

9 WAKOOKA AVE ELANORA HEIGHTS NSW DA ISSUE

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STORMWATER SERVICES LEGEND

PIPEWORK SYMBOLOGY & ABBREVIATIONS

AGM	AMENDMENT
ASM	AUTHORITY GAS MAIN
ASWM	AUTHORITY SEWER MAIN
AWM	AUTHORITY STORMWATER MAIN
	AUTHORITY WATER MAIN
	CASTIN
	DISCONNECTED SERVICE
ELEC	ELECTRICAL SERVICE
GRW	GREY WATER
	INSET BORDER
IR	IRRIGATION LINE
eIR	IRRIGATION LINE - EXISTING
NCW	NON-POTABLE COLD WATER
eNCW	NON-POTABLE COLD WATER - EXISTING
NHW	NON-POTABLE HOT WATER
eNHW	NON-POTABLE HOT WATER - EXISTING
NHW-R	NON-POTABLE HOT WATER RETURN
RR	RAINWATER RE-USE
eRR	RAINWATER RE-USE - EXISTING
RW	RECLAIMED WATER
eRW	RECLAIMED WATER - EXISTING
	STORMWATER CATCHMENT
SWD	STORMWATER DRAINAGE
eSWD	STORMWATER DRAINAGE - EXISTING
SWRM	STORMWATER RISING MAIN
eSWRM	STORMWATER RISING MAIN - EXISTING
SSD	SUBSOIL DRAINAGE
eSSD	SUBSOIL DRAINAGE - EXISTING
SOF	SYPHONIC OVERFLOW
eSOF	SYPHONIC OVERFLOW - EXISTING
SSW	SYPHONIC STORMWATER
eSSW	SYPHONIC STORMWATER - EXISTING

DRAWING SCHEDULE

DRAWING NUMBER	DRAWING SCALE	DRAWING TITLE
SW-000	NTS	COVER SHEET AND LEGEND - STORMWATER SERVICES
SW-100	1:200	SITE PLAN - STORMWATER SERVICES
SW-101	1:100	GROUND FLOOR PLAN - STORMWATER SERVICES
SW-102	1:100	ROOF PLAN - STORMWATER SERVICES
SW-200	1:200	SEDIMENT AND EROSION CONTROL PLAN - STORMWATER SERVICES

SYMBOLS

	RISER
	DROP / RISE
	DROPPER
	TEE DROPPER
	PIPEWORK CAP
	PIPEWORK CONTINUATION
	UNDOCUMENTED CONTINUED LINE
	PIPEWORK SECTION
	DIRECTION ARROW
	NEW CONNECTION
	NEXT DRAWING
	DIRECTION OF FLOW SERVICE DESCRIPTION
	SERVICE SIZE
	DIRECTION OF FLOW
	STOP VALVE
	CHECK VALVE
	3-WAY VALVE
	BALL VALVE
	REDUCED PRESSURE ZONE DEVICE
	PRESSURE RELIEF VALVE
	PRESSURE LIMITING VALVE
	DOUBLE CHECK VALVE
	INFRA RED SENSOR
	WATER FILTER
	REFLUX VALVE
	REFLUX VALVE IN PIT
	PATHBOX
	EXPANSION JOINT
	PRESSURE GAUGE
	FLOW SWITCH
	PRESSURE SWITCH
	WATER POINT
	HOSE TAP
	PUMP
	CONTROL PANEL
	CLEAROUT TO SURFACE
	SYPHONIC OUTLET
	RAINWATER OUTLET
	SPREADER
	OVERLAND FLOW ARROW
	STORMWATER FLOW ARROW
	PENETRATION / CORE HOLE IN SLAB
	BEAM PENETRATION
	REDUCER
	STORMWATER GRATE
	STORMWATER COVER
	TRENCH GRATE
	REVISION
	KERB ENTRY PIT
	HAY BALE
	RAINWATER HEAD

ABBREVIATIONS

AS	Australian Standards
BCA	Building Code Of Australia
BDO	Balcony Drain Outlet
BR	Brass
BV	Ball Valve
BWL	Bottom Water Level
CHV	Check Valve
CI	Cast Iron
CIC	Cast In Column
CICL	Cast Iron Cement Lined
CIS	Cast In Slab
CL	Ceiling Level
COS	Clear Out To Surface
CP	Chrome Plated
CU	Copper
CV	Control Valve
DCV	Double Check Valve
DCV-A	Double Check Valve Assembly
DIA	Diameter
DICL	Ductile Iron Cement Lined
DP	Downpipe
DWG	Drawing
e	Existing
ECV	Expansion Control valve
EJ	Expansion Joint
ELEC	Electrical Service
FCR	For Continuation Refer
FFL	Finished Floor Level
FRC	Fibre Reinforced Concrete
FSL	Finished Surface Level
GAL	Galvanised
GD	Grated Drain
GDO	Grated Drain Outlet
GL	Ground Level
GMS	Galvanised Mild Steel
GO	Gutter Outlet
GV	Gate Valve
H/L	High Level
HD	Heavy Duty
HDPE	High Density Polyethylene
HP	High Point
HV	High Voltage
ID	Inside Diameter
IL	Invert Level
IO	Inspection Opening
IS	Inspection Shaft
IV	Isolation Valve
JU	Jump Up
KIP	Kerb Inlet Pit
KPA	Kilopascal
KW	Kilowatt
L	Litres
L/L	Low Level
L/S	Litres Per Second
LD	Light Duty

ABBREVIATIONS cont.

LV	Low Voltage
M	Metre
M.HEAD	Metres Head
M/S	Metres per Second
M3/HR	Cubic Metres per Hour
MDPE	Medium Density Polyethylene
MIN	Minimum
MJD	Movement Joint Drain
MM	Millimetres
MS	Mild Steel
NRV	Non-Return Valve
NTS	Not To Scale
O/F	Overflow
OD	Outside Diameter
OJ	Oblique Junction
PDO	Planter Drain Outlet
PG	Pressure Gauge
PLV	Pressure Limiting Valve
PRV	Pressure Relief Valve
PVC	Polyvinyl Chloride
RCP	Reinforced Concrete Pipe
RHS	Rectangular Hollow Section
RL	Reduced Level
RPZD	Reduced Pressure Zone Device
RV	Reflux Valve
RW/H	Rain Water Head
RWO	Rainwater Outlet
S/S	Stainless Steel
SDO	Spoon Drain Outlet
SL	Surface Level
SO	Syphonic Outlet
SOF	Syphonic Overflow
SPD	Spreader
SQ	Square
SSL	Structural Slab Level
STD	Sprinkler Test Drain
SV	Stop Valve
SWIP	Stormwater Inspection Pit
SWMH	Stormwater Manhole
SWP	Stormwater Pit
SWS	Stormwater Sump
SYP	Syphonic
TB	Thrust Block
TBR	To Be Removed
TEL	Telecommunication Service
TG	Trench Grate
TWL	Top Water Level
TYP	Typical
U/S	Underside
UNO	Unless Noted Otherwise
UPVC	Unplasticised Polyvinyl Chloride
UV	Ultra Violet
VCP	Vitrified Clay Pipe
WL	Water Level

REV	DATE	DESCRIPTION	DRN	APP
A	14.01.19	PRELIMINARY ISSUE	MA	PC
B	29.01.19	DA ISSUE	MA	PC

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Architect:

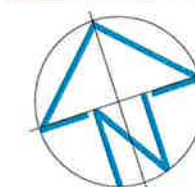
ENVIROTECTURE PROJECTS
48 KALANG RD
ELANORA HEIGHTS NSW 2101

Drawing Title:

COVER SHEET AND LEGEND
STORMWATER SERVICES

Project:

9 WAKOOKA AVE
ELANORA HEIGHTS, NSW



DRAWN	ENGINEER	CHECKED	SCALE
MA	MA	PC	NTS
PROJECT No.	DRAWING No.	REVISION	
ADC181208	SW-000	B	

ORIGINAL SIZE: A3

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PROPOSED SITE AREA:	
SITE AREA:	1776M2
LANDSCAPING:	278M2
DRIVEWAY:	563M2
PAVING:	286M2
WATERCOURSE:	164M2
POOL:	72M2
GARAGE:	35M2
MAIN DWELLING:	301M2

PROPOSED NEW STUDIO:
ROOF/IMPERVIOUS AREA: 55M2
OPEN DECKING/PERVIOUS AREA: 22M2

PROPOSED ADDITION IMPERVIOUS AREA 77M2 - 4%

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ENVIROTECHTURE PROJECTS
48 KALANG RD
ELANORA HEIGHTS NSW 2101



SITE PLAN

STORMWATER SERVICES

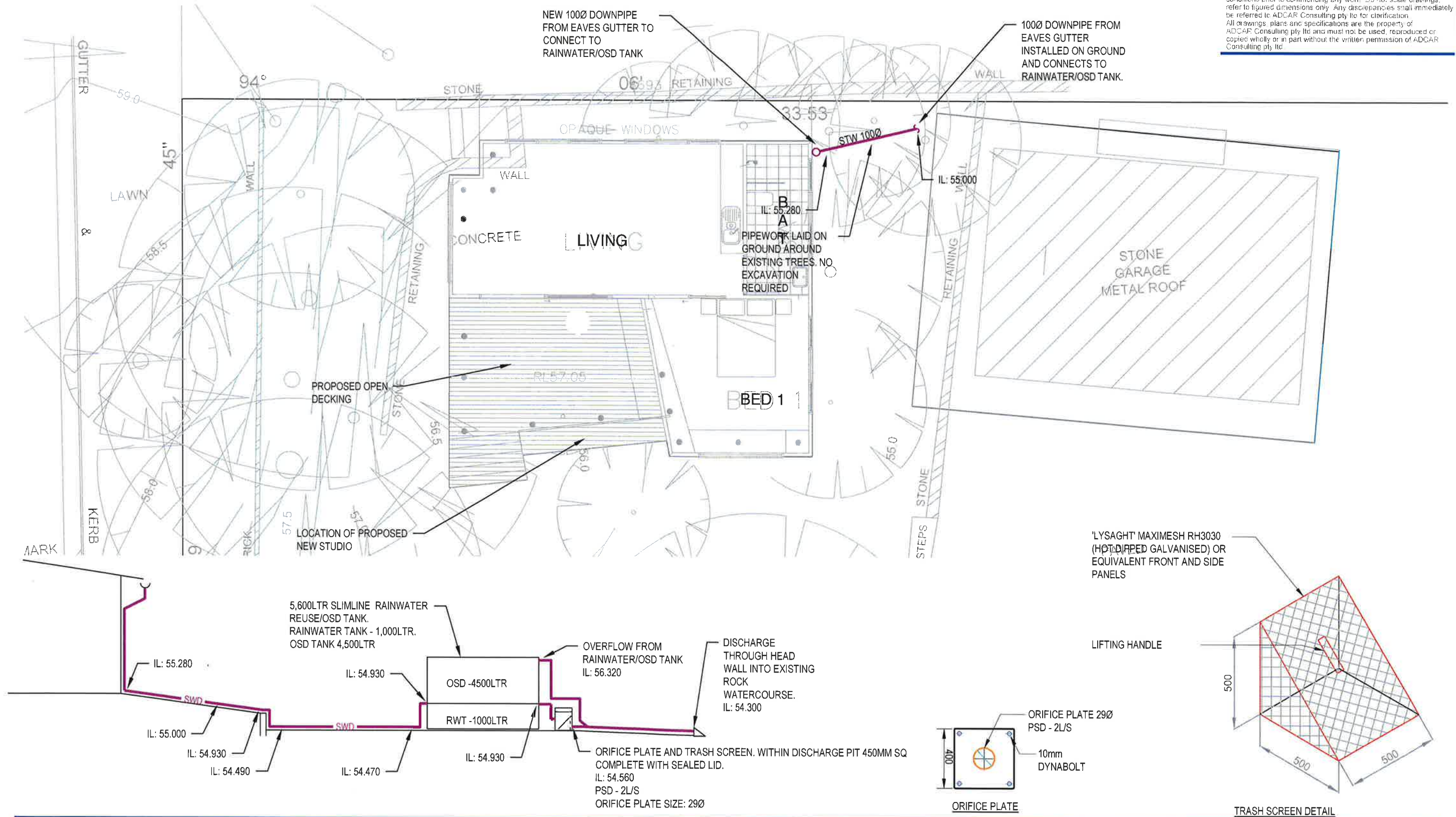
9 WAKOOKA AVE
ELANORA HEIGHTS, NSW



DRAWN MA	ENGINEER MA	CHECKED PC	SCALE 1:200
PROJECT No. ADC181208		DRAWING No. SW-100	REVISION C

CA 371C (1991)

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Architect:
ENVIROTECTURE PROJECTS
48 KALANG RD
ELANORA HEIGHTS NSW 2101

Drawing Title:
**GROUND FLOOR PLAN
STORMWATER SERVICES**

Project:
**9 WAKOOKA AVE
ELANORA HEIGHTS, NSW**



DRAWN	ENGINEER	CHECKED	SCALE
MA	MA	PC	1:100
PROJECT No.	DRAWING No.	REVISION	
ADC181208	SW-101	C	

ORIGINAL SIZE: A3

[illegible]

The site plan for D.P. 243271 (1776m²) shows a proposed site with various features and boundaries. Key elements include:

- Proposed Location of Works:** Indicated by a shaded rectangular area in the upper left.
- Silt Fence Installed Around Proposed Location of Works:** A line of small squares surrounding the proposed work area.
- Site Boundary:** A line defining the perimeter of the site, with labels at the top and bottom.
- Site Entrance:** A set of stairs leading into the site from the bottom left.
- Rock Watercourse:** A feature running along the right side of the site.
- Other Features:** Includes a stone garage with a metal roof, a pool, paved areas, concrete, a deck, and a brick residence with a metal roof.
- Dimensions:** Various measurements are provided, such as 45m, 90m, 24m, 27.37m, 28.2m, 44m, 60.91m, 34.695m, 10m, 0.635m, 113.4m, and 45m.

EROSION CONTROL NOTES

1. ALL INITIAL SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING TOPSOIL STRIPPING AND EARTHWORKS.
2. IMMEDIATELY ANY BARRIER OR FOOTPATH IS COMPLETED, THE SECTION SHALL BE TOPSOILED AND SEEDED OR TURFED.
3. THE RECOMMENDED SEED MIX AND FERTILIZER SPREAD RATE SHALL BE AS DIRECTED BY SUPERINTENDENT.
4. IMMEDIATELY AREAS ARE SEEDED, THEY SHALL BE PROPERLY

ORDER OF CONSTRUCTION:

REFER TO DETAILED CONSTRUCTION SCHEDULE FOR SPECIFIC DETAILS.

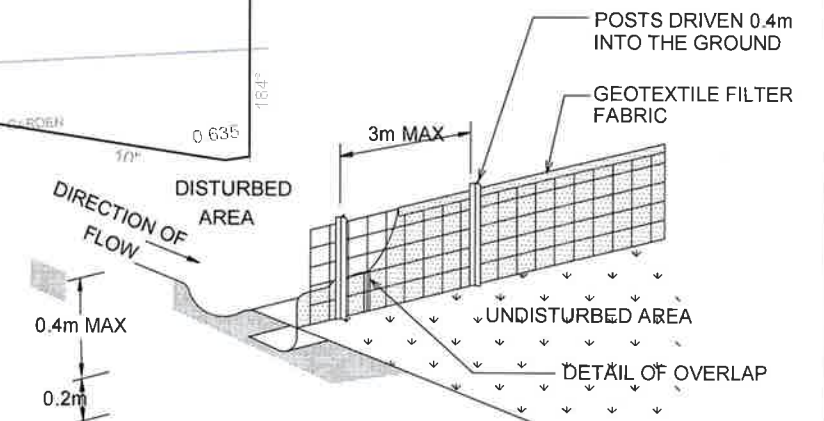
1. PROVIDE SILT FENCE AROUND BOUNDARIES AS SHOWN ON THE PLAN. RETURNS TO BE PROVIDED EVERY 20m MAXIMUM.
2. CONSTRUCT SILT TRAPS AROUND EXISTING PITS & SEDIMENT TRAP.
3. PROVIDE DIVERSION BANKS ALONG THE SIDES AS SHOWN ON THE PLAN. BANKS TO SPILL ONTO SCALLOPED SILT FENCING.

D.P. 188050

1. ALL INITIAL SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING TOPSOIL STRIPPING AND EARTHWORKS.
2. IMMEDIATELY ANY BATTER OR FOOTPATH IS COMPLETED, THE SECTION SHALL BE TOPSOILED AND SEEDED OR TURFED.
3. THE RECOMMENDED SEED MIX AND FERTILIZER SPREAD RATE SHALL BE AS DIRECTED BY SUPERINTENDENT.
4. IMMEDIATELY AREAS ARE SEEDDED, THEY SHALL BE PROPERLY WATERED TO PROMOTE GROWTH. THE GROWTH SHALL BE WATERED UNTIL VEGETATION TO SUPERINTENDENT'S SATISFACTION IS ACHIEVED.
5. A STRIP OF TURF SHALL BE PLACED IMMEDIATELY BEHIND THE KERB ON ALL NEW ROADS TO ACT AS A FILTER STRIP.
6. FILL KERB INLET SEDIMENT TRAPS, DETAILED ABOVE, URBAN EROSION AND SEDIMENT CONTROL MANUAL, ON ALL INLET PITS.
7. THE CONTRACTOR SHALL NOTE THAT HIS CONTRACT IS NOT COMPLETED UNTIL THE REVEGETATION IS ACCEPTED BY COUNCIL. SOME AREAS MAY REQUIRE THE PLACEMENT OF TURF TO ACHIEVE SATISFACTORY REVEGETATION.
8. ALL VEHICLE MOVEMENTS TO BE RESTRICTED TO AREAS OF CONSTRUCTION ONLY.

REFER TO DETAILED CONSTRUCTION SCHEDULE FOR SPECIFIC DETAILS.

1. PROVIDE SILT FENCE ALONG BOUNDARIES AS SHOWN ON THE PLAN. RETURNS TO BE PROVIDED EVERY 20m MAXIMUM.
2. CONSTRUCT SILT TRAPS AROUND EXISTING PITS & SEDIMENT TRAP.
3. PROVIDE DIVERSION BANKS ALONG THE SIDES AS SHOWN ON THE PLAN. BANKS TO SPILL ONTO SCALLOPPED SILT FENCING.
4. PROVIDE TEMPORARY ENTRY/EXIT AREA AS SHOWN.
5. STRIP TOPSOIL FROM IMMEDIATE WORK AREA AND REMOVE SURPLUS AS DIRECTED. STOCKPILE REMAINED ON SITE IN AREA DESIGNATED WITH DIVERSION BANK IN PLACE UPSLOPE AND SILT FENCE IN PLACE. DOWNSLOPE.
6. CLEAN GROSS POLLUTANT TRAP & EXISTING PITS.
7. CONSTRUCT BULK EARTHWORKS
8. CONSTRUCT PROPOSED BUILDING C.
9. CONSTRUCT DRAINAGE & OSD WORKS TO SPECIFICATION.
10. CONSTRUCT ROAD & CIVIL WORKS TO DETAILS SHOWN ON PLANS.
11. DURING CONSTRUCTION OF DRAINAGE PIPELINES TEMPORARY PROTECTION TO BE PROVIDED AROUND PITS & PIPE OPENINGS. ALL SPOIL TO BE STOCKPILED ON HIGH SIDE OF TRENCH PRIOR TO BACKFILLING.
12. PROVIDE TURF STRIPS BEHIND ROADS.
13. REMOVE SEDIMENT CONTROL MEASURES.

[illegible]

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SEDIMENT AND EROSION CONTROL PLAN

STORMWATER SERVICES

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DRAWN MA	ENGINEER MA	CHECKED PC	SCALE 1:200
PROJECT No. ADC181208		DRAWING No. SW-200	REVISION B

ORIGINAL SIZE: A3