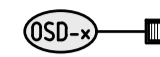
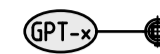
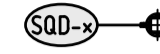
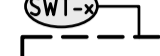
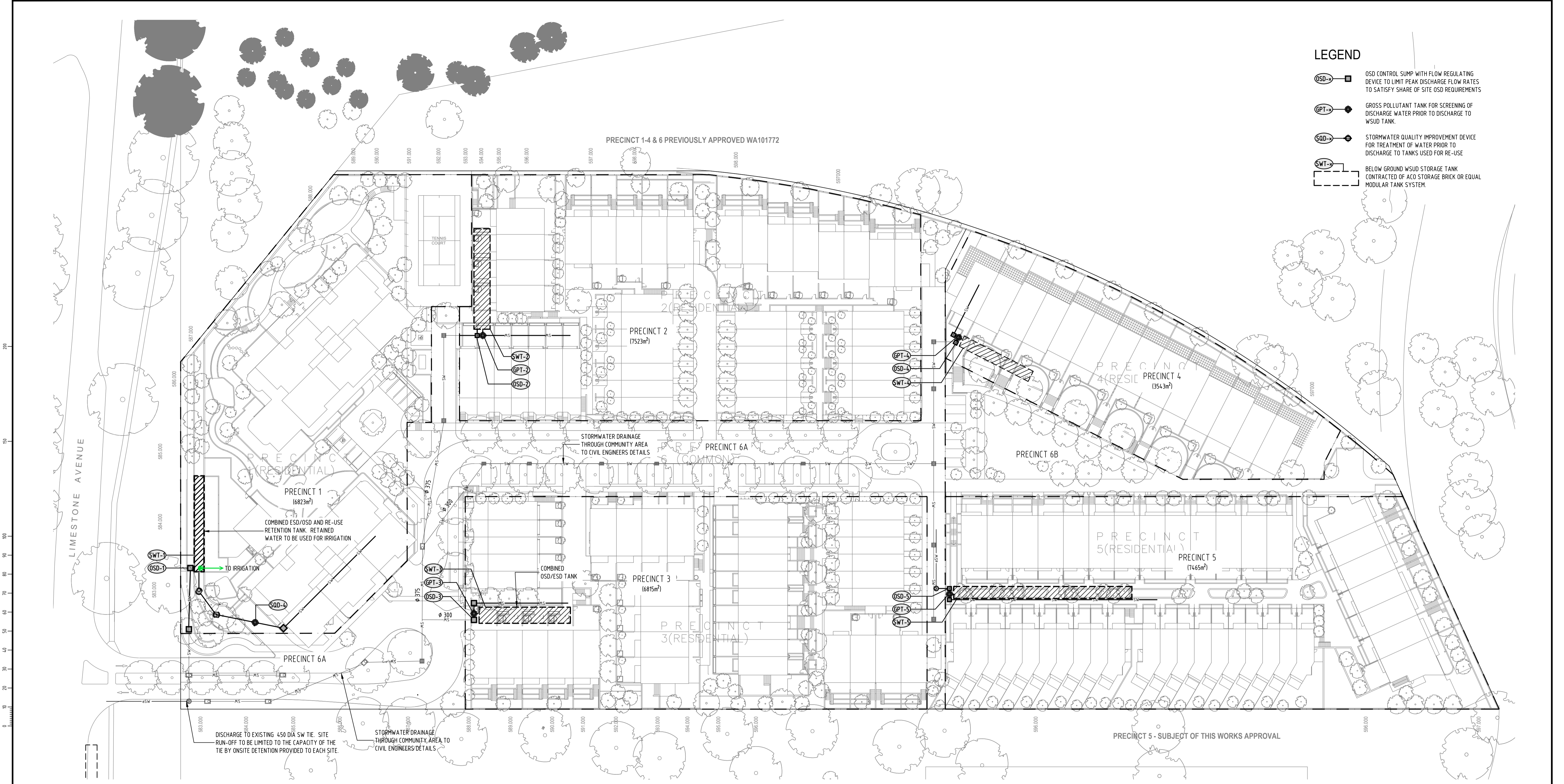


LEGEND

-  OSD CONTROL SUMP WITH FLOW REGULATING DEVICE TO LIMIT PEAK DISCHARGE FLOW RATES TO SATISFY SHARE OF SITE OSD REQUIREMENTS
-  GROSS POLLUTANT TANK FOR SCREENING OF DISCHARGE WATER PRIOR TO DISCHARGE TO WSD TANK
-  STORMWATER QUALITY IMPROVEMENT DEVICE FOR TREATMENT OF WATER PRIOR TO DISCHARGE TO TANKS USED FOR RE-USE
-  BELOW GROUND WSD STORAGE TANK CONTRACTED OF ACO STORAGE BRICK OR EQUAL MODULAR TANK SYSTEM



THE WSD CONCEPT DESIGN HAS BEEN PREPARED IN COMPLIANCE WITH THE ACT WSD GENERAL CODE AND THE ACT MULTI UNIT HOUSING DEVELOPMENT CODE AGAINST THE MANDATORY CRITERIA OF

- R86: WATER CONSUMPTION REDUCTION
- R87: ONSITE WATER RETENTION
- R88: SW POLLUTION REDUCTION
- R89: SW RUN-OFF MANAGEMENT.

REFER TO DRAWING NUMBER H002 FOR EVIDENCE OF COMPLIANCE AGAINST ALL ITEMS



A1 SHEET

No.	REVISION/ISSUE	DATE	BY	CHECKED	No.	REVISION/ISSUE	DATE	BY	CHECKED
6	UPDATED FOR PRECINCT 5 WORKS APPROVAL	03.08.22	DNT	DNT					
5	AMENDED WORKS APPROVAL	17.01.2020	DNT	DNT					
4	WORKS APPROVAL ISSUE	23.01.19	DNT	DNT					
3	DEP AND CONCEPT PLAN ISSUE	03.09.18	DNT	DNT					
2	PRELIMINARY AMENDED MASTERPLAN ISSUE	28.08.18	DNT	DNT					
1	MASTERPLAN ISSUE	14.12.16	APT	DNT					

DOMA

THCS
TENNANT HYDRAULIC CONSULTING SERVICES

PROJECT
THE FOOTHILLS SECTION 38 CAMPBELL

BLOCK: 435 SECTION: 38 SUBURB: CAMPBELL

DRAWING
HYDRAULIC SERVICES SW MANAGEMENT PLAN

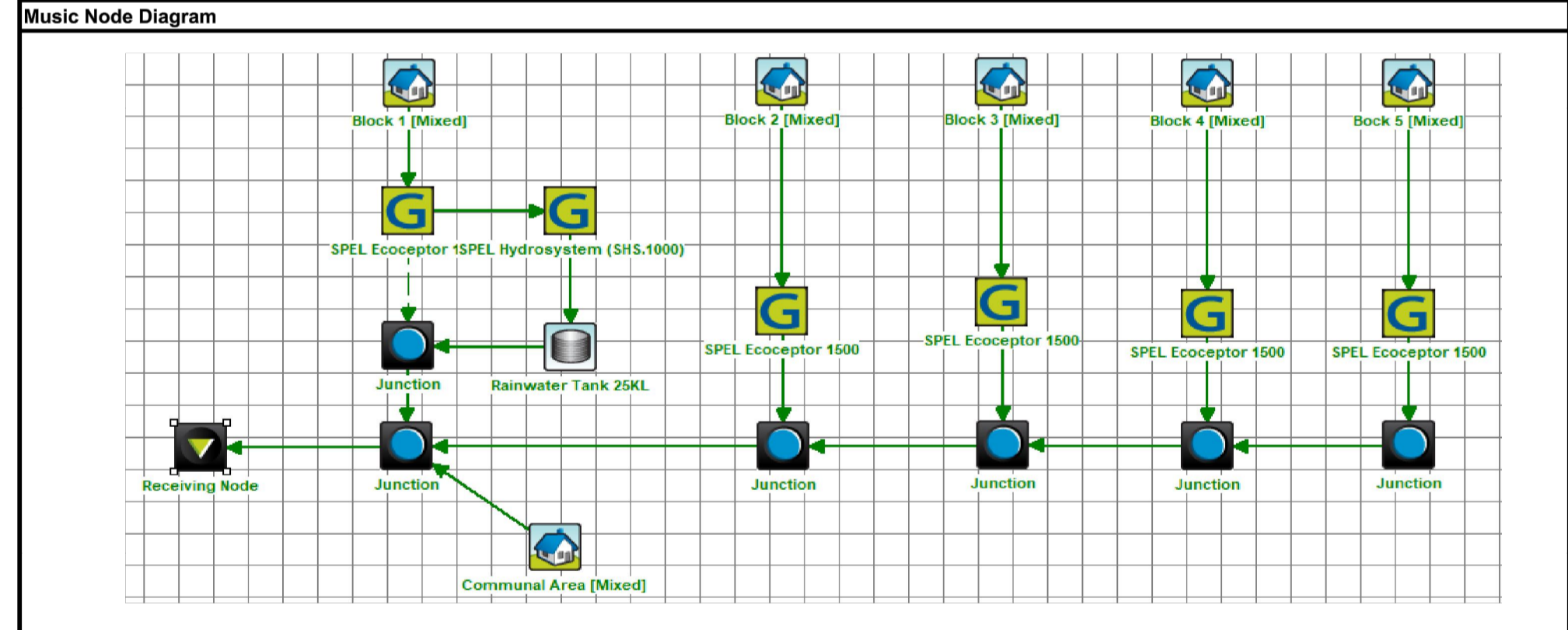
File Name: TH180036-PS-WA-UPDATE.DWG DATE: AUG'18 SCALE: 1:500 @ A1
Plot Date: 17/01/2020 2:06 PM 1:1000 @ A3

PROJECT: TH180036 DWG No: H-WA-001 REV: 6 STATUS: APPROVAL

DRAWN	DESIGNED	CHECKED
APT	DNT	

STORMWATER MANAGEMENT SCHEDULE							
Block	Block 1	Block 2	Block 3	Block 4	Block 5	Common	Total
Block Area	6823	7523	6815	3543	7465	7,938	40107
Impervious Area - Roof Area							
Roof Connected to rainwater storage	2065	3156	2545	1680	4541	0	13987
Roof area not connected to storage	0	0	0	0	0	0	0
Total	2,065	3,156	2,545	1,680	4,541	0	13,987
Impervious Area - Paved Areas							
Hard Paved Areas (shedding to drainage)	1957	2066	1541	800	817	1797	8978
Permeable / porous paving (shedding to drainage)							
Paved areas shedding runoff to garden beds and/or lawns	700.25	575.25	682.25	265.75	126	1535.25	3884.75
Total	2,657	2,641	2,223	1,066	943	3,332	12,863
Total Impervious areas <i>(with 50% reduction applied to permeable paving areas, and excluding paving with runoff to garden beds and/or lawns)</i>	4,722	5,797	4,768	2,746	5,484	3,332	26,850
Minimum Site Storage Required							
Development Type							
Portion of site area excluded from retention calculation							50%
Impervious area contributing to storage volume calculation							6,796
Site storage required at 1.4kl per 100m ² of impervious area							95
Contributing Impervious area	4,722	5,797	4,768	2,746	5,484	0	23,518
Proportion	20%	25%	20%	12%	23%	0%	100%
Share of ESD	19	23	19	11	22	0	95
Slow Release Rate (l/min)	13.3	16.3	13.4	7.7	15.4	0.0	66.1

POLLUTION REDUCTION SCHEDULE							
Music Inputs	Block 1	Block 2	Block 3	Block 4	Block 5	Common	Total
Total Area	6823	7523	6815	3543	7465	7938	40107
Imperviousity	69%	77%	70%	77%	73%	42%	67%
ESD	0	0	0	0	0	0	0
OSD	102.5	82.6	80.5	37.5	85.0	0	388.2
Re-use Retention	25000	0	0	0	0	0	25000.0
Reuse rate (l/day)	792	0	0	0	0	0	792.3
GPT	Optional	Yes	Optional	Yes	Yes	No	Varies
SQID	No	Optional	No	Optional	Optional	No	Varies



	Sources	Residual Load	% Reduction
Flow (ML/yr)	18.7	18.5	1.4
Total Suspended Solids (kg/yr)	2900	1010	65
Total Phosphorus (kg/yr)	4.19	1.71	59.3
Total Nitrogen (kg/yr)	49.9	27.8	44.3
Gross Pollutants (kg/yr)	697	127	81.8

WATER REDUCTION CALCULATIONS							
Subdivision	Precinct 1	Precinct 2	Precinct 3	Precinct 4	Precinct 5	Development Totals	
Indoor Information	No units / townhouses	117	44	39	14	31	245
	Average beds per unit / TH	1.85	2	2	4	3	12.85
	Number of Bedrooms	217	88	78	56	93	532
	Shower Head Rating	4 Star	4 Star	4 Star	4 Star	4 Star	4 Star
	Clothes Washing Machine Rating	4 Star	4 Star	4 Star	4 Star	4 Star	4 Star
	Dishwashers Rating	5 Star	5 Star	5 Star	5 Star	5 Star	5 Star
Site Information	Site Area (m ²)	6823	7523	6815	3543	7465	32,169
	Total Roof Area (m ²)	2,065	3,156	2,545	1,680	4,541	13,987
	Lawn Area (m ²)	0	0	0	0	0	0
	Irrigated Garden Area (m ²)	1,681	863	1,023	399	991	4,956
	Impervious Pavement or Driveway (m ²)	2657	2641	2223	1066	943	9531
	Rainwater Tank Information	Are There going to be water tanks installed	Yes	No	No	No	No
Total size of all the tanks (litr)		25000	0	0	0	0	25,000
Total impervious area flowing into the tanks (m ²)		4722	0	0	0	0	4,722
What will be the use for the water in the tanks		Garden	n/a	n/a	n/a	n/a	Varies
Is there going to be a pool, spa, or pond ?		Yes	No	No	No	No	Varies
Is there going to be a cover on the pool or spa ?		Yes	-	-	-	-	-
Pool, Spa or Pond Information	Average depth of the pool, spa or pond (m)	1.2	-	-	-	-	-
	Average length of the pool, spa or pond (m)	35	-	-	-	-	-
	Average width of the pool, spa or pond (m)	5	-	-	-	-	-
	The volume of the pool, spa or pond is (litr)	210,000	-	-	-	-	-
	Potable Water Usage with Reductions (L/day)	21,511	9,088	8,229	5,648	9,666	44,476
	Pre 2003 Potable Water Usage (L/day)	36,215	15,232	13,507	9,538	16,042	90,533
Water Reduction Information	Reduction (L/day)	14,704	6,144	5,278	3,890	6,376	36,391
	% Reduction	41%	40%	39%	41%	40%	40%

WSUD COMPLIANCE SCHEDULE		
Rule	Requirement	Response
R86	The Development achieves a minimum 40% reduction in mains water consumption compared to an equivalent development constructed in 2003, without reliance on landscaping measures	Compliance is achieved by the use of high water efficiency fixtures and appliances as scheduled below. Basins: 4 Star (7.0l/min) Showers: 4 Star (7.5l/min max flow rate) WC's: 4 Star (4.5/3.0ltr dual flush) Dishwashers: 4 Star (supplied with unit inclusions) Washing Machines: 4 Star (supplied with unit inclusions)
R87	On sites larger than 2000m ² stormwater management measures comply with all of the following: a) provision for the retention of stormwater on the block is equivalent to at least 1.4kl per 100m ² of impervious area. b) the retained stormwater complies with one of more of the following - i) is stored for later re-use ii) it is released to the stormwater system over a period of not less than 1 day	In addition to the above the Irrigation systems to blocks 2 and 4 will be provided with harvested rainwater. Refer to Water Reduction spreadsheet provided on this drawing for demonstration of compliance for each block and the development as a whole. As the site is a commercial redevelopment the storage volume has been calculated based on 50% of the site area being excluded from the calculation as permitted by the ACT Water Ways WSUD General Code Section 4.2 Performance Targets. Each of the 5No Precincts are provided with individual extended storage detention tanks with slow release to stormwater over 1-2 days. Precinct 1 is further provided with additional retention storage for re-use to irrigation.
R88	For blocks 5,000m ² or larger, the average annual stormwater pollutant export is reduced for all of the following : a) suspended solids by at least 60% b) total phosphorous by at least 45% c) total nitrogen by at least 40%	This criteria is achieved by the the implementation of a Stormwater Quality Improvement treatment trains to each block to receive all inflow from the piped systems, and each comprising of: i) Spel Ecoceptor gross pollutant traps to the tank inlets for Precincts 2-5. ii) For Block 1 the treatment is upgrade to a SQID to treat inflow to the retention tank from which water will be used for irrigation of precinct 1 and associated common area landscape. The outcomes of the above treatment measures have been modelled utilising MUSIC Version 6.3 with the following reduction outcomes, demonstrating compliance with the required reductions.
R89	On previously developed blocks larger than 2000m ² the capacity of the existing pipe (minor) stormwater connection is not exceeded in the 1-in-10 year storm event and the capacity of the existing major overland stormwater system is not exceeded in the 1-in-100 year stormevent.	Compliance with this criteria is achieved by the provision of an Onsite Stormwater Detention systems for each block to limit the post development stormwater run-off to the flow rate corresponding to the 1-in-5 Year storm event for the existing site conditions, together with the limiting capacity of the existing 450dia stormwater tie point servicing the site. The OSD systems will comprise of: i) An OSD control sump fitted with a orifice plate to the outlet drain to ensure a maximum discharge rate as individually calculated for each block to achieve a combined maximum discharge rate of 544l/s for the development. ii) Below ground OSD tanks are connected to the control sump in order to achieve high early discharge. The tanks have been sized to contain the full run-off from a 1-in-100 year stormevent. Refer to the Stormwater Management Schedule on this drawing for the individual site PSD's and detention storage volumes.

This site is zoned under the Territory Plan as CZ2 and accordingly is required to comply with the Commercial Zones Development Code which under Part F requires Residential development in Commercial zoned areas to comply with the Multi Unit Housing Development Code. Accordingly the WSUD design response for this project has been determined to comply with Element 8: Environment of the Multi Unit Housing Development Code. Extracts from the code together with compliance statements are provided in the above schedule.

A1 SHEET

No.	REVISION/ISSUE	DATE	BY	CHECKED
6	UPDATED FOR PRECINCT 5 WORKS APPROVAL	03.08.22	DNT	DNT
5	AMENDED WORKS APPROVAL	17.01.2020	DNT	DNT
4	WORKS APPROVAL ISSUE	23.01.19	DNT	DNT
3	DEP AND CONCEPT PLAN ISSUE	03.09.18	DNT	DNT
2	PRELIMINARY AMENDED MASTERPLAN ISSUE	28.08.18	DNT	DNT
1	MASTERPLAN ISSUE	14.12.16	APT	DNT

No.	REVISION/ISSUE	DATE	BY	CHECKED

DOMA

THCS
TENNANT HYDRAULIC CONSULTING SERVICES

UNIT 1.03/09 TENNANT STREET
FYSHWICK ACT, 2698
P.H: (02) 8285 2599
WEB: www.thcs.com.au
ABN: 28 825 484 933

PROJECT: **THE FOOTHILLS SECTION 38 CAMPBELL**

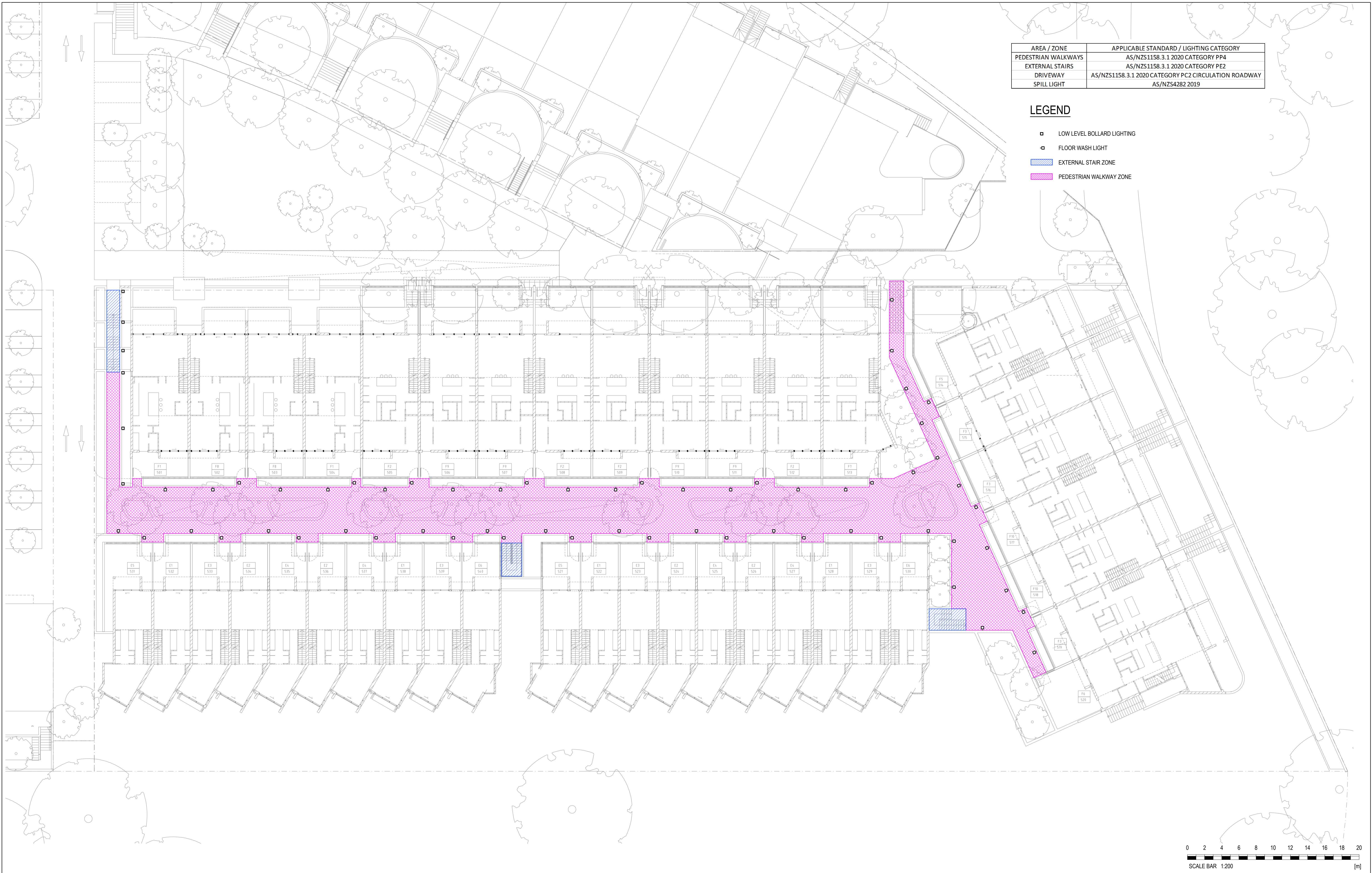
DRAWN: **HYDRAULIC SERVICES SW MANAGEMENT SCHEDULES**

File Name: TH180036-PS-WA-UPDATE.DWG
DATE: **AUG'18**
SCALE: **NTS**

DRAWN: APT
DESIGNED: DNT
CHECKED: DNT

BLOCK: 4&5 SECTION: 38 SUBURB: CAMPBELL

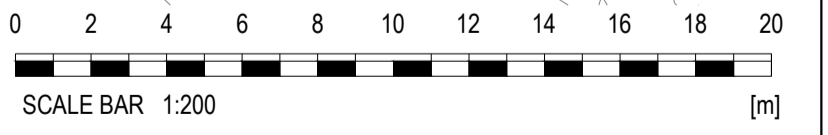
PROJECT: **TH180036**
DWG No: **H-WA-002**
REV: **6**
STATUS: **APPROVAL**



AREA / ZONE	APPLICABLE STANDARD / LIGHTING CATEGORY
PEDESTRIAN WALKWAYS	AS/NZS1158.3.1 2020 CATEGORY PP4
EXTERNAL STAIRS	AS/NZS1158.3.1 2020 CATEGORY PE2
DRIVEWAY	AS/NZS1158.3.1 2020 CATEGORY PC2 CIRCULATION ROADWAY
SPILL LIGHT	AS/NZS4282 2019

LEGEND

- LOW LEVEL BOLLARD LIGHTING
- FLOOR WASH LIGHT
- ▨ EXTERNAL STAIR ZONE
- ▨ PEDESTRIAN WALKWAY ZONE



E-003	© Copyright of S4B Studio Creative Engineering Solutions ABN 95 144 688 945		rev	description	date	referenced drawings	architect	STEWART ARCHITECTURE	client	DOMA	E admin@s4bstudio.com.au T +61 2 9002 4200 Services 4 Buildings Pty Ltd L5/ 309 George Street Sydney NSW 2000 ABN 95 144 688 942 s4bstudio.com.au	project THE FOOTHILLS PRECINCT 5 BLOCKS 4 & 5 SECTION 38 CAMPBELL	drawn	service	title EXTRNAL LIGHTING DESIGN CRITERIA PLAN					
	P1		PRELIMINARY ISSUE	09.08.2022	WA102								LEVEL 1	C		KT	ELECTRICAL SERVICES	date	05.08.22	designed



E-002

© Copyright of S4B Studio
Creative Engineering Solutions
ABN 95 144 688 945

All rights reserved. Figured dimensions shall be taken in preference to scaling. The Contractor shall check all dimensions on site prior to commencing work.

rev	description	date
P1	PRELIMINARY ISSUE	09.08.2022
P1	PRELIMINARY ISSUE	11.08.2022

drawing no	title	rev
WA101	GROUND	C

architect	client
STEWART ARCHITECTURE	DOMA

admin@s4bstudio.com.au
+61 2 9002 4200
Services 4 Buildings Pty Ltd
LS/ 309 George Street
Sydney NSW 2000
ABN 95 144 688 942
s4bstudio.com.au

STEWART ARCHITECTURE

DOMA

project
**THE FOOTHILLS
PRECINCT 5
BLOCKS 4 & 5
SECTION 38 CAMPBELL**

drawn	service
KT	ELECTRICAL SERVICES
date	05.08.22
designer	SG
date	08.2022
scale	1:200@A1
project no	S4B22002104
drawing no	E-002
	P2

EXTERNAL SERVICES PLAN

DEVELOPER: DOMA GROUP

AS3500 DESIGN FLOW RATES:

DESIGN FLOW:	3.47 l/s	No. FIRE HOSE REEL:	---
IRRIGATION FLOW:	18.1 l/s	No. FIRE HYDRANTS:	TBC
MECHANICAL FLOW:	N/A		

NOTES

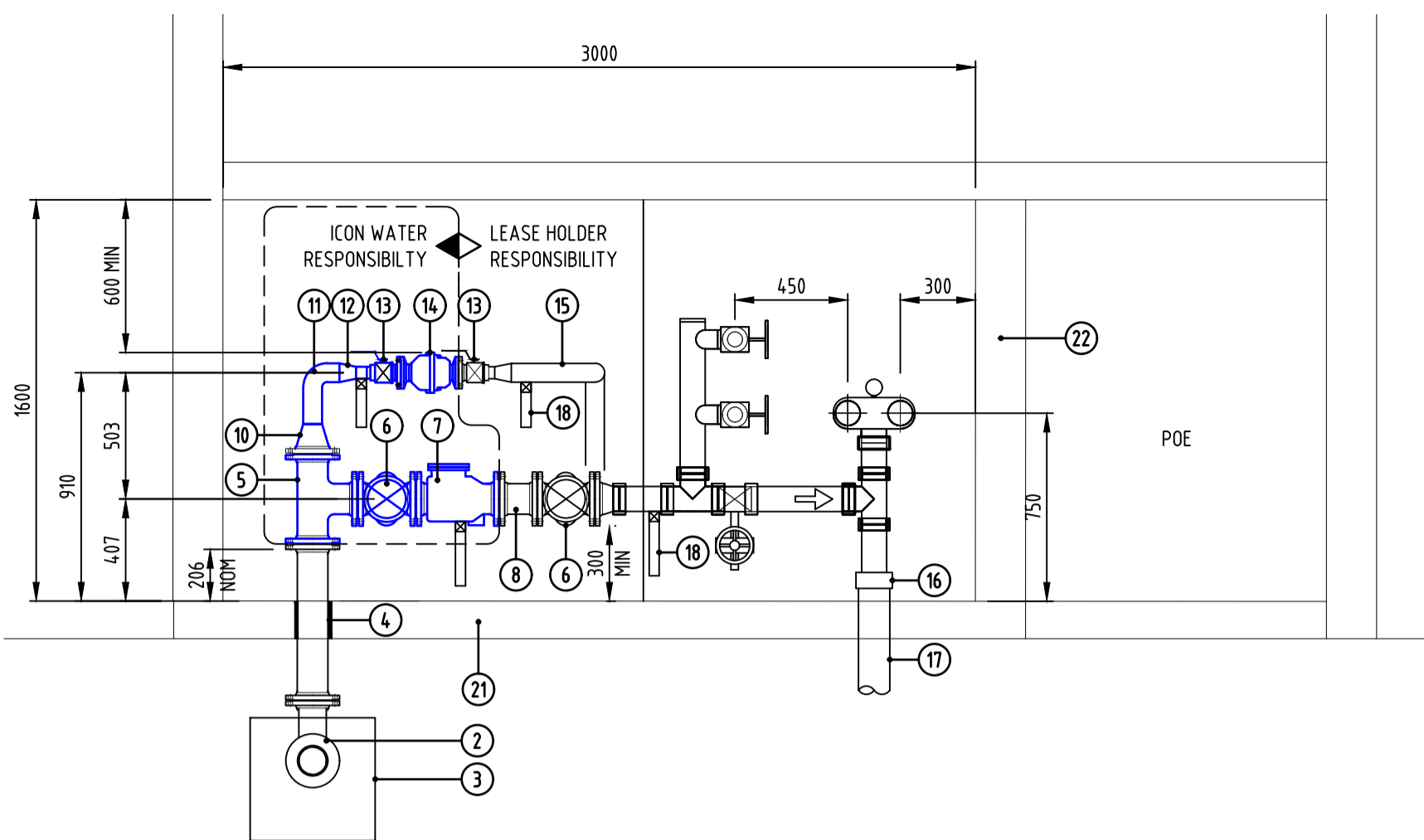
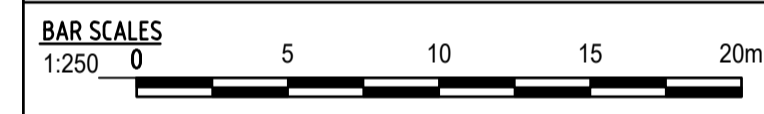
- ALL WORK ON ICON WATER'S WATER SUPPLY AND SEWER MAINS TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT ICON WATER STANDARD RELEASED AUGUST 2019. ALL WORK ON STORMWATER MAINS TO BE CARRIED OUT IN ACCORDANCE WITH DESIGN STANDARDS FOR URBAN INFRASTRUCTURE WORKS.
- CONNECTIONS AND OR DISCONNECTIONS OF SEWER AND WATER AT THE MAIN TO BE MADE BY ICON WATER AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS TO EXPOSE THE MAIN AT THE LOCATION OF THE CONNECTION/DISCONNECTION IN PREPARATION FOR THE WORK BY ICON WATER. ALL EXCAVATION IN THE VICINITY OF MAINS IS TO BE CARRIED OUT BY HAND.
- THE CONTRACTOR MUST VISIT THE SITE OF WORKS BEFORE TENDERING AND MAKE ALLOWANCES ON HIS TENDER FOR ALL TOPOGRAPHIC CONSTRAINTS AFFECTING THE EXECUTION OF THE WORKS AND THE RESTORATION OF THE SITE.
- ALTHOUGH THE POSITION OF EXISTING UNDERGROUND SERVICES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS, THE CONTRACTOR SHALL CONFIRM THE DEPTH AND LOCATION OF ALL SERVICES ON SITE BEFORE COMMENCING EXCAVATIONS.
- ALL LEVELS TO AUSTRALIAN HEIGHT DATUM (AHD). ALL COORDINATES ARE BASED ON THE CANBERRA LOCAL GRID SYSTEM.
- THE CONTRACTOR MUST SECURE ALL PERMITS, ARRANGE ALL CLEARANCES AND PAY ALL FEES REQUIRED TO COMPLETE THE PROJECT PRIOR TO THE COMMENCEMENT OF WORK.
- WORK AS EXECUTED DRAWINGS AND THE BOOK MUST BE SUBMITTED BEFORE CONNECTION.
- ANY NON-METALLIC WATER SERVICE IS TO BE INSTALLED WITH TRACER WIRE AND TESTED.
- EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE AND DUMPED AT AN APPROVED SPOIL AREA.
- THE CONTRACTOR SHALL REINSTATE ALL DISTURBED SURFACES TO MATCH EXISTING.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION OF ALL NECESSARY TEMPORARY TRAFFIC MANAGEMENT PLANS AND THEIR APPROVAL.
- CONTRACTOR TO CONFIRM DEPTH OF SEWER AND STORMWATER TIE POINTS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ADVISE THE DESIGN ENGINEER IF NOT IN ACCORDANCE WITH THE PLAN.

LEGEND

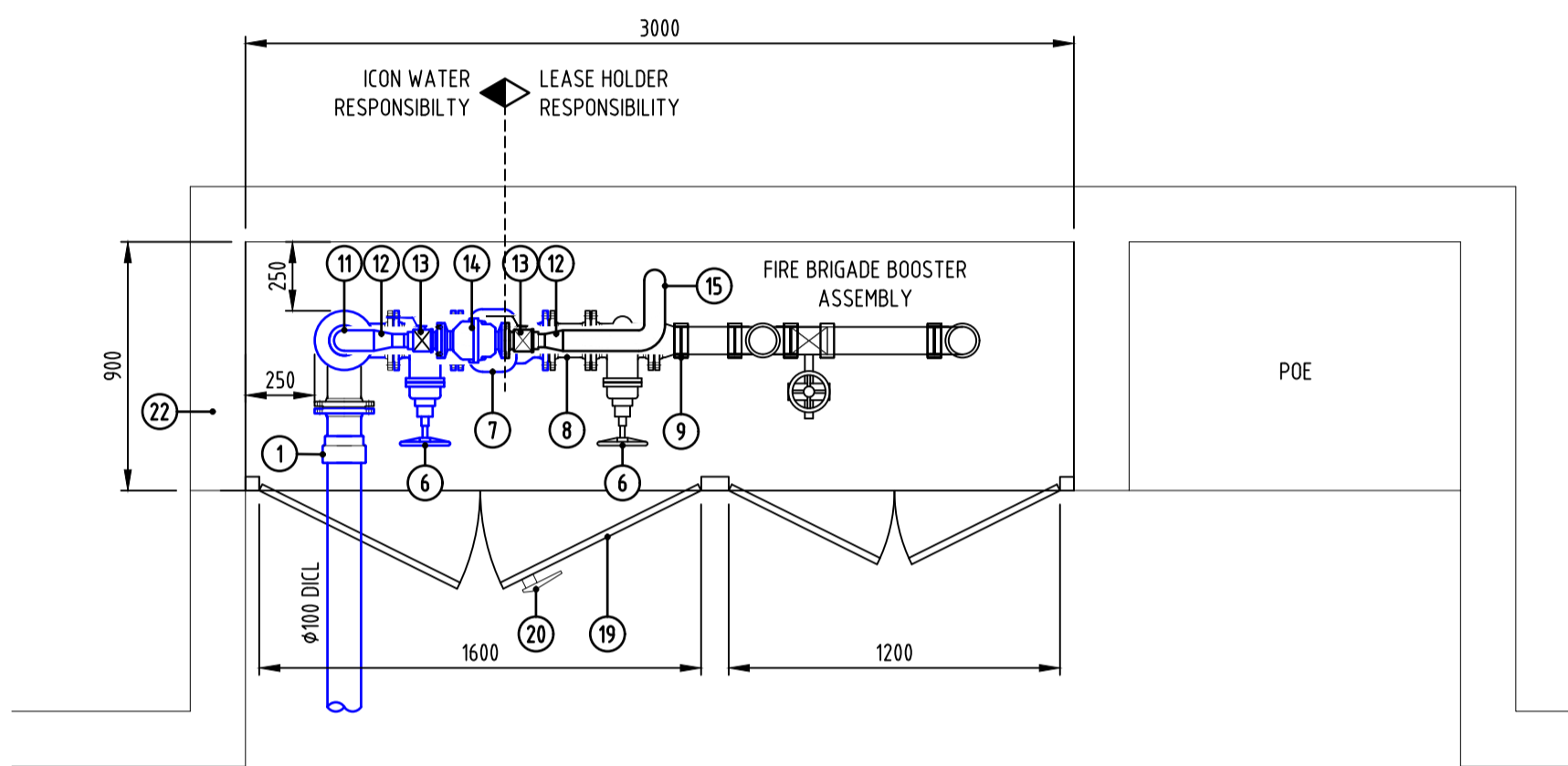
EXISTING	NEW	SEWER
eS	S	WATER
eW	W	STORMWATER
eSW	SW	GAS
G	G	TELEPHONE
eT	T	ELECTRICITY
E	E	SANITARY DRAINAGE
eSD	SD	WATER-DOMESTIC
W	W	FIRE SERVICE
FS	FS	

	MAINTENANCE HOLE
	GATE/STOP VALVE
	WATER METER
	THRUST BLOCK
	FIRE HYDRANT

EXISTING SERVICE TO BE EXHAUMED



ELEVATION

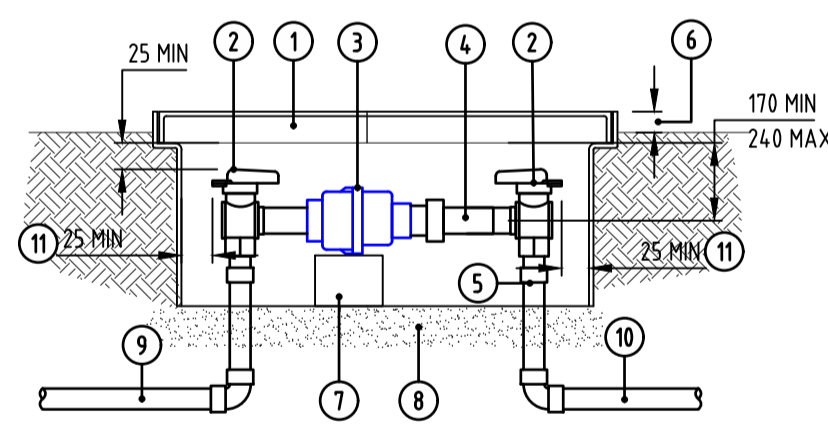


PLAN

DETAIL

WATER METER CUPBOARD

1
1:25



NOTE:
THE WATER METER IS SUPPLIED BY AND REMAINS THE RESPONSIBILITY OF ICON WATER. ALL OTHER COMPONENTS REMAIN THE RESPONSIBILITY OF THE PROPERTY OWNER.

DETAIL

UNIT METERS

2
NTS

DETAIL NOTES

- Ø100 DICL FLANGE - SOCKET ADAPTOR
- Ø100 FLANGED DICL BEND
- THRUST BLOCK BEHIND TEE OR BEND TO SD-5002-D & SD-5003-D
- PIPES TO BE ABLEFLEX WRAPPED AT PENETRATION THROUGH ENCLOSURE FLOOR SLAB
- Ø100x100 FLANGED DICL TEE
- Ø100 FIRE SERVICE ISOLATION VALVE LOCKED IN OPEN POSITION (REFER TO MATERIALS NOTE 4)
- Ø100 FIRE SERVICE NON-RETURN VALVE
- Ø100 DISMANTLING JOINT
- Ø100 FLANGE TO VITAUIC COUPLING
- Ø100x65 DICL REDUCER
- Ø65 Cu BEND
- Ø65x40 Cu REDUCER
- Ø40 RESILIENT SEATED BALL VALVE (REFER TO MATERIALS NOTE 4)
- Ø40 DOMESTIC WATER METER SUPPLIED BY ICON WATER
- Ø65Cu DOMESTIC WATER SERVICE
- Ø100 GALV M.S. TO Ø125Pe ADAPTOR.
- Ø125 Pe FIRE SERVICE TO INGROUND RETICULATION
- UNISTRUT PIPE SUPPORTS FROM FLOOR OR WALL AS APPLICABLE.
- 1000 WIDE DOORS HINGED DOORS. DOORS TO BE INSULATED WITH 30mm THICK CLIMAFOAM XPS INSULATION BOARD
- LEVER LATCH HANDLE TO DOOR WITH EYELETS FOR PADLOCK. SUPPLY AND FIT PADLOCK TO ICON WATER REQUIREMENTS.
- 150 THICK CONCRETE PLINTH
- MASONRY CONSTRUCTED WATER METER ENCLOSURE

MATERIALS:

- ALL PIPEWORK AND FITTINGS SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH ICON WATER STD-SPE-M-002 AND TO THE APPROVED PRODUCTS LIST STD-SPE-G-006 AS AVAILABLE FROM THE ICON WATER WEB SITE.
- ALL DUCTILE IRON CEMENT LINED (DICL) PIPE AND FITTINGS TO BE PN35 RATED IN ACCORDANCE WITH AS/NZ 2280 COMPLETE WITH SEAL COAT. FITTINGS SHALL BE EITHER FBE OR RILSAN COATED INTERNALLY AND EXTERNAL.
- ALL COPPER PIPE AND FITTINGS SHALL BE TYPE B TO AS1432 AND SHALL BE JOINTED BY BRAZING OR A PRESS-FIT SYSTEM TO ICON WATER APPROVED PRODUCTS LIST STD-SPE-G-006.
- ALL ICON WATER ASSET GATE VALVES OF 50mm AND GREATER ARE TO BE RESILIENT SEATED ANTICLOCKWISE CLOSING.

DETAIL NOTES

- SMALL WATER METER PIT SUPPLIED BY ICON WATER
- 90° STOP VALVE
- WATER METER SUPPLIED BY ICON WATER
- UNION CONNECTOR
- PEX ADAPTOR CONNECTION TO STOP VALVE OUTLET.
- 50mm CLEARANCE TO FINISHED SOFT LANDSCAPE SURFACE OR FLUSH WITH PAVEMENT OR GRASS AS APPLICABLE
- BRICK SUPPORT TO WATER METER.
- CRUSHER DUST BASE 20-40mm DEEP.
- Pe INGROUND SITE WATER SERVICE RETICULATION.
- INGROUND SERVICES (Ø20 PEX TO TOWNHOUSES & Ø32 COPPER TO CLUBHOUSE).
- CLEARANCES TO BE ACHIEVED WITH HANDLE IN OPEN AND CLOSED POSITION.

2	ISSUED FOR WORKS APPROVAL INFORMATION	03.08.22	DNT	DNT
1	ISSUED FOR COORDINATION	24.06.22	DNT	DNT
No.	REVISION/ISSUE	DATE	BY	CHECKED

DOMA

THCS
TENNANT HYDRAULIC CONSULTING SERVICES

UNIT 1.03/109 TENNANT STREET
FYSHWICK ACT, 2606
PH: (02) 8285 2599
WEB: www.thcs.com.au
ABN: 28 825 404 093

PROJECT
**THE FOOTHILLS
SECTION 38 CAMPBELL
PRECINCT 5**

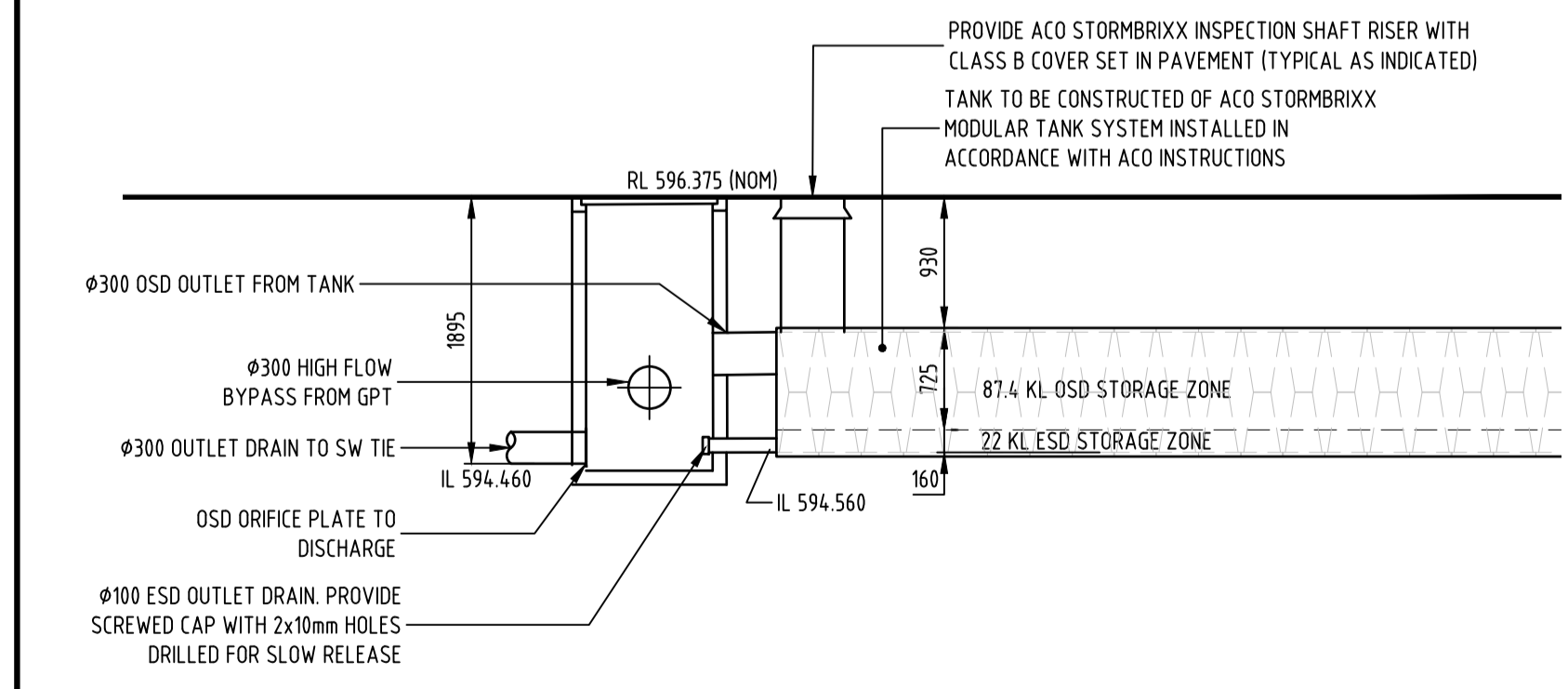
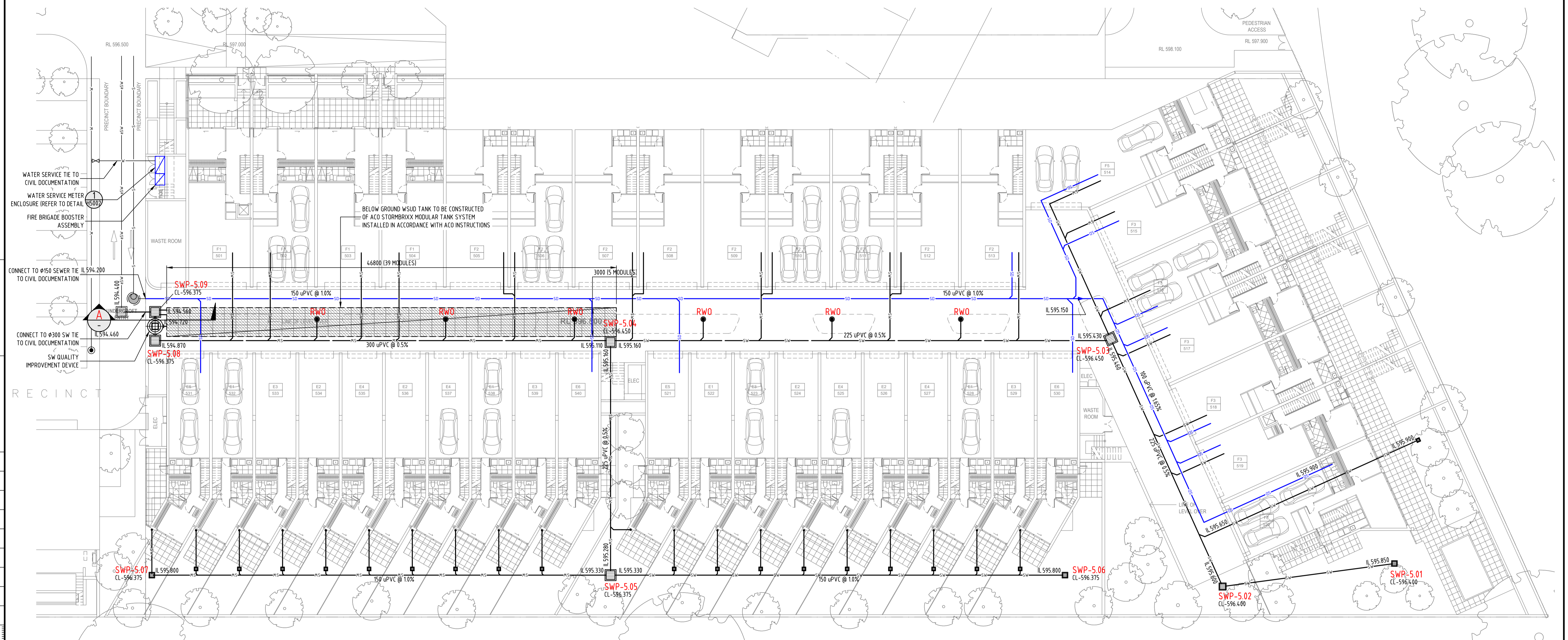
DRAWING HYDRAULIC SERVICES EXTERNAL SERVICES METERING DETAILS		DATE MAR'20	SCALE AS SHOWN
File Name: TH200105-H5002.DWG	DWG No.	REV	STATUS
PROJECT TH200105	DWG No. H5002	REV 2	STATUS PRELIMINARY

BLOCK: 4.85 SECTION: 38 SUBURB: CAMPBELL

DRAWN	DESIGNED	CHECKED
DNT	DNT	

PLAN OF SANITARY DRAINAGE.

PLAN No: _____
 APPROVED UNDER REGULATION 7 OF THE CANBERRA SEWERAGE & WATER SUPPLY REGULATIONS
 Registration No: _____
 Approved By: _____ Date: _____



SECTION A
 WSUD TANK
 1:50

A1 SHEET

No.	REVISION/ISSUE	DATE	BY	CHECKED	No.	REVISION/ISSUE	DATE	BY	CHECKED
2	ISSUED FOR WORKS APPROVAL INFORMATION	03.08.22	DNT	DNT					
1	ISSUED FOR COORDINATION	24.06.22	DNT	DNT					

DOMA

THCS
 TENNANT HYDRAULIC CONSULTING SERVICES

UNIT 1.03/109 TENNANT STREET
 Fyshwick ACT 2608
 PH: (02) 8285 2599
 WEB: www.thcs.com.au
 ABN: 28 825 484 093

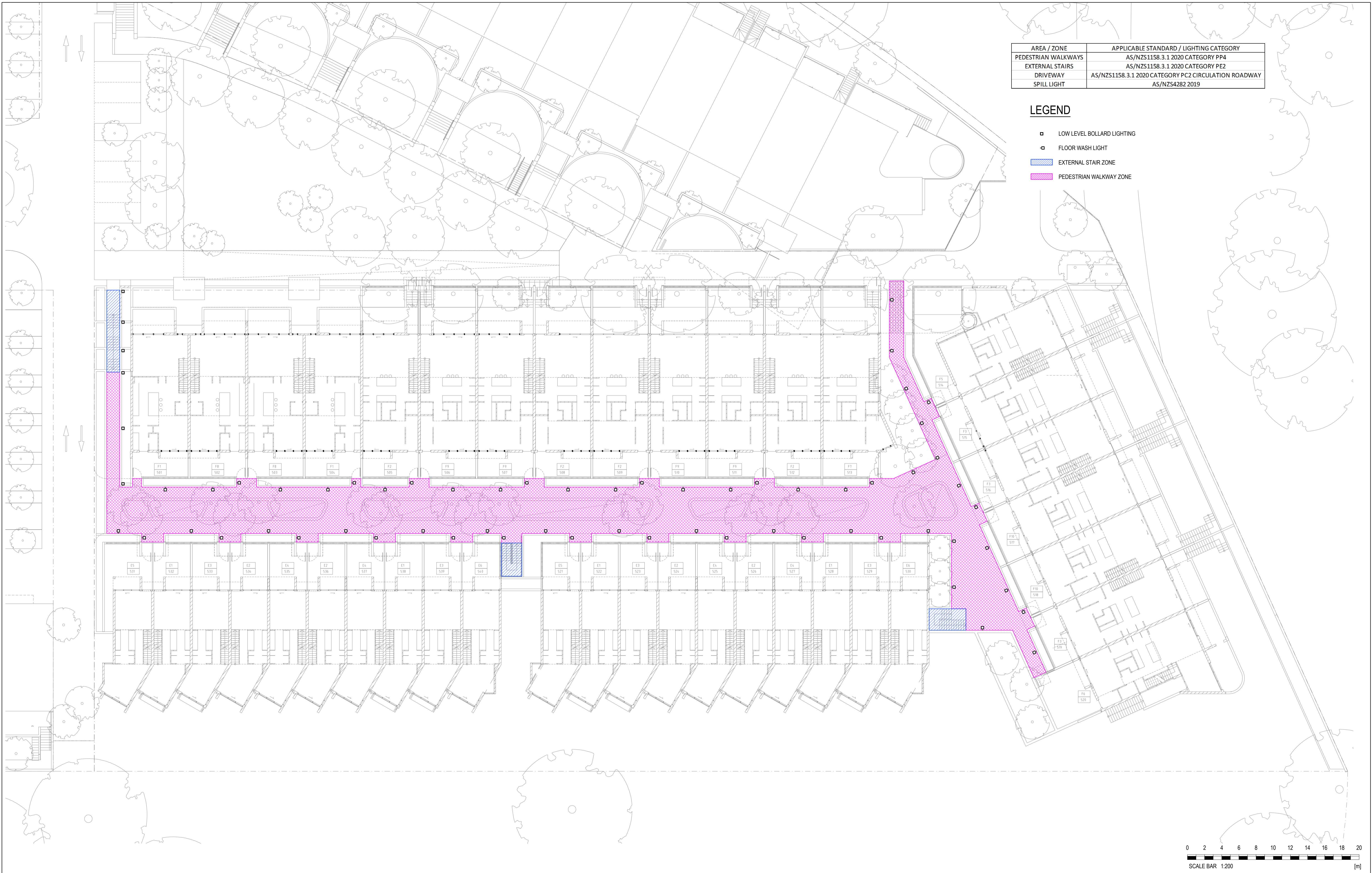
PROJECT
**THE FOOTHILLS
 SECTION 38 CAMPBELL
 PRECINCT 5**

BLOCK: 4.85 SECTION: 38 SUBURB: CAMPBELL

DRAWING
**HYDRAULIC SERVICES
 PRECINCT 5
 GENERAL ARRANGEMENT PLAN**

File Name: TH200105-H5003.DWG DATE: JUNE'22 SCALE: 1:200 @ A1
 1:400 @ A3

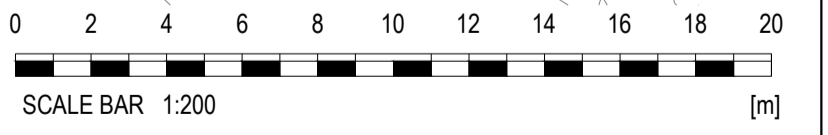
PROJECT: TH200105 DWG No: H5003 REV: 2 STATUS: PRELIMINARY



AREA / ZONE	APPLICABLE STANDARD / LIGHTING CATEGORY
PEDESTRIAN WALKWAYS	AS/NZS1158.3.1 2020 CATEGORY PP4
EXTERNAL STAIRS	AS/NZS1158.3.1 2020 CATEGORY PE2
DRIVEWAY	AS/NZS1158.3.1 2020 CATEGORY PC2 CIRCULATION ROADWAY
SPILL LIGHT	AS/NZS4282 2019

LEGEND

- LOW LEVEL BOLLARD LIGHTING
- FLOOR WASH LIGHT
- ▨ EXTERNAL STAIR ZONE
- ▨ PEDESTRIAN WALKWAY ZONE



E-003	© Copyright of S4B Studio Creative Engineering Solutions ABN 95 144 688 945		rev	description	date	drawing no	title	rev	STEWART ARCHITECTURE	DOMA	E admin@s4bstudio.com.au +61 2 9002 4200 Services 4 Buildings Pty Ltd LLS/ 309 George Street Sydney NSW 2000 ABN 95 144 688 942 S4Bstudio.com.au		project	THE FOOTHILLS PRECINCT 5 BLOCKS 4 & 5 SECTION 38 CAMPBELL	drawn	service	ELECTRICAL SERVICES
	P1		PRELIMINARY ISSUE	09.08.2022	WA102		LEVEL 1	C							05.08.22	KT	

PRECINCT 1-4 & 6 PREVIOUSLY APPROVED WA101772

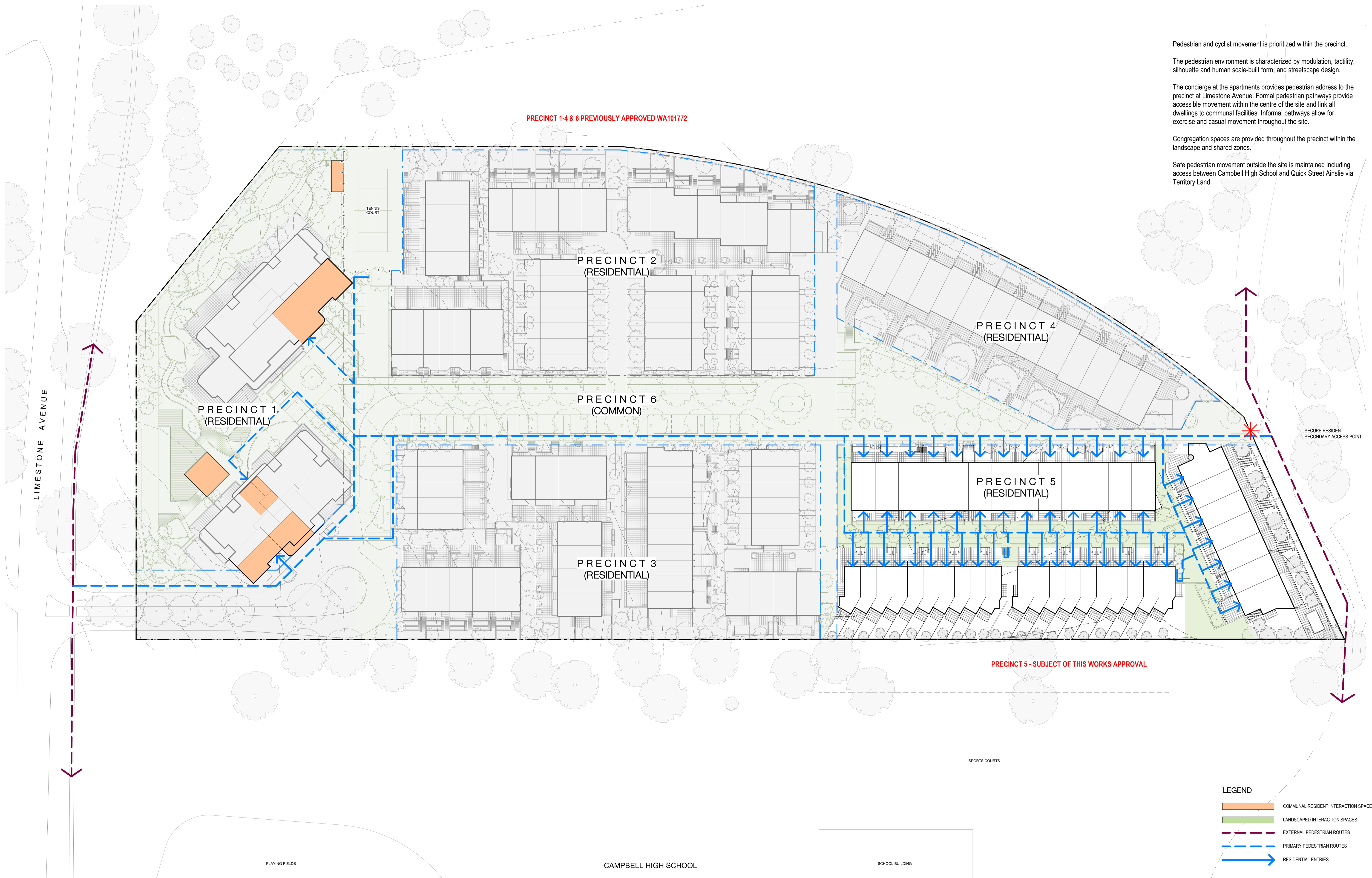
Pedestrian and cyclist movement is prioritized within the precinct.

The pedestrian environment is characterized by modulation, tactility, silhouette and human scale-built form; and streetscape design.

The concierge at the apartments provides pedestrian address to the precinct at Limestone Avenue. Formal pedestrian pathways provide accessible movement within the centre of the site and link all dwellings to communal facilities. Informal pathways allow for exercise and casual movement throughout the site.

Congregation spaces are provided throughout the precinct within the landscape and shared zones.

Safe pedestrian movement outside the site is maintained including access between Campbell High School and Quick Street Ainslie via Territory Land.



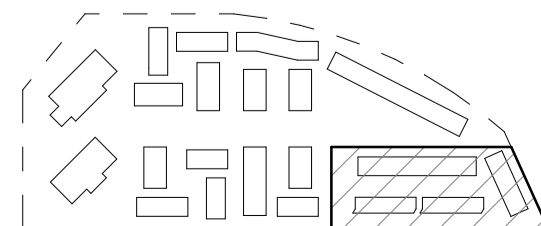
PRECINCT 5 - SUBJECT OF THIS WORKS APPROVAL

LEGEND

- COMMUNAL RESIDENT INTERACTION SPACES
- LANDSCAPED INTERACTION SPACES
- EXTERNAL PEDESTRIAN ROUTES
- PRIMARY PEDESTRIAN ROUTES
- RESIDENTIAL ENTRIES

REV	DESCRIPTION	DATE
A	ISSUE FOR CLIENT REVIEW	29.06.2022
B	ISSUE FOR WORKS APPROVAL	16.08.2022

DATE
29.06.2022
16.08.2022



DOMA

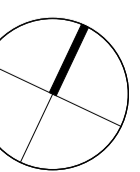
**STEWART
ARCHITECTURE**

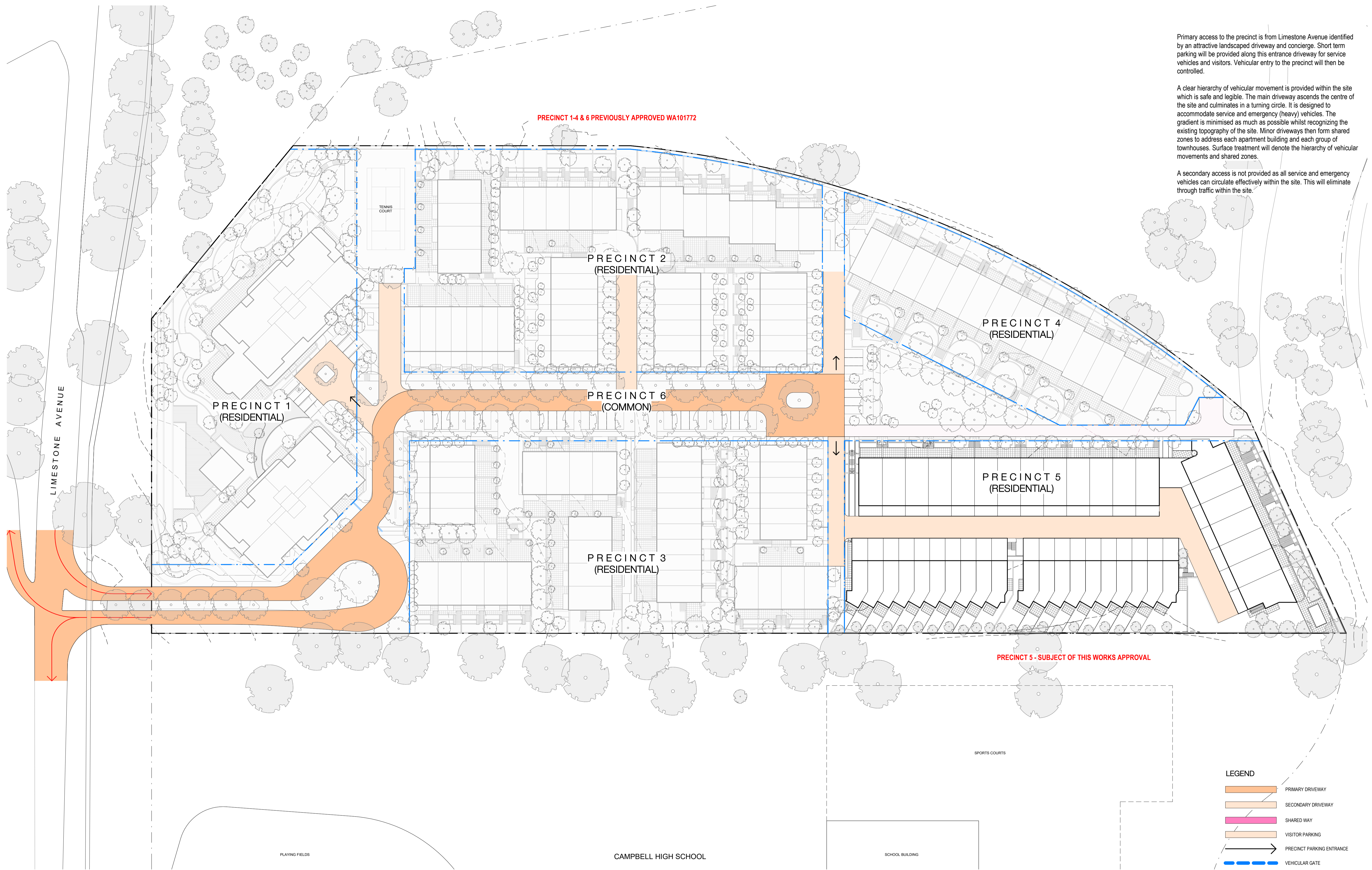
36 MILDURA STREET FYSHWICK 2609
PO BOX 3469 MANKA ACT 2603
OFFICE@STEWARTARCHITECTURE.COM.AU

PROJECT **THE FOOTHILLS**
BLOCKS 4 & 5 SECTION 38 CAMPBELL
PROJECT No. **1624**

DRAWING No. **WA0 - 025**
DRAWING TITLE **PEDESTRIAN EXPERIENCE**
SCALE **1: 500 @ A1**
DATE **2022**

This drawing is copyright and remains the property of Stewart Architecture.
This drawing is for development application purposes and not for construction.





Primary access to the precinct is from Limestone Avenue identified by an attractive landscaped driveway and concierge. Short term parking will be provided along this entrance driveway for service vehicles and visitors. Vehicular entry to the precinct will then be controlled.

A clear hierarchy of vehicular movement is provided within the site which is safe and legible. The main driveway ascends the centre of the site and culminates in a turning circle. It is designed to accommodate service and emergency (heavy) vehicles. The gradient is minimised as much as possible whilst recognizing the existing topography of the site. Minor driveways then form shared zones to address each apartment building and each group of townhouses. Surface treatment will denote the hierarchy of vehicular movements and shared zones.

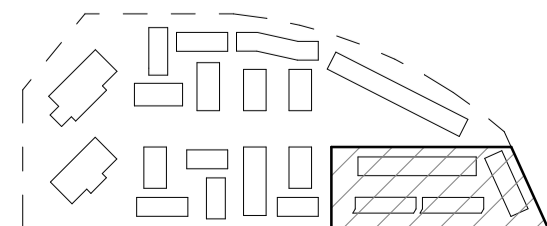
A secondary access is not provided as all service and emergency vehicles can circulate effectively within the site. This will eliminate through traffic within the site.

PRECINCT 1-4 & 6 PREVIOUSLY APPROVED WA101772

PRECINCT 5 - SUBJECT OF THIS WORKS APPROVAL

- LEGEND**
- PRIMARY DRIVEWAY
 - SECONDARY DRIVEWAY
 - SHARED WAY
 - VISITOR PARKING
 - PRECINCT PARKING ENTRANCE
 - VEHICULAR GATE

REV	DESCRIPTION	DATE
A	ISSUE FOR CLIENT REVIEW	29.06.2022
B	ISSUE FOR WORKS APPROVAL	16.08.2022



DOMA

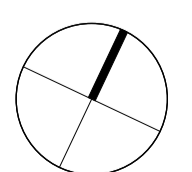
STEWART ARCHITECTURE

36 MILDURA STREET Fyshwick 2609
PO BOX 3469 MANKA ACT 2603
OFFICE@STEWARTARCHITECTURE.COM.AU

PROJECT **THE FOOTHILLS**
BLOCKS 4 & 5 SECTION 38 CAMPBELL
PROJECT No. **1624**

DRAWING No. **WA0 - 026**
DRAWING TITLE **VEHICULAR MOVEMENT**
SCALE **1: 500 @ A1**
DATE **2022**

This drawing is copyright and remains the property of Stewart Architecture. This drawing is for development application purposes and not for construction.



Residential and visitor parking is provided in accordance with the Territory Plan's Parking and Vehicular Access General Code.

Residential parking will be provided in secure basements / undercrofts which are carefully integrated within the footprint of each building group and screened from public view. This parking has been carefully designed to address the topography and geotechnical features of the site.

Visitor parking will be located at-grade throughout the site. At-grade spaces are in small groupings to ensure dominance of landscape.

PRECINCT 1-4 & 6 PREVIOUSLY APPROVED WA101772

PRECINCT 5 - SUBJECT OF THIS WORKS APPROVAL

LIMESTONE AVENUE

MAIN DRIVEWAY

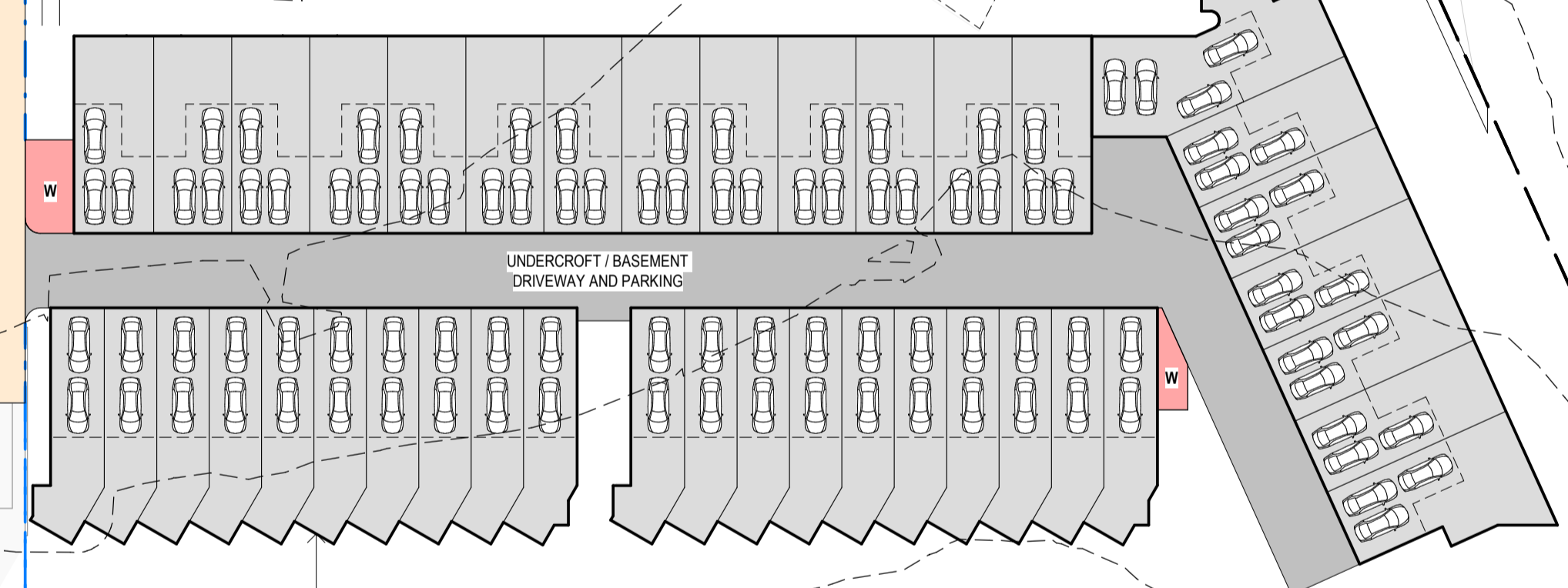
EXPOSED DRIVEWAY

BUILDING FOOTPRINT

PLAYING FIELDS

CAMPBELL HIGH SCHOOL

SCHOOL BUILDING



PARKING ANALYSIS

TOWNHOUSES (PRECINCT 5)
 DWELLING QTY
 RATE / DWELLING
 PARKING GENERATION
 PARKING PROVISION

	1 BEDROOM	2 BEDROOM	3 & 4 BEDROOM	TOTALS
DWELLING QTY	20	20		40
RATE / DWELLING	1.5	2		70
PARKING GENERATION	30	40		101 SPACES
PARKING PROVISION	2	2.4		

VISITORS
 DWELLINGS (PRECINCTS 1-5)
 GENERATION (25% OF DWELLING)
 PROVISION

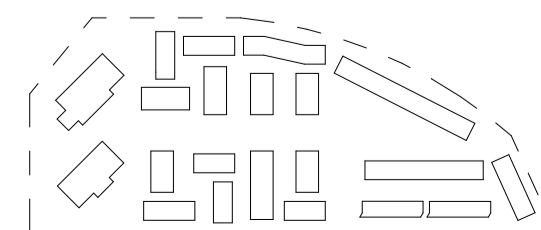
252
 63
 89 SPACES

LEGEND

- MAIN ROAD
- SECONDARY DRIVEWAY - OPEN
- SECONDARY DRIVEWAY - UNDERCROFT
- GARAGE / PARKING - UNDERCROFT
- UNDERCROFT WASTE

REV	DESCRIPTION	DATE
A	ISSUE FOR CLIENT REVIEW	29.06.2022
B	ISSUE FOR WORKS APPROVAL	16.08.2022

DATE
 29.06.2022
 16.08.2022



DOMA

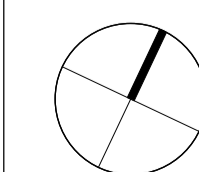
STEWART ARCHITECTURE

36 MILDURA STREET Fyshwick 2609
 PO BOX 3469 MANKAJA ACT 2603
 OFFICE@STEWARTARCHITECTURE.COM.AU

PROJECT **THE FOOTHILLS**
 BLOCKS 4 & 5 SECTION 38 CAMPBELL
 PROJECT No. **1624**

DRAWING No. **WA0 - 027**
 DRAWING TITLE **PARKING STRATEGY**
 SCALE **1:500 @ A1**
 DATE **2022**

This drawing is copyright and remains the property of Stewart Architecture.
 This drawing is for development application purposes and not for construction.



PRECINCT 1-4 & 6 PREVIOUSLY APPROVED WA101772

Private open space for each dwelling will exceed the minimum requirements of the territory plan.

Townhouses enjoy extensive outdoor gardens and terraces, generally to at least two frontages of each dwelling. townhouse private open space will achieve a minimum of 36sqm

LIMESTONE AVENUE

PRECINCT 1
(RESIDENTIAL)

PRECINCT 2
(RESIDENTIAL)

PRECINCT 4
(RESIDENTIAL)

PRECINCT 6
(COMMON)

PRECINCT 5
(RESIDENTIAL)

PRECINCT 3
(RESIDENTIAL)

PRECINCT 5 - SUBJECT OF THIS WORKS APPROVAL

PLAYING FIELDS

CAMPBELL HIGH SCHOOL

SCHOOL BUILDING

SPORTS COURTS

LEGEND

PRIVATE OPEN SPACE

REV	DESCRIPTION	DATE
A	ISSUE FOR CLIENT REVIEW	29.06.2022
B	ISSUE FOR WORKS APPROVAL	16.08.2022

DATE
29.06.2022
16.08.2022



DOMA

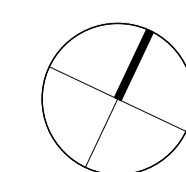
STEWART
ARCHITECTURE

36 MILDURA STREET FYSHWICK 2609
PO BOX 3469 MANKA ACT 2603
OFFICE@STEWARTARCHITECTURE.COM.AU

PROJECT **THE FOOTHILLS**
BLOCKS 4 & 5 SECTION 38 CAMPBELL
PROJECT No. **1624**

DRAWING No. **WA0 - 032**
DRAWING TITLE **PRIVATE OPEN SPACE**
SCALE **1:500 @ A1**
DATE **2022**

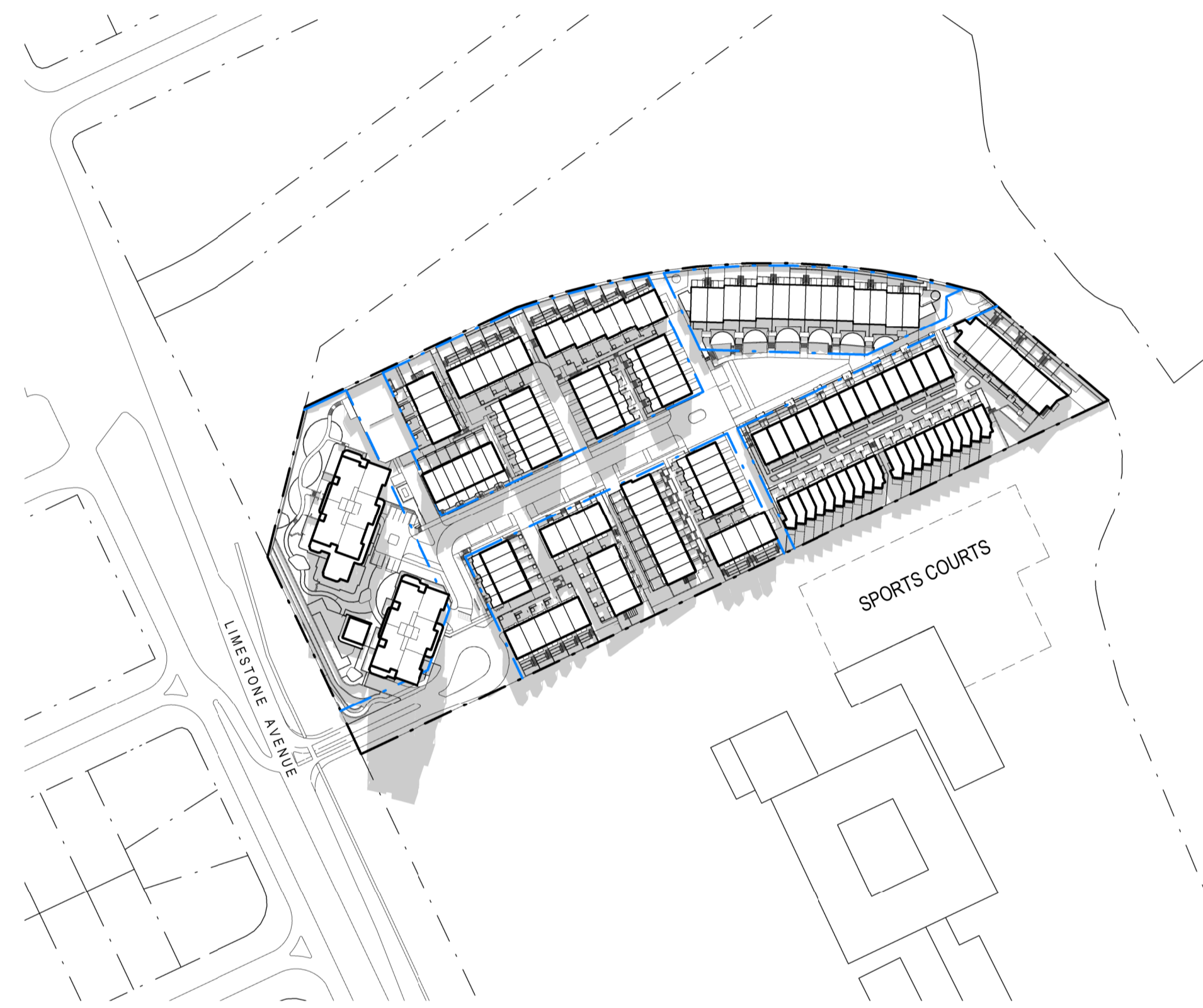
This drawing is copyright and remains the property of Stewart Architecture.
This drawing is for development application purposes and not for construction.



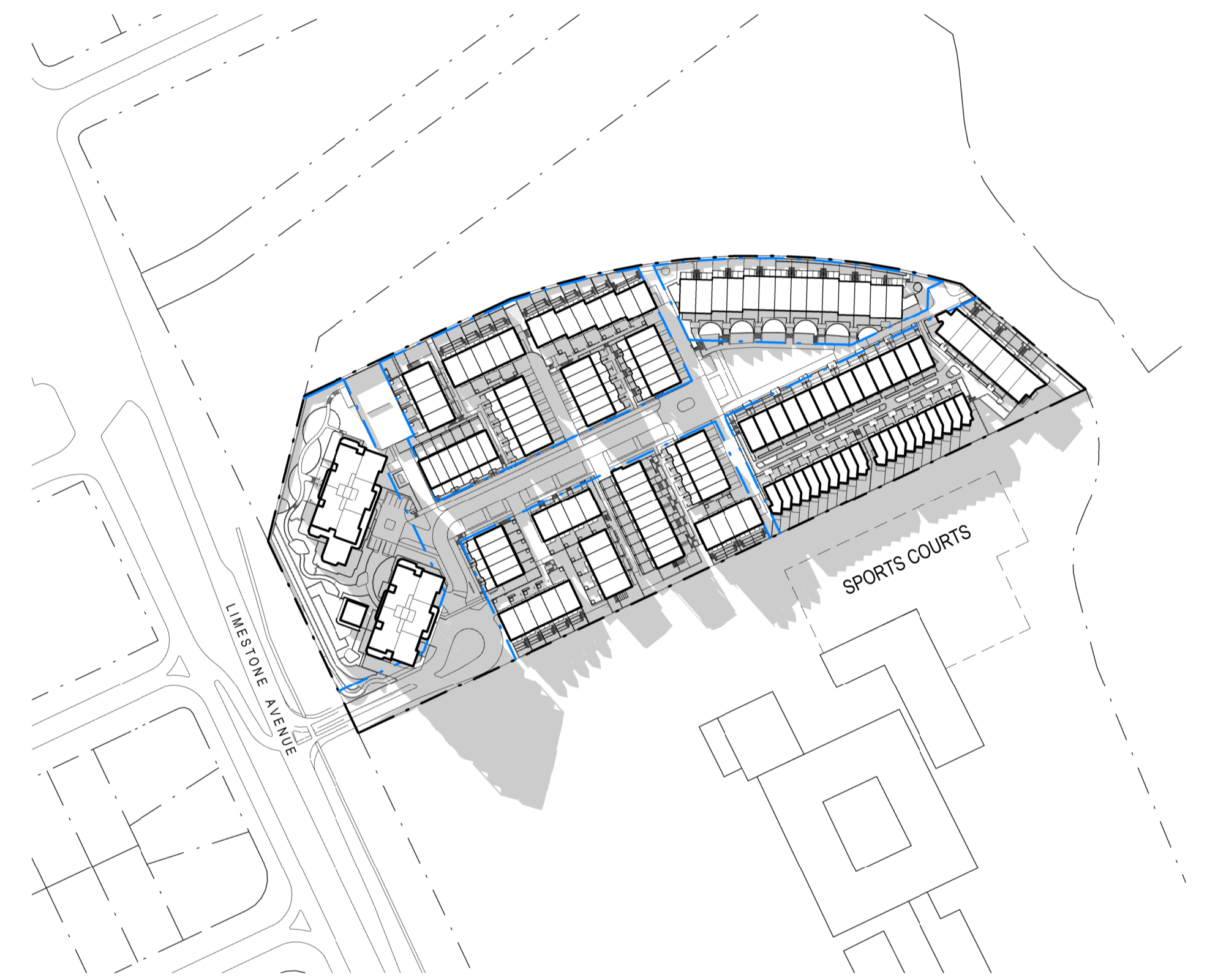
The development concept proposes buildings fronting Campbell Highschool be of a height that minimizes overshadowing of the outdoor playground areas; consistent with the proposed DCP Urban Design Principle 5 - ensuring that buildings must minimize shadows on the outdoor playground areas of the Campbell High School Between 9am to 3pm.



WINTER SOLSTICE 9AM



WINTER SOLSTICE 12PM



WINTER SOLSTICE 3PM

REV	DESCRIPTION	DATE
A	ISSUE FOR CLIENT REVIEW	29.06.2022
B	ISSUE FOR WORKS APPROVAL	16.08.2022



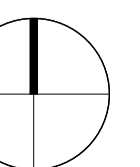
DOMA

**STEWART
ARCHITECTURE**

36 MILDURA STREET Fyshwick 2609
PO BOX 3469 MANKA ACT 2603
OFFICE@STEWARTARCHITECTURE.COM.AU

PROJECT **THE FOOTHILLS**
BLOCKS 4 & 5 SECTION 38 CAMPBELL
PROJECT No. **1624**

DRAWING No. **WA0 - 035**
DRAWING TITLE **SHADOW DIAGRAM**
SCALE
DATE **2022**

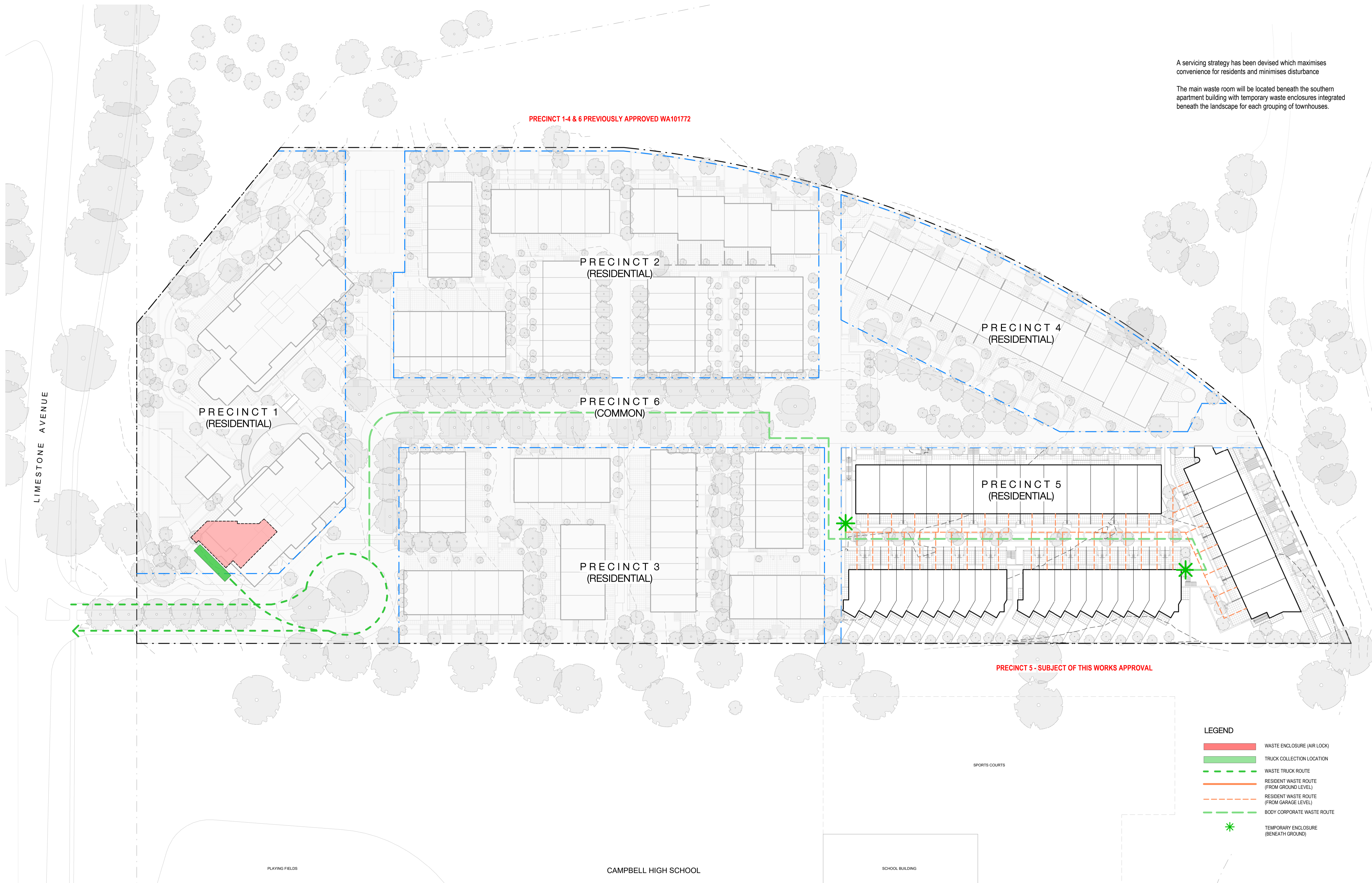


This drawing is copyright and remains the property of Stewart Architecture.
This drawing is for development application purposes and not for construction.

A servicing strategy has been devised which maximises convenience for residents and minimises disturbance

The main waste room will be located beneath the southern apartment building with temporary waste enclosures integrated beneath the landscape for each grouping of townhouses.

PRECINCT 1-4 & 6 PREVIOUSLY APPROVED WA101772



- LEGEND**
- WASTE ENCLOSURE (AIR LOCK)
 - TRUCK COLLECTION LOCATION
 - WASTE TRUCK ROUTE
 - RESIDENT WASTE ROUTE (FROM GROUND LEVEL)
 - RESIDENT WASTE ROUTE (FROM GARAGE LEVEL)
 - BODY CORPORATE WASTE ROUTE
 - TEMPORARY ENCLOSURE (BENEATH GROUND)

REV	DESCRIPTION	DATE
A	ISSUE FOR CLIENT REVIEW	29.06.2022
B	ISSUE FOR WORKS APPROVAL	16.08.2022

DOMA **STEWART ARCHITECTURE**

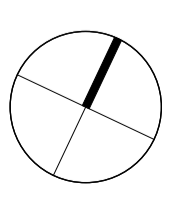
36 MILDURA STREET Fyshwick 2609
PO BOX 3469 MANKAJA ACT 2603
OFFICE@STEWARTARCHITECTURE.COM.AU

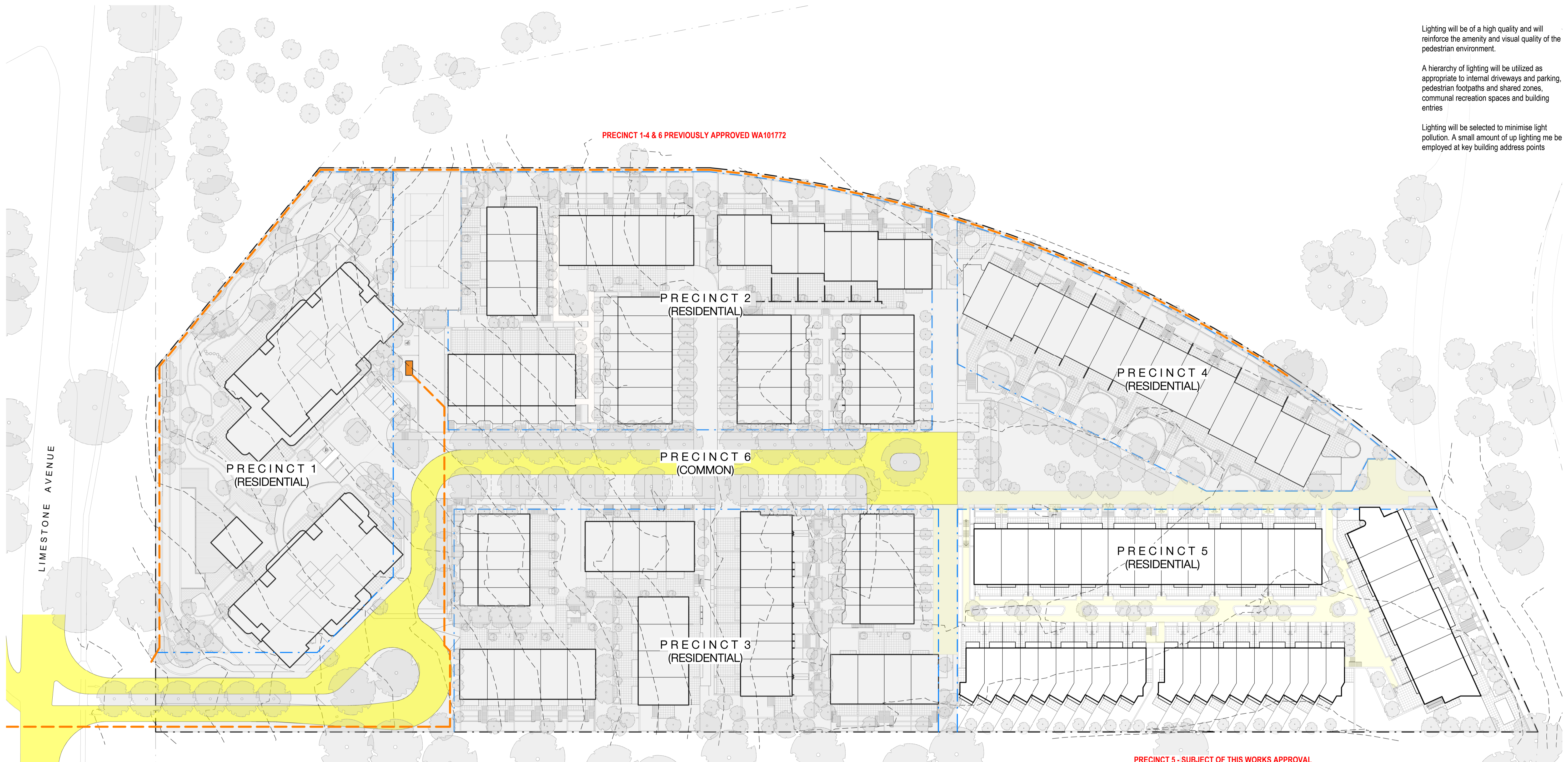
PROJECT **THE FOOTHILLS**
BLOCKS 4 & 5 SECTION 38 CAMPBELL

PROJECT No. **1624**

This drawing is copyright and remains the property of Stewart Architecture.
This drawing is for development application purposes and not for construction.

DRAWING No. **WA0 - 038**
DRAWING TITLE **SERVICING**
SCALE **1: 500 @ A1**
DATE **2022**





Lighting will be of a high quality and will reinforce the amenity and visual quality of the pedestrian environment.

A hierarchy of lighting will be utilized as appropriate to internal driveways and parking, pedestrian footpaths and shared zones, communal recreation spaces and building entries

Lighting will be selected to minimise light pollution. A small amount of up lighting may be employed at key building address points

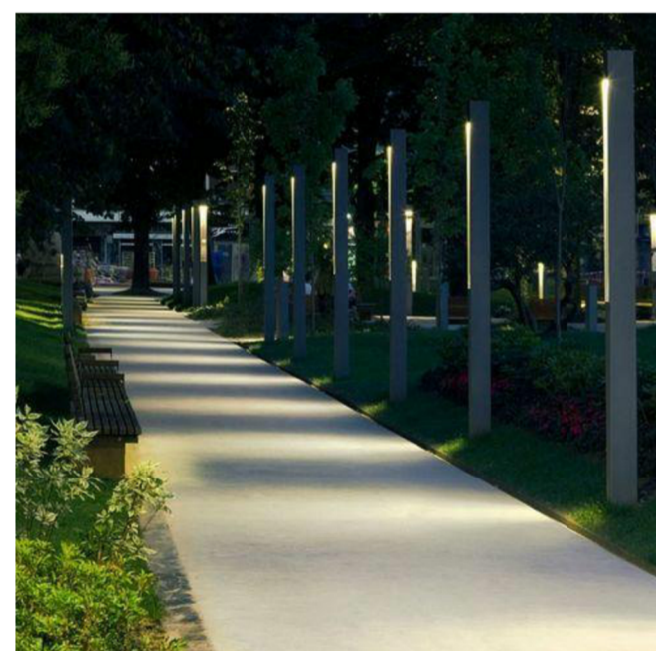
PRECINCT 5 - SUBJECT OF THIS WORKS APPROVAL



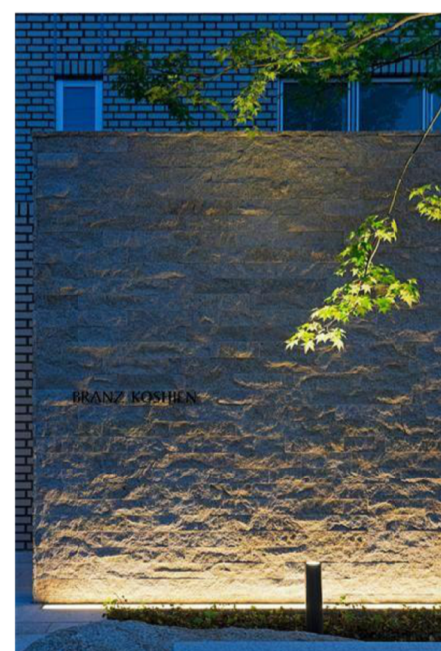
STREET LIGHTING



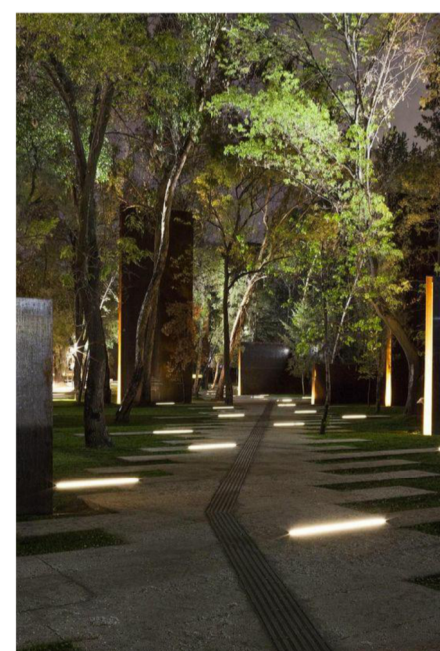
PLAYING FIELDS



PEDESTRIAN LIGHTING




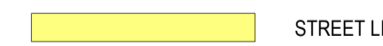

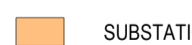
CAMPBELL HIGH SCHOOL



SCHOOL BUILDING



LEGEND

-  HV LINE
-  STREET LIGHTING
-  PEDESTRIAN LIGHTING
-  SUBSTATION

REV	DESCRIPTION	DATE
A	ISSUE FOR WORKS APPROVAL	16.06.2022



DOMA

STEWART ARCHITECTURE

36 MILDURA STREET Fyshwick 2609
PO BOX 3469 MANKAJA ACT 2603
OFFICE@STEWARTARCHITECTURE.COM.AU

PROJECT **THE FOOTHILLS**
BLOCKS 4 & 5 SECTION 38 CAMPBELL
PROJECT No. **1624**

DRAWING No. **WA0 - 039**
DRAWING TITLE **ELECTRICAL & LIGHTING PLAN**
SCALE **1 : 500 @ A1**
DATE **2022**

This drawing is copyright and remains the property of Stewart Architecture. This drawing is for development application purposes and not for construction.

