



CURTIN UNIVERSITY
PROJECT DELIVERY GUIDELINES

USING THE GUIDELINES

000343



Curtin University

Details of revisions			
Level	Details	Date	Initial
1	Creation of original document as part of RPS Phase 2 Project	Aug-2016	RPS/RH
1	Update of structure to reflect changes in PDG Master Map	Jan-17	RPS
1	Update of structure to reflect changes in PDG Master Map	Jun-17	RPS
2	Update to reflect the inclusion of Metering Services Guidelines into the PDG Suite	Oct-18	RPS
2	Inclusion of wording to allow departures from the existing guideline	Oct-19	RPS

CONTENTS

1 USING THE GUIDELINES	5
1.1 RELATED GUIDELINES/PLANS/POLICIES.....	6
1.1.1 CURTIN MASTER PLANNING	6
1.1.2 ACADEMIC HEART PLANNING FRAMEWORK	7
1.1.3 DISABILITY ACCESS AND INCLUSION PLAN.....	8
1.1.4 HEALTH AND SAFETY	8
1.1.5 SUSTAINABILITY AT CURTIN	9
1.2 CURTIN UNIVERSITY PF & D SYSTEMS	9
2 PROJECT DELIVERY GUIDELINES – STRUCTURE.....	10
3 PROJECT DELIVERY GUIDELINES – ARCHITECTURE	11
3.1 PLANNING PRINCIPLES.....	11
3.1.1 WORKPLACE	11
3.1.2 RESEARCH	11
3.1.3 LEARNING AND TEACHING	11
3.1.4 GREEN STAR – COMMUNITIES	11
3.1.5 EMERGENCY MANAGEMENT	11
3.2 HEALTH & WELLBEING	12
3.2.1 INDOOR AIR QUALITY	12
3.2.2 LIGHT	12
3.2.3 ACOUSTICS	12
3.3 BUILT FORM AND FABRIC.....	12
3.4 FITOUT	12
3.4.1 FURNITURE, FIXTURES AND EQUIPMENT	12
3.4.2 SIGNAGE	12
3.5 BUILDING OPERATIONS	13
3.5.1 CLEANING/LOGISTICS/WASTE MANAGEMENT	13
3.5.2 BUILDABILITY AND MAINTAINABILITY	13
4 PROJECT DELIVERY GUIDELINES – ENGINEERING AND PUBLIC REALM.....	14
4.1 BUILDING OPERATIONS INCLUDING ACCESS AND MAINTENANCE... 	14
4.2 ELECTRICAL SERVICES	14

4.3	MECHANICAL SERVICES INCLUDING VENTILATION AND AIR CONDITIONING	14
4.4	LIFT SERVICES	14
4.5	HYDRAULIC SERVICES.....	14
4.6	DATA NETWORKS AND COMMUNICATION.....	14
4.7	AV (MEDIA) SERVICES	15
4.8	FIRE SERVICES.....	15
4.9	SECURITY SERVICES	15
4.10	SERVICES METERING	15
4.11	TRAFFIC AND TRANSPORT.....	16
4.11.1	TRAFFIC (PEDESTRIAN/CYCLISTS/VEHICLES)	16
4.12	PUBLIC REALM	16
4.12.1	PEDESTRIAN WAYS (PAVING).....	16
4.12.2	LANDSCAPING (SOFT AND HARD)	16
4.12.3	IRRIGATION.....	16
4.13	HAZARDOUS MATERIALS AND DANGEROUS GOODS	16

PROJECT DELIVERY GUIDELINES

1 USING THE GUIDELINES

The purpose of the Curtin University Project Delivery Guidelines is to provide a consistent approach for the delivery of Curtin University (CU) built form and external works and services projects to reflect and inform:

- campus planning and development principles
- Curtin University project delivery objectives
- Curtin University operating requirements.

The Guidelines have been prepared in consultation with CU subject matter experts and stakeholders.

The Guidelines provide high level objectives and controls. Contact should be maintained during the planning, design, documentation, construction commencement and commissioning phases with the relevant Responsible Officer and subject matter experts to:

- confirm compliance with the Guidelines;
- raise issues of non-compliance; and
- recommend changes.

The Guidelines provide CU's general requirements. They do not relieve external parties from their responsibility in the provision of goods and services. The Guidelines must be read in conjunction with:

- the specific project brief documents
- knowledge of the documents, policies, projects and plans described below
- applicable technical and statutory standards.

The Project Delivery Guidelines have been prepared in consultation with Curtin University subject matter experts and stakeholders. It is recognised that the subject matter of Guidelines will not always be suitable for all project elements and departures from the Guidelines may be required or desirable. Departures from Guidelines must be agreed upon in consultation with the relevant University Guideline subject matter expert. Departures must be recorded in a project register and recorded and reviewed in the Project Control Group meeting minutes under its own meeting agenda item "Project Delivery Guideline Departures". Where the University subject matter expert identifies that a departure adds ongoing value to the University, the subject matter expert will update the relevant Guideline.

1.1 RELATED GUIDELINES/PLANS/POLICIES

The following plans, policies and guidelines describe the strategic intent required to be incorporated into projects delivered for Curtin University.

1.1.1 CURTIN MASTER PLANNING

Curtin is the heart of the largest concentration of innovative industry and research in Western Australia. We've developed a master plan that outlines [a vision for 2030](#) to create an important economic and innovative hub, with diversity in culture and the arts – a district that celebrates the University's creative knowledge.

For information on how we propose to make Curtin greater please select from the suite of documents below.

CREATING THE CITY OF INNOVATION - THE VISION

PDF 4.4Mb



[Download](#)

DRIVERS FOR CHANGE - PART A

PDF 4.2Mb



[Download](#)

MASTER PLAN - PART B

PDF 9.2Mb



[Download](#)

DELIVERING THE VISION - PART C

PDF 12.4Mb



[Download](#)

1.1.2 ACADEMIC HEART PLANNING FRAMEWORK

The planning framework for the Academic Heart of Greater Curtin advances and applies the vision and six guiding principles of Greater Curtin – the campus-wide master plan.

The *Academic Heart Design Guidelines* encapsulate the planning principles to be pursued for projects undertaken on the core campus areas and can be viewed [here](#).

The planning framework for the Academic Heart of Greater Curtin has three key structuring elements:

DISTINCTLY CURTIN

The future University needs to be responsive and respectful of its heritage and grow from the qualities and experiences that are at the heart of its identity and brand.

The planning framework recognises these as the key cultural assets of the University and sets in place a strategy to first recognise, and then ensure they continue to be relevant and dynamic pieces of the contemporary university experience.

COMPACT CAMPUS

Curtin University's Bentley Campus encompasses an area of approximately 114 ha, an area well in excess of the space required to sustainably support the University's projected growth over the next 15 years.

The planning approach seeks to 'concentrate and consolidate' activity within a 400 m radius walking catchment of the library.

A CONNECTED COMMUNITY

The importance of improving connectivity between buildings, between faculties, between the university and the wider community, is recognised as a key strategy in the creation of a 'knowledge neighbourhood' that supports lifelong learning, research and innovation.

1.1.3 DISABILITY ACCESS AND INCLUSION PLAN

Curtin University is committed to ensuring equitable and inclusive access for people with a disability to our facilities, services, events and academic programs on all our Western Australian campuses. Our DAIP informs our students, staff and the public about the areas of access and inclusion on all our WA locations that can be improved, and our strategies to address them.

A copy of our DAIP can be found at <http://about.curtin.edu.au/policy-governance/disability-access-inclusion-plan/>.

The *Universal Design Guidelines – Built Form* encapsulate the planning principles to be pursued for projects undertaken on the core campus areas and can be viewed at <https://properties.curtin.edu.au/workingwithus/guidelines.cfm>.

The Universal Design Guidelines document aims to:

- clarify expectations for designers, contractors, project managers and staff in applying Universal Design principles to the built environment of Curtin University campuses
- provide guidance on methods and prioritisation for the improvement of existing, non-compliant and/or older built environments
- provide a clear governance model and key elements to be addressed in the design and construction of new campus infrastructure.

1.1.4 HEALTH AND SAFETY

Curtin University is committed to providing and maintaining high standards of health and safety in the workplace and will:

- ensure compliance with relevant legislation and the University's Health and Safety Management System
- promote an organisational culture that adopts health and safety as an integral component of its management philosophy
- ensure that health and safety is part of the business planning processes and that it is adequately resourced by all areas
- maintain an effective mechanism for consultation and communication of health and safety matters
- maintain an effective process for resolving health and safety issues and managing health and safety risks
- provide appropriate health and safety training

- regularly review health and safety performance to monitor the effectiveness of health and safety actions and ensure health and safety targets and objectives are met.

A copy of our Health and Safety Management Standards can be found at:

<https://healthandsafety.curtin.edu.au/local/docs/HManagementStandards.pdf>.

1.1.5 SUSTAINABILITY AT CURTIN

In 2015 Curtin University was awarded Australia's first [5-Star Green Star-Communities](#) rating from the Green Building Council of Australia (GBCA) for its master plan, which will see the Bentley Campus developed into a 'City of Innovation'.

Green Star – Communities unifies our sustainability initiatives, clarifies our approach and sets shared goals across the organisation while providing independent verification that our vision will deliver on environmental, social and economic sustainability.

Assistance is provided in the Guidelines for project teams to understand and include the Green Star criteria in their planning and design activities.

1.2 CURTIN UNIVERSITY PF & D SYSTEMS

PF & D has a number of IT systems that are used to support the planning, acquisition, operation and disposal of the University's physical facilities.

- Insite – the PF & D Intranet
- Integrated Management System - the Properties, Facilities & Development (PF & D) management system. It contains all the business processes, tools (forms, templates, systems) and knowledge resources (information) required to deliver projects and perform core operational activities. As a standardised PF & D-wide system, the IMS delivers:
 - a central repository of best practice processes and tools, consistent with PF & D's shared values
 - transparency of all processes, accessible by all PF & D employees and their agents.
- Archibus – our infrastructure and facilities management system
- Blue Cielo – our drawing management system
- Greensense – our utilities data management and reporting system
- Gallagher FT Command Centre (Cardex) – our security access control and ID card system
- Noggin OCA – our security incident management and reporting system
- Mileon – our parking management system.

2 PROJECT DELIVERY GUIDELINES – STRUCTURE

The suite of documents that make up the Project Delivery Guidelines are structured in a logical way such that proponents should work their way through the documents relevant to their project interests in a hierarchical manner. The diagram below indicates the structure.

1	STRATEGIC VISION		CURTIN POLICY AND GOVERNANCE
	CREATING THE CITY OF INNOVATION - A VISION FOR GREATER CURTIN		
CURTIN MASTER PLAN			
PART A - GREATER CURTIN DRIVERS FOR CHANGE			
PART B - GREATER CURTIN MASTER PLAN			
PART C - CREATING THE CITY OF INNOVATION			
2	DEVELOPMENT GUIDELINES		
	GREATER CURTIN ACADEMIC HEART PLANNING FRAMEWORK		
	GREATER CURTIN ACADEMIC HEART PLANNING - DEVELOPMENT GUIDELINES		
	CURTIN UNIVERSITY PLACE ACTIVATION PLAN		
	CURTIN UNIVERSITY SPACE PLANNING STRATEGY		
	BIODIVERSITY PLAN		
	SUSTAINABLE FUTURES PLAN		
	UNIVERSAL DESIGN GUIDELINES		
	INTEGRATED TRANSPORT PLAN		
	WAYFINDING STRATEGY		
3	PROJECT DELIVERY GUIDELINES		
	USING THE GUIDELINES		
	PROJECT DELIVERY - ARCHITECTURE	PROJECT DELIVERY - ENGINEERING & PUBLIC REALM	
	3.1 PLANNING PRINCIPLES	4.1 BUILDING OPERATIONS: ACCESS, MAINTENANCE, MANUALS	
	* Workplace	000337 PDG Campus Logistics Design Guidelines	
	000335 PDG Workplace Design Guidelines	4.2 ELECTRICAL SERVICES	
	* Research	000312 PDG Electrical Services Guidelines	
	000336 PDG Research and Laboratory Design Guidelines	4.3 MECHANICAL, VENTILATION & AIR CONDITIONING	
	* Learning and Teaching	000311 PDG Mechanical Services Guidelines	
	000333 PDG Learning and Teaching Spaces Design Guidelines	4.4 LIFT SERVICES	
	* Greenstar Communities	000322 PDG Vertical Transport Guidelines	
	000325 PDG Green Star - Communities Design Guidelines	4.5 HYDRAULIC SERVICES	
	*Emergency Management	000326 PDG Hydraulic Services Design Guidelines	
	000331 PDG Emergency Management Design Guideline	4.6 DATA/NETWORKS/COMMUNICATIONS	
	3.2 HEALTH & WELLBEING	000313 PDG Data Cabling Network Requirements	
	* Indoor Air Quality	4.7 AV (MEDIA) SERVICES	
	000341 PDG Health & Wellbeing Guidelines	000324 PDG Audiovisual Guidelines Master Guide	
	*Light	Audiovisual Guidelines Parts 1-6	
	000341 PDG Health & Wellbeing Guidelines	4.8 FIRE SERVICES	
	*Acoustics	000321 PDG Fire Safety Project Guidelines	
	000341 PDG Health & Wellbeing Guidelines	000330 PDG Fire Services Technical Requirements	
	000344 PDG Acoustic Requirements Guidelines	4.9 SECURITY SERVICES	
	3.3 FABRIC	000327 PDG Security Infrastructure Design Guidelines	
	000334 PDG Built Form and Fabric Design Guidelines	000328 PDG Security Infrastructure Technical Requirements	
	3.4 FITOUT	4.10 SERVICES METERING	
	* Furniture, Fittings and Furnishings	000346 PDG Services Metering Guidelines	
	000342 PDG Furniture, Fixtures and Equipment Guidelines	4.11 TRAFFIC & TRANSPORT	
	000316 PDG Public Places Design and Technical Guidelines	000340 PDG Transport and Movement Guidelines	
	* Signage	4.12 PUBLIC REALM	
	000332 Signage Planning and Design Guidelines	* Pedestrian Ways (Paving)	
	3.5 BUILDING OPERATIONS	000316 PDG Public Places Design and Technical Guidelines	
	*Cleaning/Logistics/Waste Management	*Landscaping (Soft and Hard)	
	000337 PDG Campus Logistics Design Guidelines	000316 PDG Public Places Design and Technical Guidelines	
	*Maintainability and Cleanability	*Irrigation	
	PDG 000338 Buildability and Maintainability Guideline	000316 PDG Public Places Design and Technical Guidelines	
		4.13 HAZARDOUS SUBSTANCES & DANGEROUS GOODS	
		000345 PDG Hazardous Materials Project Guidelines	
		000329 PDG Hazardous Substances Storage Guidelines	
	CURTIN UNIVERSITY REQUIREMENTS & REFERENCE MATERIALS		

3 PROJECT DELIVERY GUIDELINES – ARCHITECTURE

The Guidelines have been arranged as follows and direct links are provided to each guideline at <https://properties.curtin.edu.au/workingwithus/guidelines.cfm>.

3.1 PLANNING PRINCIPLES

3.1.1 WORKPLACE

The performance requirements for workplace design are to be found in the following documents:

000335 PDG Workplace Design Guidelines.

3.1.2 RESEARCH

The performance requirements for research facility design are to be found in the following documents:

000336 PDG Research and Laboratory Design Guidelines.

3.1.3 LEARNING AND TEACHING

The performance requirements for learning and teaching facility design are to be found in the following documents:

000333 PDG Learning and Teaching Spaces Design Guidelines.

3.1.4 GREEN STAR – COMMUNITIES

The performance requirements for design in accordance with Green Star principles are to be found in the following document:

000325 PDG Green Star – Communities Design Guidelines

and its accompanying reference document:

000339 PDG Green Star – Communities Compliance Checklist.

3.1.5 EMERGENCY MANAGEMENT

The performance requirements for design for emergency management are to be found in the following documents:

000331 PDG Emergency Management Design Guidelines.

3.2 HEALTH & WELLBEING

3.2.1 INDOOR AIR QUALITY

The performance requirements for indoor air quality are to be found in the following documents:

000341 PDG Health & Wellbeing Guidelines

3.2.2 LIGHT

The performance requirements for illumination are to be found in the following documents:

000341 PDG Health & Wellbeing Guidelines.

3.2.3 ACOUSTICS

The performance requirements for acoustic design are to be found in the following documents:

000341 PDG Health & Wellbeing Guidelines

000344 PDG Acoustic Requirements Guidelines.

3.3 BUILT FORM AND FABRIC

The performance requirements for fabrics and materials to be used are to be found in the following document:

000334 PDG Built Form and Fabric Guidelines.

3.4 FITOUT

3.4.1 FURNITURE, FIXTURES AND EQUIPMENT

The performance requirements for furniture, fixtures and equipment to be used are to be found in the following document:

000342 PDG Furniture, Fixtures and Equipment Guidelines

and, for external furniture:

000316 PDG Public Places Design and Technical Guidelines.

3.4.2 SIGNAGE

The performance requirements for signage are to be found in the following documents:

000332 PDG Signage Planning and Design Guidelines.

3.5 BUILDING OPERATIONS

3.5.1 CLEANING/LOGISTICS/WASTE MANAGEMENT

The design performance requirements for cleaning, logistics and waste management in buildings are to be found in the following document:

000337 PDG Campus Logistics Design Guidelines.

3.5.2 BUILDABILITY AND MAINTAINABILITY

The performance requirements for design for maintenance are to be found in the following documents:

000338 PDG Buildability and Maintainability Guidelines.

4 PROJECT DELIVERY GUIDELINES – ENGINEERING AND PUBLIC REALM

This section of the Guidelines provides performance requirements for the design, documentation, installation, commissioning and post-occupancy considerations for the following building services:

4.1 BUILDING OPERATIONS INCLUDING ACCESS AND MAINTENANCE

The performance requirements for building operations are to be found in the following document:

000337 PDG Campus Logistics Design Guidelines.

4.2 ELECTRICAL SERVICES

The performance requirements for Electrical Services are to be found in the following document:

000312 PDG Electrical Services Guidelines.

4.3 MECHANICAL SERVICES INCLUDING VENTILATION AND AIR CONDITIONING

The performance requirements for Mechanical Services are to be found in the following document:

000311 PDG Mechanical Services Guidelines.

4.4 LIFT SERVICES

The performance requirements for vertical transportation are to be found in the following document:

000322 PDG Vertical Transportation Guidelines.

4.5 HYDRAULIC SERVICES

The performance requirements for hydraulic services are to be found in the following document:

000326 PDG Hydraulic Services Design Guidelines.

4.6 DATA NETWORKS AND COMMUNICATION

The performance requirements for network and communication services are to be found in the following document:

000313 PDG Data Cabling Network Requirements.

4.7 AV (MEDIA) SERVICES

The performance requirements for audiovisual services are to be found in the following documents:

000324 PDG Audiovisual Guidelines Master Guide

000314 PDG Audiovisual Guidelines Part 1 – Room and System Standards.

000319 PDG Audiovisual Guidelines Part 2 – Technical Design Standards.

000315 PDG Audiovisual Guidelines Part 3 – Interface and Programming Standards.

000317 PDG Audiovisual Guidelines Part 4 – Detailed Design Specifications.

000320 PDG Audiovisual Guidelines Part 5 – Project Processes.

000318 PDG Audiovisual Guidelines Part 6 – Design and Build.

A Design Resources document (Part 7) is also available on request.

4.8 FIRE SERVICES

The performance requirements for fire services are to be found in the following documents:

000321 PDG Fire Safety Project Guideline

and its associated reference document:

000330 PDG Fire Services Technical Requirements.

4.9 SECURITY SERVICES

The performance requirements for security services are to be found in the following document:

000327 PDG Security Infrastructure Design Guidelines

and its associated reference document:

000328 PDG Security Infrastructure Technical Requirements.

4.10 SERVICES METERING

The performance requirements for the metering of services are to be found in the following document:

000346 PDG Services Metering Guidelines.

Note that the metering of services requirements has impact across the following functional areas: Mechanical, Electrical, Hydraulic, Fire Safety, Data Communications and Public Realm (Irrigation).

4.11 TRAFFIC AND TRANSPORT

4.11.1 TRAFFIC (PEDESTRIAN/CYCLISTS/VEHICLES)

The performance requirements for traffic and transport are to be found in the following document:

000340 PDG Transport and Movement Guidelines.

4.12 PUBLIC REALM

4.12.1 PEDESTRIAN WAYS (PAVING)

The performance requirements for pedestrian ways are to be found in the following document:

000316 PDG Public Realm Design and Technical Guidelines.

4.12.2 LANDSCAPING (SOFT AND HARD)

The performance requirements for landscaping are to be found in the following document:

000316 PDG Public Realm Design and Technical Guidelines.

4.12.3 IRRIGATION

The performance requirements for irrigation are to be found in the following document:

000316 PDG Public Realm Design and Technical Guidelines.

4.13 HAZARDOUS MATERIALS AND DANGEROUS GOODS

The performance requirements for hazardous substances are to be found in the following document:

000345 PDG Hazardous Materials Project Guidelines

000329 PDG Hazardous Materials Storage Guidelines.