



# HUDSON

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## CIVIL PRODUCTS

## HCP UNI-VAULT – SW DETENTION

### Hudson Civil Stormwater UNI-VAULT

The **HCP UNI-VAULT** system is a modular, buried stormwater detention storage option, and can be used for infiltration/soakage or groundwater recharge purposes if required. With flexibility and ease of precast concrete modular construction, the **HCP UNI-VAULT** system allows large storage volumes with variable footprint and depths as well as providing excellent access to enable maintenance to be performed safely and efficiently.

The **HCP UNI-VAULT** system is a below ground structure produced by connecting individual precast concrete modules into a configuration that suits site and project specific requirements.. A range of design and installation benefits make the **HCP UNI-VAULT** system a competitive solution for any residential, commercial or industrial project.

Multiple configurations are available to suit site footprint, depths to invert, multi-location or multi-cell runs, and other site or construction limitations – our team works with the client, contractor and designers to ensure that site and project specific requirements are achieved to provide an optimal bespoke solution for large volume stormwater detention on difficult and challenging sites.

- *Modular components, multiple configuration*
- *Precast concrete for longevity and durability*
- *Tanks can be trafficable or non-trafficable*
- *Construction advice and shop drawings available*
- *Access and working space for maintenance*
- *Large volume storage for footprint and depth*
- *Fast installation on site*
- *Safe, tidy worksite limiting insitu concrete works*



***“HCP UNI-VAULT - Taking the peak off stormwater flows to better manage pre & post-development flows for the betterment of downstream stormwater networks”***

# UNI-VAULT PROJECT SPECIFIC DETAILS

*Hudson Civil Products have installed the following UNI-VAULT System for storage/detention stormwater for the below project site. Project specifics are as follows.*

**Project:**  
**De Kleine Constructions, UNI-VAULT structure, Lenah Valley Subdivision**

**Layout & Configuration:**

Single run unculvert structure 2400mm x 900mm internal, refer detail plan. Detention Storage structure, no infiltration/soakage required. Rubber Ring Joint (RRJ) connection between units. Designed for Class B loading.

**Storage Volume Total:** 22.11KL

**Inlet Pipe Size:** DN300

**Outlet Pipe Size (Restricted Orifice):** DN150

**Overflow Pipe Size:** DN300

**Storage Internal Diameter/Width (mm):** 2400mm

**Max Storage Height from invert (mm):** 900mm

**Inlet/overflow grate supplied:** External, by others

**Inlet or outlet sump trap or GPT:** By others

**Shop Drawing units (please attach):**

Yes, per approved HCC design (Sugden & Gee Designers)

**Maintenance Notes:**

*Design per approved HCC certification (refer Sugden & Gee design). Manhole access (1050 dia) is provided for full chamber access at both upstream and downstream inlet/outlet, to enable cleaning and monitoring of any sediment/debris. It is recommended that the unit be inspected at regular intervals during first 12-18 months of operation, to ensure that no debris or sedimentation is deposited which may affect tank storage or performance, in which case additional upstream catchment SW quality/treatment/interception devices may need to be considered. Cleaning by Vac truck is recommended, and no tank entry should be required under ordinary circumstances (note tank is a CONFINED SPACE and should be entry by permit only, refer HCC requirements and other regulatory requirements as applicable..*



RRJ Connections between units

