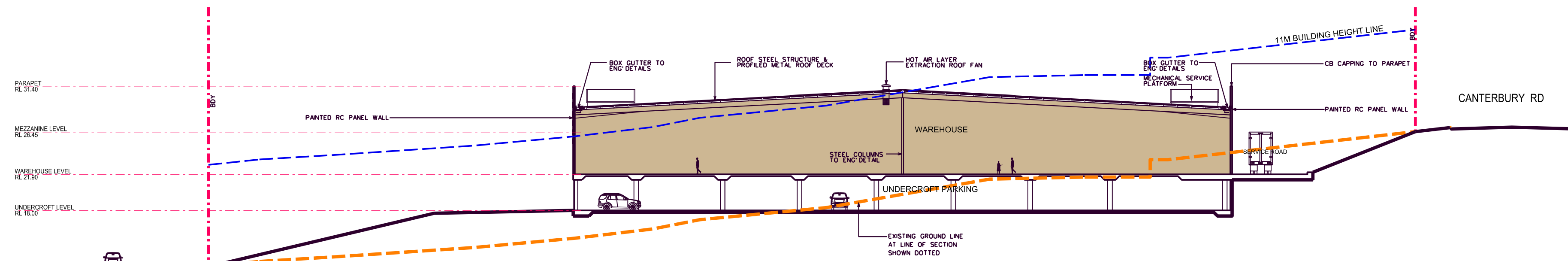
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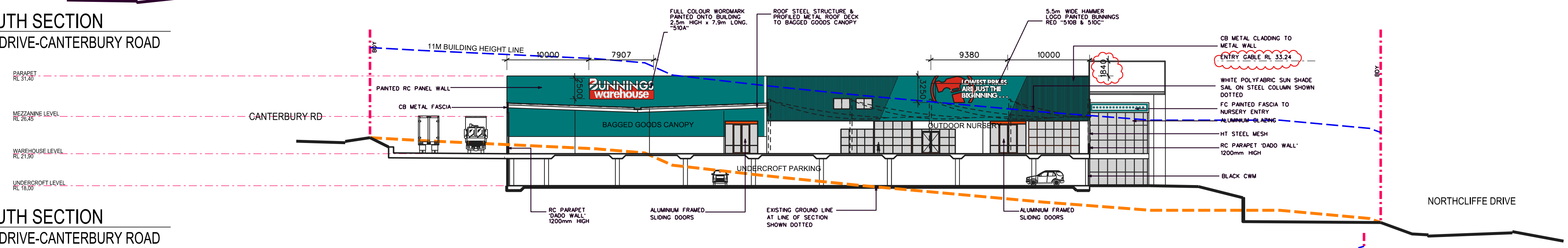
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CAD REF: Microstation V8i SS2 PROPOSED BUNNINGS WAREHOUSE, KEMBLA GRANGE, N.S.W. 2526 - PLOTTED December 2017

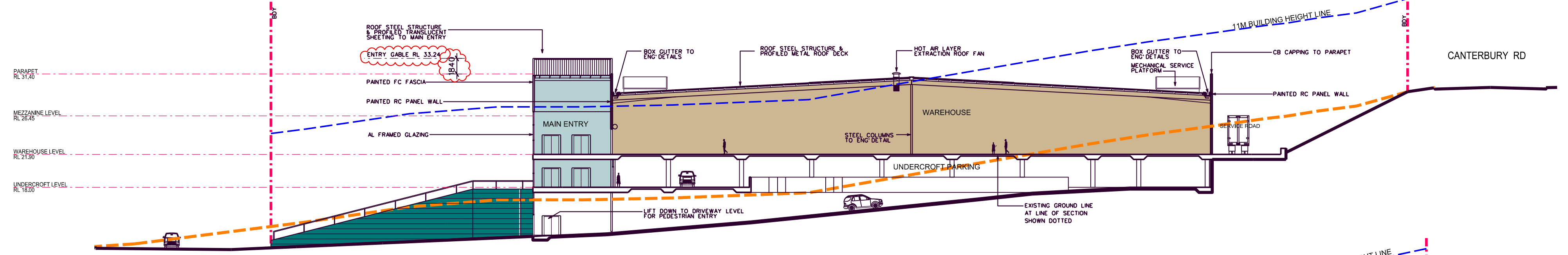
06 NORTH-SOUTH SECTION
030 NORTHCLIFFE DRIVE-CANTERBURY ROAD



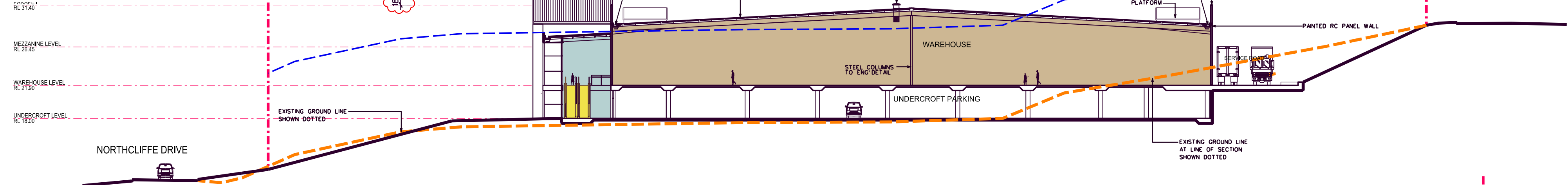
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030 NORTHCLIFFE DRIVE-CANTERBURY ROAD



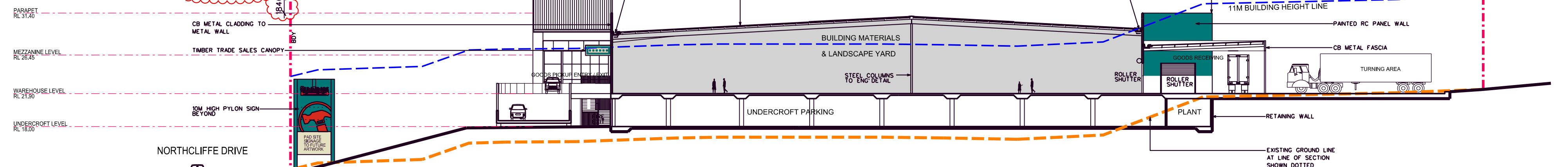
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030 NORTHCLIFFE DRIVE-CANTERBURY ROAD



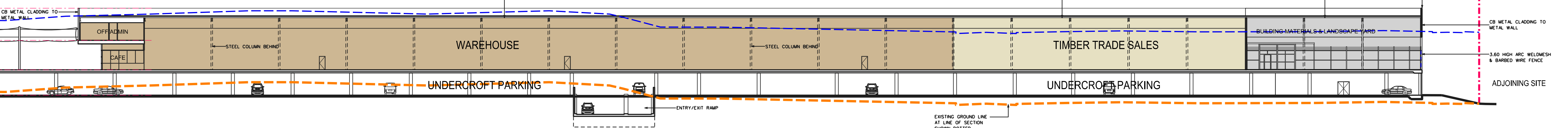
03 NORTH-SOUTH SECTION
030 NORTHCLIFFE DRIVE-CANTERBURY ROAD



02 NORTH-SOUTH SECTION
030 NORTHCLIFFE DRIVE-CANTERBURY ROAD



01 EAST-WEST SECTION
030 PRINCES HIGHWAY-ADJOINING PROPERTY



DA ISSUE
NOT FOR CONSTRUCTION

NO.	AMENDMENT	DATE	NO.	AMENDMENT	DATE
A	DA ISSUE	08.03.16			
B	DA ISSUE: INTERIM	18.07.17			
C	DA ISSUE	15.08.17			
D	MAIN ENTRY GABLE RL	04.12.17			

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PROPOSED BUNNINGS WAREHOUSE
KEMBLA GRANGE
CNR NORTHCLIFFE DR & PRINCES HWY
KEMBLA GRANGE NSW 2526
SCALE: 1:350
DATE: OCT 13
SECTIONS

PROJ. NO.
1352
DRG. NO.
120
AMD NO.
D

CAD REF: Microstation V8i SS2 PROPOSED BUNNINGS WAREHOUSE, KEMBLA GRANGE, N.S.W. 2526 - PLOTTED December 2017



01 FLOOR PLAN
MEZZANINE LEVEL

02 FLOOR PLAN
WAREHOUSE LEVEL

DETAIL ROAD DESIGN UPDATE
TO HDD PTY LTD LAYOUT
DATED 22 NOV 17

DA ISSUE
NOT FOR CONSTRUCTION

NO.	AMENDMENT	DATE	NO.	AMENDMENT	DATE
A	DA ISSUE	08.03.16			
B	DA ISSUE - INTERIM	18.07.17			
C	DA ISSUE	19.08.17			
D	ROAD DESIGN UPDATE	04.12.17			

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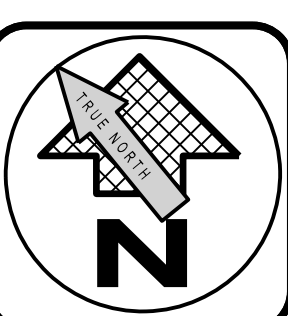
BUNNINGS
warehouse

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EST. 1927

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PROPOSED BUNNINGS WAREHOUSE
KEMBLA GRANGE
CNR NORTHCLIFFE DR & PRINCES HWY
KEMBLA GRANGE NSW 2526

FLOOR PLAN
WAREHOUSE LEVEL

SCALE :
1:350

DATE :
OCT 13

PROJ. NO.
1352

DRG. NO.
101

AMD. NO.
D

CANTERBURY ROAD



DETAIL ROAD DESIGN UPDATE
TO HDD PTY LTD LAYOUT
DATED 22 NOV 17

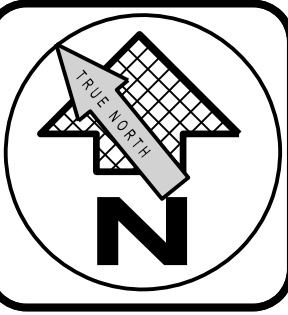
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OCT 13
NOT FOR CONSTRUCTION

NO.	AMENDMENT	DATE	NO.	AMENDMENT	DATE
A	0A ISSUE	08.03.16			
B	0A ISSUE INTERIM	18.07.17			
C	0A ISSUE	19.08.17			
D	ROAD DESIGN UPDATE	04.12.17			

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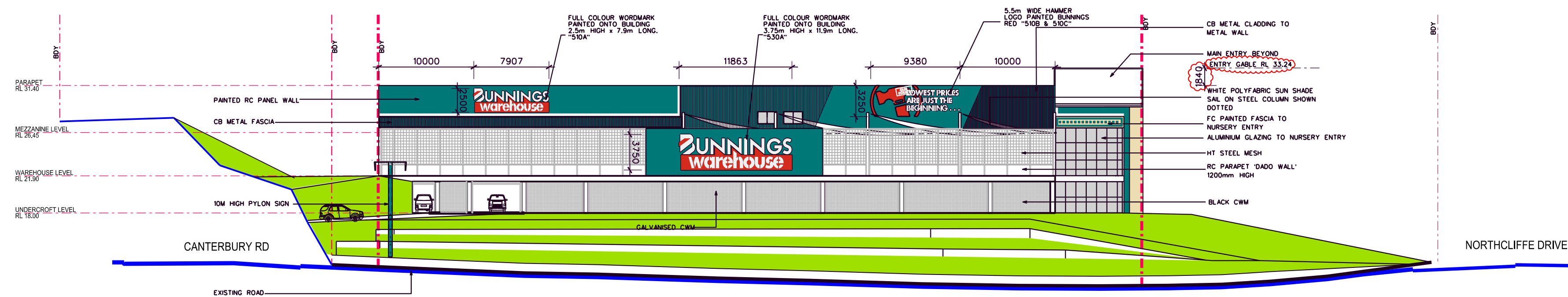


PROPOSED BUNNINGS WAREHOUSE
KEMBLA GRANGE
CNR NORTHCLIFFE DR & PRINCES HWY
KEMBLA GRANGE NSW 2526

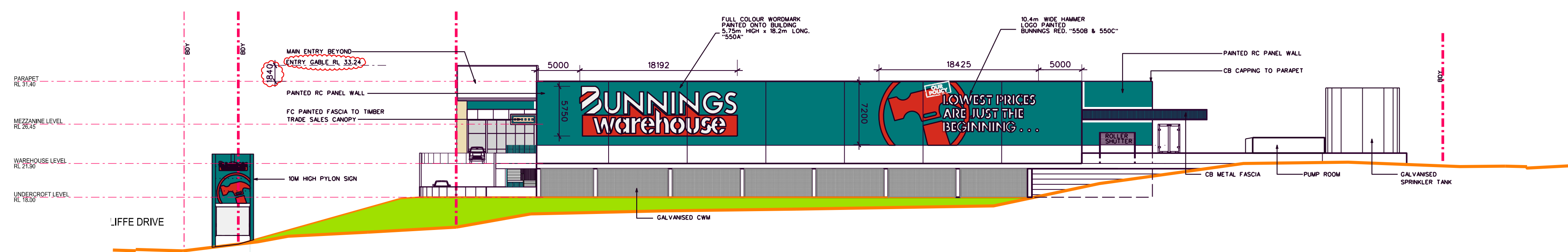
FLOOR PLAN
UNDERCROFT PARKING LEVEL

SCALE :
1:350
DATE :
OCT 13
PROJ. NO.
1352
DRG. NO.
100
AMD NO.
D

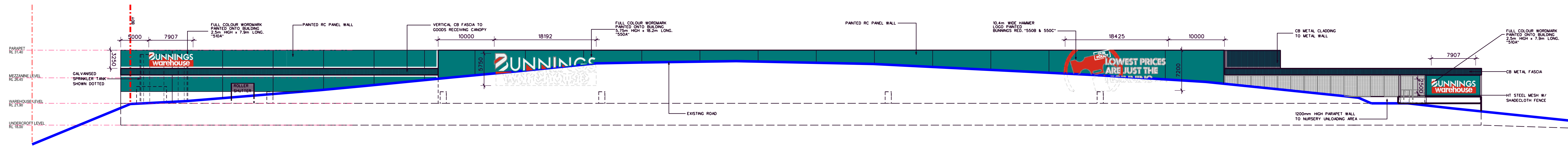
CAD REF: Microstation V8i SS2 PROPOSED BUNNINGS WAREHOUSE, KEMBLA GRANGE, N.S.W. 2526 - PLOTTED December 2017



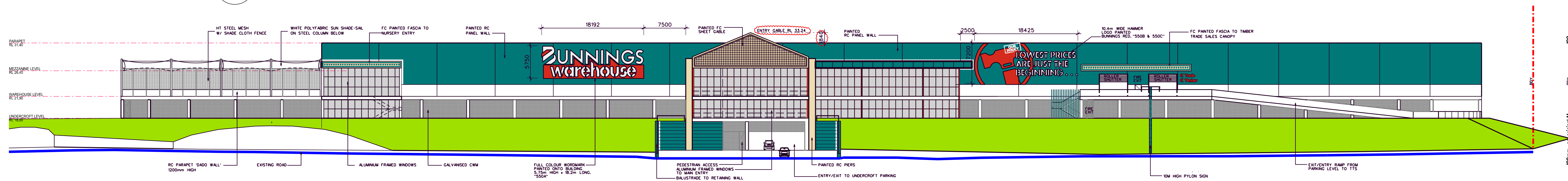
04 WEST ELEVATION
030 PRINCES HIGHWAY



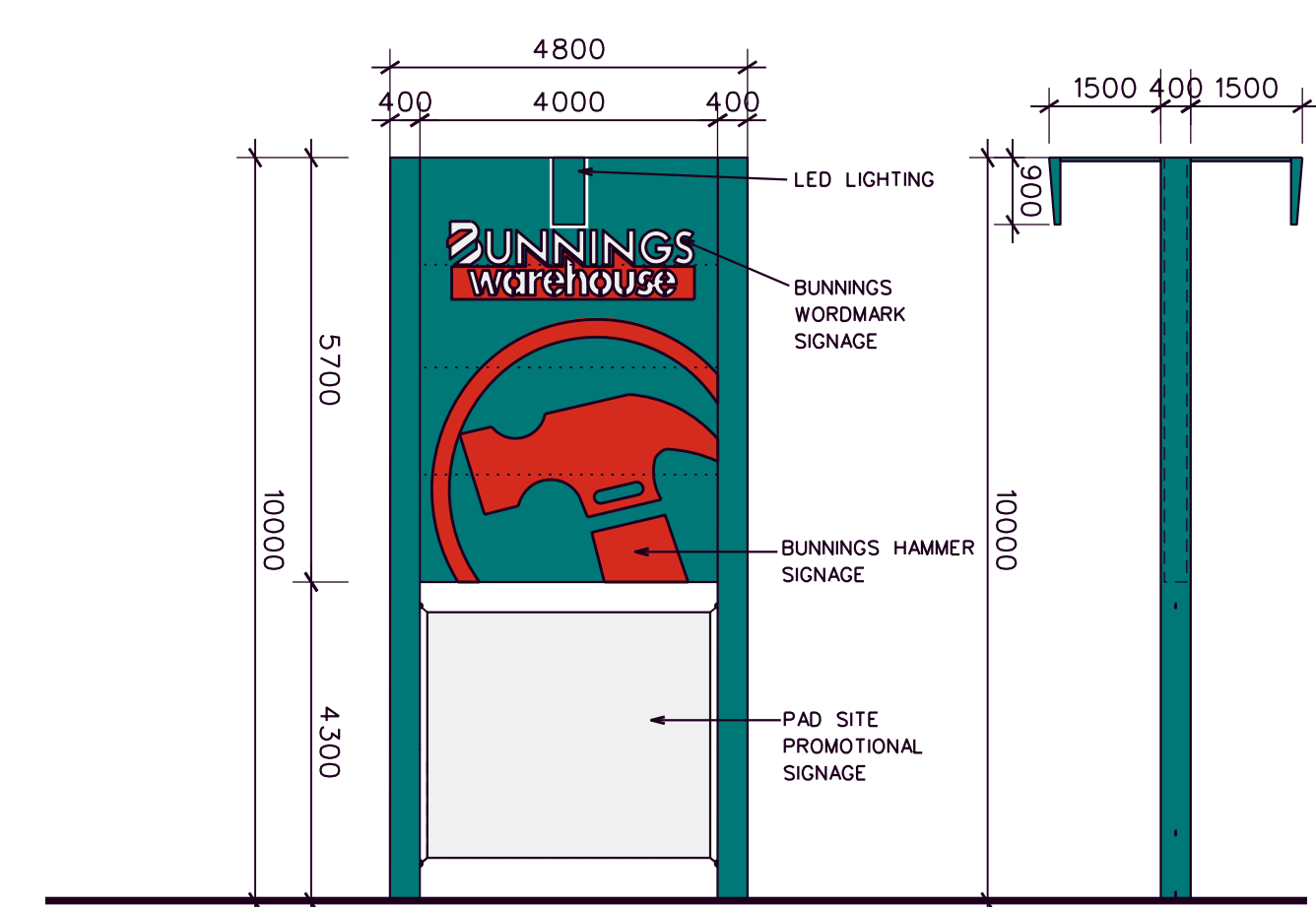
03 EAST ELEVATION
030 ADJOINING PROPERTY



02 NORTH ELEVATION
030 CANTERBURY ROAD



01 SOUTH ELEVATION
030 NORTHCLIFFE DRIVE



05 PYLON SIGN
030 FRONT ELEVATION

06 PYLON SIGN
030 SIDE ELEVATION

DA ISSUE
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CLIENT

BUNNINGS
warehouse

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EST - 1927
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PROPOSED BUNNINGS WAREHOUSE
KEMBLA GRANGE
CNR NORTHCLIFFE DR & PRINCES HWY
KEMBLA GRANGE NSW 2526

ELEVATIONS

SCALE : 1:350
DATE : OCT 13

PROJ. NO. 1352
DRG. NO. 130
AMD NO. D



VIEW 1 FROM PHARLAP AVE LOOKING WEST TOWARDS MAIN ENTRY



VIEW 02 FROM NORTHCLIFFE DR LOOKING WEST TOWARDS MOTORWAY

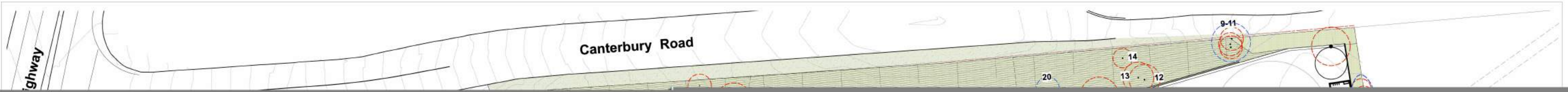
ZUNNINGS
warehouse



JOHN H. BROGAN & ASSOCIATES



PROJ. NO.
1352
DRG. NO.
200
AMD NO.
C



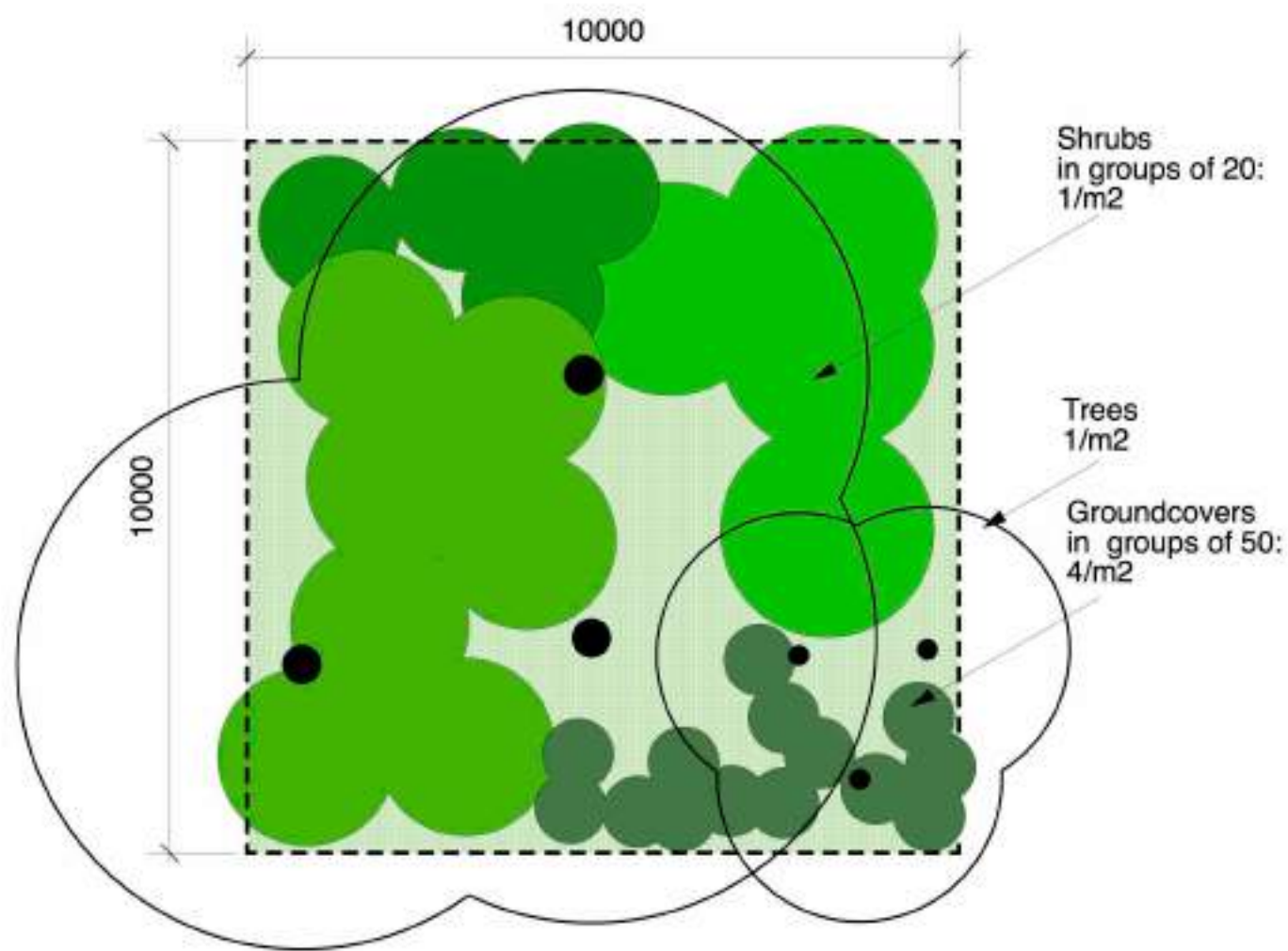


4 WEST ELEVATION Princes Highway
1:250

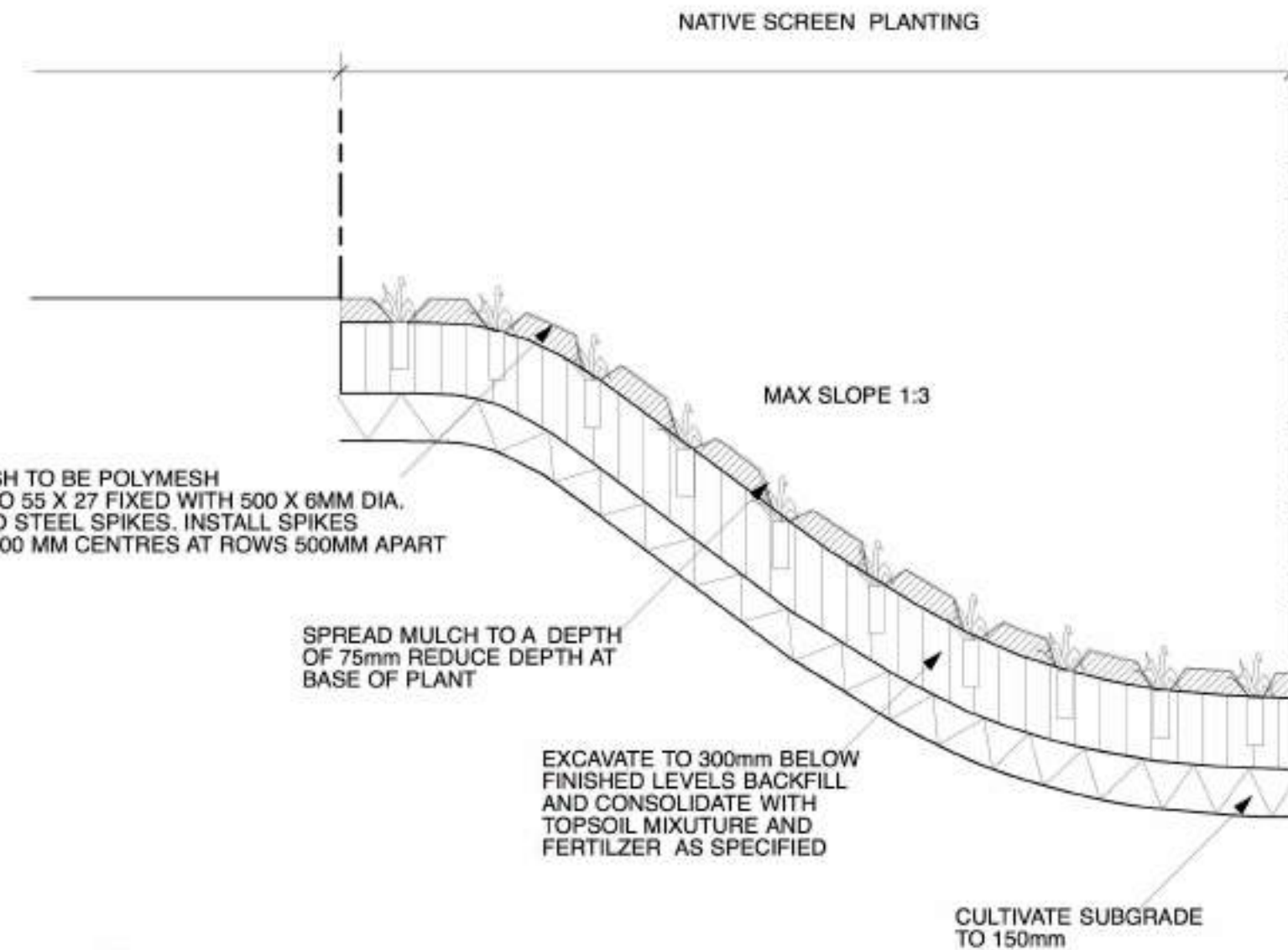


3 EAST ELEVATION - Adjoining Property
1:250

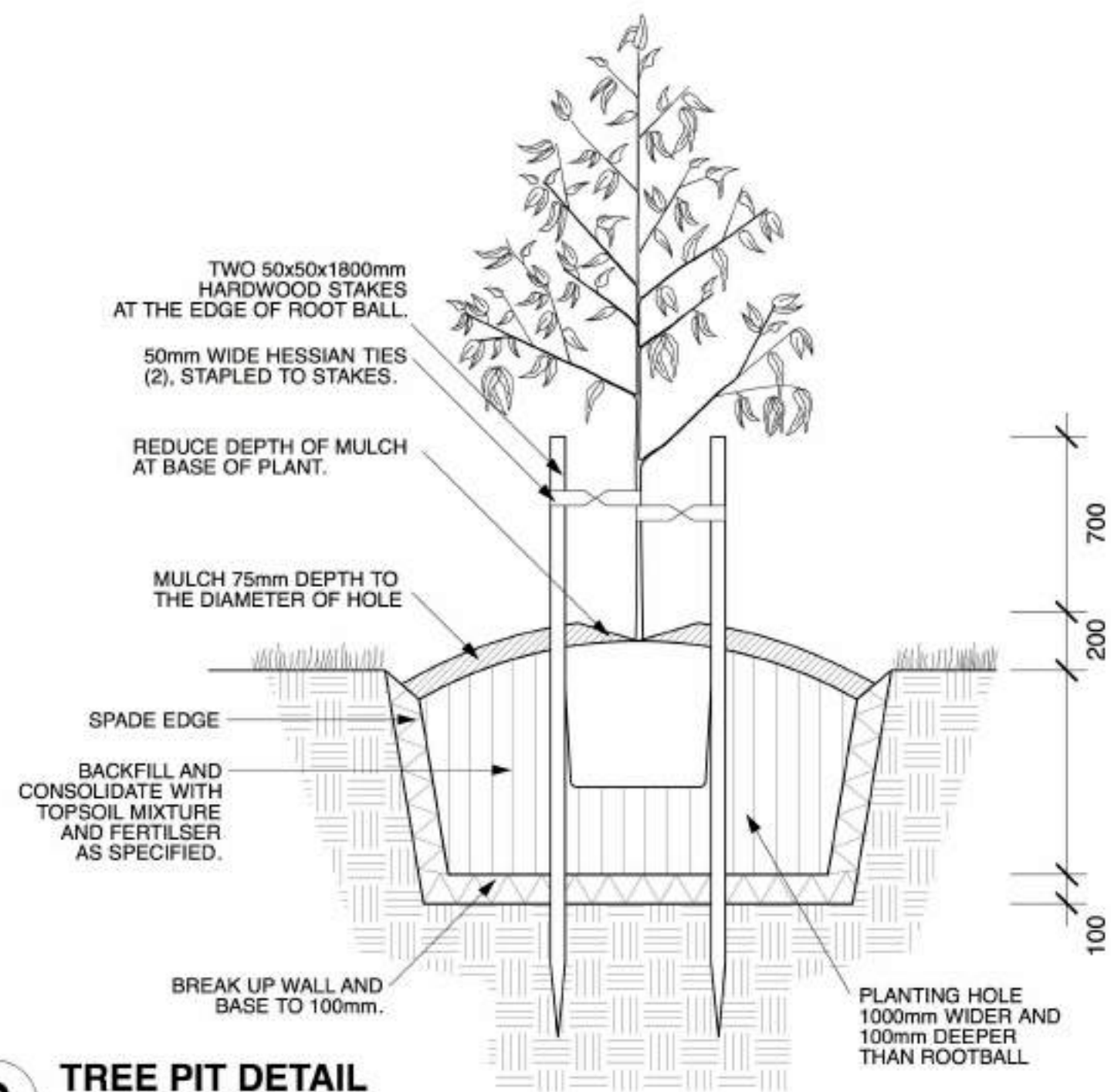




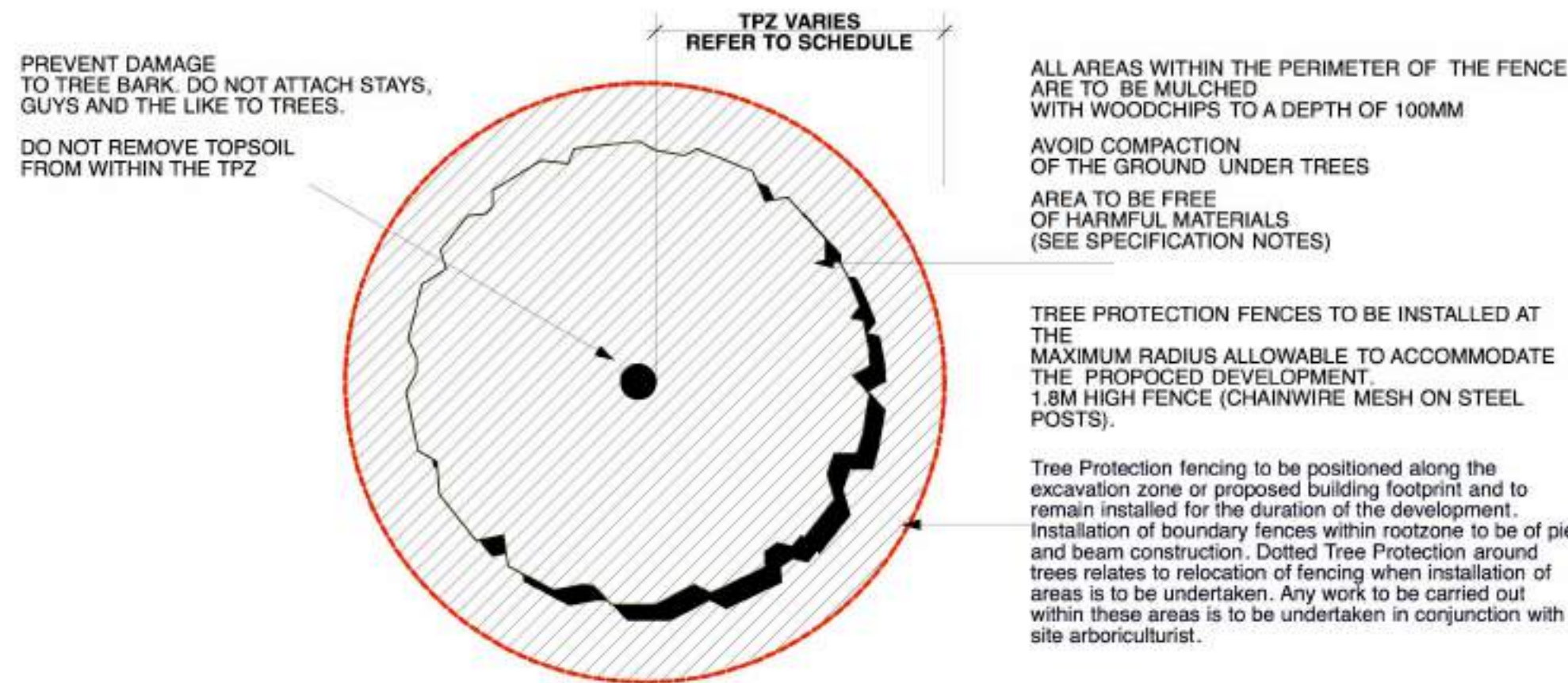
A PLANTING MATRIX - MASSED NATIVE SHRUBS + GRASSES DETAIL
1:100@A1



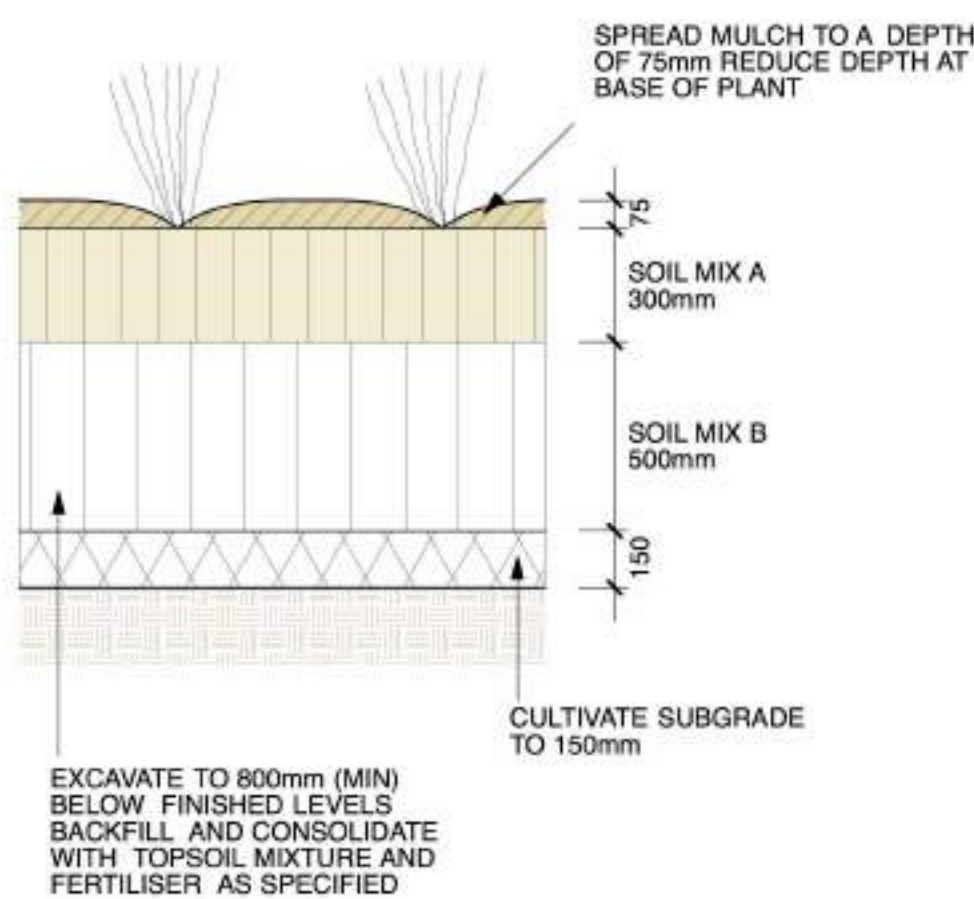
B BANK TREATMENT + MASS PLANTING
1:20@A1



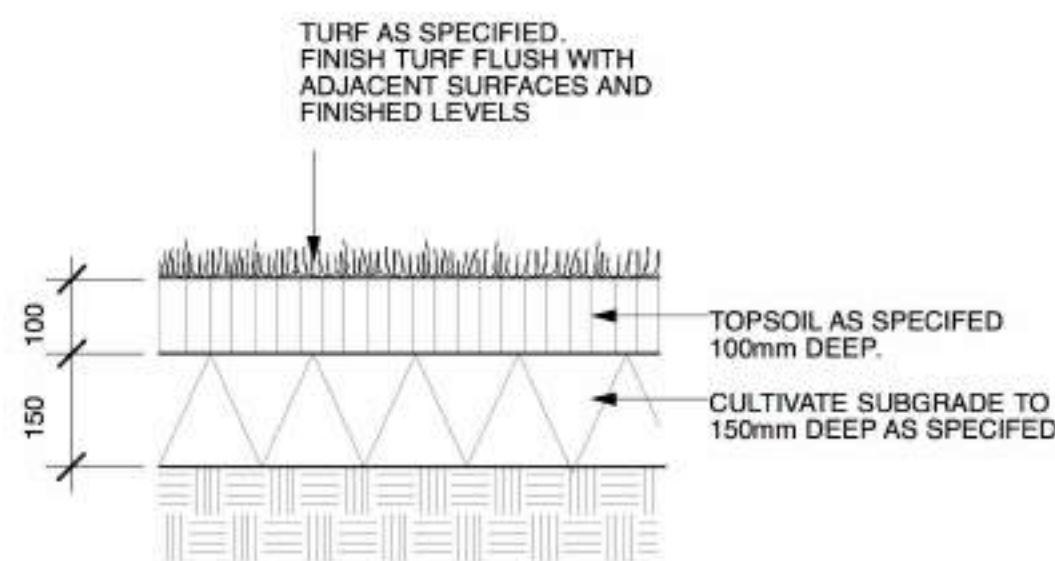
C TREE PIT DETAIL
1:20@A1



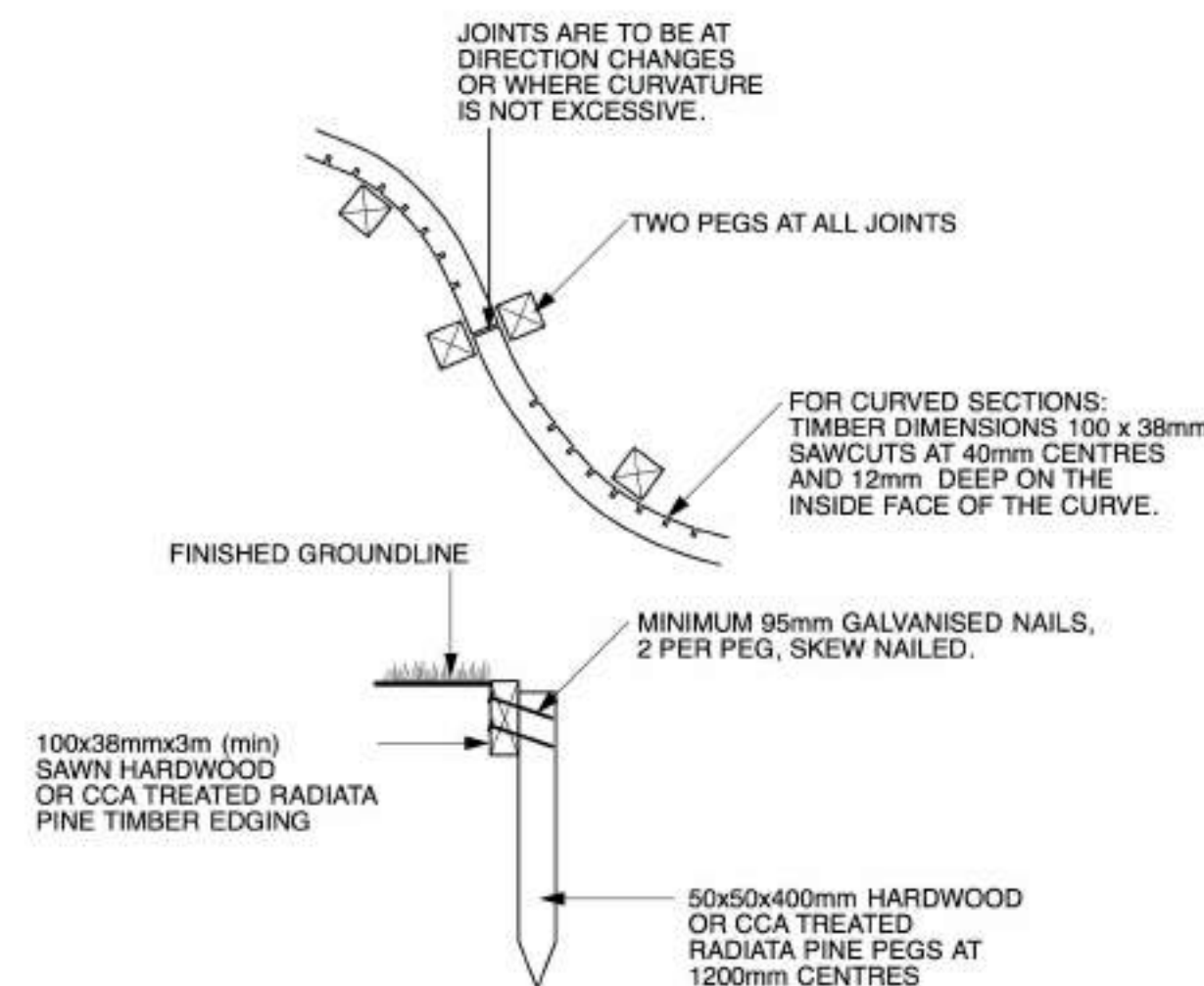
1 TREE PROTECTION DETAIL
1:50@A1



D MASS PLANTING DETAIL
1:20@A1



E TURF DETAIL
1:10@A1



F TIMBER EDGE DETAIL
1:10@A1

SPECIFICATION NOTES

zSITE PREPARATION / SOIL WORKS
ALL EXISTING TREES MARKED FOR RETENTION SHALL BE PROTECTED FOR THE DURATION OF THE BUILDING WORKS. REMOVE FROM SITE ALL PERENNIAL WEEDS SUCH AS OXALIS, ONION WEED AND THE LIKE.
NO REGRADING IS TO BE CARRIED OUT WITHIN THE DRIP LINE OF THE TREES TO BE RETAINED. WHERE EXCAVATION IS NECESSARY USE HAND METHODS TO AVOID DAMAGE TO THE ROOT SYSTEM. DO NOT CUT ROOTS GREATER THAN 50MM. CUT ROOTS CLEANLY WITH A SAW AND DO NOT SEAL THE WOUND.

TREE PROTECTION
PROTECT ALL EXISTING TREES AS NOTED ON THE DRAWINGS FOR THE DURING OF THE BUILDING WORKS.

TAKE ALL NECESSARY PRECAUTIONS, INCLUDING THE FOLLOWING:

Tree Protection fence:
INSTALL A TREE PROTECTION FENCES AT THE MAXIMUM RADIUS ALLOWABLE TO ACCOMMODATE THE PROPOSED DEVELOPMENT. MAINTAIN THE FENCE FOR THE DURATION OF THE BUILDING WORKS.

CONSTRUCT THE FENCE 1.8 M HIGH WITH CHAINWIRE MESH ON STEEL POSTS. ALL AREAS WITHIN THE PERIMETER OF THE FENCE ARE TO BE COVERED TO A DEPTH OF 100MM WITH WOODCHIP MULCH.

Temporary Irrigation:
INSTALL A TEMPORARY IRRIGATION SYSTEM TO ALL TREES TO BE RETAINED. INSTALL DRIP EMITTERS ON POLY LATERALS. THE IRRIGATION SYSTEM IS TO BE CONTROLLED BY A GALCON OR SIMILAR AUTOMATIC CONTROLLER.

Harmful materials:
DO NOT STORE, STOCKPILE, DUMP OR OTHERWISE REPLACE UNDER OR NEAR TREES, BULK MATERIALS AND HARMFUL MATERIALS INCLUDING OIL, PAINT, WASTE CONCRETE, CLEARINGS, BOLDERS AND THE LIKE. DO NOT PLACE SPILL FROM EXCAVATIONS AGAINST TREE TRUNKS, EVEN FOR SHORT PERIODS. PREVENT WIND-BLOWN MATERIALS SUCH AS CEMENT FROM HARMING TREES AND PLANTS.

Damage:
PREVENT DAMAGE TO TREE BARK. DO NOT ATTACH STAYS, GUYS AND THE LIKE TO TREES.

Work under trees:
DO NOT REMOVE TOPSOIL FROM WITHIN THE DRIP LINE OF TREES UNLESS OTHERWISE SPECIFIED. IF IT IS NECESSARY TO EXCAVATE WITHIN THE DRIP LINE, USE HAND METHODS SUCH THAT ROOT SYSTEMS ARE PRESERVED INTACT AND UNDAMAGED.

Roots:
DO NOT CUT TREE ROOTS EXCEEDING 50 MM DIAMETER UNLESS PERMITTED BY THE SUPERINTENDENT. WHERE IT IS NECESSARY TO CUT TREE ROOTS, USE A CHAIN SAW OR SIMILAR MEANS SUCH THAT THE CUTTING DOES NOT UNDULY DISTURB OR ROCK THE REMAINING ROOT SYSTEM. IMMEDIATELY AFTER CUTTING, APPLY AN APPROVED BITUMINOUS FUNGICIDAL SEALANT TO THE CUT SURFACE TO PREVENT THE INCURSION OF ROT OR DISEASE.

Compacted Ground:
AVOID COMPACTION OF THE GROUND UNDER TREES. IF THE GROUND UNDER TREES HAS BEEN UNDULY COMPACTED DURING THE WORK UNDER THE CONTRACT, FOR EXAMPLE BY THE OPERATION OF HEAVY CONSTRUCTIONAL PLANT, LOOSEN THE SOIL BY CORING.

SOIL WORKS
THOROUGHLY CULTIVATE THE SUBSOIL TO A DEPTH OF 150MM. SUPPLY AND INSTALL TO A DEPTH OF 300 MM THE FOLLOWING SOIL MIX:

SOIL DEPTH	150MM
TURF	300MM
SOIL MIX	
BLACK LOAM	60%
COARSE WASHED RIVER SAND	40%

ORGANIC LAYER 50 MM DEEP
CULTIVATE A 50MM LAYER OF ORGANIC ADDMIX INTO THE TOP 100MM OF SOIL MIX

Addmix composition	
TREATED HARDWOOD SAWDUST	30%
PINE PARK FINES	40%
COMPOSTED MANURE	30%

TREE PLANTING AREAS TO BE MOUND 300 MM ABOVE THE EXISTING GROUND LINE TO IMPROVE DRAINAGE FROM PLANTING HOLES. TREE HOLES TO BE EXCAVATED 2 TIMES LARGER THAN THE ROOTBALL AND BACKFILLED WITH SOIL MIX AS SPECIFIED ABOVE.

MULCH
SUPPLY AND PLACE 75 MM LAYER OF HARDWOOD HORTICULTURAL GRADE MULCH, (GRADED IN SIZE 15 MM X 15 MM X 15 MM, FREE FROM WOOD SLIVERS). SET DOWN 25MM FROM ADJACENT PAVING.

TURFED AREAS
APPLY SHIRLEY'S NO17 LAWN FERTILISER TO SOIL, APPLIED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. TURF SHALL BE:

o Green Leas Park Couch WITH AN EVEN THICKNESS OF 30MM.

DO NOT LET TURF DRY OUT. LIGHTLY TOP DRESS TURF 6 WEEKS AFTER LAYING WITH 10MM IMPORTED TOPSOIL THATCH TO BE LAID WITH STAGGERED JOINTS. FLUSH WITH PATHWAY LEVELS.

TIMBER EDGE
ALL MASS PLANTED AREAS WHERE THEY ABUT GRASSED AREAS SHALL HAVE A TREATED TIMBER EDGE. 100 X 38 MM NOMINAL EDGING. 50 MM HW STAKES. SET EDGING FLUSH WITH ADJOINING SURFACES AS SHOWN ON THE DRAWINGS TO DEFINE PLANTING AND OR GRASSED AREAS. EDGING WITH GALVANISED NAILS. TWO PER STAKE. DRIVE STAKES 400 MM INTO GROUND AT 1200 MM CENTRES ON THE PLANTING SIDE OF THE EDGING WITH THE TOP FLUSH WITH THE EDGING.

PLANT MATERIALS
ALL PLANTS SHALL BE TRUE TO TYPE, OF HEALTHY GROWTH DISEASE FREE NURSERY STOCK AND NOT DISPLAYING RESTRICTED GROWTH PATTERNS. SHOULD THERE BE A REQUIREMENT FOR SUBSTITUTIONS THEY SHALL NOT CHANGED WITHOUT PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT. NO VARIATED STRAIN SHALL BE USED. ALLOW FOR SLOW RELEASE FERTILISER TO ALL PLANTS APPLIED AT THE MANUFACTURERS RECOMMENDED RATE TO BE SAME OR SIMILAR TO OSMOCOTE.

FERTILIZER:
MASS PLANTED AREAS : ALLOW 2 SHIRLEYS SLOW RELEASE KOKEI PELLETS PER 5 - 35 LITRE PLANT AND ONE PER 150MM PLANT TURF AREAS : ALLOW SHELLEYS NO.17 LAWN FERTILIZER OR EQUIVALENT, APPLIED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.

STAKES AND TIES
DURABLE HARDWOOD, STRAIGHT, SIZE SHALL BE 50X50X1800 WITH TIES SPACED APPROXIMATELY 300MM APART. DRIVE STAKES 600MM INTO THE GROUND ON THE WINDWARD SIDE OF THE PLANT. TIES SHALL BE 50MM HESSIAN WEBBING FIXED IN A FIGURE OF EIGHT PATTERN.

PLANT ESTABLISHMENT PERIOD
FROM THE DATE OF PRACTICAL COMPLETION, THERE SHALL BE A PERIOD OF 52 WEEKS FOR THE PLANTING ESTABLISHMENT PERIOD. ANY FAILED PLANTS SHALL BE REPLACED WITH THE SAME TYPE AND SPECIES, THE MULCHED SURFACES SHALL BE MAINTAINED IN A NEAT AND TIDY CONDITION. STAKES AND TIES SHALL BE ADJUSTED AS REQUIRED AND THE TURF SHALL BE REGULARLY MOWED TO MAINTAIN A HEALTHY GROUND COVER. A CONSTANT WATER REGIME SHALL BE MAINTAINED TO ENSURE HEALTHY GROWTH OF ALL PLANT MATERIAL.

IRRIGATION
ALL PLANTING AREAS TO BE SUPPLIED WITH A FULLY AUTOMATIC DRIP IRRIGATION SYSTEM EQUIPPED WITH A TIMER. THE IRRIGATION SYSTEM SHALL MEET ALL THE REQUIREMENTS OF THE WATER AND ELECTRICITY SUPPLY AUTHORITY AND RELEVANT AUSTRALIAN STANDARDS. PROVIDE RICHDEL OR SIMILAR APPROVED CONTROLLER. CONNECTION TO SYDNEY WATER MAINS TO BE THROUGH AN APPROVED REDUCED PRESSURE ZONE DEVICE INSTALLED TO WATER REGULATIONS.

BANK STABILIZATION - Geoweb

MANUFACTURER: GEOFABRICS AUSTRALASIA PTY LTD

PH 02 9821 3277

STANDARD PANEL SIZE: 2.95M X 6.1M

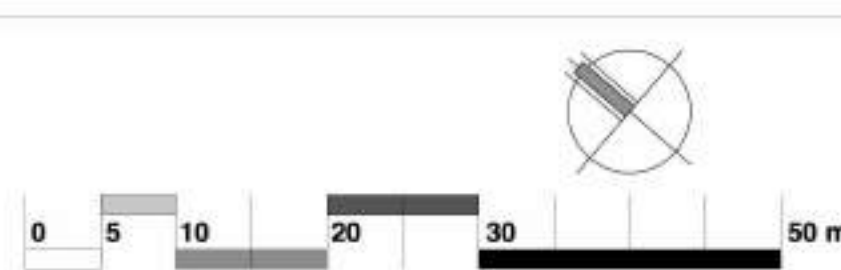
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F	DA ISSUE	26/07/2017	client:
E	DA ISSUE	10/03/2016	
D	COORDINATION ISSUE	26/02/2016	
C	COORDINATION ISSUE	16/02/2016	
B	COORDINATION ISSUE	11/02/2016	
A	PRELIMINARY ISSUE	28/01/2016	
rev	description	date	



architect:
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37 Pitt Street, Sydney NSW 2000
p: 9221 2833 e: jrb@brogans.com.au

landscape architect:
JOHN LOCK & associates
LANDSCAPE ARCHITECTURE
jla
Suite 3, 5 Earl Street, Mosman NSW 2088
p: 02 9669 9866 e: landesign@bigpond.com

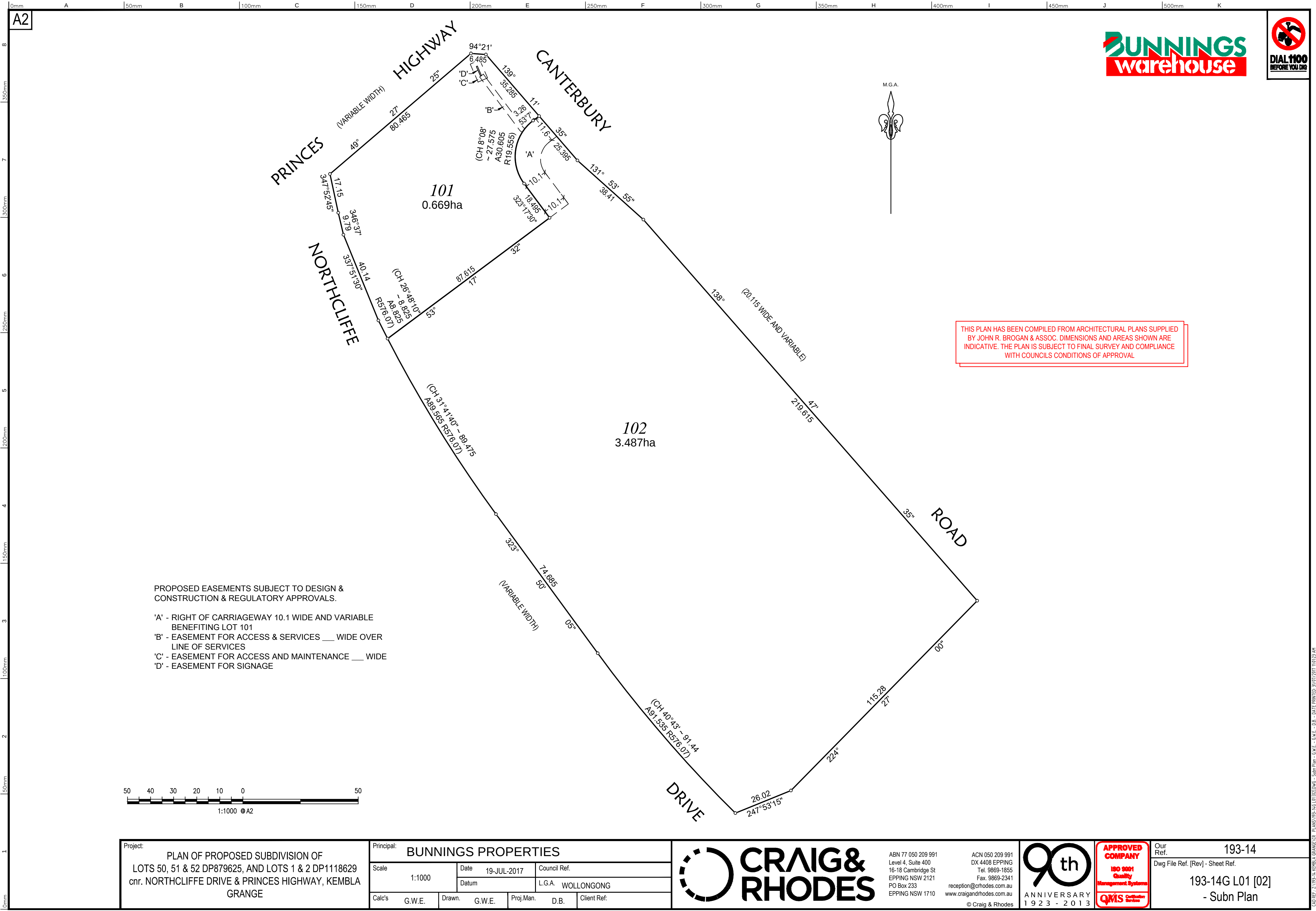


project:
Proposed Bunnings Warehouse Kembla Grange
Corner Northcliffe Drive & Princes Highway Kembla Grange NSW 2526

LANDSCAPE DETAILS

scale :
1:500 @ A1
1:1000 @ A3
date :
27/01/2016

drawing # :
2301 LP - 03



PROPOSED EASEMENTS SUBJECT TO DESIGN & CONSTRUCTION & REGULATORY APPROVALS.

- 'A' - RIGHT OF CARRIAGEWAY 10.1 WIDE AND VARIABLE BENEFITING LOT 101
- 'B' - EASEMENT FOR ACCESS & SERVICES ___ WIDE OVER LINE OF SERVICES
- 'C' - EASEMENT FOR ACCESS AND MAINTENANCE ___ WIDE
- 'D' - EASEMENT FOR SIGNAGE



THIS PLAN HAS BEEN COMPILED FROM ARCHITECTURAL PLANS SUPPLIED BY JOHN R. BROGAN & ASSOC. DIMENSIONS AND AREAS SHOWN ARE INDICATIVE. THE PLAN IS SUBJECT TO FINAL SURVEY AND COMPLIANCE WITH COUNCILS CONDITIONS OF APPROVAL

Project: PLAN OF PROPOSED SUBDIVISION OF LOTS 50, 51 & 52 DP879625, AND LOTS 1 & 2 DP1118629 cnr. NORTHCLIFFE DRIVE & PRINCES HIGHWAY, KEMBLA GRANGE	Principal: BUNNINGS PROPERTIES						CRAIG & RHODES ABN 77 050 209 991 Level 4, Suite 400 16-18 Cambridge St EPPING NSW 2121 PO Box 233 EPPING NSW 1710 ACN 050 209 991 DX 4408 EPPING Tel. 9869-1855 Fax. 9869-2341 reception@crrhodes.com.au www.craigandrhodes.com.au © Craig & Rhodes	 ANNIVERSARY 1923 - 2013	 APPROVED COMPANY ISO 9001 Quality Management Systems QMS	Our Ref. 193-14
	Scale 1:1000	Date 19-JUL-2017	Council Ref.		Dwg File Ref. [Rev] - Sheet Ref.					
	Calc's G.W.E.	Drawn. G.W.E.	Proj.Man. D.B.	Client Ref.	193-14G L01 [02]					
					- Subn Plan					

C:\P\193-14 KEMBLA GRANGE\CO_PLANS\193-14G L01 [02].DWG - Subn Plan - G.W.E. - G.W.E. - G.W.E. - G.W.E. - DATE PRINTED 31/07/2017 11:13:21 AM

DETAIL SURVEY OVER LOTS 50-52 D.P. 879625
& LOTS 1 & 2 D.P. 1118629

NORTHCLIFFE DRIVE & PRINCES HIGHWAY,
KEMBLA GRANGE

LEGEND

▲ BM	BENCHMARK
RL	REDUCED LEVEL
AHD	AUSTRALIAN HEIGHT DATUM
DH&W	DRILL HOLE & WING
● PP	POWER POLE
⚡ PLP	POWER POLE / LIGHT POLE
⚡ LP	LIGHT POLE
SS ✓	STREET SIGN
TL •	TRAFFIC LIGHT
SV •	STOP VALVE
H •	HYDRANT
SWP	STORMWATER PIT
MH	MAINTENANCE HOLE
GP	GULLY PIT
SIE •	SEWER INSPECTION EYE
TC	TELSTRA PIT
—	GATE
FH	FIRE HYDRANT
—	OVERHEAD POWER LINES
— W	APPROXIMATE LOCATION OF UNDERGROUND WATER MAINS VIDE DBYD
— G	APPROXIMATE LOCATION OF UNDERGROUND GAS MAINS VIDE DBYD
— C	APPROXIMATE LOCATION OF UNDERGROUND COMMUNICATIONS CABLES VIDE DBYD
— OC	APPROXIMATE LOCATION OF UNDERGROUND OPTUS CABLES VIDE DBYD

Survey Notes:-

Location of structures approximate only.

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As part of your duty of care, please contact the following where necessary :-

Ausgrid	Ph. 131535
Dial Before You Dig	Ph. 1100
Endeavour Energy	Ph. 131081
Jemena Gas Company	Ph. 131245
NBN	Ph. 1800 881 816
Optus Communications	Ph. 1800 505 777
Sydney Water	Ph. 132092
Telstra Corporation	Ph. 132203

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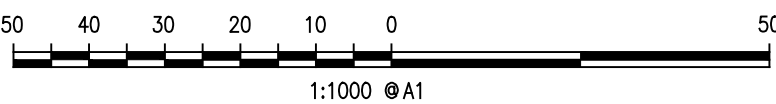
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Project:

DETAIL SURVEY OVER LOTS 50-52 D.P. 879625
& LOTS 1 & 2 D.P. 1118629
NORTHCLIFFE DRIVE & PRINCES HIGHWAY,
KEMBLA GRANGE

Principal:

BUNNINGS GROUP LIMITED

Scale	1:1000	Date	3/11/2014	Council Ref.	
Datum	A.H.D.	L.G.A.	WOLLONGONG		
Calc's	L.H.	Drawn	R.N.	Proj Man.	D.B.
				Client Ref.	



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www.craigandrhodes.com.au



Our

Ref.

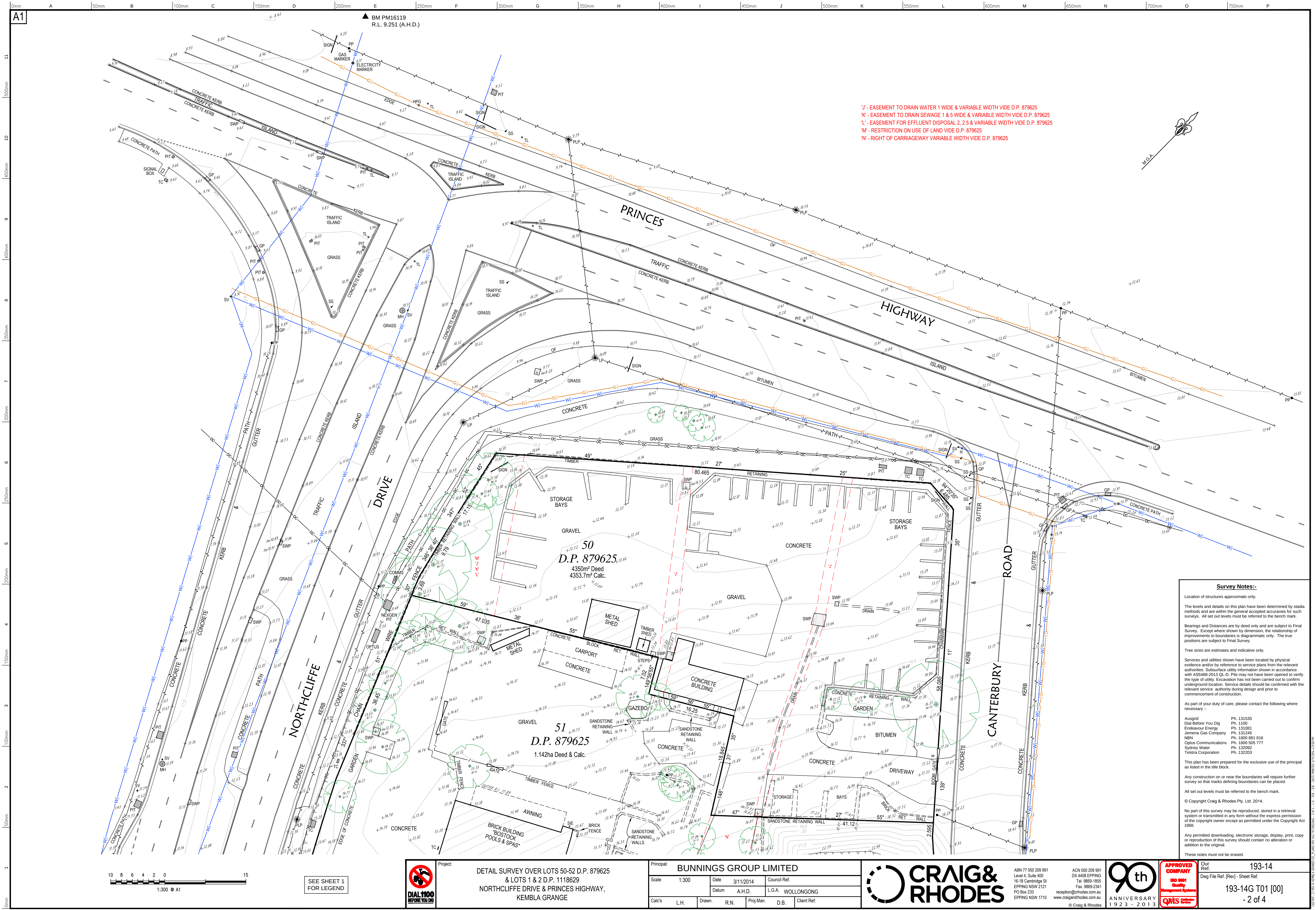
Dwg File Ref. (Rev) - Sheet Ref.

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- 1 of 4

ORIGIN OF LEVELS: P.M. 16119 R.L. 9.251 (A.H.D.) VIDE SCIMS DATED 13-10-2014



'J' - EASEMENT TO DRAIN WATER 1 WIDE & VARIABLE WIDTH VIDE D.P. 879625
'K' - EASEMENT TO DRAIN SEWAGE 1 & 5 WIDE & VARIABLE WIDTH VIDE D.P. 879625
'L' - EASEMENT FOR EFFLUENT DISPOSAL 2.25 & VARIABLE WIDTH VIDE D.P. 879625
'M' - RESTRICTION ON USE OF LAND VIDE D.P. 879625
'N' - RIGHT OF CARRIAGEWAY VARIABLE WIDTH VIDE D.P. 879625

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As part of your duty of care, please contact the following where necessary:-

Ausgrid	Ph. 131555
Dial Before You Dig	Ph. 1100
Endeavour Energy	Ph. 131081
Jemena Gas Company	Ph. 131245
NBN	Ph. 1800 881 816
Optus Communications	Ph. 1800 505 777
Sydney Water	Ph. 132092
Telstra Corporation	Ph. 132003

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Project: **DETAIL SURVEY OVER LOTS 50-52 D.P. 879625 & LOTS 1 & 2 D.P. 1118629 NORTHCLIFFE DRIVE & PRINCES HIGHWAY, KEMBLA GRANGE**

Principal: BUNNINGS GROUP LIMITED					
Scale	1:300	Date	3/11/2014	Council Ref.	
Datum	A.H.D.	L.G.A.	WOLLONGONG		
Calc's	L.H.	Drawn	R.N.	Proj Man.	D.B.
				Client Ref.	

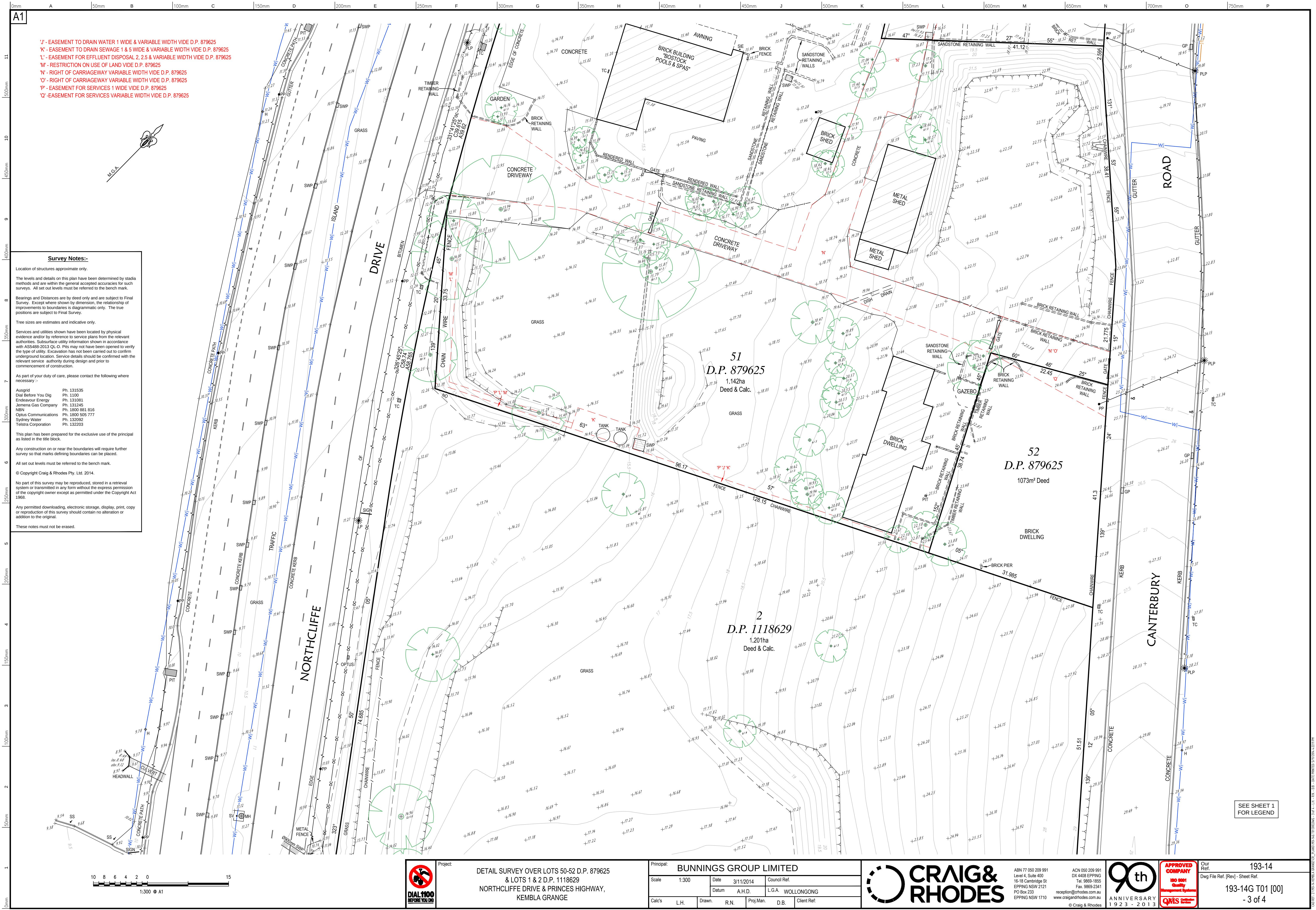


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Dwg File Ref. (Rev.) Sheet Ref.
193-14G T01 [00]
- 2 of 4



- 'J' - EASEMENT TO DRAIN WATER 1 WIDE & VARIABLE WIDTH VIDE D.P. 879625
- 'K' - EASEMENT TO DRAIN SEWAGE 1 & 5 WIDE & VARIABLE WIDTH VIDE D.P. 879625
- 'L' - EASEMENT FOR EFFLUENT DISPOSAL 2.25 & VARIABLE WIDTH VIDE D.P. 879625
- 'M' - RESTRICTION ON USE OF LAND VIDE D.P. 879625
- 'N' - RIGHT OF CARRIAGEWAY VARIABLE WIDTH VIDE D.P. 879625
- 'O' - RIGHT OF CARRIAGEWAY VARIABLE WIDTH VIDE D.P. 879625
- 'P' - EASEMENT FOR SERVICES 1 WIDE VIDE D.P. 879625
- 'Q' - EASEMENT FOR SERVICES VARIABLE WIDTH VIDE D.P. 879625

Survey Notes:-

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Augrid	Ph. 131535
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Endeavour Energy	Ph. 131081
Jemena Gas Company	Ph. 131245
NBN	Ph. 1800 881 816
Optus Communications	Ph. 1800 505 777
Sydney Water	Ph. 132092
Telstra Corporation	Ph. 132003

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Project:

DETAIL SURVEY OVER LOTS 50-52 D.P. 879625
& LOTS 1 & 2 D.P. 1118629
NORTHCLIFFE DRIVE & PRINCES HIGHWAY,
KEMBLA GRANGE

Principal: BUNNINGS GROUP LIMITED

Scale	1:300	Date	3/11/2014	Council Ref.	
Datum	A.H.D.	L.G.A.	WOLLONGONG		
Calc's	L.H.	Drawn	R.N.	Proj Man.	D.B.
				Client Ref.	

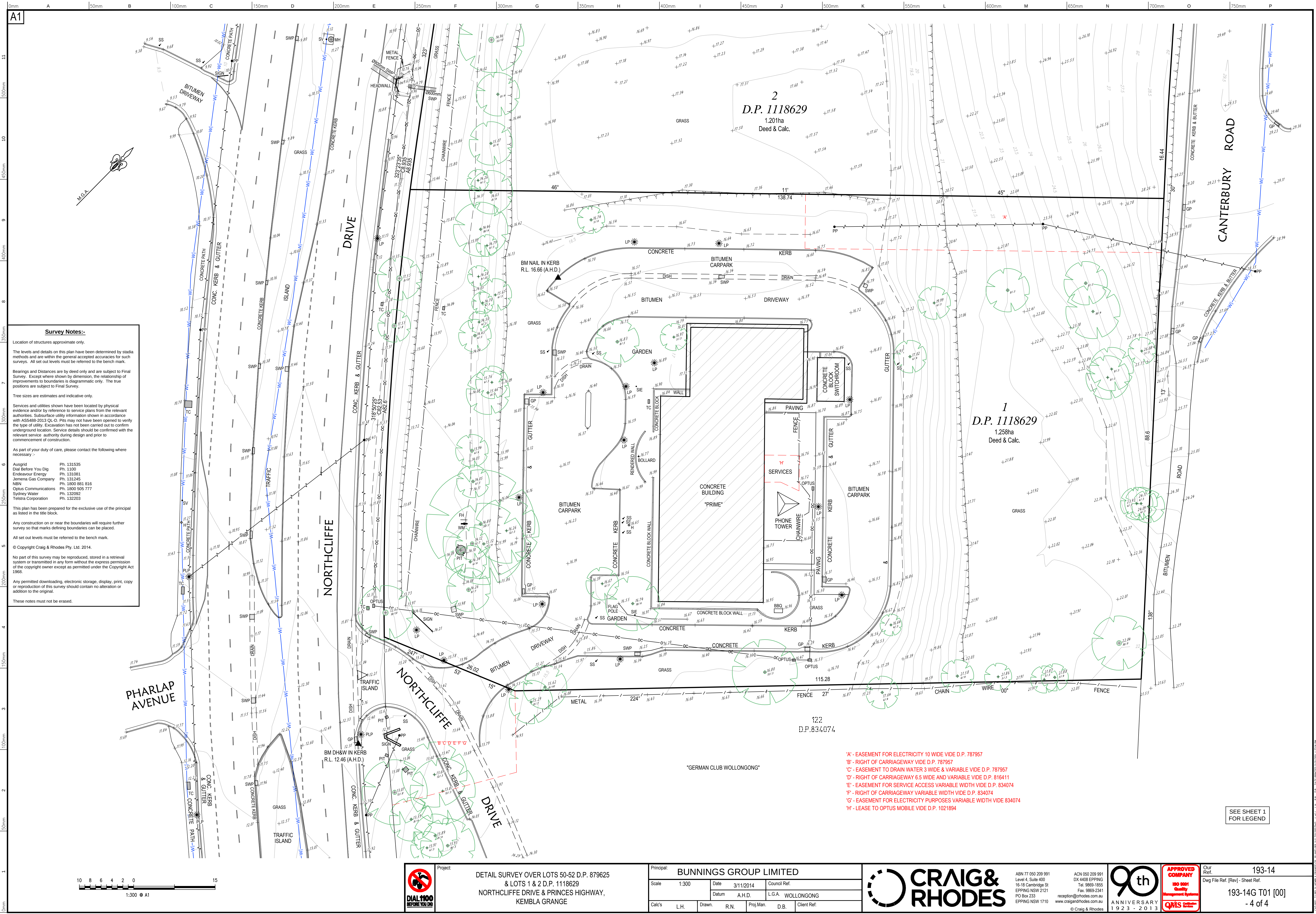


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193-14G T01 [00]
- 3 of 4



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Dial Before You Dig	Ph. 1100
Endeavour Energy	Ph. 131081
Jemena Gas Company	Ph. 132245
NBN	Ph. 1800 881 816
Optus Communications	Ph. 1800 505 777
Sydney Water	Ph. 132092
Telstra Corporation	Ph. 132203

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- 'A' - EASEMENT FOR ELECTRICITY 10 WIDE VIDE D.P. 787957
- 'B' - RIGHT OF CARRIAGEWAY VIDE D.P. 787957
- 'C' - EASEMENT TO DRAIN WATER 3 WIDE & VARIABLE VIDE D.P. 787957
- 'D' - RIGHT OF CARRIAGEWAY 6.5 WIDE AND VARIABLE VIDE D.P. 816411
- 'E' - EASEMENT FOR SERVICE ACCESS VARIABLE WIDTH VIDE D.P. 834074
- 'F' - RIGHT OF CARRIAGEWAY VARIABLE WIDTH VIDE D.P. 834074
- 'G' - EASEMENT FOR ELECTRICITY PURPOSES VARIABLE WIDTH VIDE 834074
- 'H' - LEASE TO OPTUS MOBILE VIDE D.P. 1021894

SEE SHEET 1
FOR LEGEND



Project:
DETAIL SURVEY OVER LOTS 50-52 D.P. 879625
& LOTS 1 & 2 D.P. 1118629
NORTHCLIFFE DRIVE & PRINCES HIGHWAY,
KEMBLA GRANGE

Principal: BUNNINGS GROUP LIMITED					
Scale: 1:300	Date: 3/11/2014	Council Ref:			
	Datum: A.H.D.	L.G.A. WOLLONGONG			
Calc's: L.H.	Drawn: R.N.	Proj Man: D.B.	Client Ref:		



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193-14G T01 [00]
- 4 of 4

PROPOSED BUNNINGS WAREHOUSE LISMORE

CNR NORTHCLIFFE DR & PRINCES HWY, KEMBLA GRANGE

CIVIL ENGINEERING WORKS FOR DEVELOPMENT APPLICATION

DRAWING INDEX:

DRAWING No.	DRAWING TITLE
01327_C100	COVER SHEET, DRAWING INDEX, GENERAL NOTES, LOCALITY SKETCH & LEGEND
01327_C201	GENERAL ARRANGEMENT PLAN UNDERCROFT PARKING LEVEL
01327_C202	GENERAL ARRANGEMENT PLAN WAREHOUSE LEVEL
01327_C205	GENERAL ARRANGEMENT PLAN BULK EARTHWORKS INTERIM LAYOUT
01327_C231	BULK EARTHWORKS CUT/FILL PLAN
01327_C301	RAMP LONGITUDINAL SECTIONS - SHEET 1
01327_C302	RAMP LONGITUDINAL SECTIONS - SHEET 2
01327_C501	OSD TANK DETAILS
01327_C601	CATCHMENT PLAN
01327_C621	STORMWATER DRAINAGE PIPE LONGITUDINAL SECTIONS - SHEET 1
01327_C622	STORMWATER DRAINAGE PIPE LONGITUDINAL SECTIONS - SHEET 2
01327_C623	STORMWATER DRAINAGE PIPE LONGITUDINAL SECTIONS - SHEET 3
01327_C624	STORMWATER DRAINAGE PIPE LONGITUDINAL SECTIONS - SHEET 4
01327_C701	SEDIMENT & EROSION CONTROL - PLAN
01327_C702	SEDIMENT & EROSION CONTROL - DETAILS

SEDIMENT & EROSION CONTROL NOTES:

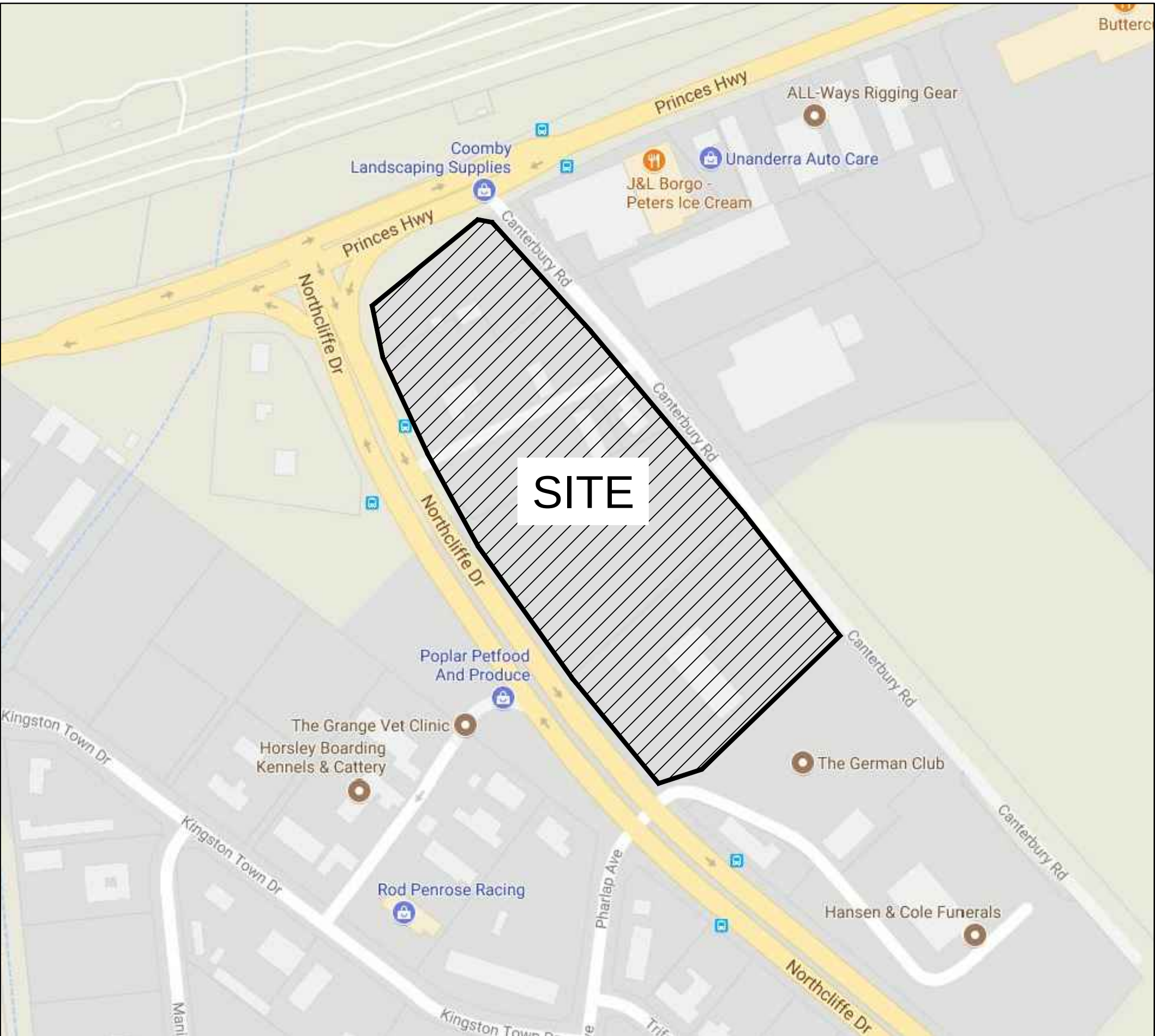
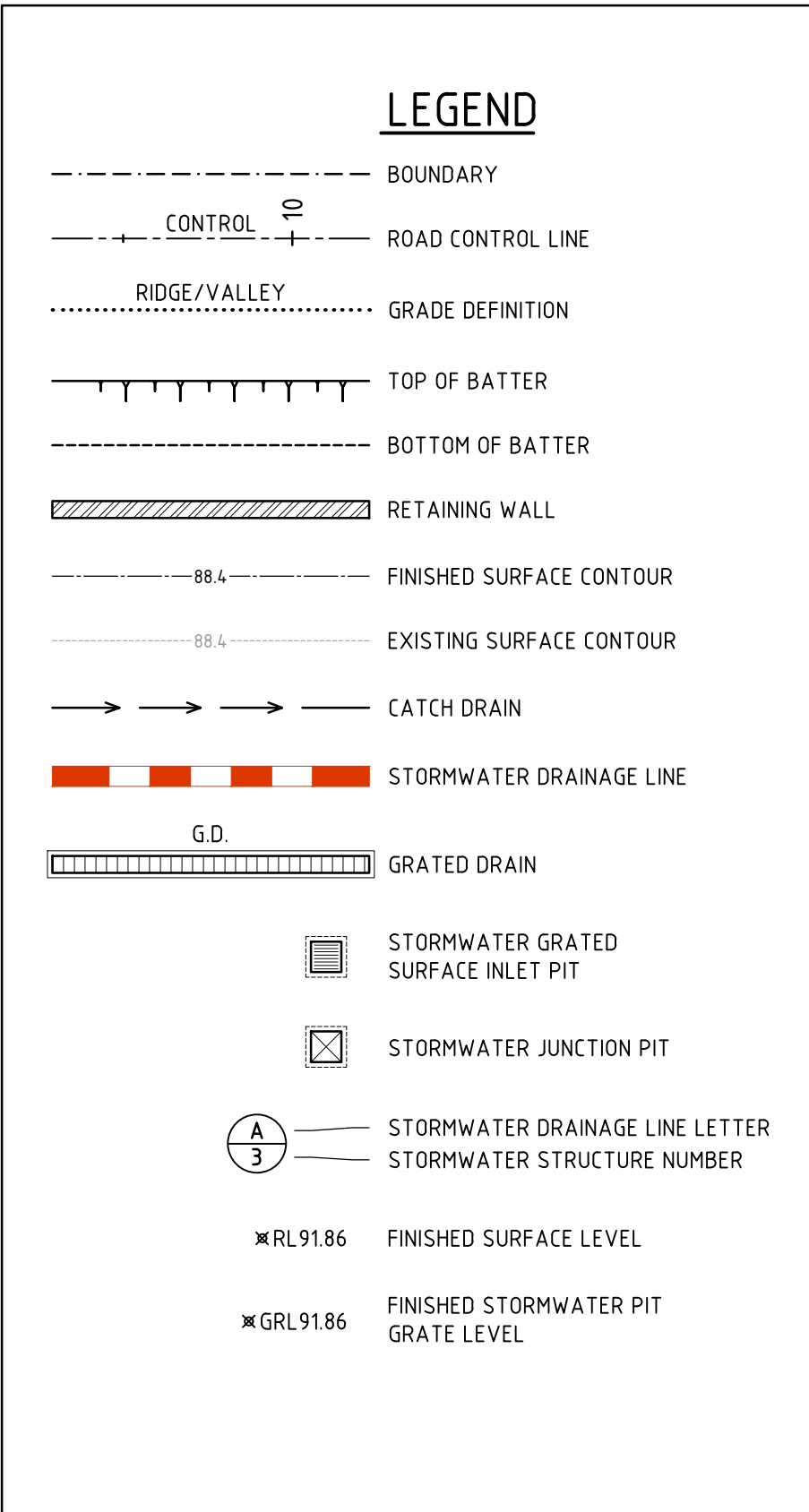
- S1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH LISMORE COUNCIL'S GUIDELINES AND THE DEPARTMENT OF HOUSING'S "MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION" MANUAL.
- S2. NO CONSTRUCTION WORKS ARE TO COMMENCE ON SITE UNTIL ALL EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND HAVE BEEN INSPECTED AND APPROVED BY THE PRINCIPAL CERTIFYING AUTHORITY.
- S3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REGULARLY INSPECTED, IN PARTICULAR AFTER STORMS, AND REPAIRED OR MAINTAINED AS REQUIRED TO ENSURE THE MEASURES CORRECT AND EFFICIENT FUNCTION THROUGHOUT THE DURATION OF THE WORKS, UNTIL SUCH TIME AS THE PRINCIPAL CERTIFYING AUTHORITY AUTHORISES THE REMOVAL OF SUCH MEASURES.
- S4. ALL STOCKPILES SHALL BE CLEAR OF ALL TREES AND DRAINAGE LINES (INCLUDING OVERLAND FLOW PATHS) AND PROTECTED FROM EROSION.
- S5. DUST CONTROL MEASURES SHALL BE IMPLEMENTED CONTINUOUSLY DURING CONSTRUCTION WORKS.

GENERAL NOTES:

- G1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH WOLLONGONG CITY COUNCIL'S CIVIL WORKS SPECIFICATION.
- G2. THE CONSTRUCTOR SHALL REVIEW, BE AWARE AND AT ALL TIMES COMPLY WITH THE SPECIFIC REQUIREMENTS FOR THIS DEVELOPMENT AS SET OUT IN WOLLONGONG CITY COUNCIL'S NOTICE OF DETERMINATION.
- G3. ANY CHANGES MADE BY THE CONSTRUCTOR TO ANY LEVEL, DIMENSION, LOCATION, POSITION, ALIGNMENT ETC., OF ANY OF THE WORKS SHOWN ON THE DRAWINGS WITHOUT THE WRITTEN CONSENT OF C&M CONSULTING ENGINEERS PTY. LTD. AND OR THE PRINCIPAL CERTIFYING AUTHORITY IS DONE SO AT THE CONSTRUCTORS OWN RISK.
- G4. THE CONSTRUCTOR SHALL ALLOW TO LIAISE WITH AND PROVIDE SUFFICIENT NOTICE TO THE PRINCIPAL CERTIFYING AUTHORITY TO ENSURE THAT ALL WORKS ARE INSPECTED TO ENABLE COMPLIANCE CERTIFICATES TO BE ISSUED THROUGHOUT THE CONSTRUCTION PERIOD. THE CONSTRUCTOR SHALL LIAISE WITH THE PRINCIPAL CERTIFYING AUTHORITY PRIOR TO ANY CONSTRUCTION WORKS COMMENCING AND PREPARE AN INSPECTION AND TEST PLAN WITH A MUTUALLY AGREED WITNESS AND HOLD POINTS FOR THE CONSTRUCTION WORKS.
- G5. IF THE PRINCIPAL CERTIFYING AUTHORITY IS NOT WOLLONGONG CITY COUNCIL, THEN THE CONSTRUCTOR MUST CONTACT WOLLONGONG CITY COUNCIL'S WORKS DIVISION TO ENABLE THEIR INSPECTION OF ALL WORKS (INCLUDING EROSION AND SEDIMENT CONTROL MEASURES) WITHIN THE ROAD RESERVE AREA.
- G6. THE CONSTRUCTOR SHALL USE A SUITABLY QUALIFIED SURVEYOR TO SET OUT ALL WORKS. THE SURVEYOR SHALL ISSUE A CERTIFICATE TO THE PRINCIPAL CERTIFYING AUTHORITY CERTIFYING THAT THE WORKS HAVE BEEN SET OUT IN ACCORDANCE WITH THE APPROVED DRAWINGS PRIOR TO THE WORKS BEING CONSTRUCTED.
- G7. ALL NEW WORKS SHALL MAKE A SMOOTH CONNECTION WITH ANY FORMATIONS, STRUCTURES, ETC.
- G8. THE WORKS SHALL BE CONSTRUCTED IN SUCH A MANNER THAT THERE IS MINIMUM DISTURBANCE TO EXISTING TREES AND VEGETATION.
- G9. ALL BOUNDARY LOCATIONS, DIMENSIONS, BEARINGS, AREAS, ETC., SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY AND ARE SUBJECT TO A FINAL SURVEY AND REGISTRATION OF THE FINAL PLAN OF SUBDIVISION WITH LAND AND PROPERTY INFORMATION NSW.
- G10. THE PUBLIC FOOTWAY AND ROADWAY FRONTING THE SITE SHALL BE MAINTAINED IN A SAFE AND UNOBSTRUCTED MANNER AT ALL TIMES DURING THE CONSTRUCTION WORKS.
- G11. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR REPAIRING TO THE SATISFACTION OF THE ASSET OWNER, ANY DAMAGE CAUSED TO ANY EXISTING INFRASTRUCTURE WITHIN THE ROAD RESERVE, INCLUDING BUT NOT LIMITED TO KERBS, GUTTERS, FOOTPATHS, VEHICULAR CROSSINGS, STREET SIGNS, SERVICE FITTING COVERS, ETC.
- G12. THE SITE SHALL BE KEPT IN A TIDY CONDITION AT ALL TIMES. LITTER RUBBISH AND BUILDING RUBBLE SHALL BE PLACED IN CONTAINERS OR BINS AND REGULARLY REMOVED FROM SITE AS REQUIRED.

EARTHWORKS NOTES:

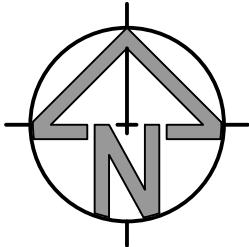
- E1. ALL TOPSOIL FROM EARTHWORKS AREAS SHOULD BE REMOVED AND STOCKPILED PRIOR TO ANY EARTHWORKS OPERATIONS.
- E2. ALL BATTER SLOPES SHALL BE A MAXIMUM OF 4:1 (U.N.O.)
- E3. ALL EARTHWORKS OPERATIONS SHALL BE SUPERVISED AND CERTIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER IN ACCORDANCE WITH AS3798 - 2007 SECTION 8.2 LEVEL 1 - INSPECTION AND TESTING.
- E4. ALL COMPACTION TEST RESULTS SHALL BE PROVIDED TO THE PRINCIPAL CERTIFYING AUTHORITY AS REQUIRED.
- E5. ALL SITE REGRADED AREAS AFTER FORMATION, SHALL BE COVERED WITH A 150mm SELECT TOPSOIL LAYER. TOPSOIL STOCKPILED PRIOR TO EARTHWORKS OPERATIONS CAN BE REUSED FOR THIS PURPOSE PROVIDED ANY DELETERIOUS MATERIAL IS REMOVED PRIOR TO PLACING.
- E6. ALL DISTURBED AREAS SHALL BE REVEGETATED AND STABILISED AS SOON AS PRACTICAL AFTER THE COMPLETION OF ANY EARTHWORKS OPERATIONS.
- E7. SURPLUS MATERIAL INCLUDING TOPSOIL SHALL BE REMOVED AND DISPOSED OF LAWFULLY OFF SITE.



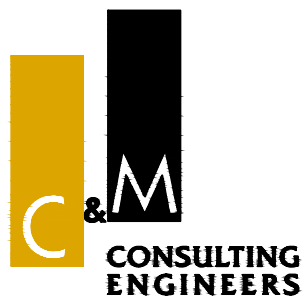
LOCALITY
N.T.S.

NOT FOR CONSTRUCTION

01	W.M.	22/08/17	A.M.	ISSUED FOR DA APPROVAL
REV.	DES.	DATE	VER.	DESCRIPTION



CLIENT



CIVIL AND HYDRAULIC
ENGINEERING DESIGN AND
PROJECT MANAGEMENT

SUITE 26
11 - 13 BROOKHOLLOW AVE
BAULKHAM HILLS NSW 2153

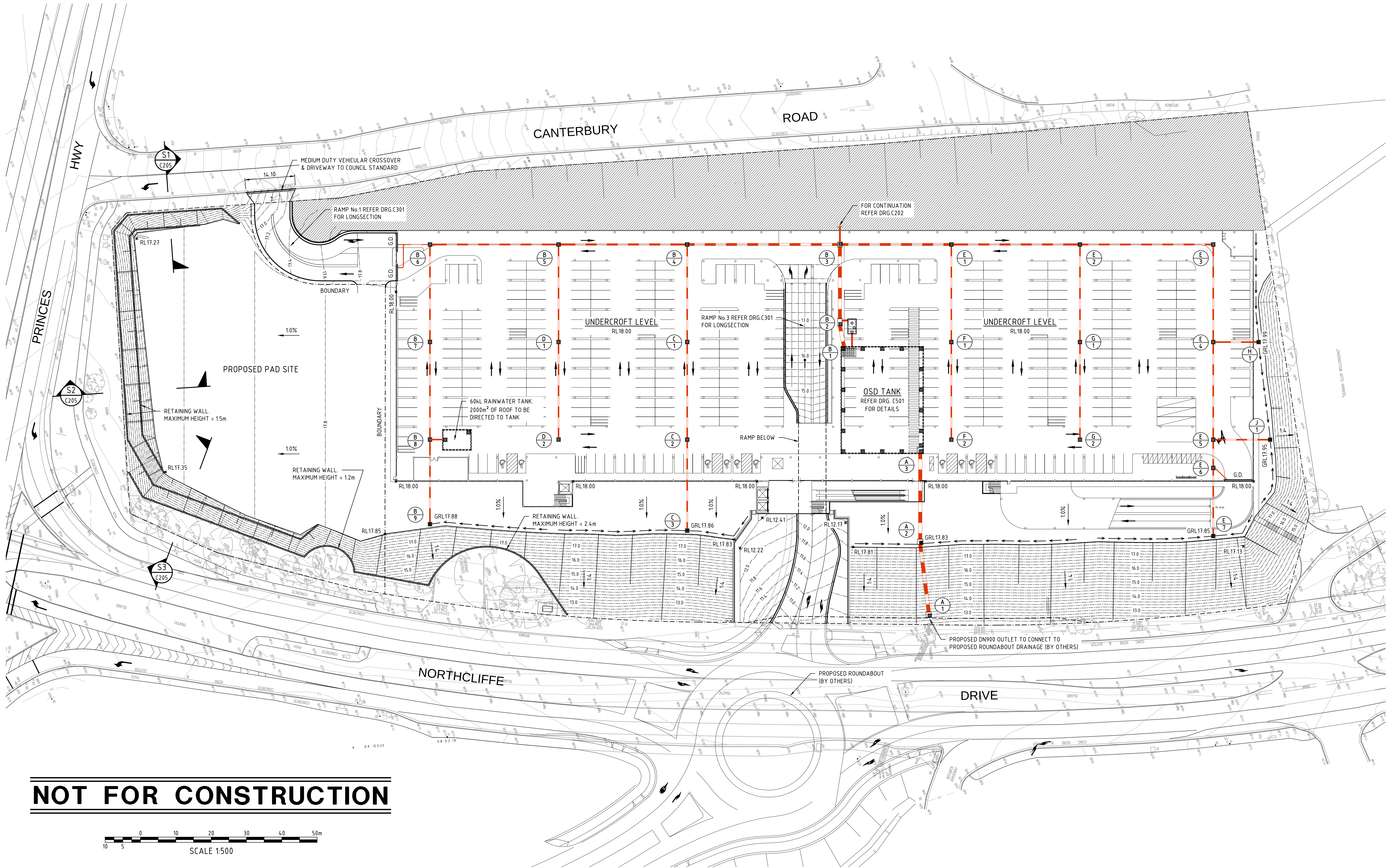
PHONE: (02) 9680 3100
FAX: (02) 9634 6989
ABN 21 118 134 240

DESIGNER	W.M.	DATE	22/08/17
ENGINEER	X.P.	LGA	WOLLONGONG
VERIFIER	A.M.	SCALE @ A1	N/A
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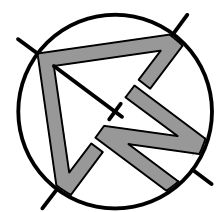
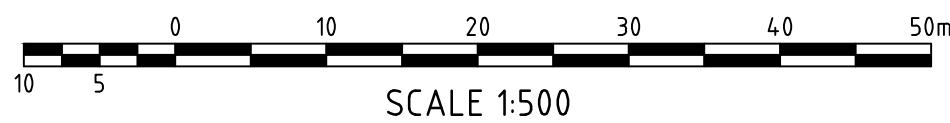
BUNNINGS WAREHOUSE KEMBLA GRANGE

COVER SHEET, DRAWING INDEX, GENERAL
NOTES, LOCALITY SKETCH & LEGEND

STATUS DEVELOPMENT APPLICATION DRAWING No. 01327_C100 REVISION 01

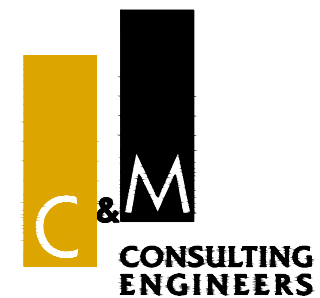


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REV.	DES.	DATE	VER.	DESCRIPTION
02	W.M.	30/08/17	A.M.	GENERAL AMENDMENTS, ISSUED FOR DA APPROVAL
01	W.M.	22/08/17	A.M.	ISSUED FOR DA APPROVAL

CLIENT



CIVIL AND HYDRAULIC
ENGINEERING DESIGN AND
PROJECT MANAGEMENT

SUITE 26
11 - 13 BROOKHOLLOW AVE
BAULKHAM HILLS NSW 2153

PHONE: (02) 9680 3100
FAX: (02) 9634 6989
ABN 21 118 134 240

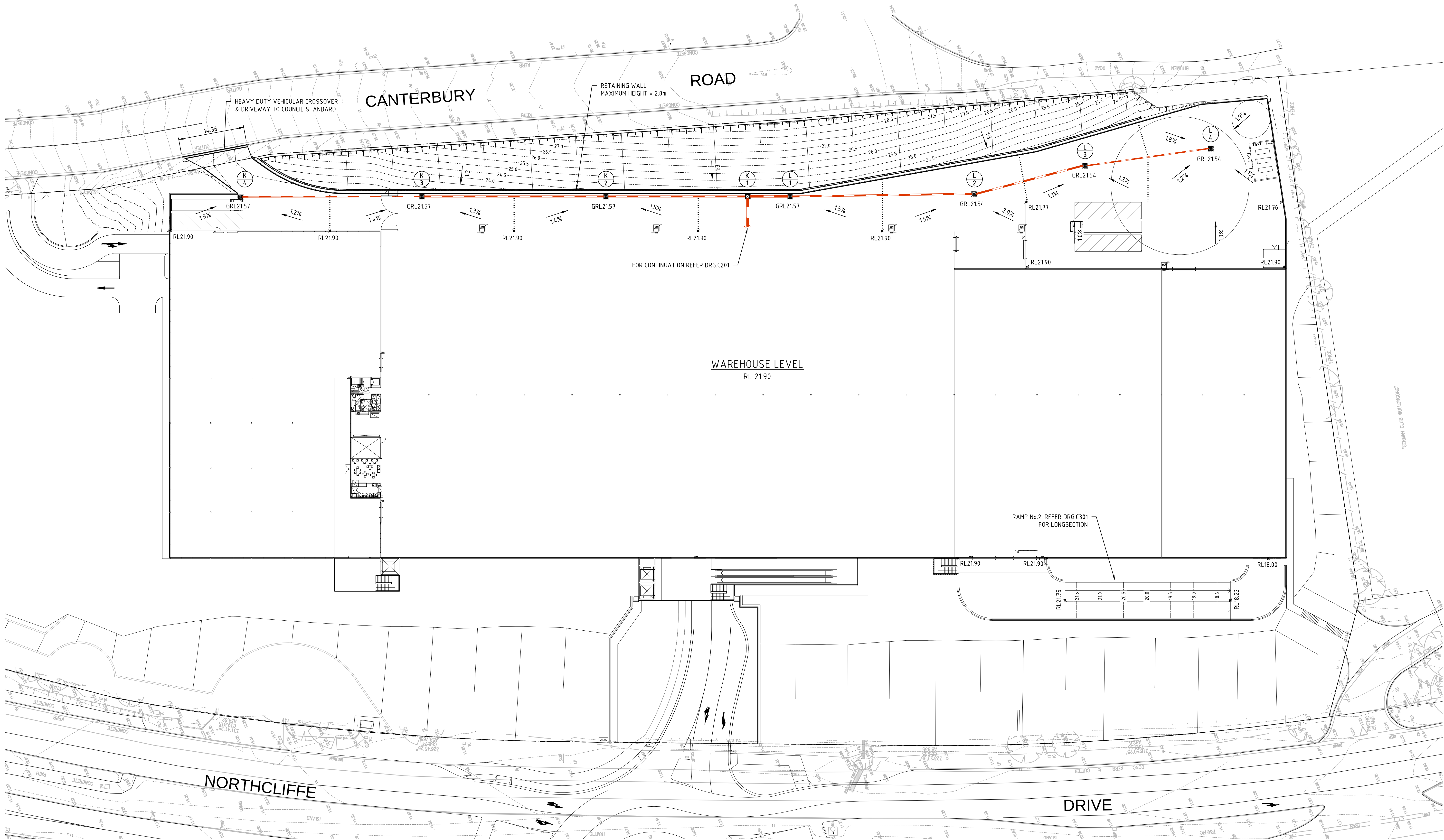
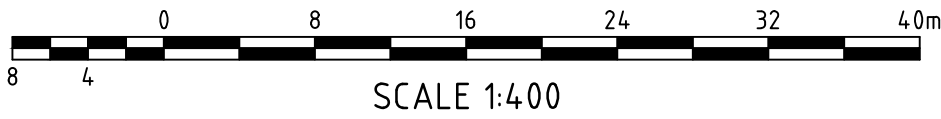
DESIGNER	W.M.	DATE	22/08/17
ENGINEER	X.P.	LGA	WOLLONGONG
VERIFIER	A.M.	SCALE @ A1	1:500
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BUNNINGS WAREHOUSE KEMBLA GRANGE

GENERAL ARRANGEMENT PLAN
UNDERCROFT PARKING LEVEL

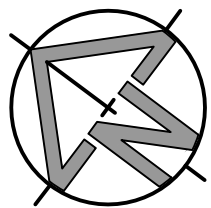
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02	W.M.	30/08/17	A.M.	GENERAL AMENDMENTS, ISSUED FOR DA APPROVAL
01	W.M.	22/08/17	A.M.	ISSUED FOR DA APPROVAL



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CIVIL AND HYDRAULIC
ENGINEERING DESIGN AND
PROJECT MANAGEMENT

SUITE 26
11 - 13 BROOKHOLLOW AVE
BAULKHAM HILLS NSW 2153

PHONE: (02) 9680 3100
FAX: (02) 9634 6989
ABN 21 118 134 240

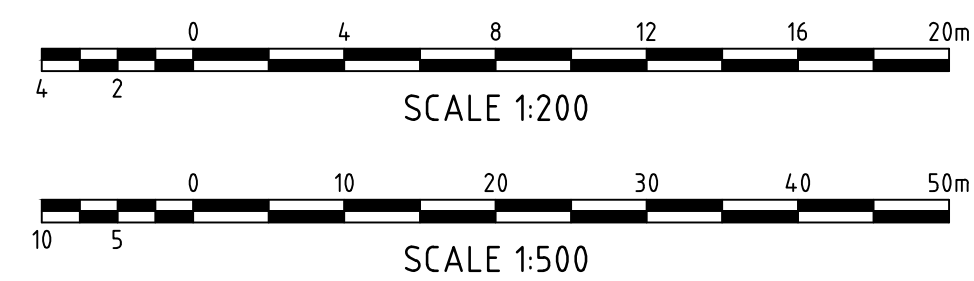
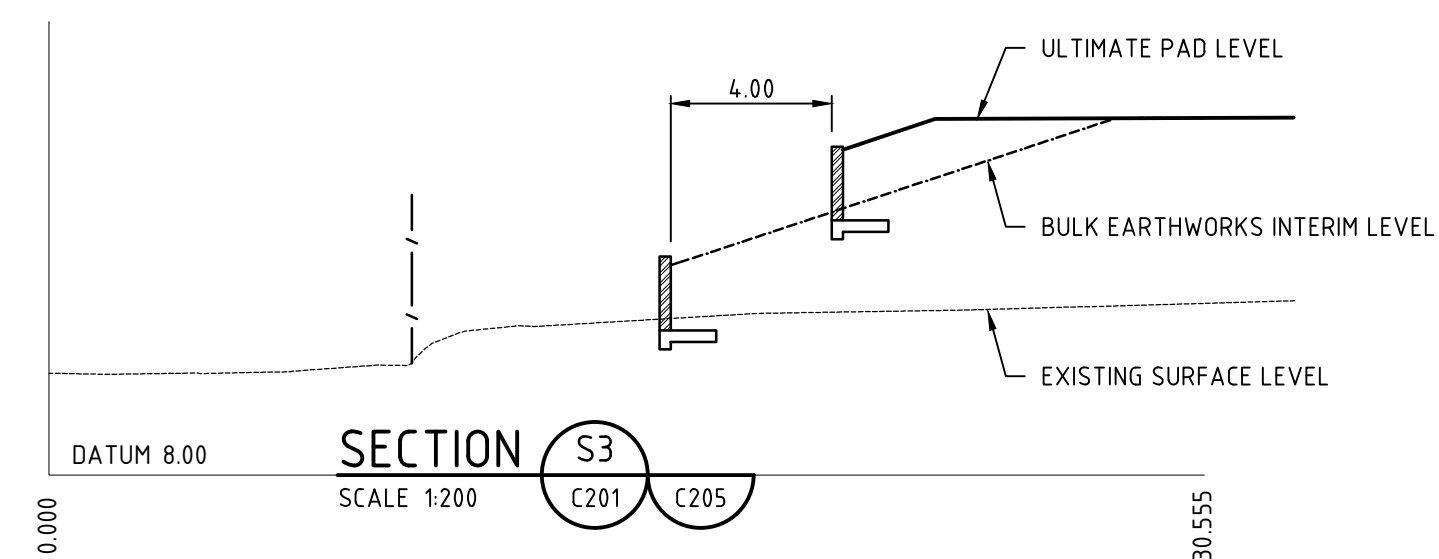
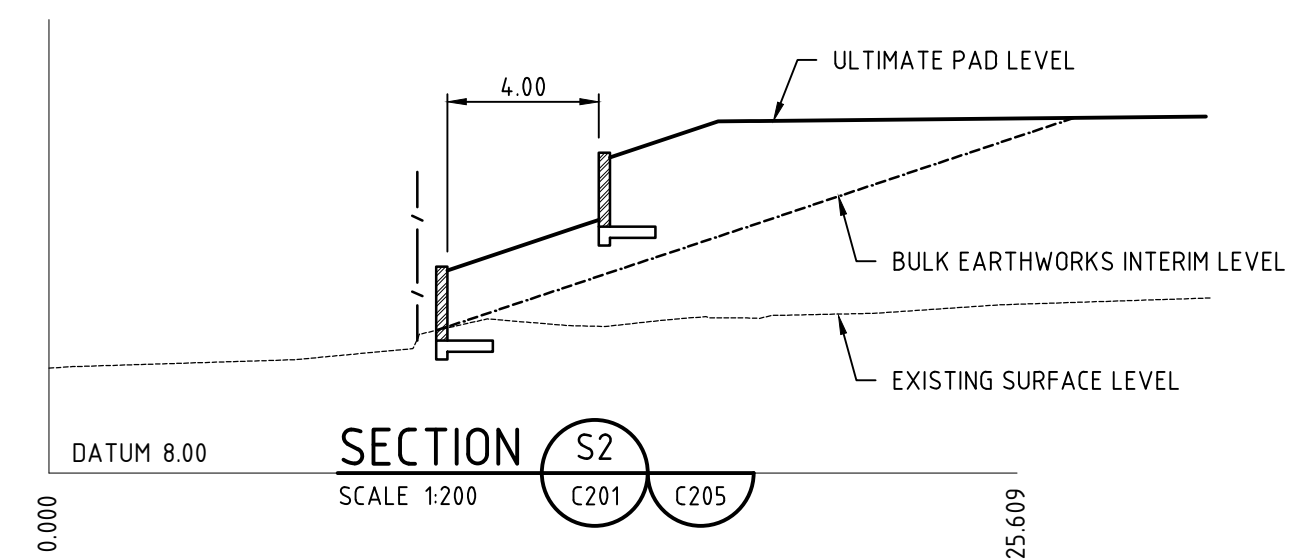
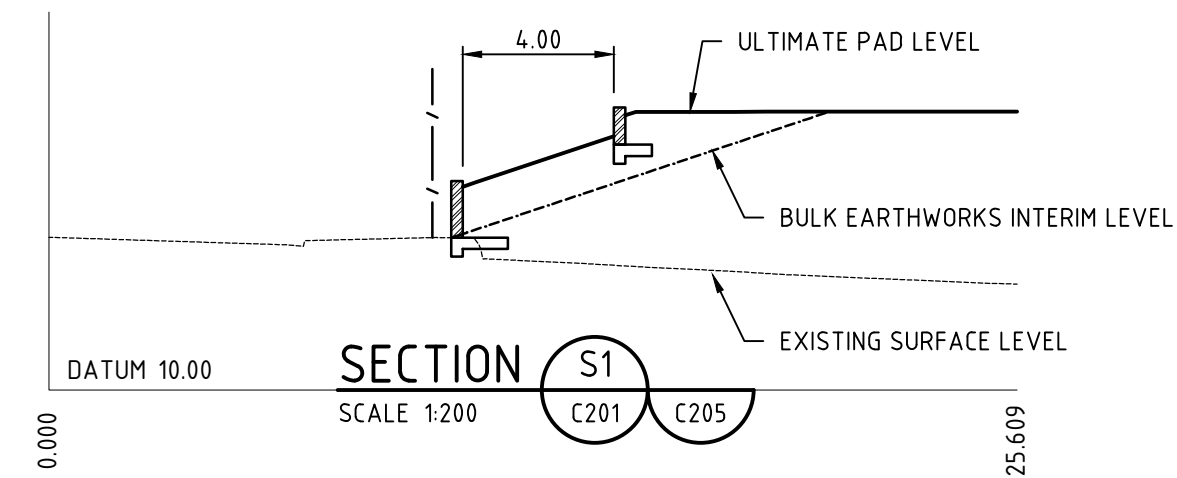
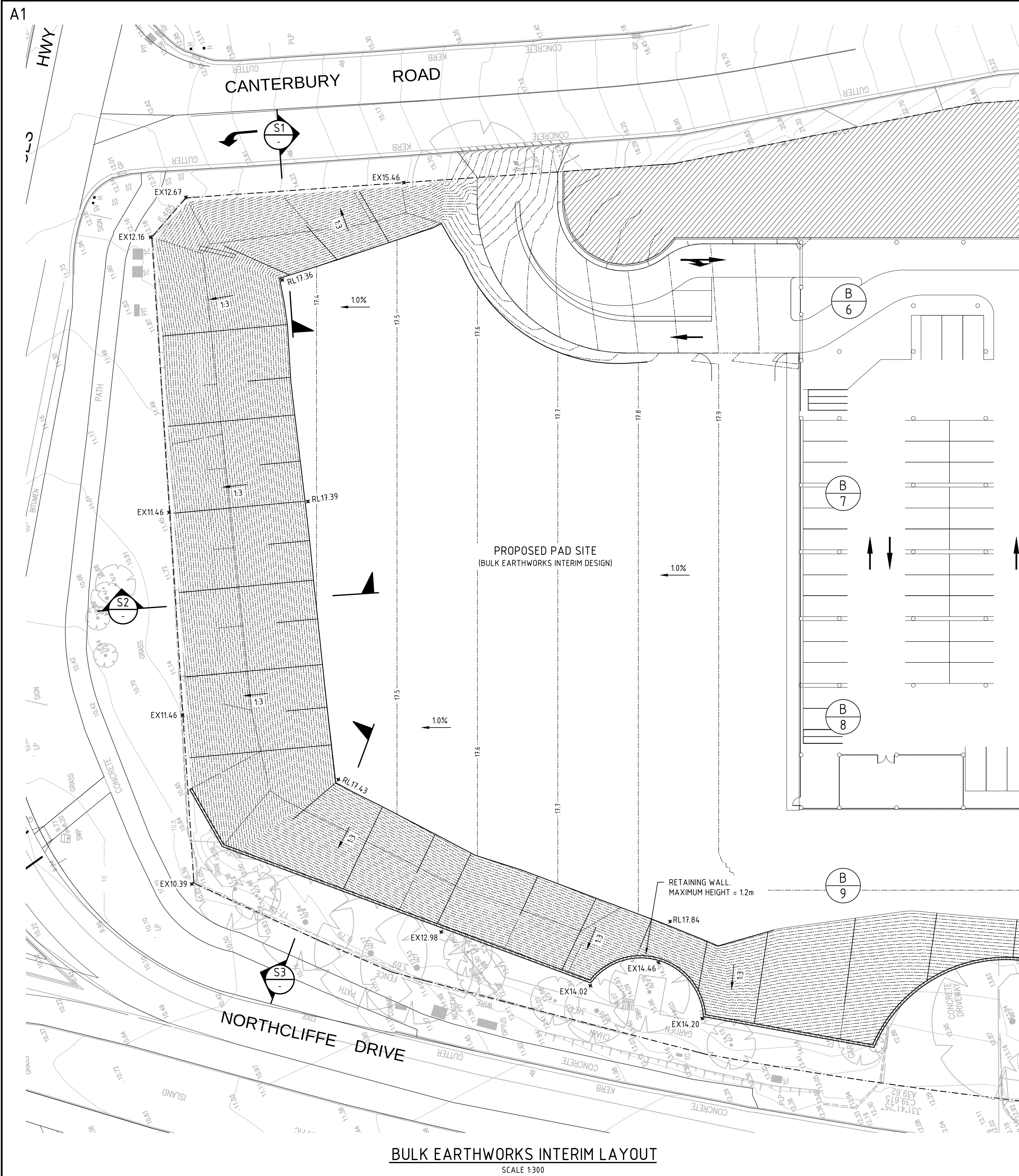
DESIGNER	W.M.	DATE	22/08/17
ENGINEER	X.P.	LGA	WOLLONGONG
VERIFIER	A.M.	SCALE @ A1	1:400
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BUNNINGS WAREHOUSE KEMBLA GRANGE

GENERAL ARRANGEMENT PLAN
WAREHOUSE LEVEL

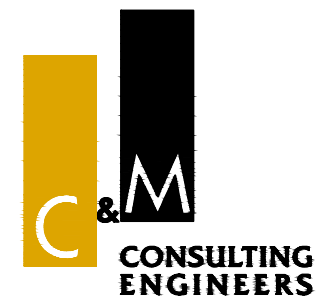
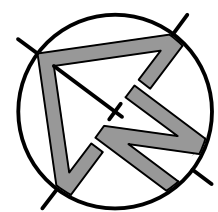
STATUS DEVELOPMENT APPLICATION DRAWING No. 01327_C202 REVISION 02

CAD FILENAME: C:\WAZ\Wollongong Projects\01327\DA 2017\01327_C205.dwg



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02	W.M.	30/08/17	A.M.	GENERAL AMENDMENTS, ISSUED FOR DA APPROVAL
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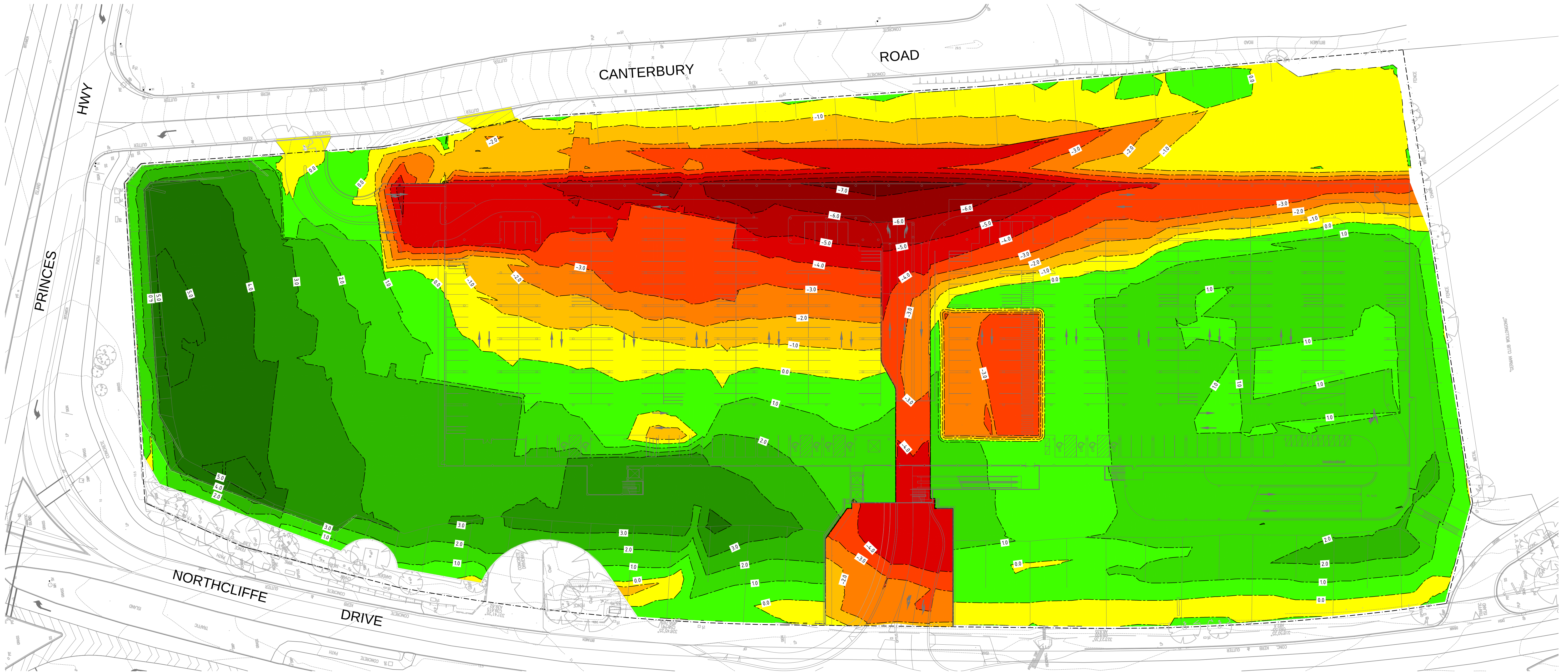
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ENGINEER	X.P.	LGA	WOLLONGONG
VERIFIER	A.M.	SCALE @ A1	AS NOTED
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BUNNINGS WAREHOUSE KEMBLA GRANGE			
GENERAL ARRANGEMENT PLAN BULK EARTHWORKS INTERIM LAYOUT			
STATUS	DEVELOPMENT APPLICATION	DRAWING No.	01327_C205
REVISION	02		

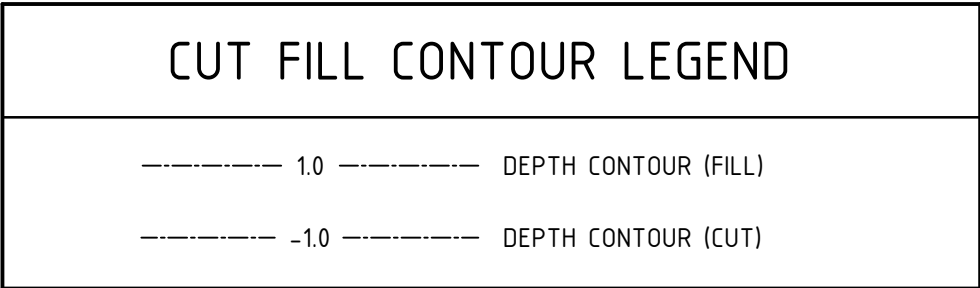


Levels Table					
No.	From Depth	To Depth	Colour	Depth Range	Volume
1	-7.516	-7.000		13m ³	CUT
2	-7.000	-6.000		329m ³	CUT
3	-6.000	-5.000		1073m ³	CUT
4	-5.000	-4.000		2701m ³	CUT
5	-4.000	-3.000		5336m ³	CUT
6	-3.000	-2.000		8267m ³	CUT
7	-2.000	-1.000		10748m ³	CUT
8	-1.000	0.000		14064m ³	CUT
9	0.000	1.000		19928m ³	FILL
10	1.000	2.000		11170m ³	FILL
11	2.000	3.000		6216m ³	FILL
12	3.000	4.000		3014m ³	FILL
13	4.000	6.000		1385m ³	FILL

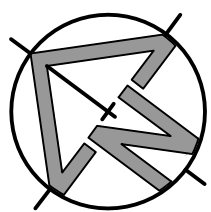
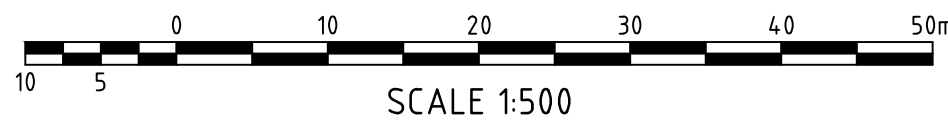
PRELIMINARY CUT VOLUME = 42531m³
PRELIMINARY FILL VOLUME = 41713m³
PRELIMINARY NET VOLUME = 818m³ (EXCESS)

- EARTHWORKS NOTES:**
PRELIMINARY BULK EARTHWORKS VOLUMES ARE BASED ON:
- EARTHWORKS AREAS STRIPPED OF TOPSOIL (200mm) PRIOR TO EARTHWORKS.
- ALL VEHICLE PAVEMENTS BOXED OUT TO SUBGRADE LEVEL (ASSUMED PAVEMENT DEPTH OF 300mm).
- SITE REGRADING AREAS BOXED OUT TO SUBGRADE LEVEL (ASSUMED DEPTH OF 200mm).
- BUILDING BOXED OUT TO PAD LEVEL (ASSUMED SLAB & SAND DEPTH OF 300mm).
- MATERIAL GENERATED FROM STORMWATER, SEWER & SERVICE TRENCHES HAVE NOT BEEN INCLUDED IN THIS QUANTITY.

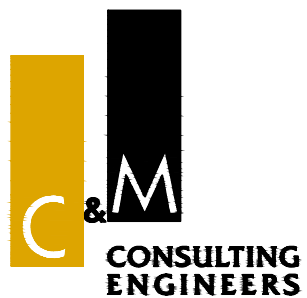
EARTHWORKS QUANTITIES ARE FOR INFORMATION ONLY AND DO NOT FORM PART OF THE CONTRACT



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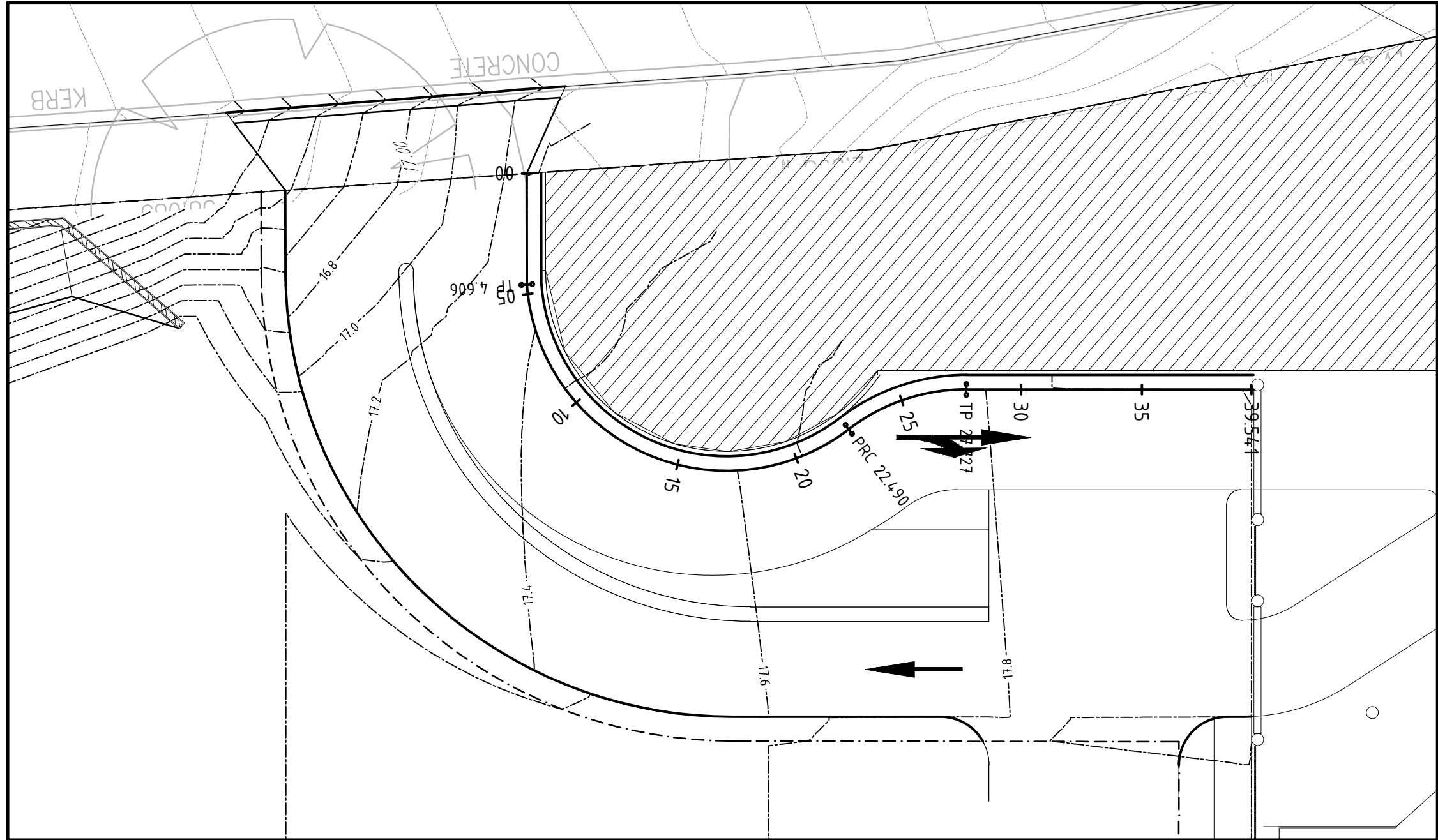
DESIGNER	W.M.	DATE	22/08/17
ENGINEER	X.P.	LGA	WOLLONGONG
VERIFIER	A.M.	SCALE @ A1	1:500
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BUNNINGS WAREHOUSE KEMBLA GRANGE

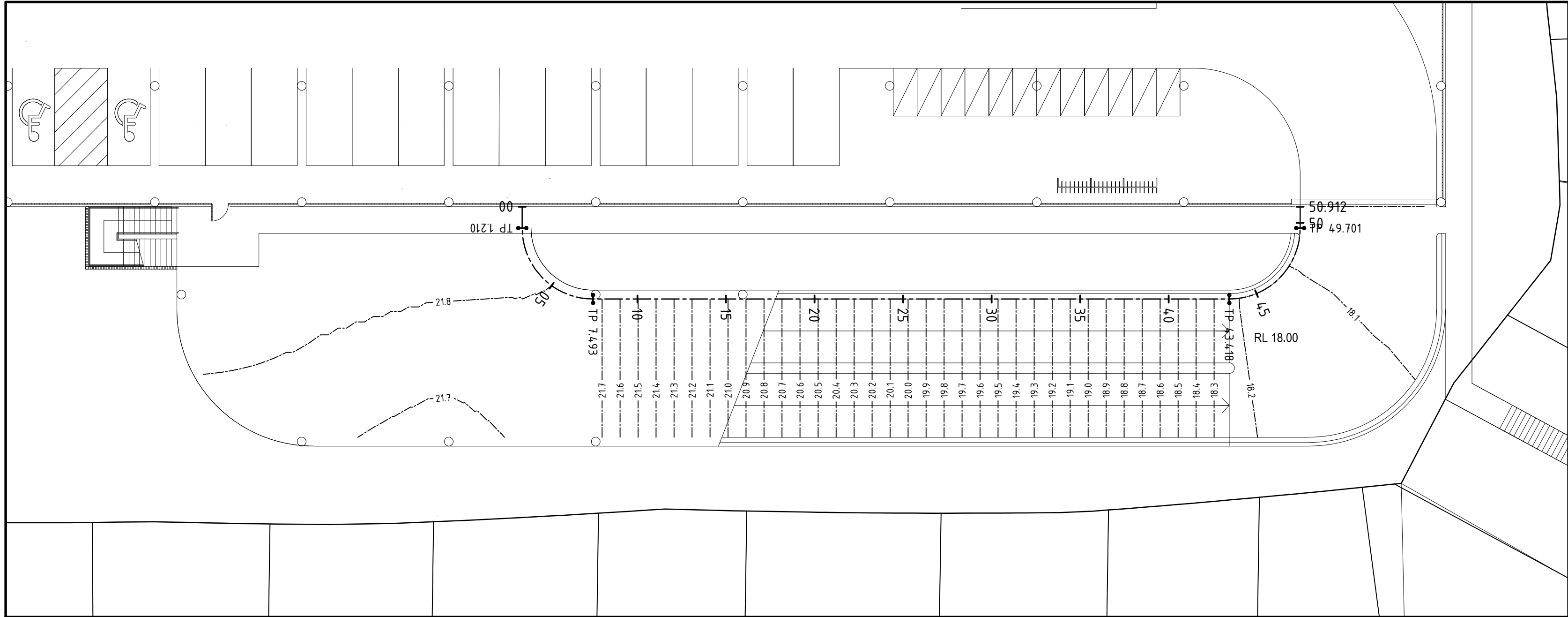
BULK EARTHWORKS CUT/FILL PLAN

STATUS DEVELOPMENT APPLICATION DRAWING No. 01327_C231 REVISION 02

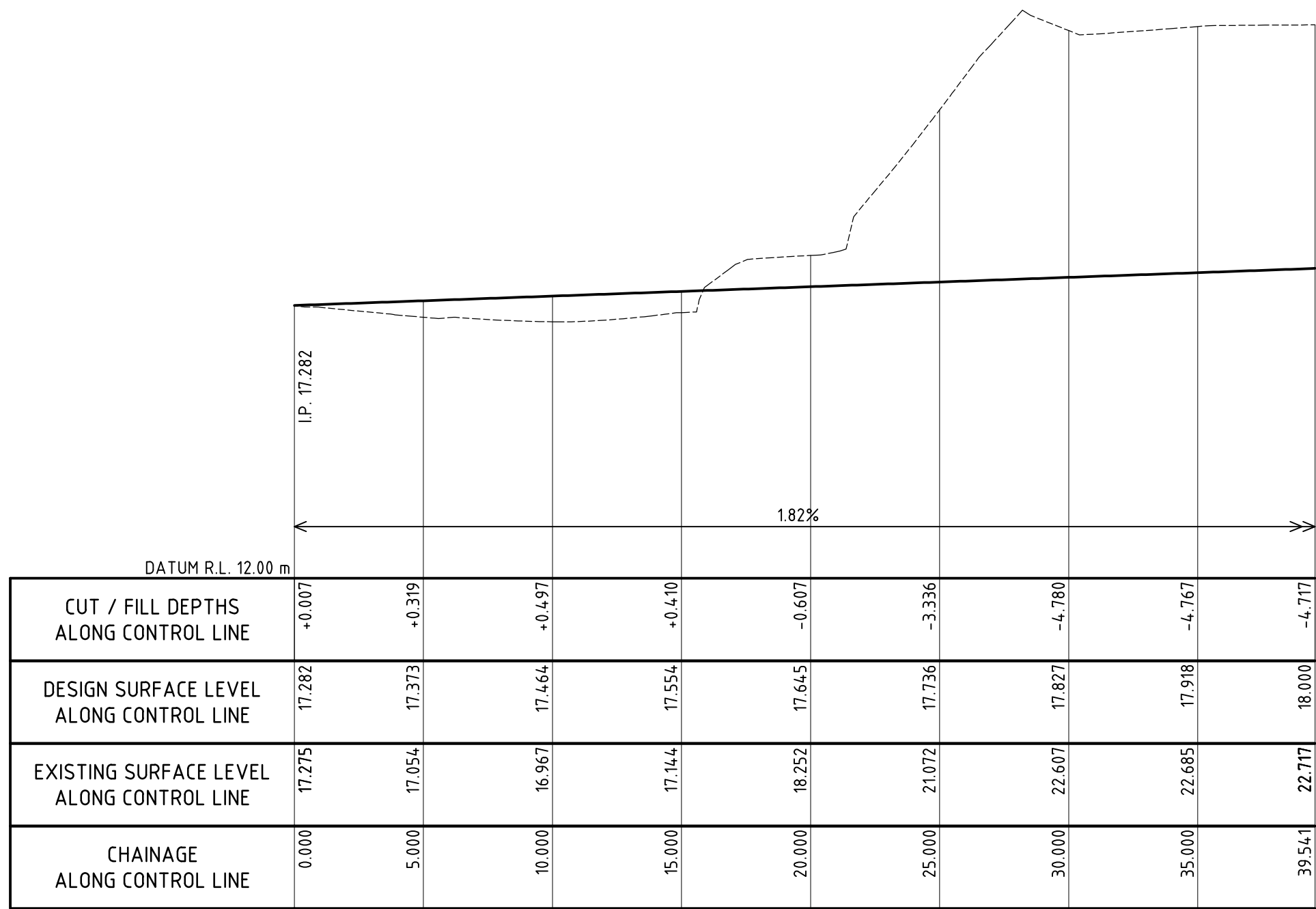
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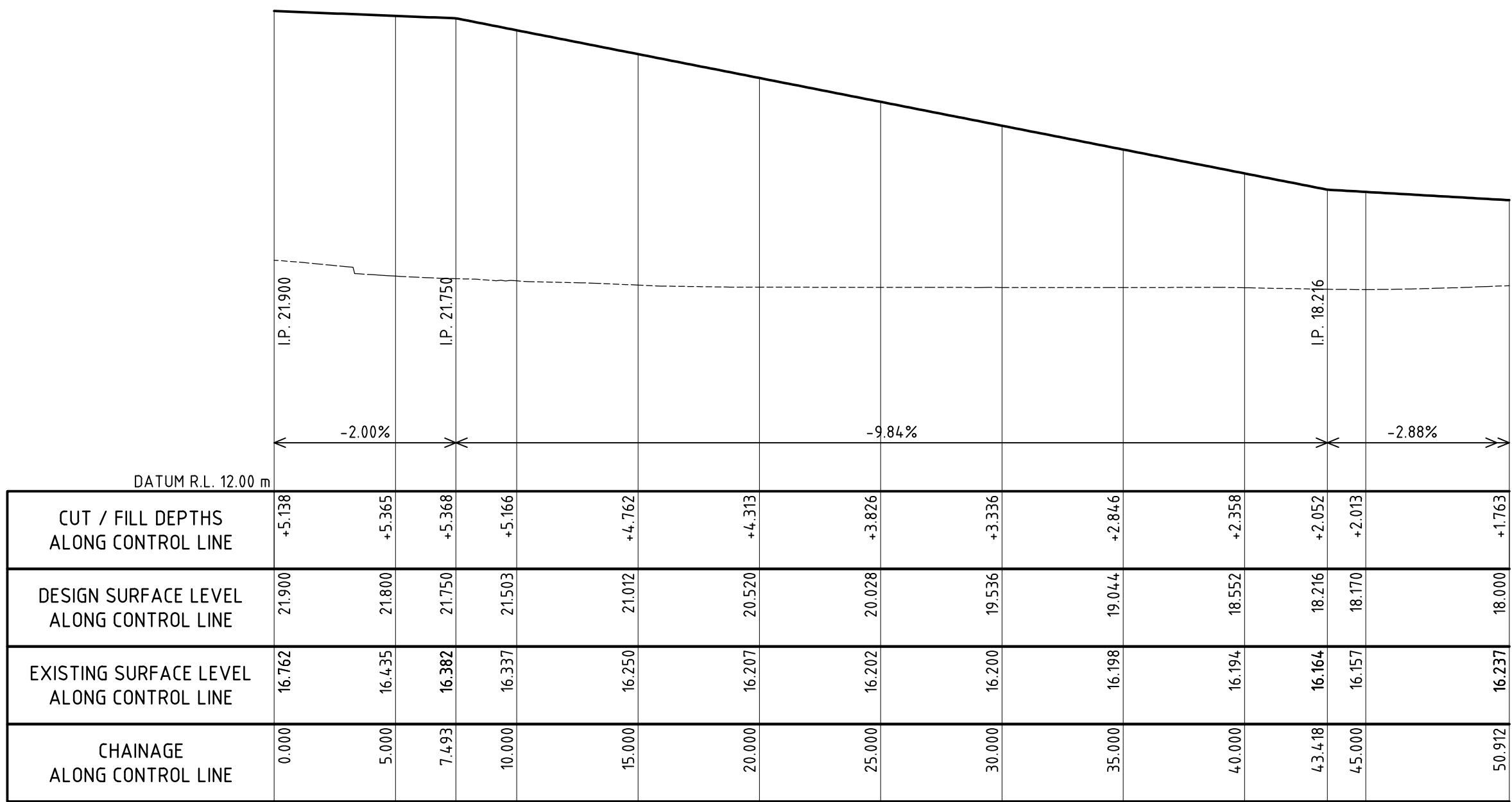
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SCALE 1:200



RAMP No.2 - PLAN
SCALE 1:200

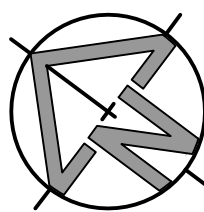
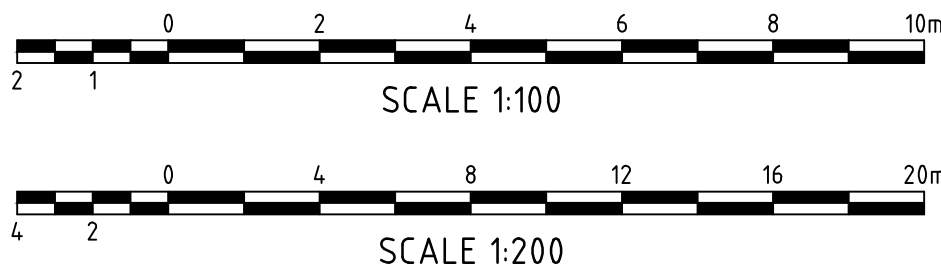


LONGITUDINAL SECTION ALONG RAMP No.1
SCALE: H 1 in 200 V 1 in 100



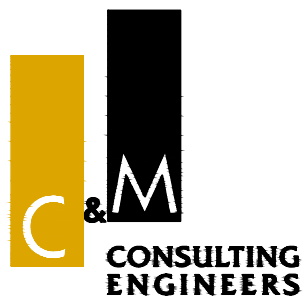
LONGITUDINAL SECTION ALONG RAMP No.2
SCALE: H 1 in 200 V 1 in 100

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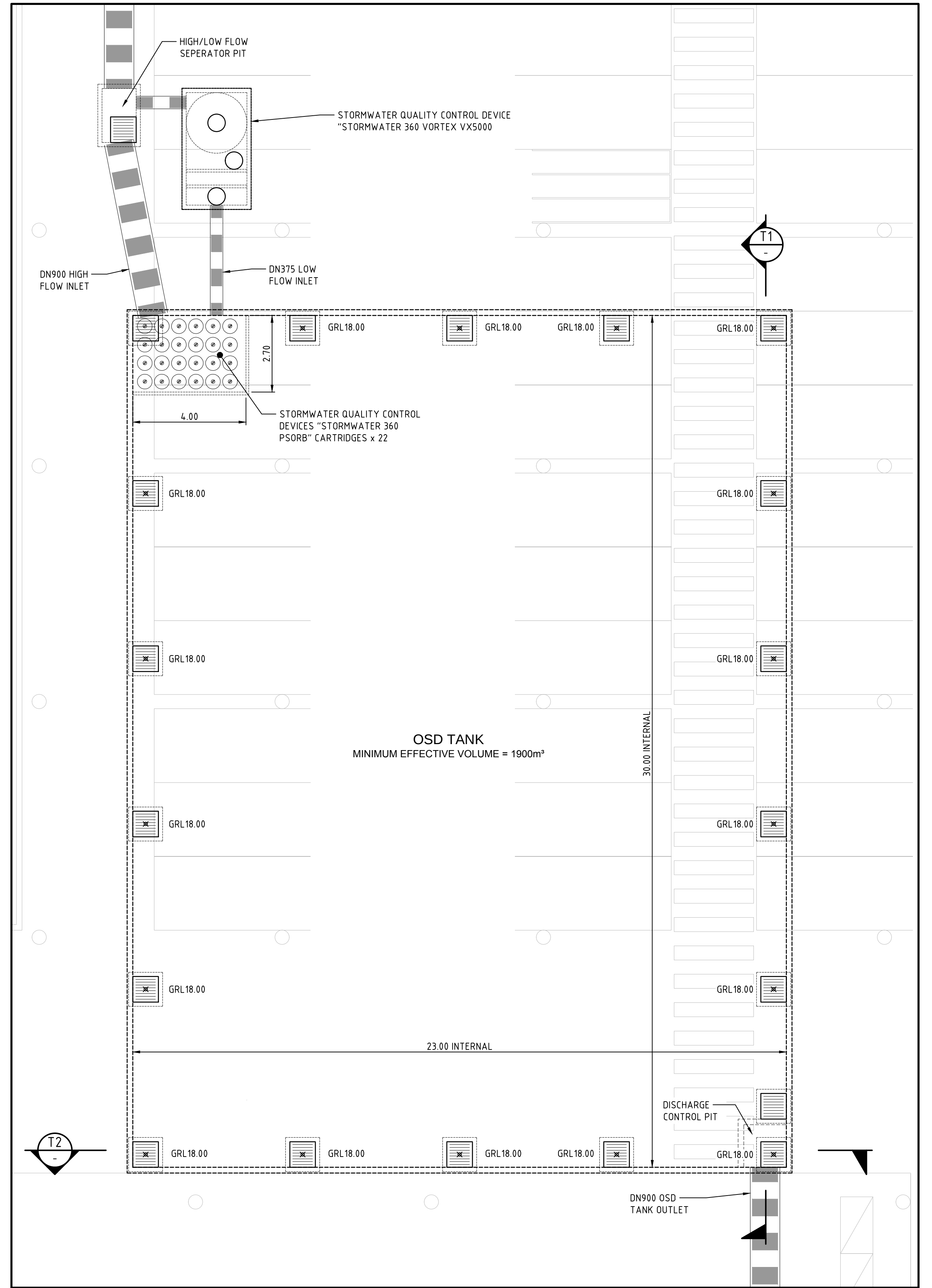
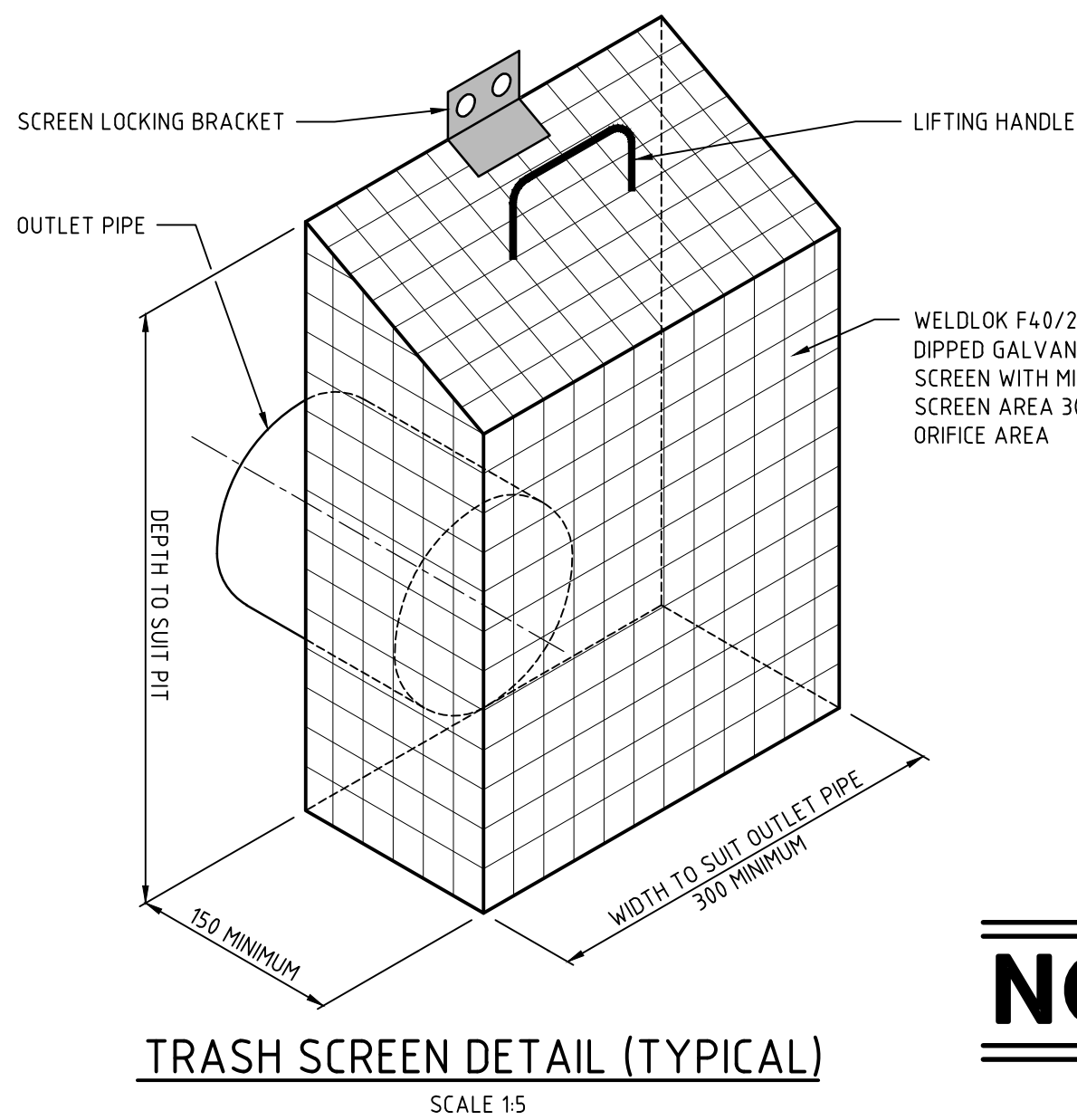
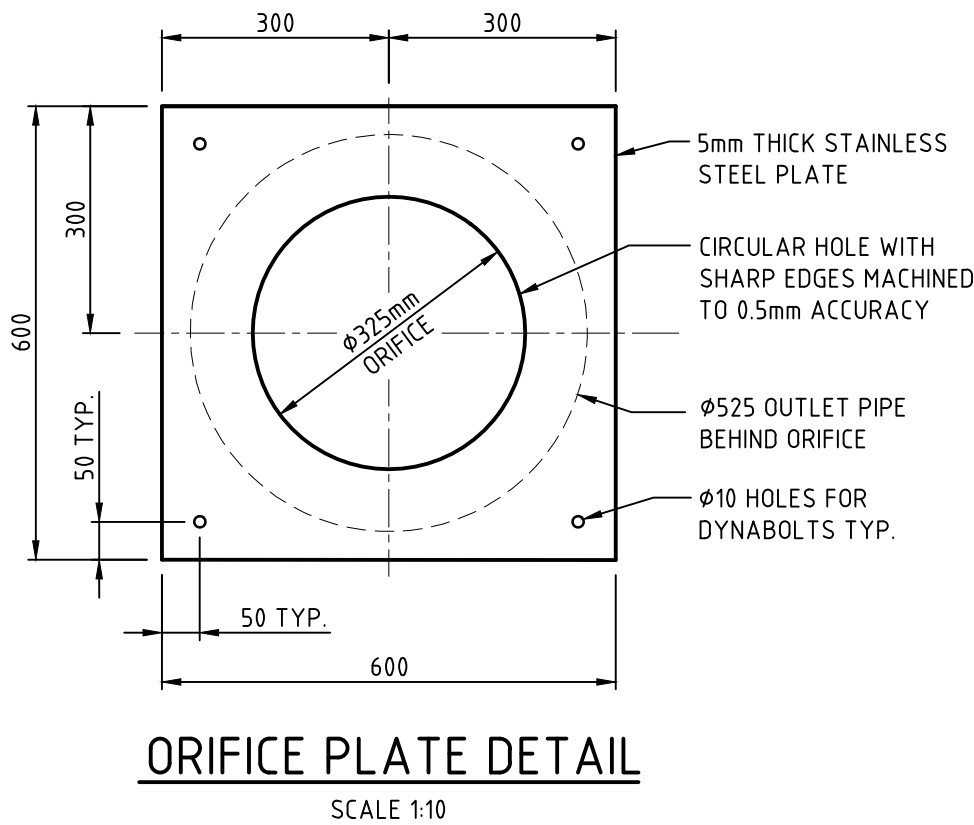
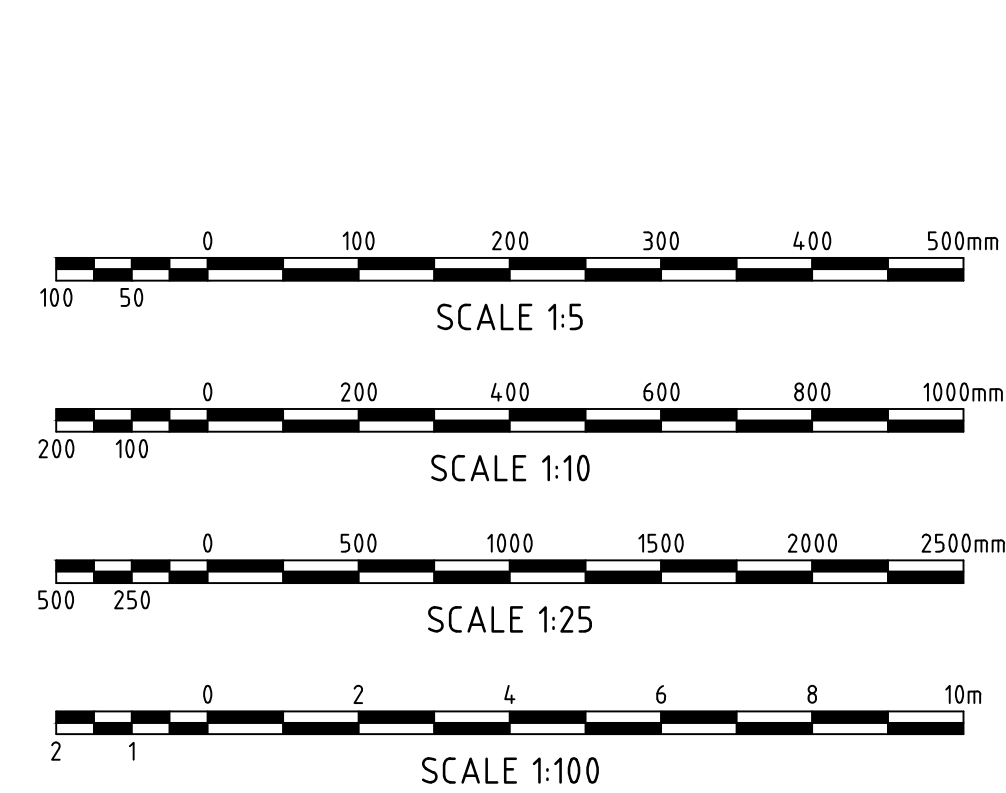
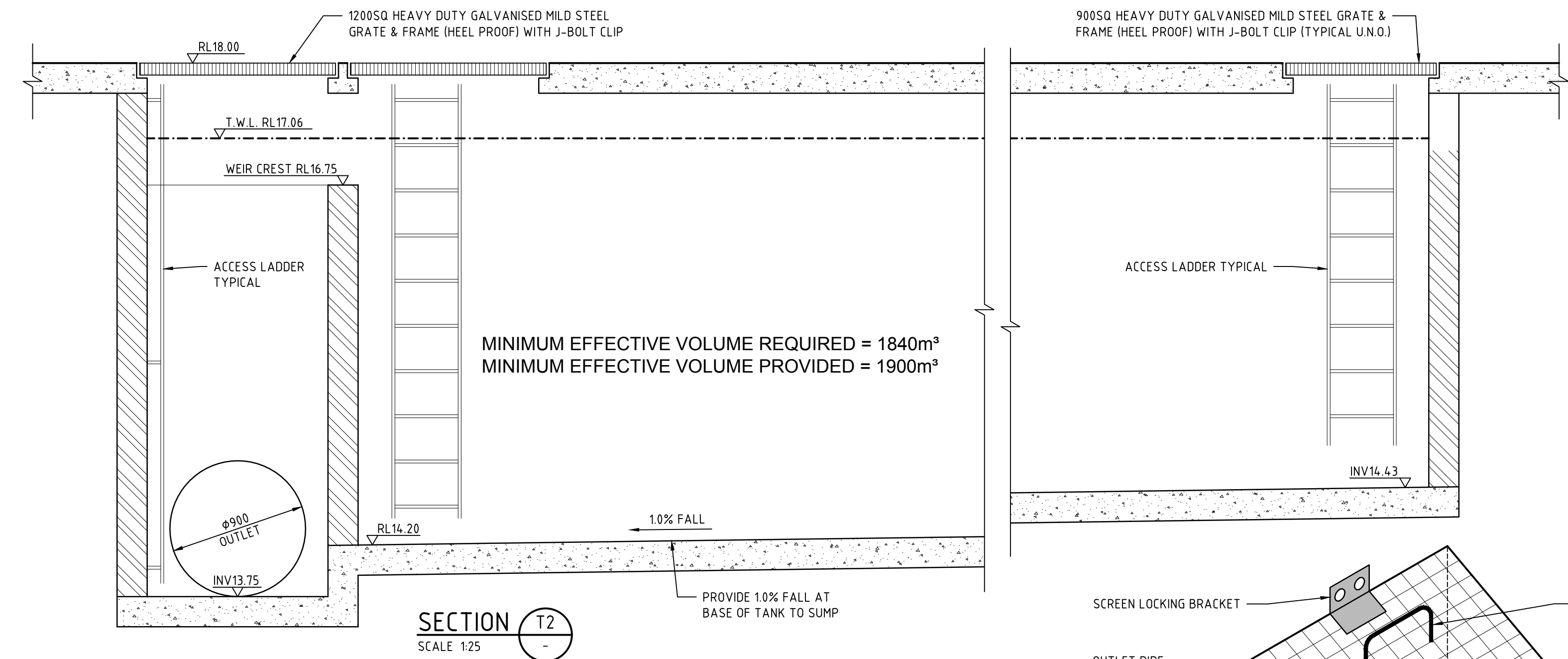
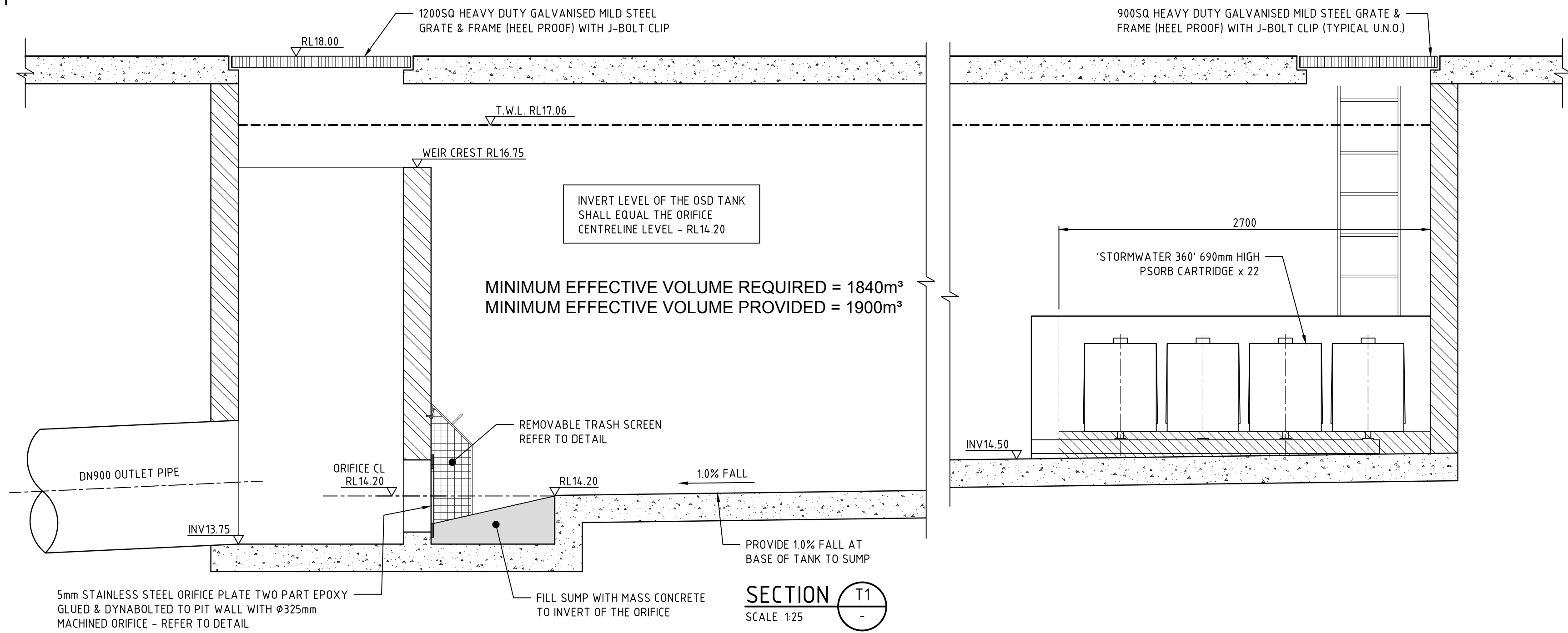
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BUNNINGS WAREHOUSE KEMBLA GRANGE

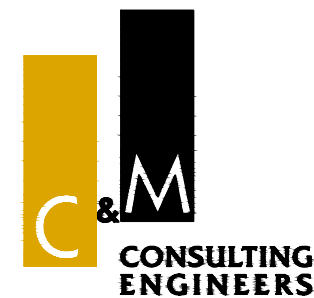
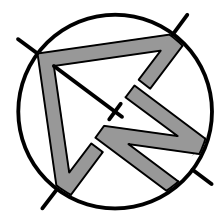
RAMP LONGITUDINAL SECTIONS - SHEET 1

STATUS DEVELOPMENT APPLICATION DRAWING No. 01327_C301 REVISION 02



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01	W.M.	22/08/17	A.M.	ISSUED FOR DA APPROVAL



CIVIL AND HYDRAULIC
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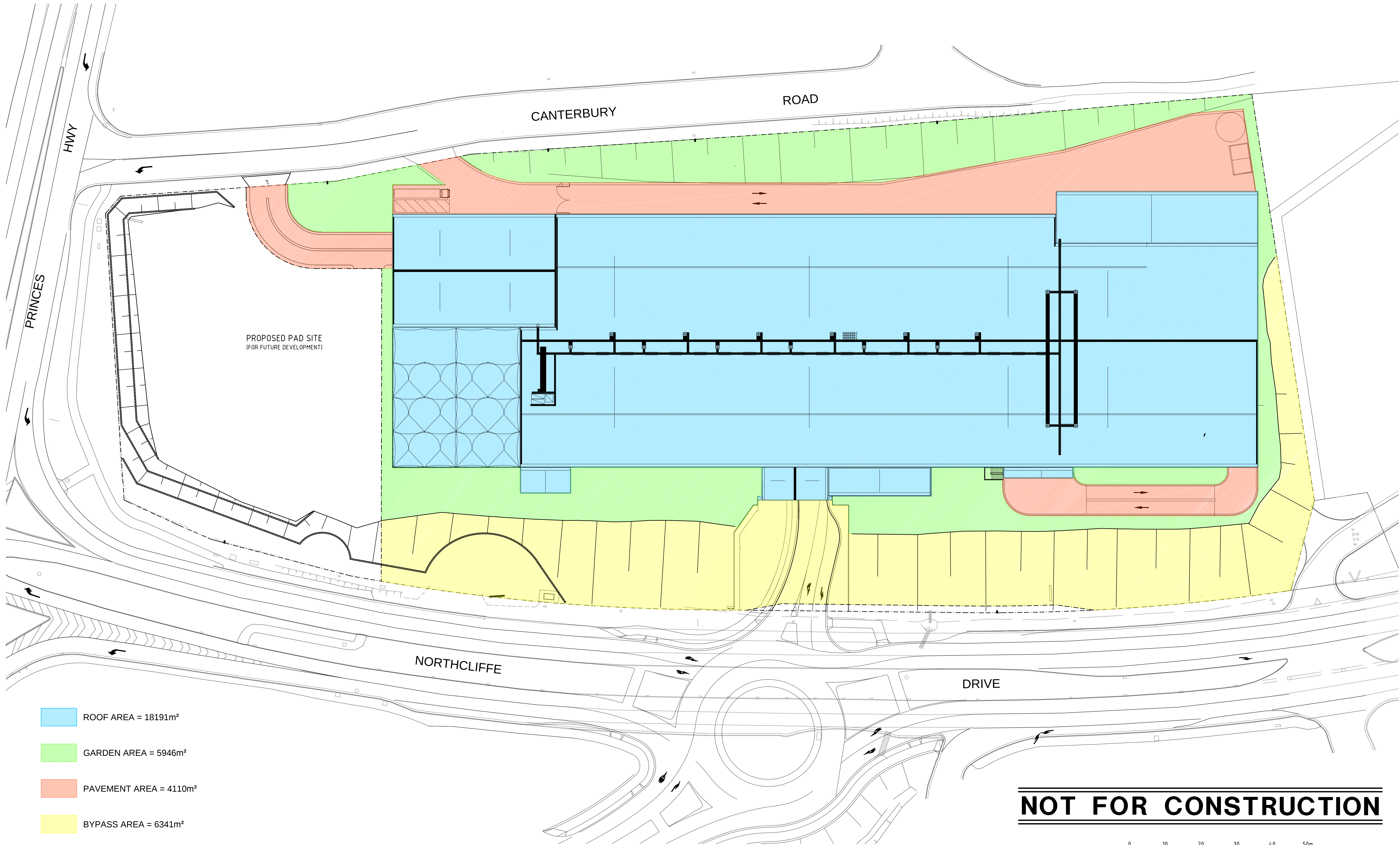
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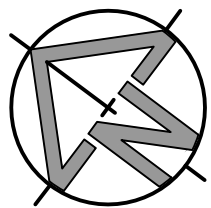
OSD TANK - PLAN
SCALE 1:100

BUNNINGS WAREHOUSE KEMBLA GRANGE	
OSD TANK DETAILS	
STATUS	DEVELOPMENT APPLICATION
DRAWING No.	01327_C501
REVISION	01

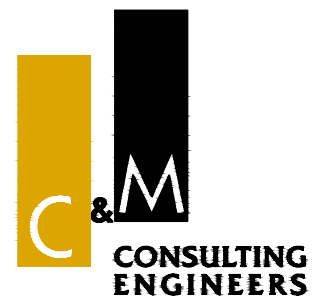


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BUNNINGS WAREHOUSE KEMBLA GRANGE

CATCHEMENT PLAN

STATUS DEVELOPMENT APPLICATION DRAWING No. 01327_C601 REVISION 02