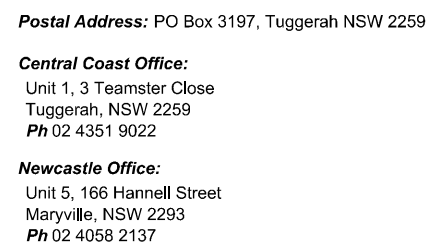
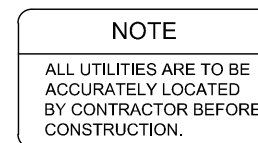


\\synergy\Projects\2018\20180499 Dee Why RSL Carwash, 825-831 Pittwater Road, Dee Why\DESIGN\DRAWINGS\CURRENT DRG\DA\20180499_DA\1_COVER.dwg



SURVEY											
1.	SURVEY BY:	CRUX SURVEYING AUSTRALIA PTY LTD.									
2.	DATE:	06/12/2019									
3.	REFERENCE:	DRG. No. 122232-SU-DT-001									
4.	ORIGIN OF COORDINATES:										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%; padding: 5px;">SSM NO.</th> <th style="width: 25%; padding: 5px;">E</th> <th style="width: 25%; padding: 5px;">N</th> <th style="width: 25%; padding: 5px;">R.L.</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">26869</td> <td style="text-align: center; padding: 5px;">342007.809</td> <td style="text-align: center; padding: 5px;">6264807.276</td> <td style="text-align: center; padding: 5px;">3.836</td> </tr> </tbody> </table>				SSM NO.	E	N	R.L.	26869	342007.809	6264807.276	3.836
SSM NO.	E	N	R.L.								
26869	342007.809	6264807.276	3.836								
5.	ALL WORKS TO BE SET OUT BY A REGISTERED SURVEYOR										
6.	ALL LEVELS SHOWN ARE TO AHD										



A1

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A1

H:\Vannery\Projects\2018\20180499 - Dee Why RSL Clubhouse, 825-831 Pittwater Road, Dee Why\DESIGN DRAWINGS\CURRENT - DRG\DA\20180499-DA-1- COVER.dwg
1/7/20

GENERAL (G)

G01.

ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE APPROVED PLANS, SUBJECT TO NORTHERN BEACHES COUNCIL STANDARDS.

G02.

ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND OTHER DOCUMENTATION SHALL BE REFERRED TO THE ENGINEER PRIOR TO INSTALLATION.

G03.

ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS SHOWN ON THESE DRAWINGS. COUNCILS SPECIFICATION OR AUTHORITY SPECIFICATIONS AS MAY APPLY. ANY DISCREPANCIES SEE NOTE 1.

G04.

ALL EXISTING SERVICES AND UTILITIES SHALL BE LOCATED, EXPOSED, LEVELED AND RECORDED PRIOR TO COMMENCEMENT OF ANY WORKS. ALL INFORMATION SHOWING SERVICES AND UTILITIES IS FOR GUIDANCE ONLY AND ITS ACCURACY IS NOT GUARANTEED.

G05.

THE CONTRACTORS WORK AREA IS CONFINED TO THE SITE AND AS SHOWN ON THESE DRAWINGS EXTERNALLY TO THE SITE UNLESS NOTED OTHERWISE.

G06.

ALL EXISTING STRUCTURES, IMPROVEMENTS STOCKPILES, RUBBISH AND DEBRIS SHALL BE REMOVED AS SPECIFIED.

G07.

ALL FINISHED GRADING SHALL BE TO THE SATISFACTION OF THE SUPERINTENDENT, BUT NOT BEYOND THE EXTENT OF WORKS.

G08.

ALL NEW WORKS SHALL MAKE A SMOOTH TRANSITION WITH EXISTING WORKS.

G09.

ALL WORKS WITHIN THE VICINITY OF A WATERCOURSE SHOULD BE REFERED TO THE NSW OFFICE OF WATER FOR A CONTROLLED ACTIVITY APPROVAL.

SEDIMENT & EROSION CONTROL (SE)

SE01.

INSTALL SEDIMENT & EROSION CONTROLS AS PER DETAILS ON THE DRAWINGS PRIOR TO COMMENCEMENT OF EXCAVATION.

SE02.

ALL SEDIMENT & EROSION CONTROLS SHALL BE CHECKED WEEKLY & IMMEDIATELY AFTER RAINFALL. SEDIMENT BUILD UP TO BE REMOVED & CONTROLS REPAIRED WHERE NECESSARY

SE03.

ALL EXPOSED/EXCAVATED AREAS SHALL BE TURFED & SEEDDED AS SOON AS POSSIBLE AFTER CONSTRUCTION.

SE04.

ALL SEDIMENT AND EROSION CONTROLS SHALL BE REMOVED AT THE COMPLETION OF WORKS, AND DISTURBED GROUND TURFED, SEEDDED OR REINSTATED TO THE SATISFACTION OF THE SUPERINTENDENT.

SE05.

ALL TURFING SHALL BE LAID PERPENDICULAR TO DIRECTION OF SURFACE RUN-OFF FLOW, AND PINNED WITH WIRE "U" SHAPED PINS OF LENGTH 200mm AT MAX 1m INTERVALS WHEN ON BATTERS OR GRADES EXCEEDING 5%.

SE06.

SEDIMENT BASIN IS TO BE FLOCCULATED WITH GYPSUM AND PUMPED DRY AFTER RAINFALL IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE NEW SOUTH WALES LANDCOM PUBLICATION 'SOILS AND CONSTRUCTION' VOLUME 1 (THE 'BLUE BOOK') AND COUNCILS REQUIREMENTS.

GEOTECHNICAL (GT)

GT01.

GEOTECHNICAL REPORT NOT PROVIDED.

CERTIFICATION (CE)

CE01.

THE PRINCIPLE CERTIFYING AUTHORITY (AT THE TIME OF ISSUING THE CONSTRUCTION CERTIFICATE) SHALL PROVIDE THE CERTIFYING ENGINEER AND CONTRACTOR A LIST OF ANY CRITICAL STAGE INSPECTIONS REQUIRED TO BE UNDERTAKEN BY A QUALIFIED ENGINEER. THE ENGINEER TO BE GIVEN 24 HOURS NOTICE PRIOR TO INSPECTION.THE ENGINEER WILL NOT CERTIFY ANY ITEM NOT INSPECTED.

NOTE

ALL UTILITIES ARE TO BE ACCURATELY LOCATED BY CONTRACTOR BEFORE CONSTRUCTION.



1/7/20

STORMWATER PITS (SP)

SP01.

CONCRETE COMPRESSIVE STRENGTH F'C = 25mPa UNO.

SP02.

SIDE WALLS OF ALL PITS DEEPER THAN 1500 ARE TO BE REINFORCED WITH ONE LAYER OF SL82 MESH CENTRALLY FOLDED 300 INTO BASE U.N.O. HORIZONTAL CORNER BARS CONSISTING OF N12 AT 400 CENTRES WITH CORNER LEGS 400 LONG SHOULD BE INSTALLED AT ALL 4 CORNERS FOR THE FULL HEIGHT OF THE PIT.

SP03.

IN-SITU CONCRETE PITS ARE NOT TO EXCEED A DEPTH OF 3500mm UNLESS SPECIFICALLY DETAILED WITHIN THIS DRAWING SET.

SP04.

PITS DEEPER THAN 1200 TO BE FITTED WITH GALVANISED STEP IRONS AS PER DETAIL.

SP05.

ALL EXPOSED PIT EDGES TO BE ROUNDED WITH 20 RADIUS.

SP06.

GRATING AND FRAME TO BE WELDLOK GALVANISED STEEL SUMP GRATE OR APPROVED EQUAL. GRATING TO BE AS FOLLOWS:

- ROADWAYS

HEAVY DUTY UNO

- CARPARKING

MEDIUM DUTY UNO

- LANDSCAPING

LIGHT DUTY UNO

SP07.

SHAPE ADJACENT SURFACE AREAS TO ASSIST WATER COLLECTION.

SP08.

PRECAST CONCRETE PITS MAY BE SUBSTITUTED SUBJECT TO APPROVAL.

SP09.

BUILD INTO UPSTREAM FACE OF ALL PITS A 3 METRE SUBSOIL LINE FALLING INTO PITS TO MATCH PIT INVERT.

SP10.

STORMWATER PITS LESS THAN 600 SQUARE AND 600 DEEP MAY BE REPLACED WITH PLASTIC PITS IF NOT LOCATED IN ROADWAYS AND WRITTEN PERMISSION IS OBTAINED FROM THE ENGINEER.

EARTHWORKS (EW)

EW01.

WITHIN EXTENTS OF WORK AREA, STRIP ALL TOPSOIL & STOCKPILE FOR RE-USE OR DISPOSE, REMOVE ALL STRUCTURES & DEBRIS

EW02.

EXCAVATE, STOCKPILE OR DISPOSE OF MATERIAL TO EXPOSE SUB-GRADE AS SPECIFIED IN CUT AREAS.

EW03.

BENCH & PROOF ROLL IN ACCORDANCE WITH AS3798 & PRESENT TO SUPERINTENDENT FOR APPROVAL.

EW04.

REPLACEMENT OF SUB-GRADE TO BE UNDERTAKEN ONLY AFTER INSTRUCTION FROM THE SUPERINTENDENT & TO THE EXTENT AS DIRECTED.

EW05.

COMPACT SUB-GRADE TO 100% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ±2% IN ACCORDANCE WITH AS 3798.

EW06.

TESTING OF ALL COMPACTED LAYERS, INCLUDING SUB-GRADE TO BE ALLOWED FOR BY THE CONTRACTOR AND COPIES OF TEST RESULTS SUPPLIED TO THE CERTIFYING ENGINEER.

EW07.

FOR SAND SUB-GRADES COMPACT TO DENSITY INDEX AS SPECIFIED IN THE DRAWING, REPORTS OR SUPERINTENDENTS INSTRUCTION.

EW08.

ALL PAVEMENTS OR BUILDING PADS TO BE COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT OR AS SPECIFIED ON THE DRAWINGS.

EW09.

ALL SPOIL FROM EXCAVATION/CONSTRUCTION TO BE REMOVED FROM SITE BY CONTRACTOR.

EW10.

RGH HAVE USED 12D MODEL TO GENERATE THE DESIGN AND EARTHWORKS SURFACES. THE MODEL HAS BEEN CREATED FOR DESIGN PURPOSES ONLY. ANY DIGITAL FILES ISSUED BY RGH FOR THIS PROJECT ARE FOR INFORMATION ONLY AND ARE NOT TO BE USED AS A CONSTRUCTION MODEL OR FOR FINAL SETOUT. ALL FILES PROVIDED ARE TO BE VERIFIED BY A REGISTERED SURVEYOR PRIOR TO UNDERTAKING ANY SETOUT

STORMWATER DRAINAGE (SD)

SD01.

ALL STORMWATER DRAINAGE TO BE IN ACCORDANCE WITH AS 3500.3.

SD02.

UPVC PIPES AS SPECIFIED TO BE IN ACCORDANCE WITH AS 1254. CONCRETE PIPES AS SPECIFIED TO BE IN ACCORDANCE WITH AS 1342.

SD03.

HOLD POINTS: CONTRACTOR IS TO PRESENT WORK AS EXECUTED SURVEY PLANS TO THE SUPERINTENDENT SHOWING LOCATION EXTENT AND LEVEL OF THE ON SITE DETENTION AND BIO-RETENTION SYSTEM AS APPLICABLE TO EACH PROJECT:

a.

COMPLETION OF SUB-GRADE EXCAVATION.

b.

INSTALLATION OF TANK STRUCTURE/FILTER MEDIUM.

c.

INSTALLATION OF ORIFICE PLATE AND/OR OUTLET PIPE.

d.

UPON COMPLETION OF ALL WORKS.

SD04.

ALL CONCRETE PIPES ARE TO BE RUBBER RING JOINTED UNLESS NOTED OTHERWISE.

SD05.

MINIMUM PIPE GRADES SHALL BE AS FOLLOWS UNO;

DIAMETER	MINIMUM GRADE
LESS THAN OR EQUAL TO 150mm	1.00%
225mm	0.5%
300mm	0.4%
GREATER THAN OR EQUAL TO 375mm	0.3%

SD06.

PIPE BEDDING MATERIAL IS TO COMPLY WITH AS 2032 OR AS 3725 AS APPROPRIATE.

SD07.

COVER REQUIRED TO PIPES IS 450mm IN ROADS AND CARPARKS AND 300mm ELSEWHERE UNO.

SD08.

TRENCHES ARE TO BE BACKFILLED WITH APPROVED FILL ONLY. FILL IS TO BE COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY IN ACCORDANCE WITH AS1289.5.1.1

SD09.

CONCRETE BULKHEADS ARE TO BE INSTALLED ON ALL PIPES WITH GRADES >16%.

SD10.

SUBSOIL DRAINS TO BE LAID AT A MINIMUM GRADE OF 1.0% U.N.O. BACKFILL WITH FREE-DRAINING GRANULAR MATERIAL TO WITHIN 200mm OF THE SURFACE U.N.O. COMPACTED IN ACCORDANCE TO RELEVANT STANDARDS, THE GEOTECH REPORT, OR AS INSTRUCTED BY THE SUPERINTENDENT. OVERLAY BACKFILL WITH APPROVED GEOFABRIC TO MAINTAIN SEPARATION FROM TOPSOIL.

SD11.

REPLACEMENT OF DESIGNED STORMWATER PIPES WITH NUMEROUS SMALLER PIPES IS NOT TO BE UNDERTAKEN WITHOUT THE DESIGNING ENGINEERS AUTHORISATION.

SD12.

CONTRACTOR TO CONFIRM INVERT LEVEL OF RECEIVING PIT/PIPE/OUTLET CHANNEL ETC AS MAY APPLY PRIOR TO COMMENCEMENT OF WORK

SD13.

ALL EXISTING IMPERVIOUS AREAS AND/OR PIPEWORK WITHIN SITE OR STUDY AREA TO BE CONNECTED TO NEW PITS OR JUNCTIONS AS MAY APPLY.

SD14.

ALL CONNECTIONS TO PITS, HEADWALLS OR OTHER, EITHER EXISTING OR PROPOSED, WITHIN THE SITE OR STUDY AREA TO BE GROUTED OR SEALED TO THE SATISFACTION OF THE SUPERINTENDENT OR COUNCIL.

SD15.

SEALED SCREW CAP CLEAR OUT INSPECTION OPENING (I.O.) TO BE PROVIDED AT THE LOWEST POINT ON ALL CHARGED STORMWATER LINES AS A MINIMUM.

SD16.

ALL CHARGED STORMWATER LINES TO BE SOLVENT WELDED JOINTS.

PAVEMENT CONSTRUCTION (PC)

PC01.

EXPOSED SUBGRADE SHALL BE COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ±2% OR TO 80% RELATIVE DENSITY AS MAY APPLY. IN ACCORDANCE WITH AS1289 5.1.1., UNLESS NOTED OTHERWISE IN GEOTECHNICAL REPORT

PC02.

BASE COURSE SHALL BE COMPACTED TO 98% MODIFIED MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ±2% IN ACCORDANCE WITH AS1289 5.1.1., UNLESS NOTED OTHERWISE IN GEOTECHNICAL REPORT

PC03.

HOLD POINTS: CONTRACTOR IS TO PRESENT WORK AS EXECUTED SURVEY PLANS TO THE SUPERINTENDENT SHOWING LOCATION EXTENT AND LEVEL OF THE PAVEMENT LAYERS AT:

a.

COMPLETION OF SUB-GRADE EXCAVATION.

b.

COMPLETION OF SUB-BASE LAYER.

c.

COMPLETION OF ANY OTHER PAVEMENT LAYERS AS SPECIFIED IN THE PAVEMENT REPORT AND/OR SPECIFICATION.

d.

UPON COMPLETION OF ALL WORKS.

PC04.

ALL CONCRETE WORKS TO BE IN ACCORDANCE WITH AS3600.

PC05.

CONCRETE SHALL BE MINIMUM 25mPa, TYPE A AND MAXIMUM AGGREGATE 20mm UNLESS NOTED OTHERWISE IN GEOTECHNICAL REPORT

PC06.

REINFORCEMENT TO BE INSTALLED AS SPECIFIED WITH MINIMUM 45mm COVER UNLESS NOTED OTHERWISE.

PC07.

CONCRETE TO BE PLACED AND COMPACTED WITH MECHANICAL VIBRATORS. POURING/DROPPING OF CONCRETE FROM HEIGHTS GREATER THAN 1m IS NOT PERMISSIBLE.

REINFORCEMENT (R)

R01.

REINFORCEMENT SYMBOLS:

N

NOTES GRADE 500 N BARS TO AS 4671

R

NOTES GRADE 250 R HOT ROLLED PLAIN BARS TO AS 4671

L

NOTES GRADE 500 L HARD-DRAWN WIRE REINFORCING FABRIC TO AS 4671

W

NOTES GRADE 450 W HARD-DRAWN PLAIN WIRE TO AS 4671

TM

NOTES GRADE 500 TRENCH MESH TO AS 4671

NUMBER OF BARS IN GROUP

17N20-250

BAR GRADE AND TYPE

SPACING IN mm

NOMINAL BAR SIZE IN mm

THE FIGURES FOLLOWING THE FABRIC SYMBOLS RL, SL, L .. TM IS THE REFERENCE NUMBER TO AS 4671.

R02.

REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.

R03.

SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR, AS PER THE TABLE BELOW:

SPLICE LENGTHS (mm)		
BAR SIZE	LESS THAN 300 CONCRETE BELOW BAR OR VERTICAL BAR	≥32MPa
	25MPa	≥32MPa
N12	300	300
N16	550	500
N20	750	650
N24	1000	900
N28	1350	1200
N32	1650	1450
N36	2000	1750

MORE THAN 300 CONCRETE BELOW BAR		
	25MPa	≥32MPa
N12	400	400
N16	650	600
N20	950	850
N24	1300	1150
N28	1650	1500
N32	2050	1850
N36	2500	2200

BOTTOM BAR LAPPED AT SUPPORTS AND TOP BAR LAPPED AT MID SPAN.

R04.

WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER.

R05.

FABRIC SHALL BE LAPPED 2 TRANSVERSE WIRES PLUS 25mm. BUNDLED BARS SHALL BE TIED TOGETHER AT 30 BAR DIAMETER CENTRES WITH 3 WRAPS OF THE WIRE.

R06.

WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-400 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400mm UNLESS NOTED.

R07.

JOGGLES TO BARS SHALL COMPRISE A LENGTH OF 12 BAR DIAMETERS BETWEEN BEGINNING AND END OF AN OFFSET OF 1 BAR DIAMETER.

R08.

ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1 METRE CENTRES BOTH WAYS, AND 800 EACH WAY FOR FABRIC. WHEN POURED ON GROUND AS FORMWORK PROVIDE PLATES UNDER ALL BAR CHAIRS. PLASTIC TIPPED STEEL CHAIRS SHALL NOT BE USED ON EXPOSED FACES IN EXPOSURE CLASSIFICATION B1, B2 AND C ONLY PLASTIC OR PLASTIC OR CONCRETE CHAIRS.

R09.

AT A SIMPLE OR END SUPPORT OF A SLAB ON A MASONRY WALL, ALL BOTTOM SLAB REINFORCEMENT SHALL EXTEND OVER THE MASONRY WALL BY A LENGTH 75mm FOR N12 BARS & 95mm FOR N16 BARS. IF THIS CANNOT BE ACHIEVED DUE TO COVER REQUIREMENTS THEN THE BARS SHALL BE COGGED. FOR FABRIC THE LAST WELDED CROSS ROD SHALL BE LOCATED OVER THE WALL AND 50mm MINIMUM BEYOND THE FACE OF THE WALL.

R10.

SITE BENDING OF REINFORCEMENT SHALL BE AVOIDED IF POSSIBLE. WHERE SITE BENDING IS UNAVOIDABLE IT SHALL BE CARRIED OUT COLD, WITHOUT THE APPLICATION OF HEAT, AND IN ACCORDANCE WITH THE PRACTICE NOTE RPN1 OF THE STEEL REINFORCEMENT INSTITUTE OF AUSTRALIA.

R11.

WHERE ENGINEERING INSPECTIONS ARE REQUIRED, THE CERTIFYING ENGINEER SHALL BE GIVEN 24 HOURS NOTICE FOR REINFORCEMENT INSPECTION AND CONCRETE SHALL NOT BE DELIVERED UNTIL FINAL APPROVAL HAS BEEN OBTAINED IN WRITING.

CONCRETE (C)

C01.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600, AS 1379 & AS 3610 CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

C02.

ALL CEMENT TO BE TYPE SL. SHRINKAGE LIMITED CEMENT IN ACCORDANCE WITH AS3972, EXCEPT THAT THE MAXIMUM SHRINKAGE OF THE CEMENT IN THE MORTAR TEST SAMPLE IN ACCORDANCE WITH AS3600 SHALL BE LESS THAN 600 MICROSTRAIN.

ELEMENT	STRENGTH (MPa)	GRADE	SUMP (mm)	MAXIMUM AGGREG. SIZE (mm)	MINIMUM CEMENT CONTENT (kg/cu.m)
SLABS		N32	80	20	250
FOOTINGS		N32	80	20	250

PROJECT ASSESSMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379 CLAUSE B7.

C03.

a.

ALL CONCRETE IN SLABS AND BEAMS TO BE PROPORTIONED TO LIMIT DRYING SHRINKAGE TO 650 MICROSTRAIN AT 56 DAYS.

b.

DETAILS OF THE PROPOSED MIX TO BE SUBMITTED & APPROVAL OBTAINED PRIOR TO POURING ANY CONCRETE.

c.

SHRINKAGE TESTS SHALL BE CARRIED OUT BY AN APPROVED NATA REGISTERED LABORATORY IN ACCORDANCE WITH AS 1012 PART 13. TESTS SHALL BE CONDUCTED ON THE FIRST BATCH OF CONCRETE USED IN SUSPENDED SLABS AND SUBSEQUENTLY AT THE RATE OF ONE TEST EVERY ADDITIONAL 100m³ OF CONCRETE SUPPLIED. THREE SPECIMENS SHALL BE TAKEN FOR EACH TEST AND THE SHRINKAGE SHALL BE THE AVERAGE OF THE THREE RESULTS. THE COST OF TESTING SHALL BE BORNE BY THE CONTRACTOR AS SHALL ANY ADDITIONAL TESTS REQUIRED IF THE CONCRETE FAILS TO MEET THE SPECIFIED SHRINKAGE LIMITS.

C04.

NO ADMXTURES OTHER THAN LOW RANGE WRA SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.

C05.

CLEAR CONCRETE COVER TO ALL REINFORCEMENT SHALL BE AS FOLLOWS UNLESS SHOWN OTHERWISE. COVER MAY NEED TO BE INCREASED FOR FIRE RATING.

EXPOSURE CLASS TO AS 3600	MINIMUM CONCRETE GRADE	CAST AGAINST GROUND	CAST IN FORMS & EXPOSED	CAST IN FORMS & NOT EXPOSED
A1 (INTERNAL)	20	40mm	-	20mm
A2 (EXTERNAL)	20	50mm	30mm	-
B1 (EXTERNAL)	32	60mm	40mm	-
B2 (EXTERNAL)	40	65mm	45mm	-
FOOTINGS	25	50mm	-	-

NOTE: WHERE CONCRETE IS POURED ON A VAPOURPROOF MEMBRANE 0.2mm MINIMUM THICKNESS, THE COVER TO CONCRETE CAST AGAINST GROUND MAY BE REDUCED BY 10mm.

C06.

CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES. NO FINISH WHICH DECREASES COVER IS ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

C07.

DEPTHS OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS.

C08.

FOR CHAMFERS, DRIP GROOVES, REGLETS, ETC. REFER TO ARCHITECT'S DETAILS, MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS.

C09.

NO HOLES, CHASES, BLOCKOUTS, DUCTS OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.

C10.

CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.

C11.

ALL CONCRETE COLUMNS GREATER THAN 1.2 METRES IN HEIGHT SHALL BE POURED A MINIMUM OF 4 HOURS PRIOR TO SLAB OR BEAM OVER.

C12.

THE FINISHED CONCRETE SHALL BE MECHANICALLY VIBRATED TO ACHIEVE A DENSE HOMOGENEOUS MASS. COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.

C13.

CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF THREE DAYS, AND THE PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. APPROVED SPRAYED ON CURING COMPOUNDS THAT COMPLY WITH AS 3799 MAY BE USED WHERE FLOOR FINISHES WILL NOT BE AFFECTED (REFER MANUFACTURERS SPECIFICATION). POLYTHENE SHEETING OR WET HESSIAN MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC.

C14.

CONSTRUCTION SUPPORT PROPPING IS TO BE LEFT IN PLACE WHERE NEEDED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING. NO BRICKWORK OR PARTITION WALLS ARE TO BE CONSTRUCTED ON SUSPENDED LEVELS UNTIL SEVEN DAYS AFTER PROPPING HAS BEEN REMOVED AND THE SLAB PRE-LOADED WITH THE BRICKS OR UNITS TO BE USED IN THE WALL.

C15.

REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT THE PERMISSION OF THE ENGINEER.

C16.

CAST-IN FIXINGS, BOLTS ETC. SHALL NOT BE ALTERED WITHOUT THE PERMISSION OF THE ENGINEER.

C17.

CONDUITS, PIPES ETC. SHALL ONLY BE LOCATED IN THE MIDDLE THIRD OF THE SLAB DEPTH AND SPACED AT NOT LESS THAN 3 DIAMETERS. CONDUITS AND PIPES SHALL NOT BE PLACED WITHIN THE COVER TO REINFORCEMENT.

C18.

SLABS AND BEAMS SHALL BE CONSTRUCTED TO BEAR ONLY ON THE BEAMS, WALLS, COLUMNS ETC. SHOWN ON THE DRAWINGS. ALL OTHER BUILDING ELEMENTS SHALL BE KEPT 12mm CLEAR OF SOFFITS OF STRUCTURE.

C19.

PLASTIC FORMWORK SPACERS AND BAR CHAIRS TO BE USED IN ALL EXPOSED CONCRETE WORK.

1/7/20

REVISION	DESCRIPTION	DATE	VERSION
A	ISSUE FOR DA	17/01/20	
			SCALE

D.A. ISSUE

Postal Address: PO Box 3197, Tuggerah NSW 2259
Central Coast Office: Unit 1, 3 Teamster Close, Tuggerah NSW 2259 Ph 02 4351 9022
Newcastle Office: Unit 5, 166 Hannell Street, Maryville NSW 2293 Ph 02 4058 2137

SURVEY BY CRUX SURVEYING AUSTRALIA
REFERENCE 122232-SU-DT-001
DATED 06/12/2019
DATUM A.H.D.

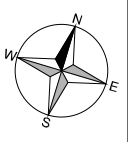
CLIENT DEE WHY RSL CLUB
ADDRESS 825-831 PITTWATER ROAD, DEE WHY
PROJECT CARWASH DRIVEWAY WIDENING

DRAWING TITLE

NOTES SHEET

SCALE	N.T.S.	INT.	SHEET
DRAWN	BP		DA.1.02
DESIGNED	ST		
CHECKED	CF		REV A
DATE	JANUARY 2020		
JOB NUMBER	20180499		

A1

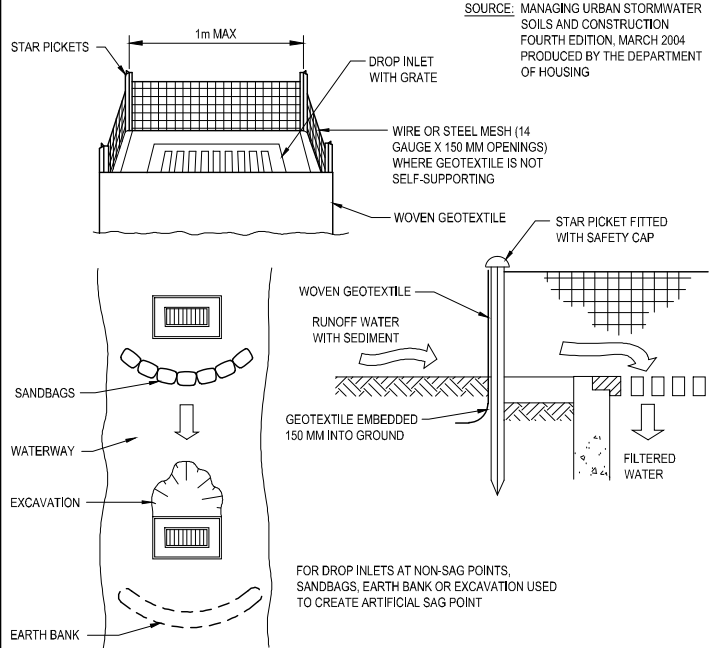


A1

The diagram illustrates a cross-section of a slope with a sediment fence. The fence is represented by a line of small circles. To the left of the fence is an 'EARTH BANK' with a '2:1 SLOPE MAX'. To the right of the fence is a 'STABILISE STOCKPILE SURFACE' with a '2:1 SLOPE MAX'. A 'SEDIMENT FENCE' label points to the fence line. An arrow labeled 'FLOW' indicates the direction of water flow from left to right. A tree is shown on the right side of the slope.

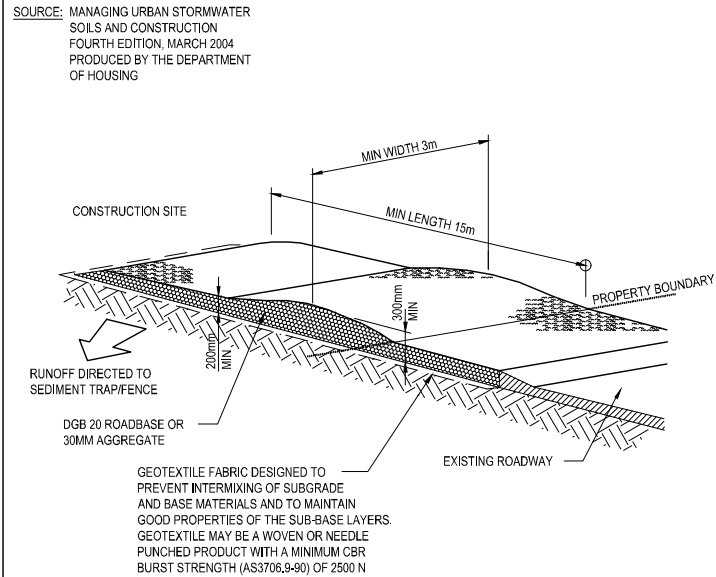
1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METERS IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESPC OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCE (STANDARD DRAWING 6-8) 1 TO 2 METRES DOWNSLOPE.

SD 4-1



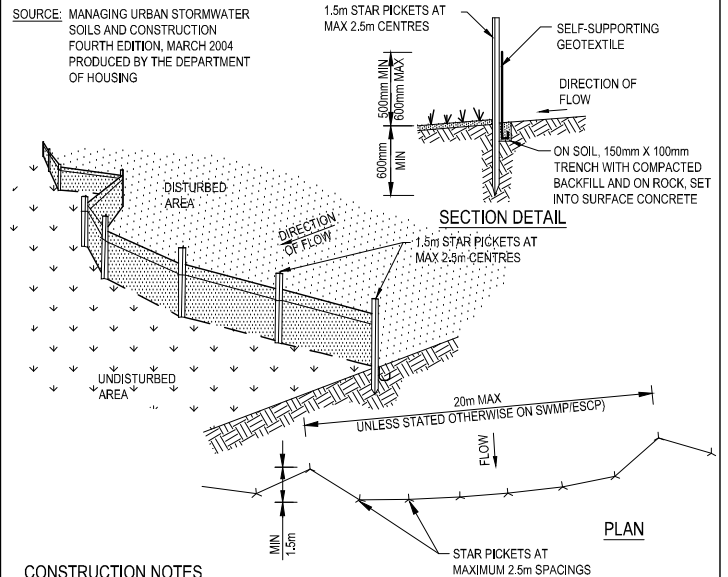
1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOTEXTILE. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING
4. DO NOT COVER INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

SD 6-12



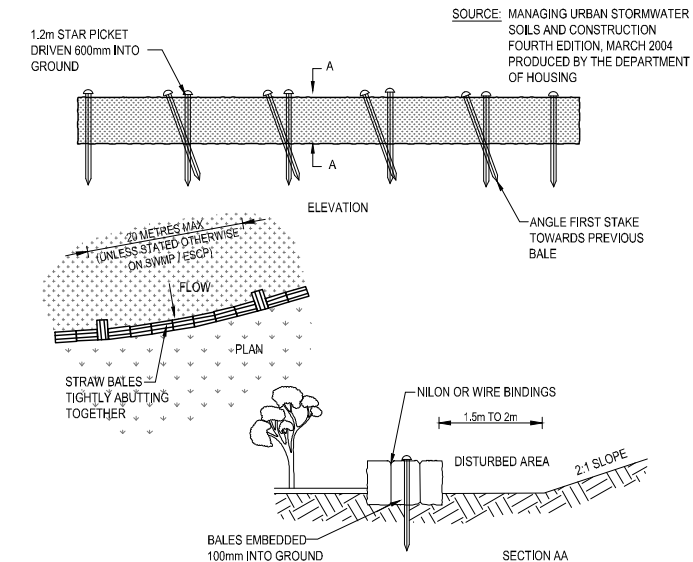
1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200MM THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30MM AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE

SD 6-14



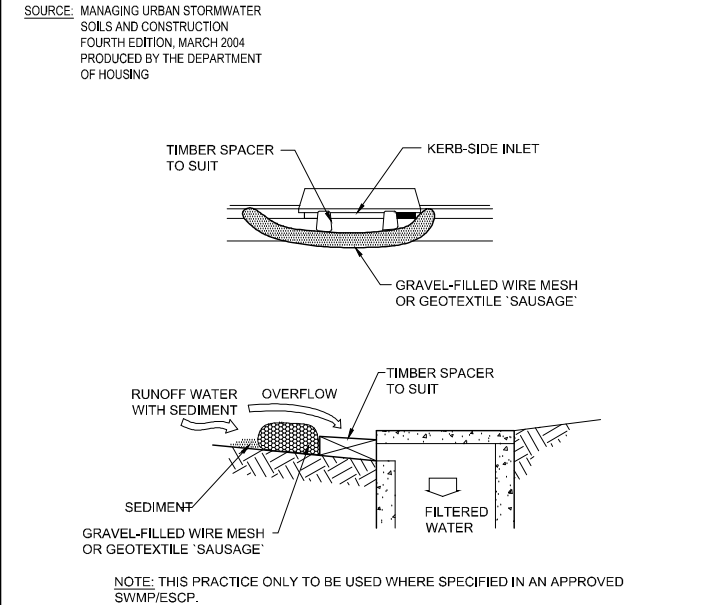
1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION, THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.
2. CUT A 150 MM DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH, ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH, FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150 MM OVERLAP.
6. BACKFILL TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE

SD 6-8



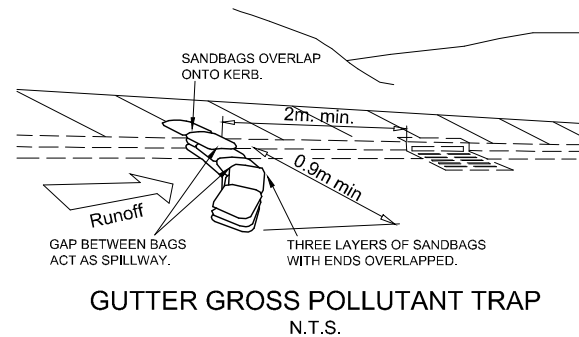
1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.
2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND
3. ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE
4. EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 1.2 METRE STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE THEM 600 mm INTO THE GROUND AND, IF POSSIBLE, FLUSH THEM WITH THE TOP OF THE BALES, WHERE STAR PICKETS ARE USED AND THEY PROTRUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS.
5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACED 1 TO 2 METRES DOWNSLOPE FROM THE TOE
6. ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED - THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS

SD 6-7

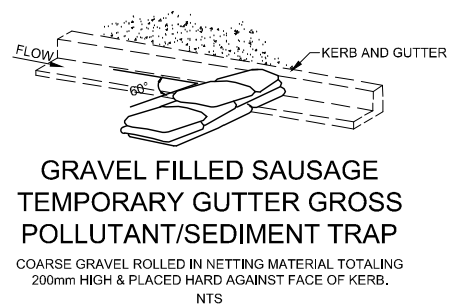


1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. PLACE THE SLEEVE CROSS-SECTION ABOUT 100mm FROM THE 400MM WIDE
4. PLACE THE FILTER AT THE Opening MAINTAIN AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDSAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ADJACENT BOTH OTHER AND SEDIMENT - LADEN WATERS CANNOT PASS BETWEEN.

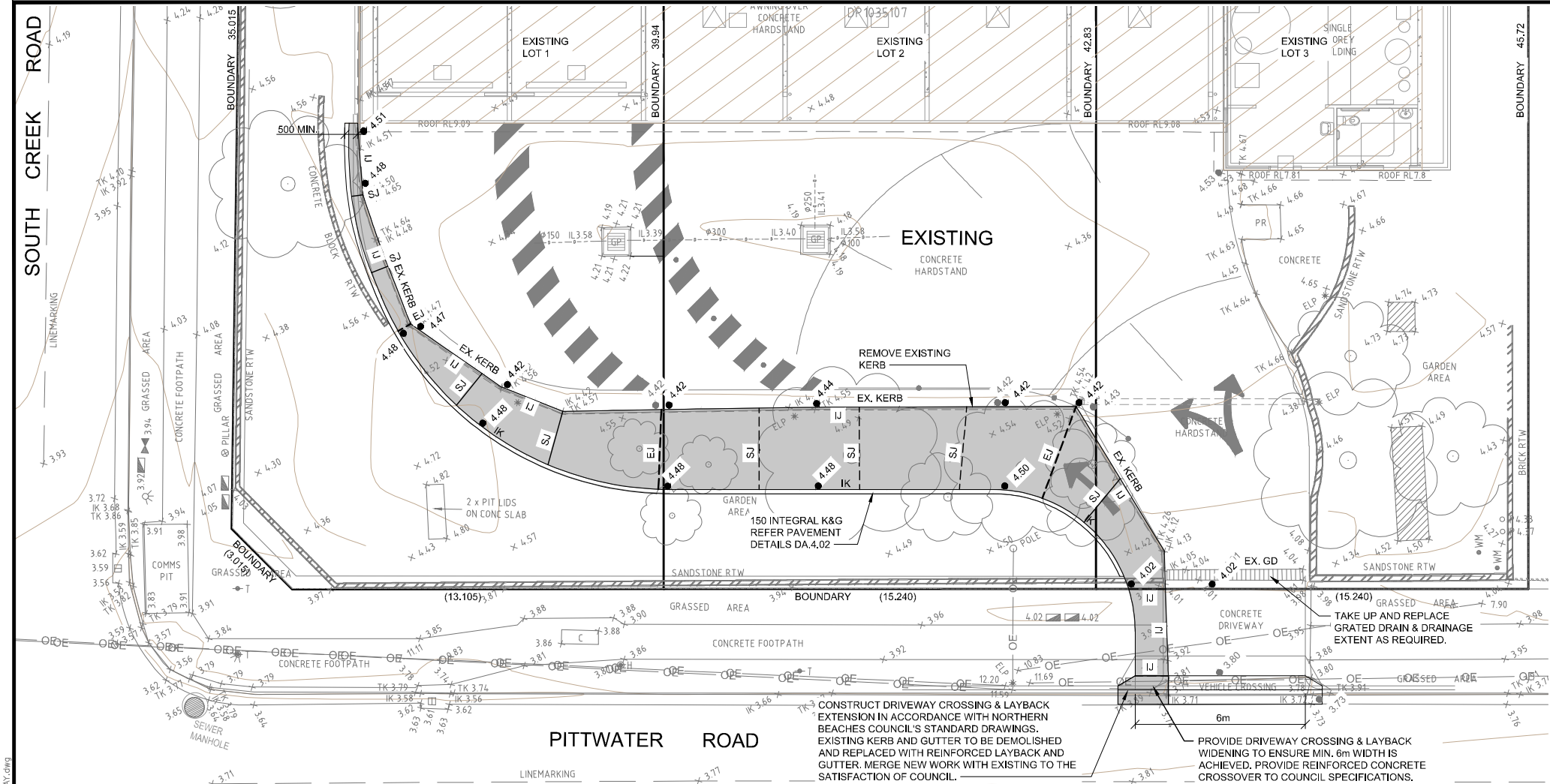
SD 6-11



WHEN USED AS A GROSS POLLUTANT TRAP
STRUCTURE SHALL BE REGULARLY DESILTED.
NTS



REVISION	DESCRIPTION	DATE	VERSION	D.A. ISSUE  RGH CONSULTING GROUP Multi-discipline Engineering <i>Postal Address:</i> PO Box 3197, Tuggerah NSW 2259 <i>Central Coast Office:</i> Unit 1, 3 Teamster Close, Tuggerah NSW 2259 <i>Ph</i> 02 4351 9022 <i>Newcastle Office:</i> Unit 5, 166 Harrold Street, Maryville NSW 2293 <i>Ph</i> 02 4058 2137	SURVEY BY	CRUX SURVEYING AUSTRALIA	CLIENT	DEE WHY RSL CLUB	DRAWING TITLE SEDIMENT AND EROSION CONTROL DETAILS	SCALE	N.T.S.	INT.	SHEET	
A	ISSUE FOR DA	17/01/2020			REFERENCE	122232-SU-DT-001	ADDRESS	825-831 PITTWATER ROAD, DEE WHY		DRAWN	BP		DA.2.02	
			SCALE		DATED	06/12/2019	PROJECT	CARWASH DRIVEWAY WIDENING		DESIGNED	ST		REV A	
										CHECKED	CF			
										DATE	JANUARY 2020			
										JOB NUMBER	20180499			



NOTES

1. TELECOMMUNICATIONS, SEWER AND ELECTRICITY LINES ARE SHOWN INDICATIVELY FROM DBYD PLANS. CONTRACTOR TO LOCATE UTILITIES AND AVOID DAMAGES TO EXISTING SERVICES.

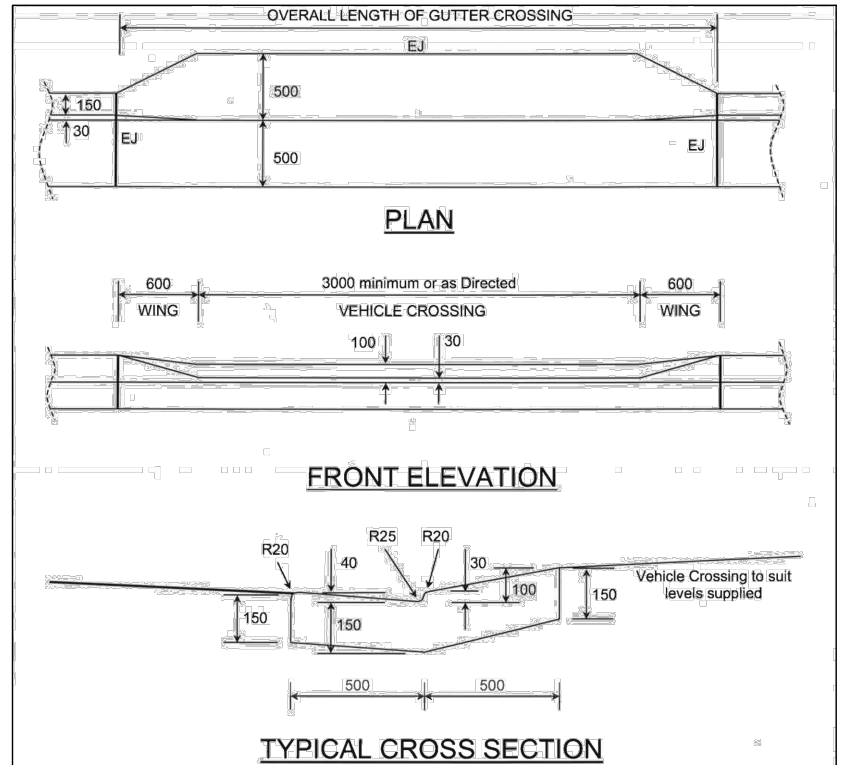
2. ALL UTILITIES ARE TO BE ACCURATELY LOCATED BY CONTRACTOR BEFORE CONSTRUCTION TO AVOID DAMAGES TO EXISTING SERVICES.

NOTE

ALL UTILITIES ARE TO BE ACCURATELY LOCATED BY CONTRACTOR BEFORE CONSTRUCTION.

LEGEND

	PROPOSED DRIVEWAY WIDENING (STRUCTURAL DETAILS TO BE CONFIRMED AT CC STAGE)
	SAWN JOINT (REFER DETAIL SHEET DA.4.02)
	ISOLATION JOINT (REFER DETAIL SHEET DA.4.02)
	EXPANSION JOINT (REFER DETAIL SHEET DA.4.02)
	INTEGRAL KERB
	EXISTING CONTOURS (0.5m)
	EXISTING ELECTRICAL OVERHEAD CABLE
	DENOTES PROPOSED FINISHED SURFACE SPOT LEVEL
	DENOTES PROPOSED FINISHED SURFACE SPOT LEVEL
	EXISTING OVERHEAD HEIGHT LIMIT BAR
	EXISTING GRATED DRAIN



NOTES:

1. 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.

2. 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.

3. Vehicle crossing to be constructed in accordance with levels and specifications issued by Council.

4. Kerbing to be constructed in accordance with Council Plan A4 2276/A and specifications.

5. Where Council or an Accredited Certifier (Civil Woks) 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.

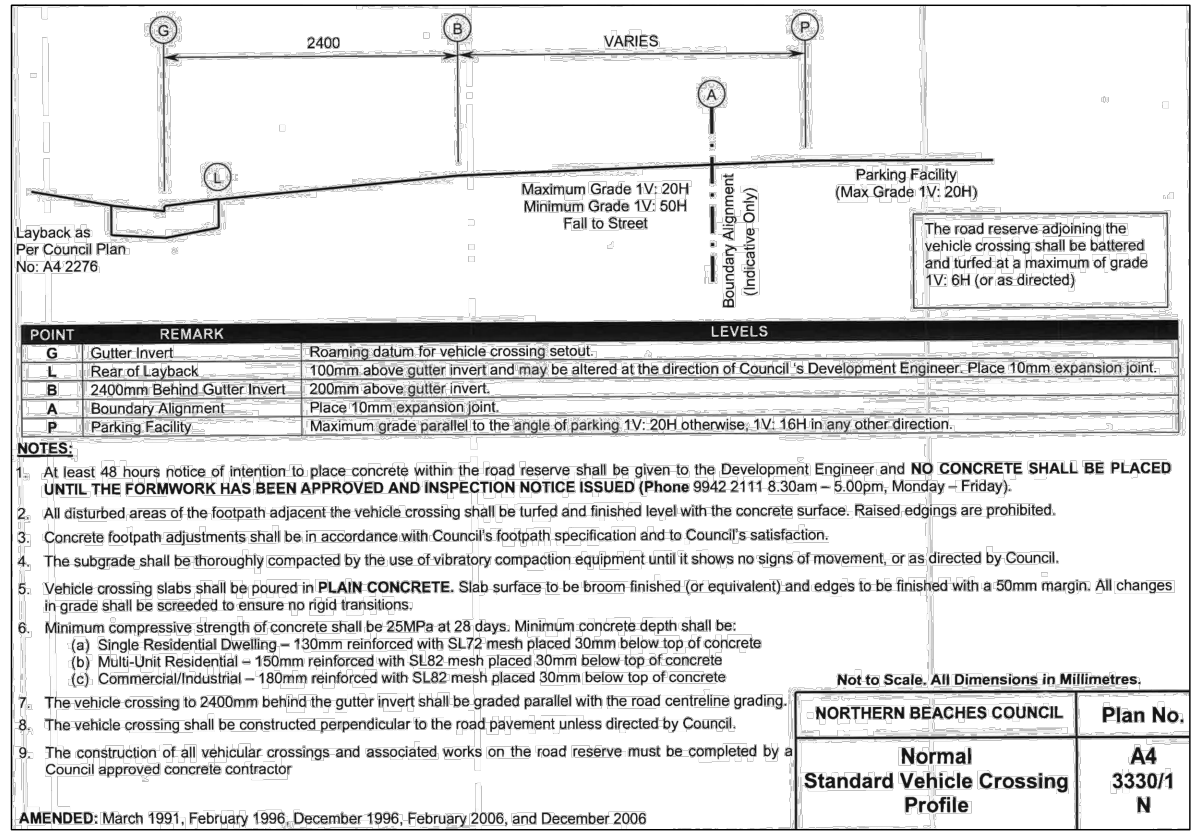
6. Where Council or an Accredited Certifier (Civil Woks) directs that the gutter be removed, a Road Opening Permit must be obtained from Council's Customer Service Centre prior to commencing work. Once the permit is established the contractor may commence vehicle crossing works. Upon completion of the works, temporary restoration shall be provided as set out in the 'Specification For Trench Construction Within Council Roads'.

7. The construction of all vehicle crossings and associated works on the road reserve must be completed by a Council approved concrete contractor.

8. EJ - Expansion Joint - 10mm Mastic.
R - Radius

NORTHERN BEACHES COUNCIL	Plan No.
Standard Gutter Crossing Detail	A4 2276/B

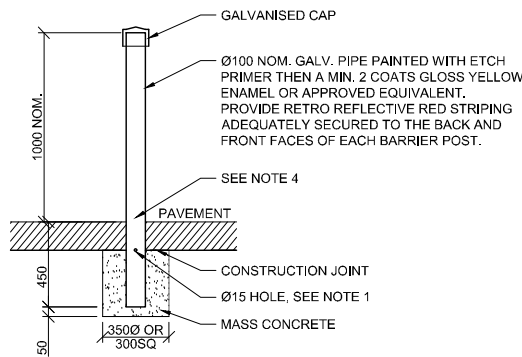
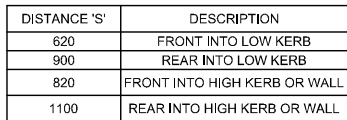
AMENDED: October 1990, December 2006



TYPICAL NORMAL STANDARD VEHICLE CROSSING PROFILE
SOURCE NORTHERN BEACHES COUNCIL STANDARD ENGINEERING DRAWINGS PLAN No. A4 3330/1 N



* PAVEMENT THICKNESS DESIGN TO BE IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S PAVEMENT THICKNESS ASSOCIATED WITH THE EXPECTED TRAFFIC LOADING OF THE DEVELOPMENT.
** REINFORCEMENT BASED ON 150 THICK SLAB. IF THICKNESS VARIES, REFER TO DESIGN ENGINEER.



SCALE 1:20

REFER TO COUNCIL STANDARD DRAWING SPECIFICATIONS

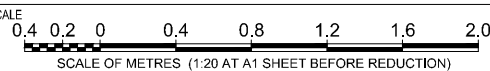
- NOTES:
1. PLACE 150 N12 BAR IN HOLE BEFORE FIXING INTO PLACE.
 2. ALL STEEL TO BE HOT DIPPED GALVANISED OR APPROVED EQUIVALENT.
 3. WHERE PATHWAYS ARE USED FOR MAINTENANCE OR EMERGENCY VEHICLE ACCESS, BOLLARDS AT ONE END OF THE PATH ARE TO BE REMOVABLE WITH LOCKING PIN.
 4. CONSIDERATION TO BE GIVEN TO 1800 HIGH BOLLARDS AND 60 DEEP FOOTINGS FOR SHARED PATHWAYS.
 5. ALL DIMENSIONS IN MILLIMETRES.



DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS ON SITE.

VERSION

D.A. ISSUE



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Tuggerah NSW 2259
Ph 02 4351 9022

Newcastle Office: Unit 5, 166 Hannell Street,
Maryville NSW 2293
Ph 02 4058 2137

SURVEY BY CRUX SURVEYING AUSTRALIA

REFERENCE 122232-SU-DT-001

DATED 06/12/2019

DATUM A.H.D.

CLIENT

DEE WHY RSL CLUB

ADDRESS

825-831 PITTWATER ROAD,
DEE WHY

PROJECT

CARWASH DRIVEWAY WIDENING

DRAWING TITLE

DRIVEWAY PAVEMENT DETAILS

SHEET

DA

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10. *Journal of the American Medical Association*, 2000; 283: 2686-2692.

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DA.4.02

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CONCEPT NOT FOR
CONSTRUCTION

A1