

# The Garry Henley Data Centre Park (RCWA1)

## Physical

- The site design is certified as Uptime Institute Tier III, this means the site is fully "concurrently maintainable" with N+1 redundant capacity in all elements and multiple uplinks - 99.982% availability
- The Data Centre Park hosts approximately 2500m<sup>2</sup> physical floor space delivering the following features
  - Build room
  - Offices
- Secure access into supporting facilities including client use kitchen, breakout area, staging area, storage and delivery area
  - Boardroom and meeting room for on-site meetings or incident response
- The Data Centre Park is separated into two zones supporting in excess of 600 cabinets at 3kw each or higher densities up to 50kw
- Customer Access into the Data Centre Modules will be via each secured module entrance that opens to a raised walkway at 545mm running through the centre of the Data Centre Park effectively defining the boundary between zone 1 and zone 2
- Customer Equipment is commissioned to the Data Centre Modules via a goods access ramp and hoist for ICT equipment
- Customer access is via the front entrance into the front apron of the Data Centre Park from Aspiration Cct
- The rear apron of the Data Centre Park is accessible via Horus Bend Drive only to Frontier DC and authorised contractors which include Western Power for the transformer areas, communications providers to access rear communication pits, fuel services for fuel deliveries and deliveries of capacity on demand data centres and envelope services



RCWA1 DATA CENTRE PARK

## Mechanical

- Concurrently Maintainable (N+1) cooling using redundant chiller loops for both zone 1 and zone 2
- Scalable cooling using Air-Cooled Scroll-based chillers initially in a 2N capacity and scaling to N+1
- Capable of supporting multiple temperature and humidity ranges within customer modules within defined ASHRAE standards or higher

## Electrical

- Full load capacity of 3MVA power, which is equivalent to ICT compute load of 1700kw and a whole of facility PUE of 1.42
- Power to site is delivered initially via two 1MVA transformers, increasing to 3 to meet full site capacity
- Power is distributed via redundant switchboards with Automatic Transfer Switches to maintain continuous availability in the event of failure
- The site is supported by an at-capacity volume of five generator sets for power redundancy (referred to as primary powers), initially in a 2N configuration scaling to N+1 as load increases
- Power distribution into customer Data Centres is via redundant paths in a Red and Blue configuration

## Security

- Frontier Data Centres are configured in four security zones to ensure maximum security for customer services and data

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- Zone 1: site perimeter controlled by proxy card access and physical on-site security control
  - Zone 2: secured access into shared facilities including storage, delivery and build areas (all individually controlled) requiring two-factor access control using proxy-card access and on-site security control once identity has been confirmed (for approved visitors)
  - Zone 3: secured access into the main Data Centre Park hall containing customer data centres, controlled using three-factor security including proxy-card access, PIN code and a third factor.
  - Zone 4: customer module as defined by the customer Data Centre solution
- Garry Henley Data Centre Park includes 24 x 7 x 365 on-site security
  - Normal access requires 24 hours' notice; allowances are made for emergency access requiring 1 hour notice
  - All zones are monitored by CCTV integrated into the Frontier Data Centre Operating System (DCOS) with data retained for 12 months (90 days online, 275 days near line)
  - All Access Control mechanisms are fully auditable with logs retained for 12 months
  - Building roofline is protected with security beams and all doors are monitored to detect any attempted unauthorised intrusions
  - All delivery doors are protected using secure bollards

## Fire

- All key elements of the site are fire rated to two hours
- Fire Indication Panel is located in the entrance and connected to all Data Centre Fire Control systems
- All fire detection and suppression systems are AS1670 compliant

## Communications

- Communications services are delivered into two horizontally diverse node rooms separated by approximately 35 metres
- Communications into Node Room North is delivered from Aspiration Cct whilst Node Room South is delivered from Horus Bend for path diversity
- Each node room support multiple carriers for carrier diversity
- Services into the Garry Henley Data Centre Park currently include:
  - Telstra
  - Amcom
  - NextGen

## Management

- The site is serviced by the Frontier secure NOC
- Garry Henley Data Centre Park is supported using the Frontier Data Centre Operating System
- The DCOS integrates both the Data Centre Park (including electrical and mechanical monitoring) and the Data3 Data Centre into a single 'pane of glass' monitoring and management solution to provide total customer control
- The DCOS provides real-time reporting to support decisions to benefit both the ICT department and the business
- The Frontier DCOS can be implemented in either a multi-tenanted or dedicated 'island mode' configuration dependent upon customer requirements
- Management services are supported by the Frontier Service Desk and optional Frontier services