

CARRINGTON ROAD, HORNSBY PROPOSED DRAINAGE UPGRADE

LEGEND

	EXISTING KERB & GUTTER.
	EXISTING FENCE.
	EXISTING CONCRETE PATH EDGE.
	EXISTING TOP/BOTTOM OF BANK
	EXISTING PLANTER BEDS.
	EXISTING STORM WATER PIPE.
	EXISTING POWER POLE.
	EXISTING TREE.
	SURVEY TRAVERSE STATION.
	SURVEY REFERENCE MARKS - DRILL HOLE.
	EXISTING TELSTRA PIT.
	EXISTING SEWER MANHOLE.
	EXISTING FIRE HYDRANT.
	EXISTING WATER STOP VALVE.
	EXISTING SEWER MAIN.
	EXISTING U/G OPTIC FIBRE CABLES.
	EXISTING U/G WATER MAIN.
	EXISTING U/G TELSTRA CABLES
	EXISTING U/G GAS CABLES
	EXISTING U/G NBN CABLES
	EXISTING O/H POWER CABLES.
	PROPOSED STORMWATER INLET PIT.
	PROPOSED KERB & GUTTER.
	STORMWATER PIT LABEL (LINE No./PIT No.).

DRAWING SCHEDULE		
SHEET No.	TITLE	ISSUE
1	DRAWING SCHEDULE, GENERAL NOTES, LOCALITY PLAN & LEGEND.	1
2	GENERAL WORKS & SERVICES PLAN.	1
3	CATCHMENT PLAN.	1
4	HYDROLOGY & HYDRAULIC CALCULATIONS.	1

GENERAL NOTES:

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS & SPECIFICATIONS OF HORNSBY SHIRE COUNCIL.
- LEVELS SHALL BE OBTAINED FROM ESTABLISHED BENCH MARKS & NOT FROM SURVEY PEGS.
- PROVIDE TRAFFIC MANAGEMENT, LINE MARKING & SIGNAGE IN ACCORDANCE WITH THE TfNSW "TRAFFIC CONTROL AT WORK SITES" TECHNICAL MANUAL & AS1742.3 REQUIREMENTS.
- SERVICES SHOWN ON THESE PLANS HAVE BEEN LOCATED FROM INFORMATION SUPPLIED FROM THE RELEVANT AUTHORITIES VIA A "BEFORE YOU DIG AUSTRALIA" ENQUIRY. THE LOCATION OF SERVICES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED AS ACCURATELY AS POSSIBLE FROM DIAGRAMS PROVIDED BY SERVICE AUTHORITIES & FIELD INVESTIGATIONS & ARE TO BE VERIFIED PRIOR TO CONSTRUCTION.
- EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED IN ACCORDANCE WITH THE LANDCOM PUBLICATION:- "MANAGING URBAN STORMWATER, SOILS & CONSTRUCTION" Vol. 1, 4th EDITION.
- ALL DISTURBED AREAS OF THE SITE ARE TO BE REINSTATED WITH EXISTING OR MATCHING MATERIALS UNLESS NOTED OTHERWISE AT THE COMPLETION OF THE WORKS.
- ARRANGE SET-OUT BY HORNSBY SHIRE COUNCIL DESIGN & CONSTRUCTION BRANCH SURVEYOR. NOTIFY ENGINEERING SURVEYOR A MINIMUM OF 24 HOURS IN ADVANCE.
- WHERE PAVEMENT RESURFACING IS UNDERTAKEN ENSURE ALL BLUE HYDRANT MARKER RRPM'S ARE REINSTATED AT THE COMPLETION OF WORKS.
- WHERE WORKS ARE ADJACENT TO EXISTING STRUCTURES UNDERTAKE A DILAPIDATION SURVEY OF EXISTING ADJACENT STRUCTURES BEFORE COMMENCEMENT OF ANY WORKS.
- UTILITY SERVICES INVESTIGATION HAS BEEN DONE BY UTILITY MAPPING (AUST) PTY LTD. DATE OF LOCATING SERVICES : 19/11/2024. TRIM DOCUMENT No.D09030488.

ABORIGINAL ARTIFACT NOTES:

- AN AHIMS WEB SEARCH HAS BEEN UNDERTAKEN FOR THIS PROJECT (REF:CARRINGTON ROAD). ALTHOUGH NO ARTIFACTS HAVE BEEN IDENTIFIED IN THIS SEARCH SHOULD ANY POTENTIAL ARTIFACTS BE UNCOVERED THEY ARE NOT TO BE REMOVED FROM THE SITE & SHALL BE IMMEDIATELY REPORTED TO COUNCIL'S PROJECT MANAGER. TRIM DOCUMENT # D09030362.



LOCALITY PLAN
NOT TO SCALE

ACCESS & SAFETY NOTES:

- THE CONSTRUCTOR SHALL COMPLY WITH ALL STATUTORY & INDUSTRIAL REQUIREMENTS FOR PROVISION OF A SAFE WORKING ENVIRONMENT INCLUDING TRAFFIC CONTROL.
- THE CONSTRUCTOR SHALL PROVIDE TRAFFIC MANAGEMENT PLANS FOR THE PROPOSED WORKS COMPLETED BY A SUITABLY QUALIFIED PERSON & APPROVED BY COUNCIL/REGULATORY AUTHORITY. WORK IS NOT TO COMMENCE ON SITE PRIOR TO APPROVAL OF TRAFFIC MANAGEMENT SCHEME.
- THE CONSTRUCTOR SHALL ENSURE THAT AT ALL TIMES ACCESS TO BUILDINGS/RESIDENCES ADJACENT TO THE WORKS IS NOT DISRUPTED.
- WHERE NECESSARY THE CONSTRUCTOR SHALL PROVIDE SAFE PASSAGE OF VEHICLES AND/OR PEDESTRIANS THROUGH OR BY THE SITE.
- THE CONSTRUCTOR SHALL ENSURE PUBLIC ACCESS EXTERNAL TO THE SITE IS IN ACCORDANCE WITH COUNCIL REQUIREMENTS.

ASSET MANAGEMENT & MAINTENANCE BRANCH

Senior Asset Engineer
Name: A. BOYD Telephone: 9847 6672
Accepted as complying with the general intent of the design brief

Signed: _____ Date: _____

Project Number: 101737

Sheet 1 of 4 Issue 1

HSC Drawing Number: 788.4

**Hornsby Shire Council
Design & Construction
Branch**

TELEPHONE (02) 9847 6666
EMAIL: hsc@hornsby.nsw.gov.au
Authorised for release - Manager Design & Construction
Name: M. DRAKE Signed: _____ Date: 3/3/25

Designer B. RAJAKARUNA	Design Checked Signed: _____	Design Team Leader Signed: _____
Drawn B. RAJAKARUNA	Drawing Checked Signed: _____	
Surveyor J. HART	NA	NA
	Field Book	AHD
Project Identifier: \\CAD File Name		
H:\PROJECTS\Carrington Road_OR_101737\Design\ACAD\Carrington Road.dwg		
Issue	Description	Name Initial Date
1	ISSUED FOR CONSTRUCTION	D TAMANG DT 3/3/25
Design not to be amended without authorisation by Manager Design & Construction		

Bar Scales
NOT TO SCALE
DO NOT SCALE, USE FIGURED DIMENSIONS ONLY



CARRINGTON ROAD, HORNSBY
PROPOSED DRAINAGE UPGRADE AT No.6

DRAWING SCHEDULE, GENERAL NOTES, LOCALITY PLAN
& LEGEND

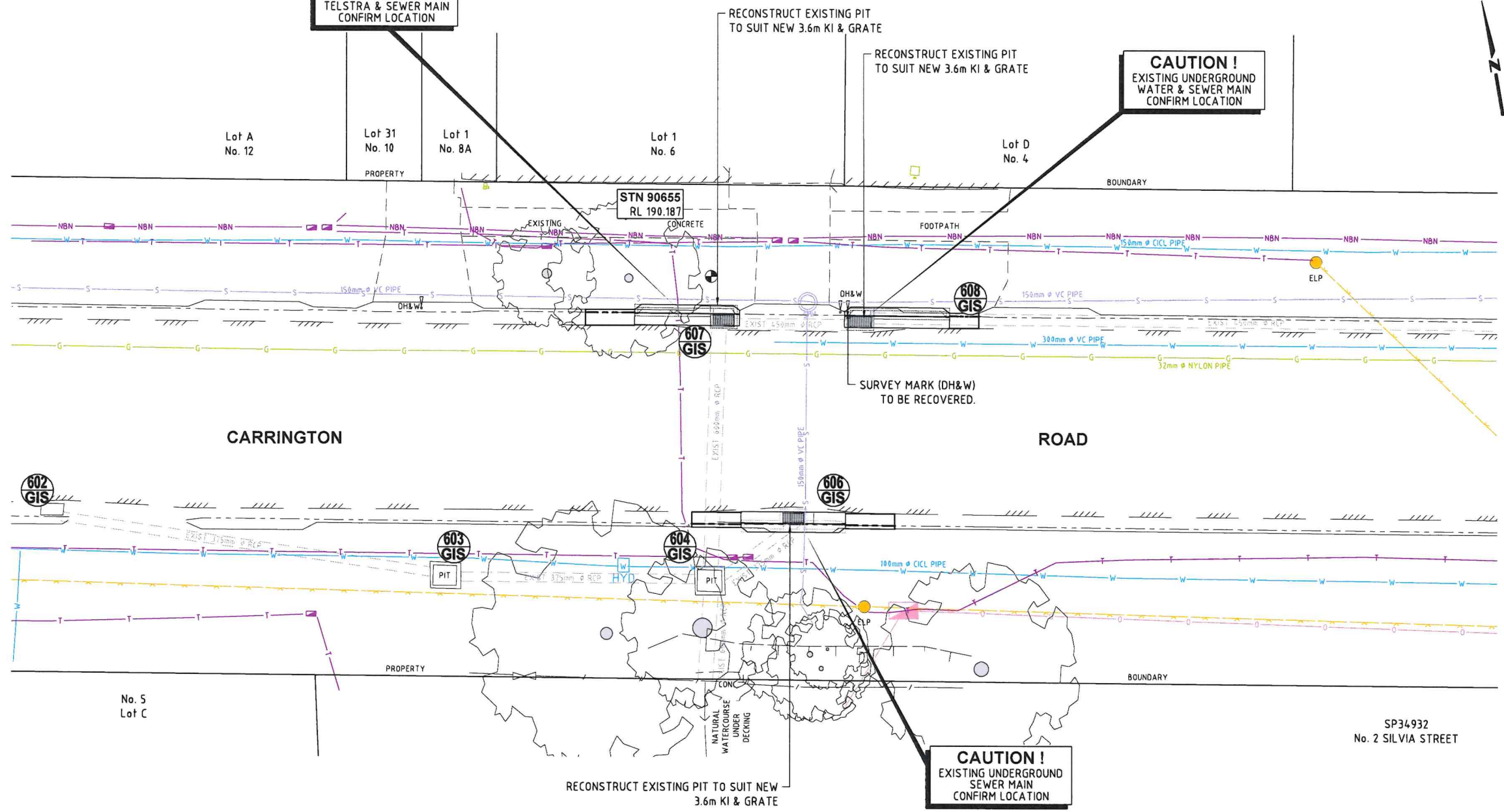
CAUTION!
EXISTING UNDERGROUND
TELSTRA & SEWER MAIN
CONFIRM LOCATION

CAUTION!
EXISTING UNDERGROUND
WATER & SEWER MAIN
CONFIRM LOCATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM KNOWN POSITIONS OF VALVES, MANHOLES ETC. AND/OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

SURVEY MARKS:
NOTE: SURVEY MARKS MUST NOT BE DISTURBED. IF MARKS HAVE TO BE REMOVED APPLICATION MUST BE MADE THROUGH A REGISTERED SURVEYOR TO SUBMIT A "PRESERVATION OF SURVEY INFRASTRUCTURE" FORM TO SPATIAL SERVICES NSW.

REFER TO SHEET No.4 FOR HYDROLOGIC HYDRAULIC ANALYSIS DATA TABLES.

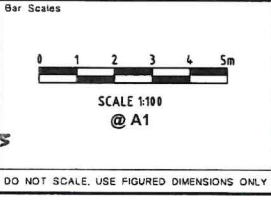


PLAN
SCALE 1:100

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Designer B. RAJAKARUNA	Design Checked <i>[Signature]</i>	Design Team Leader
Drawn B. RAJAKARUNA	Drawing Checked	
Surveyor J. HART	NA	NA
	Field Book	AHD
	Level Book	Datum
Project Identifier \ CAD File Name H:\PROJECTS\Carrington Road_DR_101737\Design\CAD\Carrington Road.dwg		
Issue	Description	Date
1	ISSUED FOR CONSTRUCTION	D TAMANG DT 3/3/25

Name	Initial	Date
M. DRAKE		3/3/25
Design not to be amended without authorisation by Manager Design & Construction		



**CARRINGTON ROAD, HORNSBY
PROPOSED DRAINAGE UPGRADE AT No.6**

GENERAL WORKS & SERVICES PLAN.

Project Number 101737	Sheet of 2 of 4	Issue 1
HSC Drawing Number 788.4		



CATCHMENT PLAN
SCALE 1:500

LEGEND

- EXISTING 0.5m CONTOUR.
- EXISTING STORMWATER PIPE.
- EXISTING STORMWATER PIT.
- CATCHMENT BOUNDARY.
- 1/6**
0.27Ha CATCHMENT NUMBER & AREA(Ha).
- PROPOSED STORMWATER PIT.

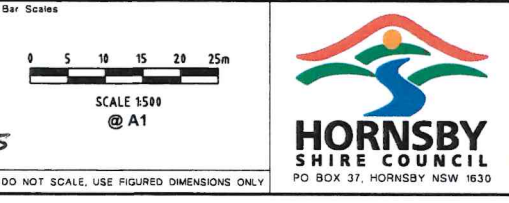
**Hornsby Shire Council
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Authorised for release - Manager Design & Construction
Name **M. DRAKE** Signed *[Signature]* Date **3/2/25**

Designer B. RAJAKARUNA	Design Checked <i>[Signature]</i>	Design Team Leader <i>[Signature]</i>
Drawn B. RAJAKARUNA	Drawing Checked <i>[Signature]</i>	
Surveyor J. HART	NA	AHD
	Field Book	Level Book
Project Identifier \ CAD File Name H:\PROJECTS\Carrington Road_DR_101737\Design\CAD\Carrington Road.dwg		
Issue 1	Description ISSUED FOR CONSTRUCTION	Name D. TAMANG
		Initial DT
		Date 3/2/25
Design not to be amended without authorisation by Manager Design & Construction		

Bar Scales	0 5 10 15 20 25m
SCALE 1:500	@ A1
DO NOT SCALE, USE FIGURED DIMENSIONS ONLY	



**CARRINGTON ROAD, HORNSBY
PROPOSED DRAINAGE UPGRADE AT No.6**

CATCHMENT PLAN.

Project Number 101737
Sheet of 3 of 4
Issue 1
HSC Drawing Number 788.4

EXISTING																														
5% AEP (ANNUAL EXCEEDANCE PROBABILITY) HYDROLOGIC & HYDRAULIC DATA & RESULTS																														
CATCHMENT AND RUNOFF					INLET FLOWS							PIPE							PIT											
Pit Name	Sub-Catchment Area (ha)	Land Use		Total Entry Time, tc (minutes)	Peak Sub-Catchment Flowrate (m3/s)	Overflows Approaching Pit		Flow Width (m)	Depth x Velocity (m2/s)	Peak Approach Flow (m3/s)	Bypass Flow(s) (m3/s)	Peak Flow in Pipe (m3/s)	Pipe Length (m)	Pipe Slope (%)	Pipe Diameter (mm)	U/S Pipe Invert Level (m)	D/S Pipe Invert Level (m)	U/S HGL in Pipe (m)	D/S HGL in Pipe (m)	Pipe Flow Velocity (m/s)	Pressure Change Coeff. Ku	Water Surface Elevation (m)	Ground Surface Level (m)	Pit Free-board (m)	Pit Name	Pit Type & Size				
		Type (IL-CL)	(%)			Origin of Approach Flows	Peak Flowrate(s) (m3/s)																							
Pit 606	0.03	EIA	90	5	0.016	Pit602	0	-	-	0.377	0.146	0.162	4.41	1.38	375	188.919	188.858	189.23	189.134	2.08	4	189.73	189.8	0.07	Pit 606	Existing GP 1.8m KI				
		RIA	5																								Pit608	0.088	24.1	0.01
		PA	5																								Pit 607	0.289	23.7	0.04
Pit 604	-	EIA	0	-	-	-	-	-	-	-	-	0.778	4.24	7	600	188.048	187.751	188.588	188.043	5.69	1.8	188.8	190	1.2	Pit604	Existing Junction Pit				
		RIA	0																											
		PA	0																											
Pit 602	0.04	EIA	90	5	0.021	-	-	0.7	0.03	0.021	0	0.021	15.2	1.36	375	189.395	189.189	189.5	189.284	0.95	4	189.5	191.1	1.6	Pit602	Existing GP 3.0m KI				
		RIA	5																											
		PA	5																											
Pit 603	-	EIA	0	-	-	-	-	-	-	-	-	0.02	9.5	1.97	375	189.189	189.002	189.284	189.069	1.51	0.5	189.28	190.3	1.02	Pit603	Existing Junction Pit				
		RIA	0																											
		PA	0																											
Pit 609	0.8	EIA	60	5	0.412	-	-	2.5	0.12	0.412	0.001	0.413	36.11	1.52	450	189.536	188.988	190.171	189.403	2.69	0.5	190.36	190.79	0.43	Pit609	Existing GP 2.4m KI				
		RIA	10																											
		PA	30																											
Pit 608	0.4	EIA	60	5	0.206	Pit609	-	24.1	0.01	0.206	0.08	0.511	5.7	2	450	188.913	188.799	189.267	189.056	2.73	1	189.32	189.85	0.53	Pit608	Existing SP 1.8m KI				
		RIA	10																											
		PA	30																											
Pit 607	0.88	EIA	60	5	0.453	-	-	23.7	0.04	0.453	0.289	0.619	9.5	5.05	525	188.59	188.11	188.965	188.797	1.87	1.5	189.01	189.87	0.86	Pit 607	Existing SP 1.8m KI				
		RIA	10																											
		PA	30																											

PROPOSED																													
5% AEP (ANNUAL EXCEEDANCE PROBABILITY) HYDROLOGIC & HYDRAULIC DATA & RESULTS																													
CATCHMENT AND RUNOFF					INLET FLOWS							PIPE							PIT										
Pit Name	Sub-Catchment Area (ha)	Land Use		Total Entry Time, tc (minutes)	Peak Sub-Catchment Flowrate (m3/s)	Overflows Approaching Pit		Flow Width (m)	Depth x Velocity (m2/s)	Peak Approach Flow (m3/s)	Bypass Flow(s) (m3/s)	Peak Flow in Pipe (m3/s)	Pipe Length (m)	Pipe Slope (%)	Pipe Diameter (mm)	U/S Pipe Invert Level (m)	D/S Pipe Invert Level (m)	U/S HGL in Pipe (m)	D/S HGL in Pipe (m)	Pipe Flow Velocity (m/s)	Pressure Change Coeff. Ku	Water Surface Elevation (m)	Ground Surface Level (m)	Pit Free-board (m)	Pit Name	Pit Type & Size			
		Type (IL-CL)	(%)			Origin of Approach Flows	Peak Flowrate(s) (m3/s)																						
Pit 606	0.03	EIA	90	5	0.016	Pit602	0.153	10.68	0.02	0.17	0	0.098	4.41	1.38	375	188.919	188.858	189.174	189.165	1.22	4	189.27	189.8	0.53	Pit 606	Proposed SP 3.6m KI			
		RIA	5																								Pit608	-	-
		PA	5																								Pit 607	-	-
Pit 604	-	EIA	-	-	-	-	-	-	-	-	-	0.959	4.24	7	600	188.048	187.751	188.621	188.078	6.09	1.8	189.16	190	0.84	Pit604	Existing Junction Pit			
		RIA	-																										
		PA	-																										
Pit 602	0.04	EIA	90	5	0.021	-	-	-	-	0.021	0	0.021	15.2	1.36	375	189.395	189.189	189.5	189.284	0.95	4	189.5	191.1	1.6	Pit602	Existing GP 3.0m KI			
		RIA	5																										
		PA	5																										
Pit 603	-	EIA	-	-	-	-	0.48	0.03	-	-	-	0.021	9.5	1.97	375	189.189	189.002	189.284	189.165	0.93	0.5	189.28	190.3	1.02	Pit603	Existing Junction Pit			
		RIA	-																										
		PA	-																										
Pit 609	0.8	EIA	60	5	0.412	-	-	0.4	0.05	0.412	0.001	0.408	36.11	1.52	450	189.536	188.988	190.521	189.799	2.57	0.5	190.69	190.79	0.1	Pit609	Existing GP 2.4m KI			
		RIA	10																										
		PA	30																										
Pit 608	0.4	EIA	60	5	0.206	Pit609	-	1.75	0.11	0.206	0.005	0.595	5.7	2	450	188.913	188.799	189.627	189.568	1.87	1	189.8	189.85	0.05	Pit608	Proposed GP 3.6m KI			
		RIA	10																										
		PA	30																										
Pit 607	0.88	EIA	60	5	0.453	-	-	2.15	0.17	0.453	0.154	0.884	9.5	5.05	525	188.59	188.11	189.261	189.165	2.04	1.5	189.57	189.87	0.3	Pit 607	Proposed GP 3.6m KI			
		RIA	10																										
		PA	30																										

**Hornsby Shire Council
Design & Construction
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Designer
B. RAJAKARUNA
Signed: *[Signature]*

Drawn
B. RAJAKARUNA
Signed: *[Signature]*

Surveyor
J. HART
Field Book: NA, Level Book: NA, AHD Datum: AHD

Project Identifier: \CAD File Name
H:\PROJECTS\Carrington Road_DR_101737\Design\ACAD\Carrington Road.dwg

Issue: 1
Description: ISSUED FOR CONSTRUCTION
Name: D TAMANG
Initial Date: 01/3/25

Authorised for release - Manager Design & Construction
Name: M. DRAKE
Signed: *[Signature]*
Date: 3/3/25
D09062481

Design Checked/Design Team Leader
Drawing Checked

Design not to be amended without authorisation by Manager Design & Construction

Bar Scales
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**CARRINGTON ROAD, HORNSBY
PROPOSED DRAINAGE UPGRADE AT No.6**

HYDROLOGY & HYDRAULIC CALCULATIONS.

Project Number
101737

Sheet of
4 4

Issue
1

HSC Drawing Number
788.4