75-77 SHEPPARD STREET, CASINO
STORMWATER SERVICES

LEGEND

ABBREVIATIONS

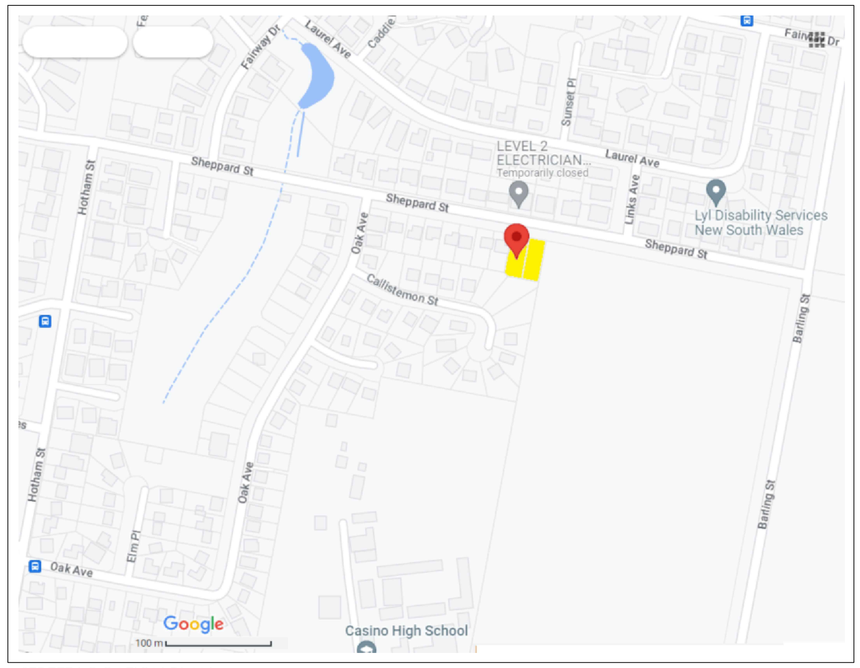
AEP	ANNUAL EXCEEDANCE PROBABILITY
ARI	AVERAGE RECURRENCE INTERVAL
CO	CLEAROUT
Ø	DIAMETER
DP	DOWNPIPE
DWG	DRAWING
e	EXISTING
GTD	GRATED TRENCH DRAIN
IL	INVERT LEVEL
kPa	KILOPASCALS
L	LITRES
L/s	LITRES PER SECOND
m	METRES
m2	SQUARE METRES
m3	CUBIC METRES
m/s	METRES PER SECOND
mm	MILLIMETRES
NOM	NOMINAL
OF	OVERFLOW
PVC	UNPLASTICIZED POLYVINYL CHLORIDE
Q100	QUANTITY OF FLOW FOR 100 YEAR ARI STORM
Q20	QUANTITY OF FLOW FOR 20 YEAR ARI STORM
RL	REDUCED LEVEL
SAC	SEWER ACCESS CHAMBER
SWP	STORMWATER PIT
UNO	UNLESS NOTED OTHERWISE

PIPE SERVICES

- E22.20 — EXISTING/NATURAL CONTOUR
- STORMWATER DRAINAGE
- EXISTING LARGE STORMWATER
- RW — RAINWATER DRAINAGE
- SUBSOIL DRAINAGE
- OVERFLOW
- CATCHMENT EXTENT
- SEDIMENT FENCE
- e — e — EXISTING SERVICE
- W — EXISTING AUTHORITY WATER MAIN
- S — EXISTING AUTHORITY SEWER MAIN

SYMBOLS

- PENETRATING PIPE
- NON-PENETRATING PIPE
- PENETRATING OFFSET
- NON-PENETRATING OFFSET
- PENETRATING TEE DROPPER
- NON-PENETRATING TEE DROPPER
- PIPE BREAK
- CAPPED SERVICE
- OPEN ENDED PIPE
- CONNECT TO EXISTING PIPE
- SERVICE CONNECTION
- H — STREET HYDRANT
- PUMP CONTROL
- SURFACE FLOW DIRECTION
- SURFACE GRADING TO DIRECT FLOW
- 10 — PIPE NETWORK NODE
- CO — CLEAR OUT
- RWO — RAINWATER OUTLET
- GTD — GRATED TRENCH DRAIN
- D1 / SW100 DETAIL 1:20 — DETAIL NUMBER & DESCRIPTION / DRAWING REFERENCE & SCALE



STREET LOCATION PLAN

SCHEDULE OF DRAWINGS	
DRAWING No.	DRAWING TITLE
SYD23062-SW000	COVER SHEET, LEGEND & DRAWING SCHEDULE
SYD23062-SW001	EROSION & SEDIMENT CONTROL PLAN
SYD23062-SW101	GROUND FLOOR PLAN
SYD23062-SW102	FIRST FLOOR PLAN
SYD23062-SW103	ROOF PLAN
SYD23062-SW201	DETAIL SHEET 1
SYD23062-SW202	DETAIL SHEET 2

IMPORTANT - FOR PRINCIPAL CONTRACTOR

TO ENABLE THE ISSUE OF STORMWATER CERTIFICATION PERMITTING OCCUPATION IN ALIGNMENT WITH COUNCIL LEGISLATION, SITE INSPECTIONS MUST OCCUR. THE PRINCIPAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL STORMWATER INSPECTIONS. ABSENCE OF INSPECTION WILL PREVENT ISSUE OF STORMWATER CERTIFICATION. SITE INSPECTIONS ARE TO BE COMPLETED BY ERBAS AS FOLLOWS:

INSPECTION NO.	STORMWATER INSPECTION REQUIREMENTS	ERBAS REPRESENTATIVE NAME	ERBAS REPRESENTATIVE SIGNATURE	INSPECTION DATE	PASS TICK ✓ OR	FAIL N/A
1	INSPECTION OF INGROUND STORMWATER DRAINAGE PRIOR TO BACKFILL (MANDATORY)					
2	INSPECTION OF ANY INGROUND STORMWATER DRAINAGE NOT VIEWED AT INSPECTION NO. 1 (OPTIONAL)					
3	INSPECTION OF INFILTRATION PIT / TANK / TRENCH PRIOR TO BACKFILL (JOB SPECIFIC)					
4	FINAL INSPECTION ON COMPLETION OF ALL LANDSCAPING & POST COMMISSIONING OF THE STORMWATER SYSTEM (MANDATORY)					
5	SURVEY OF RAINWATER & ONSITE DETENTION TANKS & WORKS AS EXECUTED STORMWATER DRAWINGS (MANDATORY) *TO BE PROVIDED TO ERBAS PRIOR TO INSPECTION					

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

Discipline	Dwg. No.	Date	Revisions
ARCH PLAN	-	-	-
ARCH RCP			
STRUCTURAL			
MECHANICAL			
ELECTRICAL			
CIVIL			
LANDSCAPE			

THE DESIGN AND DETAILS SHOWN ON THESE DRAWINGS ARE APPLICABLE TO THIS PROJECT ONLY AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART OR BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN PERMISSION OF ERBAS & ASSOCIATES WITH WHOM COPYRIGHT RESIDES.
ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN. WORK TO FIGURED DIMENSIONS, DO NOT SCALE RED DRAWINGS.
CHECK ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS.

ISSUE	DATE	AMENDMENT
P1	10.02.23	PRELIMINARY ISSUE FOR ARCHITECTS REVIEW
P2	04.05.23	DEVELOPMENT APPLICATION ISSUE

ARCHITECT
Barry Rush & Associates Pty Ltd
Architects. Nominated Architect: Barry John Rush
ARB Registration No 3753
Suite 25A, 2 Beattie Street, Balmain, NSW
Phone: (02) 9555 8028 Email: info@barryrush.com.au
www.barryrush.com.au

CLIENT
NSW GOVERNMENT
LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718
https://www.dpie.nsw.gov.au/land-and-housing-corporation

BUILDING SERVICES ENGINEER
erbas™
Sydney Melbourne Manila
L1, 15 Atchison Street, St Leonards NSW 2065
Ph: (02) 9437 1022 general@erbas.com.au
www.erbas.com.au

DESIGNED: IY
CHECKED: MS
NORTH POINT

PROJECT
MULTI-DWELLING
HOUSING DEVELOPMENT
75-77 SHEPPARD STREET,
CASINO NSW
(RICHMOND VALLEY COUNCIL)

DRAWING TITLE
STORMWATER SERVICES
COVER SHEET, LEGEND &
DRAWING SCHEDULE

SCALE at A1	PROJECT No.	DRAWING No.	ISSUE
-			
DATE FEB 2023		SYD23062-SW000	P2
DRAWN IY			

SHEPPARD STREET

BENCHMARK
CUT IN KERB
RL 39.41 (AHD)

PROVIDE TEMPORARY GRAVEL LAYER AT VEHICULAR ENTRANCE TO PREVENT SOIL DEPOSITS ON ROADWAY DURING CONSTRUCTION:
NOMINAL 5m x 3m x 200mm THICK LAYER
USING DGB20 ROADBASE OR 30mm AGGREGATE
(SIMILAR PRINCIPLE TO 15m LONG ARRANGEMENT SHOWN IN STANDARD DRAWING SD6-14 ON PAGE 6-48 OF SOILS & CONSTRUCTION: MANAGING URBAN STORMWATER, 4TH EDITION, MARCH 2004 AVAILABLE FROM LANDCOM)
REFER TO DETAIL D1 ON DWG SW201

ASSUMED 1.5m WIDE STORMWATER DRAINAGE EASEMENT FOR BENEFIT OF NEIGHBOURING GOLF COURSE

ASSUMED 5m WIDE SEWER DRAINAGE EASEMENT FOR BENEFIT OF NEIGHBOURING GOLF COURSE

ASSUMED 1.5m WIDE STORMWATER DRAINAGE EASEMENT FOR BENEFIT OF NEIGHBOURING GOLF COURSE

ASSUMED 5m WIDE SEWER DRAINAGE EASEMENT FOR BENEFIT OF NEIGHBOURING GOLF COURSE

SINGLE STOREY
BRICK RESIDENCE
TILE ROOF
No. 73

RIDGE:42.58
HEAD:40.85
SILL:39.65
GUTTER RL 41.1
RIDGE:42.34
GUTTER RL 41.1

75
DP 776531

761
DP 1155484
AREA: 700M²
VACANT
No. 75

762
DP 1155484
AREA: 654.9M²
VACANT
No. 77

A
DP 405998
GOLF COURSE

SPREAD: 8M
HEIGHT: 10M
TRUNK: 0.4

SPREAD: 8M
HEIGHT: 10M
TRUNK: 0.4

SPREAD: 6M
HEIGHT: 10M
TRUNK: 0.4

SPREAD: 6M
HEIGHT: 10M
TRUNK: 0.4

WHERE DEEMED NECESSARY:
ERECT ALL SEDIMENT FENCES PRIOR TO EXCAVATION OF EXISTING GROUND SURFACE & REMOVE WHEN NO LONGER NECESSARY TO CONTROL MOVEMENT OF SOIL & WATER ACROSS SITE
(REFER TO DETAIL D2 ON DWG SW201)

FOR EROSION & SEDIMENT CONTROL ASSESSMENT NOTES REFER TO DWG SW201

APPROXIMATE EXISTING CONTOURS BASED ON SURVEY PLAN (TYPICAL)

ASSUMED 2m WIDE DRAINAGE EASEMENT SERVING REAR NEIGHBOUR AT 8 CALLISTEMON STREET

ASSUMED eSWP SERVING REAR NEIGHBOUR AT 8 CALLISTEMON STREET

1:100

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

Discipline	Dwg. No.	Date	Revisions
ARCH PLAN	-	-	-
ARCH RDP			
STRUCTURAL			
MECHANICAL			
ELECTRICAL			
CIVIL			
LANDSCAPE			

THE DESIGN AND DETAILS SHOWN ON THESE DRAWINGS ARE APPLICABLE TO THIS PROJECT ONLY AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART OR BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN PERMISSION OF ERBAS & ASSOCIATES WITH WHOM COPYRIGHT RESIDES.
ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN. WORK TO FIGURED DIMENSIONS, DO NOT SCALE FROM DRAWING.
CHECK ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS.

ISSUE	DATE	AMENDMENT
P1	10.02.23	PRELIMINARY ISSUE FOR ARCHITECTS REVIEW
P2	04.05.23	DEVELOPMENT APPLICATION ISSUE

ARCHITECT
Barry Rush & Associates Pty Ltd
Architects. Nominated Architect: Barry John Rush
ARB Registration No 3753
Suite 25A, 2 Beattie Street, Balmain, NSW
Phone: (02) 9555 8028 Email: info@barryrush.com.au
www.barryrush.com.au

CLIENT
NSW GOVERNMENT
LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718
https://www.dpie.nsw.gov.au/land-and-housing-corporation

BUILDING SERVICES ENGINEER
erbas™
Sydney Melbourne Manila
L1, 15 Atchison Street, St Leonards NSW 2065
Ph: (02) 9437 1022 general@erbas.com.au
www.erbas.com.au

DESIGNED: IY
CHECKED: MS
NORTH POINT

PROJECT
MULTI-DWELLING
HOUSING DEVELOPMENT
75-77 SHEPPARD STREET,
CASINO NSW
(RICHMOND VALLEY COUNCIL)

DRAWING TITLE
STORMWATER SERVICES
EROSION & SEDIMENT CONTROL PLAN

SCALE at A1	PROJECT No.	DRAWING No.	ISSUE
1:100	SYD23062-SW001		P2
DATE: FEB 2023			
DRAWN: IY			

SHEPPARD STREET

CONTRACTOR TO CONFIRM AVAILABLE PIT DEPTH PRIOR TO CONSTRUCTION

ASSUMED IL36.40 — eSWP RL37.04 — IL36.42 — RL37.23

CONNECT TO EXISTING COUNCIL KERB INLET PIT AS REQUIRED

DISCHARGE TO STREET PIT IN ACCORDANCE WITH COUNCIL REQUIREMENTS. DEMOLISH & REINSTATE KERB & FOOTPATH AREAS WHERE NECESSARY

ASSUMED IL37.00 — RL37.70 * ASSUMED — eSWP — ASSUMED IL37.04

ASSUMED EXISTING DRAINAGE TO REMAIN

IL37.00 — SWP1 — RL38.15

SET OUT POINT

ASSUMED IL37.42

ASSUMED 1.5m WIDE STORMWATER DRAINAGE EASEMENT FOR BENEFIT OF NEIGHBOURING GOLF COURSE

APPROXIMATE LOCATION OF EXISTING AUTHORITY SEWER MAIN

WHERE APPLICABLE: PRIOR TO EXCAVATION CONTACT DIAL-BEFORE-YOU-DIG ON 1100 TO AVOID DAMAGE TO EXISTING SERVICES

ASSUMED 5m WIDE SEWER DRAINAGE EASEMENT FOR BENEFIT OF NEIGHBOURING GOLF COURSE

CONTRACTOR TO ENSURE AT LEAST 80% OF IMPERVIOUS GROUND SURFACES (DRIVEWAYS, PATHS & PARKING SPACES) ARE GRADED TO DIRECT RUNOFF TOWARDS LANDSCAPED AREAS TO PROMOTE NATURAL INFILTRATION

PROPOSED BUILDING ELEMENTS ADJACENT TO SEWER & ASSOCIATED STRUCTURAL SUPPORT TO BE APPROVED BY RELEVANT AUTHORITY PRIOR TO CONSTRUCTION & ANY REQUIRED CONCRETE ENCASEMENT SHALL BE PROVIDED BY AN APPROVED CONTRACTOR

PROPOSED LANDSCAPING

CONTRACTOR TO ENSURE AT LEAST 80% OF IMPERVIOUS GROUND SURFACES (DRIVEWAYS, PATHS & PARKING SPACES) ARE GRADED TO DIRECT RUNOFF TOWARDS LANDSCAPED AREAS TO PROMOTE NATURAL INFILTRATION

ASSUMED 1.5m WIDE STORMWATER DRAINAGE EASEMENT FOR BENEFIT OF NEIGHBOURING GOLF COURSE

ASSUMED 5m WIDE SEWER DRAINAGE EASEMENT FOR BENEFIT OF NEIGHBOURING GOLF COURSE

EXISTING GOLF COURSE GROUNDS
DP 405998
GOLF COURSE

UNDERGROUND FIRST FLUSH DIVERTER EQUAL TO RAINHARVESTING (NOMINAL Ø300 TUBE x 4m LENGTH). DISCHARGE TRICKLE DRAIN INTO DOWNSTREAM STORMWATER DRAINAGE

FINISHED GROUND SURFACES AROUND BUILDINGS TO BE GENERALLY GRADED AWAY FROM AND AROUND BUILDINGS TO AVOID CREATING LOW POINTS WHERE WATER CAN ACCUMULATE (TYPICAL)

PROVIDE ALL SUBSOIL DRAINAGE AS REQUIRED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S & LANDSCAPE ARCHITECTS DOCUMENTATION (e.g. FOR RETAINING WALLS OR PLANTER DRAINS)

CONTRACTOR TO ENSURE AT LEAST 80% OF IMPERVIOUS GROUND SURFACES (DRIVEWAYS, PATHS & PARKING SPACES) ARE GRADED TO DIRECT RUNOFF TOWARDS LANDSCAPED AREAS TO PROMOTE NATURAL INFILTRATION

RAINWATER TANK TO STORE MIN 30m3 BELOW GROUND FROM RL36.39 UP TO RL37.89 WITH 1.50m EFFECTIVE STORAGE DEPTH, (e.g. 7m x 3m x 1.5m DEPTH = MIN 31m3) REFER TO DETAIL D3 ON DWG SW201

TANK ACCESS COVERS ARE TO BE LOCKABLE TO PREVENT REMOVAL BY UNAUTHORISED PERSONS.

CONTRACTOR TO ENSURE ADEQUATE PROTECTIVE SOIL COVER OVER ALL PIPEWORK (TYPICAL)

WHEREVER POSSIBLE: LAY ALL PIPEWORK TO AVOID EXISTING & PROPOSED TREES (TYPICAL)

APPROXIMATE EXISTING CONTOURS BASED ON SURVEY PLAN (TYPICAL)

ASSUMED EXISTING NEIGHBOURING EASEMENT DRAINAGE TO REMAIN

ASSUMED 2m WIDE DRAINAGE EASEMENT SERVING REAR NEIGHBOUR AT 8 CALLISTEMON STREET

ASSUMED eSWP SERVING REAR NEIGHBOUR AT 8 CALLISTEMON STREET

BUILDER TO ENSURE TYPICAL WALLS/FENCES PERMIT PASSAGE OF STORMWATER AT GROUND LEVEL FOR EMERGENCY OVERLAND FLOW DURING SEVERE STORMS (NOM 100mm HIGH GAP OR OVERFLOW OPENING)

ALL EXISTING UNDERGROUND SERVICES INDICATED ON PLAN ARE BASED ON INFORMATION AVAILABLE AT THE TIME OF DESIGN & ARE SHOWN IN ASSUMED LOCATIONS ONLY. INVESTIGATE & CONFIRM ALL RELEVANT LOCATIONS & CONNECTIONS PRIOR TO INSTALLATION OF NEW PIPES & ADVISE SUPERINTENDENT OF ANY DISCREPANCIES.

INVESTIGATE LOCATION OF ALL EXISTING SERVICES AFFECTED BY NEW WORKS & DISUSE, CAP OFF, DIVERT, UPGRADE, RENEW, REINSTATE & RECONNECT SERVICES AS REQUIRED. COORDINATE ALL TEMPORARY SHUTDOWNS WITH SITE SUPERINTENDENT, PROVIDING REASONABLE & ADEQUATE ADVANCE NOTICE.

0 2 4 6 8 10 m
1:100

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

Discipline	Dwg. No.	Date	Revisions
ARCH PLAN	A04	22.08.23	-
ARCH ROOF			
STRUCTURAL			
MECHANICAL			
ELECTRICAL			
CIVIL			
LANDSCAPE			

THE DESIGN AND DETAILS SHOWN ON THESE DRAWINGS ARE APPLICABLE TO THIS PROJECT ONLY AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART OR BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN PERMISSION OF ERBAS & ASSOCIATES WITH WHOM COPYRIGHT RESIDES.
ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN. WORK TO FIGURED DIMENSIONS, DO NOT SCALE FROM DRAWINGS.
CHECK ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS.

ISSUE	DATE	AMENDMENT
P1	10.02.23	PRELIMINARY ISSUE FOR ARCHITECTS REVIEW
P2	04.05.23	DEVELOPMENT APPLICATION ISSUE
P3	30.08.23	CONSTRUCTION CERTIFICATE ISSUE

ARCHITECT
Barry Rush & Associates Pty Ltd

CLIENT
NSW GOVERNMENT

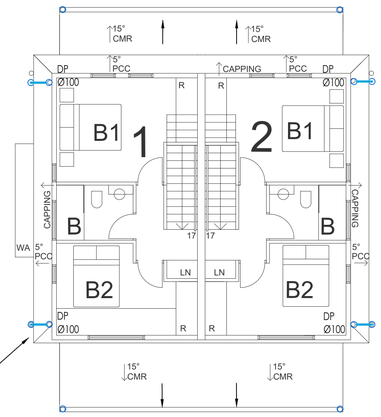
BUILDING SERVICES ENGINEER
erbas™
Sydney Melbourne Manila
L1, 15 Atchison Street, St Leonards NSW 2065
Ph: (02) 9437 1022 general@erbas.com.au
www.erbas.com.au

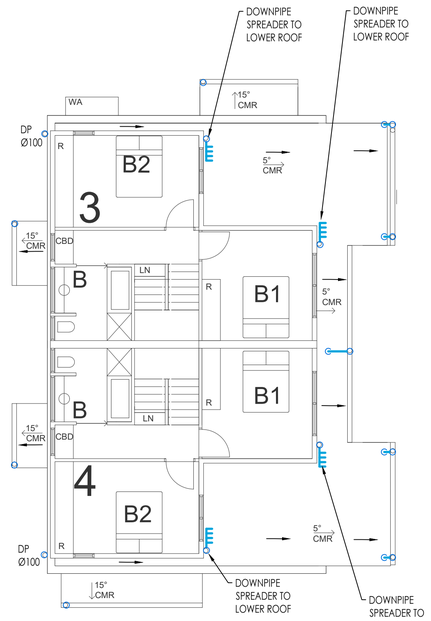
DESIGNED IY
CHECKED MS
NORTH POINT

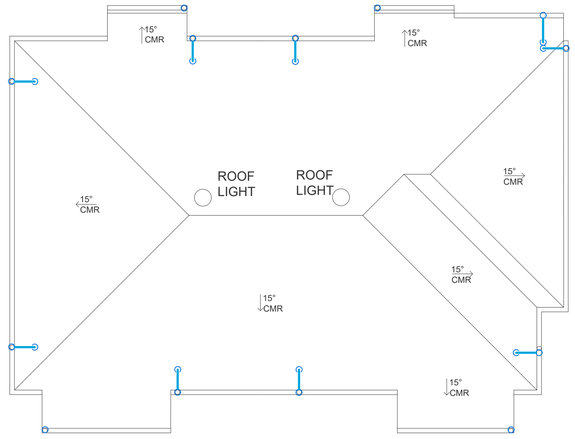
PROJECT
HOUSING DEVELOPMENT
75-77 SHEPPARD STREET CASINO, NSW
LOTS 761 & 762 IN DP 1155484

DRAWING TITLE
STORMWATER SERVICES
GROUND FLOOR PLAN

SCALE at A1	PROJECT No.	DRAWING No.	ISSUE
1:100			
DATE FEB 2023		SYD23062-SW101	P3
DRAWN IY			







FINAL DOWNPIPE LOCATIONS, ROOF GUTTER SECTIONS & EMERGENCY OVERFLOWS TO BE GENERALLY IN ACCORDANCE WITH ARCHITECT'S DOCUMENTATION & CONSISTENT WITH AS3500.3 CONFIGURATION WHERE APPLICABLE (EAVES GUTTERS GENERALLY TO BE 150mm WIDE HALF ROUND OR EQUIVALENT WITH MIN 7700mm2 EFFECTIVE CROSS SECTION DRAINING TO Ø100 DOWNPIPE UNLESS NOTED OTHERWISE)

0 2 4 6 8 10 m
1:100

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

Discipline	Dwg. No.	Date	Revisions
ARCH PLAN	DA01 - 09 Sheppard St Casino for CONSULTANTS 030523 (CAD FILE)	05.03.23	-
ARCH RCP			
STRUCTURAL			
MECHANICAL			
ELECTRICAL			
CIVIL			
LANDSCAPE			

THE DESIGN AND DETAILS SHOWN ON THESE DRAWINGS ARE APPLICABLE TO THIS PROJECT ONLY AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART OR BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN PERMISSION OF ERBAS & ASSOCIATES WITH WHOM COPYRIGHT RESIDES.
ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SHOWN. WORK TO FIGURED DIMENSIONS, DO NOT SCALE FROM DRAWINGS.
CHECK ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS.

ISSUE	DATE	AMENDMENT
P1	10.02.23	PRELIMINARY ISSUE FOR ARCHITECT'S REVIEW
P2	04.05.23	DEVELOPMENT APPLICATION ISSUE

ARCHITECT
Barry Rush & Associates Pty Ltd
Architects. Nominated Architect: Barry John Rush
ARB Registration No 3753
Suite 25A, 2 Beattie Street, Balmain, NSW
Phone: (02) 9555 8028 Email: info@barryrush.com.au
www.barryrush.com.au

CLIENT
NSW GOVERNMENT
LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718
https://www.dpie.nsw.gov.au/land-and-housing-corporation

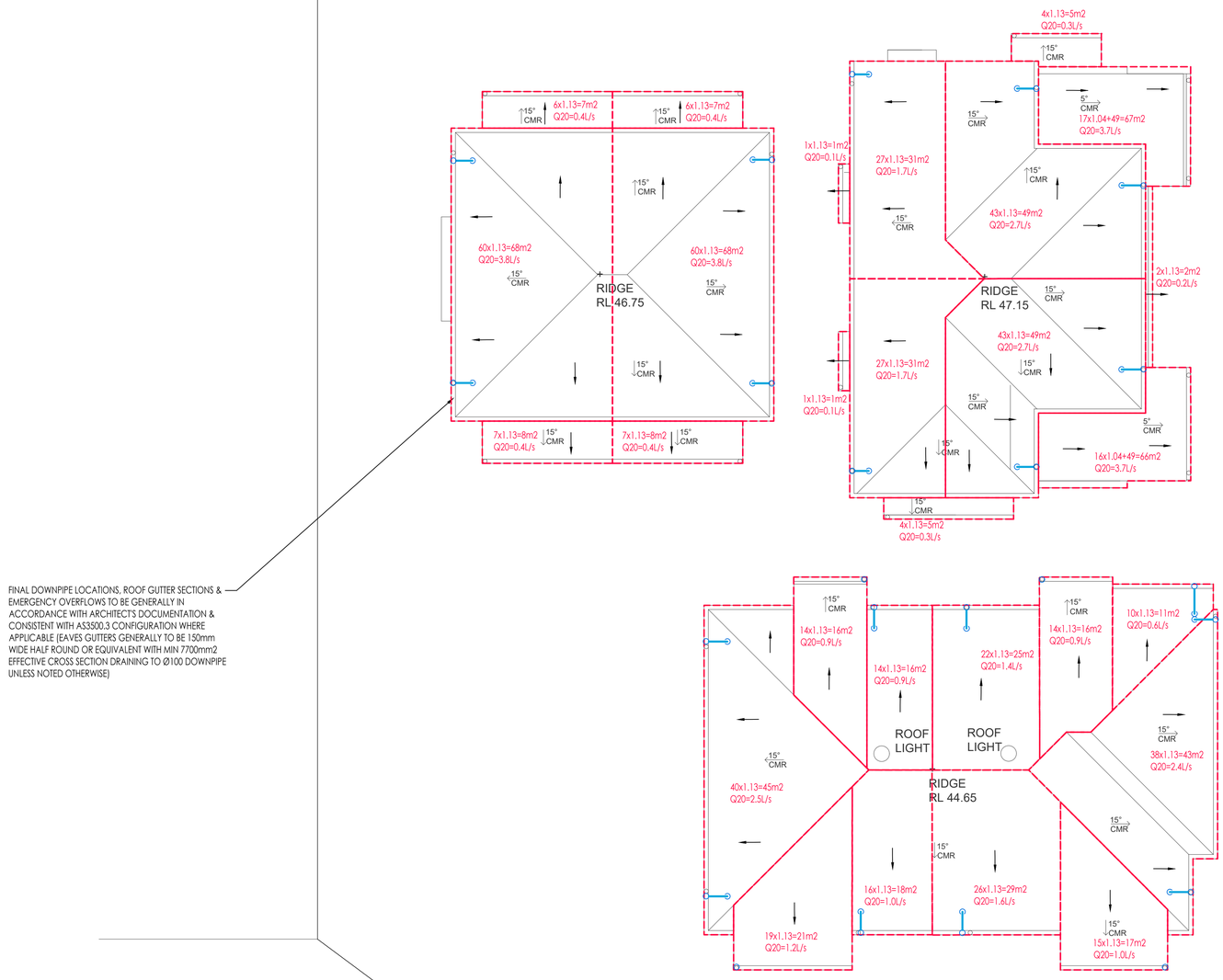
BUILDING SERVICES ENGINEER
erbas™
Sydney Melbourne Manila
L1, 15 Atchison Street, St Leonards NSW 2065
Ph: (02) 9437 1022 general@erbas.com.au
www.erbas.com.au

DESIGNED IY
CHECKED MS
NORTH POINT

PROJECT
MULTI-DWELLING
HOUSING DEVELOPMENT
75-77 SHEPPARD STREET,
CASINO NSW
(RICHMOND VALLEY COUNCIL)

DRAWING TITLE
STORMWATER SERVICES
FIRST FLOOR PLAN

SCALE at A1	PROJECT No.	DRAWING No.	ISSUE
1:100			
DATE FEB 2023		SYD23062-SW102	P2
DRAWN IY			



FINAL DOWNPIPE LOCATIONS, ROOF GUTTER SECTIONS & EMERGENCY OVERFLOWS TO BE GENERALLY IN ACCORDANCE WITH ARCHITECT'S DOCUMENTATION & CONSISTENT WITH AS3500.3 CONFIGURATION WHERE APPLICABLE (EAVES GUTTERS GENERALLY TO BE 150mm WIDE HALF ROUND OR EQUIVALENT WITH MIN 7700mm2 EFFECTIVE CROSS SECTION DRAINING TO Ø100 DOWNPIPE UNLESS NOTED OTHERWISE)

0 2 4 6 8 10 m
1:100

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

Discipline	Dwg. No.	Date	Revisions
ARCH PLAN	DA01 - 09 Sheppard St Casino for CONSULTANTS 030523 (CAD FILE)	03.05.23	
ARCH RCP			
STRUCTURAL			
MECHANICAL			
ELECTRICAL			
CIVIL			
LANDSCAPE			

THE DESIGN AND DETAILS SHOWN ON THESE DRAWINGS ARE APPLICABLE TO THIS PROJECT ONLY AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART OR BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN PERMISSION OF ERBAS & ASSOCIATES WITH WHOM COPYRIGHT RESIDES.
ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN. WORK TO FIGURED DIMENSIONS. DO NOT SCALE FROM DRAWINGS.
CHECK ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS.

ISSUE	DATE	AMENDMENT
P1	10.02.23	PRELIMINARY ISSUE FOR ARCHITECT'S REVIEW
P2	04.05.23	DEVELOPMENT APPLICATION ISSUE

ARCHITECT

Barry Rush & Associates Pty Ltd
Architects. Nominated Architect: Barry John Rush
ARB Registration No 3753
Suite 25A, 2 Beattie Street, Balmain, NSW
Phone: (02) 9555 8028 Email: info@barryrush.com.au
www.barryrush.com.au

CLIENT

NSW GOVERNMENT
LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718
https://www.dpie.nsw.gov.au/land-and-housing-corporation

BUILDING SERVICES ENGINEER

erbas™
Sydney Melbourne Manila
L1, 15 Atchison Street, St Leonards NSW 2065
Ph: (02) 9437 1022 general@erbas.com.au
www.erbas.com.au

DESIGNED: IY
CHECKED: MS
NORTH POINT

PROJECT
MULTI-DWELLING
HOUSING DEVELOPMENT
75-77 SHEPPARD STREET,
CASINO NSW
(RICHMOND VALLEY COUNCIL)

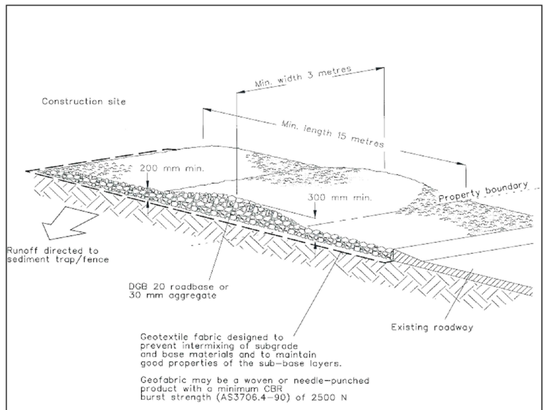
DRAWING TITLE
STORMWATER SERVICES
ROOF PLAN

SCALE at A1	PROJECT No.	DRAWING No.	ISSUE
1:100			
DATE			
FEB 2023		SYD23062-SW103	P2
DRAWN			
IY			

EROSION & SEDIMENT CONTROL ASSESSMENT

Based on Soils and Construction: Managing Urban Stormwater - 4th Edition - March 2004

Assumed area of Soil Disturbance	=	1355	m2 =	0.1355 ha
Rainfall Erosivity Factor R	=	3400	for	CASINO from APPENDIX B: MAP 2 ON PAGE B-4
Take Site Slope	=	5	%	
Indicative Erosion Hazard is		LOW		based on Section 4.4.1 Figure 4.6 on page 4-10
Use Revised Universal Soil Loss Equation (RUSLE) to check:				
Soil Erodibility Factor K	=	0.060	for	CASINO from www.environment.nsw.gov.au/espade2webapp
Slope Length/Gradient Factor Ls	=	1.19	from APPENDIX A: USING 80m LENGTH IN TABLE A1 ON PAGE A-9	
Erosion Control Practice Factor P	=	1.3	from APPENDIX A: TABLE A2 ON PAGE A-11	
Ground Cover & Management Factor C	=	1.0	from APPENDIX A: FIGURE A5 ON PAGE A-12	
Soil Loss	=	316	t/ha/yr	
Soil Loss Class	=	3	for	SOIL LOSS BETWEEN 226 & 350t/ha/yr based on SECTION 4.4.2 TABLE 4.2 ON PAGE 4-13
Erosion Hazard is therefore		LOW-MODERATE		AND THERE ARE NO SEASONAL RESTRICTIONS ON SITE ACTIVITY
For 1.0 t/m3 density, Average Annual Soil Loss	=	316	m3/yr	SINCE THIS IS GREATER THAN THAN 150m3/yr, A SEDIMENT BASIN WOULD BE CONSIDERED NECESSARY UNLESS INDIVIDUAL SOIL DISTURBANCE AREAS CAN BE LIMITED TO 2500m2 OR LESS based on SECTION 6.3.2(d) ON PAGE 6-8
				FOR THE AREA TO BE DISTURBED ON THIS SITE, SEDIMENT FENCES ARE CONSIDERED SATISFACTORY
10yr 5min RAINFALL INTENSITY	=	185	mm/h	Refer to SECTION 2.1 ON PAGE 2-1, SECTION 4.4.1(a) ON PAGE 4-9 & SECTION 4.3.2(h)(iv) ON PAGE 4-4
10yr 1hr RAINFALL INTENSITY	=	55.7	mm/h	LENGTHS OF SEDIMENT FENCING SHOULD BE ARRANGED TO LIMIT SUBCATCHMENT FLOWS TO 50L/s
				Refer to SECTION 6.3.7 (e) ON PAGE 6-34 & SECTION 2.3.1(e) ON PAGE 2-4
A fully pervious area of up to		1900	m2 can be accommodated by one length of sediment fencing	

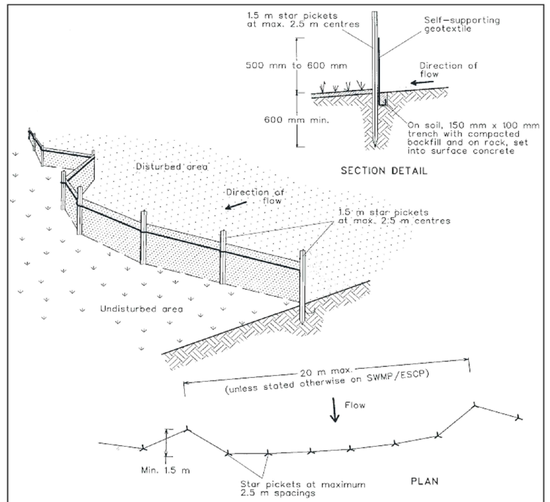


Construction Notes

1. Strip the topsoil, level the site and compact the subgrade.
2. Cover the area with needle-punched geotextile.
3. Construct a 200-mm thick pad over the geotextile using road base or 30-mm 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

STABILISED SITE ACCESS **SD 6-14**

D1 SW01 STABILISED SITE ACCESS
NOT TO SCALE



Construction Notes

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 the trench over the base of the fabric and compact it thoroughly over the geotextile.

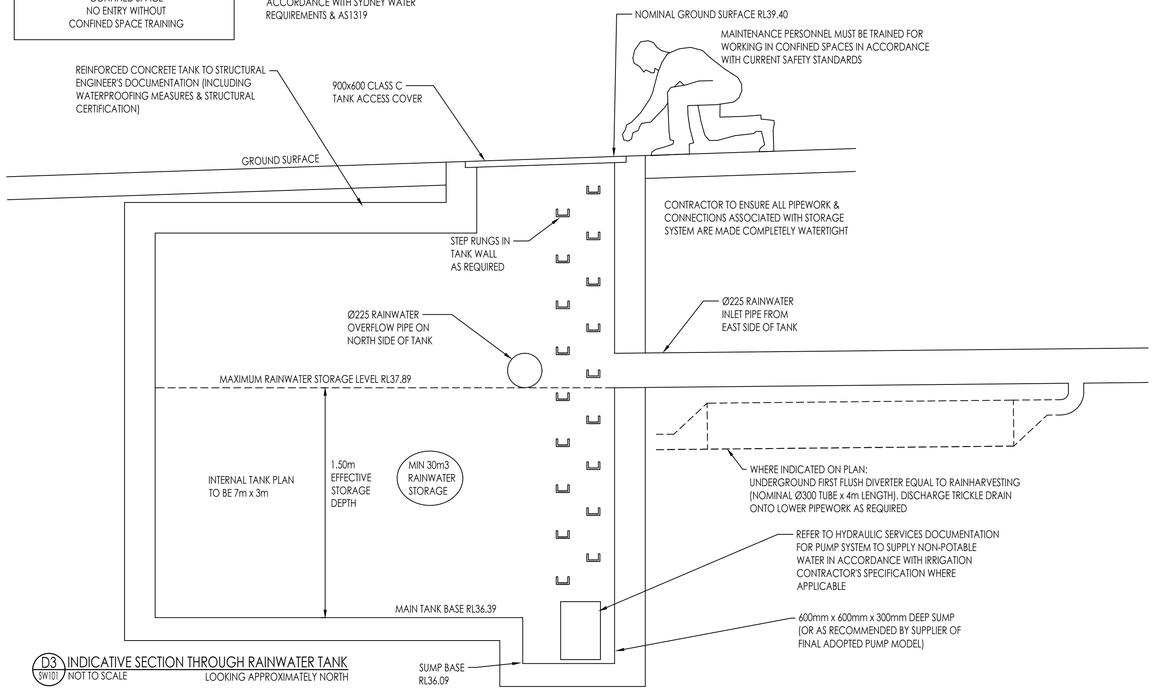
SEDIMENT FENCE **SD 6-8**

D2 SW01 SEDIMENT FENCE
NOT TO SCALE

IN ACCORDANCE WITH CONSENTCONDITION 40:
WHERE APPLICABLE:
PROVIDE VISIBLE SIGNAGE NEAR TANK ACCESS LID
(MADE OF METAL OR DURABLE SYNTHETIC MATERIAL):

DANGER
CONFINED SPACE
NO ENTRY WITHOUT
CONFINED SPACE TRAINING

PROVIDE VISIBLE WARNING SIGNAGE AT ALL RAINWATER TANK OUTLETS (e.g. GARDEN HOSE TAPS) IN ACCORDANCE WITH SYDNEY WATER REQUIREMENTS & AS1319



D3 SW101 INDICATIVE SECTION THROUGH RAINWATER TANK
NOT TO SCALE LOOKING APPROXIMATELY NORTH

STORMWATER MANAGEMENT PLAN INFORMATION

DEVELOPMENT AUTHORITY: Richmond Valley Council

SITE ADDRESS: 75-77 Sheppard Street, Casino NSW

DEVELOPMENT GUIDELINES
- Richmond Valley Council - Development Control Plan 2021 - Part A-1 Dwelling Houses in the R1 General Residential Zone
- Richmond Valley Council - Development Control Plan 2021 - Part I-9 Water Sensitive Design

EXISTING SITE CHARACTERISTICS
- Site area = 1355m2
- Two existing vacant residential lots
- Located approximately 100m west of Links Avenue, on south side of Sheppard Street.
- Survey plan prepared by RPS Australia East Pty Ltd - Drawing Reference 151687 [Rev 1] - dated 24/05/2022 indicates Australian Height Datum (AHD) site surface contours ranging from a localised high point of about RL40.74 near the southeast corner of the site down to about RL38.04 at the northwest corner of the site. The average site slope is observed to be about 5%.

LOCAL FLOODING EFFECTS
Based on the Casino Floodplain Hazard Categories map the subject property at is NOT considered to be affected by flooding.

EXISTING STREET DRAINAGE
Based on site survey of the existing property undertaken on 1 May 2022, it was observed that existing underground street drainage includes a kerb inlet pit near the northwest corner of the site, on the south side of Sheppard Street.

PROPOSED CONNECTION
It is proposed that site drainage from the new development will be directed to the existing street pit in Sheppard Street.

RAINWATER STORAGE
Based on Richmond Valley Council - Development Control Plan 2021 - Part A-1 Dwelling Houses in the R1 General Residential Zone, Table A1.13 requires each dwelling to be provided with a minimum 5000L rainwater storage tank. Rainwater storage requirements for new residential dwellings are also typically provided to satisfy State Environmental Policy Building Sustainability Index (BASIX) assessment requirements. It is proposed that an equivalent 5000L rainwater storage will be provided for each of 6 dwellings (total 30m3).

STORMWATER QUALITY
Based on Richmond Valley Council - Development Control Plan 2021 - Part A-1 Dwelling Houses in the R1 General Residential Zone, Table A1.13 requires at least 80% of proposed impermeable ground surface to be directed towards lawn or garden areas, to promote natural infiltration.
Based on Richmond Valley Council - Development Control Plan 2021 - Part I-9 Water Sensitive Design, Table I-9.2 for residential lots requires either
- a minimum 5000L rainwater tank for each dwelling to capture at least 50% of the associated roof area OR
- an infiltration/absorption system to capture at least 80% of total roof area OR
- a bioretention system to capture at least 80% of total roof area
It is proposed that an equivalent 5000L rainwater storage will be provided for each of 6 dwellings (total 30m3) AND at least 80% of impervious ground surfaces will be graded to direct runoff towards lawn or garden areas on the western side of the site.

STORMWATER GENERATION
Based on Richmond Valley Council - Development Control Plan 2021 - Part I-9 Water Sensitive Design, Table I-9.4 for residential lots requires either
- a minimum 5000L rainwater tank for each dwelling to capture at least 50% of the associated roof area OR
- an infiltration/absorption system to capture at least 80% of total roof area OR
- a bioretention system to capture at least 80% of total roof area
It is proposed that an equivalent 5000L rainwater storage will be provided for each of 6 dwellings (total 30m3) AND at least 80% of impervious ground surfaces will be graded to direct runoff towards lawn or garden areas on the western side of the site.

TEMPORARY EROSION & SEDIMENT CONTROL MEASURES
Based on Richmond Valley Council - Development Control Plan 2021 - Part A-1 Dwelling Houses in the R1 General Residential Zone, Table A1.13 requires erosion and sediment control measures to be implemented. During construction works the management of soil and water movement requiring erosion and sediment control is to be undertaken in accordance with the Landcom publication *Soils and Construction: Managing Urban Stormwater 4th Edition, March 2004* (also known as "the Blue Book").
Temporary construction measures to be undertaken include:
- Sediment fencing on the low side of earthmoving operations
- A gravel layer at the construction vehicle access point into the area of works
- Regular monitoring of soil movement characteristics and cleaning of sediment deposits as required during construction
- Security fencing around the area of construction works

CONCLUSION
This Stormwater Management Plan identifies and addresses the following items relating to anticipated engineering assessment by Richmond Valley Council :
- Mainstream flooding effects are not considered to be applicable to the site of proposed works
- Existing Council street drainage along Sheppard Street provides the opportunity for an underground stormwater connection
- Minimum 30000L or 30m3 rainwater storage is proposed to address Council & BASIX requirements
- Stormwater quality and generation are to be addressed by rainwater storage and by directing impervious ground surfaces towards landscaped areas
- Erosion and sediment movement is to be controlled during construction with suitable measures to prevent undesirable soil deposits around the works area

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

Discipline	Dwg. No.	Date	Revisions
ARCH PLAN			
ARCH RCP			
STRUCTURAL			
MECHANICAL			
ELECTRICAL			
CIVIL			
LANDSCAPE			

THE DESIGN AND DETAILS SHOWN ON THESE DRAWINGS ARE APPLICABLE TO THIS PROJECT ONLY AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART OR BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN PERMISSION OF ERBAS & ASSOCIATES WITH WHOM COPYRIGHT RESIDES.
ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN. WORK TO FIGURED DIMENSIONS, DO NOT SCALE FROM DRAWINGS.
CHECK ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS.

ISSUE	DATE	AMENDMENT
P1	10.02.23	PRELIMINARY ISSUE FOR ARCHITECT'S REVIEW
P2	04.05.23	DEVELOPMENT APPLICATION ISSUE

ARCHITECT
Barry Rush & Associates Pty Ltd
Architects. Nominated Architect: Barry John Rush
ARB Registration No 3753
Suite 25A, 2 Beattie Street, Balmain, NSW
Phone: (02) 9555 8028 Email: info@barryrush.com.au
www.barryrush.com.au

CLIENT
NSW GOVERNMENT
LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718
https://www.dpie.nsw.gov.au/land-and-housing-corporation

BUILDING SERVICES ENGINEER
erbas™
Sydney Melbourne Manila
L1, 15 Atchison Street, St Leonards NSW 2065
Ph: (02) 9437 1022 general@erbas.com.au
www.erbas.com.au

DESIGNED IY
CHECKED MS
NORTH POINT

PROJECT
MULTI-DWELLING
HOUSING DEVELOPMENT
75-77 SHEPPARD STREET,
CASINO NSW
(RICHMOND VALLEY COUNCIL)

DRAWING TITLE
STORMWATER SERVICES
DETAIL SHEET 1

SCALE at A1	PROJECT No.	DRAWING No.	ISSUE
-			
DATE FEB 2023	SYD23062-SW201		P2
DRAWN IY			

STORMWATER PIPE SCHEDULE

STORMWATER PIPE SIZING BY RATIONAL FORMULA & COLEBROOK-WHITE EQUATION
Coefficient of runoff determined in accordance with Ch. 14 of AR & R (1987)

PROJECT: 75-77 SHEPPARD ST CASINO

Design rainfall intensity = 213.00 mm/h Pipe roughness k = 0.015 mm
ARI = 20 years Fy = 1.05 10 year 1 hour intensity = 55.70 mm/h

U/S NODE	D/S NODE	AREA m2	IMPERV %	COEF	SLOPE %	INFLOW L/s	PIPEFLOW L/s	CAP L/s	SIZE mm
1	2	6	100	0.94	1.00	0.3	0.3	8.0	100
2	3	30	100	0.94	1.00	1.7	2.0	8.0	100
3	4	30	100	0.94	1.00	1.7	3.7	8.0	100
4	22	7	100	0.94	1.00	0.4	4.1	8.0	100
5	6	6	100	0.94	1.00	0.3	0.3	8.0	100
6	9	30	100	0.94	1.00	1.7	2.0	8.0	100
7	8	4	100	0.94	1.00	0.2	0.2	8.0	100
8	9	27	100	0.94	1.00	1.5	1.7	8.0	100
9	10	0	100	0.94	1.00	0.0	3.7	8.0	100
10	11	1	100	0.94	1.00	0.1	3.8	8.0	100
11	14	1	100	0.94	1.00	0.1	3.9	8.0	100
12	13	30	100	0.94	1.00	1.7	1.7	8.0	100
13	14	7	100	0.94	1.00	0.4	2.1	8.0	100
14	21	0	100	0.94	1.00	0.0	5.9	8.0	100
15	16	30	100	0.94	1.00	1.7	1.7	8.0	100
16	17	30	100	0.94	1.00	1.7	3.4	8.0	100
17	18	2	100	0.94	1.00	0.1	3.5	8.0	100
18	19	30	100	0.94	1.00	1.7	5.1	8.0	100
19	51	30	100	0.94	1.00	1.7	6.8	8.0	100
20	21	27	100	0.94	1.00	1.5	8.6	23.7	150
21	22	0	100	0.94	1.00	0.0	14.5	23.7	150
22	28	0	100	0.94	1.00	0.0	18.6	23.7	150
23	24	29	100	0.94	1.00	1.6	1.6	8.0	100
24	25	14	100	0.94	1.00	0.8	2.4	8.0	100
25	26	22	100	0.94	1.00	1.2	3.6	8.0	100
26	27	14	100	0.94	1.00	0.8	4.4	8.0	100
27	28	14	100	0.94	1.00	0.8	5.2	8.0	100
28	36	0	100	0.94	1.00	0.0	23.8	69.3	225
29	30	19	100	0.94	1.00	1.1	1.1	8.0	100
30	31	15	100	0.94	1.00	0.8	1.9	8.0	100
31	32	26	100	0.94	1.00	1.5	3.4	8.0	100
32	33	16	100	0.94	1.00	0.9	4.2	8.0	100
33	34	19	100	0.94	1.00	1.1	5.3	8.0	100
34	35	20	100	0.94	1.00	1.1	6.4	8.0	100
35	36	20	100	0.94	1.00	1.1	7.5	8.0	100
36	37	0	100	0.94	1.00	0.0	31.3	69.3	225
37	39	0	100	0.94	1.00	0.0	31.3	69.3	225
38	39	3	100	0.94	1.00	0.2	0.2	23.7	150
39	42	0	100	0.94	1.00	0.0	31.5	69.3	225
40	41	26	19	0.61	1.00	0.9	0.9	23.7	150
41	42	19	21	0.62	1.00	0.7	1.6	23.7	150
42	45	0	100	0.94	1.00	0.0	33.1	69.3	225
43	44	36	67	0.81	1.00	1.7	1.7	23.7	150
44	45	14	79	0.86	1.00	0.7	2.4	23.7	150
45	48	246	87	0.89	1.00	13.0	48.5	69.3	225
46	47	3	100	0.94	1.00	0.2	0.2	23.7	150
47	48	0	100	0.94	1.00	0.0	0.2	23.7	150
48	50	0	100	0.94	1.00	0.0	48.7	69.3	225
49	50	108	68	0.81	1.00	5.2	5.2	8.0	100
50	1000	0	100	0.94	1.00	0.0	53.9	69.3	225
51	20	4	100	0.94	1.00	0.2	7.0	8.0	100

1. COLEBROOK-WHITE ROUGHNESS k = 0.015mm FOR POLYVINYL CHLORIDE PIPE (PVC).
2. A MINIMUM PIPE SLOPE OF 1.00% IS ASSUMED FOR CALCULATION PURPOSES.
3. SURFACE LEVELS BASED ON ARCHITECTURAL & SURVEY DRAWINGS.
4. CONFIRM PRACTICALITY OF PIPE INSTALLATION & ADVISE OF ANY DISCREPANCY PRIOR TO CONSTRUCTION.
5. SUSPENDED STORMWATER DRAINAGE TO BE SEWER GRADE UPVC WITH SOLVENT WELDED JOINTS SUPPORTED AS PER AS3500.3 CLAUSE 4.9.6.2.
6. STORMWATER DRAINAGE TO BE SEWER GRADE UPVC WITH SOLVENT WELDED JOINTS LAID ON GRANULAR BEDDING TO AS3500.3 CLAUSE 6.3.1.2.
7. SUBSOIL DRAINAGE (WHERE REQUIRED) TO BE SLOTTED UPVC WITH FILTER SOCK LAID IN FREE-DRAINING GRANULAR MATERIAL TO AS3500 CLAUSE 6.3.1.2.
8. CONFIRM ALL SUBSOIL DRAINAGE REQUIREMENTS PRIOR TO CONSTRUCTION & COORDINATE WITH FOOTING LEVELS WHERE APPLICABLE.
9. ALL DRAINAGE TO BE MIN Ø100 UNLESS NOTED OTHERWISE. ENSURE PIPE BENDS GENERALLY DO NOT EXCEED 45 DEGREES IN PLAN.
10. THE ENTIRE DRAINAGE INSTALLATION SHALL COMPLY WITH THE RELEVANT PROVISIONS OF AS3500.3.
11. WATERTIGHT INSPECTION OPENINGS OR PITS TO BE PROVIDED FOR CLEANING PURPOSES AT MAXIMUM 30m INTERVALS & IN ACCORDANCE WITH AS3500.3 CLAUSE 7.4.1.
12. ALL STORMWATER OUTLETS TO BE Ø100 FLAT GRATE EQUAL TO SPECIALITY PLUMBING SUPPLIES TRUFLO SERIES (TEL 02 9417 1900) UNLESS NOTED OTHERWISE.
13. BUILDER TO PROVIDE 'AS BUILT' DRAWINGS OF ALL RELEVANT DRAINAGE WORKS AS REQUIRED FOR CERTIFICATION PURPOSES. IN SOME CASES COUNCIL MAY REQUIRE APPROVED PLANS TO BE MARKED WITH RED INK TO INDICATE CHANGES TO THE ORIGINAL DESIGN LAYOUT.
14. FINAL DRAINAGE LAYOUT SHALL BE MARKED ON AS-BUILT DRAWINGS AS REQUIRED FOR CERTIFICATION & REFERENCE PURPOSES.
15. WHERE APPLICABLE, BUILDER TO PAY ALL ROAD OPENING & COUNCIL FEES ASSOCIATED WITH REQUIRED CONSTRUCTION.
16. SITE INSPECTIONS SHOULD BE ARRANGED IN ACCORDANCE WITH CONSENT CONDITIONS & CERTIFIER'S REQUIREMENTS, WITH REASONABLE ADVANCE NOTICE BEING GIVEN & WRITTEN CONFIRMATION FROM THE RELEVANT PARTY THAT THE CURRENT HOURLY RATE FEE WILL BE PAID.
17. AS-BUILT DRAWING/SURVEY OF COMPLETED WORKS SHOULD BE MADE AVAILABLE TO VIEW PRIOR TO ARRANGING FOR FINAL SITE INSPECTION.
18. ALL DOWNPIPES DRAINING TO THE STORAGE SYSTEM SHALL BE MADE WATERTIGHT BELOW THE MAXIMUM WATER STORAGE LEVEL.
19. ALL REQUIRED EASEMENTS, POSITIVE COVENANTS OR OTHER LEGAL INSTRUMENTS TO BE ARRANGED & REGISTERED BY SURVEYOR OR OTHER APPROVED AGENT.

STORMWATER PIT SCHEDULE

Label	No:	Pit Size	Surface RL	Outlet IL	Pit Depth	Lid Type	Load Class
SWP	1	900x900	38.15	37.00	1150	Cover	C
SWP	2	450x450	38.55	37.95	600	Grate	C
SWP	3	450x450	39.20	38.60	600	Grate	A
SWP	4	450x450	39.20	38.70	500	Grate	A
SWP	5	450x450	39.70	39.20	500	Grate	A
SWP	6	450x450	39.70	39.20	500	Grate	A
SWP	7	450x450	39.80	39.30	500	Grate	A
SWP	8	450x450	40.20	39.60	600	Grate	A
GTD	1	300 WIDE	38.15	VERTICAL	MIN 200	Grate	C

1. PITS TO BE REINFORCED CONCRETE IN ACCORDANCE WITH AS3500.3
2. GRATES GENERALLY TO BE HINGED GALVANISED MILD STEEL EQUAL TO BR DURHAM & SONS (ADOPT HEELPROOF STYLE WHERE APPLICABLE)
3. COORDINATE REBATE & CHANNEL DIMENSIONS WITH SLAB CONSTRUCTION TO SUIT TRENCH DRAIN DIMENSIONS AS NECESSARY (WITH STRUCTURAL ENGINEER'S APPROVAL/SUPERVISION)
4. FALL BASE OF TRENCH DRAINS TO OUTLET AT MIN 1%.
5. LIAISE WITH BUILDER TO ENSURE CONCRETE WORKS ASSOCIATED WITH PIT/TRENCH LOCATIONS ARE ACCURATELY COORDINATED AS REQUIRED.
6. GENERALLY GRADE SURROUNDING SURFACES TO DIRECT STORMWATER INTO GRATES.
7. MINIMUM LOAD CLASS RATINGS ARE PROVIDED. IF A SPECIFIC LOAD CLASS IS NOT COMMERCIALLY AVAILABLE, ADOPT THE NEXT HIGHER LOAD CLASS.
8. PROVIDE STEP RUNGS WHERE PIT DEPTH EXCEEDS 1.2m.

THIS DRAWING HAS BEEN PREPARED IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:

Discipline	Dwg. No.	Date	Revisions
ARCH PLAN	-	-	-
ARCH RCP			
STRUCTURAL			
MECHANICAL			
ELECTRICAL			
CIVIL			
LANDSCAPE			

THE DESIGN AND DETAILS SHOWN ON THESE DRAWINGS ARE APPLICABLE TO THIS PROJECT ONLY AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART OR BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN PERMISSION OF ERBAS & ASSOCIATES WITH WHOM COPYRIGHT RESIDES.
ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SHOWN. WORK TO FIGURED DIMENSIONS. DO NOT SCALE FROM DRAWINGS.
CHECK ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL CONTRACT DOCUMENTS.

ISSUE	DATE	AMENDMENT
P2	04.05.23	DEVELOPMENT APPLICATION ISSUE

ARCHITECT
Barry Rush & Associates Pty Ltd
Architects. Nominated Architect: Barry John Rush
ARB Registration No 3753
Suite 25A, 2 Beattie Street, Balmain, NSW
Phone: (02) 9555 8028 Email: info@barryrush.com.au
www.barryrush.com.au

CLIENT
NSW GOVERNMENT
LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718
https://www.dpie.nsw.gov.au/land-and-housing-corporation

BUILDING SERVICES ENGINEER
erbas™
Sydney Melbourne Manila
L1, 15 Atchison Street, St Leonards NSW 2065
Ph: (02) 9437 1022 general@erbas.com.au
www.erbas.com.au

DESIGNED: IY
CHECKED: MS
NORTH POINT

PROJECT
MULTI-DWELLING
HOUSING DEVELOPMENT
75-77 SHEPPARD STREET,
CASINO NSW
(RICHMOND VALLEY COUNCIL)

DRAWING TITLE
STORMWATER SERVICES
DETAIL SHEET 2

SCALE at A1	PROJECT No.	DRAWING No.	ISSUE
-			
DATE: FEB 2023			
DRAWN: IY	SYD23062-SW202		P2