Mapping of National Competency Standard for Architects against NCSA

Unit 1	Design			Revised Standard
Context 1.1	**To create an architectural design through the exercise of knowledge, imagination, judgement and professional responsibility**			
1.1.1	Generate a design concept that can be realised as a building	**1**	The design concept demonstrates an analysis of and response to the design brief, user intent and built purpose	3.2
		2	The design concept demonstrates a considered response to the physical location and addresses the relevant wider issues of urban or rural context	3.3
		3	The design concept demonstrates the exercise of critical choice, aesthetic judgement and creative imagination	3.2
		4	The design concept demonstrates a clear and coherent design approach	3.2 + 4.3
		5	The design concept demonstrates sensitivity to the ordering, sequencing and articulation of three-dimensional form and spatial content is evident	3.5
		6	The design concept demonstrates an understanding of architectural history and building traditions	3.2 + Disciplinary KD
		7	The design concept demonstrates an understanding of relevant social, cultural and environmental issues	3.3 + Social and Ethical KD
		8	The design concept demonstrates an appreciation of economic factors, building systems and materials	3.6, 3.7
1.1.2	Recognise the need to sustain the natural and the built environment, and the needs and aspirations of building users and the community, in the formulation of a design concept	**9**	The design concept demonstrates respect for the natural environment and awareness of the issues of sustainability	3.2, 3.3 + Sustainable Enviro KD
		10	The design concept demonstrates an assessment and understanding of the impact of the project on building users and community	3.1, 3.2 + Social and Ethical KD
		11	The design concept demonstrates an understanding of issues of national and regional planning and their relationship to local demography and resources	3.3 + Social and Ethical KD + Sustainable Enviro KD
		12	The design concept demonstrates the observation of society's values influencing health, safety, welfare and use of the built environment	3.1, 3.2 + Social and Ethical KD
1.1.3	Comply with the law and regulations governing planning, building design, procurement and the practice of architecture	**13**	The development of the design concept demonstrates knowledge of the ethical basis, laws and statutes that regulate the practice of architecture	3.3, 3.4 + Regulation KD
		14	The design concept demonstrates compliance with the law, relevant codes, regulations and industry standards for development, design, construction and services	3.3, 3.4 + Regulation KD
1.1.4	Communicate the design concept clearly	**15**	The development of the design concept utilises freehand drawings, diagrams, other graphic techniques and modelling (physical and/or computer simulated) to explore three-dimensional form and relationships	3.8 + Communication KD
		16	The design concept is described through drawings and/or three- dimensional representation, computer	3.8 + Communication KD
Context 1. 2	**To formulate an architectural design in response to a project brief, sufficient to obtain endorsement of overall objectives and design concept by a client and other interested parties**			
1.2.1	Interpret project brief and decide design objectives and parameters with the client	**17**	The architectural design demonstrates a critical response to budget and time frame based on an analysis of the project brief	2.3, 2.4
		18	The architectural design demonstrates a consideration of the feasibil of the project brief and a review of alternative options	2.3, 2.6, 4.1
		19	The architectural design demonstrates a critical response to spatial and functional requirements and relationships, including access	2.2
		20	The architectural design demonstrates an investigation of the interes of building users and reconciles those interests with the project brief	2.1, 2.2, 2.6 + Social and Ethical KD
		21	The architectural design demonstrates an investigation of human, social, environmental and contextual issues	3.1, 3.2, 3.3 + Social and Ethical KD
		22	The architectural design demonstrates the implications of physical, technical, cost and regulatory constraints	3.3, 3.4
		23	The architectural design demonstrates the process of collaboration and integrates sources of specialist information and expertise	4.4

1.2.2	Develop a schematic design through a repetitive process of hypothesis, evaluation and re-appraisal	**24**	The schematic design demonstrates that the program has been analysed, priorities evaluated, problems defined, strategies formulat and a theoretical design approach considered	4.1, 4.2, 4.3
		25	The schematic design is progressively investigated, emerging issues researched, experiential, material and aesthetic options considered and alternatives explored, tested and refined	4.2, 4.3, 4.6
		26	The schematic design satisfies the project brief, site analysis, user requirements, design parameters, and identifies constraints	4.1, 4.2
		27	The schematic design is validated by technical considerations, integrating structure, construction technologies and service systems into a functionally effective whole	4.4, 4.5
		28	The schematic design is informed by theoretical considerations, and intellectual and aesthetic judgement	4.1, 4.3, 4.4, 4.4, 4.6, 4.7 + Disciplinary KD
1.2.3	Communicate the schematic design clearly	**29**	The development of the schematic design utilises freehand drawings, diagrams, other graphic techniques and modelling to explore three- dimensional form and relationships	3.7, 4.8 Communication KD
		30	Describe the schematic design through drawings and/or three- dimensional representation, computer simulation or other visual and written techniques	4.8 Communication KD
1.2.4	Agree the schematic design with the client and interested parties	**31**	The schematic design proposals are evaluated and tested to enable agreement on selection and commitment to the development of a preferred design	2.6, 4.7
		32	The design approach, concept and conditions are articulated to infor a client and other interested parties	2.6, 3.9, 4.8
		33	Client expectations and limitations are reconciled, differences resolv consequences recognised , alternatives ordered and responsibility for decisions assumed	2.6, 3.9, 4.8
		34	The agreement of client to proceed to the detailed design stage is obtained	4.8
Context 1.3	**To develop a detailed design which is consistent with the design concept**			
1.3.1	Investigate and analyse detailed requirements for organisation of spaces, areas and circulation within and around a building	**35**	The detailed design determines specific spatial requirements and relationships for building occupancy and functions	5.2
		36	The detailed design investigates internal and external patterns of circulation and project implications are assessed	5.2
		37	The detailed design demonstrates the integration of construction and technical systems in the spatial arrangement	5.2, 5.4, 5.5
		38	The detailed design interprets, assesses and incorporates information and recommendations provided by consultants, specialists and manufacturers	5.2, 5.5
1.3.2	Consider options and decide the disposition and assembly of the structural system, construction elements, materials and building components	**39**	The detailed design investigates and evaluates the choice of structural system, based upon an understanding of structural principles and their application	5.4, 5.5
		40	The detailed design investigates and evaluates construction elements based upon an understanding of technical performance and the requirements of building standards	5.4, 5.5
		41	The detailed design is assessed for consistency with design concept	5.1
		42	The detailed design investigates and evaluates materials and building components based upon an understanding of their physical properties- strength, performance and durability	5.6
		43	The detailed design demonstrates a considered judgement of the visual and contextual qualities of the structural system, construction elements, materials and building components	5.5, 5.6
		44	The selection of building materials is consistent with, and appropriate to, the structural and construction system proposed and details of assembly are technically proficient	5.4
		45	The selection of fittings, fixtures and finishes is suitable for the purpose, cost and assembly	5.6
		46	Specialists are consulted as necessary	5.4
1.3.3	Establish requirements for building service systems	**47**	The active and passive service systems selected for thermal comfort, lighting and acoustics are suitable for the occupation, function and environmental parameters	5.8

		48	The mechanical and electrical, hydraulic and transportation systems selected are suitable for the occupation, function and environmental parameters and appropriate to time constraints	5.7
		49	Specialists are consulted as necessary	5.4
		50	Appropriate technical and mechanical systems and equipment is integrated with the schematic design	5.4, 5.5, 5.6, 5.7
Context 1.4	**To resolvea detailed design sufficient to obtain agreement and authorisation to proceed to documentation for its translation into built form**			
1.4.1	Progressively finalise all decisions relating to the assessment of specialist information, design detail, material choice and building costs and management strategies	**51**	The detailed design demonstrates the consideration and resolution of each aspect of the project brief	5.1
		52	The detailed design demonstrates that all building elements are sufficient and appropriate for construction intentions and environmental sustainability	5.4, 5.5, 5.6, 5.7, 5.8 + Sustainable KD
		53	The detailed design demonstrates consistency between the proposed building elements, construction systems, project budget and time constraints	5.1, 5.2, 5.9
		54	The detailed design demonstrates the integration of specialist information and expertise	5.4
		55	The detailed design demonstrates continuing consideration of the interests of building users, the community and other relevant groups	5.1, 5.2 + Social and Ethical KD
1.4.2	Communicate the detailed design clearly	**56**	The development of the detailed design utilises freehand drawings, diagrams, other graphic techniques and modelling to explore three- dimensional form and relationships	5.1, 5.2, 5.10 + Communication KD
		57	The detailed design is described through drawings and/or three- dimensional representation, computer simulation or other visual and/or written techniques	5.1, 5.2, 5.10 + Communication KD
1.4.3	Negotiate and agree the detailed design proposal with the client and other interested parties	**58**	Clear and accurate professional advice is provided on the detailed design response to each aspect of the project brief	5.10
		59	The reasons for any departure from the project brief are explained and agreed	5.10
		60	All other outstanding issues are resolved in readiness for commencement of the construction documentation	5.10
1.4.4	Prepare for start of construction documentation	**61**	A strategy and program for construction documentation are adopted The requirement for any additional specialist consultants is identified and their scope of work defined	6.1, 6.2
		62	The requirement for any additional specialist consultants is identified and their scope of work defined	6.1, 6.2
Context 1 . 5	**To continuously comply with the project brief and meet contractual agreements throughout the course of implementation of a design project**			
1.5.1	Resolve, in detail, all components of the design in order to prepare instructions for their construction or supply	**63**	The detailed design demonstrates a clear and coherent design approach has been maintained	6.1
		64	Decisions made are timely and conform to the agreed contractual and administrative program	6.7
		65	The ongoing contribution of consultants and suppliers is co ordinated	6.2
Unit 2	**Documentation**			
Context 2.1	**To generate documentation and clearly communicate information for an architectural projectt so that it can be costed, built and completed in accordance with the brief, time frame, cost and quallity objjecttives**			
2.1.1	Establish a documentation process	**66**	Participants in the documentation process are identified	6.1, 6.7
		67	Approach and procedures for the documentation process are identified	6.1, 6.7, 6.8
		68	Time schedules for the completion of documentation are established	6.1, 6.7
		69	Monitoring and checking protocols are established	6.7
2.1.2	Prepare architectural drawings with regard to the location, extent of building elements, components, finishes, fittings and systems	**70**	Materials, products and systems are selected and descibed in accordance with the detailed design	6.5
		71	Timely, accurate, complete and comprehensible drawings are produced for consultants, building contractors and relevant authorities	6.4
		72	Design changes which evolve during the documentation process are communicated to the client for approval	6.3, 6.7

2.1.3	Prepare architectural specifications and schedules	**73**	Timely, accurate, complete and comprehensible specifications and schedules are produced for consultants, contractors and relevant authorities	6.2
		74	The specifications and schedules nominate type, quality and performance standards with regard to selected materials, finishes, fittings, components, systems and special items	6.5
		75	The specifications and schedules identify and describe the type and extent of work of separate building trades and sub-contractors	6.6
		76	The specifications, schedules and drawings are cross-referenced and co-ordinated	6.8
2.1.4	Co-ordinate the documentation of the project	**77**	The architectural and consultants' documentation are checked for consistency and compatibility	6.4
		78	The architectural and consultants' documentation are checked and confirmed for consistency with the detailed design and with quality, cost and time parameters	6.7
		79	The documentation is consistent with the type of building contract and/or procurement procedure that has been selected for the project	6.8
2.1.5	Agree on the documentation with the client and other interested parties	**80**	The client is provided with a clear explanation and understanding of the documentation	5.8, 6.3
		81	The documentation is resolved and agreed in readiness for commencement of construction	6.4, 6.8
Context 2.2	**To provide documentation for effective occupation of the project and as a future reference source**			
2.2.1	Provide handover advice and as-built records	**82**	A clear explanation and documentation of building operation and systems is provided	8.8
		83	Accurate documents are prepared that record the location and extent of building elements and services, including those changes which occurred during the construction process	8.8

Unit 3 **Project Management**

Context 3.1	**To confirm objectives and conditions at inception of project**			
3.1.1	Establish and evaluate identified requirements, perceptions and priorities	**84**	Project requirements are established, evaluated and assessed and priorities allocated	1.2
		85	Project budget and time constraints are confirmed following an analysis of the project brief and factors affecting delivery	1.3
		86	The project brief is monitored and assessed against the budget, program and external factors	2.3
3.1.2	Establish site conditions	**87**	The limitations of the site and its environs are investigated, identified and opportunities recorded	2.1
		88	Site access and utility connections are identified and considered	2.1
		89	Specialist input is identified and obtained	1.4
		90	The options for re-use and life cycle costing and, where relevant, the conservation of existing buildings and infrastructure are considered	1.4 + Sustainable KD
3.1.3	Assess potential interaction between the project, the environment and the community	**91**	The implications of environmental factors are investigated, assessed and reported	1.4 + Sustainable KD
		92	The implications of cultural factors are investigated, assessed and reported	1.2, 1.4 + Sustainable KD
		93	Opportunities for engagement with community participation processes are investigated and recommendations made	Social and ethical KD
3.1.4	Assess regulatory context	**94**	The implications of the law, relevant codes, regulations and industry standards are identified, understood and assessed	1.2, 2.1, 2.2 + Regulatory KD
3.1.5	Consider construction systems and materials options	**95**	Construction systems, service systems and material options consistent with the project brief and the design objectives are considered	2.6
Context 3.2	**To establish an appropriate procurement method and complete contractual arrangements with all participants**			
3.2.1	Establish terms of agreement with client	**96**	Services to be provided to the client and professional fees are identified and clearly communicated	1.1
		97	A method of engagement is established, appropriate to the scale and nature of the project and the scope of services to be provided	1.1, 7.2
3.2.2	Establish project procurement options	**98**	The advantages and disadvantages of procurement options are considered	1.5, 1.6, 1.7
		99	Project opportunities and constraints are assessed, key issues identified and recommendations made to the client	1.4, 1.7

3.2.3	Prepare preliminary project evaluations, programs and feasibility studies	**100**	Project scope is clearly defined	1.2
		101	A project cost analysis is undertaken which reflects an understanding of procurement method, contractual arrangements and other project parameters	2.3, 2.4
		102	Time, cost, and quality requirements are recognised and balanced against client needs and priorities	2.4, 2.5
3.2.4	Establish project information management systems	**103**	Recording and information systems are established to satisfy all requirements of the contract of engagement	8.7
		104	Systems are established to ensure the flow of information, instructions, approvals and agreements between all participants	8.5, 8.7
3.2.5	Establish requirements for, and co-ordinate, specialists	**105**	The need for consultants, contractors and suppliers is established The scope of specialist services is specified and briefs prepared	7.4
		106	The scope of specialist services is specified and briefs prepared	7.4
		107	The selection of specialists including fee arrangements is negotiated and client agreement secured	7.4
3.2.6	Prepare and conclude contractual agreements and negotiations for proceeding with project construction	**108**	The types of construction contracts are considered and assessed and recommendations made to the client	7.1, 7.2
		109	The financial arrangements for project construction proposed by the contractor are analysed	7.3
		110	Contractor qualifications are evaluated prior to selection	7.3
		111	The terms and conditions of the contract are reviewed, negotiated and finalised	7.5
		112	Ethical practices are followed	7.2, 7.5, 7.6 + Social and Ethical KD
Context 3.3	**To provide contract administration for the construction of a project**			
3.3.1	Administer a standard form construction contract	**113**	Administrative processes are established and maintained which ensure progressive fulfilment of requirements of contract documents	8.3, 8.4, 8.5
		114	Construction progress is systematically monitored and compliance with the contract provisions and budget ensured	8.4
		115	Progress claims, variations and extensions are evaluated and certified	8.5
		116	Problems and uncertainties are resolved and advice provided	8.4, 8.5
		117	Defects are identified and rectification by the builder is monitored	8.4
		118	Instructions are issued	8.5
3.3.2	Monitor compliance with contract documents and requirements of relevant regulatory authorities	**119**	Authority approvals are obtained as required	8.3
		120	A mechanism is established for regular progress reporting to the client on variations to the program, budget and quality	8.5
		121	Compliance with contract documents and requirements of regulatory authorities is verified at completion of the contract	8.6, 8.8
Context 3.4	**Before, or on completion of the contract, to compile and document information and responsibilities for future operational use**			
3.4.1	Assemble project maintenance and operation manuals as required by the contract	**122**	Warranties, maintenance agreements, certificates and approvals are obtained and handed over	8.8
		123	Maintenance and operation manuals are prepared and provided Client responsibilities at handover are identified and advised	8.8
		124	Client responsibilities at handover are identified and advised	8.8
3.4.2	Undertake post occupancy evaluation and assess for future operational use	**125**	Performance information is systematically acquired, analysed, reviewed and disseminated as necessary	8.8
Unit 4	**Practice Management**			
Context 4.1	**To establish and maintain an architectural practice**			
4.1.1	Define practice objectives and establish a practice structure and strategies for their achievement	**126**	Knowledge is demonstrated of alternative practice models, such as sole practice, partnership, company, joint-venture, multi-disciplinary, secondary consultancy and networking	9.4

		127	An appropriate practice structure is established in response to anticipated scope and demand for professional services	9.1
		128	A businessplanisdevelopedandastrategyestablishedfor performance review	xxxx
		129	Professional, technical and financial resources adequate and appropriate for the practice structure and strategies are adopted	9.2
		130	Engagement procedures are identified	1.1, 9.1
		131	Client satisfaction and project performance is monitored and information for improvement of future services recorded	9.4
4.1.2	Establish and maintain practice management systems	**132**	A practice management system is established to report, monitor and review financial performance of the practice	9.3
		133	Accounting procedures are established and maintained	9.3
		134	Specialists for practice management advice are consulted as necessary	xxxx
		135	Administrative systems and quality management standards are established and applied to facilitate the efficient, timely and profitable provision of professional services	9.3
		136	All practice management systems are regularly analysed and reviewed A comprehensive library system of information and material essential	9.3
		137	A comprehensive library system of information and material essential for practice is established and maintained	9.2
4.1.3	Deploy and manage staff	**138**	Staff numbers and skills are managed to meet practice needs	xxxx
		139	Staffresponsibilitiesareclearlydefinedandtheirunderstandingensured	xxxx
		140	Personnel records are maintained to ensure efficient administration of the terms and conditions of employment	xxxx
		141	Opportunity is provided for staff to undertake personal and professional development	xxxx
		142	Ethical practices are followed	9.1, 9.6 + Soial and Ethical KD
4.1.4	Comply with the law and regulations governing the conduct of an architectural practice	**143**	Compliance with the law and regulations governing the conduct of an architectural practice, as a business entity and as an employer is demonstrated	9.5, 9.7 + Regulatory KD
		144	Compliance with the law and regulations governing accounting and financial matters is demonstrated	9.7 + Regulatory KD
		145	Compliance with common law and duty of care provisions, and the laws of contract and tort is demonstrated	9.7 + Regulatory KD
		146	Compliance with copyright law and the protection of intellectual property is demonstrated	9.5
		147	Specialists are consulted as necessary for financial, legal, professional and other practice advice	9.7
		148	An understanding of the legal responsibilities of an architect, with regard to registration, practice and building contracts is demonstrated	9.7
4.1.5	Observe the standards of conduct expected by the community of a professional in the practice of architecture	**149**	Anunderstandingofprofessionalethicsandethicalpracticeis demonstrated	9.6 + Social and Ethial KD