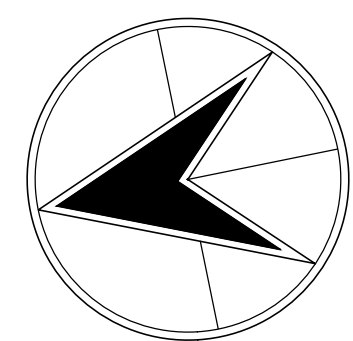
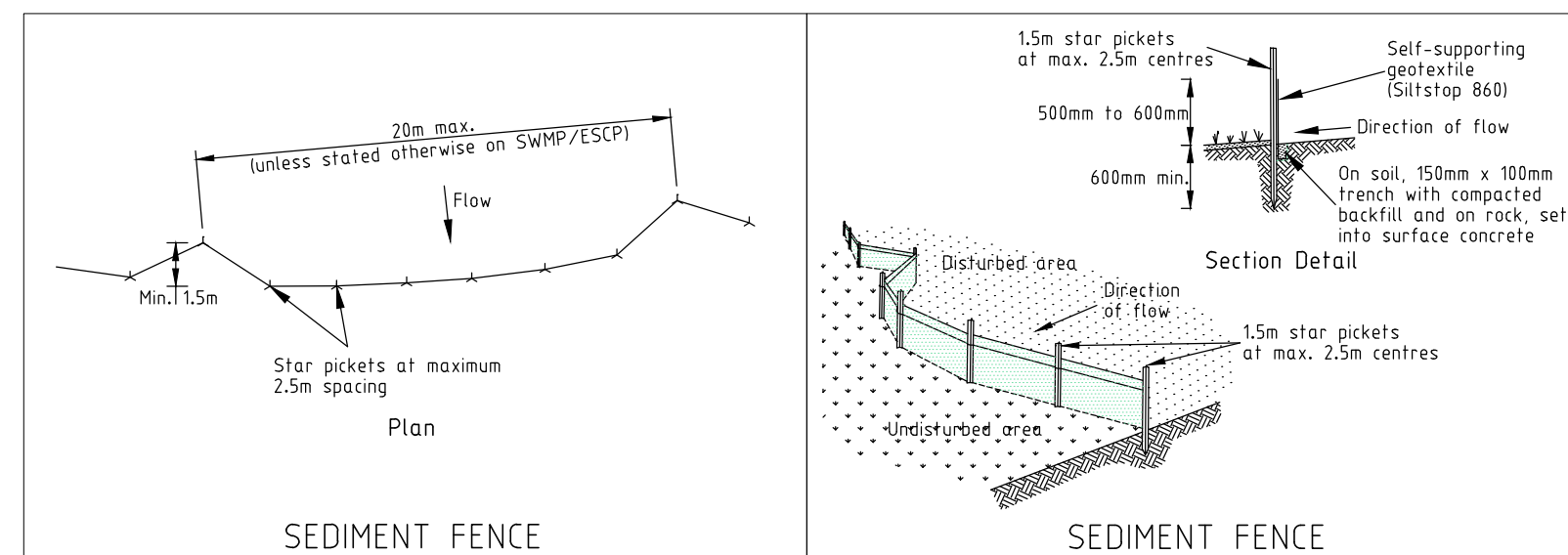
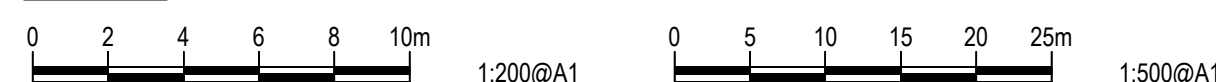


## STORMWATER MANAGEMENT NOTES

- |       |  |
|-------|--|
| SM1.  | ALL BUILDING ROOF GUTTERS WILL HAVE LEAF GUARD INSTALLED.  |
| SM2.  | ALL NEW DOWNPIPES ARE TO BE LOCATED BY HYDRAULIC CONSULTANT AND ARE TO BE COLLECTED IN PVC PIPELINES, JOINT GLUE SEALED, AND CONNECTED TO THE RAINWATER TANK.  |
| SM3.  | ALL ROOF AREAS ARE TO DRAIN TO THE RAINWATER TANK FOR NON-POTABLE STORAGE WATER USE, SUCH AS IRRIGATION, POOL TOPUP AND TOILET FLUSHING, IN ACCORDANCE WITH COUNCIL'S GUIDELINES.  |
| SM4.  | THE RAINWATER TANK WILL BE FITTED WITH A FIRST FLUSH DEVICE AND MAINTAINED ON A MONTHLY BASIS.   |
| SM5.  | ALL SITE GARDENS AND LANDSCAPE AREAS ARE TO BE IRRIGATED FROM THE RAINWATER TANK'S NON-POTABLE STORAGE WATER.  |
| SM6.  | ALL STORMWATER GENERATED ON NEW CARPARK AREA WILL DRAIN TO BIO RETENTION FILTER. ALL REMAINING LANDSCAPE AND HARD STAND AREAS WILL DRAIN DIRECTLY TO THE INTERALLOTMENT PIPELINE VIA PITS AND PIPES.   |
| SM7.  | LEVELS & ORIENTATION OF DRAINAGE STRUCTURES ARE NOT TO BE ALTERED FROM THAT SHOWN ON THE PLAN AND IS TO BE CHECKED ON COMPLETION BY THE ENGINEER.  |
| SM8.  | SURFACE INLET GRATES ARE TO BE GALVANISED STEEL FABRICATION AT THE SPECIFIED DIMENSIONS AND INSTALLED WITH SUITABLE LOCK DOWN MECHANISM EG J-SPRING BOLT.  |
| SM9.  | ALL STORMWATER PIPELINES ARE TO BE LAID ON SAND EVENLY GRADED TO THE INVERT LEVEL AND ALL FITTINGS TO BE IN ACCORDANCE WITH AS1260. MIN PIPELINE GRADIENT IS TO BE 1:100.  |
| SM10. | SUITABLE SUBSOIL DRAINAGE SYSTEMS WILL BE PROVIDED BEHIND ALL RETAINING WALLS AND DWELLING FOOTINGS AND SEEPAGE COLLECTED WILL BE DISCHARGED INTO THE NEAREST DOWNSTREAM STORMWATER PIPED SYSTEM.  |
| SM11. | SUBSOIL DRAINAGE PIPELINE IS A 100mm DIAMETER AGRICULTURE PIPE WITH A FABRIC STOCKING THAT WHEN LAID HAS 100mm OF 10mm AGGREGATE SURROUNDING IT FULLY WITH THE TRENCH.   |
| SM12. | WHERE ANY ISOLATED PROPOSED PIPELINE IS LOCATED WITHIN 2m OF A TREE THAT IS TO BE RETAINED, THE PIPELINE WILL BE THRUST BORED OR HAND/SPADE DUG TO REDUCE THE IMPACT OF EXCAVATION ADJACENT TO THE TREE. ALL WORKS TO BE SUPERVISED BY PROJECT ARBORIST. |



SCALE



NOTE THESE TYPICAL DETAILS ARE PROVIDED FOR THE ASSISTANCE OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR THEIR IMPLEMENTATION TO SUIT THE STAGING OF THE WORKS AND TO COMPLY WITH THE PROVISIONS OF THE SPECIFICATION AND DIRECTIVES OF THE EPA AND/OR SUPERINTENDANT.

INTERALLOTMENT PIPELINE  
Ø300 uPVC @ 1%  
Flow Capacity 195l/s @ 0.6m head

CONSTRUCT JUNCTION PIT OVER EXISTING STREET PIPELINE FOR STORMWATER CONNECTION SERVING No.60 BURNS RD.

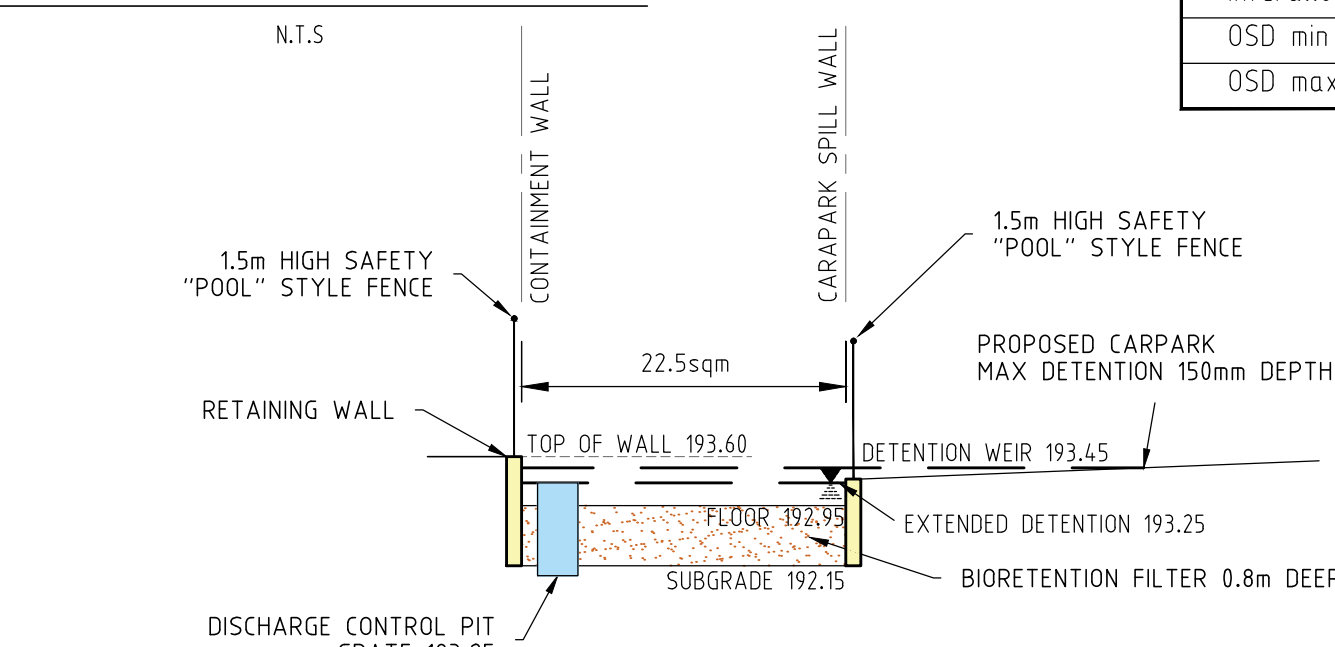
INVESTIGATE EXISTING INGROUND MAINS  
AND CABLES IN BURNS RD TO ENSURE  
STREET PIPELINE CONNECTION IS POSSIBLE

INVESTIGATE EXISTING 10KL RAINWATER TANKS  
ARE EFFICIENTLY BALANCED TO PLUMB TO ALL  
IRRIGATION, POOL TOP UP AND TOILET FLUSHING.  
INDICATIVE LOCATION .

PROVIDE ORIFICE  
DIAMETER 40mm





## ORIFICE PLATE ARRANGEMENT

N.T.S.



STORMWATER MANAGEMENT FACILITY  
TYPICAL SECTION

1:100

1.100	
KO	PROPOSED KERB ONLY
FK	PROPOSED FLUSH KERB
KG	PROPOSED KERB AND GUTTER
	RAINWATER AND DETENTION TANK
	BIORETENTION FILTER AREA
	ASPHALTIC CONCRETE PAVEMENT
	SEDIMENT FENCE

THIS DRAWING IS BASED ON THE FOLLOWING LAYOUTS AND MEASUREMENTS				

CONSTRUCT CARPARK PAVEMENT MAX GRADIENT OF 5% TO PAVEMENT LEVELS AND DRAINING ALL RUNOFF INTO STORMWATER MANAGEMENT FACILITY FOR QUALITY TREATMENT AND OSD.

PROVIDE WEIR CONTROL FOR  
DETENTION STORAGE ONTO  
DRIVEWAY AT THRESHOLD 193.45AHD

INSTALL DISCHARGE CONTROL PIT TO COUNCIL'S  
STANDARD DRAWING WITH TOG 93.25AHD AND  
LOW FLOW ORIFICE Ø40mm @ 191.97AHD CENTER

SD STORAGE [21.8cum] TO BE PROVIDED  
BIORETENTION GARDEN AND SPILLING  
OVER ONTO CARPARK PAVEMENT TO A  
MAXIMUM PONDING DEPTH OF 150mm.

PROVIDE 1.0m WIDE BIORETENTION GARDEN TO COLLECT OILS, METALS, RUBBERS AND TREAT NUTRIENTS FROM RUNOFF. REFER SPECIFICATION THIS SHEET AND LANDSCAPE SPECIFICATIONS.

CONSTRUCT RETAINING WALL TO CONTAIN  
BIORETENTION FACILITY WITH TOW 193.60AHD,  
A MAXIMUM WALL HEIGHT OF 600mm.

## CARPARK LAYOUT

SITE CATCHMENT HYDROLOGY								
Parameters		Annual Exceedance Probability (AEP)						
		63.2%	50%	20%	10%	5%	2%	1%
Existing Site	8,008sqm	@ 60% impervious (4,905sqm)						
Flowrate	l/s	118	142	219	275	337	442	524
Proposed Site	8,008sqm	@ 75% impervious (5,994sqm)						
Flowrate without detention	l/s	130	156	240	302	370	485	575
Interallotment pipeline @ 2328sqm	l/s	57	68	105	132	162	212	252
OSD min volume required	cum	21.8						
OSD max permissible flowrate	l/s	4.1						

B	BRAESIDE DRIVEWAY LEVELS & PIT 6A DELETED	11/05/20	C6 & B2
A	DEVELOPMENT APPLICATION	05/12/19	GENERAL
ISSUE	DETAILS OR AMENDMENTS	DATE	ZONE



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Civil, Structural, Hydraulics, Flood, Fire Services, Local Government

PROJECT ST EDMUND'S COLLEGE  
60 BURNS RD WAHROONGA

TITLE	STORMWATER MANAGEMENT PLAN
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CLIENT **ST EDMUND'S COLLEGE**

DRAWING No. **1931C01-100B**

SHT 1/1

DRAWN-DESIGN-VERIFY	
AL DS DS	

DEVELOPMENT APPLICATION ONLY