



# MRS. P SIMSON 17 PLAYFAIR ROAD NORTH CURL CURL STORMWATER DRAINAGE WORKS DEVELOPMENT APPLICATION



LOCALITY PLAN  
N.T.S

## SCHEDULE OF DRAWINGS

DRAWING No.	DESCRIPTION
5918041-DA-001	TITLE SHEET, LOCALITY PLAN AND GENERAL NOTES
5918041-DA-002	STORMWATER PLAN
5918041-DA-003	STORMWORKS PLAN
5918041-DA-004	EROSION AND SEDIMENT CONTROL PLAN AND DETAILS
5918041-DA-005	STORMWATER CONFIGURATIONAL SECTION AND DETAILS

## SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY VERIS FORMERLY LAWRENCE GROUP, BEING REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. CARDNO DOES NOT GUARANTEE THE ACTUALITY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUSTAINABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT THE SUPERINTENDENT.

## EXISTING UNDERGROUND SERVICES NOTES

THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION, SURVEY SEARCH UNDERGROUND SERVICES REPORT 11/10/15/16 AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED TO SHOW THE POSITIONS OF ANY KNOWN SERVICES, AND MAY NOT BE AS CONSTRUCTED OR ACCURATE. CARDNO CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES. INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.

CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ON SITE INCLUDING HAND EXCAVATION WHERE NECESSARY. CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS. CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.

## PROPOSED WORKS LEGEND

EXISTING (REFER SURVEY NOTES)

PROPOSED



FINISHED SURFACE LEVEL  
SITE BOUNDARY  
STORMWATER PIT & LINE. REFER LONGITUDINAL SECTION

## EROSION AND SEDIMENT CONTROL NOTES

### GENERAL INSTRUCTIONS

1. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONTROL OF EROSION AND SEDIMENTATION TO THE SATISFACTION OF COUNCIL, OFFICE OF WATER, SYDNEY WATER AND OFFICE OF ENVIRONMENT AND HERITAGE. TO THIS END, THE EROSION AND SEDIMENTATION CONTROLS SHOWN ON THE DRAWINGS SHALL ONLY BE USED AS A GUIDE BY THE CONTRACTOR, AND SHALL REPRESENT THE MINIMUM REQUIREMENT ONLY.

2. THE CONTRACTOR SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE CREATED AS DOCUMENTED OR AS OTHERWISE DIRECTED BY THE SUPERINTENDENT.

3. ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH:  
a. LOCAL AUTHORITY REQUIREMENTS  
b. NSW OFFICE OF ENVIRONMENT & HERITAGE REQUIREMENTS  
c. NEW GOVERNMENT "MANAGING URBAN" STORMWATER, SOILS AND "CONSTRUCTION", 4TH EDITION, MARCH 2004.

4. MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.

5. CONTRACTOR IS TO ENSURE ALL EROSION & SEDIMENT CONTROL DEVICES ARE MAINTAINED IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.

### LAND DISTURBANCE

6. WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:  
a. INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLANS REFER TO E.A.  
b. INSTALL SEDIMENT TRAPS AS SHOWN ON PLANS.

7. UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. WHERE POSSIBLE, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF MINORABLE SIZE.

### EROSION CONTROL

7. DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.

8. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

### SEDIMENT CONTROL

9. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS FEASIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.

10. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LINES OF SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.

11. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

### OTHER MATTERS

12. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.

13. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:  
a. PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE.  
b. ENSURING THAT NOTHING IS BUILT UP TO THE TRUNK.  
c. PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPIRES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS:

(i) ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER THE TRUNK OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICHEVER IS THE GREATER.  
(ii) A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRASSLAW) BEING PLACED UNDER ALL FILL LAYERS OF MORE THAN 100mm AND LAYERS DEEPER THAN 100mm.  
(iii) CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.

## BULK EARTHWORKS NOTES

1. ORIGIN OF LEVELS: REFER SURVEY NOTES
2. STRIP TOPSOIL/ORGANIC MATERIAL FROM CONSTRUCTION AREA AND REMOVE FROM SITE.
3. EXCAVATED MATERIAL TO BE REMOVED FROM SITE
4. COMPACT FILL AREAS AND SUBGRADE TO NOT LESS THAN

LOCATION STANDARD DRY DENSITY (AS 1289 S.11)

UNDER BUILDING SLABS ON GROUND	95%
LANDSCAPED AREAS UNLESS NOTED OTHERWISE	95%

5. FOR NON COHESIVE MATERIAL, COMPACT TO 10% DENSITY INDEX.

6. THE EXPOSED SURFACE SHOULD BE COMPACTED WITH A MINIMUM OF 8 PASSES OF A 10 TONNE MINIMUM DEAD WEIGHT ROLLER, FOLLOWED BY TEST ROLLING IN THE PRESENCE OF A GEOTECHNICAL ENGINEER AND REPEATED AS REQUIRED WHERE SOFT SPOTS ARE IDENTIFIED. THEY SHOULD BE EXCAVATED AND THEN BACKFILLED USING SUITABLE GRANULAR MATERIAL AND COMPACTED IN 0.25m (CLOSE THICKNESS) LAYERS.

7. SOFT MATERIALS EXCEED 0.5m A BRIDGING LAYER MAY BE REQUIRED.

7. FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN:  
(a) 1 TEST PER 200m<sup>2</sup> OF FILL PLACED PER 250 LAYER OF FILL  
(b) 3 TESTS PER VISIT

(c) 1 TEST PER 100m<sup>2</sup> OF EXPOSED SUBGRADE TESTING SHALL BE "LEVEL 1" TESTING IN ACCORDANCE WITH AS 3798 (2007).

8. FILLING TO BE PLACED IN MAXIMUM 250mm - CLOSE LAYERS AND COMPACTED AS SPECIFIED.

9. NOT FILLING SHALL TAKE PLACE TO EXPOSED SUBGRADE UNTIL THE AREA HAS BEEN PROVED BUILT IN THE PRESENCE OF CERTIFYING AUTHORITY AND THE GEOTECHNICAL ENGINEER AND APPROVAL GIVEN BY WRITING THAT FILLING CAN PROCEED.

## STORMWATER DRAINAGE NOTES

1. PIPES FOR REINFORCED CONCRETE, CLASS "A" APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS (100).

2. PIPES WITH SOCKETS SHALL BE Laid IN BEDDING WHERE SUITABLE RECESSES HAVE BEEN PROVIDED TO ENSURE PIPES DO NOT BEAR ON THEIR SOCKETS.

3. PIPES TO BE INSTALLED TO TYPE H52 SUPPORT IN ACCORDANCE WITH AS 925 (2007) IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE, WHERE PIPE IS UNDER PAVEMENTS RASPEL REMAINERS OF THICKEN TO UNDERLIE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 250mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 S.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75).

4. ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3508 3.1 (2018) AND AS/NZS 3508 3.2 (2018).

5. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.

6. GRATES AND COVERS SHALL CONFORM TO AS 3996.

7. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.

8. ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED DURING THE PROCESS. ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.



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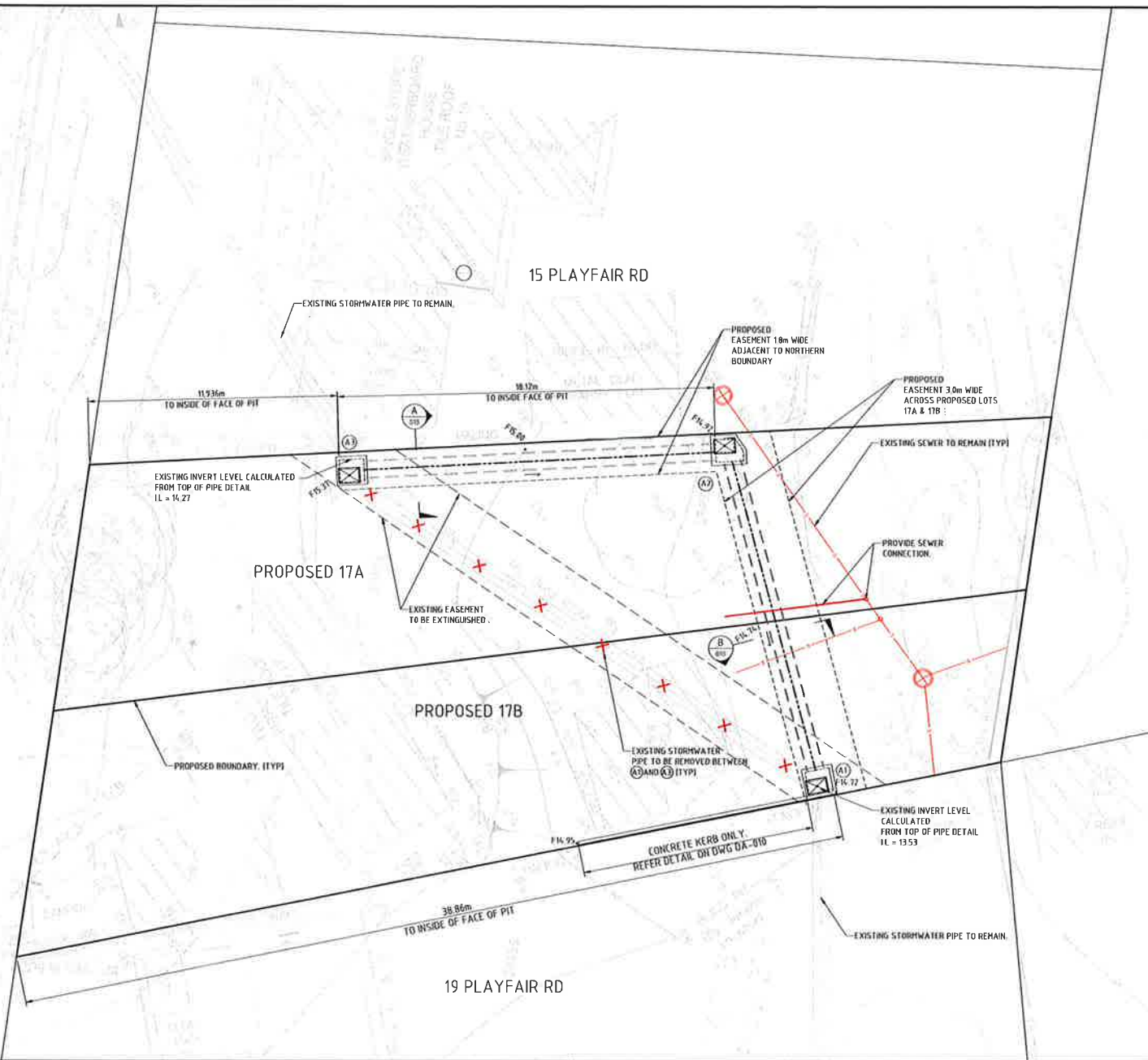
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Drawn	Check	Date	Status
Y.L.	Y.L.	17.11.2018	Drawn
Y.L.	Y.L.	17.11.2018	Checked
Y.L.	Y.L.	17.11.2018	Designed
Y.L.	Y.L.	17.11.2018	Approved
Y.L.	Y.L.	17.11.2018	Approved

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DRAWN	CHECKED	DATE	SCALE	SHEET
AHD	Y.L.	NOV 18	N.T.S	A1
5918041-DA-000				2

PLAYFAIR ROAD



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Checked	17/11/2015	By	
Reviewed	17/11/2015	By	
Verified	17/11/2015	By	
Approved	17/11/2015	By	

MRS. P SIMSON  
 17 PLAYFAIR ROAD  
 NORTH CURL, CURL  
 DEVELOPMENT APPLICATION  
 STORMWATER PLAN

Status	FOR APPROVAL			
NOT TO BE USED FOR CONSTRUCTION PURPOSES				
DATE	NOV 18	Scale	1:100	Size
A1				A1
Drawing Number	59918041-DA-001			Revision
				2



No	Date	Description	Rev	By	Appr
1	13.12.2018	ISSUE FOR DEVELOPMENT APPLICATION			
2	03.12.2018	ISSUE FOR DEVELOPMENT APPLICATION			



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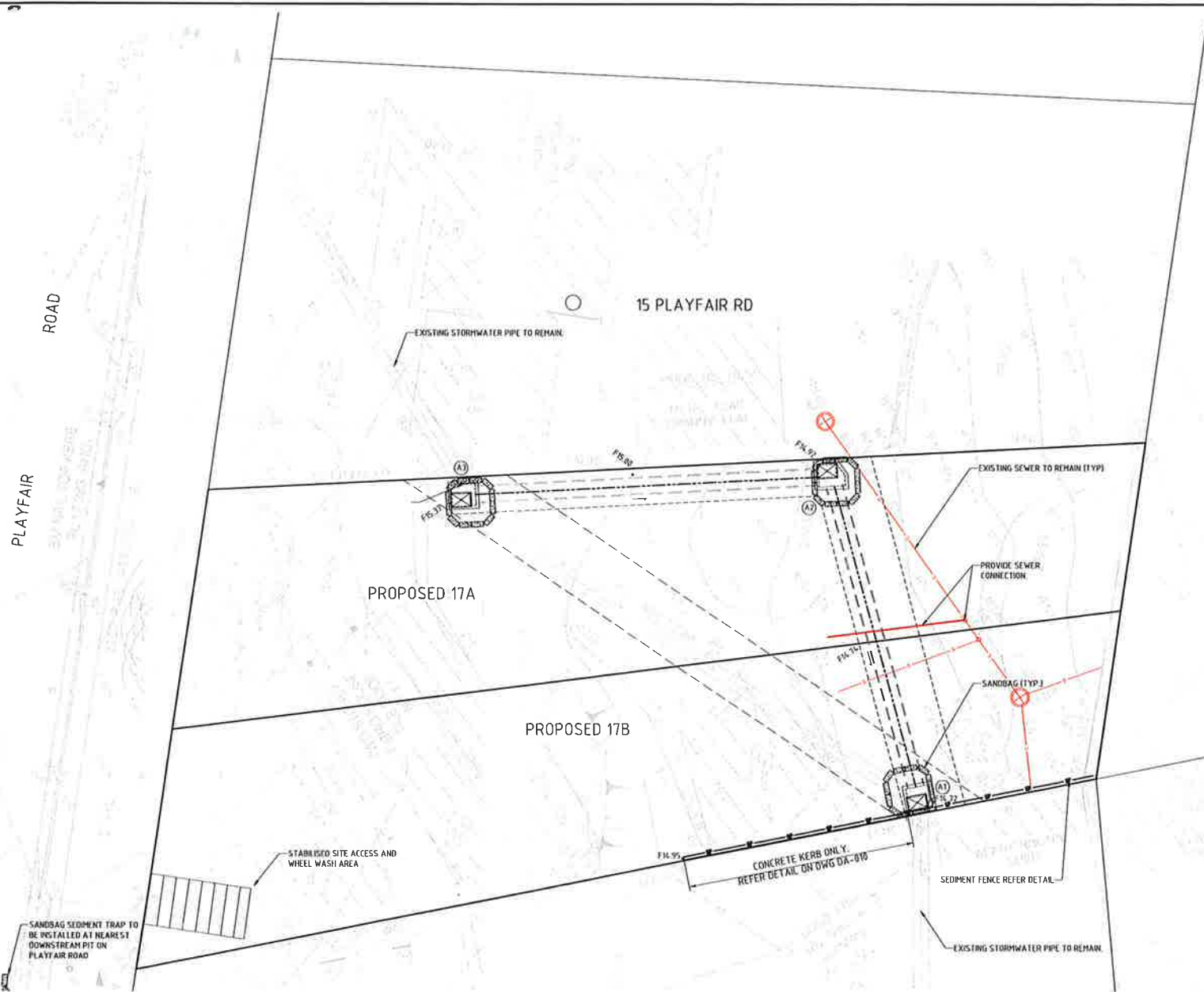
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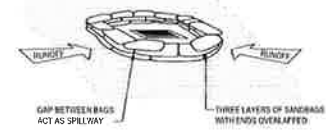
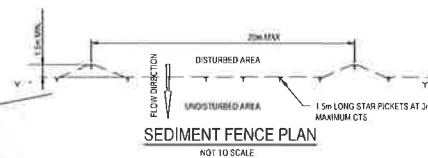
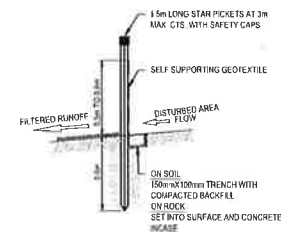
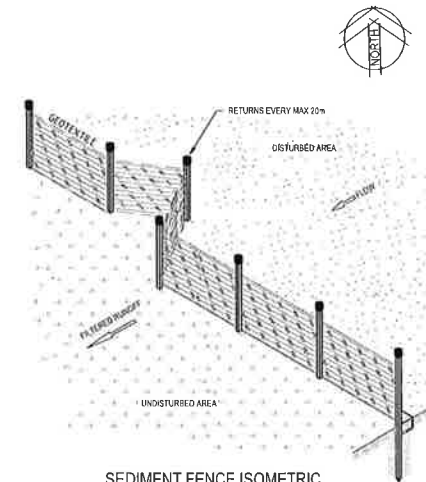
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**MRS. P SIMSON**  
Project 17 PLAYFAIR ROAD  
NORTH CURL CURL  
DEVELOPMENT APPLICATION  
SITWORKS PLAN

Status	FOR APPROVAL
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Author	DATE NOV 18
Scale	1:100
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Drawn	59918041-DA-002
Revised	2



EROSION AND SEDIMENT CONTROL PLAN  
 1:100m



#	Date	Description	By	Check	Appr
1	13.12.2018	ISSUE FOR DEVELOPMENT APPLICATION	TM	HT	TM
2	03.12.2018	ISSUE FOR DEVELOPMENT APPLICATION	TM	HT	TM
3					
4					
5					
6					
7					
8					
9					
10					



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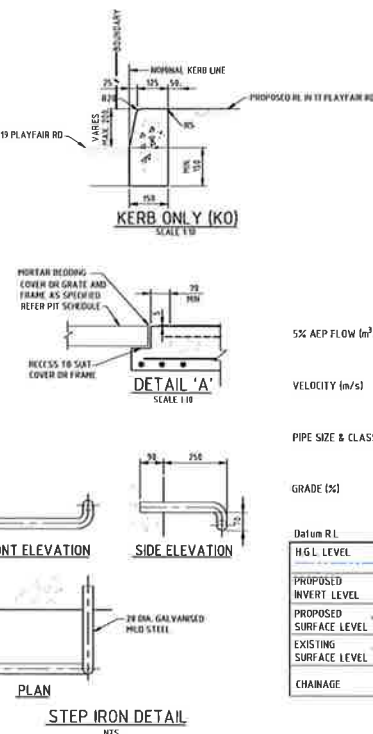
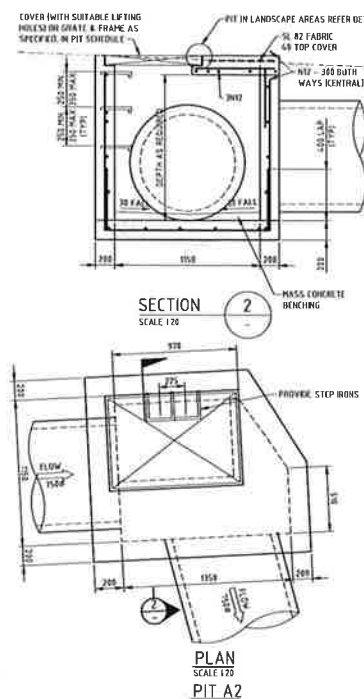
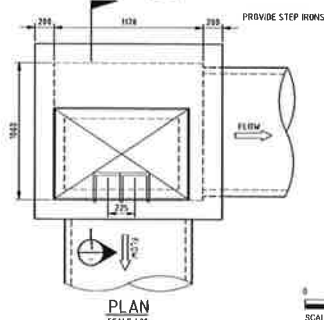
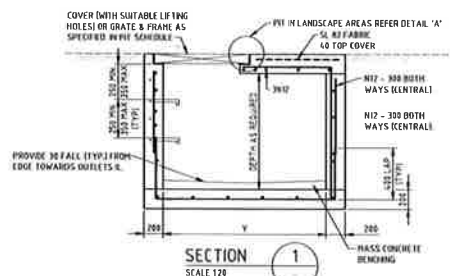
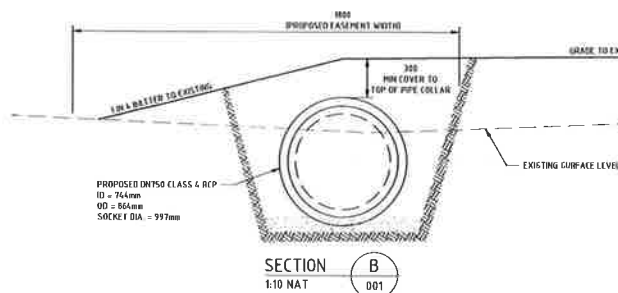
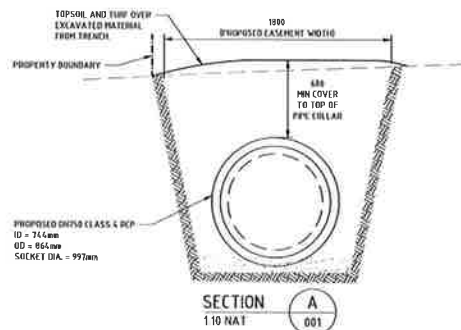
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MRS. P SIMSON  
 17 PLAYFAIR ROAD  
 NORTH CURL CURL  
 DEVELOPMENT APPLICATION  
 EROSION AND SEDIMENT CONTROL PLAN  
 AND DETAILS

Drawn	Check	Date	Scale	Rev
YLS	YLS	17.11.2018	AS SHOWN	A1
Checked	YLS	17.11.2018		
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**FOR APPROVAL**  
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59918041-DA-003  
 2



PIT SCHEDULE	
DIMENSIONS AND COVER	PIT NUMBER
100x600 CLASS "C" CAST IRON COVER WITH CONCRETE INFILL K-1130 V-1050	A1, A3
900x600 CLASS "E" CAST IRON COVER WITH CONCRETE INFILL HIEFER DE TAR.	A2

5% AEP FLOW (m<sup>3</sup>/s)

VELOCITY (m/s)

PIPE SIZE & CLASS

GRADE (%)

[illegible]

LINE A  
SCALE 1:25000 150 (V)

		PIIS A1 & A2				 SCALE 1:20 @A1	
						 SCALE 1:50 @A2	
						 SCALE 1:300 @A3	
		REV	BY	CHK	DATE		
2	13.12.2018	ISSUE FOR DEVELOPMENT APPLICATION					
1	13.12.2018	2018 FOR DEVELOPMENT APPLICATION					
Rev.	Date	Description	REV	BY	CHK	DATE	

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VL	12/11/2015
Checked	By
TM	17/11/2015
Designed	By
TM	17/11/2015
Verified	By
MF	17/11/2015
Approved	
TM	17/11/2015

MRS. P SIMSON

PROJECT	17 PLAYFAIR ROAD NORTH CURL CURL DEVELOPMENT APPLICATION
NO.	STORMWATER LONGITUDINAL SECTION AND DETAILS

Status: <b>FOR APPROVAL</b>				
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APPROVAL	DATE	Scale	Size	AI
AHD	NOV 18	AS SHOWN		
Drawing Number				Revision
59918041-DA-010				2