

**SITWORKS AND DRAINAGE NOTES**

- SITWORKS AND DRAINAGE NOTES ARE TO BE READ IN CONJUNCTION WITH THE GENERAL AND COORDINATION NOTES ON DRAWING 23120/C00.
- CONTRACTOR IS TO CHECK THAT THE PROPOSED PIPE WORKS DO NOT CLASH WITH EXISTING SERVICES PRIOR TO ANY TRENCH EXCAVATION. THE CONTRACTOR NOTIFY THE ENGINEER IF ANY CLASHES ARE FOUND FOR ADVISE ON ANY DESIGN REQUIREMENTS.
- STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE ASSESSMENT OF CONSTRUCTION LOADS AND ANY TEMPORARY BRACING, PROPPING, ETC. REQUIRED DURING CONSTRUCTION. STRUCTURES SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL OVERSTRESSED.
- ALL TRENCH EXCAVATIONS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE WORKPLACE HEALTH AND SAFETY 1989 AS AMENDED AND THE MINE RE
- ALL TRENCHES IN TRAFFICABLE AND NON TRAFFICABLE ZONES SHALL BE BACKFILLED TO DENSITY RATIOS, FREQUENCIES AND LAYER INTERVALS IN ACCORDANCE WITH CURRENT COUNCIL STANDARDS. ALL TEST RESULTS SHALL FORWARDED TO THE SUPERINTENDENT AS THEY BECOME AVAILABLE.
- ALL PRECAST CONCRETE PIPES ARE TO BE MANUFACTURED IN ACCORDANCE WITH AS 4058. STORMWATER PIPES SHALL BE TO FOLLOWING CLASSES U.N.O.
  - REINFORCED CONCRETE PIPES (RCP) = CLASS 2;
  - FIBRE REINFORCED PIPES (FRC) = CLASS 2.
- ALL RCP PIPES SHALL HAVE THE FOLLOWING JOINTS U.N.O.
  - RCP <=600 DIA = RUBBER RING JOINTED (RRJ);
  - RCP >600 DIA = FLUSH JOINTED (FJ).
- STORMWATER PIPES SHALL BE UPVC PIPES CLASS 'SN8' U.N.O.
- MANHOLE AND FIELD INLET ACCESS SHALL BE INSTALLED AS DESCRIBED BELOW IN ACCORDANCE WITH AS1657:
  - GULLY/FIELD INLETS >1.35m DEPTH: STEP IRONS;
  - MANHOLES 0.850m-3.0m DEPTH: STEP IRONS;
  - MANHOLES >3.0m DEPTH: FIXED ACCESS LADDER.
- TEST CERTIFICATES AND MATERIAL CERTIFICATION DOCUMENTATION IS REQUIRED FOR ALL PIPES, FITTINGS, BOX CULVERTS
- ALL STORMWATER SETOUT IS TO CENTRE OF STRUCTURE U.N.O.
- SIDE DRAINS ARE TO BE PROVIDED UNDER ALL KERB AND CHANNEL AND CONNECTED TO STORMWATER PITS.
- WHERE CONNECTION IS TO BE MADE TO AN EXISTING CONSTRUCTION THE CONTRACTOR SHALL CONFIRM THE LOCATION AND DEPTH OF EXISTING SERVICES PRIOR TO COMMENCING WORK ON ANY CRITICAL SECTION. THE SUPERINTENDENT MAY VARY LEVELS AND GRADIENTS OF NEW WORKS TO MATCH EXISTING SERVICES.
- REFER BCC STANDARD DRAWING BSD-2001 FOR ALL KERB PROFILES.
- REFER ARCHITECTS PLANS FOR FENCE DETAILS AND EXTENT.

**NEIGHBOURING PROPERTY CONSENT**  
 This approval does not authorise or give permission to enter onto, under or over any neighbouring private properties to survey or carry out any works without any prior consultation or without the prior consent of the relevant land or property owner(s).  
(This includes but is not limited to any works for: built to boundary walls; any construction (eg. retaining walls) within neighbouring buildings structural zones; boundary fences; temporary rock anchoring; or crane over-sail.)

**BCC DS RECEIVED**  
 12-MAY-2026  
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 A007020836

**REPAIR DAMAGE TO COUNCIL INFRASTRUCTURE**  
 If at any time during the construction phase of the approved development, damage to the existing kerb and channel, footpath or roadway creates unsafe, unreasonable and/or not fit for purpose conditions as assessed by Council, the contractor is to carry out repairs as directed by Program Planning and Intergration

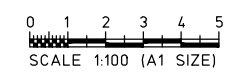
**ADDITIONAL BCC PERMITS**  
 Obtain all relevant BCC Permits or Certificates of Assessment as may be required by the conditions of the Development Permit or BCC Local Laws, including:  
 Temporary Lane / Road Closures  
 Permit to Occupy Road (Work Zones)  
 Permit to Work on Council Property

**APPROVED PLAN**  
 Brisbane City Council  
 3 April 2024

**APPROVED PLAN ONLY REFERS TO:**

- Earthworks
- Stormwater
- Roadworks
- Traffic Functional Layout
- Traffic Signals
- Construction Management Plan
- WSUD Device(s)
- Signs and Linemarking

Other: NIL



**NOTE:**  
 REFER DRGS 23120/C11 FOR SITWORKS AND DRAINAGE DETAILS.

CODE	REVISION	DATE	BY	CODE	REVISION	DATE	BY
C	FOR APPROVAL	19.02.24	VK				
B	PRELIMINARY ISSUE	27.11.23	LW				
A	PRELIMINARY ISSUE	17.10.23	LW				

Client  
**GIBSON ARCHITECTS**

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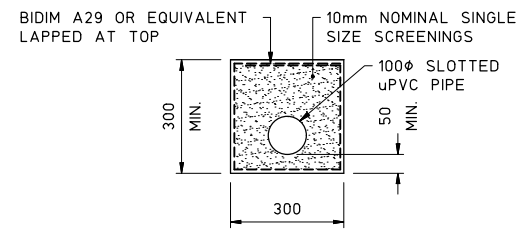
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Designed	Checked
AV	HM
Drawn	Date
LW	SEP 23

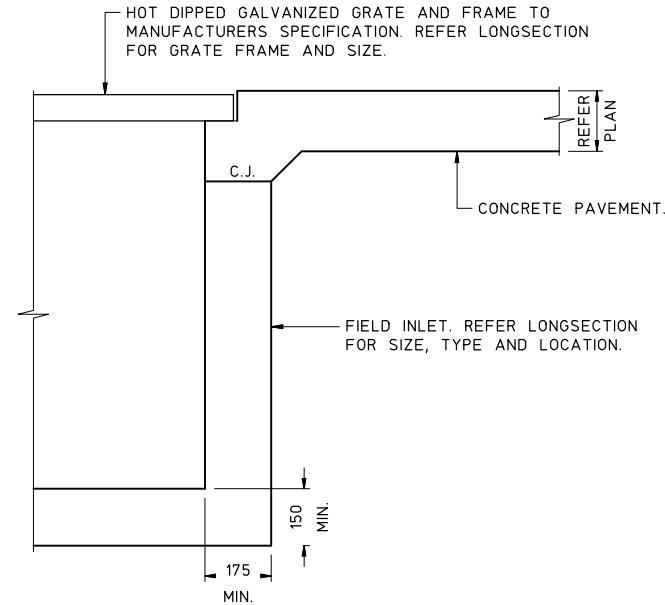
Project  
**PROPOSED MEDICAL CENTRE**  
 Address  
**36 MOWBRAY TERRACE, EAST BRISBANE**

Drawing title <b>SITWORKS AND DRAINAGE PLAN</b>	
Drawing No <b>23120/C10</b>	Revision Code <b>C</b>

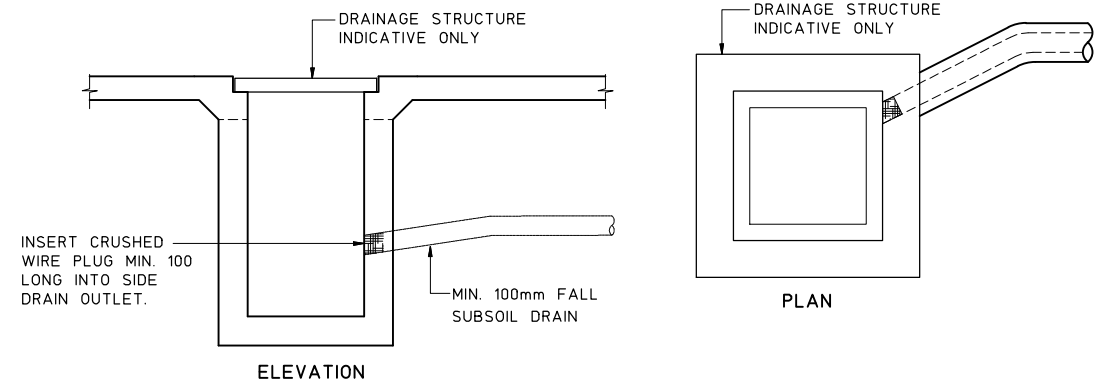
**BCC DS**  
 LODGED  
 23/02/2024  
**APPLICATION REF**  
 A006468052



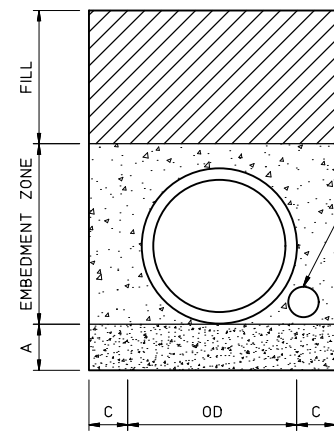
**SUBSOIL DRAIN DETAIL**  
N.T.S



**TYPICAL INLET DETAIL IN CONCRETE PAVEMENT**  
N.T.S



**SUBSOIL DRAIN OUTLET DETAIL (DSO)**  
N.T.S.  
SUBSOIL DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH COUNCIL'S GUIDELINES.  
PIPE JOINS SHOULD BE GLUED USING PLUMBING CEMENT.  
PIPE SHOULD NOT BE INSTALLED WITH FILTER SOCK SURROUNDING PIPE.

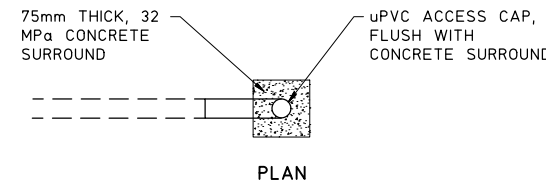


**SINGLE PIPE**  
N.T.S

**BACKFILL LEGEND**

	COMPACTED BACKFILL
	EMBEDMENT ZONE
	BEDDING MATERIAL

PROVIDE 1.0m LONG  $\phi 100$  STUB TO DEWATER PIPE TRENCH. STUB TO BE CORRUGATED PERFORATED POLYETHYLENE PIPE CLASS 400 TO AS2439 (WITH END CAP) INSTALLED ON THE UPSTREAM FACE OF MANHOLES.



**SUBSOIL DRAIN FLUSH POINT AT END OF LINE DETAIL (FPE)**  
N.T.S.  
SUBSOIL DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH COUNCIL'S GUIDELINES.  
PIPE JOINS SHOULD BE GLUED USING PLUMBING CEMENT. PIPE SHOULD NOT BE INSTALLED WITH FILTER SOCK SURROUNDING PIPE.

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Brisbane City Council  
3 April 2024  
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 Signs and Linemarking  
Other: NIL

EXCAVATION, BEDDING AND BACKFILLING FOR STORMWATER DRAINAGE PIPES					
PIPE SIZE 'D' (mm)	PIPE TYPE	BEDDING ZONE A (mm)	EMBEDMENT ZONE B (mm)	SIZE WIDTH C (mm)	SUBSOIL DRAIN REQUIRED
$\phi 90 - \phi 225$	RIGID	75	D + 150	150	NO
	FLEXIBLE	100	D + 150	150	NO
$\phi 225 - \phi 900$	RIGID	75	D + 150	150	YES
	FLEXIBLE	100	D + 150	150	YES
$\phi 900 - \phi 1500$	RIGID	75	D + 150	D/6	YES
	FLEXIBLE	100	D + 150	D/6	YES
> $\phi 1500$	RIGID	75	D + 150	D/6	YES
	FLEXIBLE	100	D + 150	D/6	YES

MINIMUM COVER REQUIREMENT	
PIPE LOCATION	MINIMUM PIPE COVER
WHERE NOT SUBJECT TO VEHICULAR LOADING	300mm
WHERE SUBJECT TO VEHICULAR LOADING	
- UNDER CONCRETE DRIVEWAY	UNDERSIDE OF SLAB + 100mm
- IN CARPARK GRANULAR PAVEMENT	450mm
- UNSEALED ROADWAY	750mm

MINIMUM INTERNAL DIMENSIONS FOR STORMWATER AND INLET PITS		
DEPTH TO INVERT OF OUTLET (mm)	MINIMUM INTERNAL DIMENSIONS (mm)	
	RECTANGULAR PIT	
	WIDTH (mm)	LENGTH (mm)
<=600	450	450
>600 <=900	600	600
>900 <=1200	600	900
>1200	900	900

**BCC DS LODGED**  
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**GIBSON ARCHITECTS**

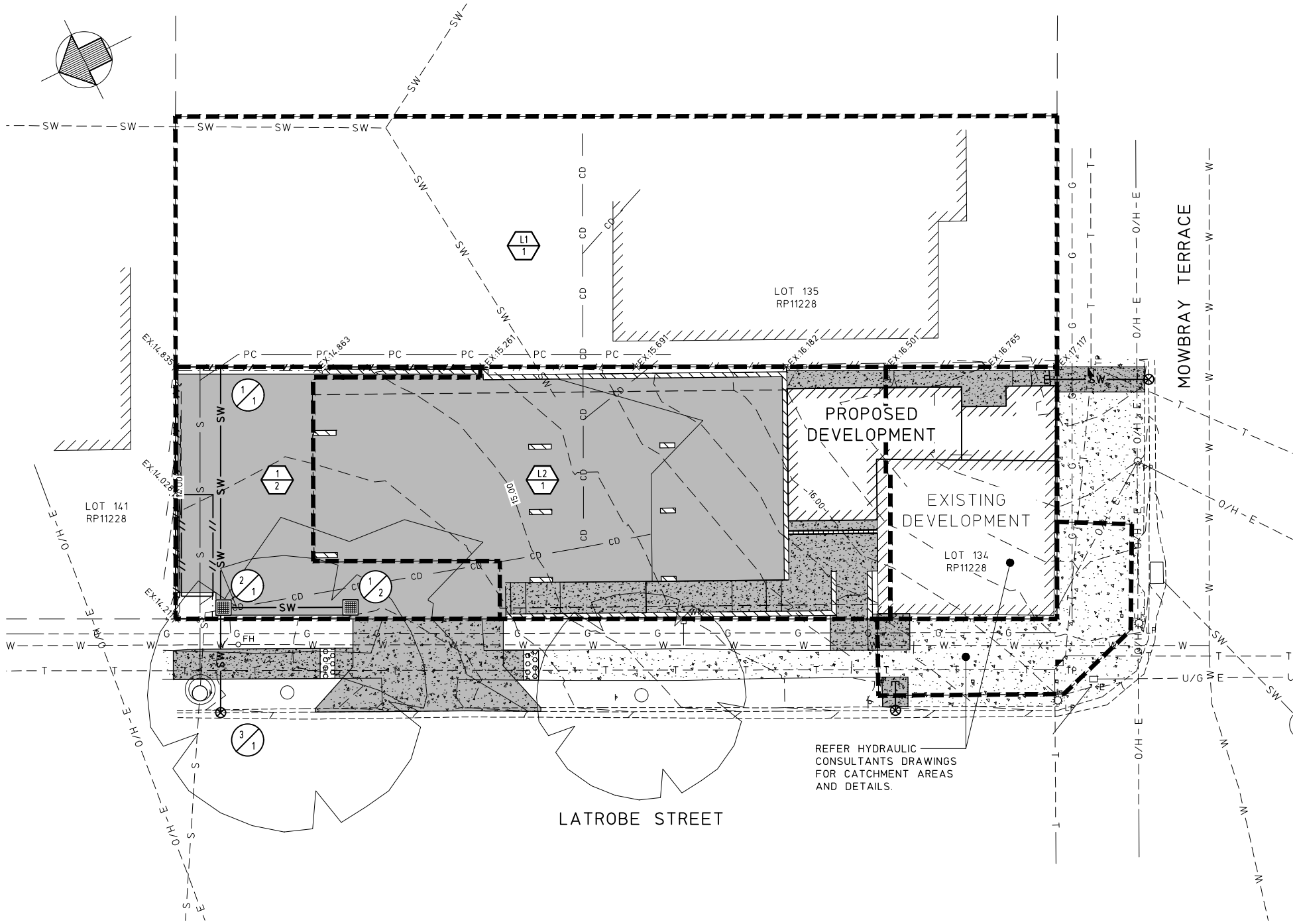
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Scales (at A1)  
AS SHOWN  
Designed AV Checked HM  
Drawn LW Date SEP 23  
Authorized RPEQ

Project  
**PROPOSED MEDICAL CENTRE**  
Address  
**36 MOWBRAY TERRACE, EAST BRISBANE**

Drawing title  
**SITWORKS AND DRAINAGE DETAILS**  
Drawing No  
**23120/C11**  
Revision Code  
**C**



REFER HYDRAULIC CONSULTANTS DRAWINGS FOR CATCHMENT AREAS AND DETAILS.

**BCC DS RECEIVED**  
12-MAY-2026  
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A007020836

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Other: NIL

CATCHMENT NAME	CATCHMENT AREA (HA)
L1/1	0.035
1/2	0.007
L2/1	0.021

- EXISTING**
- LOT BOUNDARY
  - - - 10.0 - - - CONTOUR MAJOR (1.000m INTERVAL)
  - - - CONTOUR MINOR (0.250m INTERVAL)
  - /// BUILDING EXTENT
  - ===== KERB AND CHANNEL
  - SW --- STORMWATER
  - S --- SEWER
  - W --- WATER
  - T --- TELECOMMUNICATION
  - - - U/G - E --- UNDERGROUND ELECTRICITY
  - - - O/H - E --- OVERHEAD ELECTRICITY
  - - - G --- GAS
  - /// FENCE
  - ▨ CROSSOVER/FOOTPATH
  - ▨ BLOCK RETAINING WALL
  - ▨ LANDSCAPING
  - X EX.14.500 SURFACE LEVEL

- PROPOSED**
- LOT BOUNDARY
  - - - 31.0 - - - CONTOUR MAJOR (1.000m INTERVAL)
  - - - CONTOUR MINOR (0.250m INTERVAL)
  - /// BUILDING EXTENT
  - SW --- STORMWATER
  - ⊗ KERB ADAPTOR
  - - - CATCHMENT BOUNDARY
  - ⬡ CATCHMENT ID
  - ⬡ DRAINAGE STRUCTURE ID
  - S --- SEWER
  - PC --- PROPERTY CONNECTION
  - - - BARRIER KERB STANDARD TYPE 'E'
  - ▨ RETAINING WALL
  - ▨ CONCRETE PAVEMENT
  - ▨ FOOTPATH
  - ▨ CROSSOVER
  - ▨ LANDSCAPING

STORMWATER DRAINAGE CATCHMENT DISCHARGE CALCULATIONS

CATCHMENT NAME	LOT NAME	CATCHMENT AREA (ha)	tc (MINS)	FRACTION IMPERVIOUS (f <sub>p</sub> )	C <sub>2</sub> VALUE	C <sub>10</sub> VALUE	C <sub>20</sub> VALUE	C <sub>50</sub> VALUE	INTENSITY T <sub>cl2yr</sub> (mm/hr)	INTENSITY T <sub>cl10yr</sub> (mm/hr)	INTENSITY T <sub>cl20yr</sub> (mm/hr)	INTENSITY T <sub>cl50yr</sub> (mm/hr)	DISCHARGE Q <sub>2</sub> (L/s)	DISCHARGE Q <sub>10</sub> (L/s)	DISCHARGE Q <sub>20</sub> (L/s)	DISCHARGE Q <sub>50</sub> (L/s)
L1/1	LOT 135	0.035	5	0.90	0.74	0.87	0.91	1.00	127	205	236	276	9	17	21	27
1/2	LOT 134	0.007	5	0.90	0.74	0.87	0.91	1.00	127	205	236	276	2	3	4	5
L2/1	LOT 134	0.021	5	0.90	0.74	0.87	0.91	1.00	127	205	236	276	5	10	13	16

STORMWATER DRAINAGE PIPE DATA

PIPE LINK	CONTRIBUTING LOT	PIPE SIZE	PIPE GRADE	PIPE CAPACITY (L/s)
1/1 - 2/1	LOT 134 & 135	φ225 uPVC SN8	1.00%	53
2/1 - 3/1	LOT 134 & 135	3x125x75 RHS	1.25%	23
1/2 - 2/1	LOT 134	φ100 uPVC SN8	1.00%	6

**BCC DS LODGED**  
23/02/2024  
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0 1 2 3 4 5  
SCALE 1:100 (A1 SIZE)

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Project  
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Drawing title  
**STORMWATER AND DRAINAGE CATCHMENT PLAN**

Drawing No  
**23120/C20**

Revision Code  
**D**