

ARH Dee Why - Stormwater

882A Pittwater Road, Dee Why

STORMWATER DRAINAGE NOTES:

GENERAL NOTES:

- D01. All levels are to Australian Height Datum (AHD), unless noted otherwise.
- D02. Dimensions shall not be scaled from drawings.
- D03. The Contractor must verify all dimensions on site prior to commencement of the works.
- D04. These plans shall be read in conjunction with the approved Architectural, Structural, Mechanical, Hydraulic, Electrical, Landscape & other Consultants drawings.
- D05. Where new work abuts existing, the Contractor shall ensure a smooth even profile free from abrupt changes.
- D06. The Contractor shall arrange for all survey setout & as-built to be performed by a Registered Surveyor.
- D07. Invert levels are given at critical locations. The Contractor/Drainer shall determine levels on minor drainage lines and confirm design levels.
- D08. Stormwater drains min. fall 1:100, unless noted otherwise.
- D09. Advise Engineer for inspection of all Stormwater works, pipes & pits, prior to covering. Provide as-built survey upon completion.
- D10. Construction of Drainage to conform with the requirements of the relevant Authority or Council.
- D11. Connections to new & existing drainage shall be neatly trimmed & cement rendered to a smooth finish.
- D12. All work shall be in accordance with AS3500 'National Plumbing & Drainage Code', unless noted otherwise.
- D13. The Contractor shall expose the full drainage route and point of discharge from the site and confirm levels prior to commencing construction.

EXISTING SERVICES:

- D14. The Contractor shall excavate for, locate and co-ordinate with all services within & beyond the property line prior to the commencement of the Works.
- D15. Existing services which are to remain shall be adjusted as necessary to suit the new Works.
- D16. Existing services no longer required shall be capped off and removed out of sight to the relevant authorities requirements.
- D17. Care is to be taken when excavating near existing services. Obtain services setout prior to works. Hand excavate as required to avoid damage to services.
- D18. Construct temporary services as required.

DRAINAGE PIPES:

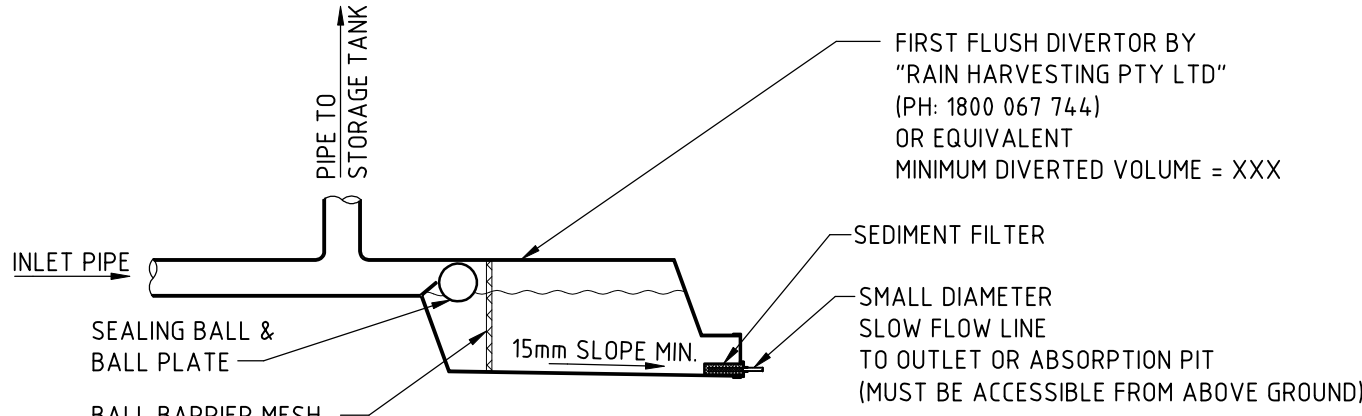
- D19. UPVC type pipes shall be used for pipes not greater than 300mm diameter, unless noted otherwise. UPVC pipes shall have solvent welded watertight joints.
- D20. Pipe diameter greater than 300mm shall be FRC type pipe Class '3', unless noted otherwise.
- D21. Pipe laying, bedding & backfill to be in accordance with the specification and the pipe manufacturer's requirements.
- D22. Where UPVC drainage pipes pass under slabs, sewer grade pipes shall be used.
- D23. Contractor shall supply & install all proprietary fittings for connections & junctions.
- D24. Additional subsoil drainage may be required where site conditions & groundwater dictate. Refer to Engineer for site inspection.
- D25. Pipes to be 100Ø unless noted otherwise.
- D26. Outlet pipes from pits shall have invert level at least 30mm lower than the invert level of the lowest pipe entering the pit.
- D27. Inspection openings or stormwater pits shall be located where shown on the drawings and at the following locations:
- a. Each point of connection
 - b. Even spacing not more than 30m apart;
 - c. Each end of any inclined jump-up which exceeds 6m in length.
 - d. Each connection to an existing stormwater drain.
 - e. Any change of direction greater than 45°
- D28. Inspection openings shall be min 150Ø and shall be plugged or capped in accordance with AS3500.
- D29. Planter boxes bases to be lined with 'Atlantis Drainage Cell' or approved equivalent wrapped in geotextile and draining to subsoil drainage pipes connected to the main stormwater system. Co-ordinate with requirements of Landscape Architect.
- D30. Junctions in stormwater drains shall be made by means of a proprietary coupler or for pipes of at least 350Ø opening cut as detailed on the drawings.

DRAINAGE PITS:

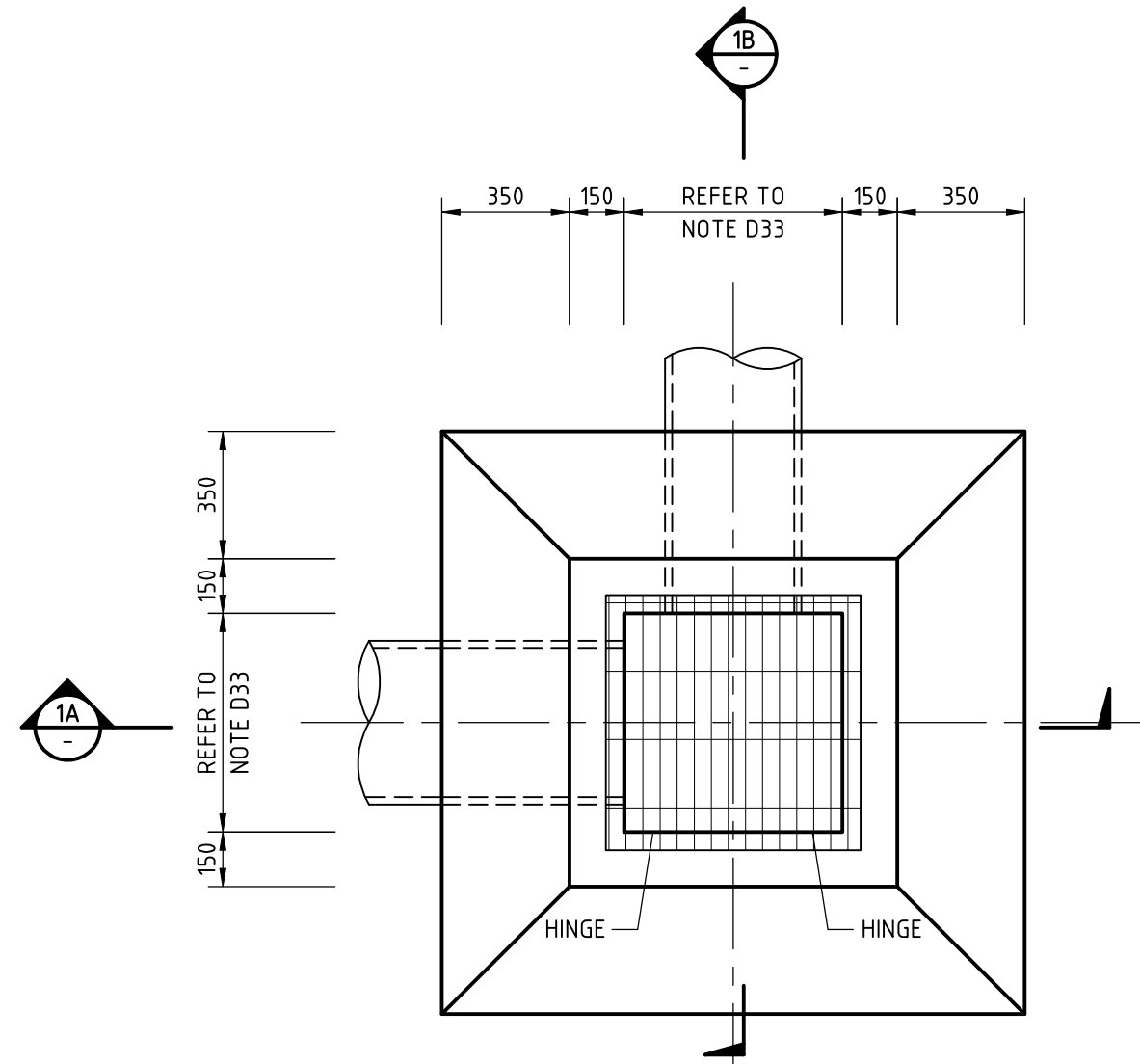
- D31. All pits and arrestors shall be constructed to the relevant authorities requirements. Provide local falls to pits.
- D32. Minimum cover to all reinforcement in concrete to be 40mm.
- D33. Minimum Drainage pit size shall be as follows:

Depth to Invert (mm)	Minimum Internal Dimensions (mm)		
	Rectangular	Circular	
	Width	Length	Diameter
≤ 600	450	450	600
> 600 ≤ 900	600	600	900
> 900 ≤ 1200	600	900	1000
> 1200	900	900	1000

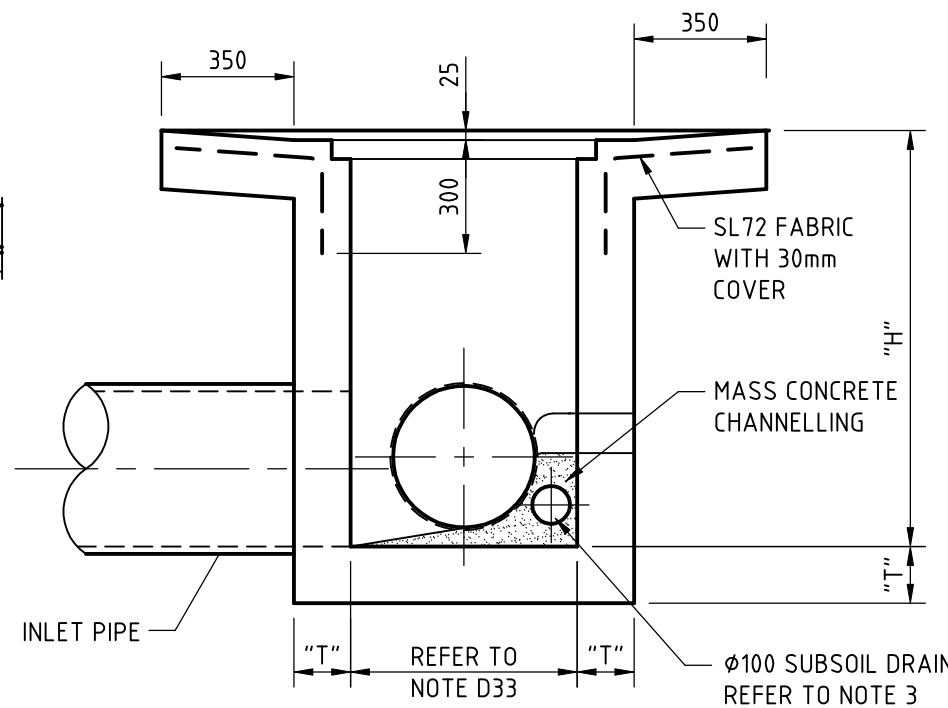
- D34. All pits to have galvanised hinged lockable gratings equivalent to "Grate Drainage Products Pty Ltd" heelguard type. Use Class B in general areas and Class D in areas subject to vehicles.
- D35. Drainage pit size may need to be increased over minimum to suit pipe size. Pit internal dimensions shall be of least 300mm greater than external diameter of corresponding pipe.
- D36. Pits deeper than 1000mm are to be fitted with step irons at 300mm centres. Contact Engineer for typical detail.
- D37. All exposed pit edges shall be rounded with 20mm radius or 20 x 20 chamfer.
- D38. Walls of cast insitu pits shall be 200mm (min) thick concrete, grade N32, unless noted otherwise.
- D39. Pits shall be reinforced with SL81 fabric, central in walls & base slab U.N.O. Mesh to be lapped 400mm. Lap mesh at corners or use N12-200 "L" bars lapping 400 each way.
- D40. Approved precast pits may be used.
- D41. Bases of drainage pits shall be grouted to prevent ponding of water, unless noted otherwise.



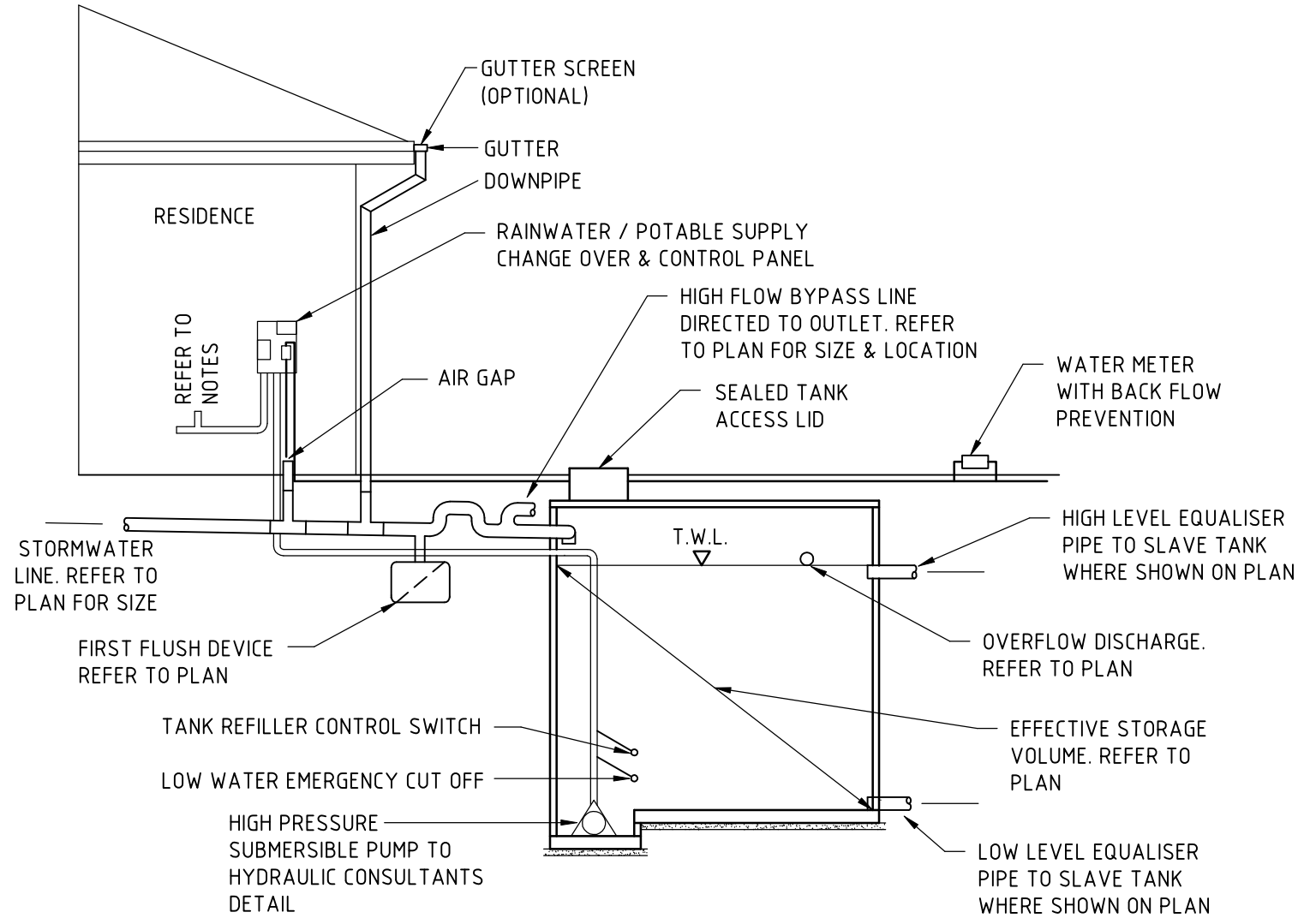
TYPICAL 'INGROUND' FIRST FLUSH DIVERTOR SCHEMATIC



GRATED PIT PLAN



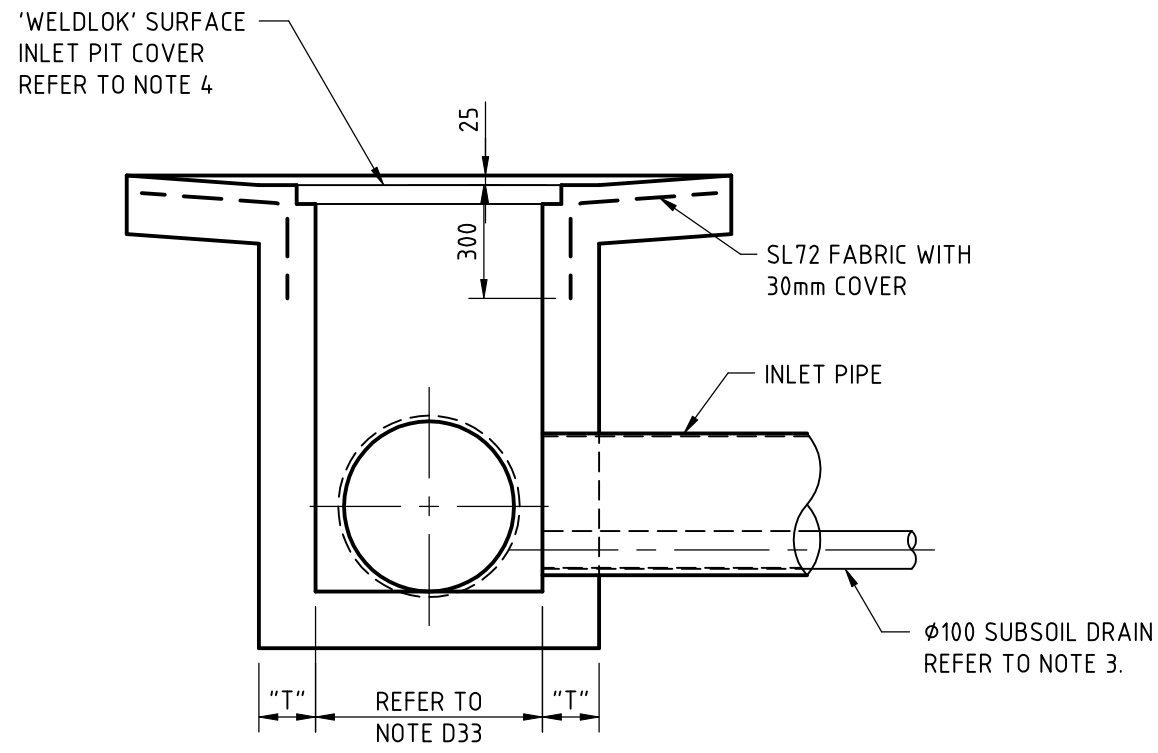
DETAIL 1A



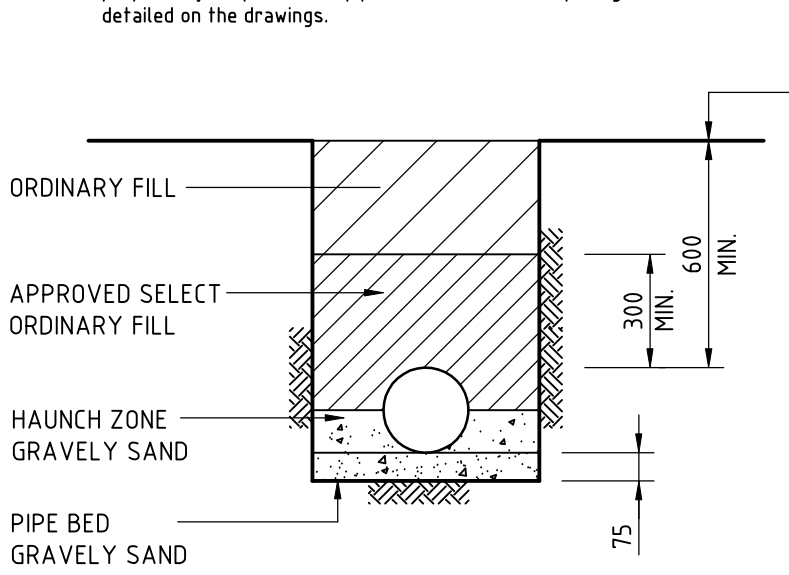
IN GROUND RAINWATER REUSE CYCLE SCHEMATIC

SAG INLET PIT NOTES:

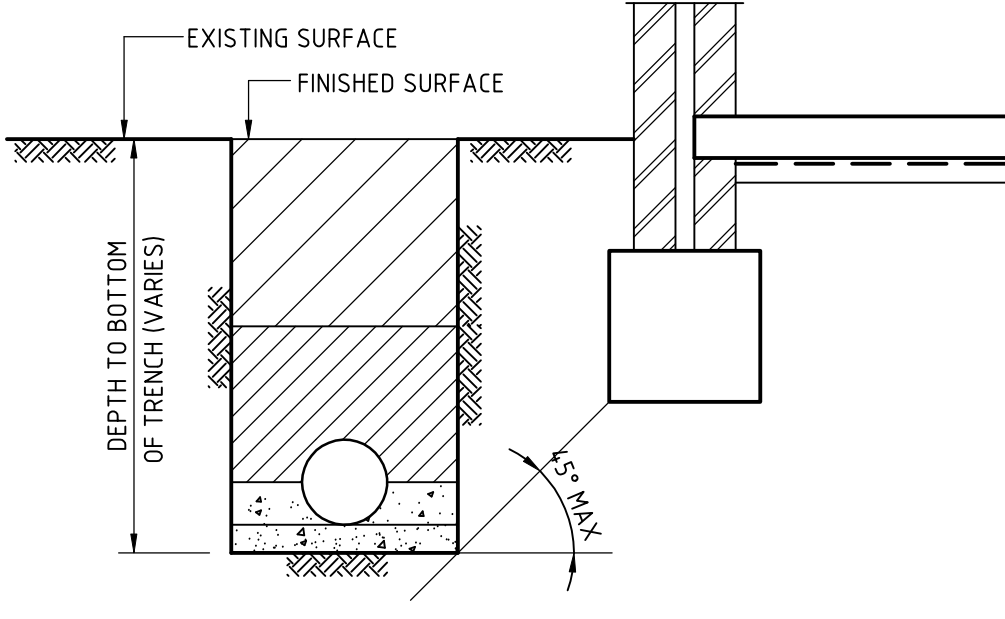
- COMPRESSIVE STRENGTH OF CONCRETE TO BE A MINIMUM OF 20MPa AT 28 DAYS.
- TOP OF BENCHING SHALL BE 1/2 OF OUTLET PIPE DIAMETER.
- Ø100 SUBSOIL DRAINAGE PIPE 3m LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED AT INVERT LEVEL EITHER SIDE OF INLET PIPES.
- PIT GRATE TO BE 'WELDLOK' OR APPROVED EQUIVALENT.
- PROVIDE STEP IRONS WHERE PIT IS DEEPER THAN 1200



DETAIL 1B



TYPICAL PIPE LAYING DETAIL



TYPICAL PIPE LAYING ADJACENT TO FOOTINGS

DRAWING SCHEDULE

SW00 STORMWATER NOTES & DRAWING SCHEDULE

SW01 GROUND FLOOR STORMWATER PLAN

SW02 SEDIMENT & EROSION CONTROL PLAN

SW03 SEDIMENT & EROSION CONTROL DETAILS & SECTIONS

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INTELLIGENT THINKING

	XX.XX.XX	XXXXXXXXXXXXXX		X.X.	
REVISION	DATE	DESCRIPTION		BY	

This drawing MUST be read in conjunction with ALL drawings for this project including but not limited to all construction notes.

PRELIMINARY
NOT FOR
CONSTRUCTION

ARCHITECT: CRAWFORD ARCHITECTS

CLIENT: CRAWFORD ARCHITECTS

PROJECT: ARH Dee Why
882A Pittwater Rd, Dee Why

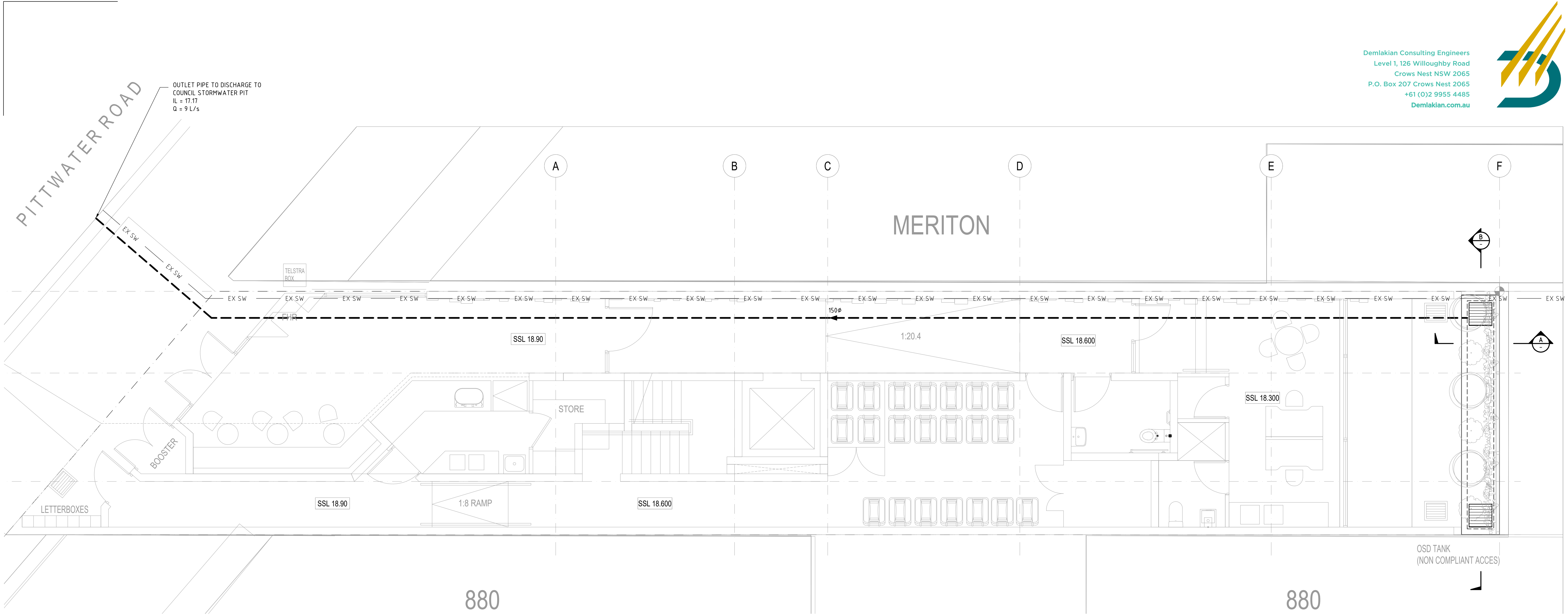
TITLE: STORMWATER NOTES
& DRAWING SCHEDULE

220218

DRAWING: SW00
REVISION: P1

DESIGNED: JD
DRAWN: RAL
CHECKED: DW
DATE: FEB 2021

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STORMWATER MANAGEMENT PLAN

ALL PIPES TO BE Ø100 UPVC @ 1% FALL, TYPICAL U.N.O.
ROOF DRAINAGE BY OTHERS TO BE DIRECTED TO OSD.
SCALE 1:200

— ➔ — DENOTES STORMWATER PIPE
- - - - - DENOTES SUBSOIL DRAIN
- 100 Ø - DENOTES PIPE DIAMETER IN MM

OSD DETAILS					
SITE AREA (SQM)	AREA DRAINING TO OSD (SQM)	SSR (CUM)	STORAGE PROVIDED (CUM)	PSD (L/s)	SITE DISCHARGE (L/s)
241	241	6.8	7.1	9	9

