

X- Discipline – Civil Water Meters Update

structural civil hydraulic engineers



Introduction

CLASS B DEVELOPMENTS

Class B	
1 st Jul 2025	Development applications for new Class B developments submitted from this date <u>must</u> include individual unit metering.
Class A	
TBC 2026	Icon Water to publish updated design and construction standards and guidelines to outline our requirements for individual unit metering in new Class A developments.
1 st Jul 2027	Development applications for new Class A developments submitted from this date can <u>opt-in</u> to individual unit metering.
1 st Jul 2028	Development applications for new Class A developments submitted from this date <u>must</u> include individual unit metering.

-Class B units generally refer to townhouse-style units, where the unit owner typically owns the interior and exterior of their unit, and has a footprint on the ground. This typically includes the roof and external walls.

-Class A units, typically found in multi-story apartment buildings, are defined by the midpoint of the floors, walls, and ceilings of the unit. This means the unit owner owns the interior space up to those points, while the Owners Corporation (or body corporate) generally owns the exterior walls, roof, and common areas. Class A units often include subsidiaries like car parking spaces or storage areas.

structural civil hydraulic engineers



sellick
consultants

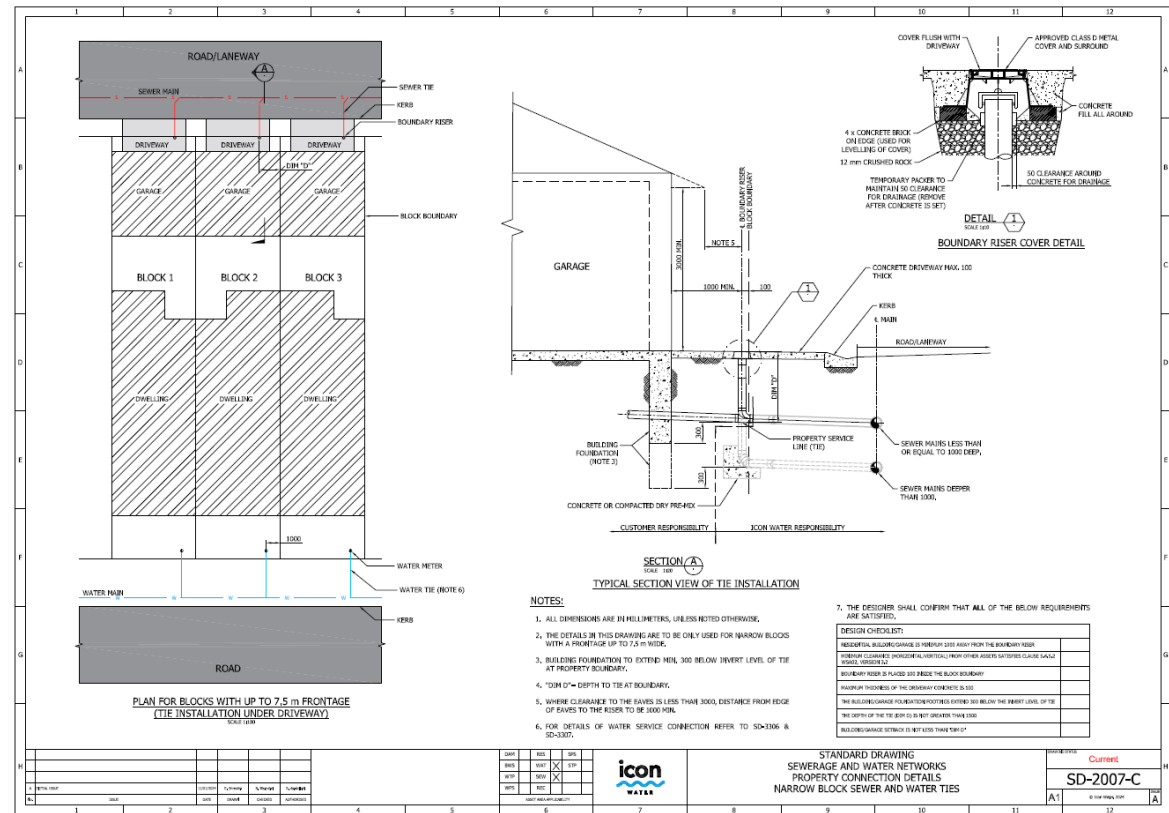
Est. 1965

canberra | sydney

ABN 82 634 296 629

Small Block Servicing

- New ICON Standard Drawing issued early 2025
- Small / Narrow blocks are defined as a block with a frontage of less than 7.5m width to the street.
- These blocks can be difficult to service when you consider the restrictions imposed by developers and architects.
- Just know that some ties are going to be under the driveways.
- And you need to use the ICON Design Checklist for these types of sites.



structural civil hydraulic engineers



sellick
consultants

Est. 1965

canberra | sydney

ABN 82 634 296 629

Small Block Servicing

Water services, including mains-to-meter pipe runs and water meters, must be located in unobstructed ground (in line with pipe protection envelope of Icon Water "Water and Sewerage Service and Installation Rules") free of surface obstructions such as, but not limited to, paved driveways (e.g., concrete, asphalt, stencilcrete), pad-mount transformers, communication boxes, and mini-pillars. An exception to this requirement is paved footpaths managed by TCCS. A minimum clearance of 1.0 meter around the meter boxes is required. In certain circumstances, Icon Water may grant special approval on a case-by-case

basis for DN20 meter boxes with only 500 mm clearance at the rear and 500 mm on one side. In all other cases, a 1.0-meter clearance is required at the front (facing the water meter from the street) and on one side. Refer to Figures 7.4.1A and 7.4.1B below for further details.

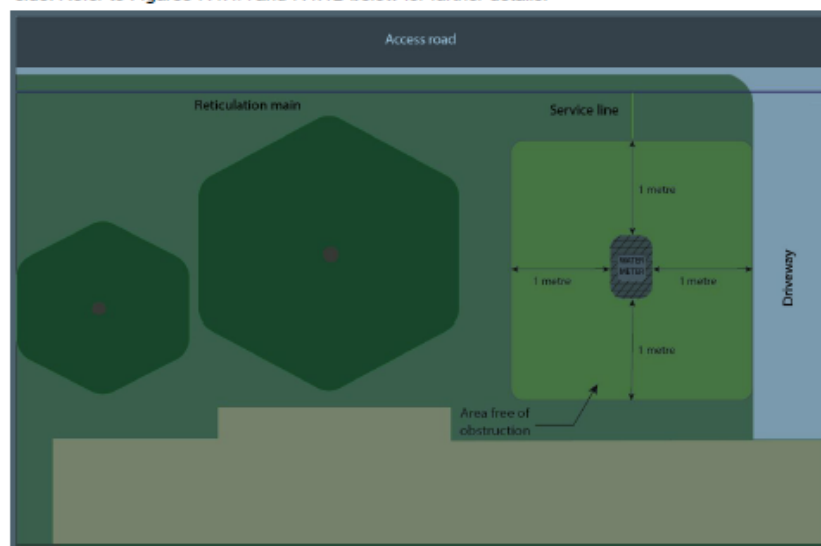


Fig. 7.4.1A Minimum Clearances for DN20 Water Meters in Meter Boxes

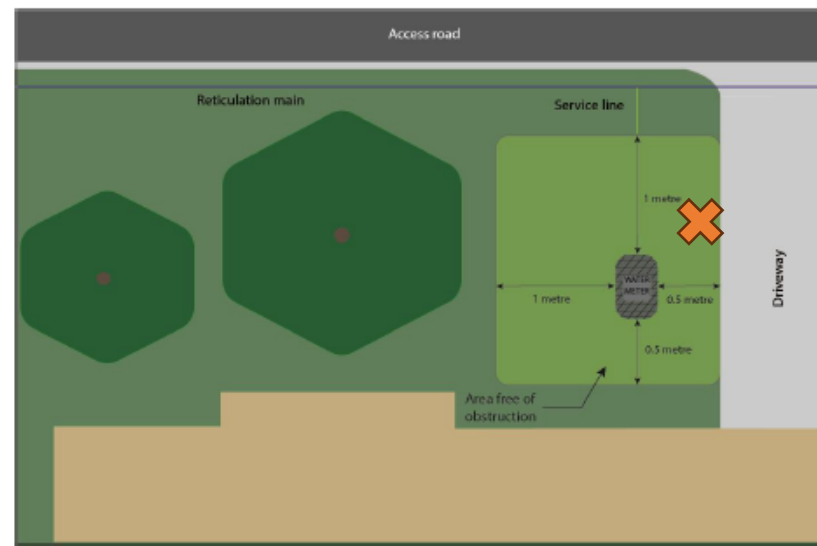


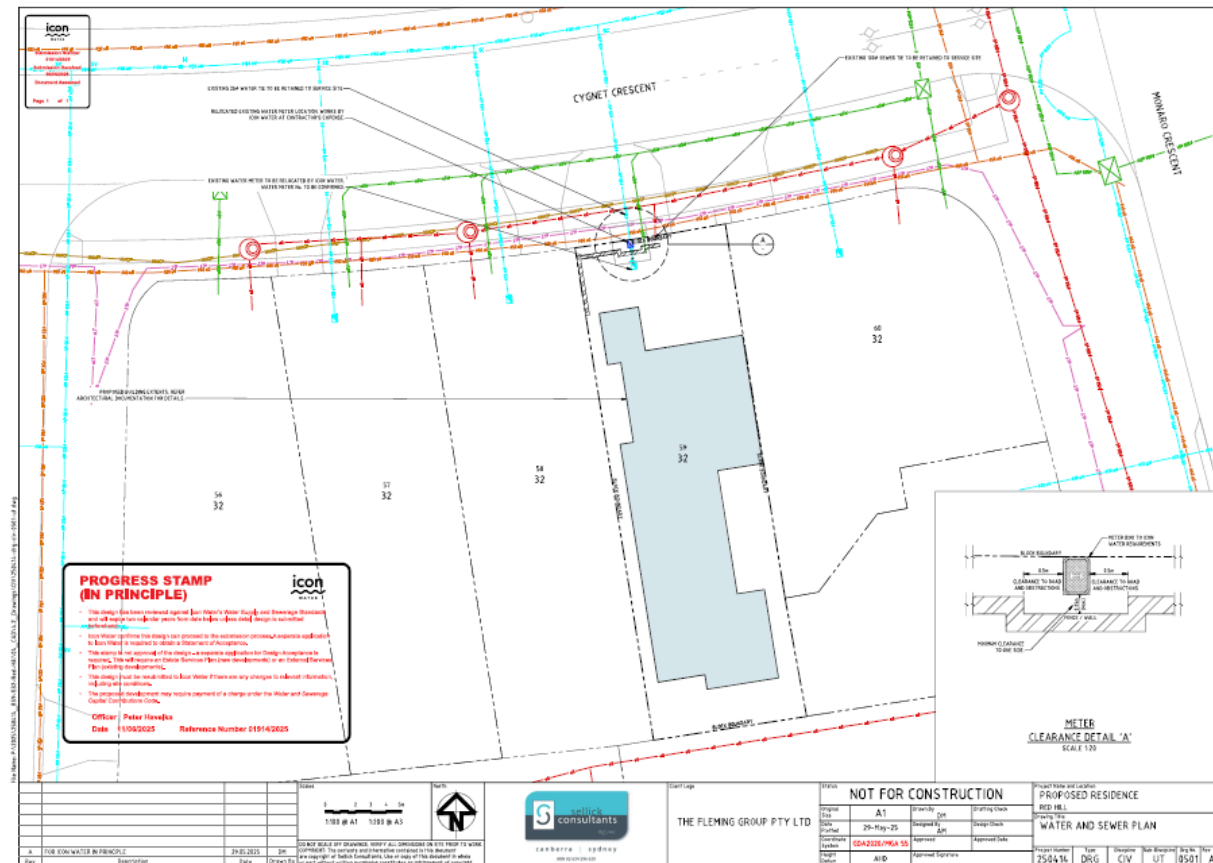
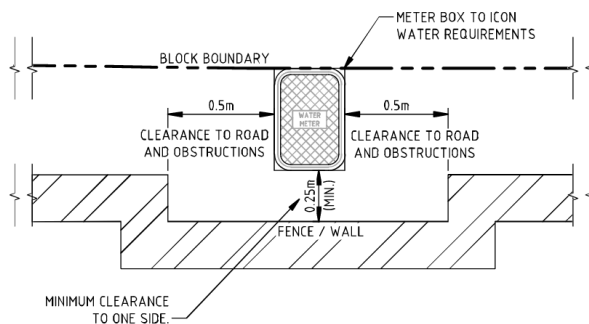
Fig. 7.4.1B Minimum Clearances for DN20 Water Meters in Meter Boxes – Special Approval

Water services may penetrate through retaining walls or fence footings on the proviso that the mains-to-meter pipe run shall be laid in a polyethylene pipe enveloper sleeve through such a retaining wall or footing. The internal diameter of enveloper sleeve pipe shall be sized 100mm larger than the water

structural civil hydraulic engineers

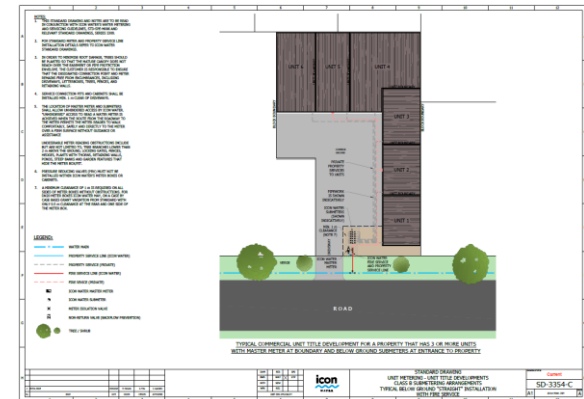
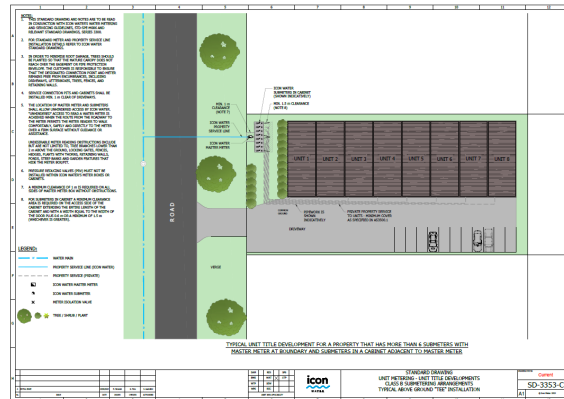
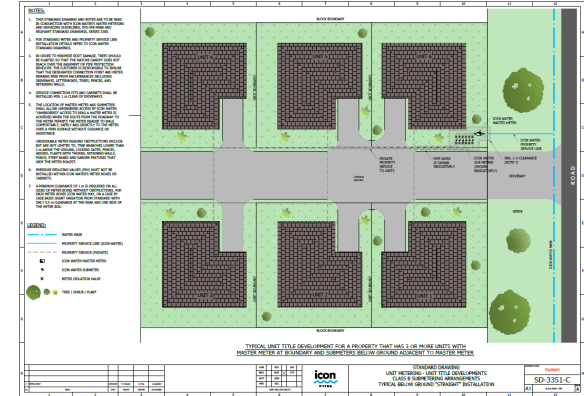
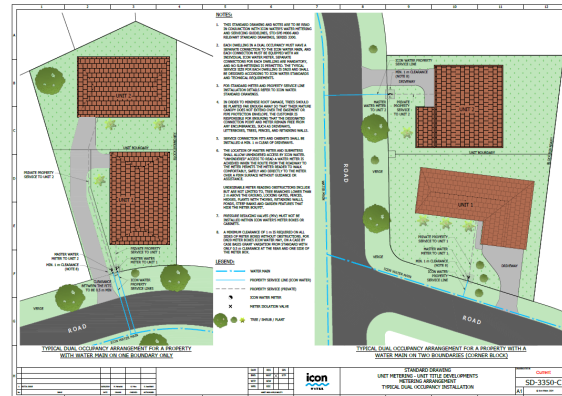
Small Block Servicing - EXAMPLE

- This is a bad example. As ICON have since come back and said this was an error.
- ICON typically asks for 0.5m to 1-2 sides only.
- Case-by-case assessment



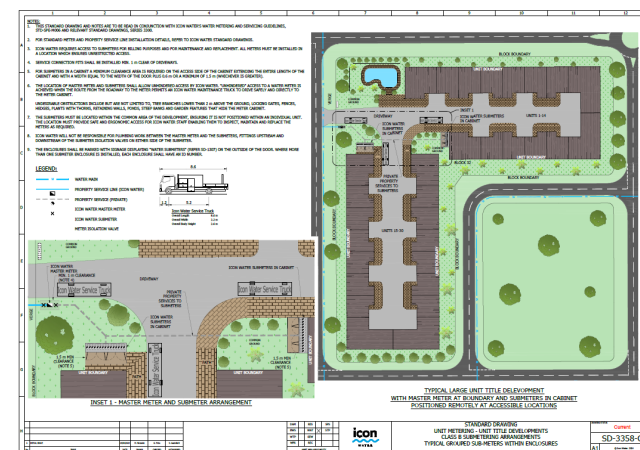
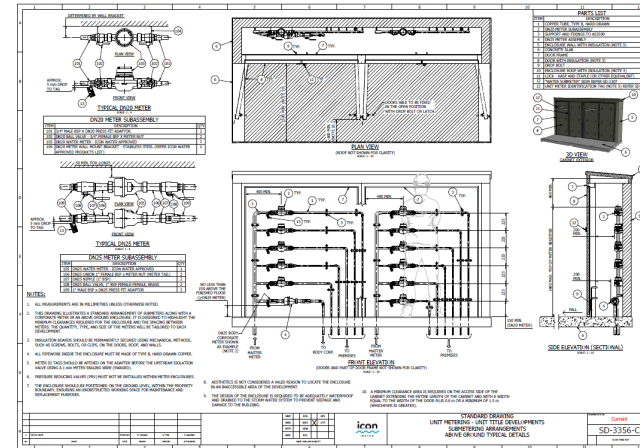
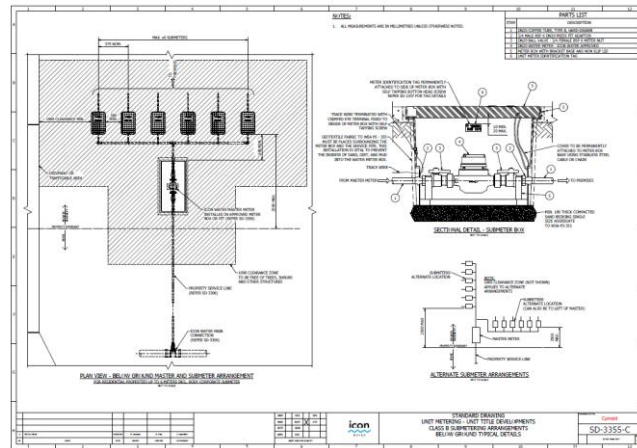
Sub-Water Meters Arrangements (aka Unit Metering) - 1

- New ICON Standard Drawings issued early 2025
- 1st July Unit Metering is Mandatory for Class B Dwellings (Website)
- Relevant Information still located in STD-SPE-M-006 Property Service Connections (part 8.6)





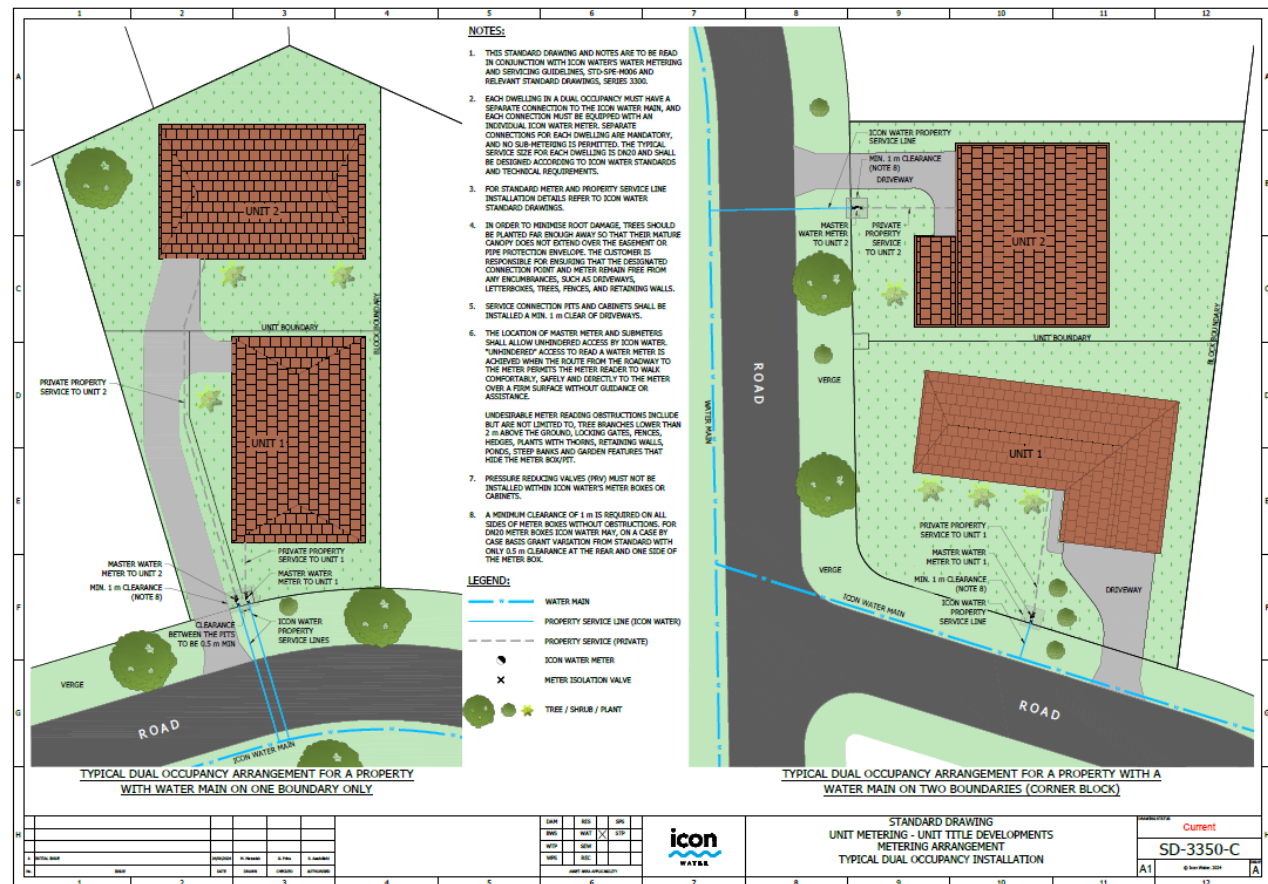
Sub-Water Meters Arrangements (aka Unit Metering) - 2





Sub-Water Meters Arrangements (aka Unit Metering) - 3

- Dual Occupancy still have individual meters (SD-3350-C)
- Granny Flats / Secondary Residences do not require sub-meters. You can request a sub-meter if your site is over 500m². You need to pay for all works associated with this.





Sub-Water Meters Arrangements (aka Unit Metering) - 4

- Master Meter located 1m (max.) from property boundary (SD-3306-D + STD-SPE-M-006)
- Sub-Meters to be located 2.5m (max.) from property boundary (SD-3355-C)
- Sub-Meters are not to be located inside building or gated properties (STD-SPE-M-006)
- 1m clearance zone around master meter and sub water-meters required (SD-3355-C)
- Refer ICON Standard Drawing SD-3350-51-52-53-54-57-58 for Arrangement Options.
- Both Master meter and Sub-meters will require vehicle access corridor suitable for 8.6m ICON trucks.



STD-SPE-M-006 REQUIREMENTS FOR PROPERTY SERVICE CONNECTIONS AND WATER METERS

Table 8.6.1 Overview of solutions for unit metering

Option	Location of Sub-Meters	Type of Installation	Max Number of Sub-Meters	Considerations
A1	At property boundary	Below ground in meter box	6	Ideal when ground space is available at the boundary. Ensure there is clear and unobstructed access is provided and the standard installation, refer to SD3355.
B	At property boundary	Above ground in cabinet	No Limit	Ideal when below-ground space is limited at the boundary. Ensure cabinet meets clearance and other standard requirements in SD3356.
A2	Inside the property common area	Below ground in meter box	10	Least preferred option - Consider internal hydraulic design. Ensure suitable access and compliance with clearance rules around each meter box of 1 m refer to SD3357
C	Inside the property common area	Above ground in cabinets	No Limit	Ensure there is enough space for grouped sub-meters and that they are accessible for maintenance. Make sure the cabinets are located in a common area with sufficient room for Icon Water service trucks to access refer to SD3358



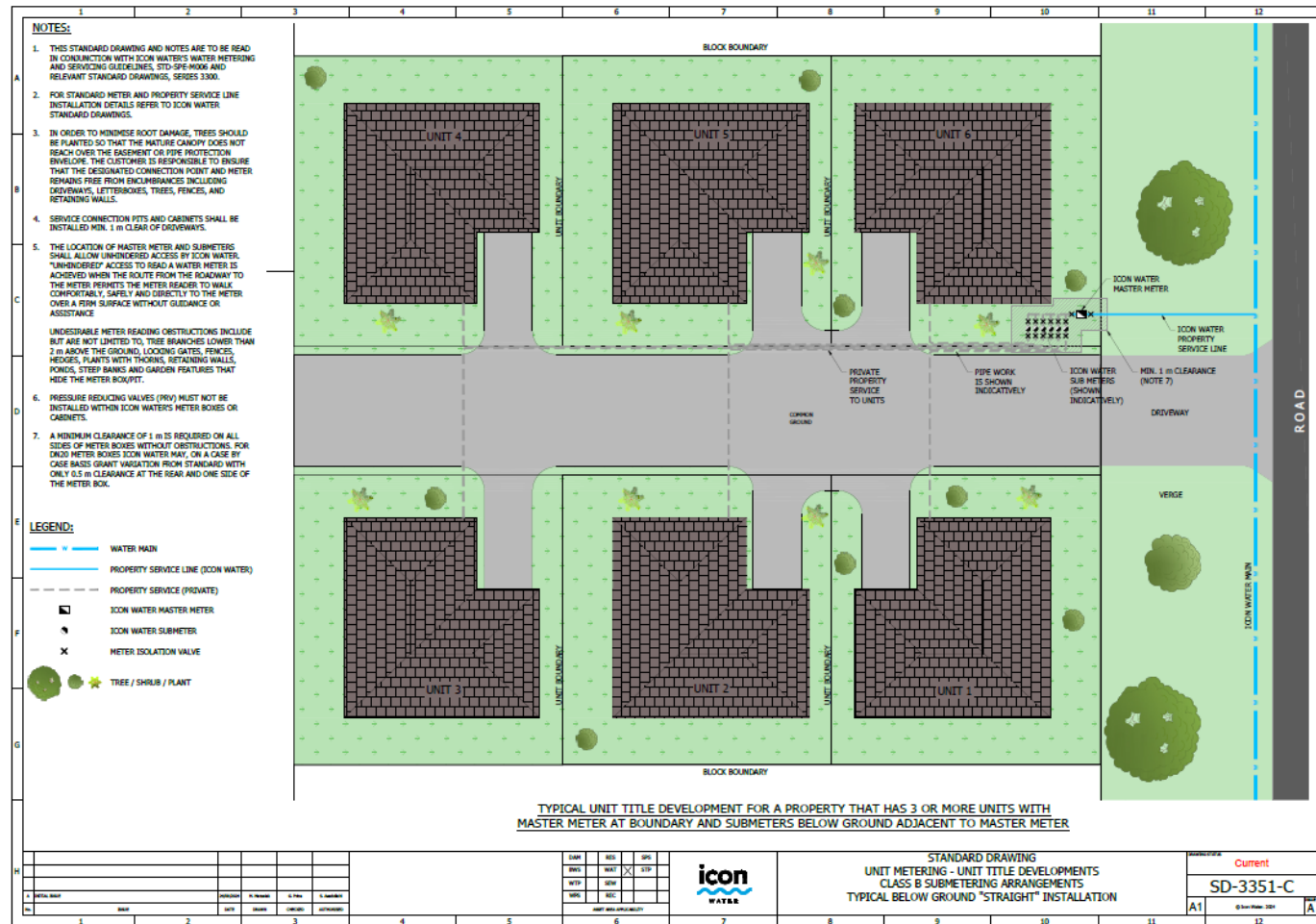
sellick
consultants

Est. 1965

canberra | sydney

ABN 82 634 296 629

Sub-Water Pit Location - 1



structural civil hydraulic engineers



Sub-Water Pit Location - 2



STD-SPE-M-006
REQUIREMENTS FOR PROPERTY SERVICE CONNECTIONS
AND WATER METERS

Table 8.6.1 Overview of solutions for unit metering

Option	Location of Sub-Meters	Type of Installation	Max Number of Sub-Meters	Considerations
A1	At property boundary	Below ground in meter box	6	Ideal when ground space is available at the boundary. Ensure there is clear and unobstructed access is provided and the standard installation, refer to SD3355.
B	At property boundary	Above ground in cabinet	No Limit	Ideal when below-ground space is limited at the boundary. Ensure cabinet meets clearance and other standard requirements in SD3356.
A2	Inside the property common area	Below ground in meter box	10	Least preferred option - Consider internal hydraulic design. Ensure suitable access and compliance with clearance rules around each meter box of 1 m refer to SD3357
C	Inside the property common area	Above ground in cabinets	No Limit	Ensure there is enough space for grouped sub-meters and that they are accessible for maintenance. Make sure the cabinets are located in a common area with sufficient room for Icon Water service trucks to access refer to SD3358



sellick
consultants

Est. 1965

canberra | sydney

ABN 82 634 296 629

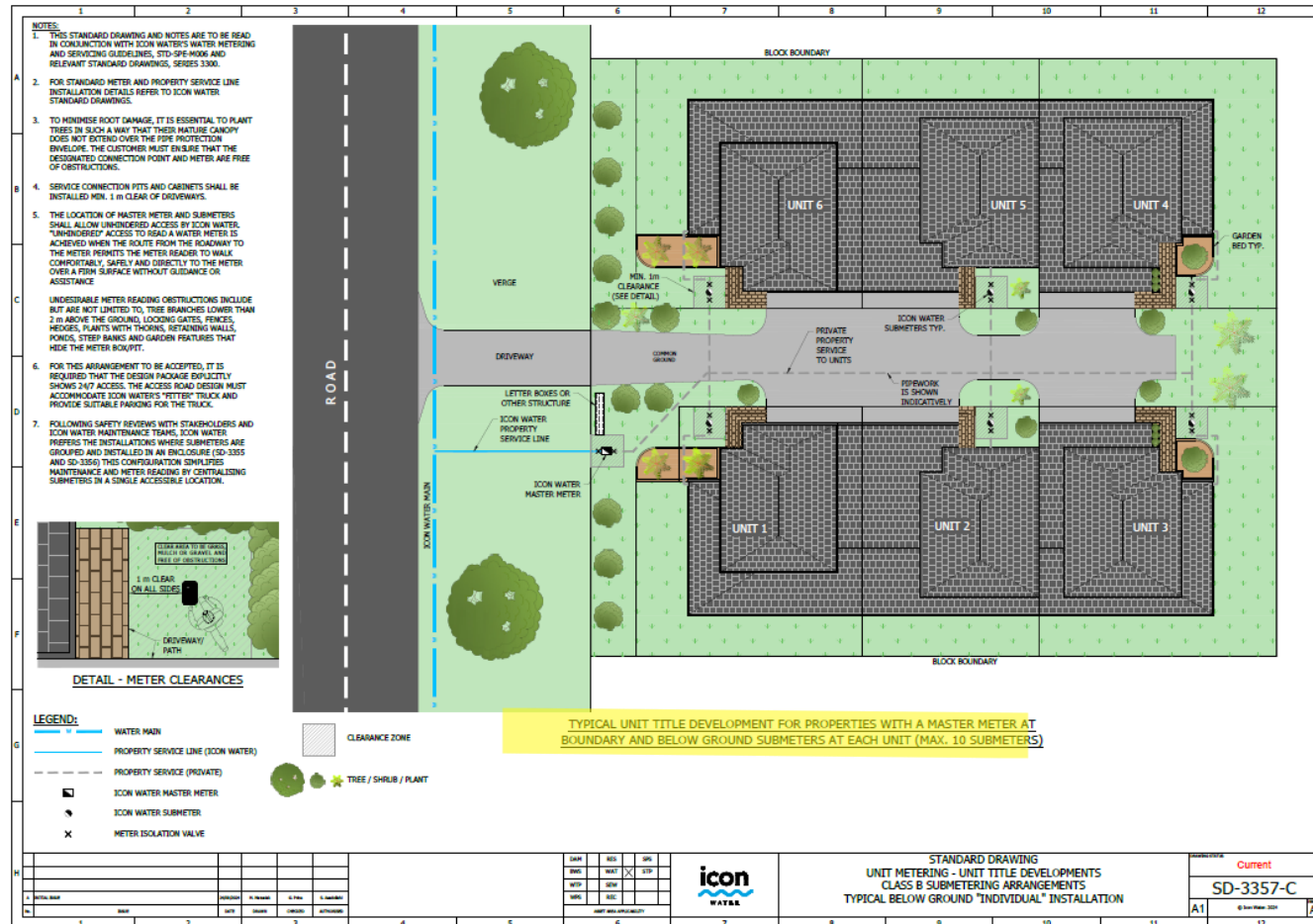
Sub-Water Pit Location - 3



structural civil hydraulic engineers



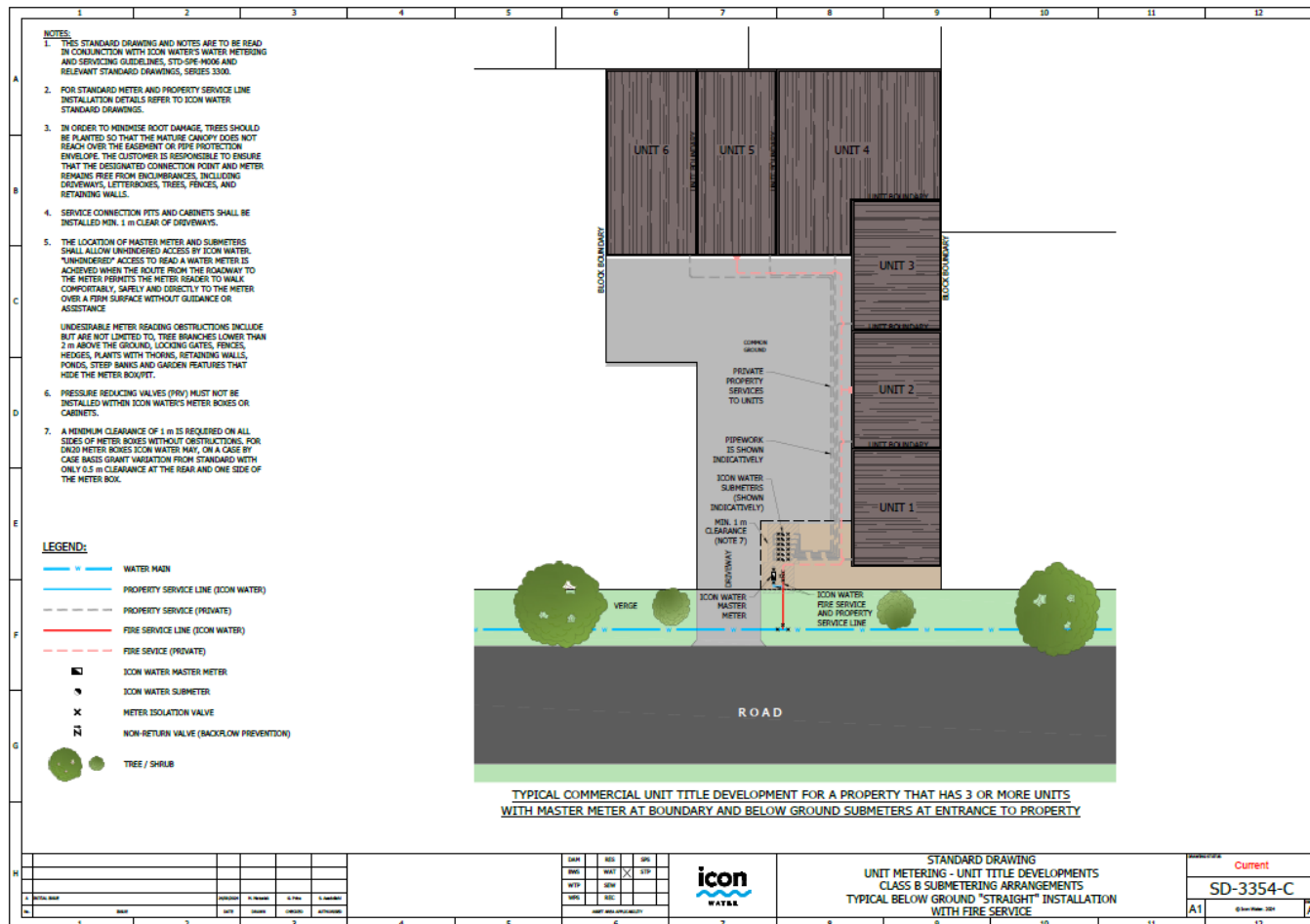
Sub-Water Pit Location - 4



structural civil hydraulic engineers



Sub-Water Pit Location - 5



structural civil hydraulic engineers



sellick
consultants

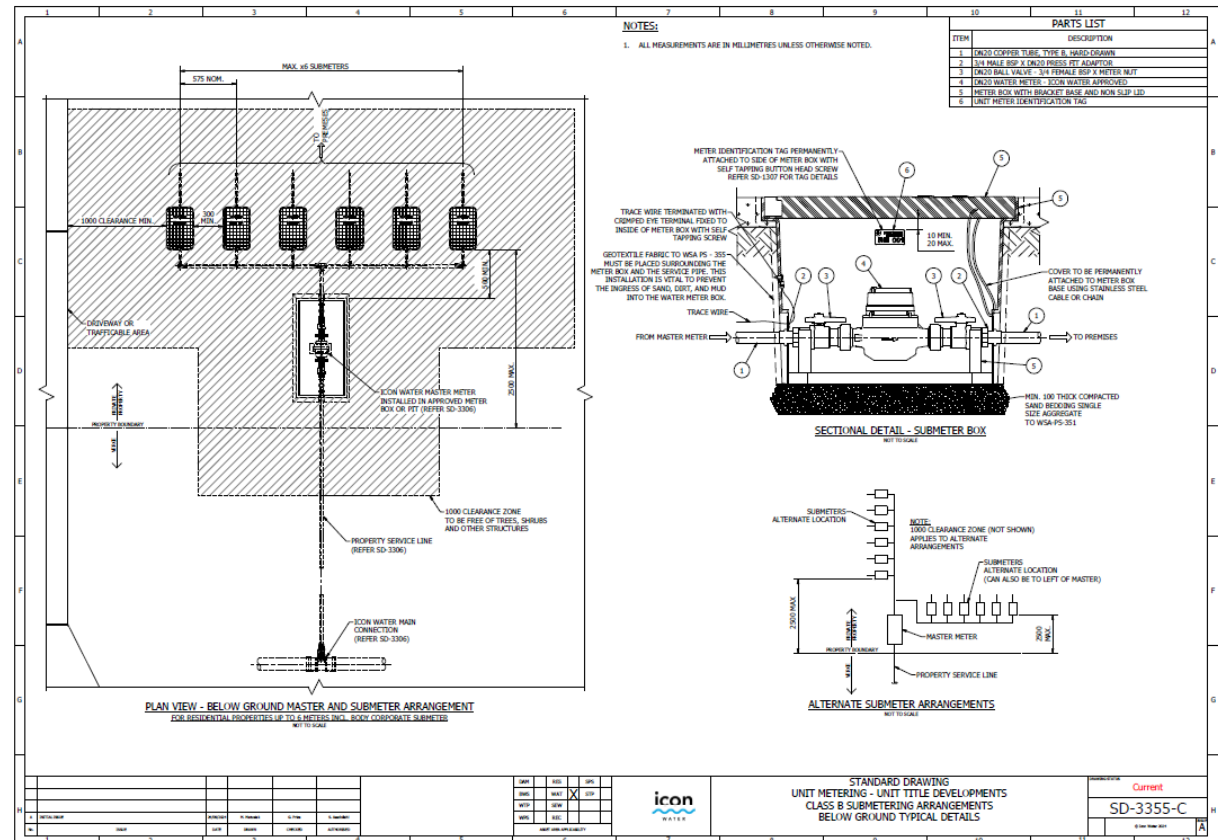
Est. 1965

canberra | sydney

ABN 82 634 296 629

Sub-Water Pit Design

- 6 sub-meters (max.) - after this you need to go to a cabinet.
- Should be located 2.5m (max.) from the property boundary (SD-3355-C)
- 600mm (min.) clearance to Master Meter.
- 1m clearance zone around master meter and sub water-meters required (SD-3355-C)
- 575mm CTS separation between sub-meters (SD-3356-C + STD-SPE-M-006)
- 300mm clearance between pits (SD-3355-C)



structural civil hydraulic engineers



Sub-Water Cabinet Design - 1



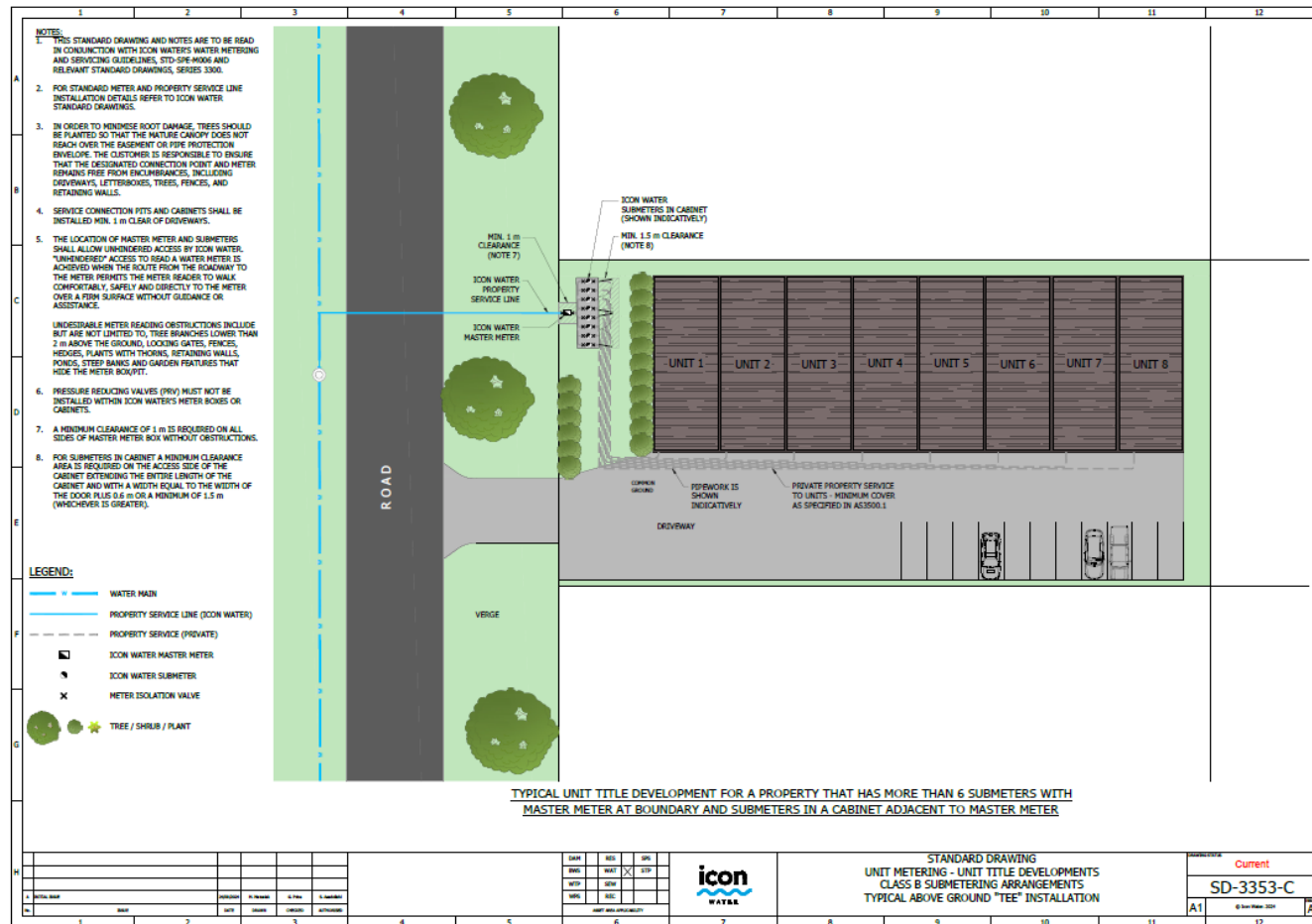
STD-SPE-M-006
REQUIREMENTS FOR PROPERTY SERVICE CONNECTIONS
AND WATER METERS

Table 8.6.1 Overview of solutions for unit metering

Option	Location of Sub-Meters	Type of Installation	Max Number of Sub-Meters	Considerations
A1	At property boundary	Below ground in meter box	6	Ideal when ground space is available at the boundary. Ensure there is clear and unobstructed access is provided and the standard installation, refer to SD3355.
B	At property boundary	Above ground in cabinet	No Limit	Ideal when below-ground space is limited at the boundary. Ensure cabinet meets clearance and other standard requirements in SD3356.
A2	Inside the property common area	Below ground in meter box	10	Least preferred option - Consider internal hydraulic design. Ensure suitable access and compliance with clearance rules around each meter box of 1 m refer to SD3357
C	Inside the property common area	Above ground in cabinets	No Limit	Ensure there is enough space for grouped sub-meters and that they are accessible for maintenance. Make sure the cabinets are located in a common area with sufficient room for Icon Water service trucks to access refer to SD3358



Sub-Water Cabinet Design - 2





Sub-Water Cabinet Design - 3



STD-SPE-M-006 REQUIREMENTS FOR PROPERTY SERVICE CONNECTIONS AND WATER METERS

Table 8.6.1 Overview of solutions for unit metering

Option	Location of Sub-Meters	Type of Installation	Max Number of Sub-Meters	Considerations
A1	At property boundary	Below ground in meter box	6	Ideal when ground space is available at the boundary. Ensure there is clear and unobstructed access is provided and the standard installation, refer to SD3355.
B	At property boundary	Above ground in cabinet	No Limit	Ideal when below-ground space is limited at the boundary. Ensure cabinet meets clearance and other standard requirements in SD3356.
A2	Inside the property common area	Below ground in meter box	10	Least preferred option - Consider internal hydraulic design. Ensure suitable access and compliance with clearance rules around each meter box of 1 m refer to SD3357
C	Inside the property common area	Above ground in cabinets	No Limit	Ensure there is enough space for grouped sub-meters and that they are accessible for maintenance. Make sure the cabinets are located in a common area with sufficient room for Icon Water service trucks to access refer to SD3358



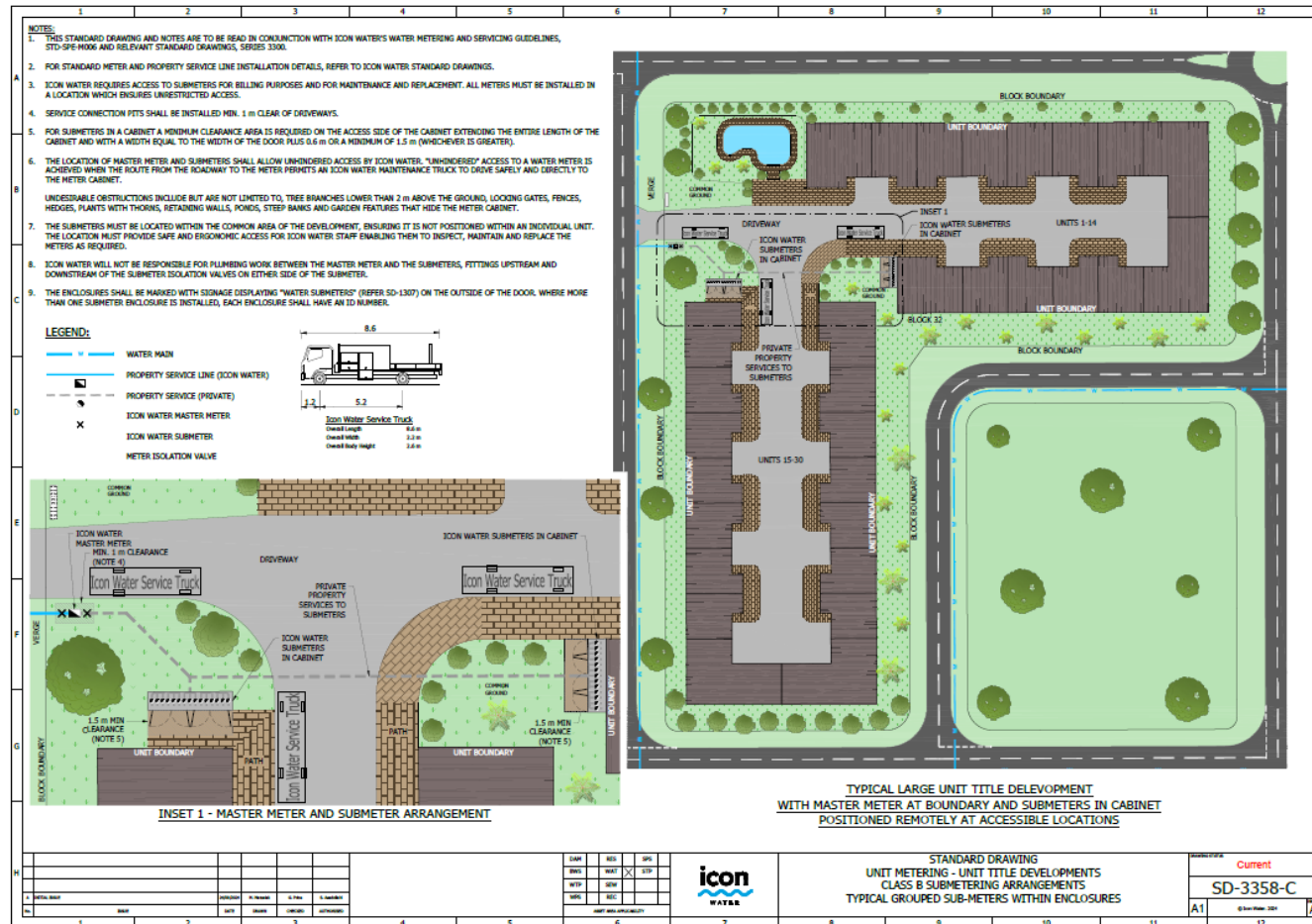
sellick
consultants

Est. 1965

canberra | sydney

ABN 82 634 296 629

Sub-Water Cabinet Design - 4

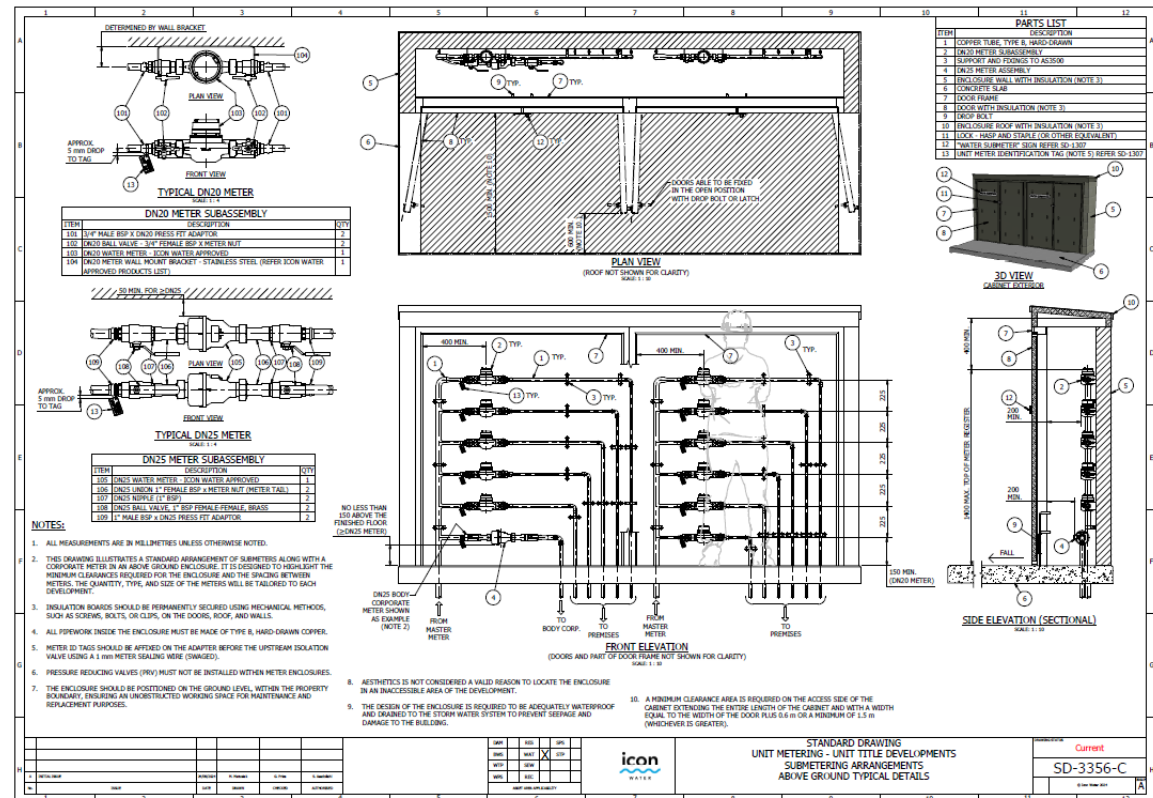


structural civil hydraulic engineers



Sub-Water Cabinet Design

- Increase of the front access. Now 1.5m (min.) in front of cabinet (SD-3356-C)
- Sub-Meter height (max.) = 1400mm – x6 meter stacks
- 225mm separation between sub-meters (SD-3356-C + STD-SPE-M-006)
- 200mm internal clearance from door to fixtures (front) (SD-3356-C + STD-SPE-M-006)
- 100mm internal clearance from walls to fixtures (sides) (SD-3356-C + STD-SPE-M-006)
- 150mm internal clearance from floor to fixtures (sides) (STD-SPE-M-006)
- 400mm internal clearance from roof to fixtures (top) (SD-3356-C + STD-SPE-M-006)
- 100mm internal clearance from pipe-to-pipes (STD-SPE-M-006)
- Should be located 2.5m Max. from property boundary (SD-3355-C)
- 'Water Submeters' Signs and Identification Tags (SD-1307-D)





sellick
consultants

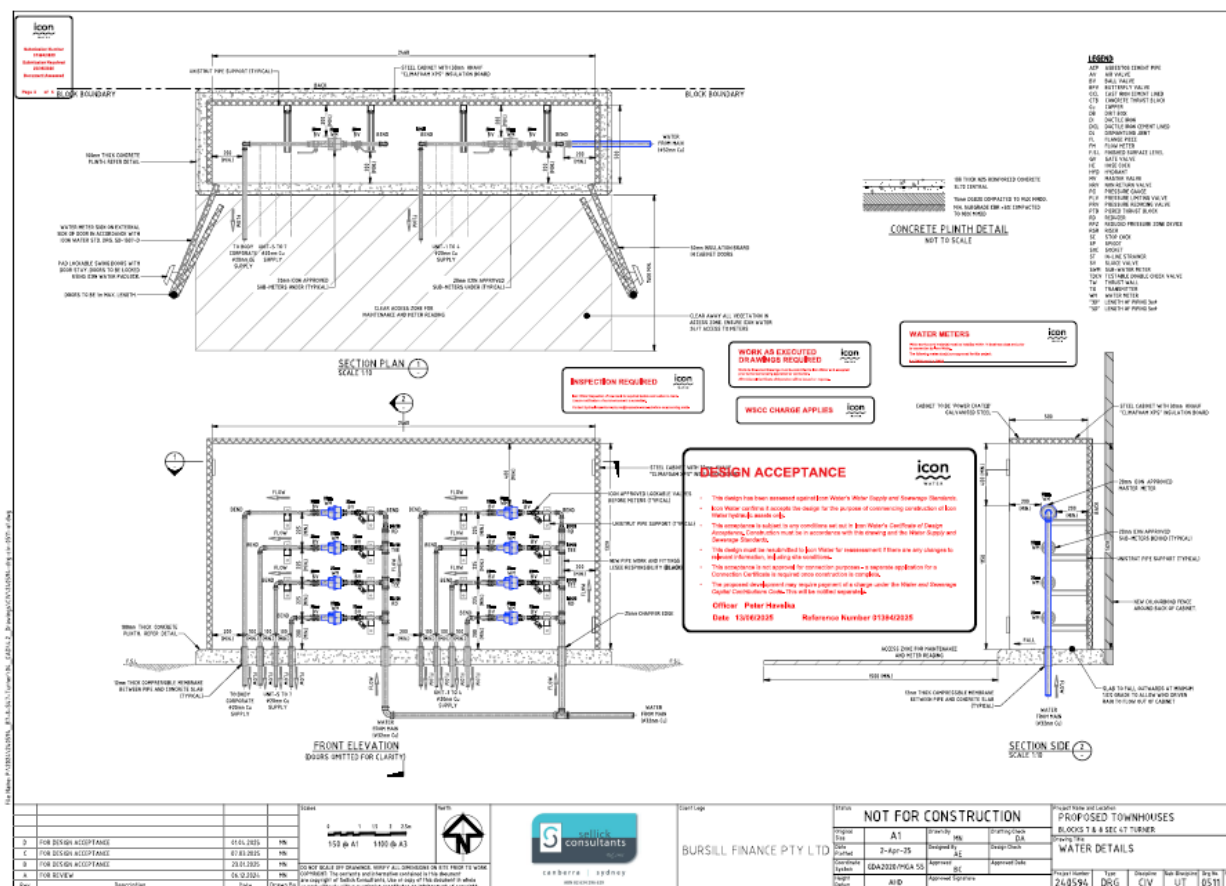
Est. 1965

canberra | sydney

ABN 82 634 296 629

Sub-Water Cabinet Design - EXAMPLE

- EXAMPLE of Early Sub-Meter Cabinet Approval.



structural civil hydraulic engineers



sellick
consultants

Est. 1965

canberra | sydney

ABN 82 634 296 629

End

structural civil hydraulic engineers