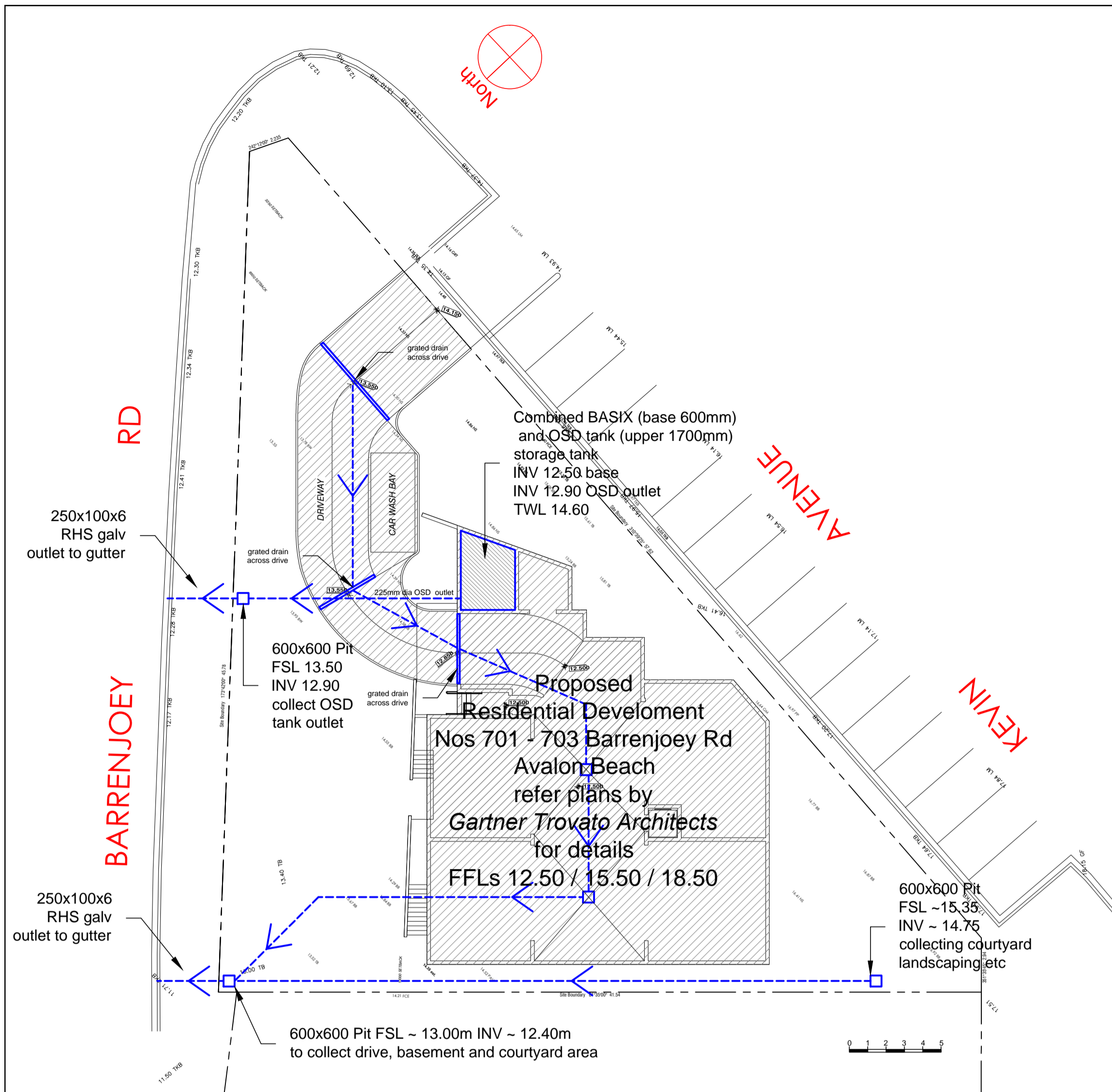


STORMWATER NOTES

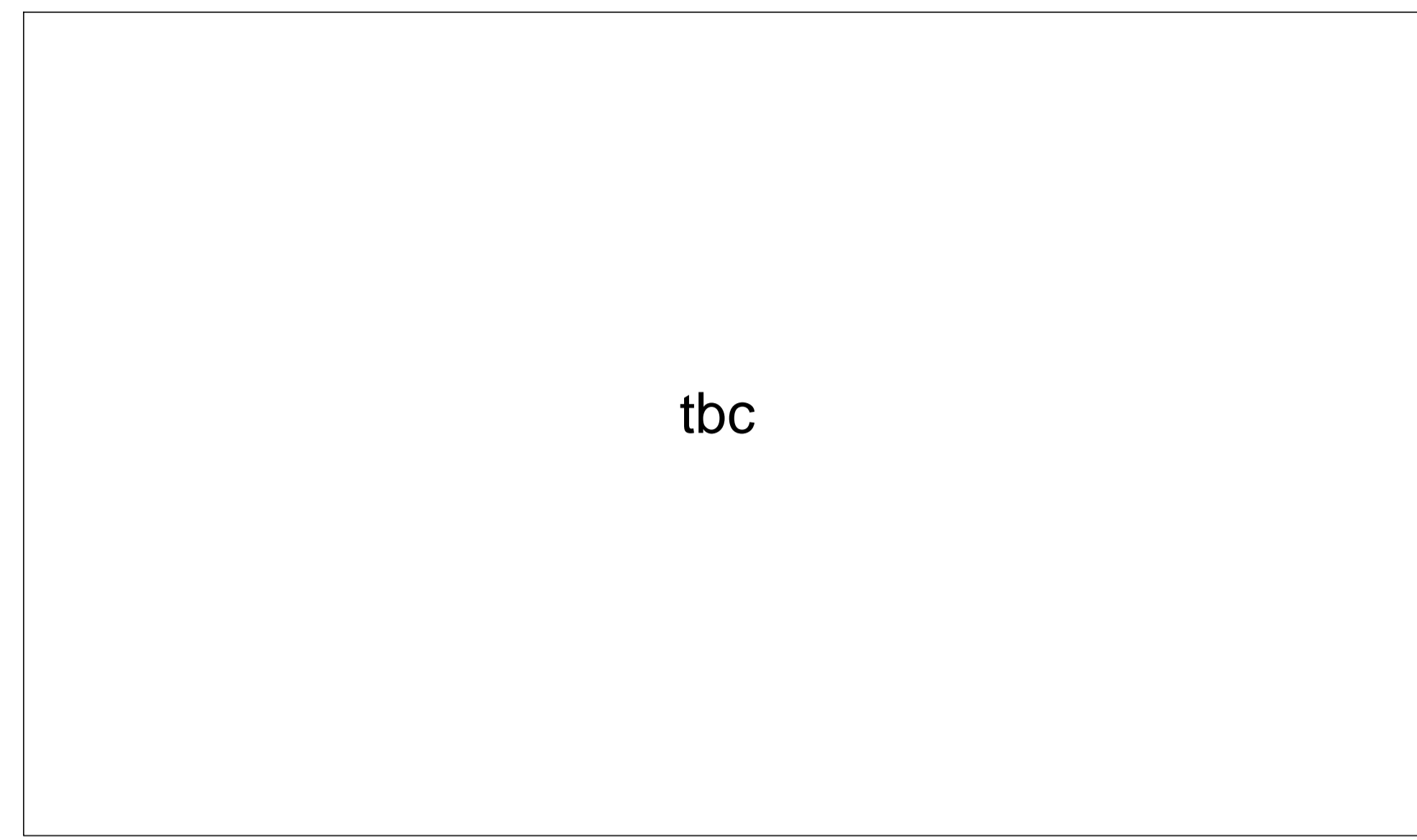
- All trunk drainage pipes as shown within this plan to be 150mm dia uPVC.
- All roof collection components (ie gutters / DPs etc) are to be located / sized by the Developments contracting Plumber to AS 3500.3 requirements.
- All pipes to be uPVC to AS 1254:2002.
- All pipes to be laid at the grade required to match pit invert levels.
- All pipes to be installed and laid in accordance with AS 3500.3:2003.
- All pipes on grades > 1:5 to have anchor blocks @ 6m cts.
- All roof guttering / down pipes / valley gutters / box gutters etc are to be sized and installed in accordance with AS 3500.3:2003.
- All pits are to be proprietary uv resistant polypropylene or similar unless noted (approved by the Engineer) and are to include a min 50mm sediment trap in the base and a maximesh screen laid at 45° across the pit to protect the outlet pipe.
- All pits greater than 600mm in depth are to be proprietary precast concrete (approved by the Engineer).
- All pits greater than 1000mm in depth are to have adequate access requirements in accordance with OH&S/Workcover requirements (ie, minimum dimensions 900x900mm with step irons).
- All works are to be inspected and certified by the Principle Certifying Authority prior to backfilling.
- All works requiring certification by the Engineer will require a works as executed survey prepared by a registered Surveyor detailing all levels etc as on the Engineering plans.
- The system is to be flushed and cleaned of all sediment and debris annually.
- The system will require regular cleaning and maintenance to ensure its ability to function is maintained.
- To ensure the system's ability to function is maintained it is to be inspected and certified as operating effectively by a licensed plumber every 5 years, and an engineer every 20yrs.
- All existing predevelopment catchment area run-off conditions exiting the site are to be maintained with no run-off flows being diverted from the predevelopment condition.



SITE STORMWATER MANAGEMENT PLAN

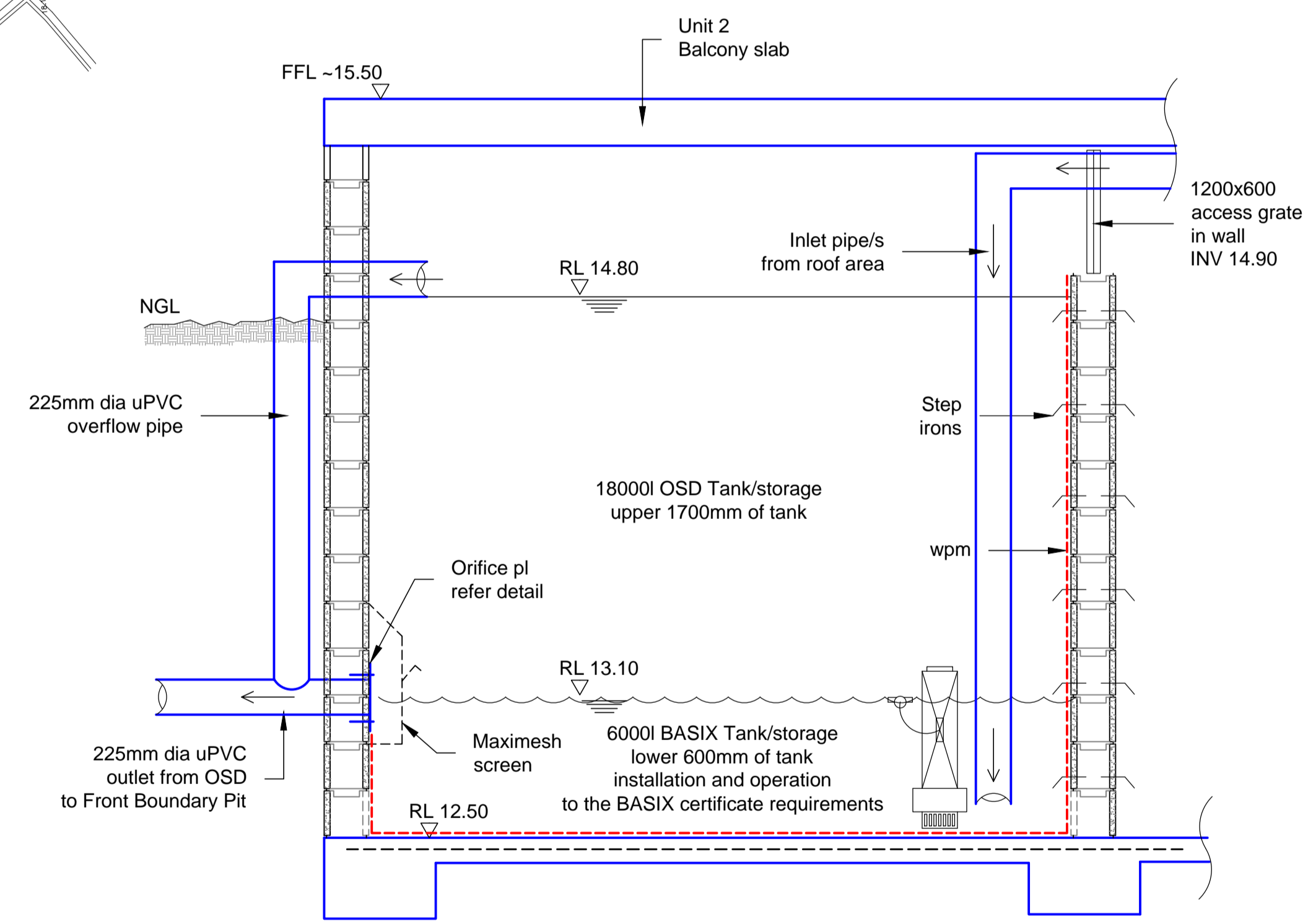
1:200

All drainage is to be collected, controlled and discharged in accordance with the BCA, Australian Standards, Northern Beaches Council Policy and sound building practices. Detention Volume and Permissible Site Discharge calculated as per Council DCP Section B5.7, proposed new impervious area ~284m² (550m² new works less existing impervious area 266m²). Required OSD Volume 18000l, required Permissible Site Discharge 9 l/s. Full Onsite Detention system layout and design to be detailed with Construction Certificate documentation along with conventional plumbing components (ie gutters, dps etc). All pipes shown above to be 150 dia uPVC. All works to be carried out by licensed contractors.



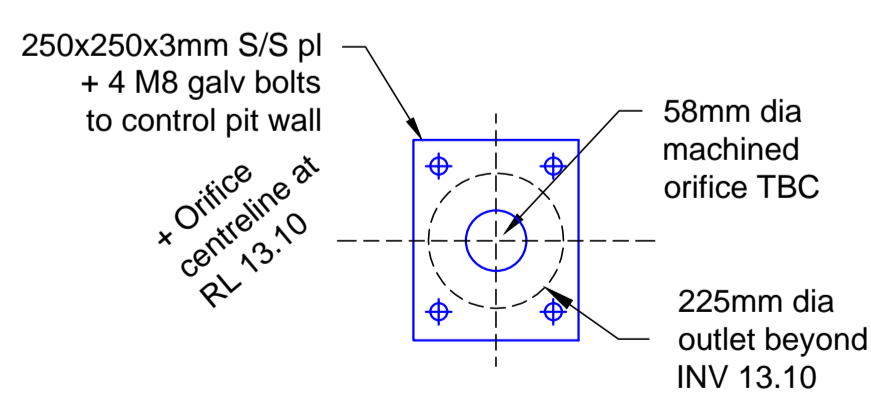
SITE PLAN

1:200



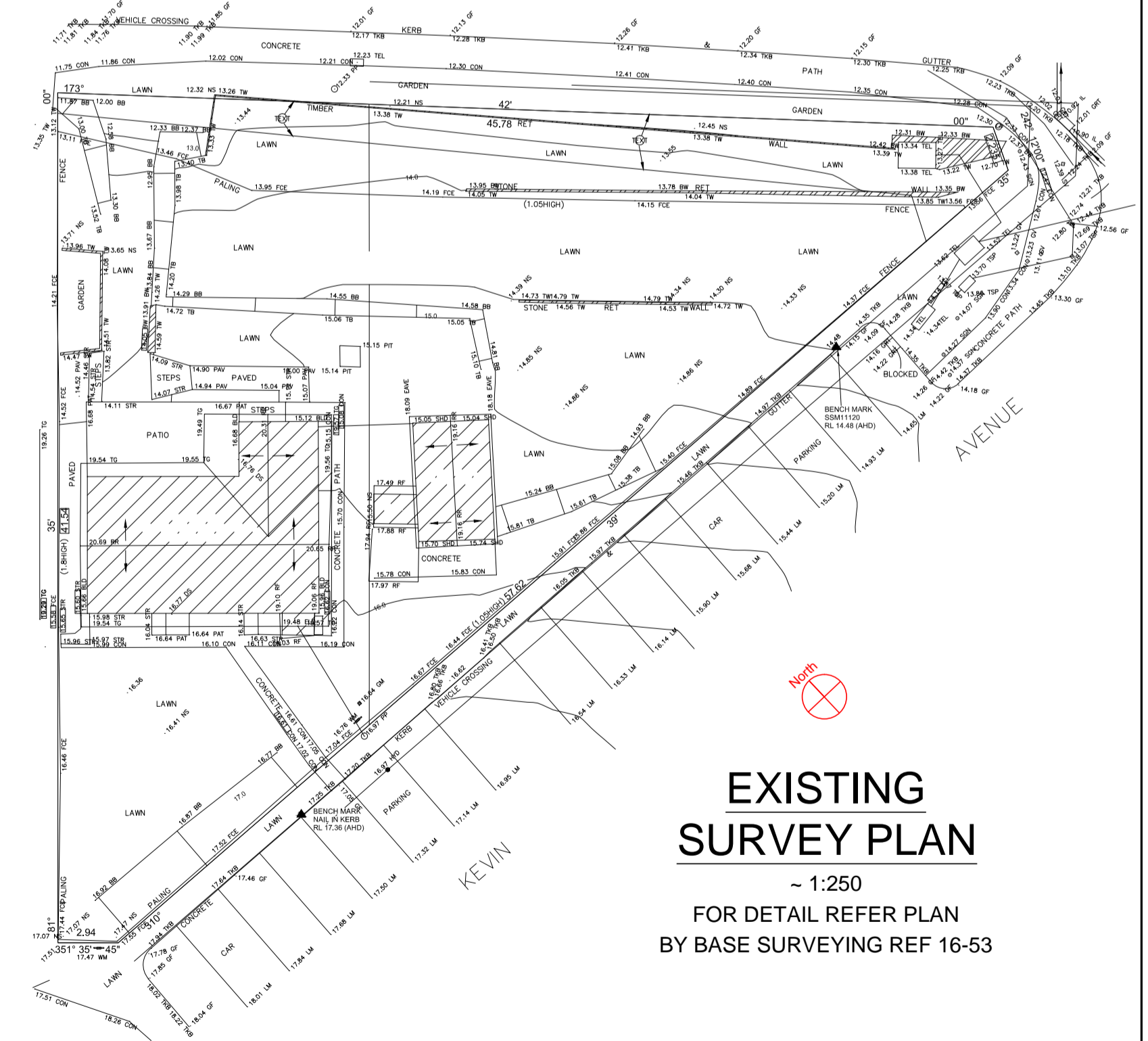
OSD CROSS SECTION

~ 1:20



ORIFICE PLATE DETAIL

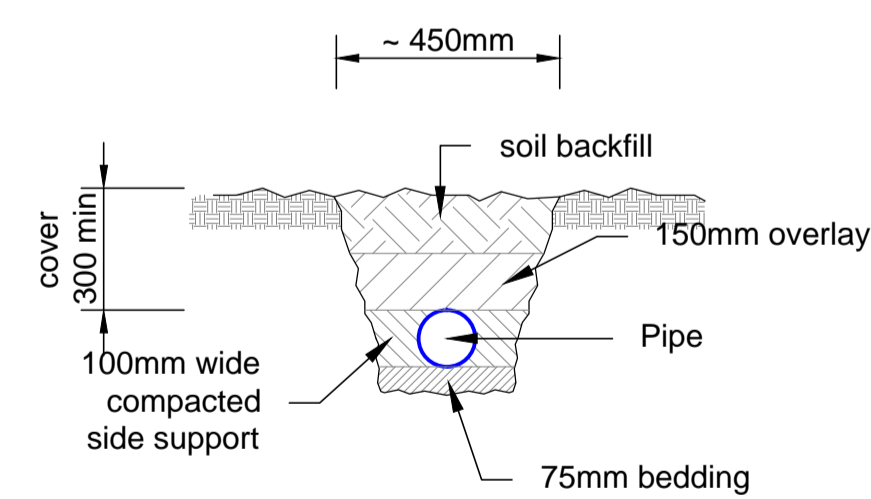
~ 1:10



EXISTING SURVEY PLAN

~ 1:250

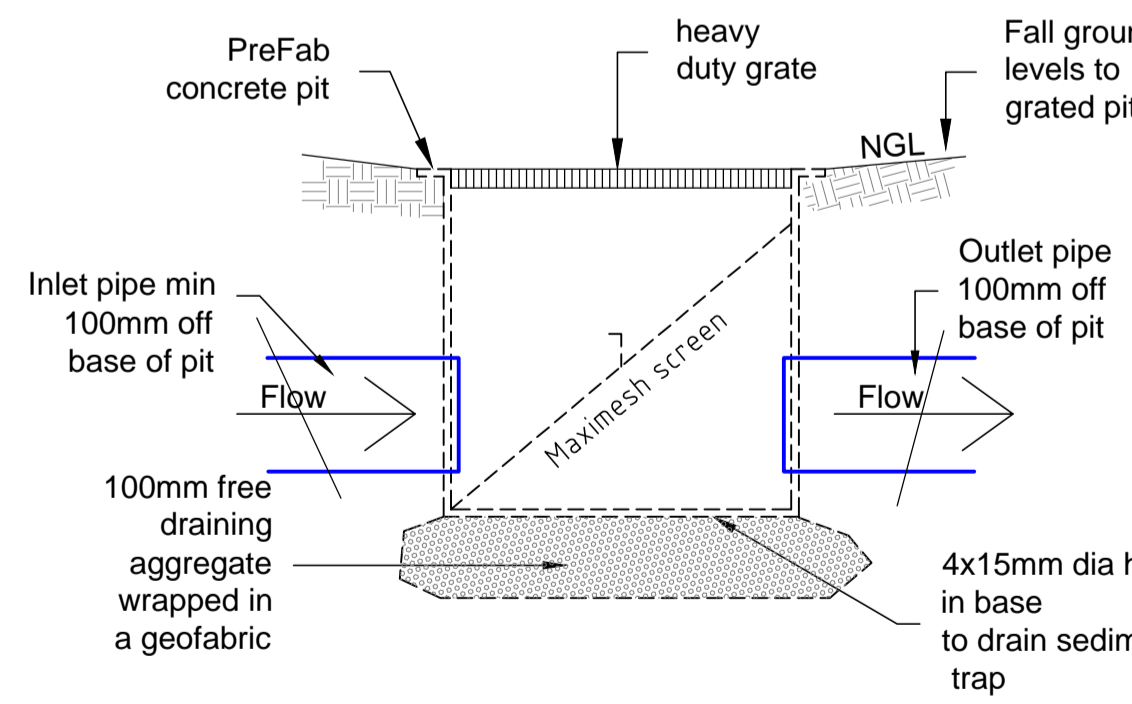
FOR DETAIL REFER PLAN BY BASE SURVEYING REF 16-53



TYPICAL PIPE & TRENCH DETAIL

~ 1:20

Bedding / overlay to be -
a) sand, free from rock, hard or sharp objects
b) max 14mm crushed rock or gravel
c) the excavated material free of rock, hard or sharp objects and broken up with no soil lumps > 75mm dia



TYPICAL PIT DETAIL

~ 1:20

ISSUE:	Date	Description
Prelim	27 10 2017	Issued for comment

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PROJECT:
PROPOSED RESIDENTIAL DEVELOPMENT
701 - 703 BARRENJOEY RD
AVALON BEACH
for ~ BILDAM

DRAWING :
STORMWATER MANAGEMENT PLAN

Job No :
170914
Drawing No:
SW1 Prelim
Document Certification
Barrenjoey Consulting Engineers Pty Ltd
per
Lucas Molloy MEA CPEng NER Director