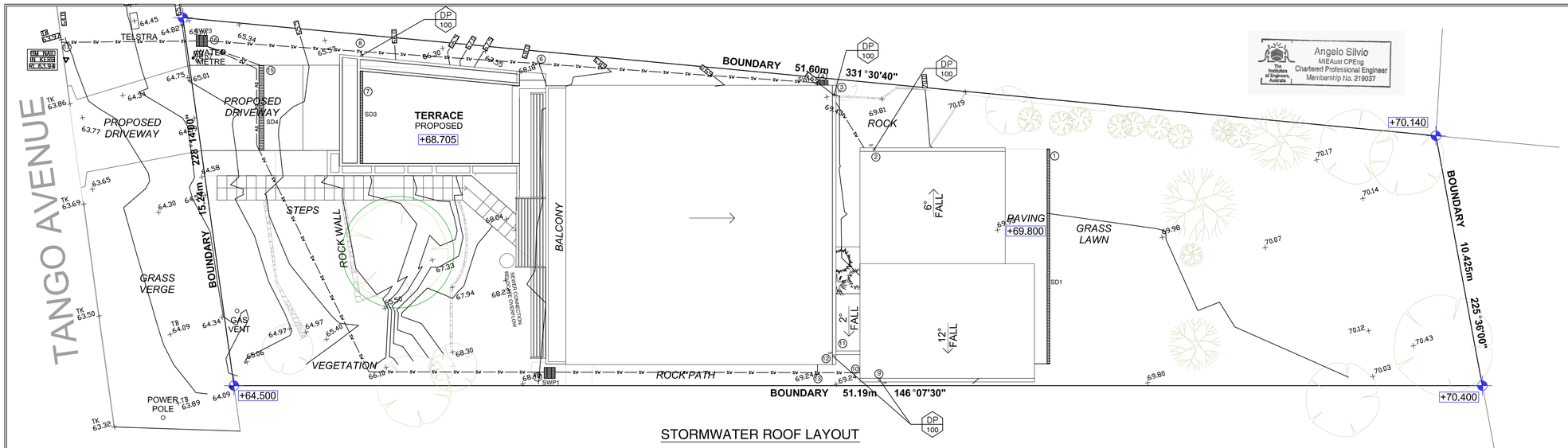
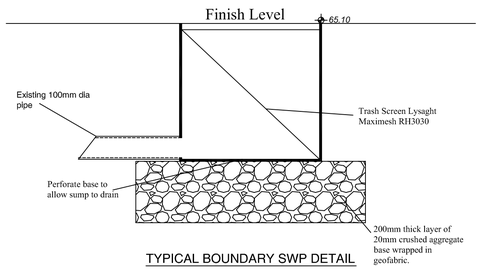


STORMWATER ROOF LAYOUT

LEGEND

S	Sewer
VP	Vent Pipe
SW	Stormwater
RW	Rainwater
W	Water
G	Gas
Sub SW	Subsoil
eSW	Existing Stormwater
aS	Authority Sewer Main
aSW	Authority Stormwater Main
aW	Authority Water Main
aG	Authority Gas Service
aT	Authority Telephone Service
aEL	Authority Electrical Service
/	Sediment Fence
	Boundary Trap
	Penetrating Pipe
	Non-Penetrating Pipe
	Pentrating Offset
	Non-Pentrating Offset
	Pipe Break
	Capped off Service
	Connect to Existing Pipe
DP 100	Type of Service / Size of Service
SP	Spreader Downpipe
CO	Cleanout
dia	Diameter
DP	Downpipe
VP	Vent Pipe
e	Existing
PD	Planter Drain
PVC	Unplasticized Polyvinyl Chloride
RHS	Rectangular Hollow Section
SHS	Square Hollow Section
RL	Reduced Level
RWO	Rainwater Outlet
SAC	Sewer Access Chamber
SWP	Stormwater pit
UNO	Unless noted otherwise
	Pipe network node
	Pit with grated cover
	Pit with solid cover

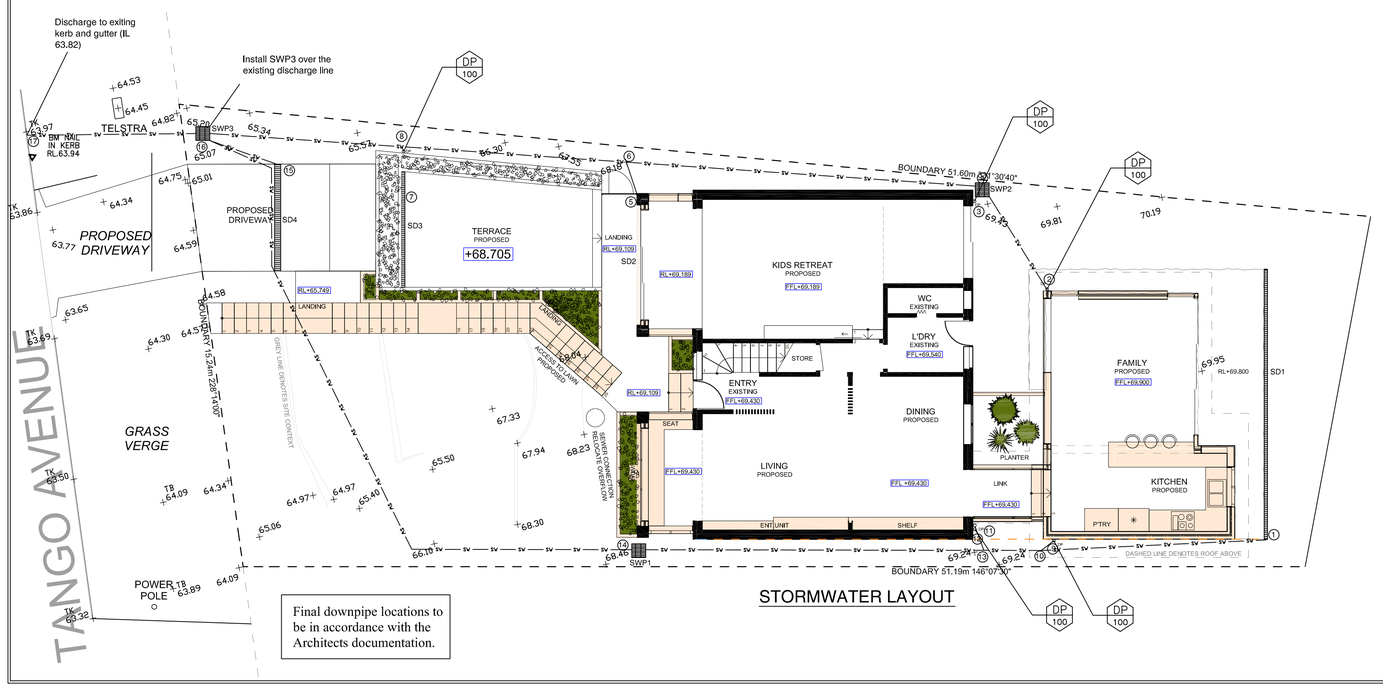


TYPICAL BOUNDARY SWP DETAIL

Note:
1. Contractor to verify all site levels and downpipe IL's prior to commencement of drainage works on site.
2. Downpipes to be a minimum of 100mm diameter.
3. All drainage graded as shown on the drawings.
4. All stormwater drainage within the site up to 225mm diameter to be UPVC graded
5. All pit covers to be as per schedule.
6. Leaf mesh shall be Maximesh Rh3030 if required.
7. Outlet pipe to be cast into the wall of the pit.

NOTES:

Colebrook-White roughness k = 0.015mm for polyvinyl chloride pipe (PVC) & 0.15mm for galvanised mild steel (GMS)
A minimum pipe slope of 1.00% is assumed for calculation purposes.
Surface levels based on Architectural & Survey drawings.
Confirm practicality of pipe installation and advise of any discrepancy prior to construction.
Stormwater drainage to be sewer grade UPVC with solvent welded joints laid on granular bedding to AS/NZS3500.3
Subsoil drain (where required) to be slotted UPVC with filter sock laid in free draining granular material.
Confirm all subsoil drainage requirements prior to construction and connection downstream of detention tank outlet where applicable.
All drainage to be min 100 dia UNO
All downpipes draining to the storage system shall be made watertight below the maximum water storage level.
Builder to provide As-Built drawings of all relevant drainage works as required for construction purposes.
Any change to detention discharge control shall be submitted to consultant for approval prior to installation.
Final drainage layout shall be marked on As-Built drawings as required for certification and reference purposes.
Any easements, positive covenants of other legal instruments to be arranged and registered by surveyor or other approved agent.



STORMWATER LAYOUT

Final downpipe locations to be in accordance with the Architects documentation.

Finish ground surfaces around building to be generally graded away from and around building to avoid low points where water can accumulate

Note:
Investigate location of all existing services affected by new works and disuse, cap off, divert, upgrade, renew, reinstate services as required. Coordinate all temporary shutdowns with site superintendent, providing reasonable and adequate notice.

STORMWATER PIPE SCHEDULE

STORMWATER PIPE SIZING BY RATIONAL FORMULA & COLEBROOK-WHITE EQUATION
Coefficient of runoff determined in accordance with AR & R (2016)

PROJECT: 15 Tango Ave Dee Why
Design rainfall intensity = 266mm/hr Pipe roughness k = 0.015mm
ARI = 100 years Fy = 1.05 10 year 1 hour intensity = 60.0 mm/hr

U/S NODE	D/S Node	Area m2	Imperv %	Coef	Slope %	Inflow l/s	Pipeflow l/s	Cap l/s	Size mm
1	10	197.9	7.7	0.59	1.50	10.4	10.4	11.0	100 PVC
2	4	28.3	100	0.90	1.00	2.3	2.3	8.8	100 PVC
3	4	63.4	100	0.90	1.00	5.1	5.1	8.8	100 PVC
4	6	0.0	100	0.90	1.00	0.0	7.3	8.8	100 PVC
5	6	5.3	100	0.90	1.00	0.4	0.4	8.8	100 PVC
6	8	0.0	100	0.90	1.00	0.0	7.7	8.8	100 PVC
7	8	22.8	100	0.90	1.00	1.8	1.8	8.8	100 PVC
8	16	0.0	100	0.90	1.50	0.0	9.6	11.0	100 PVC
9	10	34.4	100	0.90	1.00	2.8	2.8	8.8	100 PVC
10	13	0.0	100	0.90	1.00	0.0	13.1	24.3	150 PVC
11	13	5.8	100	0.90	1.00	0.5	0.5	8.8	100 PVC
12	13	63.4	100	0.90	1.00	5.1	5.1	8.8	100 PVC
13	14	0.0	100	0.90	1.00	0.0	18.6	24.3	150 PVC
14	16	0.0	100	0.90	1.00	0.0	18.6	24.3	150 PVC
15	16	11.6	100	0.90	1.00	0.9	0.9	8.8	100 PVC
16	17	0.0	100	0.90	1.00	0.0	29.1	-	100 PVC

STORMWATER PIT AND DRAIN SCHEDULE

Pit Number	Surface RL (m)	Outlet IL (m)	Depth (mm)	Internal Size (mm)	Duty
SWP1	68.46	68.01	450	450x450	Light
SWP2	69.43	68.98	450	450x450	Light
SWP3	65.10	64.65	450	450x450	Light
SD1	69.75	69.65	100	100	Light -Heel guard
SD2	69.109	69.009	100	100	Light -Heel guard
SD3	68.705	68.605	100	100	Light -Heel guard
SD4	65.20	65.00	200	200	Heavy

Tall Ideas PTY LTD
7 Eaton St
Willoughby NSW 2068
TEL 02 99581860
FAX 02 99672492
ABN 34 055 736 402

TITLE
Stormwater Plan
For
15 Tangp Ave
Dee Why

CLIENT
Mark Hopkins &
Catherine Manu
–

DRAWN A.S.	CHECKED
SCALE @ A1 1:100, 1:10	DATE 22/06/20
APPROVED	
DWG.No. 200507-H1 1 of 1	REVISION 1