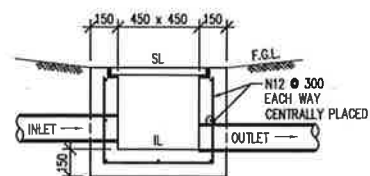
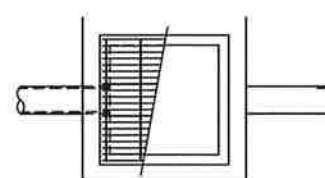


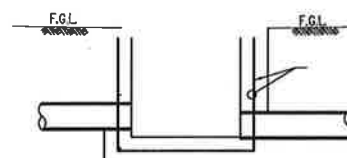
450 x 450 STORMWATER PIT
PRECAST CONCRETE PITS MAY BE
SUBSTITUTED SUBJECT TO APPROVAL.



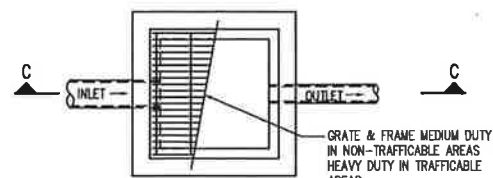
SECTION A-A



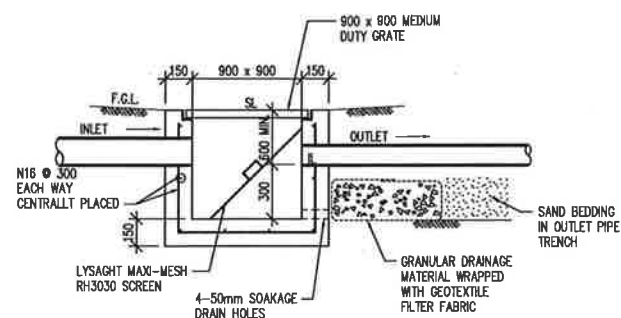
600 x 600 STORMWATER PIT



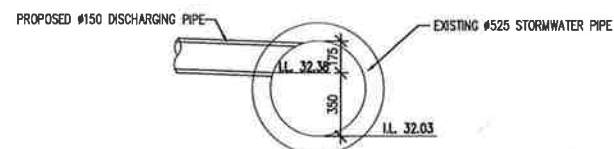
SECTION B-B



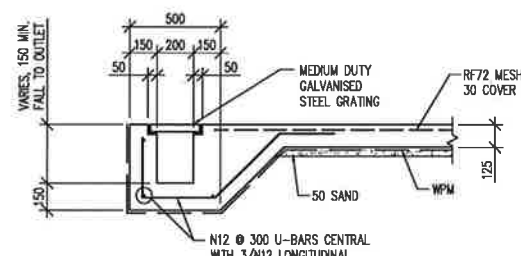
900 x 900 SILT ARRESTOR PIT
PRECAST CONCRETE PITS MAY BE
SUBSTITUTED SUBJECT TO APPROVAL



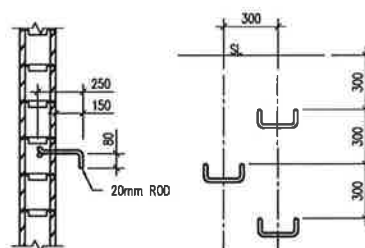
SECTION C-C



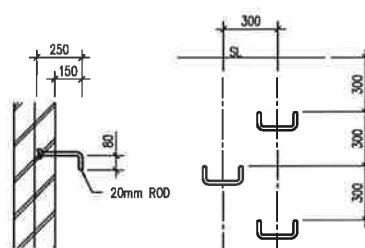
SECTION 01
1:20



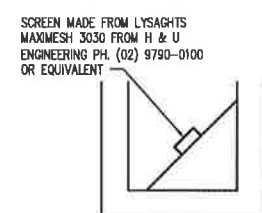
GRATED DRAIN
SCALE 1:20



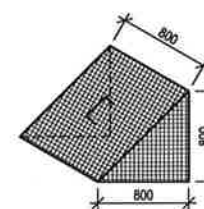
STEP IRON DETAIL
PROVIDE STEP IRONS WHEN PITS/TANKS
ARE GREATER THAN 1000 DEEP



STEP IRON DETAIL
 PROVIDE STEP IRONS WHEN PITS/TANKS
 ARE GREATER THAN 1000 DEEP



LITTER & LEAF SCREEN DETAIL



ISOMETRIC VIEW

MICHAEL ELL CONSULTING ENGINEERS PTY LTD
Structural, Hydraulic & Civil Engineers

Ph: 9807 5355
Fax: 9807 5366

UPPER PARRAMATTA RIVER CATCHMENT TRUST
On-Site Detention Calculation Sheet

Location : 6-8 BURKE STREET, TELOPEA

Catchment Area		Ponds/Sublacio Creek	
Sile Area		0.3484 ha	(A)
Basic Storage Volume	$330 \times A$	114.97 m ³	(B)
Basic Discharge	$0.13 \times A$	0.0453 m ³ /s	(C)
Area of site drained to storage		0.3136 ha	(D)
(Must must not be less than 75%)		90%	
$(D)/(A) \times 100$		90 %	(E)
Storage per ha of contributing area	B/D	367 m ³ /ha	(F)
Using volume/PSD adjustment equation with (F), and calculate new PSD in l/sec/ha		113.2 l/sec/ha	(G)
Determine final PSD	$G \times D/1000$	0.0355 m ³ /s	(H)
Area of site drained to DCP		0.3136 ha	(I)
Peak discharge to DCP for 100 years AR(235mm/hr)		0.205 m ³ /s	(J)
Peak flow over weir (J - H)		0.1695 m ³ /s	(K)
Selected width of weir		1.8 m	(L)
Selected height of weir above centreline of orifice		1.87 m	(M)
Depth of flow over weir		0.151 m	(N)
Maximum head to orifice centre		2.021 m	(P)
Calculated orifice diameter		0.108 m	(Q)
Maximum discharge		35.5 l/s	(R)
Head for high early discharge		1.87 m	(S)
High early discharge	$R \times (S/P)^{0.5}$	34.15 l/s	(T)
Approximate mean discharge	$(R+T)/2$	34.83 l/s	(U)
Average discharge / ha	U/D	111.1 l/sec/ha	(V)
Using volume/PSD adjustment equation with (V), and calculate final storage volume per hectare.		372.1 m ³ /ha	(W)
Determine actual SSR	$W \times D$	116.7 m ³	
Provided storage		120 m ³	OK

MICHAEL ELL CONSULTING ENGINEERS Pty
Structural, Hydraulic, & Civil Engineers

Ph : 9 6 0 7 5 3 5
Fax : 9 6 0 7 5 3 6

ORIFICE DESIGN

Address : 6-8 Burke Street, Telopea

Top water level	TWL	=	34.5	m
Outlet pipe invert level	L_{outlet}	=	32.75	m
Diameter of orifice	d	=	110	mm
Center of orifice		=	32.805	m
Head for orifice	H	=	1.695	m
	C	=	0.6	(Orifice 0.6, Pipe 0.8)
Capacity of one orifice	Q	=	<u>32.9</u>	l/sec
No. of orifices used		=	1	Orifice
Total discharge	Q_{tot}	=	<u>32.9</u>	l/sec
PSD	Q_{psd}	=	<u>34.84</u>	l/sec

OK!

**LOCKED BAG 4001
ASHFIELD NSW BC1800
PHONE No (02) 8753 8000
FAX No (02) 8753 8888
www.housing.nsw.gov.au**

ARCHITECT:

BRD DESIGN
16 MOUNT STREET
HUNTERS HILL NSW 2110
TEL (02) 80121612
EMAIL brd@ozemail.com.au

B	22.10.11	OSD DESIGN CALCULATION SHEET ADDED
A	26.07.10	ARCH'S NEW PLAN
REV	DATE	NOTATION/AMENDMENT
DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. E.G. 16P.04/16P.03/16P.05 TAKE PRECEDENCE		

PROJECT MANAGER & ARCHITECT
ASSETS DIVISION
PH (820) 875-8100 FAX (820) 875-8100

STRUCTURAL CONSULTANT
MICHAEL ELL CONSULTING
TEL (424) 987-6789 FAX (424) 987-6789

HYDRAULIC CONSULTANT
MICHAEL ELL CONSULTING ENGINEERS
TEL (212) 967-6366 FAX (212) 967-6366

LANDSCAPE ARCHITECTS NAME
(32) TELEPHONE (32) FAX

BUSINESS PARTNER:
HOUSING NSW
COMMUNITY HOUSING DIVISION

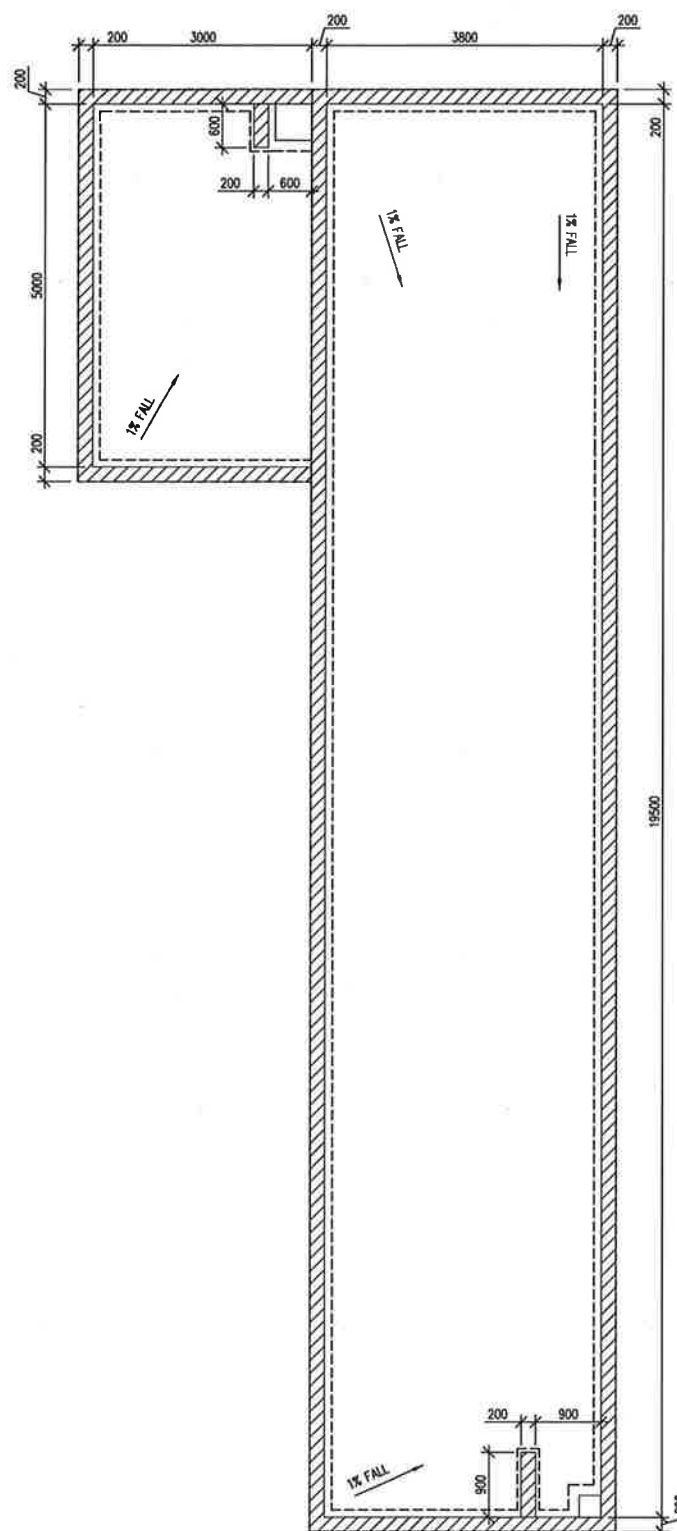
24 GENERAL HOUSING UNITS

1-5 CHESNUT AVE. & 6-8 BURKE ST., TELOPEA

STORMWATER DETAILS

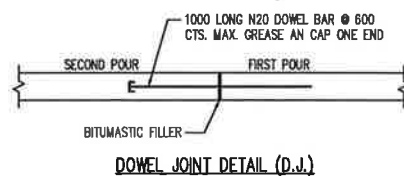
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22.03.10		1:20		G.H.		BG1T	
STAGE		STATION		WORKMAN		APPROVED	
DA		DC		AG			
TYPE		SHEET				FIGURE	
C		C02				B	

0 5 10 20 40MM
SCALE FOR PRINTING
PURPOSE ONLY

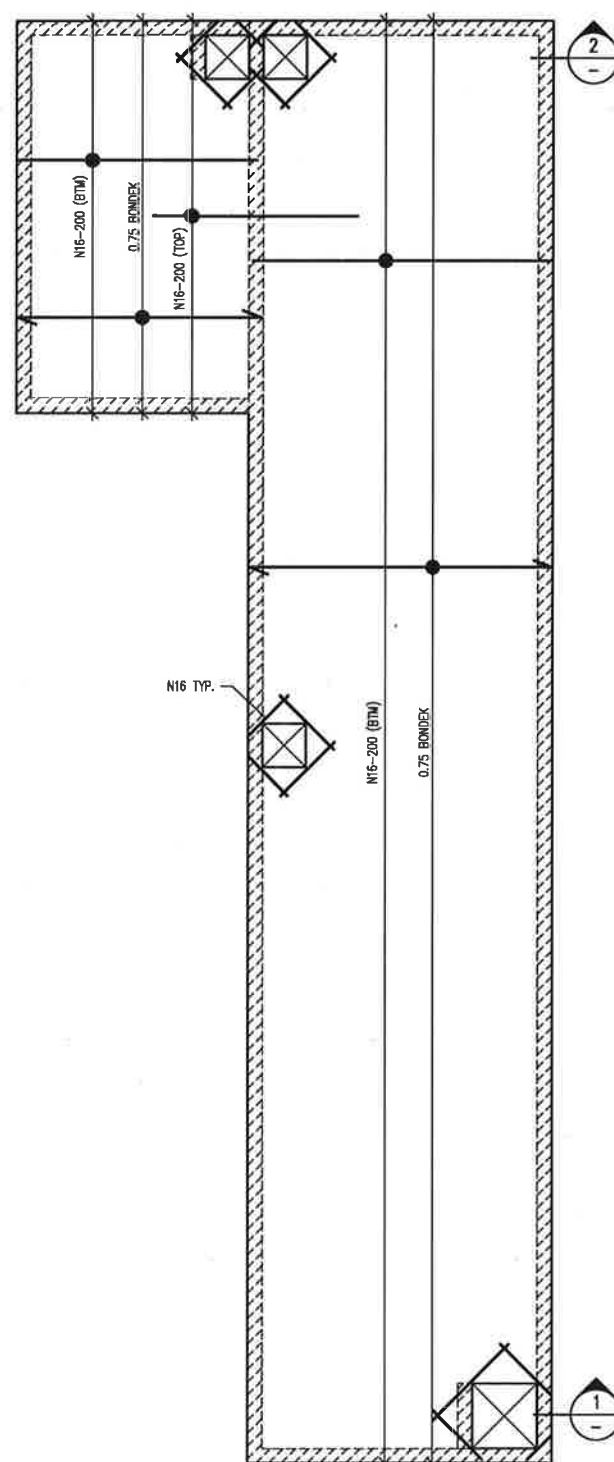


BASE SLAB OF TANK
SCALE 1:50

ALL SLAB TO BE 130mm THICK WITH SL72 MESH ON TOP

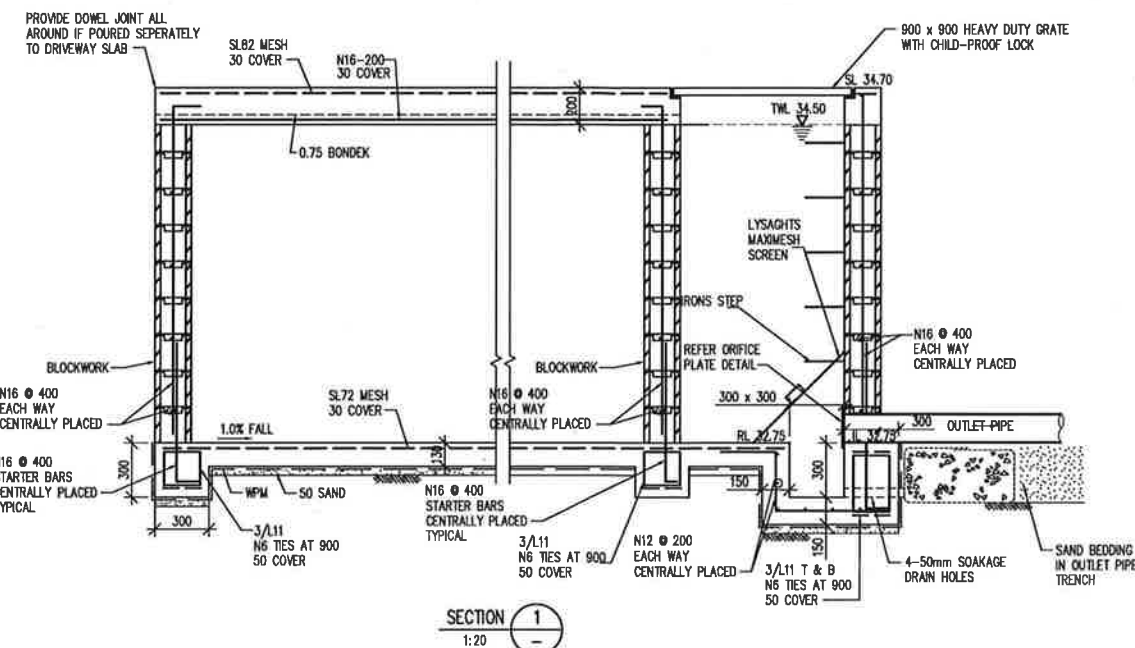


DOWEL JOINT DETAIL (D.J.)

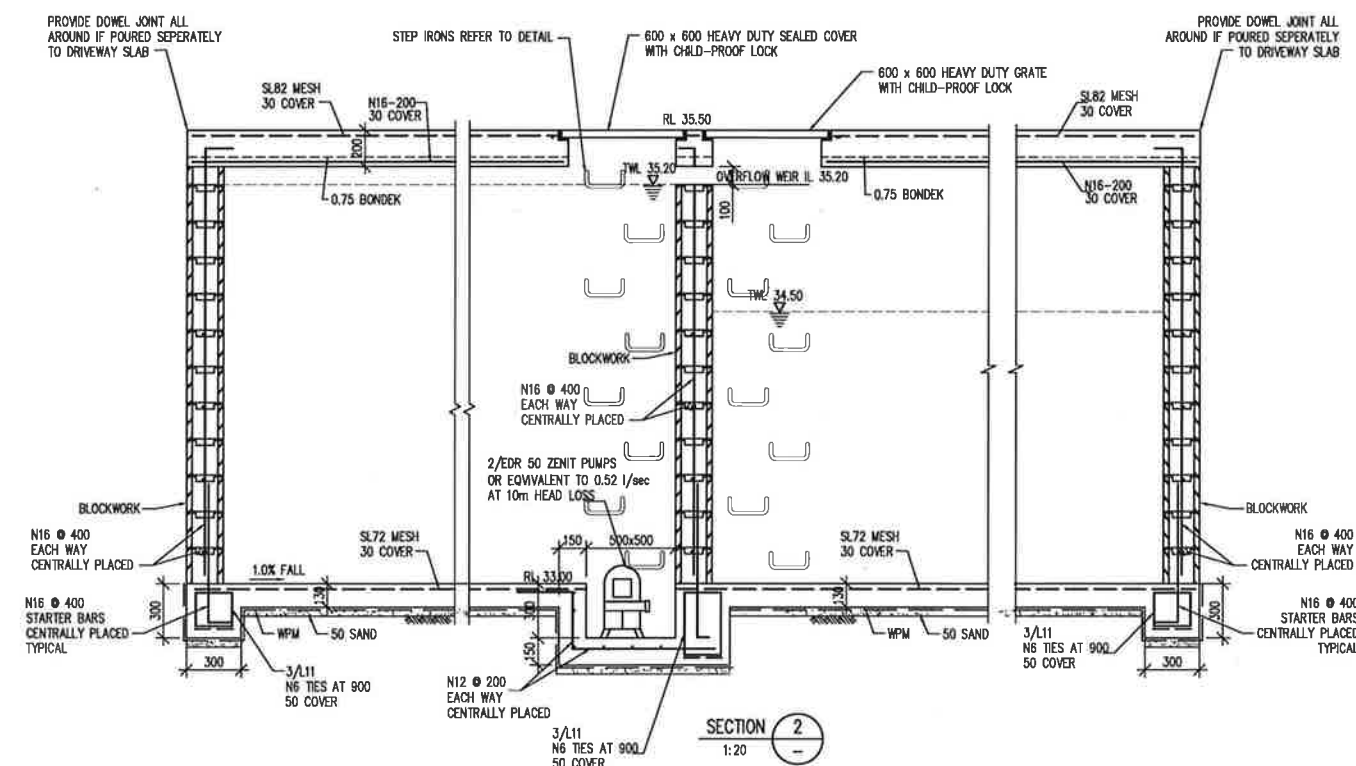


TOP SLAB OF TANK
SCALE 1:50

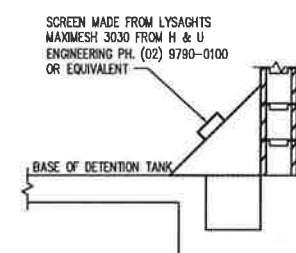
ALL SLAB TO BE 200mm THICK WITH SL82 MESH ON TOP + EXTRA BARS AS SHOWN
SLAB SLOPE TO MATCH DRIVEWAY SURFACE.



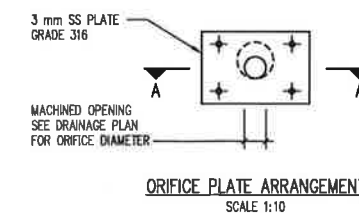
SECTION 1
1:20



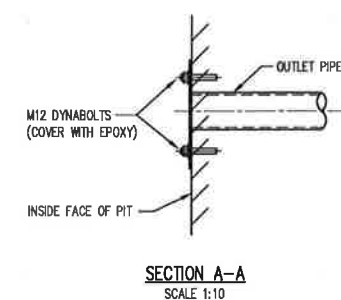
SECTION 2
1:20



ISOMETRIC VIEW



ORIFICE PLATE ARRANGEMENT
SCALE 1:10



SECTION A-A
SCALE 1:10

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FAX No (02) 8753 8888
www.housing.nsw.gov.au

ARCHITECT:
BRD DESIGN
18 MOUNT STREET
HUNTERS HILL NSW 2110
TEL (02) 80121512
EMAIL: brd@ozemail.com.au

DATE: 26.07.10
REV: A
NOTATION/AMENDMENT

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE.
FIGURED DIMENSIONS TAKE PRECEDENCE.

PROJECT MANAGER & ARCHITECT
ASSETS DIVISION
PH (02) 8012 8000 FAX (02) 8753 8011

STRUCTURAL CONSULTANT
MICHAEL ELL CONSULTING ENGINEERS
TEL (02) 8012 8000 FAX (02) 8012 8000

HYDRAULIC CONSULTANT
MICHAEL ELL CONSULTING ENGINEERS
TEL (02) 8012 8000 FAX (02) 8012 8000

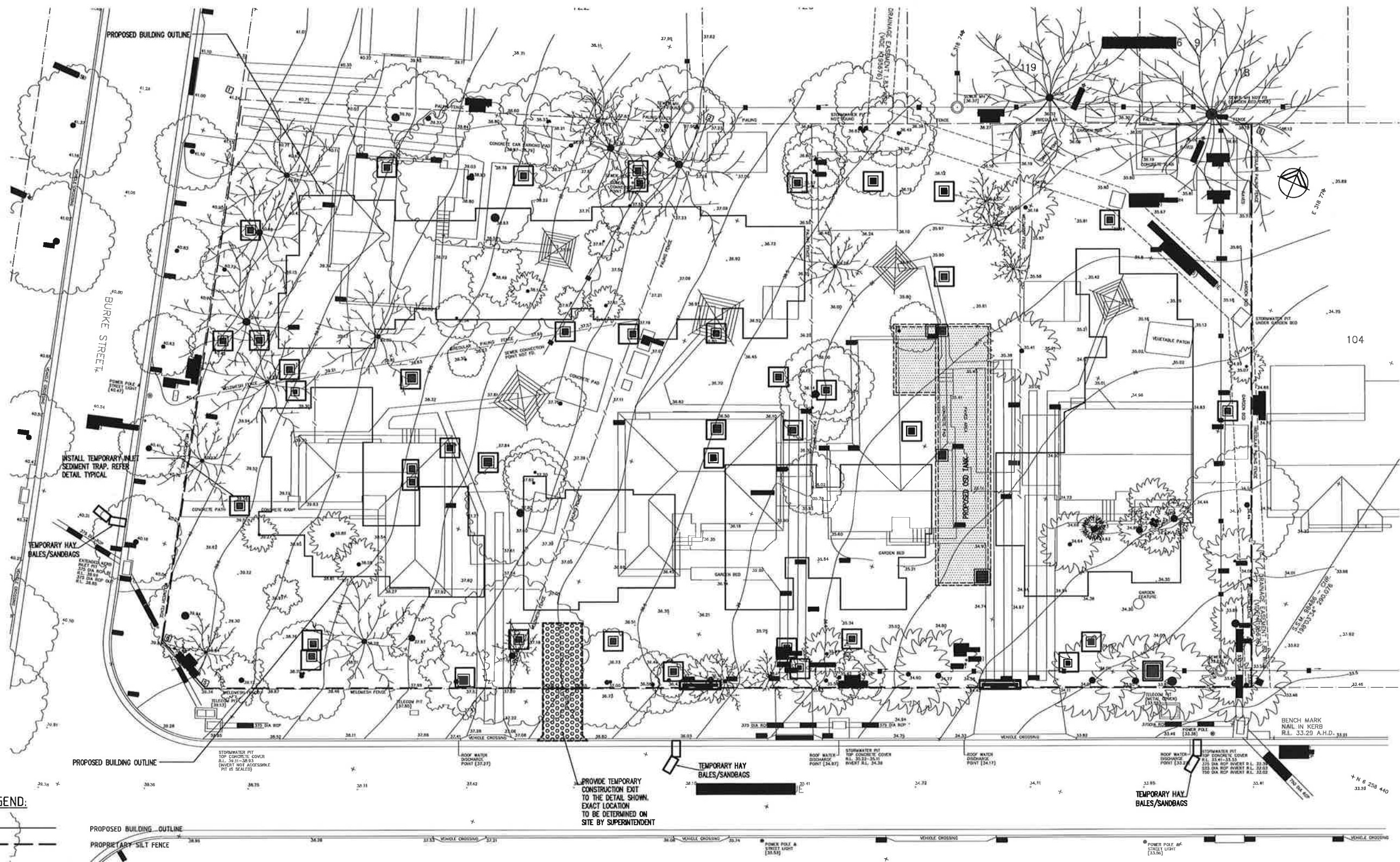
LANDSCAPE CONSULTANT
LANDSCAPE ARCHITECTS NAME
(02) 9555 5555 FAX (02) 9555 5555

BUSINESS PARTNER:
HOUSING NSW
COMMUNITY HOUSING DIVISION

PROJECT:
24 GENERAL HOUSING UNITS
1-5 CHESNUT AVE. & 6-8 BURKE ST., TELOPEA

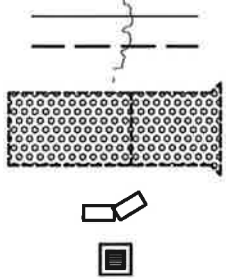
TITLE:
STORMWATER DETAILS
10030-C03A

DATE: 22.03.10
SCALE: 1:20
D.T. DC
TYPE: C
SHEET: C03
REV: A



EROSION AND SEDIMENT CONTROL PLAN

LEGEND:



PROPOSED BUILDING OUTLINE
PROPOSED SILT FENCE
TEMPORARY CONSTRUCTION EXIT
TEMPORARY HAY BALES/SANDBAGS
PROPOSED DRAINAGE PIT WITH INLET SEDIMENT TRAP

LOCKED BAG 4001
ASHFIELD NSW BC1800
PHONE No (02) 8753 8000
FAX No (02) 8753 8868
www.housing.nsw.gov.au

ARCHITECT:
BRD DESIGN
18 MOUNT STREET
HUNTERS HILL NSW 2110
TEL (02) 80121512
EMAIL: brd@brd.com.au

REV	DATE	NOTATION/AMENDMENT
C	22.10.11	ARCH'S CHANGES
B	02.09.10	ARCH'S NEW PLAN
A	28.07.10	ARCH'S NEW PLAN

PROJECT MANAGER & ARCHITECT
ASSETS DIVISION
PH (02) 8753 8100 FAX (02) 8753 8011
STRUCTURAL CONSULTANT
MICHAEL ELL CONSULTING ENGINEERS
TEL (02) 8807 8308 FAX (02) 8807 8309

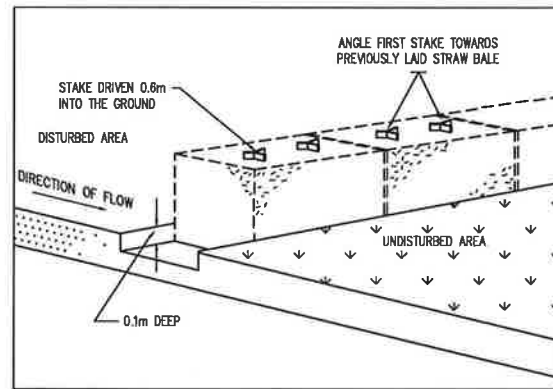
HYDRAULIC CONSULTANT
MICHAEL ELL CONSULTING ENGINEERS
TEL (02) 8807 8308 FAX (02) 8807 8309
LANDSCAPE CONSULTANT
LANDSCAPE ARCHITECTS NAME
(02) TEL: (02) FAX:

BUSINESS PARTNER
HOUSING NSW
COMMUNITY HOUSING DIVISION

PROJECT:
24 GENERAL HOUSING UNITS
1-5 CHESNUT AVE. & 6-8 BURKE ST., TEOPEA

TITLE:
EROSION AND SEDIMENT
CONTROL PLAN
FILE:
10030-C04A
PLOTTER:

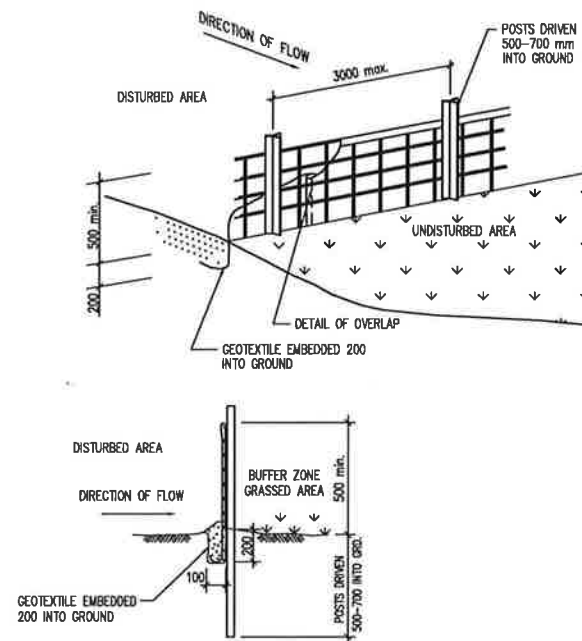
DATE	SCALE	PROJ	PROJ NO
22.03.10	1:150	G.H.	BG110
DESIGN	DC	DESIGNED	APPROVED
DA	DC	AG	
TYPE	SHEET	REV	
C	C04	C	



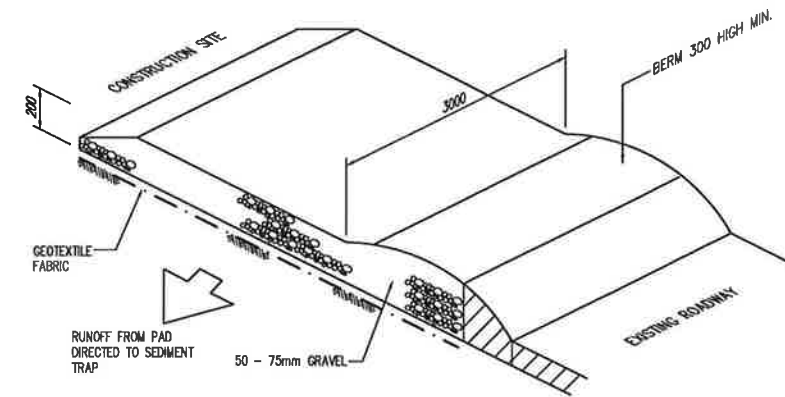
STRAW BALE SEDIMENT FILTER

EROSION CONTROL NOTES:

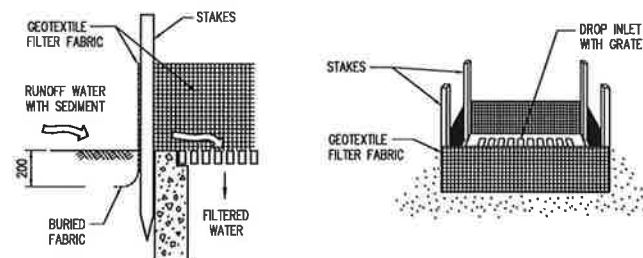
1. ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED PRIOR TO SITE DISTURBANCE
2. STRIPPING OF GRASS AND VEGETATION ETC. FROM SITE SHALL BE KEPT TO A MINIMUM
3. TOPSOIL FROM ALL AREAS THAT WILL BE DISTURBED TO BE STRIPPED AND STOCKPILED ON SITE.
4. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE AND ALL TRAPPED SEDIMENT TO BE REMOVED TO A NOMINATED SOIL STOCKPILE SITE



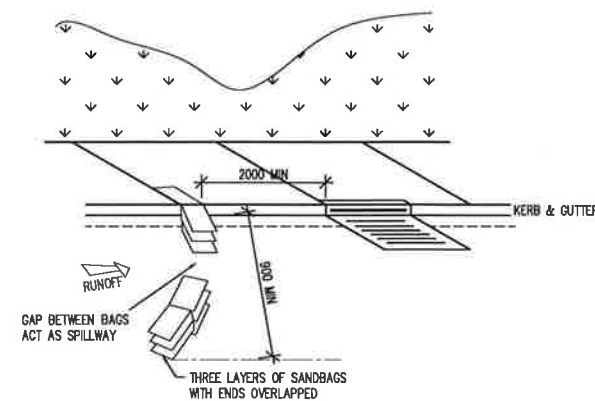
GEOFABRIC LINED 'SILT' FENCE



RUBBLE CROSSING
FOR USE AT ALL TRUCK/CONSTRUCTION
VEHICLE ENTRY POINTS TO THE SITE



GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP
N.T.S.



SANDBAG KERB INLET
SEDIMENT TRAP
N.T.S.

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ASHFIELD NSW BC1800
PHONE No (02) 8753 8000
FAX No (02) 8753 8888
www.housing.nsw.gov.au

ARCHITECT:
BRD DESIGN

18 MOUNT STREET
HUNTERS HILL NSW 2110
TEL (02) 80121512
EMAIL: brd@comcast.com.au

REV	DATE	NOTATION/AMENDMENT
A	26.07.10	ARCH'S NEW PLAN
REV	DATE	NOTATION/AMENDMENT

PROJECT MANAGER & ARCHITECT
ASSETS DIVISION
PH (02) 8957 8100 FAX (02) 8957 8011

STRUCTURAL CONSULTANT
MICHAEL ELL CONSULTING ENGINEERS
TEL (02) 8957 8000 FAX (02) 8957 8000

HYDRAULIC CONSULTANT
MICHAEL ELL CONSULTING ENGINEERS
TEL (02) 8957 8000 FAX (02) 8957 8000

LANDSCAPE CONSULTANT
LANDSCAPE ARCHITECTS NAME
(02) TEL: PHONE (02) FAX

BUSINESS PARTNER
HOUSING NSW
COMMUNITY HOUSING DIVISION

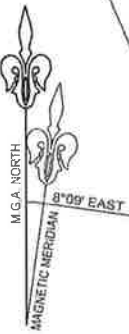
PROJECT:
24 GENERAL HOUSING UNITS

1-5 CHESNUT AVE. & 6-8 BURKE ST., TELOPEA

TITLE:
STORMWATER DETAILS

10030-C05A

REVISION			
DATE	SCALE	PROJ	PROJECT NO.
22.03.10	1:20	G.H.	BG170
STAGE	DESIGN	DESIGNER	APPROVED
DA	DC	AG	
TYPE	SHEET	REP	
C	C05	A	



SHEET 2

SHEET 4

SHEET 3



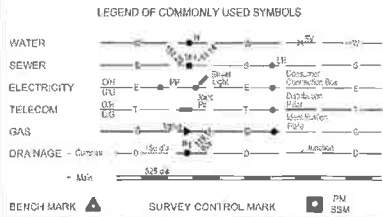
DENOTES TREES & SHRUBS
COMMON NAME (IF KNOWN)
HEIGHT (H)
CANOPY (C)
TRUNK DIA (T)
LEVEL AT BASE

DENOTES VIEW OF PHOTOS TAKEN

LOT 101-103 & 123-124 M.G.A. CO-ORDINATES			
	EASTING	NORTHING	
(1)	316 691 643	6 258 453 266	
(2)	316 724 702	6 258 455 724	
(3)	316 762 628	6 258 462 519	
(4)	316 700 223	6 258 443 156	
(5)	316 717 109	6 258 411 031	
(6)	316 702 703	6 258 413 085	

SURVEY PRACTICE REGULATIONS 2000 (CLAUSE 61(2))						
M.G.A. CO-ORDINATES						
MARK	EASTING	NORTHING	R.L.	CLASS	ORDER	ZONE
S.S.M. 19445	316 504 125	6 258 664 402	34.300	B	U	56
S.S.M. 19450	316 625 519	6 258 729 613	24.954	B	U	56
CONSIDERED SEA LEVEL & SCALE CORRECTION FACTOR 0.99998						
SOURCE: M.G.A. CO-ORDINATES ADOPTED FROM S.C.I.M.S. 17TH MARCH 2000.						

CONTOUR INTERVAL: 0.5m
DATUM: (A.H.D.)
ORIGIN OF DATUM: SSM 98186
RL 44.851
100 YEAR FLOOD RL:
RECOMMENDED MINIMUM
FLOOR RL:
SOURCE OF FLOOD INFO:



REDUCTION RATIO 1:200 @ A1
LAND TITLE INFORMATION
LOTS: 101, 102, 103, 123 & 124
PLAN NOs: DP 36691
OTHER:
AREA: 3484 m²

DATE OF SURVEY: 25 / 03 / 2009
SURVEY CONSULTANT:
P. J. BAKER & ASSOCIATES
LAND & ENGINEERING SURVEYORS
REGISTERED SURVEYORS
SURVEYORS
REF: 040309

RESITECH
DETAIL & CONTOUR PLAN OF
LOTS 101, 102, 103, 123 & 124
DP 36691

LOCATION: TELOPEA
STREET ADDRESS: 6-8 BURKE ST
1-5 CHESTNUT AVE
SITE LAYOUT JOB
91277 / 001 / 01

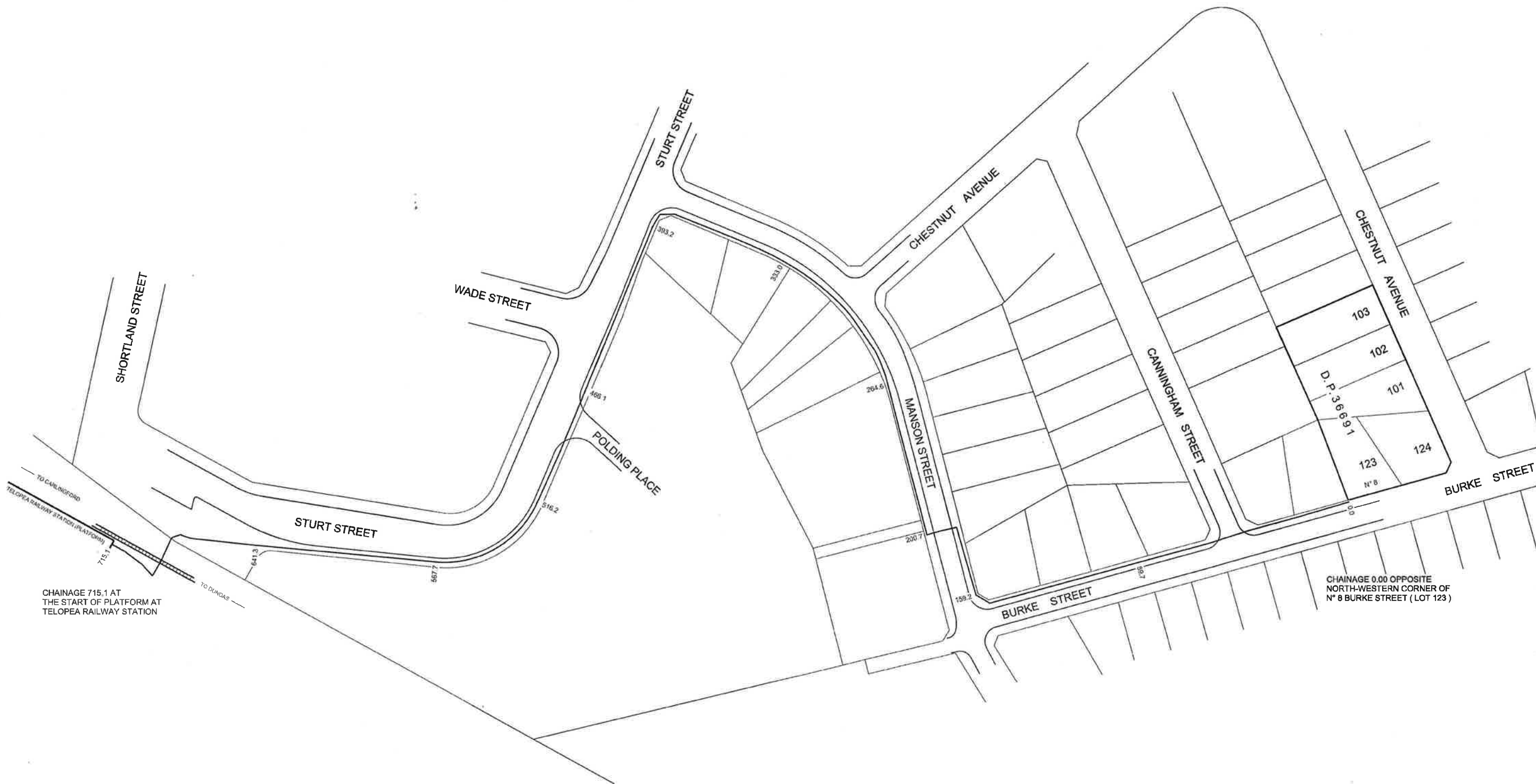
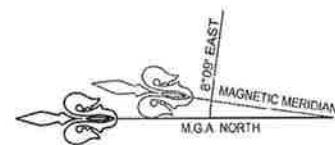
TYPE: S
SHT. 1
OF 5

No.	DATE	NOTATION/AMENDMENT	No.	DATE	NOTATION/AMENDMENT
1	23/2/10	ROUTE TO TELOPEA RAILWAY STATION ADDED			
FILE		FILE SIZE (MB)	CHECKED BY		



No.	DATE	NOTATION/AMENDMENT	No.	DATE	NOTATION/AMENDMENT	CONTOUR INTERVAL: 0.5m		LEGEND OF COMMONLY USED SYMBOLS		REDUCTION RATIO 1 : 100@A1 200@A3		DATE OF SURVEY: 25 / 03 / 2009		RESITECH RESIDENTIAL TECHNOLOGIES AUSTRALIA A SERVICE AGENCY OF NEW DEPARTMENT OF WORKS		DRAWING TITLE		LOCATION		TYPE									
1	23/2/10	ROUTE TO TELOPEA RAILWAY STATION ADDED				U&IUM: (A.H.D.)		WATER		LAND TITLE INFORMATION LOTS: 101, 102, 103, 123 & 124 PLAN NOs: DP 36691 OTHER: AREA: 3484 m²	SURVEYORS REF 040309 Registration Surveyor	SURVEY CONSULTANT: P. J. BAKER & ASSOCIATES LAND & ENGINEERING SURVEYORS 10/100 RIVERVIEW RD, GUNNAP SYDNEY NSW 1510 TEL: 02 9550 1000 WWW.PJBASURVEY.COM.AU	DETAIL & CONTOUR PLAN OF LOTS 101, 102, 103, 123 & 124 DP 36691	STREET ADDRESS 6-8 BURKE ST 1-5 CHESTNUT AVE SITE LAYOUT JOB 91277 / 001 / 01	TELOPEA	SHT. 2 OF 5													





No.	DATE	NOTATION/AMENDMENT	No.	DATE	NOTATION/AMENDMENT
1	23/2/10	ROUTE TO TELOPEA RAILWAY STATION ADDED			
			FILE	FILE SIZE (MB)	CHECKED BY
CONTOUR INTERVAL: 0.5m DATUM: (A.M.D.) ORIGIN OF DATUM: SGM 88486 RL 44.851 100 YEAR FLOOD RL: RECOMMENDED MINIMUM FLOOR RL: SOURCE OF FLOOD INFO:					
LEGEND OF COMMONLY USED SYMBOLS WATER SEWER ELECTRICITY TELECOM GAS DRAINAGE - General BENCH MARK SURVEY CONTROL MARK					
REDUCTION RATIO 1 : 800@A1 1600@A3 LAND TITLE INFORMATION LOTS: 101, 102, 103, 123 & 124 PLAN No: DP 36691 OTHER: AREA: 3484 m²					
DATE OF SURVEY: 23 / 02 / 2010 SURVEY CONSULTANT: P. J. BAKER & ASSOCIATES LAND & ENGINEERING SURVEYORS SURVEYORS REF: 040309					
RESITECH SURVEYED DISTANCE TO TELOPEA RAILWAY STATION					
LOCATION: TELOPEA STREET ADDRESS: 6-8 BURKE ST 1-5 CHESTNUT AVE SITE LAYOUT JOB 91277 / 001 / 01					
TYPE: S SHT. 5 OF 5					

