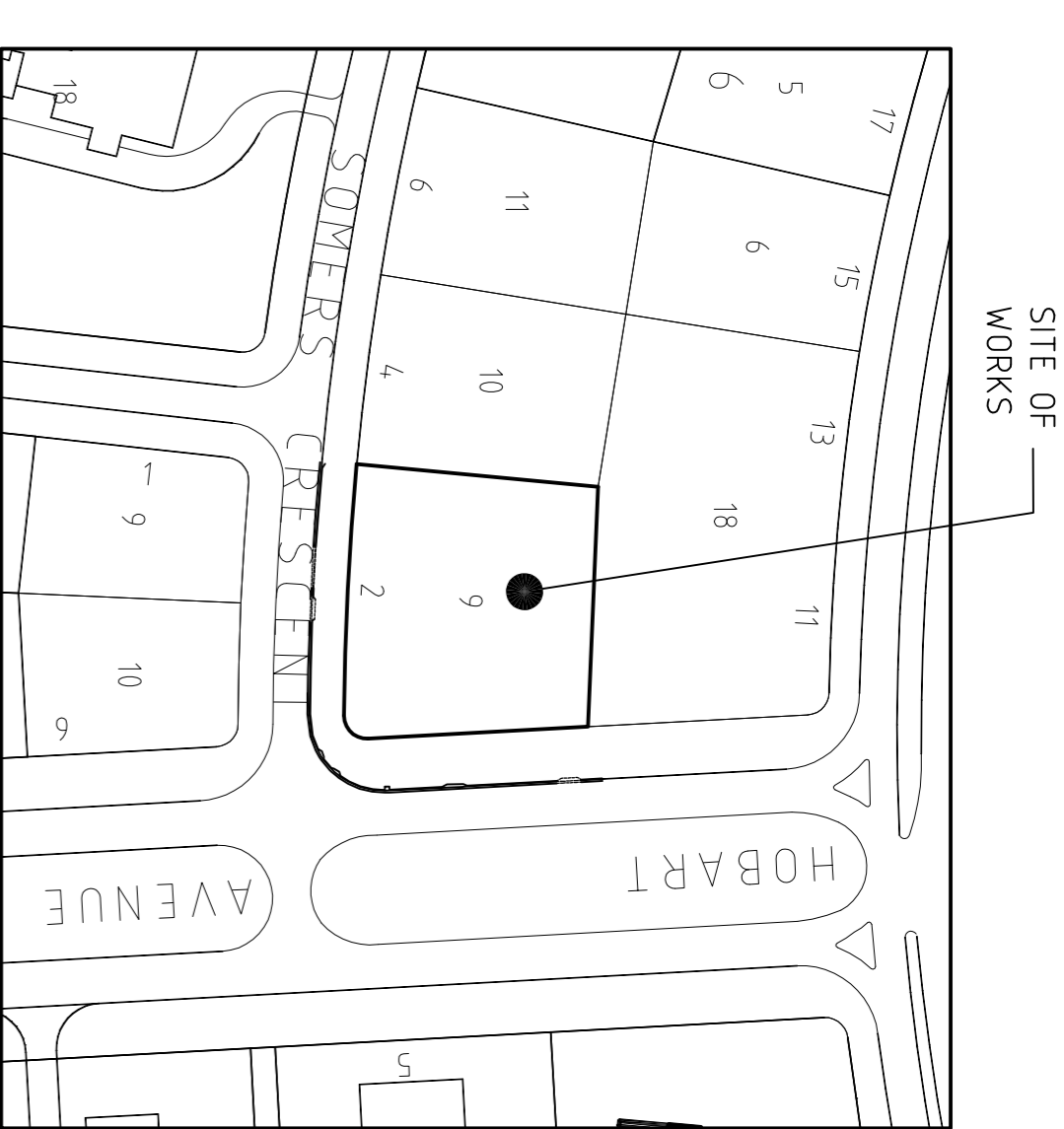


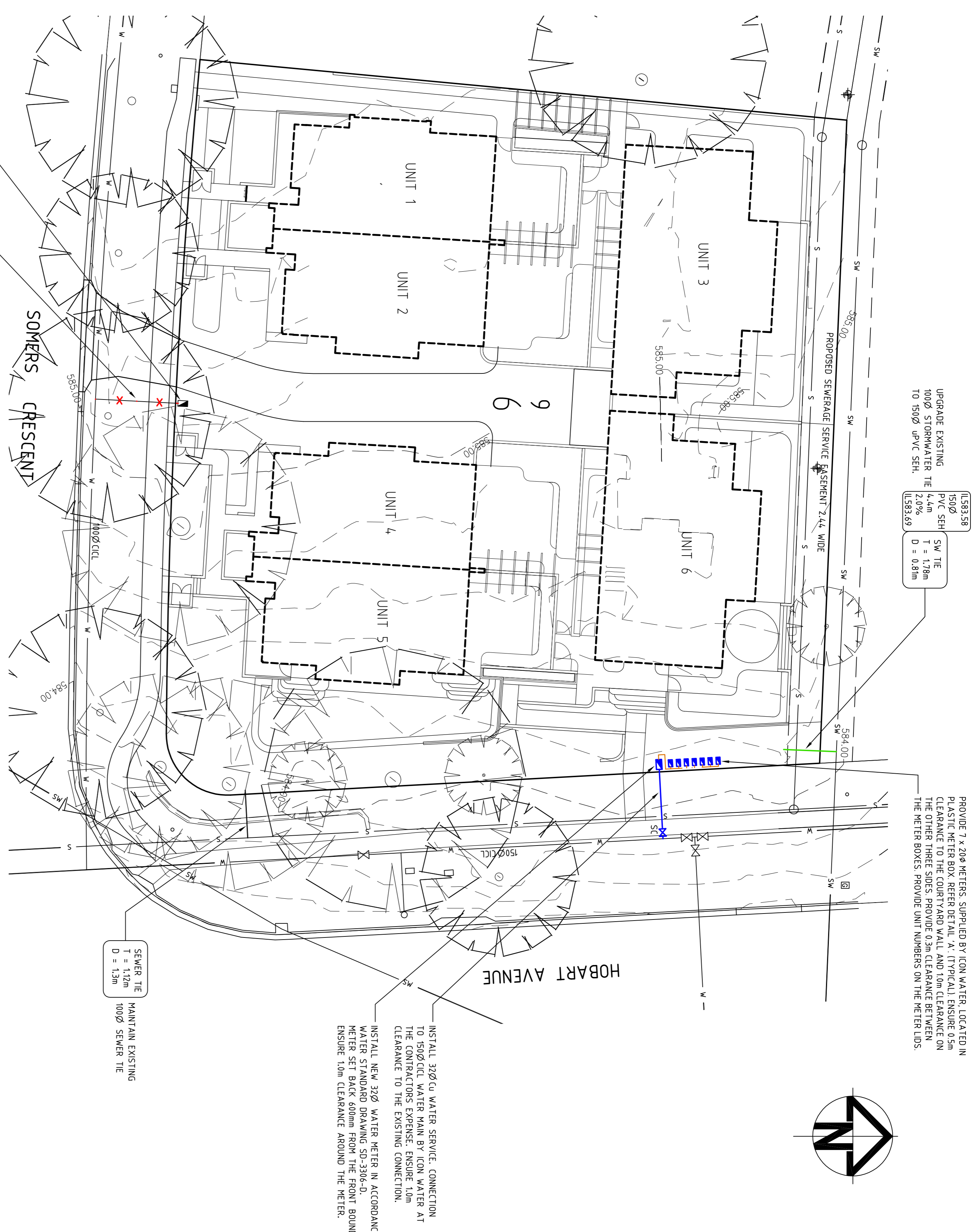
**DEPOSITED PLAN TO BE SUBMITTED AT THE TIME OF WORK AS EXECUTED DOCUMENTATION SUBMISSION.**

**GENERAL NOTES**

- ALL WORK ON ICON WATER'S WATER SUPPLY AND SEWER MAINS TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT ICON WATER'S WATER SUPPLY & SEWERAGE STANDARDS RELEASED AUGUST 2019. ALL WORK ON STORMWATER MAINS TO BE CARRIED OUT IN ACCORDANCE WITH DESIGN STANDARDS FOR URBAN INFRASTRUCTURE AND STANDARD SPECIFICATION FOR URBAN INFRASTRUCTURE WORKS.
- CONNECTIONS AND/OR DISCONNECTIONS OF SEWER AND WATER AT THE MAIN TO BE MADE BY ICON WATER 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 IN HIS TENDER FOR ALL TOPOGRAPHIC CONSTRAINTS AFFECTING THE EXECUTION OF THE WORKS AND THE RESTORATION OF THE SITE.
- ALTHOUGH THE POSITIONS 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 ARE 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 BEFORE COMMENCING WORK.
- WORK AS EXECUTED DRAWINGS, THE BOOK AND DEPOSITED PLAN 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 SITE AND DISPOSED OF AT AN APPROVED SPOIL AREA.
- THE CONTRACTOR SHALL REINSTATE ALL DISTURBED SURFACES TO MATCH EXISTING.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION OF ALL APPROVALS.
- CONTRACTOR TO CONFIRM DEPTH OF SEWER AND STORMWATER THE POINTS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ADVISE DESIGN ENGINEER IF NOT IN ACCORDANCE WITH PLAN.



**LOCALITY PLAN**  
NOT TO SCALE



INSTALL NEW 32Ø WATER METER IN ACCORDANCE WITH ICON WATER STANDARD DRAWING SD-3306-D. WATER SET BACK 600MM FROM THE FRONT BOUNDARY. ENSURE 1.0M CLEARANCE AROUND THE METER.

SEWER TIE  
T = 1.2m  
D = 150mm  
100Ø SEWER TIE

LEG3358  
150Ø SW TIE  
KALC SEH  
T = 1.78m  
100Ø STORMWATER TIE  
1.2%  
D = 0.81m  
L1633.69

PROVIDE 7 x 20Ø METERS, SUPPLIED BY ICON WATER, LOCATED IN PLASTIC METER BOX. REFER DETAIL 'A'. (TYPICAL). ENSURE 0.3m CLEARANCE TO THE CURB AND WALL AND 1.0m CLEARANCE ON THE OTHER THREE SIDES. PROVIDE 0.3m CLEARANCE BETWEEN THE METER BOXES. PROVIDE UNIT NUMBERS ON THE METER LIDS.

EXISTING WATER METER TO BE REMOVED BY ICON WATER AT THE TIME OF DISCONNECTION. WATER METER NO. TBC.

EXISTING 20Ø WATER SERVICE TO BE DISCONNECTED AND EXHUMED. DISCONNECTION AT THE 100Ø CIL MAIN BY ICON WATER AT THE CONTRACTOR'S EXPENSE. DEVELOPER TO SEEK ALL NECESSARY AUTHORITY APPROVALS FOR THE WORKS WITHIN THE TFL.

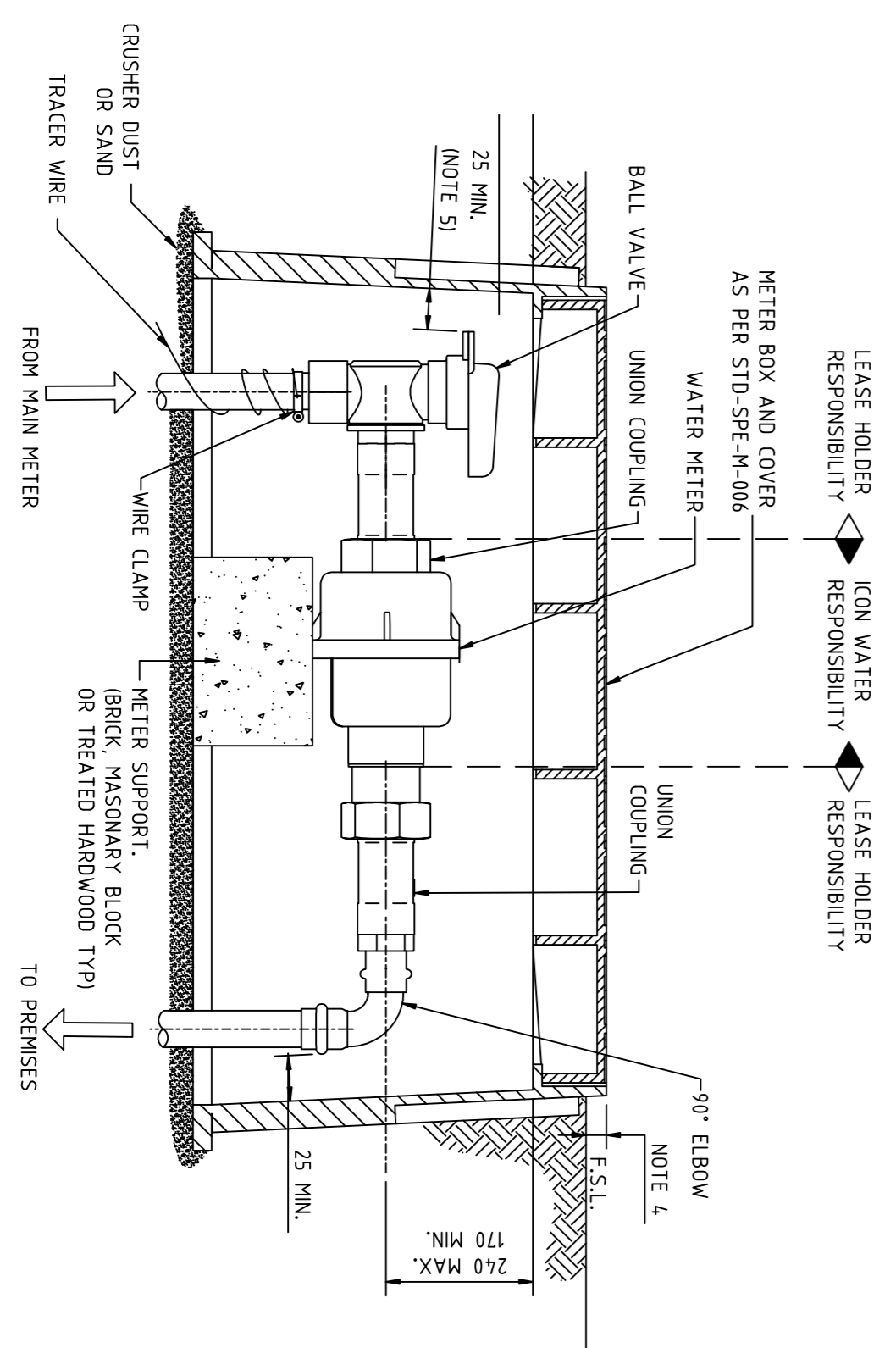
**NOTES:**

- PROVIDE 7 x 20Ø METERS, SUPPLIED BY ICON WATER, LOCATED IN PLASTIC METER BOX.
- INTERNAL METERS TO BE OWNED AND UNDER THE RESPONSIBILITY OF ICON WATER.
- INTERNAL MAINS TO BE OWNED AND UNDER THE RESPONSIBILITY OF THE BODY CORPORATE.

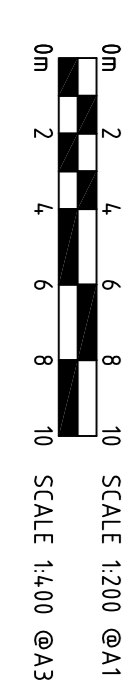
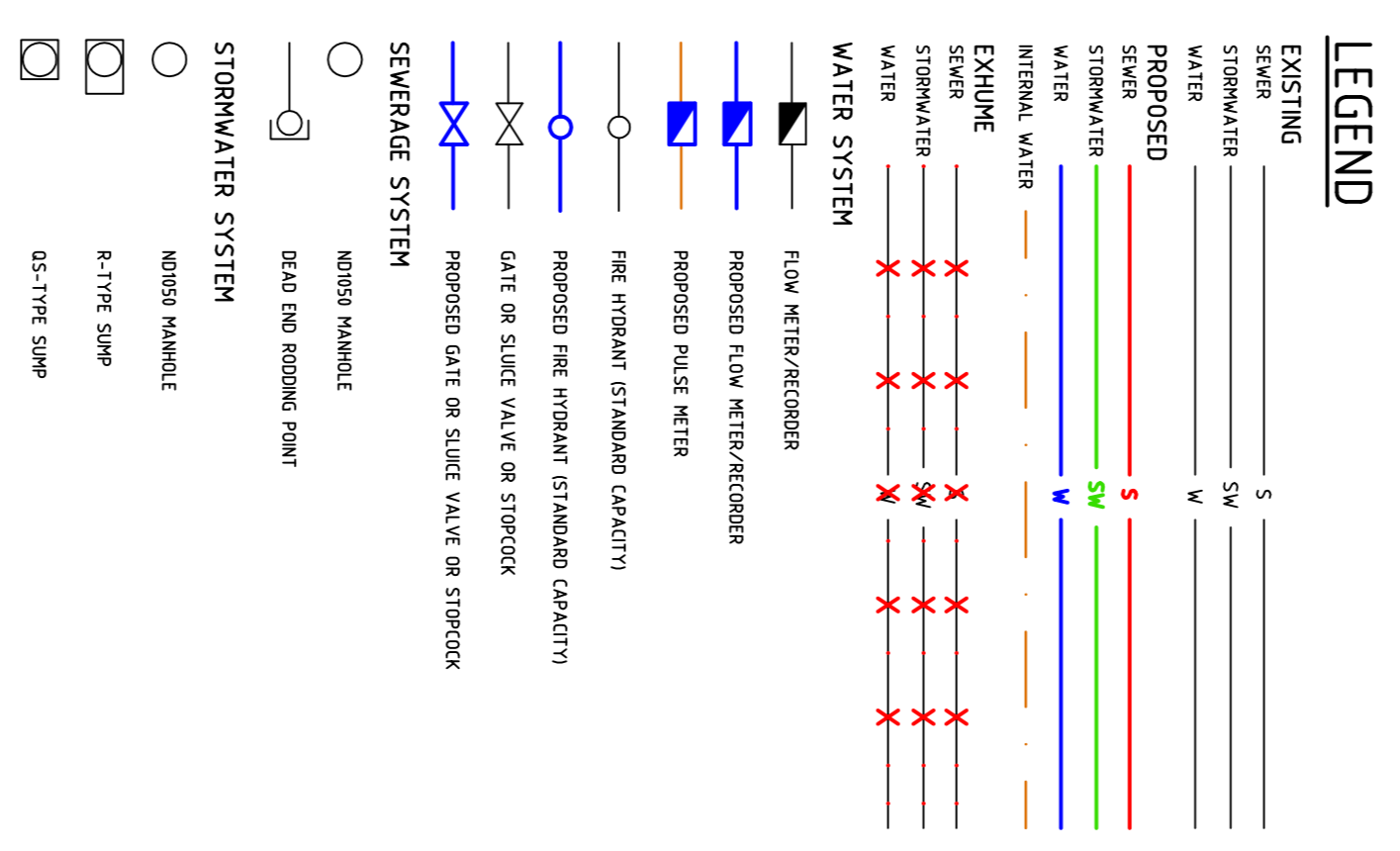
THE CONTRACTOR SHALL CONFIRM THE DEPTH AND LOCATION OF ALL SERVICES ON SITE BEFORE COMMENCING EXCAVATIONS

**DRIVEWAY NOTE FOR ALL DRIVEWAYS:**

ENSURE DRIVEWAY BACKFILL AND COVER LEVELS IS IN ACCORDANCE WITH ICON WATER STANDARD DRAWING SD-2106-D.



UNIT No.	METER No.
BULK	-
BC	-
1	-
2	-
3	-
4	-
5	-
6	-



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(m) 0412 330 243

**RUMBLE CAROLINE RUMBLE**  
PROJECT  
PROPOSED UNIT DEVELOPMENT  
BLOCK 9, SECTION 6  
FOREST, ACT

**EXTERNAL SERVICES PLAN**  
DESIGNED BY KS  
DRAWN BY KS  
AUTHORISED 24RUMBLE1  
DATE JUN 24

SCALE 1:200 @ A1  
JOB NO. 24RUMBLE1  
DRAWING NO. DA01



### CONCRETE KERBS, FOOTPATHS AND MINOR WORKS

1. CONSTRUCTION OF CONCRETE KERBS, FOOTPATHS AND MINOR WORKS SHALL BE IN ACCORDANCE WITH DESIGN STANDARD DRAWINGS DS3-01, DS3-02 AND DS3-03.
2. ALL CONCRETE TO BE MINIMUM GRADE N25 (f<sub>c</sub>=25MPa) UNLESS NOTED OTHERWISE. AGGREGATE SIZE TO BE 20 MAXIMUM.
3. JOINTING SHALL BE IN ACCORDANCE WITH DESIGN STANDARD DRAWINGS DS3-02 AND DS3-03.
4. BROOMED FINISH TO BE APPLIED TO ALL VEHICULAR CROSSINGS, FOOTPATHS AND RAMP RAMP. ALL OTHER EXPOSED SURFACES TO HAVE STEEL FLOAT FINISH.
5. ALL CONCRETE TO BE CURED CONTINUOUSLY FOR THREE DAYS AFTER PLACING OR ALTERNATIVELY COATED WITH AN APPROVED CURING COMPOUND IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION.

### CONCRETE PAVEMENT NOTES

1. ALL CONCRETE SHALL BE MINIMUM GRADE N22 (f<sub>c</sub>=22 MPa).
2. ALL PAVEMENT TO BE 150mm THICK AND REINFORCED WITH ONE LAYER OF S182 FABRIC AT 50mm TOP COVER UNLESS SHOWN OTHERWISE.
3. BROOMED FINISH TO BE APPLIED TO ALL CONCRETE SURFACES.
4. ALL CONCRETE TO BE CURED CONTINUOUSLY FOR THREE DAYS AFTER PLACING.

### VERGE GRASSING NOTES

1. DURING THE PROJECT RETAIN ALL EXISTING VERGE GRASS COVER. WATERING MAY BE REQUIRED TO RETAIN GRASS AND TREES IN GOOD CONDITION.
2. AT THE COMPLETION OF CONSTRUCTION VERGES SHOULD STILL HAVE ESTABLISHED DRYLAND GRASS COVER. TOPSOIL IS NOT TO BE REMOVED AND THE SOIL LEVEL MUST NOT BE CHANGED.
3. IF THE STANDARD OF GRASS COVER ON THE VERGE IS TO BE IMPROVED, THE FOLLOWING REQUIREMENTS APPLY.
  - LIGHTLY CULTIVATE THE SOIL TO 25 MM - 50 MM DEPTH (50 MM MAXIMUM TO MINIMISE DAMAGE TO TREE ROOTS). CULTIVATE ONLY IF ONE DIRECTION. AVOID MAJOR ROOTS, AND KEEP A MINIMUM OF 1-2M AWAY FROM TREE TRUNKS.
  - ADD B TYPE TOPSOIL AT 25-4MM - 50-4MM DEPTH. LEVEL THE TOPSOIL AND ADD NPK FERTILISER EQUIVALENT TO MULTIGRO AT 40G/M<sup>2</sup>.
  - LAY TURF OR SOW SEED OF SUITABLE DROUGHT TOLERANT SPECIES. KEEP MOIST DURING ESTABLISHMENT.
  - ANTI-GROUND IRRIGATION SYSTEM WILL NOT BE PERMITTED IN THE VERGE. A SYSTEM OF QUICK COULTERS AT THE LEASE EDGE OF THE PLACES APPROVAL OF THE IRRIGATION PLAN.
4. ANY DAMAGE THAT OCCURS TO TREES IS TO BE REPAIRED AT THE DEVELOPER'S EXPENSE. RESTORATIVE WORK IS TO BE APPROVED BY CANBERRA URBAN PARKS AND PLACES (COPPLAND CARRIED OUT BY APPROVED OPERATORS).

ISSUE	DESCRIPTION	DATE	CHECKED
A	FOR DEVELOPMENT APPROVAL.	01.06.24	

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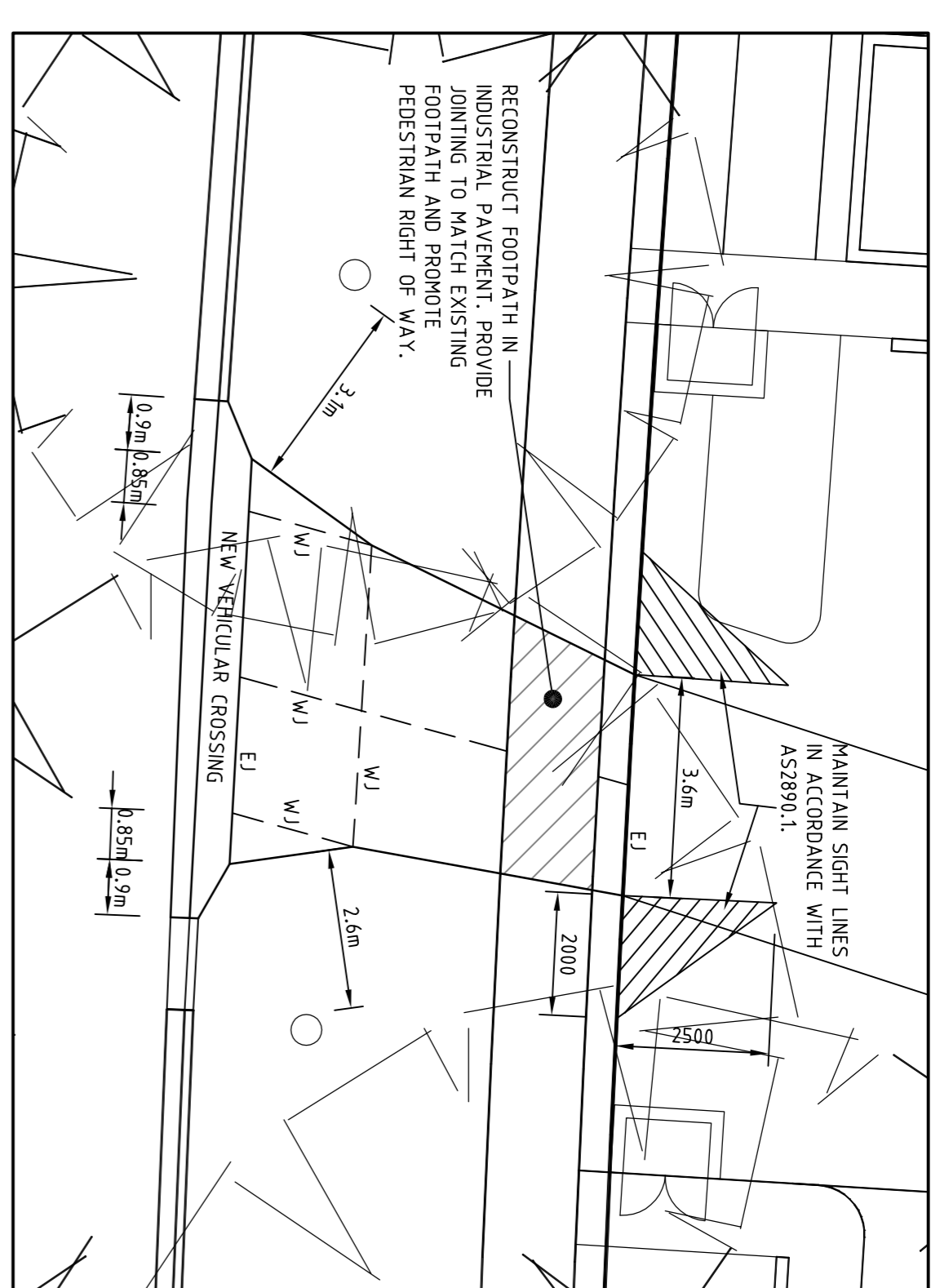
CLIENT  
**RUMBLE**

PROJECT  
**PROPOSED UNIT DEVELOPMENT  
 BLOCK 9, SECTION 6  
 FOREST, ACT**

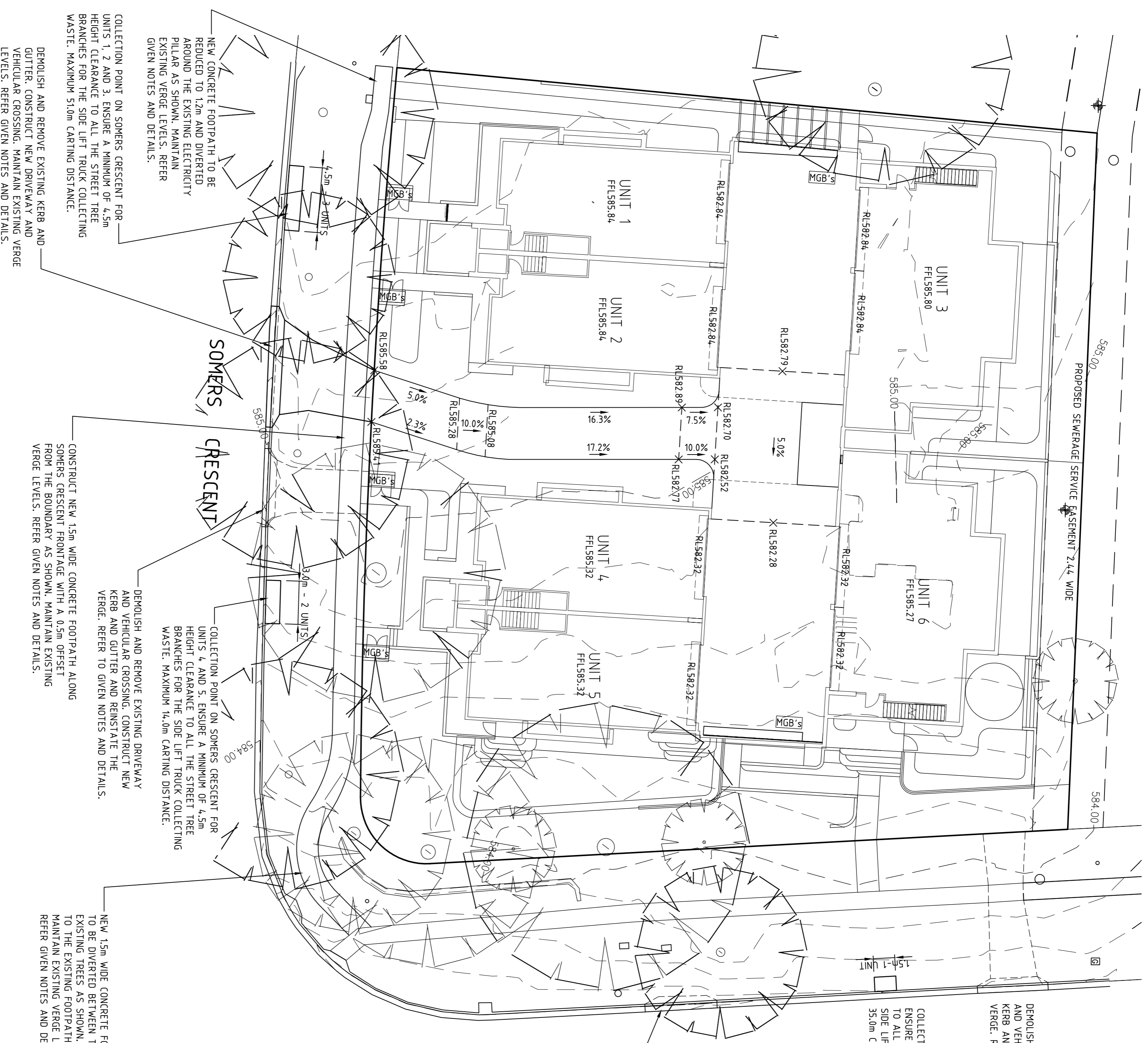
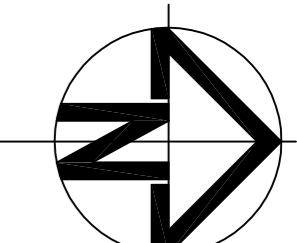
TITLE  
**CIVIL WORKS PLAN  
 AND DETAILS**

DESIGNED BY  
 KS  
 DRAWN BY  
 KS  
 AUTHORISED  
 ZARUMBLE1  
 DATE  
 JUN 24

SCALE  
 1:200 @ A1  
 JOB NO.  
 DRAWING NO.  
 DA02



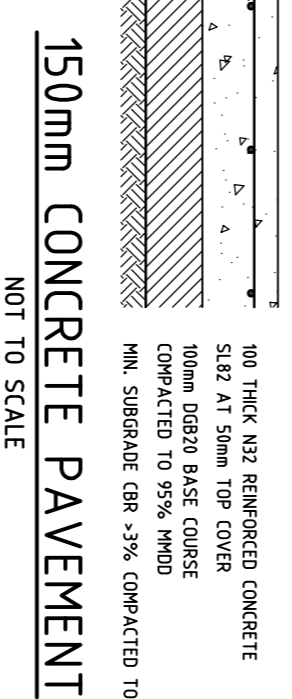
DRIVEWAY DETAIL 1:100



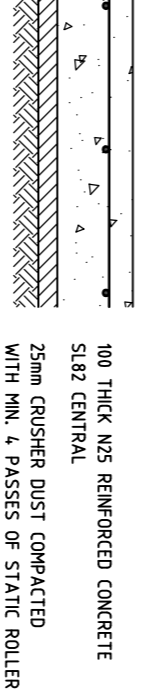
DEMOLISH AND REMOVE EXISTING DRIVEWAY AND VEHICULAR CROSSING. CONSTRUCT NEW KERB AND GUTTER AND REINSTATE THE VERGE. REFER TO GIVEN NOTES AND DETAILS.

COLLECTION POINT ON HOBART PLACE FOR UNIT 6. ENSURE A MINIMUM OF 1.2m CLEARANCE TO ALL THE STREET TREE BRANCHES FOR THE SIDE LIFT TRUCK COLLECTING WASTE. MAXIMUM 35.0m CARTING DISTANCE.

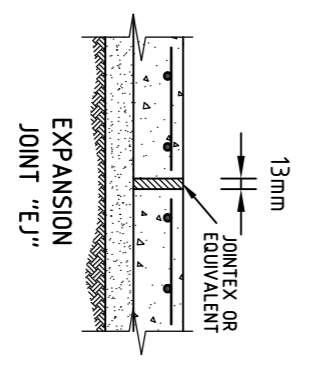
DEMOLISH AND REMOVE EXISTING DRIVEWAY AND VEHICULAR CROSSING. CONSTRUCT NEW KERB AND GUTTER AND REINSTATE THE VERGE. REFER TO GIVEN NOTES AND DETAILS.



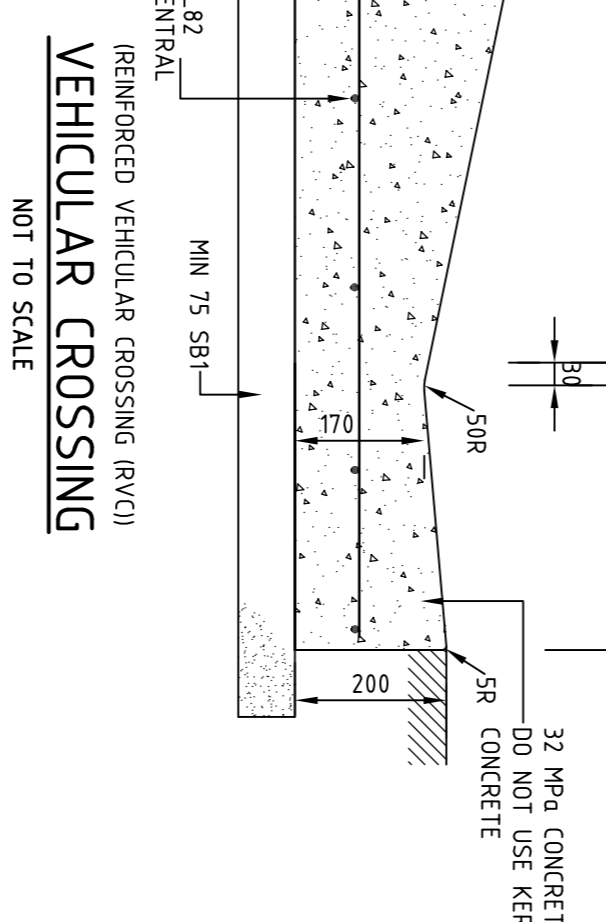
150mm CONCRETE PAVEMENT NOT TO SCALE



TYPE 'C' FOOTPATH NOT TO SCALE



JOINT DETAILS NOT TO SCALE



VEHICULAR CROSSING NOT TO SCALE

NOTES:

- MAINTAIN EXISTING VERGE GRASSING. REINSTATE AS NECESSARY IN ACCORDANCE WITH GIVEN NOTES.
- MAINTAIN EXISTING FOOTPATH. SHOULD ANY PANELS BE REPLACED, RECONSTRUCT TO MATCH EXISTING WIDTH WITH GIVEN DETAIL.

NOTE:

- BINS TO BE TRANSFERRED FROM THE COURTYARDS TO THE KERBSIDE COLLECTION POINT AND SUBSEQUENTLY REMOVED FROM THE KERB AFTER COLLECTION BY THE INDIVIDUAL UNIT OWNERS.

COLLECTION POINT ON SOMERS CRESCENT FOR UNITS 1, 2 AND 3. ENSURE A MINIMUM OF 4.5m HEIGHT CLEARANCE TO ALL THE STREET TREE BRANCHES FOR THE SIDE LIFT TRUCK COLLECTING WASTE. MAXIMUM 35.0m CARTING DISTANCE.

NEW CONCRETE FOOTPATH TO BE REDUCED TO 1.2m AND DIVERTED AROUND THE EXISTING ELECTRICITY PILLAR AS SHOWN. MAINTAIN EXISTING VERGE LEVELS. REFER TO GIVEN NOTES AND DETAILS.

CONSTRUCT NEW 15m WIDE CONCRETE FOOTPATH ALONG SOMERS CRESCENT FRONTAGE WITH A 0.5m OFFSET FROM THE BOUNDARY AS SHOWN. MAINTAIN EXISTING VERGE LEVELS. REFER TO GIVEN NOTES AND DETAILS.

DEMOLISH AND REMOVE EXISTING DRIVEWAY AND VEHICULAR CROSSING. CONSTRUCT NEW KERB AND GUTTER AND REINSTATE THE VERGE. REFER TO GIVEN NOTES AND DETAILS.

COLLECTION POINT ON SOMERS CRESCENT FOR UNITS 4, AND 5. ENSURE A MINIMUM OF 4.5m HEIGHT CLEARANCE TO ALL THE STREET TREE BRANCHES FOR THE SIDE LIFT TRUCK COLLECTING WASTE. MAXIMUM 35.0m CARTING DISTANCE.

NEW 15m WIDE CONCRETE FOOTPATH TO BE DIVERTED BETWEEN THE EXISTING TREES AS SHOWN. CONNECT TO THE EXISTING FOOTPATH NETWORK. MAINTAIN EXISTING VERGE LEVELS. REFER TO GIVEN NOTES AND DETAILS.



## WATER SENSITIVE URBAN DESIGN CHECKLIST

MANS WATER USE	RATING	APPLIANCES (OPTIONAL)	RATING
PLUMBING FITTING	3 STAR	WASHING MACHINE	3 STAR
TAPS	4 STAR	DISHWASHER	3 STAR
SHOWER HEADS	4 STAR		
TOILETS			
OTHER			

LANDSCAPING	AREA OF IRRIGATED LAWN	AREA OF IRRIGATED GARDEN BEDS	TOTAL IRRIGATED AREA	AREA OF NON-IRRIGATED LAWN	AREA OF NON-IRRIGATED GARDEN BEDS	TOTAL NON-IRRIGATED AREA
	120.0	600.0	720.0	0	153.8	153.8
	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>

RAINWATER STORAGE AND USE PROPOSED	YES	NO
PROPOSED WATER	YES	NO
TOILET FLUSHING	NO	NO
OTHER	NO	NO

ESTIMATED MANS WATER USE REDUCTION USING THE DESIGN RESPONSE REPORT, BASIX OR OTHER ASSESSMENT TOOL, SPREADSHEET: 44%

STORMWATER MANAGEMENT	2553.8	m <sup>2</sup>
DEVELOPMENT AREA	2553.8	m <sup>2</sup>
IMPERVIOUS AREA - ROOF AREA	900.0	m <sup>2</sup>
ROOF CONNECTED TO RAINWATER STORAGE	400.0	m <sup>2</sup>
TOTAL ROOF AREA NOT CONNECTED TO STORAGE	1300.0	m <sup>2</sup>
IMPERVIOUS AREA - PAVED AREAS	380.0	m <sup>2</sup>
HARD PAVED AREAS	0	m <sup>2</sup>
PERMEABLE / POROUS PAVING	380.0	m <sup>2</sup>
TOTAL	380.0	m <sup>2</sup>

TOTAL IMPERVIOUS AREAS (WITH A 50% REDUCTION APPLIED TO PERMEABLE/POROUS PAVING AREAS) 1680.0 m<sup>2</sup>

THIS PROJECT IS IN A RESIDENTIAL ZONED AREA. THE STORMWATER SITE STORAGE REQUIREMENT IS DIVIDED BY 100 AND MULTIPLIED BY 1.4 KL

PAVED AREAS SHEDDING RUNOFF TO GARDEN BEDS AND/OR LAWNS 200 m<sup>2</sup>

RAINWATER STORAGE PROPOSED: YES

TYPE OF STORAGE (ABOVE GROUND TANK, BURIED TANK, GUTTER STORAGE, WALL STORAGE, OTHER) 45,000L BELOW GROUND TANKS

VOLUME OF STORAGE (M3 OR KL) 45.0 m<sup>3</sup>(KL)

EXTENDED STORAGE DETENTION PROPOSED YES

SUMMARY OF WSUD TARGETS AND ACHIEVEMENTS

MANS WATER USE REDUCTION	TARGET	ACHIEVED
STORMWATER SITE STORAGE	40% (2352 M3(KL))	44% (45.0 M3(KL))

## WATER CONSERVATION STRATEGIES

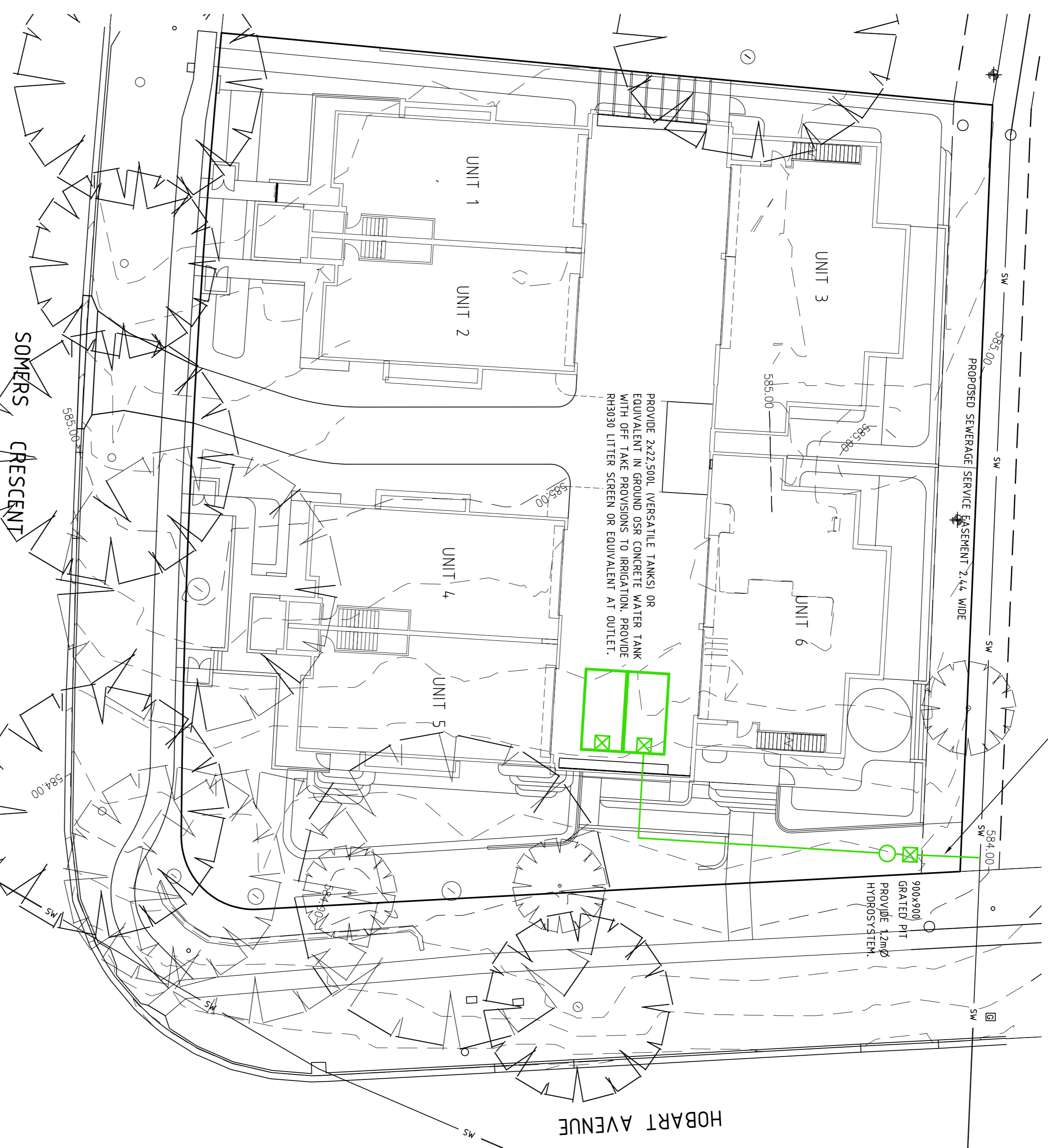
- ON SITE RETENTION TANK PROVIDED FOR LANDSCAPE IRRIGATION.
- DUAL FLUSH CISTERNS TO BE PROVIDED TO ALL WCS THROUGHOUT DEVELOPMENT.
- WATER SAVER SHOWER HEADS TO BE PROVIDED.
- MUCH TO BE PROVIDED TO ALL GARDEN BEDS (50mm MINIMUM DEPTH).

## STORMWATER NOTES

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH AS 3500.3 AND THE DESIGN STANDARDS FOR URBAN INFRASTRUCTURE.
- ALL STORMWATER LINES TO BE 100Ø UPVC AT 1.0% MIN. GRADE UNLESS NOTED OTHERWISE.
- COVER TO SERVICES TO BE IN ACCORDANCE WITH AS 3500.3-2-1998.
- ALL SUB-SOIL LINES TO BE SLEEVED WITH GEF-FABRIC FILTER WITH NO FINES AGGREGATE BACKFILL.
- MAXIMUM IN GROUND JUNCTION DEFLECTION ANGLE TO BE 45 DEGREES.

## MAINTENANCE NOTES

- MAINTENANCE OF STORAGE SYSTEM IS THE RESPONSIBILITY OF THE BODY CO-OPERATE.
- MAINTENANCE TO BE CARRIED OUT ON A QUARTERLY BASIS AT A MINIMUM AND AFTER EXTENDED PERIODS OF RAINFALL.
- MAINTENANCE PROCEDURE TO INCLUDE:
  - REMOVAL OF GROSS POLLUTANTS AND SEDIMENT FROM TANK AND SUMPS.
  - REMOVAL AND CLEANING OF LITTERSCREEN AND REINSTATE.
  - FLUSH SYSTEM AND REMOVE REMAINING SEDIMENT AS NECESSARY.
  - ASSESS CONDITION OF ORIFICE PLATE, REPLACE IF POOR.
  - GENERAL ASSESSMENT OF SYSTEM, CARRY OUT ANY NECESSARY REPAIRS.



## MINIMUM INTERNAL DIMENSIONS STORMWATER AND INLET PITS

Depth to invert of outlet	Minimum internal dimensions	
	Rectangular	Circular
<400	450	450
>400 <900	600	600
>900 <1200	600	900
>1200	900	1000

AS3500.3.2 Table 8.2

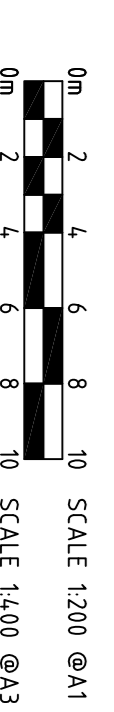
## TREATMENT TRAIN EFFECTIVENESS

OUTPUT DATA FROM MUSIC SOFTWARE			
SOURCE	RESIDUAL LOAD	REDUCTION (%)	TARGET (%)
FLOW ML/yf	0.707	0.518	26.7
TSS kg/yf	171	53.9	68.5
TP kg/yf	0.152	0.077	49.3
TN kg/yf	2.18	1.16	46.8
			4.0

NOTE: RETAINED WATER TO BE USED ON GARDEN BEDS AND LAWN TO MINIMIZE POLLUTANTS.

DETENTION  
SITE STORAGE REQUIRED = 8.4 m<sup>3</sup>  
SITE STORAGE PROVIDED = 0.0 m<sup>3</sup>

RETENTION  
SITE STORAGE REQUIRED = 23.52 m<sup>3</sup>  
SITE STORAGE PROVIDED = 45.0 m<sup>3</sup>



## CIVIL WORKS PLAN AND DETAILS

PROJECT  
PROPOSED UNIT DEVELOPMENT  
BLOCK 9, SECTION 6  
FOREST, ACT

PIERRE DRAGH  
CONSULTING ENGINEERS PTY. LTD.  
PO BOX 336 HALL ACT 2618  
(m) 0412 330 243

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RUMBLE

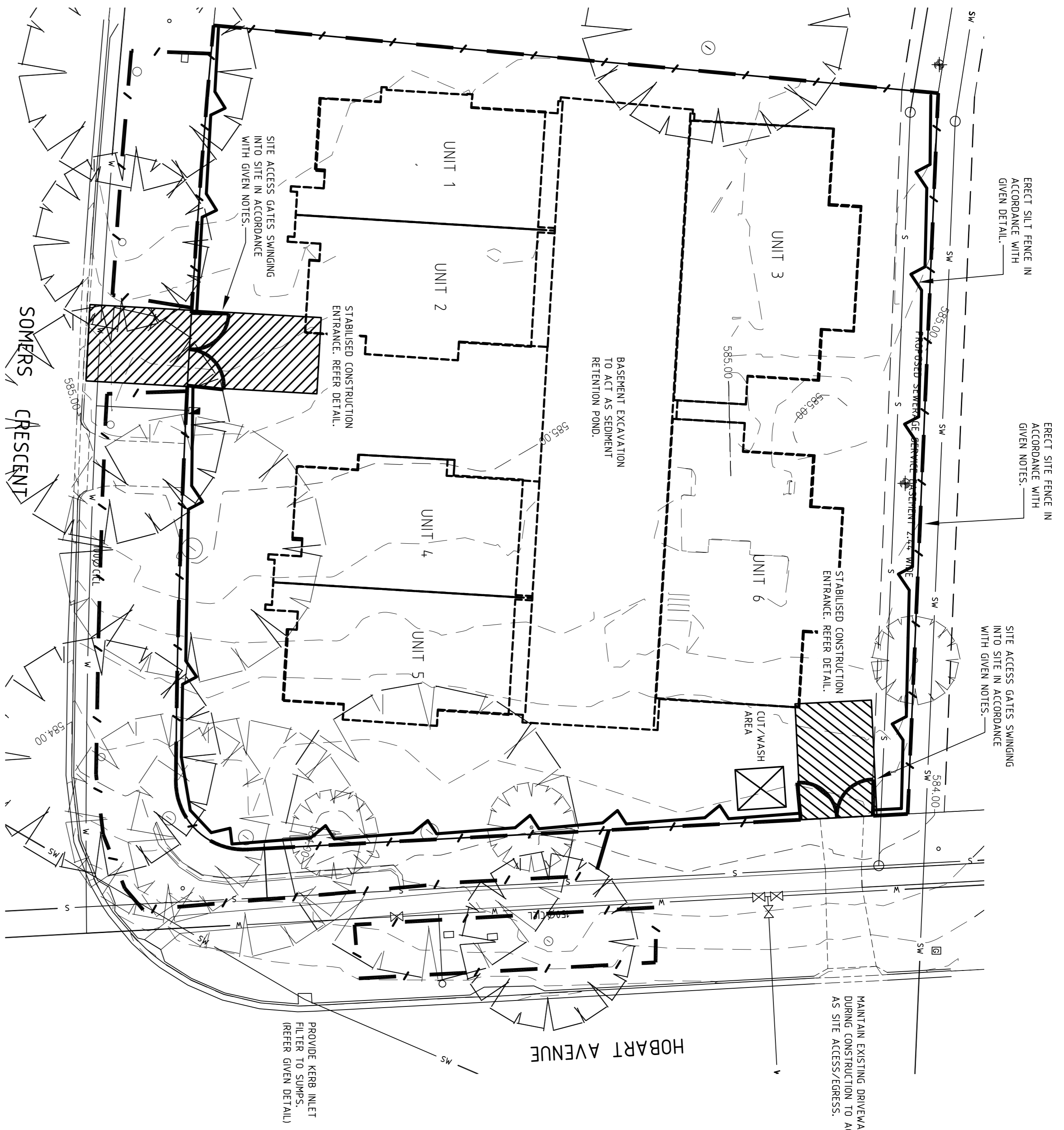
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KS  
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KS  
JOB NO. 24RUMBLE1  
AUTHORISED  
DRAWING NO.  
DATE JUN 24

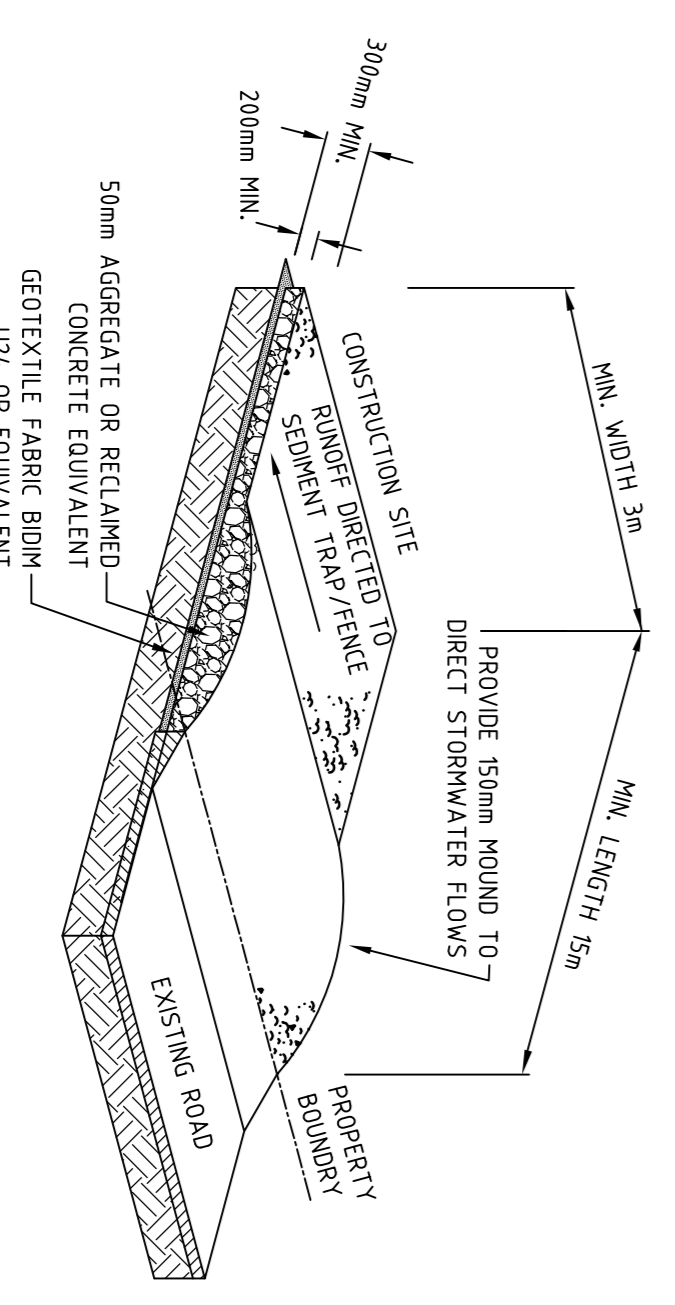
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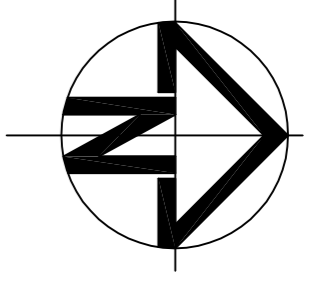
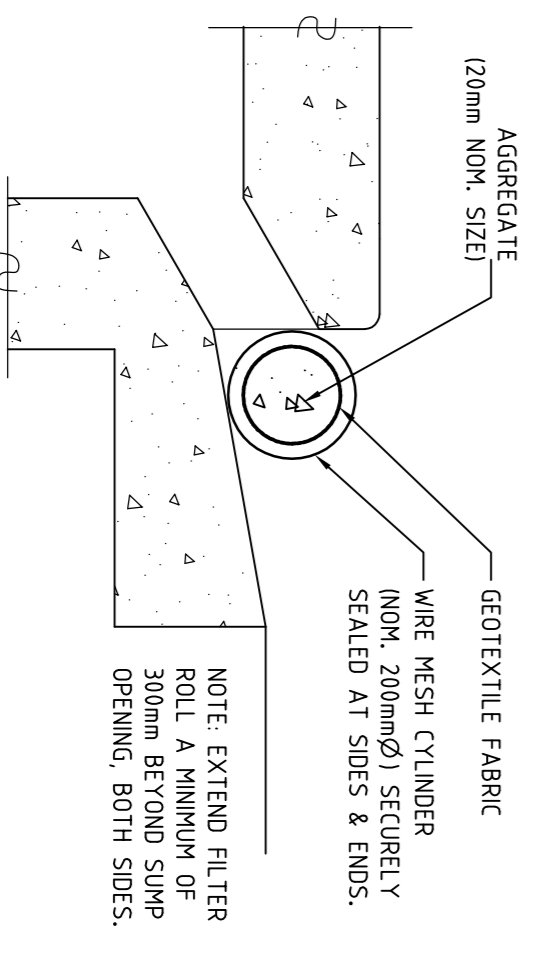




**STABILISED CONSTRUCTION ENTRANCE**  
NOT TO SCALE



**TYPICAL SECTION FILTER ROLL**  
NOT TO SCALE



**MAINTENANCE SCHEDULE**

- MONTHLY:
  - TURN OVER STABILISED CONSTRUCTION ENTRY MATERIAL AND TOP UP AS REQUIRED.
- WEEKLY:
  - CHECK AND REINSTATE SILT CONTROL FENCES.
- DAILY:
  - SWEEP AND REMOVE ANY DIRT TRACKED ONTO PUBLIC ROADS BY VEHICLES. ALL NECESSARY STEPS SHOULD BE TAKEN THAT ARE PRACTICAL AND REASONABLE TO MINIMISE DUST POLLUTION ON LAND DEVELOPMENT AND CONSTRUCTION SITE.
  - DURING/AFTER WET WEATHER:
    - LIMIT CONSTRUCTION VEHICLE ACCESS TO SITE DURING AND IMMEDIATELY FOLLOWING WET WEATHER.

**DUST MANAGEMENT**

- A WATER CABT OR SUFFICIENT WATER SPRAYS SHALL BE MADE AVAILABLE IN DRY AND WINDY CONDITIONS TO MAINTAIN DUST SUPPRESSION.
- WATER SHALL BE APPLIED TO SUPPRESS DUST FROM OPEN EARTHWORKS AS WELL AS UNPROTECTED STOCKPILES.
- STOCKPILES SHALL BE EITHER COVERED OR SEEDED TO PREVENT DUST.
- AREAS OF COMPLETED EARTHWORKS SHALL BE PROGRESSIVELY REHABILITATED WITH DRYLAND GRASS AND FENCED OFF AS SOON AS PRACTICABLE TO PREVENT FURTHER EROSION.
- THE CONTRACTOR SHALL CONTACT ACTEWAGL TO OBTAIN AN EXEMPTION TO USE WATER ON THE SITE.

**CONTACT DETAILS**

PROJECT MANAGER: TBC  
SITE FOREMAN: TBC

**HOURS OF OPERATION**

- SITE WORKS TO BE CONDUCTED ONLY BETWEEN THE FOLLOWING HOURS:
  - WEDNESDAYS 7:00AM TO 6:00PM
  - SATURDAYS 7:00AM TO 6:00PM
  - NO WORK ON SUNDAYS OR PUBLIC HOLIDAYS

**GENERAL NOTES**

- WASTE ENCLOSURES WILL BE USED FOR ALL RUBBISH ON SITE AND RUBBISH REMOVED FROM ENCLOSURES WHEN REQUIRED OR FULL.
- IT IS A BALANCED SITE.
- ALL WORK TO COMPLY WITH ENVIRONMENT PROTECTION GUIDELINES FOR CONSTRUCTION AND LAND DEVELOPMENT IN THE ACT 2011.

**SEDIMENT RETENTION POND**

- THE SEDIMENT RETENTION POND SHALL BE FULLY MAINTAINED UNTIL THE DISTURBED CATCHMENT AREA IS PROTECTED AGAINST EROSION BY PERMANENT STABILISATION.
- PROTECTION SHALL BE PROVIDED FOR THE FINAL LANDSCAPE WORKS UTILISING SILT CONTROL FENCING.
- THE SEDIMENT RETENTION POND SHALL BE CLEANED OUT WHEN THE VOLUME REMAINING IS REDUCED BY SEDIMENTATION TO 90%.
- THE EMBANKMENT SHALL BE STABILISED WITH HERIAN TEMPORARILY.
- THE POND IS TO BE HELD EMPTY TO ENABLE IT TO CAPTURE STORM EVENTS. CAPTURED STORM FLOWS SHALL BE CHEMICALLY Dosed WITH GYPSUM AT A RATE OF 320MG PER CUBIC METRE.
- DISCHARGE FROM THE POND IS PERMITTED WHEN THE WATER HAS CLARIFIED TO BELOW 60MG/L (USUALLY WITHIN 24-36 HOURS).
- DISCHARGE OF TREATED WATER TO FEED INTO FILTER POND PRIOR TO DISCHARGE INTO STORMWATER SYSTEM.
- ENVIRONMENT ACT TO BE ADVISED OF PROPOSED POND DISCHARGE PRIOR TO DISCHARGE.

**SEDIMENT CONTROL NOTES**

- SEDIMENT AND EROSION CONTROL DEVICES TO BE INSTALLED AND FULLY OPERATIONAL PRIOR TO STRIPPING OF SITE TOP SOIL.
- STOCK PILES/S TO BE LOCATED AWAY FROM DRAINAGE LINES AND SURFACE FLOW PATHS. CONTROLLED STRATAIONS OR FARRAWS TO BE PROVIDED TO STOCK PILES TO MINIMISE EROSION.
- STABILISED CONSTRUCTION ENTRANCE TO BE CONSTRUCTED PRIOR TO ACCESS TO SITE BY CONSTRUCTION VEHICLES. AGGREGATE REQUIRED FOR STORMWATER DRAINAGE IS INSTALLED TO INTERNAL ROADWAYS. PROVIDE GRADED SWP FILTER IN ACCORDANCE WITH GIVEN DETAIL.
- AVERAGE EXISTING SITE SLOPE 3.9%
- TOTAL SITE AREA 0.25HA.
- BUILDER IS TO ESTABLISH A MAINTNANCE PROGRAM FOR SEDIMENT & EROSION CONTROL DEVICES TO ENSURE INSPECTION AFTER SIGNIFICANT RAINFALL AND THAT ANY REPAIRS NECESSARY ARE QUICKLY ATTENDED TO.
- ENVIRONMENT PROTECTION WITH ENVIRONMENT PROTECTION AUTHORITY. (TELEPHONE 132281)
- ALL NEW CONSTRUCTION WORK MUST BE CONTAINED WITHIN THE ROADWORKS.
- LIMIT ACCESS TO SITE DURING AND IMMEDIATELY AFTER WET WEATHER.
- REGULARLY REMOVE ANY SOIL FROM ROADS ADJACENT TO THE SITE.
- NO STORAGE OF CONSTRUCTION MATERIALS, PARKING OF VEHICLES NOR EQUIPMENT PERMITTED OUTSIDE OF BLOCK WITHOUT TAMS APPROVAL.
- NO SITE SHEDS, STORAGE SHEDS, SITE AMENITIES TO BE ERECTED OUTSIDE OF BLOCK WITHOUT TAMS APPROVAL.
- PROVIDE REVERSE FILTER ROLL TO EXISTING SWMP WHERE INDICATED REFER TO GIVEN DETAIL.
- REVERSE FILTER ROLLS TO BE REMOVED, CLEANED AND REINSTALLED PRIOR TO SITE WORKS. LEAKING IS ALSO TO TAKE PLACE IMMEDIATELY AFTER PERIODS OF RAINFALL DURING CONSTRUCTION.
- ALL SERVICE TRENCHES TO BE BACK FILLED WITHIN 24HOURS OF INSPECTION.
- EXCESS SOIL IS TO BE DISPOSED AT AN EPA APPROVED LOCATION.
- THE SITE FOREMAN IS TO CONTACT THE EPA (132281) TO ARRANGE A SITE INSPECTION AND ENDORSEMENT OF SEDIMENT AND EROSION CONTROL MEASURES PRIOR TO WORKS COMMENCING.
- THE SITE FOREMAN IS TO CONTACT THE EPA (132281) TO DISCUSS ANY PROPOSED MAJOR CHANGES TO SEDIMENT AND EROSION CONTROLS ON SITE PRIOR TO IMPLEMENTING THE CHANGES.
- THE SITE FOREMAN WILL ENSURE CONTRACTORS ACCESS AND EXIT THE SITE USING ONLY EPA APPROVED STABILISED ACCESS/EXIT POINTS AS DETAILED ON ENDORSED SEDIMENT AND EROSION CONTROL PLANS.

ISSUE DESCRIPTION	DATE	CHECKED
A FOR DEVELOPMENT APPROVAL.	01.06.24	

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**RUMBLE**

PROJECT  
**PROPOSED UNIT DEVELOPMENT**  
**BLOCK 9, SECTION 6**  
**FOREST, ACT**

TITLE  
**SEDIMENT AND EROSION**  
**CONTROL PLAN**

DESIGNED BY  
KS

DRAWN BY  
KS

AUTHORISED  
24RUMBLE1

DATE  
JUN 24

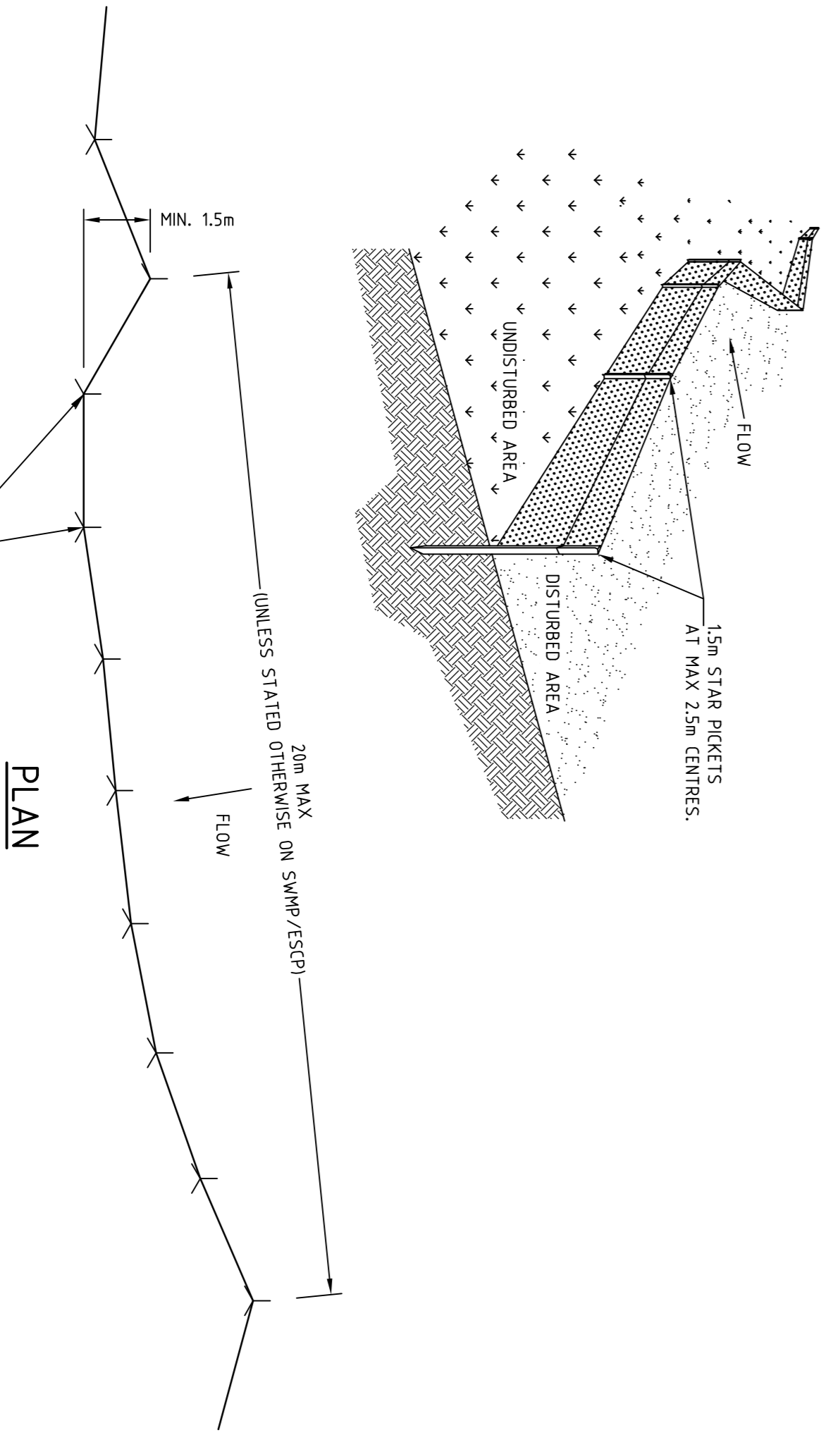
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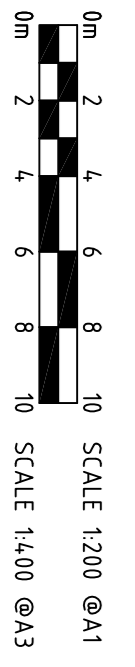
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**SILT FENCE**

NOT TO SCALE



**PLAN**







## NOTES

### 1. GENERAL

- 1.1. THESE NOTES MUST BE READ IN CONJUNCTION WITH THE REQUIREMENTS OUTLINED IN REFERENCE DOCUMENT 04.
- 1.2. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO ENSURE THAT ALL TERRITORY ASSETS ARE PROTECTED FROM DAMAGE.
- 1.3. NO WORKS OTHER THAN THOSE IDENTIFIED ON THE APPROVED LMPF ARE TO TAKE PLACE WITHIN THE TREE PROTECTION ZONE (TPZ) OF AN EXISTING TREE. NO CONSTRUCTION ACTIVITIES SUCH AS STORAGE, PARKING, STOCKPILING, SITE SHEDS, CONSTRUCTION ACCESS, WASHDOWN, EXCAVATION ETC. ARE ACCEPTED WITHOUT APPROVAL.
- 1.4. PRIOR TO CONSTRUCTION ALL PROTECTION MEASURES INDICATED ON THE APPROVED LMPF MUST BE IMPLEMENTED ON-SITE. THE PROJECT TEAM MUST NOTIFY URBAN TREESCAPES UTS IN WRITING, ONCE THE PROTECTION MEASURES HAVE BEEN INSTALLED. [tescsupport@tcsgov.au](mailto:tescsupport@tcsgov.au) AND ORGANISE AN INSPECTION.

### 2. SITE ACCESS – REFER VEHICLE ACCESS WITHIN TPZ ALSO

- THIS SECTION OF NOTES IS APPLICABLE FOR ALL DEVELOPMENTS
- 2.1. SITE ACCESS MUST BE STRICTLY THROUGH THE ACCESS POINTS IDENTIFIED ON THIS PLAN. ACCESS THROUGH UNLEASSED LAND THAT IS NOT IDENTIFIED ON THE APPROVED LMPF IS STRICTLY PROHIBITED.

### 3. STORAGE OF MATERIALS

THIS SECTION OF NOTES IS APPLICABLE FOR ALL DEVELOPMENTS

- 3.1. THE STORAGE OF CONSTRUCTION MATERIALS AND THE PARKING OF VEHICLES OR EQUIPMENT ON VERGES OR ADJACENT PUBLIC OPEN SPACES ARE NOT PERMITTED WITHOUT PRIOR APPROVAL FROM TCS.
- 3.1.1. ONLY STORAGE AND PARKING LOCATIONS ON UNLEASSED LAND IDENTIFIED ON THIS LMPF ARE APPROVED.

### 4. SITE ACCOMMODATION

THIS SECTION OF NOTES IS APPLICABLE FOR ALL DEVELOPMENTS

- 4.1. SITE SHEDS, SITE ARENITES, STORAGE SHEDS, SIGNS, BILLBOARDS, OR CONTAINERS ARE STRICTLY PROHIBITED FROM BEING PLACED ON UNLEASSED LAND UNLESS IDENTIFIED ON THE APPROVED LMPF, AND PUBLIC UNLEASSED LAND PERMIT.
- 4.1.1. ONLY SITE ARENITES ON UNLEASSED LAND IDENTIFIED ON THIS LMPF ARE APPROVED.

### 5. FENCING

THIS SECTION IS APPLICABLE FOR ALL DEVELOPMENT SITES ADJACENT TO UNLEASSED LAND. PROTECTION FENCING MUST BE IDENTIFIED ON THE LMPF TO PROTECT TERRITORY ASSETS ADJACENT THE DEVELOPMENT SITE.

#### 5.1. PROTECTION FENCING

- 5.1.1. FENCING MUST BE ERECTED BEFORE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES ON SITE. THIS INCLUDES BUT IS NOT LIMITED TO STARTING OF DEMOLITION WORKS, DELIVERY OF MACHINERY OR MATERIALS, STOCKPILING, STORAGE ETC.
- 5.1.2. FENCING MUST BE ERECTED IN THE LOCATION, ALIGNMENTS AND MATERIAL INDICATED ON THE APPROVED LMPF AND MUST STOP ACCESS THROUGHOUT CONSTRUCTION.
- 5.1.3. FENCING MUST REMAIN IN PLACE FOR THE ENTIRETY OF THE PROJECT, AND MAINTAINED IN GOOD, SAFE WORKING ORDER UNTIL OPERATIONAL ACCEPTANCE IS GRANTED. REMOVAL BEFORE OA IS GRANTED MUST BE APPROVED BY TCS IN WRITING.
- 5.1.4. FENCING MUST BE RIGID MESH TEMPORARY FENCE PANELS SUPPORTED BY STEEL POSTS AND CONCRETE BASES. SUPPORT POSTS DRIVEN INTO THE GROUND ARE STRICTLY PROHIBITED.
- 5.1.5. ALL CONNECTING FIXTURES/HARDWARE MUST BE SECURELY MOUNTED SO FENCING CANNOT BE DISMANTLED AND REMOVED BY THE PUBLIC.
- 5.1.6. THE USE OF ALTERNATIVE FENCING MATERIALS MUST BE DISCUSSED WITH, AND APPROVED BY TCS.
- 5.1.7. FENCING MUST BE SETBACK FROM FOOTPATHS AND CIVIL INFRASTRUCTURE AS PER REF.04 REQUIREMENTS.
- 5.1.8. ANY DEVIATION FROM THESE SETBACKS MUST BE CLEARLY NOTED ON THE LMPF FOR REVIEW BY TCS.

### 6. CANOPY PROTECTION

THIS SECTION OF NOTES IS APPLICABLE WHERE THE EXISTING CANOPY OF A TREE ON UNLEASSED LAND IS LIKELY TO BE IMPACTED BY CONSTRUCTION WORKS. THE FOLLOWING CANOPY PROTECTION REQUIREMENTS ARE MANDATORY

- 6.1. THE DEVELOPER IS RESPONSIBLE TO MINIMISE ANY IMPACTS ON THE TREE CANOPIES AND PROTECT ALL EXISTING TREE CANOPIES FROM CONSTRUCTION ACTIVITIES.
- 6.2. WHERE CANOPY IMPACTS ARE IDENTIFIED, THE FOLLOWING REQUIREMENTS ARE MANDATORY.
  - 6.2.1. IDENTIFY ANY PRUNING REQUIREMENTS ON THE LMPF BY NOTATIONALLY INDICATING ON A PHOTOGRAPH WHERE THE LIMBS MAY NEED TO BE PRUNED OR TIED BACK.
  - 6.2.2. WHERE DIRECTED BY TCS, A SUITABLY QUALIFIED ARBORIST WITH A MINIMUM CERTIFICATE 5 QUALIFICATION MUST BE ENGAGED TO IDENTIFY THE CANOPY IMPACTS AND PROPOSE THE PREFERRED THE BACK OF LIMBS OR EXTENT OF PRUNING REQUIRED.
  - 6.2.3. WHERE PRUNING IS IDENTIFIED, REFER TO SECTION 5 OF THESE NOTES.
  - 6.2.4. ALL PRUNING AND TYING OF BRANCHES MUST BE UNDERTAKEN BY SUITABLY QUALIFIED ARBORISTS WITH A MINIMUM CERTIFICATE 3 QUALIFICATION AS PER BEST PRACTICE AS4373.
  - 6.2.2. WHERE PRACTICAL BRANCHES SHOULD BE TIED BACK CLEAR OF THE WORK, AND PRUNING SHOULD ONLY BE USED AS LAST RESORT.
  - 6.2.3. A PRUNING REPORT FROM THE ARBORIST MUST BE COMPLETED AND ISSUED TO TCS URBAN TREESCAPES UTS WITH THE LMPF AND LODD FOR APPROVAL BEFORE PRUNING ACTIVITIES CAN COMMENCE.
  - 6.2.4. ONCE THE PRUNING REPORT HAS BEEN ENDORSED BY TCS URBAN TREESCAPES, THE PROJECT REPRESENTATIVE MUST NOTIFY TCS URBAN TREESCAPES OF WHEN THE PRUNING IS PLANNED TO TAKE PLACE. [tescsupport@tcsgov.au](mailto:tescsupport@tcsgov.au).
- 6.3. BRANCH PRUNING OF TERRITORY TREES.
  - 6.3.1. ALL PRUNING AND TYING OF BRANCHES MUST BE UNDERTAKEN BY SUITABLY QUALIFIED ARBORISTS WITH A MINIMUM CERTIFICATE 3 QUALIFICATION AS PER BEST PRACTICE AS4373.
  - 6.3.2. WHERE PRACTICAL BRANCHES SHOULD BE TIED BACK CLEAR OF THE WORK, AND PRUNING SHOULD ONLY BE USED AS LAST RESORT.
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  - 6.2.4. ONCE THE PRUNING REPORT HAS BEEN ENDORSED BY TCS URBAN TREESCAPES, THE PROJECT REPRESENTATIVE MUST NOTIFY TCS URBAN TREESCAPES OF WHEN THE PRUNING IS PLANNED TO TAKE PLACE. [tescsupport@tcsgov.au](mailto:tescsupport@tcsgov.au).

THIS SECTION OF NOTES IS APPLICABLE WHEREVER PRUNING IS REQUIRED TO TREES ON UNLEASSED LAND. ALL PRUNING ACTIVITIES MUST BE IDENTIFIED ON THE APPROVED LMPF.

### 7. TRUNK/BRANCH PROTECTION

THIS SECTION IS APPLICABLE WHERE WORK IS REQUIRED WITHIN THE TREE PROTECTION ZONE OF AN EXISTING TREE. TRUNK PROTECTION MUST BE INSTALLED WHEN WORK IS REQUIRED WITHIN THE TPZ OF A TREE.

- 7.1. PROTECTION BATTENS MUST BE PUT IN PLACE BEFORE COMMENCING WORKS AND MAINTAIN IN GOOD CONDITION THROUGHOUT THE WORK PERIOD. PROTECTION BATTENS CAN ONLY BE REMOVED AT THE COMPLETION OF WORKS.
- 7.2. TRUNK PROTECTION (AS PER CURRENT AS4970 REQUIREMENTS)
  - 7.2.1. LOOSELY WRAP THE TRUNK REQUIRING PROTECTION IN A THICK LAYER OF HESSIAN.
  - 7.2.2. USE MINIMUM 2m LENGTHS OF TIMBER FOR THE TRUNK PROTECTION AND INSTALL AT BASE OF TRUNK FOR FULL CIRCUMFERENCE OF TREE. SPACE BATTENS SO GAPS BETWEEN BATTENS ARE NO GREATER THAN 20mm. BATTENS MUST BE UNTERATED TIMBER FREE OF NAILS, SCREWS OR BOLTS.
  - 7.2.3. LASH BATTENS TO TREE USING STRAPS, ROPE OR HESSIAN WEBBING ENSURING THE BATTENS ARE SECURE AGAINST THE TREE, BUT NOT TOO TIGHT ON THE TRUNK. BATTENS MUST BE LASHED AT THE TOP, BOTTOM AND MIDDLE AS A MINIMUM.
- 7.3. BRANCH PROTECTION (AS PER CURRENT AS4970 REQUIREMENTS)
  - 7.3.1. WHERE LOW HANGING BRANCHES GREATER THAN 100mm IN DIAMETER ARE LIKELY TO BE IMPACTED BY THE WORKS THEY WILL REQUIRE ADDITIONAL PROTECTION.
  - 7.3.2. LOOSELY WRAP THE BRANCHES REQUIRING PROTECTION IN A THICK LAYER OF HESSIAN.
  - 7.3.3. USE TIMBER CUT TO LENGTH TO SUIT THE BRANCH REQUIRING PROTECTION AND INSTALL TO FULL CIRCUMFERENCE OF BRANCH. SPACE BATTENS SO GAPS BETWEEN BATTENS ARE NO GREATER THAN 20mm. BATTENS MUST BE UNTERATED TIMBER FREE OF NAILS, SCREWS OR BOLTS.
  - 7.3.4. LASH BATTENS TO TREE USING STRAPS, ROPE OR HESSIAN WEBBING ENSURING THE BATTENS ARE SECURE AGAINST THE TREE, BUT NOT TOO TIGHT ON THE TRUNK. BATTENS MUST BE LASHED AT THE TOP, BOTTOM AND MIDDLE AS A MINIMUM.

### 8. DEMOLITION WITHIN THE TPZ – REFER ALSO CANOPY, TRUNK BRANCH, ROOT PROTECTION NOTES

THIS SECTION OF NOTES IS APPLICABLE WHERE EXISTING INFRASTRUCTURE IS REQUIRED TO BE DEMOLISHED WITHIN THE TPZ OF AN EXISTING TREE

- 8.1. ONLY THE DEMOLITION WORKS WITHIN TPZ AREAS AS INDICATED ON THE APPROVED LMPF. ANY DEMOLITION WORK WITHIN TPZ AREAS, THAT IS NOT INDICATED ON THE ENDORSED PLAN IS NOT APPROVED BY URBAN TREESCAPES AND AN UPDATED LMPF MUST BE PROVIDED TO TCS FOR RE-ENDORSEMENT BEFORE COMMENCING THE WORKS.
- 8.2. DEMOLITION OF OLD PAVEMENT WITHIN TPZ -
  - 8.2.1. ALL CONSTRUCTION WORK IS TO BE COMPLETED PRIOR TO EXCAVATION AND REMOVAL OF THE EXISTING PAVEMENT. THIS IS TO ENSURE THE TREE ROOTS DO NOT DRY OUT BEFORE WORK IS COMPLETED.
  - 8.2.2. TO MINIMISE ROOT DAMAGE, THE REMOVAL OF THE EXISTING PAVEMENT SHALL BE CAREFULLY DONE IN SMALL STAGED SECTIONS AND ONLY TO THE DEPTH OF THE EXISTING MATERIAL (SURFACE LAYER AND BASE LAYER), SO AS TO NOT CAUSE DAMAGE TO TREE ROOTS.
  - 8.2.3. NO MACHINERY IS TO BE ALLOWED WITHIN THE TPZ AND MUST ALWAYS STAY OUTSIDE THIS ZONE DURING THE REMOVAL OF THE OLD PAVEMENT MATERIAL.
  - 8.2.4. ANY DAMAGE TO THE TREE/TREE ROOTS WHICH CAUSES THE TREE TO DECLINE, WILL REQUIRE TREE REPLACEMENT AT THE DEVELOPER'S EXPENSE.

## NOTES

### 9. EXCAVATION WITHIN THE TREE PROTECTION ZONE (TPZ)- REFER ALSO NOTES SECTION 5.2 AND 8

- THIS SECTION OF NOTES IS APPLICABLE WHERE EXCAVATION WITHIN THE TPZ OF A TREE ON UNLEASSED LAND IS APPROVED BY TCS. ALL EXCAVATIONS WITHIN THE TPZ MUST BE SHOWN ON THE LMPF. OTHERWISE IF EXCAVATION IS NOT SHOWN ON THE LMPF THE IMPACT ON THE TREES CAUSED BY THE EXCAVATION IS CONSIDERED UNAPPROVED
- 9.1. THE TERM "EXCAVATION" IN RELATION TO THIS CLAUSE MEANS ANY EARTH WORKS GREATER THAN 50mm IN DEPTH FROM THE EXISTING SURFACE LEVEL, INCLUDING TRENCHING FOR SERVICES.
  - 9.2. ONLY THE EXCAVATIONS IDENTIFIED ON THIS LMPF ARE APPROVED WITHIN THE TPZ.
  - 9.3. EXCAVATION WITHIN THE STRUCTURAL ROOT ZONE (SRZ) OF A TREE AS OUTLINED IN AS4970, IS STRICTLY PROHIBITED.
  - 9.4. EXCAVATION WITHIN THE TPZ MUST BE EXECUTED USING EITHER UNDER-BORING, HYDRO-EXCAVATION OR HAND DIGGING TECHNIQUES, UNLESS AN ALTERNATIVE METHOD HAS BEEN DOCUMENTED AND ENDORSED BY URBAN TREESCAPES.
  - 9.5. WHERE IDENTIFIED BY UTS, EXCAVATION TO EXPOSE ROOTS MAY BE REQUIRED TO BE UNDERTAKEN BY LOW-PRESSURE HYDRO-EXCAVATION USING A FAN SHAPED NOZZLE HEAD THAT IS KEPT 15cm FROM SOIL PROFILE.
  - 9.6. A SUITABLY QUALIFIED ARBORIST MUST BE PRESENT WHEN EXCAVATIONS THROUGH THE TPZ OF A TREE ARE BEING EXECUTED.
  - 9.7. NO ROOTS GREATER THAN 30mm IN DIAMETER ARE TO BE CUT, REFER SECTION 5.2 OF THESE NOTES.
  - 9.8. IF ADDITIONAL EXCAVATION WITHIN THE TPZ IS IDENTIFIED TO BE REQUIRED THROUGH THE CONSTRUCTION PERIOD, THE DEVELOPER/CONTRACTOR MUST SEEK APPROVAL FOR THIS EXCAVATION FROM TCS BEFORE STARTING THE WORKS.

### 10. TREE ROOT PROTECTION – REFER ALSO NOTES SECTION 5.2

THIS SECTION IS APPLICABLE WHERE EXISTING TREE ROOTS ARE FOUND IN EXCAVATION LOCATIONS.

- 10.1. MOST TREE ROOTS ARE FOUND WITHIN THE TOP 300mm DEPTH OF SOIL, SO THE FOLLOWING PROTECTION MEASURES MUST BE FOLLOWED WHEN ROOTS ARE ENCOUNTERED.
- 10.2. MAINTAIN THE GOOD HEALTH OF THE TREES THAT HAVE HAD DISTURBANCE IN THEIR ROOT ZONE BY CONTINUAL WATERING, AT NO TIME SHALL THE DISTURBED AREA BE ALLOWED TO DRY OUT TO THE DETRIMENT OF THE TREES HEALTH.
- 10.3. WHERE EXTENSIVE ROOT DAMAGE HAS BEEN CAUSED, THE DEVELOPER MUST SEEK ADVICE FROM AN ARBORIST ABOUT MEASURES TO MINIMISE THE IMPACT OF THE DAMAGE ON THE TREES HEALTH (ADDITIONAL WATERING, FERTILISING ETC).
- 10.4. ALL EXPOSED ROOTS MUST BE BACKFILLED/COVERED WITH SOIL IMMEDIATELY.
  - 10.4.1. BACKFILL AROUND TREE ROOTS WILL BE IN ACCORDANCE WITH AS4970 TO MATCH FINISHED LEVELS, WHERE SITE SOIL IS UNABLE TO BE RE-USED. SOIL TO MEET MHS-994 SOIL REQUIREMENTS MUST BE USED UNLESS OTHERWISE APPROVED.
  - 10.4.2. WHERE ROOTS CANNOT BE COVERED IMMEDIATELY THE ROOTS MUST BE PROTECTED FROM DESICCATION BY LIGHTLY WATERING OR COVERING WITH HESSIAN WHICH MUST BE KEPT MOIST.
  - 10.4.3. WHERE PROPOSED WORKS COME IN CONTACT WITH TREE ROOTS, A LAYER OF GEOTEXTILE FABRIC MUST BE PLACED OVER ROOTS AND UNDERNEATH ANY NEW PAVEMENT OR INFRASTRUCTURE (DOWNPIES AND FOOTPATHS FOR EXAMPLE).
- 10.5. ROOT PRUNING
  - 10.5.1. CUTTING OF ROOTS SHOULD BE THE LAST RESORT AND ONLY UNDERTAKEN IF NO OTHER OPTION IS AVAILABLE AND ROOT CUTTING IS APPROVED BY UTS.
    - 10.5.1.1. ALTERNATIVE CONSTRUCTION METHODOLOGY MAY BE PROPOSED BY UTS, SUCH AS BRIDGING OVER, OR UNDER-BORING UNDER A LARGE ROOT THAT WOULD COMPROMISE ONGOING TREE HEALTH. ROOTS GREATER THAN 30mm IN DIAMETER MUST NOT BE CUT, IF ROOTS GREATER THAN 30mm IN DIAMETER ARE REQUIRED TO BE CUT, APPROVAL FROM UTS MUST BE SOUGHT BEFORE CUTTING.
  - 10.5.2. ALL ROOTS SHALL BE CUT WITH SUITABLE PROFESSIONAL EQUIPMENT AND BY SUITABLY QUALIFIED ARBORISTS WITH A MINIMUM CERTIFICATE 3 QUALIFICATION.
  - 10.5.3. ANY ROOTS THAT ARE REQUIRED TO BE REMOVED MUST BE CUT CLEANLY WITH CLEAN AND SHARP ARBORIST TOOLS. TREE ROOTS ARE NOT TO BE RIPPED, TORN, OR PULLED AWAY FROM THE ROOT MASS.
  - 10.5.4. ANY DAMAGE TO THE TREE/TREE ROOTS WHICH CAUSES THE TREE TO DECLINE, WILL REQUIRE TREE REPLACEMENT AT THE DEVELOPER'S EXPENSE.

### 11. VEHICLE ACCESS WITHIN THE TPZ

THIS SECTION OF NOTES IS APPLICABLE WHERE ANY VEHICLE MOVEMENT IS REQUIRED THROUGH THE TPZ OF AN EXISTING TREE. ALL ACCESS THROUGH THE TPZ OF AN EXISTING MUST BE INDICATED ON THE APPROVED LMPF.

- 11.1. VEHICLE ACCESS THROUGH THE TPZ OF AN EXISTING TREE IS STRICTLY PROHIBITED UNLESS INDICATED AND APPROVED ON THE PROJECT LMPF.
- 11.2. VEHICLE ACCESS WITHIN THE STRUCTURAL ROOTS ZONE (REFER CURRENT AS4970) IS STRICTLY PROHIBITED.
- 11.3. VEHICLE ACCESS THROUGH A LOW HANGING CANOPY IS STRICTLY PROHIBITED (LESS THAN 3.5m CLEARANCE FROM EXISTING GROUND TO THE LOWEST MAJOR LIMB).
- 11.4. CLEARLY MARK OUT THE APPROVED ACCESS ROUTE ON-SITE. 50 VEHICLES DO NOT DEVIATE FROM THE APPROVED ROUTE.
- 11.5. ACCESS ROUTE STABILISATION WITHIN THE TPZ
  - 11.5.1. PLACE A MINIMUM 200mm LAYER OF ORGANIC 25mm WOOD CHIP MULCH ON THE AREA OF THE TPZ THE VEHICLE ROUTE THAT PASSES THROUGH. THE MULCH LAYER IS TO BE MAINTAINED AT THIS THICKNESS UNDER AREAS OF TRAFFIC FOR AS LONG AS ACCESS IS REQUIRED.
  - 11.5.2. PLACE A PROTECTIVE BOARD (RUMBLE BOARD) OVER THE MULCH ENSURING EACH BOARD IS SECURELY CONNECTED TO THE NEXT BOARD (AS REQUIRED) WITH GAPS NO BETWEEN BOARDS NO GREATER THAN 30mm.
  - 11.5.3. BOARDS MUST BE KEPT IN PLACE AND IN GOOD CONDITION FOR THE DURATION OF THE ACCESS REQUIREMENTS.
  - 11.5.4. ALTERNATIVE STABILISATION MATERIALS FOR THE ACCESS ROUTE SUCH AS ACCESS FOR HEAVY VEHICLES, MUST BE DISCUSSED AND APPROVED BY TCS.
- 11.6. WHERE VEHICLES ARE LIKELY TO CONFLICT WITH BRANCHES, BRANCH PROTECTION MUST BE IMPLEMENTED, REFER NOTES SECTION 3 FOR LIMB PROTECTION REQUIREMENTS.
- 11.7. IF PRUNING OF A TREE IS REQUIRED TO FACILITATE ACCESS, THIS MUST BE CLEARLY IDENTIFIED ON THE TCS APPROVED LMPF, REFER NOTES SECTION 5 FOR PRUNING REQUIREMENTS.
- 11.8. VEHICLE ACCESS THROUGH THE TPZ OF AN EXISTING TREE MUST NOT BE CLOSER THAN 3m TO THE TRUNK OF THE TREE (UNLESS OTHERWISE AGREED WITH TCS).

### 12. RECTIFICATION OF UNLEASSED LAND

- THIS SECTION OF NOTES IS APPLICABLE TO ALL DEVELOPMENTS
- 12.1. FOR ALL WORKS, OTHER THAN MINOR WORKS\*, AND UNLESS OTHERWISE APPROVED BY AA, A SUITABLY QUALIFIED LANDSCAPE ARCHITECT OR HORTICULTURIST SHALL BE EMPLOYED TO ENSURE THAT WORK IN THE VERGE MEETS THE REQUIREMENTS. THE ARCHITECT/HORTICULTURIST SHALL ALSO BE PRESENT DURING ANY CULTIVATION OR RESTORATION OF THE VERGE WHICH AFFECTS PLANT MATERIAL, AND SHALL PROVIDE CERTIFICATION, ENDORSED BY THE COMMISSIONER, THAT ALL WORK, CULTIVATION AND RESTORATION HAVE BEEN PERFORMED TO INDUSTRY STANDARDS.
    - 12.1.1. \* (I.E. MINOR IN COMPLEXITY AND/OR SCOPE OF WORKS AND CONFIRMED AS A MINOR WORKS BY AA).
  - 12.2. AT THE FINALISATION OF THE DEVELOPMENT WORKS, THE TERRITORY ASSETS IN UNLEASSED LAND ADJACENT THE DEVELOPMENT MUST BE UNALTERED AND IN THE SAME OR BETTER CONDITION THAN BEFORE THE DEVELOPMENT WORKS COMMENCED, UNLESS ADJUSTMENTS TO THESE ASSETS HAVE BEEN APPROVED BY TCS AS PART OF THE DEVELOPMENT APPROVALS.
  - 12.3. WHERE TERRITORY ASSETS ON UNLEASSED LAND HAVE BEEN DAMAGED BY THE DEVELOPMENT, THESE ASSETS MUST BE FULLY REPIRED AT THE COST OF THE DEVELOPER TO THE REQUIREMENTS IN THE TCS MUNICIPAL INFRASTRUCTURE TECHNICAL SPECIFICATIONS, OR THE REQUIREMENTS IN THE COMPOSITE VERGE LANDSCAPE PLAN AS APPROVED BY TCS.

### 13. SITE SPECIFIC TREE PROTECTION MEASURES

THIS SECTION IS WHERE THE PROponent OR TCS CAN INSERT ADDITIONAL SITE-SPECIFIC PROTECTION REQUIREMENTS TO THE ABOVE.

ISSUE DESCRIPTION	DATE	CHECKED
A FOR DEVELOPMENT APPROVAL.	01.06.24	

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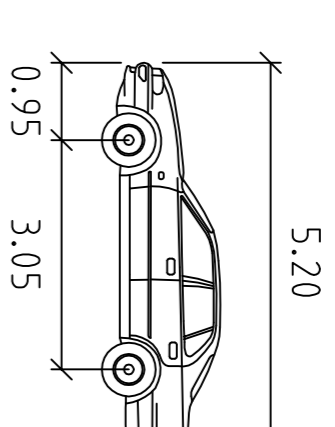
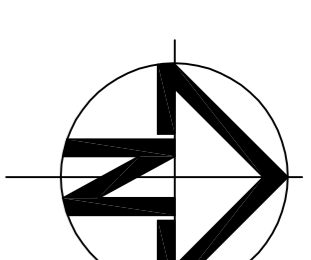
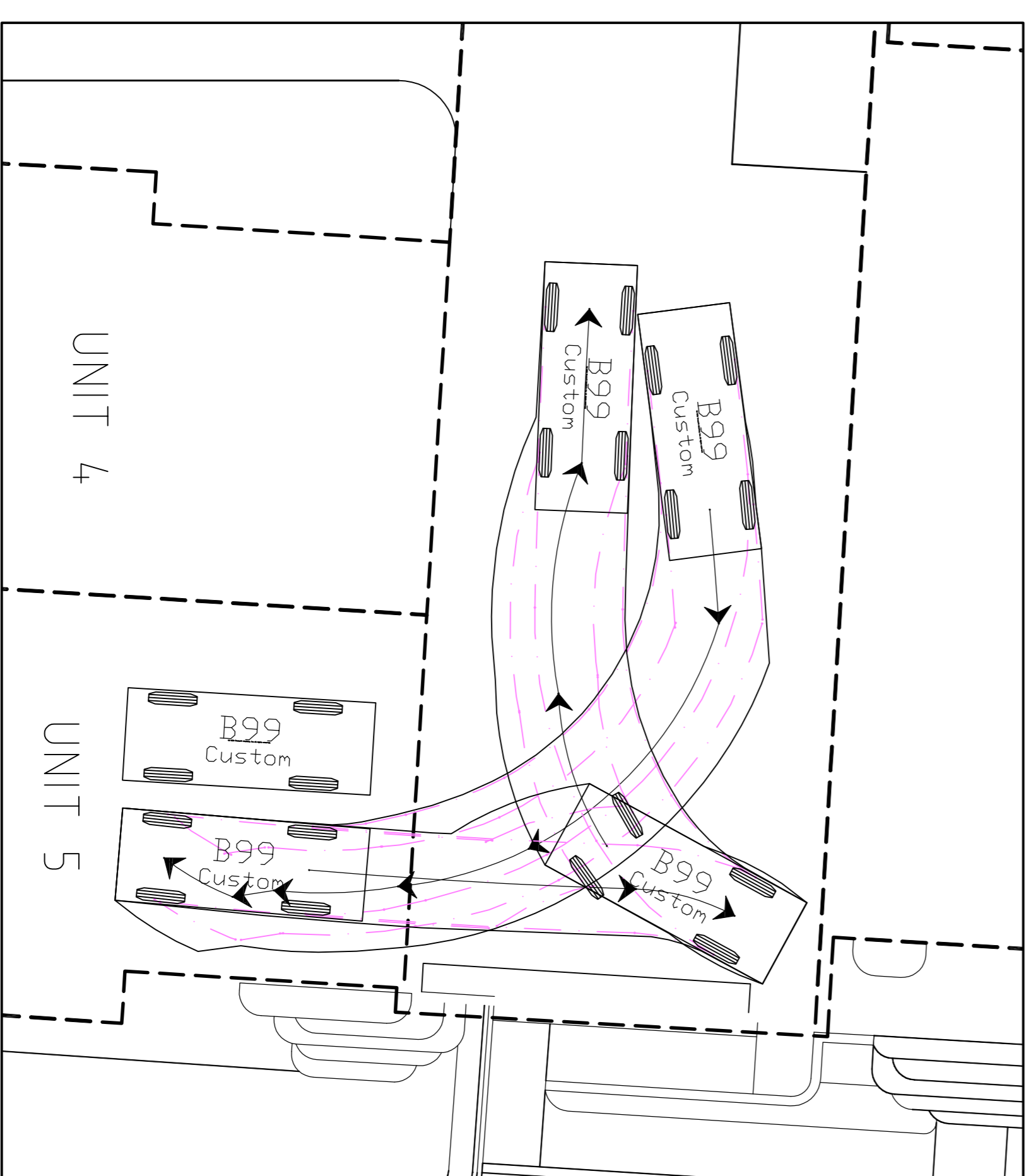
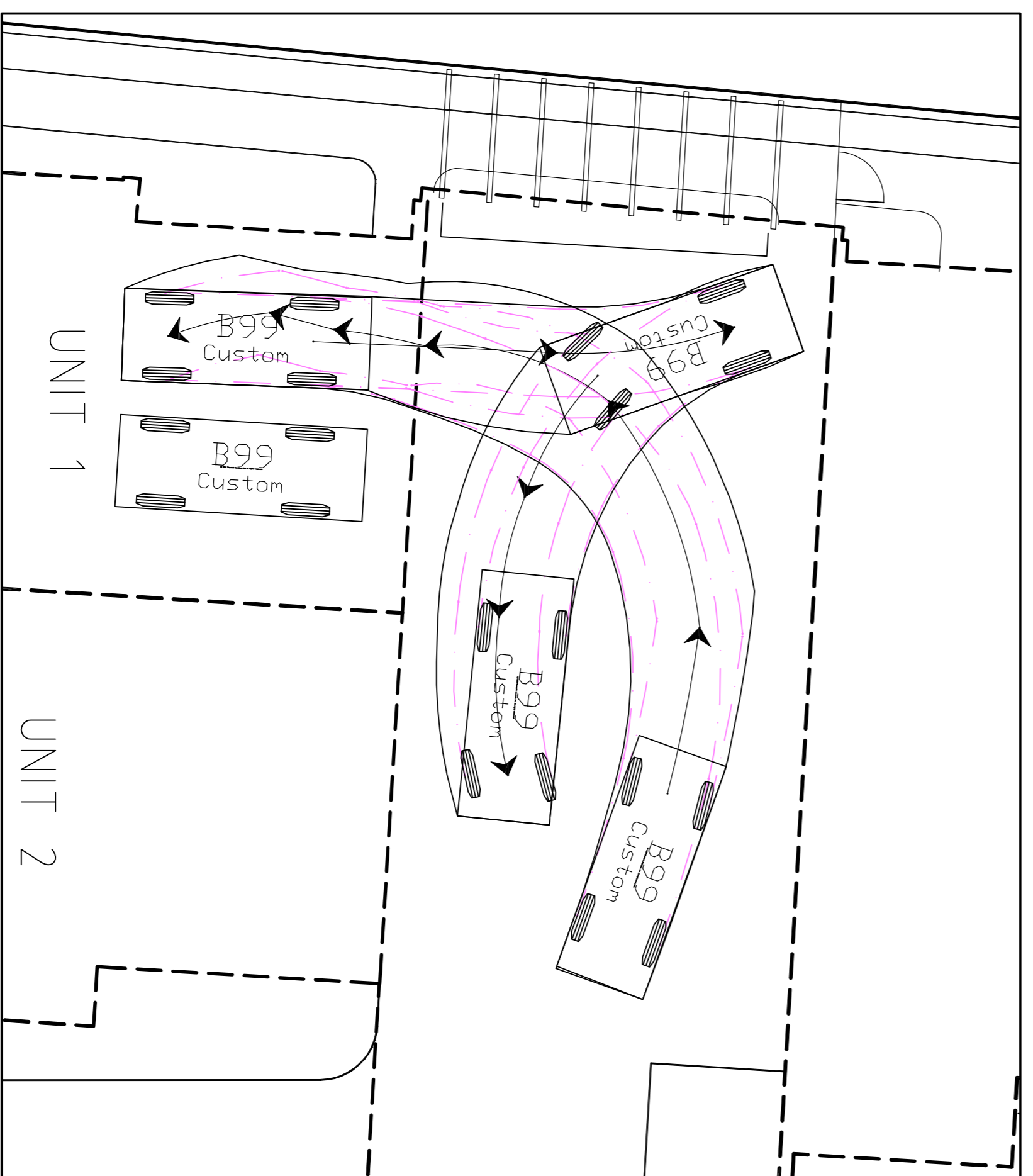
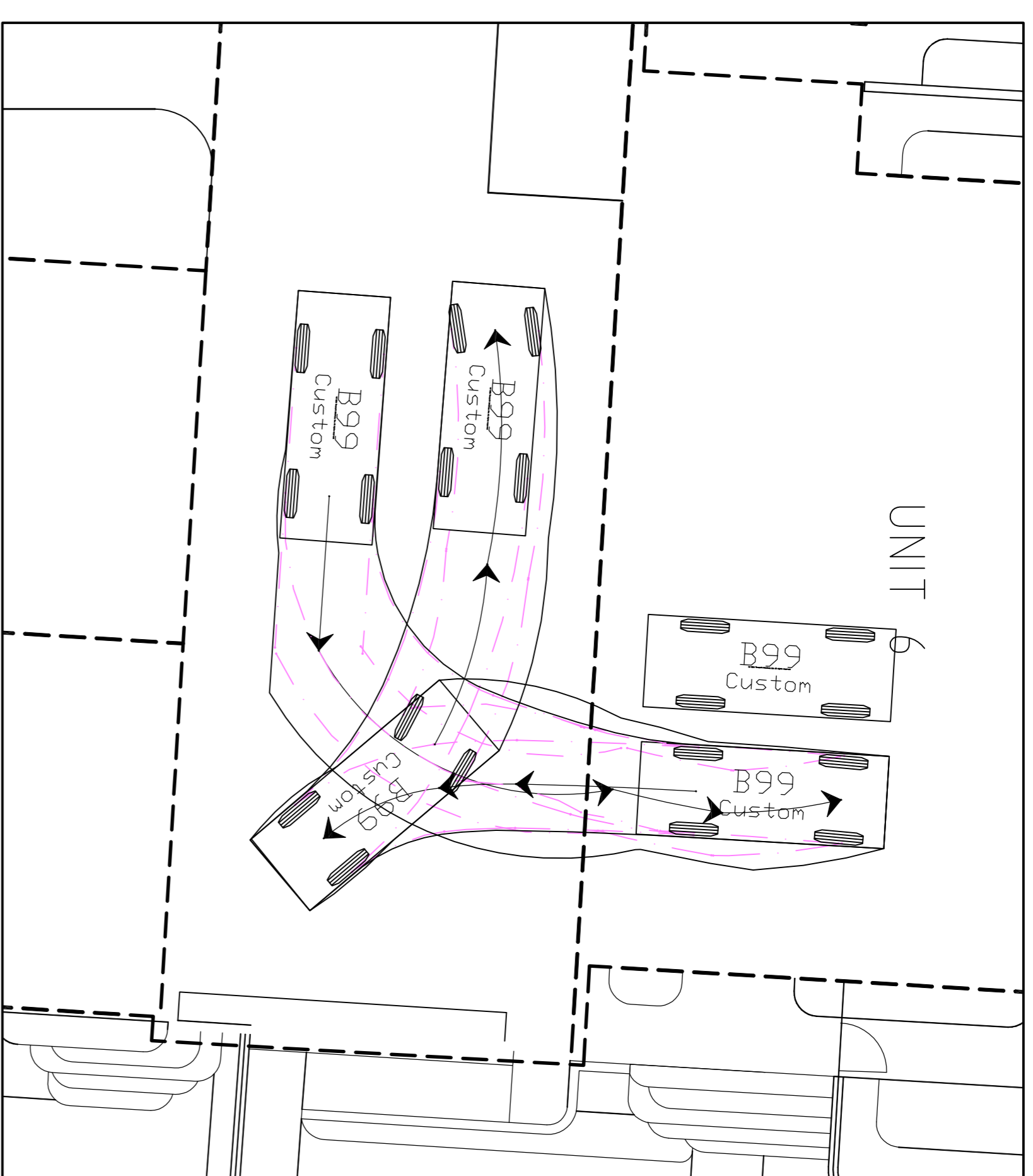
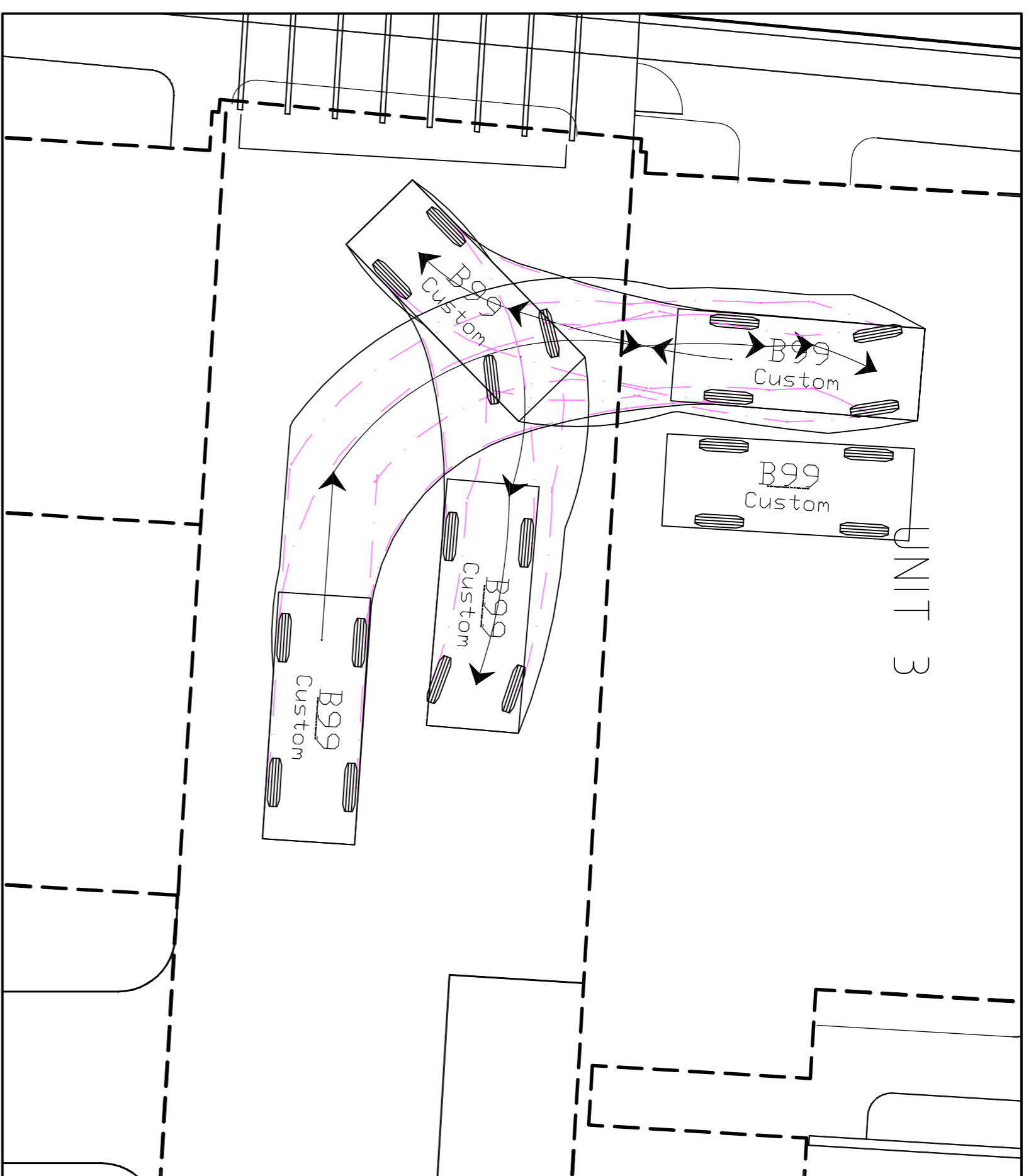
CLIENT  
**RUMBLE**

PROJECT

**PROPOSED UNIT DEVELOPMENT**  
**BLOCK 9, SECTION 6**  
**FOREST, ACT**

TITLE  
**LANDSCAPE MANAGEMENT**  
**PROTECTION PLAN – NOTES**

DESIGNED BY KS	SCALE 1:200 @ A1
DRAWN BY KS	JOB NO. 24RUMBLE1
AUTHORISED	DRAWING NO. DA06
DATE JUN 24	



B99		metres
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Track	:	1.84
Lock to Lock Time	:	6.00
Steering Angle	:	33.5

ISSUE DESCRIPTION	DATE	CHECKED
A FOR DEVELOPMENT APPROVAL.	01.06.24	

**PIERRE DRAGH**  
CONSULTING ENGINEERS PTY. LTD.  
PO BOX 336 HALL ACT 2618  
(m) 0412 330 243

CLIENT  
**RUMBLE**

PROJECT  
PROPOSED UNIT DEVELOPMENT  
BLOCK 9, SECTION 6  
FOREST, ACT

TITLE  
TURNING DEMONSTRATION PLAN

DESIGNED BY KS	SCALE 1:100 @ A1
DRAWN BY KS	JOB NO. 24RUMBLE1
AUTHORISED	DRAWING NO.
DATE JUN 24	DA07

