

HYDRAULIC PLAN ASSESSMENT INFORMATION and PROCEDURES

Assessment of hydraulic plans is undertaken to ensure the proposed development does not detrimentally impact on the integrity of HWC water and sewer systems.

It should be noted that HWC expect that internal plumbing systems are designed in accordance with the NSW Code and Australian Standards. Plumbers and hydraulic consultants who design and construct the internal systems should ensure their compliance with these requirements.

HWC require Hydraulic Plans to be prepared and submitted if the proposed development falls into ANY of the following categories –

- Water services are 32mm diameter or greater.
- There are more than 2 residential units on the lot.
- When a commercial development requires a meter greater than 20mm.
- The development requires an internal fire service or alterations to existing services.
- There is potential for trade waste to be discharged to HWC sewer or there are alterations proposed to an existing installation.
- Where water supplied is to be used in manufacturing processes.
- If there is a request to either upsize or downsize an existing meter.
- Any development which is considered to be outside normal connection criteria.
- If the development requires an internally boosted water system.
- Pump to sewer systems, other than single residential dwellings.
- Rain water tanks connected directly or indirectly to HWC potable water supply.

Hydraulic Plans should be prepared in accordance with the NSW Code of Practice: Plumbing and Drainage and Australian Standards AS/NZ 3500. HWC also require the following information to be included on plans submitted for review.

- Corporation water and sewer mains.
- Location of existing water meters and sewer connections.
- Type of connection to HWC sewer system ie inspection shaft or boundary trap.
- RL's of overflow gullies, floors and the 1 in 100 year flood level.
- Location of shafts for individual strata units.
- Indicate where and how water is to be used in processing.
- Cross connections between HWC water system and other water systems.

- Trade waste facilities (size, type and description).
- Air conditioning cooling towers.

HWC require an application form (link to application forms page) to be completed and lodged with the appropriate fees and a covering letter. The covering letter should include the following details -

- A description of plumbing and drainage works required to service the proposed development.
- Meter & service sizes and flow rates, including information on how sizes and rates were determined.
- The ultimate fixture loading on the house drainage system.
- The checklist (link to 4.7.3.1) should also be submitted with the designs.

The plan is then assessed by HWC Technical staff to determine the suitability of the design with regard to meeting Hunter Water's requirements. Assessment of the plan is focussed mainly on the points outlined below -

- The size of services and meters.
- Location of meters.
- Installation of appropriate backflow prevention devices.
- Connection to the sewer system.
- The potential for discharge of tradewaste to the sewer system.
- Configuration of water storage tanks (including backflow prevention details).
- Pump to sewer arrangements (where applicable).

It should be noted that Hunter Water reserves the right to impose conditions over and above those detailed where considered necessary for a particular development.

Details not assessed by HWC on hydraulic designs

- Internal hot water, gas and stormwater systems.
- Location of plumbing fixtures, floor wastes etc covered by the Building Code of Australia.
- Fire services, location of booster and suction points, size of internal pipework, location of hydrants, fire hose reels, wall drenchers and sprinkler heads and fire storage tanks within the lot/development that are covered by the Building Code of Australia.
- The performance of water and sanitary drainage fittings and fixtures.
- The design and performance of sanitary plumbing and house drainage.

- Approve the use of any water supply fixture, fitting, sanitary or house drainage fixtures, fittings that do not have approval (Water Mark).
- The use, location, size and type of rainwater tanks, not connected to HWC potable water supply.