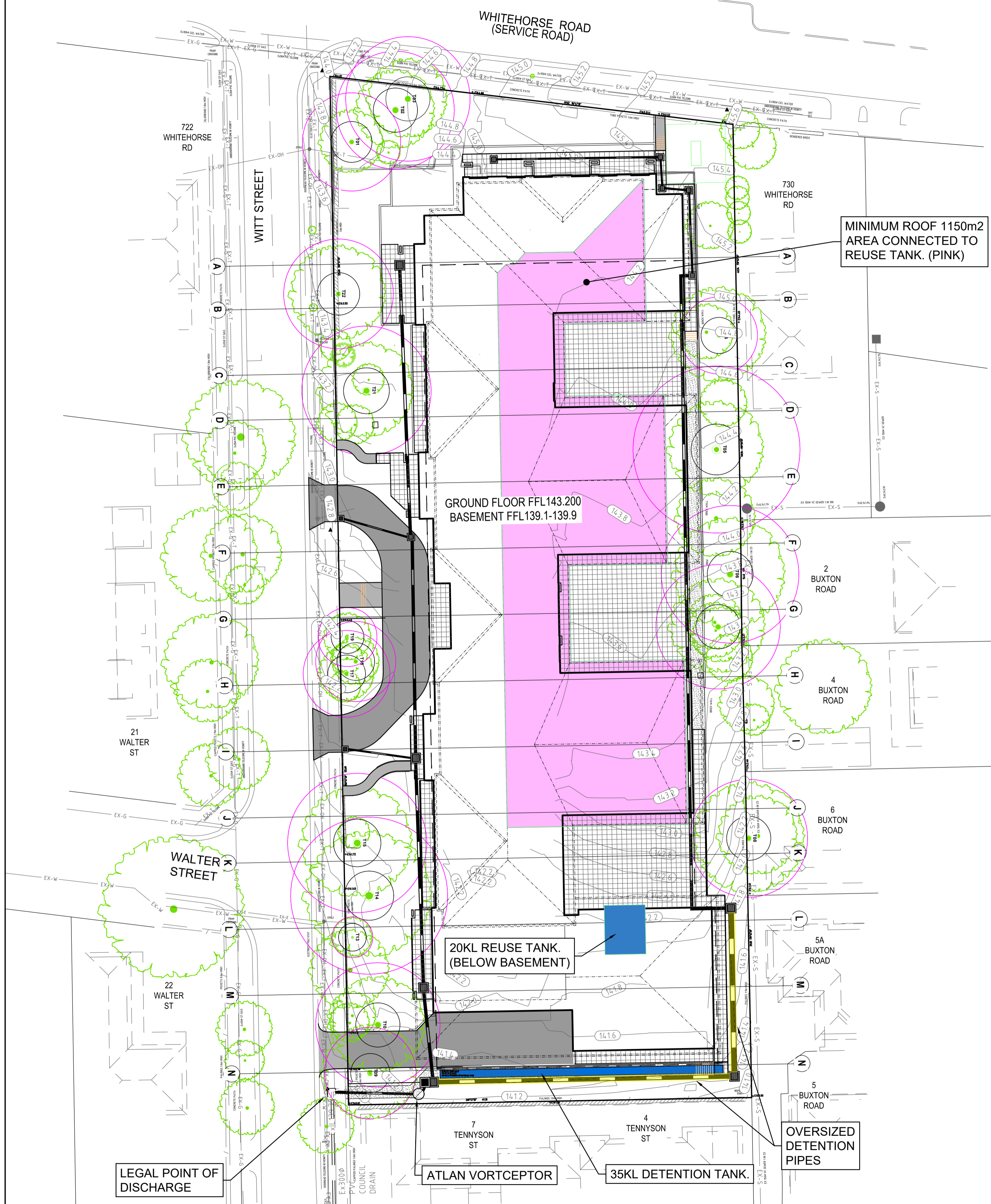


STORMWATER MANAGEMENT PLAN

PROPOSED AGED CARE FACILITY

8 WITT STREET, MITCHAM, VIC



STORMWATER MANAGEMENT SUMMARY

FLOODING:
COUNCIL LIABLE TO FLOODING ADVICE (REG 153/154) - NO. NO APPLICABLE LSI0 / SBO.

STORMWATER ON-SITE DETENTION:
20% (5 year) POST DEVELOPMENT (C0.85) RESTRICTED TO 20% (5year) PRE DEVELOPMENT (C0.35)
PSD = 47l/s
DETENTION REQUIRED = 47m3
(COMBINATION TANK AND OVERSIZE PIPES)
- 35m x 450dia PIPE, 20m x 600dia PIPE + PITS = 12m3
- DETENTION TANK = 35m3

WATER QUALITY (WSUD):
20KL REUSE TANK CONNECTED TO 1150m2 ROOF (WEST FACING DPS)
PLUMBED FOR IRRIGATION
ATLAN VORTCEPTOR GPT

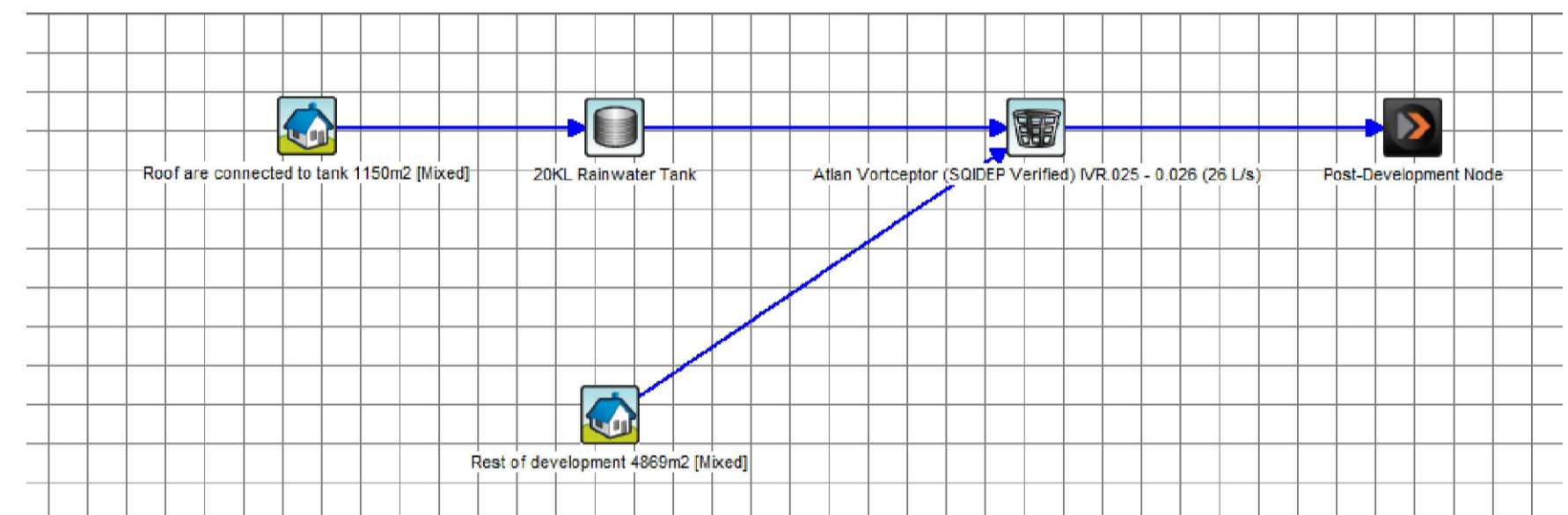
MELBOURNE WATER:
NOT IN MELBOURNE WATER DRAINAGE SCHEME

LEGEND

DRAINAGE PIPES	STORMWATER DRAINAGE (20%AEP)	
	EXISTING DRAINAGE	
OVERLAND FLOW	INDICATED BY FLOW ARROWS ON PLAN	
LEVELS	EXISTING CONTOURS	
	EXISTING SPOT LEVELS	

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

ADVERTISED PLAN



MUSIC TREATMENT TRAIN

Treatment Train Effectiveness - Post-Development Node

	Sources	Residual Load	% Reduction
Flow (ML/yr)	4.4	3.69	16.1
Total Suspended Solids (kg/yr)	920	87.5	90.5
Total Phosphorus (kg/yr)	1.8	0.256	85.8
Total Nitrogen (kg/yr)	12.7	5.64	55.5
Gross Pollutants (kg/yr)	154	2.31	98.5

Include Pre-Development

MUSIC RESULTS

THE CONCEPTUAL STORMWATER DRAINAGE SYSTEM ON THIS SITE HAS BEEN DESIGNED, WITH THE USE OF "MUSIC" (MODEL FOR URBAN STORMWATER IMPROVEMENT CONCEPTUALISATION), SUCH THAT STORMWATER RUNOFF EXITING THE LAND MEETS THE CURRENT BEST PRACTICE WITH THE USE OF THE FOLLOWING TREATMENT DEVICES:

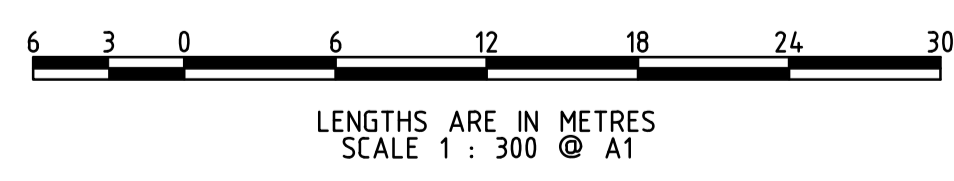
- 1 x 20,000L UNDERGROUND RAINWATER TANK
- PLUMBED TO IRRIGATION.
- 1 x ATLAN VORTCEPTOR (SQIDEP APPROVED)

PERFORMANCE OBJECTIVES FOR STORMWATER QUALITY, AS CONTAINED IN THE URBAN STORMWATER BEST PRACTICE ENVIRONMENTAL MANAGEMENT GUIDELINES (VICTORIAN STORMWATER COMMITTEE, 1999) AS FOLLOWS:

- 80% REDUCTION OF THE TYPICAL ANNUAL LOAD OF SUSPENDED SOLIDS (90.5% ACHIEVED)
- 45% REDUCTION OF THE TYPICAL ANNUAL LOAD OF TOTAL PHOSPHORUS (85.8% ACHIEVED)
- 45% REDUCTION OF THE TYPICAL ANNUAL LOAD OF TOTAL NITROGEN (55.5% ACHIEVED)
- 70% REDUCTION OF THE TYPICAL ANNUAL LOAD OF GROSS POLLUTANTS (98.5% ACHIEVED)

FOR TREATMENT OF STORMWATER ON SITE MEETS BEST PRACTICE GUIDELINES AND THEREFORE HAS AN EQUIVALENT "STORM" RATING OF 100%

DRAINAGE DESIGN PARAMETERS:
MINOR FLOWS:
20% AEP UNDERGROUND PIPED DRAINAGE NETWORK DIRECTED TO THE LPOD SHOWN ON PLAN.
MAJOR FLOWS:
1% AEP OVERLAND FLOW PATHS DIRECTED TO ROAD RESERVE.



NO	REVISION	DATE	NO	REVISION	DATE
A	TOWN PLANNING ISSUE	22/05/25			
P1	PRELIMINARY ISSUE	23/03/25			

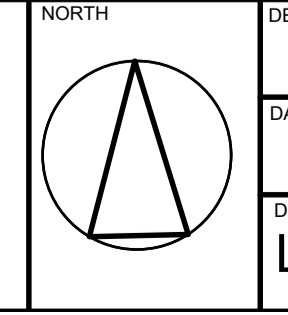
DATUMS USED FOR THIS DESIGN/DRAWING
VERTICAL: AHD - REFER BENCH MARKS ON PLAN VIDE PM MMB 2096, PARISH OF NUNAWADING, RL145.854m.
HORIZONTAL: MGA 2020 ZONE 55
PREPARED BY: SPEEDIE DEVELOPMENT CONSULTANTS
DATE: 20/09/24
REF No.: 13516F
MUNICIPALITY: WHITEHORSE CITY COUNCIL



Lanigan Civil
Patama Pty Ltd (ABN: 79 108 035 463)
Trading as Lanigan Civil
Consulting Civil Engineers
Unit 4, 7-9 Hail Street, Braeside VIC 3195
Tel: 03 9558 4380 Fax: 03 9587 9707
Email: admin@lanivil.com.au

AGED CARE FACILITY
8 WITT STREET,
MITCHAM

STORMWATER
MANAGEMENT PLAN



DESIGNED	DRAWN	CHECKED
NJC	NJC	--
DATE	SCALE/S	
AS NOTED	AS NOTED	
DWG NO	ISSUE	
LC3050-SMP1	A	

DIAL BEFORE YOU DIG
www.1100.com.au

CONTRACTOR MUST DIAL 1100 TO CONFIRM LOCATION OF EXISTING SERVICES AND COMPLY WITH ANY AUTHORITY REQUIREMENTS REGARDING EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORKS.