

Landscape Architectural Candidate Workshop

South African Council for the Landscape Architectural Profession

30 MARCH 2019



Section 2 - Landscape Design

Section 4 - Landscape Project Management and Landscape Construction

Section 5 - Applied Horticultural and Landscape Technology

PROJECT PROFILE

- MOTIVATION REPORT
- PROFILE OF EVIDENCE



Weighting Core competency Table 4 November 2016

Proposed	DEFINITIONS
minimum weighting	
0	PROFICIENT: (practice orientated) An ability to demonstrate project based application of specialist knowledge, critically
9	engaging with current research and or practices in doing so. To, within specific study fields, demonstrate the ability to
	apply appropriate methods and processes in unique real life project scenarios. To be proficient in management, design
	and supervision of project implementation in practice.
7	COMPETENT: (field specific competence) Demonstrate knowledge of and project based engagement in an area at the
7	forefront of a field, discipline and practice; relating that knowledge to a particular context. Selecting and applying
	appropriate procedures, processes and techniques to unique landscape related challenges within a specialized field of
	practice.
F	KNOWLEDGE AND UNDERSTANDING: (integrated knowledge) the assimilation and comprehension of knowledge.
5	Individuals should be able to understand, apply and evaluate the key terms, concepts, facts, principles, rules and theories
	within the working environment. The ability to select and apply a range of methods to resolve realistic landscape related
	problems in practice.
•	KNOWLEDGABLE: (to be acquainted with) To demonstrate <u>detailed</u> knowledge of one or more fields, disciplines or
3	practices including the ability to apply appropriate methods, procedures and techniques within a defined context.
1	INFORMED AWARENESS: To be sufficiently informed on matters pertaining to the profession i.e. demonstrate a basic
•	knowledge. Aided through experiential training and or industry related methods of learning.

The purpose of the project profile and the report is to assess the experience gained in terms of the SACLAP's core competency table since obtaining of the individual's tertiary qualification.

The candidate is to present a project profile and a report that demonstrates the knowledge gained in the best possible manner in order for the assessors to evaluate the core competencies.

			ssional e Architect	Lanc	onal Senior Iscape tectural	Land	ssional scape ectural	Land	essional dscape tectural
					nologist		ologist	Tech	nnician
			2F 9		QF 8)F 7		QF 6
		Competenc y upon	Competen cy upon	Competend y upon	Competenc y upon	Competend y upon	Competer cy upon	Competen y upon	Competend y upon
	Core Competencies	registration	graduation	registration	graduation	registration	graduatior	registration	graduation
2	Landscape Design								
2.1	Landscape Master Planning/Design Framework	9	7	7	7	5	3	1	1
	Site survey, site analysis, site evaluation, recommendations, reports and guidelines								
2.2	LandscapeTheories and Methodologies	9	7	7	7	5	3	3	3
	Landscape architecture history, theory and critique								
	Landscape design theory eg. Sustainable design, green building, ecological responsive design etc.								
	Construction history, theory and critique								
	Cultural landscapes								
2.3	Landscape Design	9	7	7	7	5	3	3	3
	Landscape levels, drainage design and stormwater management								
	Landscape Design: interpretation of brief, collation of data, ecological and site								
	responsive design, services and relevant integration of design information, evaluation								
	of data, design proposals and presentations, plan approval and local authority								
	requirements, advise on other professional involvement								
	Plant design i.e. aesthetical, functional and ecological considerations								
2.4	Working drawings & Documentation associated with Landscape design	9	5	7	5	7	5	5	3
	Hard and Soft Landscape Detail Construction drawings, grading plans, planting plans,								
	irrigation design inputs, specifications, bills of quantities, writing landscape								
	maintenance specification								
2.5	Cost Estimation of Landscape Design	9	5	5	5	5	3	3	1
	Cost estimation, project budget confirmation, Quantification and measuring ,material and labour rates.								
					L				
4	Landscape Project Management & Landscape Construction								
4.3	Construction Contract Implementation	5	3	5	3	5	3	3	1
	Elevations, slopes and falls, co-ordinates, datum points, setting out points, dimensions, distances and proportion				a and				
	Supplier management and control, size, type and sequencing of deliveries, commercial				11		1.st		
	arrangements and proportions						<		
	Understanding specifications, aesthetic interpretation, accuracy of installation				(1				
					10	·			
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4.4	Construction Contract Administration	5	3	5	3	5	3	3	1
	Costing, rate calculation, work measurement, preparation of monthly claim, interaction with cost								
	controller for valuation and certification of landscape work								
	Quality assurance in relation to specifications, testing of components and /materials, samples, site house keeping								
	Format & frequency, reporting and feedback								
	Preparation and submission, returnables schedule, pricing review, evaluation criteria,								
	insurances, compliance issues								
	Appointment letter, contract document familiarisation, forms of contract and								
	implications								
	Implications								
5	Applied Herticulture/Londocone Technology								
	Applied Horticulture/Landscape Technology	7		7			-	<u> </u>	
5.1	Plant knowledge	/	5	7	5	5	5	5	3
	Nomenclature, characteristics, uses and requirements							<u> </u>	
5.2	Plant propagation	1	1	1	1	1	1		1
	Nursery management: set up on site, propagation methods, propagation mediums, fertilizing, maintenance, pest and disease control								
5.3	Arboriculture	3	3	3	3	3	3	1	1
	Tree planting methods, appropriate pruning, root treatment, tree surgery, pests & disease identification and treatment, tree removal practises								
5.4	Soil knowledge	3	3	3	3	3	3	1	1
	Classification (interpretation), fertilisation, handling and placing, cultivation, mulching, growth media								
	Flow of water, infiltration, porosity, watering requirements								
5.5	Turf grass management	3	3	3	3	3	3	1	1
0.0	Sport field, construction, maintenance, preparation of fields	<u>J</u>			5	5			- '
5.6	Irrigation	3	3	3	3	3	3	3	1
5.0	Water quality - interpretation of lab results, mitigation measures, etc	5	5	5	5	5	5		- '
	Design of systems, working drawings and estimates of quantities and costs, installation								-
	and maintenance								
	Determination of watering requirements, implementing water-wise principles								
5.7	Landscape equipment/mechanisation	3	1	3	1	3	1	1	1
	Understanding equipment capacity/specifications/suitability/calibration				4.4				
5.8	Landscape installation practise	5	3	5	3	5	3	3	3
	Plant handling & installation						2		
	Skill in the use and suitability of materials : paving , concrete, street furniture etc.				P				
5.9	Landscape maintenance practice	5	3	5	3	5	3	3	3
	Plant growth, , water requirements						36		
	Pest and disease control						223		2
	Best practice principles				and have		17 12		1 st
				X			6 9 L	1	X

Section 2,4,5 Landscape Architectural

Scale of evaluation Core compentancy compentacy level

3

- Candidate name: Category:
- Mentor:

- 9 PROFICIENT: (practice orientated) An ability to demonstrate project based application of specialist 7 COMPETENT: (field specific competence) Demonstrate knowledge of and project based engagement in ε
- 5 KNOWLEDGE AND UNDERSTANDING: (integrated knowledge) the assimilation and comprehension of k

- Date:
- KNOWLEDGABLE: (to be acquainted with) To demonstrate detailed knowledge of one or more fields, dis
- INFORMED AWARENESS: To be sufficiently informed on matters pertaining to the profession i.e. demonst

		-							
2	Landscape Design	Professional Landscape Archite ct	Professional Senior Landscape Architectural Technologist	Professional Landscape Architectural Technologist	Professional Landscape Architectural Technician	Mark (1-10)	% OF TOTAL	Sub- total Mark	0
2.1	Landscape Master Planning/Design Framework	<u> </u>	<u> </u>	<u> </u>	<u>~</u> <	0	20%		
2.1.1	Site survey/analysis/evaluation	9	7	5	1	-			
2.1.2	Design Framework/ Master Plans	9	7	5	1				
2.1.3	Reports and guidelines	9	7	5	1				
2.2	Landscape Theories and Metholodologies					0	5%	0.0	
2.2.1	Landscape architecture history, theory and critique. Adhering to national standards and specification	9	7	5	1				
2.2.2	Landscape design theory eg. sustainable design, green building, ecological responsive design, SITES, New Landscape Declaration, etc	9	7	5	3				
2.2.3	Construction history, theory and critique	9	7	5	3				
2.2.4	Cultural landscapes	9	7	5	3				
2.3	Landscape Design					0	30%	0.0	
2.3.1	Landscape levels, drainage plans, storm water management	9	7	5	1				
2.3.2	Brief description of scope of work	9	7	5	1				J
2.3.3	Interpretation of project brief	9	7	5	1				I
2.3.4	Site survey/analysis/evaluation	9	7	5	1				l
2.3.5	Collation of data, services and relevant integration of design information	9	7	5	1				
2.3.6	Evaluation of data	9	7	5	1				
2.3.7	Concept and concept development	9	7	5	1				
2.3.8	Material palette (hard and soft, street furniture, colours, textures, look and feel) and seasonal avaliability/lead times	9	7	5	1				
2.3.9	Sketch design proposals and responsiveness to design conditions. Section, elevations and presentation drawings	9	7	5	1				
2.3.10	Motivational reports i.e. what were the opportunities/ challenges/ considerations and how did the design address such	9	7	5	1				
2.3.11	Describe the interaction and communication with the other professionals and specialists on the team	9	7	5	1				
2.3.12	Any plans / documentation approval; national and local authority requirements e.g. National Building Regulations SANS 10400 , NEMA, municipal by-laws, SDP/LDP's etc.	9	7	5	1				

- Explain your role in the project ٠
- Motivate your **methodology** used .
- Information to be clear and ٠ readable
- Why, how, lessons learned •
- Only work after University ٠

4	Landscape Project Management and Landscape Construction	Professional Landscape Architect	Professional Senior Landscape Architectural Technologist	Professional Landscape Architectural Technologist	Professional Landscape Architectural Technician	Mark (1-10)	% OF TOTAL	Sub- total Mark	0
4.1	Project Management:					0	20%	0.0	
4.1.1	Co-ordinate of role players, meetings and procedures. Co- ordination, integration and dissemination of project information with other contractors and consultants	7	5	3	1				
4.1.2 4.1.3	Example of a site meeting minutes (drawn up by candidate) Example of a drawing register (drawn up by candidate)	7 7	5	3 3	1				
4.2	Construction Contract Management:		L I			0	20%	0.0	
4.2.1	Co-ordinate of sub contractors, meetings and procedures. Co- ordination, integration, management and dissemination of project implementation information.	5	5	5	3		20/6	0.0	
4.2.2	Understanding of complexity, context and difficulty, interface with other contractors, access, storage & staging points. Programming	5	5	5	3				
4.2.3	Interface with other contractors and consultants, dependencies, sequencing of work, penalties and delays, notifications of delays.	5	5	5	3				
4.2.4	Example of a site instruction (drawn up by candidate)								
4.2.5	Example of variation order (drawn up by candidate)								
4.3	Construction Contract Implementation:					0	20%	0.0	
4.3.1	Elevations, slopes and falls, co-ordinates, datum points, setting out points, dimensions, distances and proportion	5	5	5	3				
4.3.2	Supplier management and control, size, type and sequencing of deliveries, commercial arrangements and proportions.	5	5	5	3				
4.3.3	Understanding specifications, aesthetic interpretation, accuracy of installation	5	5	5	3				
5	Applied Horticultural and Landscape Technology	Professional Landscape Architect	Professional Senior Landscape Architectural Technologist	Professional Landscape Architectural Technologist	Professional Landscape Architectural Technician	Mark (1-10)		Sub- total Mark	0
5.1	Plant knowledge						0 20	0% 0.0	D
5.1.1	Botanical nomenclature, characteristics, uses and requirements. plant taxonomy, plant physiology, plant communities/companion planting, ecological value	7	7	5	5				
5.2			_	1.00	S.		0 10	0.0	
5.2.1	Plant propogation: Nursery management: set up on site, propagation methods, propagation mediums, fertilizing, maintenance, pest and disease control. plant harvesting (on site or local) and/or rescue (on site or local)	1	1	1	1				<u>,</u>
	iotaiy	In	1	1	13	11	+	11-	
5.3	Arboriculture		3 mm	-	a		0 10	0% 0.0	
5.3.1	Tree planting methods, appropriate pruning, root treatment, tree surgery, pests & disease identification and treatment. Best practice	3	3	3	1	2.	-		
5.3.2	Tree removal practises (Alien invasive and non invasive)	3	3	3	1 1	1	1	1	4
5.3.3	Transplanting practices and technologies	3	1.3.	3	1	1	6		
5.4	Soil knowledge				Colores Com		0 10	0% 0.0	
5.4.1	Classification (interpretation), fertilisation, handling and placing, cultivation, mulching, growth media. applicable to on site and imported soils. Tonsoil baryesting and storage from site	3	3	3	1	1	~	2	2:

Design.....

Reference Material applicable to this Section

The Standard Measurements System

Model Preambles to Trades

National Building Regulations SANS 10 400

Sustainable Site Initiative™



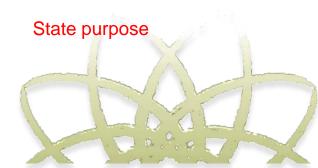
Landscape Master Planning/Design Framework

Site survey, site analysis, site evaluation, recommendations, reports and guidelines

- Site survey
 - Appointment of surveyor
 - Clearly state what info you require
 - Accuracy of information
- Site analysis/evaluation
 - State the constraints (if any)
 - State context/purpose/desired outcome
 - Advise client of outcome
- · Reports and guidelines
 - Index
 - State purpose
 - Clearly set out information logical thought process

Interpreted information

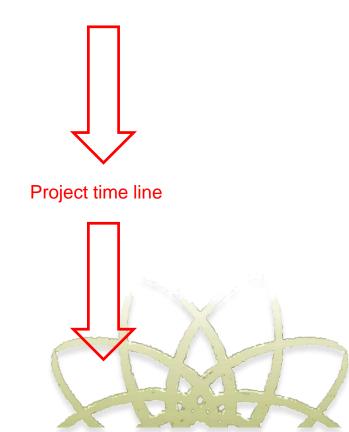
Opportunity & constraints



Landscape Design

Interpretation of brief, collation of data, services and relevant integration of design information, evaluation of data, communication skills, sketch design proposals, presentation drawings, motivational reports, plans approval and local authority requirements, advise on other professional involvement

- Interpretation of brief
- Integration of design information
- Evaluation of data
- Concept
- Sketch plans
- Presentation drawings
- Stakeholder engagement
- Recognition of budget
- Working drawings for Construction
- As-builts



Landscape Design

Interpretation of brief, collation of data, services and relevant integration of design information, evaluation of data, communication skills, sketch design proposals, presentation drawings, motivational reports, plans approval and local authority requirements, advise on other professional involvement

The National Building Regulations SANS 10400 focus is on building but the following need to be taken cognisance of:

- Part A: General principles and requirements
- Part B: Structural design
- Part C: Dimensions
- Part D: Public safety
- Part F: Site operations
- Part G: Excavations
- Part M: Stairways
- Part O: Lighting and ventilation
- Part P: Drainage
- Part Q: Non-water-borne means of sanitary disposal
- Part R: Stormwater disposal
- Part S: Facilities for persons with disabilities

Showcase project where you have applied these regulations

Landscape Design

Interpretation of brief, collation of data, services and relevant integration of design information, evaluation of data, communication skills, sketch design proposals, presentation drawings, motivational reports, plans approval and local authority requirements, advise on other professional involvement

- Sustainable Sites Initiative[™] Version 2
 - Site Selection
 - Pre-design assessment & planning
 - Site design water
 - Site design soil & vegetation
 - Site design material selection
 - Site design human health & well-being
 - Construction
 - Operation & maintenance
 - Monitoring & innovation



Working drawings & Documentation associated with Landscape implementation

Hard and Soft Landscape Detail Construction drawings, grading plans, planting plans, irrigation design inputs, specifications, bills of quantities

- Landscape detailing
 - Hard elements
 - Soft elements planting
 - Irrigation (design & supply, specialist input)
- Specifications
 - Level of detail
- BOQ
 - Accuracy of information
 - Reflect what is on drawings
 - · Reflect what is in the specifications
 - Remember to include specialist information
- Construction administration
 - Completion certificates, payment certificates etc
 - Site instructions etc.

Readable plans

Explain your work methodology



Cost Estimation of Landscape Installations

Cost estimation, project budget confirmation, Quantification and measuring ,material and labour rates. (evaluated in exam, portfolio & CV)

- Budget
- · Cost estimation at high level of concept
- Cost refinement after detail design is completed
- Value engineering
- Management of costs during project cycle

Explain your work methodology



Technical Skills associated with Landscape Architecture

Drafting, presentation techniques, photography, computer literacy

• This is demonstrated in the supporting documentation that you submit.

Research

• In the motivation section of the documentation, you are to describe briefly the research that each project required.



Section 4 - Landscape Project Management and Landscape Construction

Project Management

- Co-ordinate of role players, meetings and **procedures**. **Co-ordination**, integration and dissemination of project information with other contractors and consultants
- Example of site meeting minutes (drawn up by candidate)
- Example of a drawing register (drawn up by candidate)

Construction Contract Management

- Co-ordinate of sub contractors, meetings and procedures. Co-ordination, integration, management and **dissemination of project implementation information**.
- Understanding of complexity, context and difficulty, **interface with other contractors**, access, storage & staging points. Programming
- Interface with other contractors and consultants, dependencies, **sequencing of work**, penalties and delays, notifications of delays.
- Example of a site instruction (drawn up by candidate)
- Example of variation order (drawn up by candidate)



Section 4 - Landscape Project Management and Landscape Construction

Construction Contract Administration

- Elevations, slopes and falls, co-ordinates, datum points, **setting out** points, **dimensions**, distances and proportion.
- **Supplier management** and control, size, type and sequencing of deliveries, commercial arrangements and proportions.
- Understanding specifications, aesthetic interpretation, accuracy of installation.

Construction Contract Administration

- **Costing**, rate calculation, work measurement, preparation of monthly claim, interaction with cost controller for valuation and certification of landscape work.
- Quality assurance in relation to specifications, testing of components and/materials, samples (material samples and on site mock ups), site house keeping. Format & frequency, reporting and feedback.
- **Preparation and submission**, returnable schedule, pricing review, evaluation criteria, insurances, compliance issues. Example: Health and Safety & waste management.
- **Appointment letter**, contract document familiarisation, forms of contract and implications. Environmental compliance (EIA, EMP) authorisation compliance & legislative compliance.

Section 5 - Applied Horticultural and Landscape Technology

Plant knowledge

• Botanical nomenclature, characteristics, uses and requirements. plant taxonomy, plant physiology, plant communities/companion planting, ecological value

Plant propagation

• **Nursery management**: set up on site, propagation methods, propagation mediums, fertilizing, maintenance, pest and disease control. plant harvesting (on site or local) and/or rescue (on site or local)

Arboriculture

- **Tree planting methods**, appropriate pruning, root treatment, tree surgery, pests & disease identification and treatment. Best practice
- Tree removal practises (Alien invasive and non invasive)
- Transplanting practices and technologies

Soil knowledge

- Classification (interpretation), **fertilisation**, handling and placing, **cultivation**, mulching, growth media. applicable to on site and imported soils. Topsoil harvesting and storage from site
- Flow of water, infiltration, porosity, watering requirements

Turf grass management:

 Sport field, construction, maintenance, preparation of fields. drainage, refurbishment/renewal/reinstatement; sporting code specifications e.g. FIFA, IRB, IAAF, etc;

Section 5 - Applied Horticultural and Landscape Technology

Irrigation

- Water quality interpretation of lab results, mitigation measures, system appropriateness and technologies; water sources etc.
- **Design of systems**, working drawings and estimates of quantities and costs, installation and maintenance.
- Determination of watering requirements, implementing water-wise principles

Landscape Equipment

 Understanding equipment capacity, specifications, suitability, calibration. Costs, skill requirements, limitations, sourcing, availability, etc

Landscape installation practices

• Plant handling & installation, skill in the use and suitability of materials: paving, concrete, street furniture etc. Setting out. On site storage and handling of materials

Landscape maintenance practice

- Plant growth, water requirements. Carbon footprint of maintenance; SITES; specifications; replacement of plants/materials; programming; pruning; seasonal tasks; hard landscape maintenance (paving, furniture, electrical, services, bins, sweeping, detergents, etc); irrigation maintenance (cleaning heads, replacement of worn parts, repairs, UV damage, etc); vandalism; monitoring
- Pest and disease control,
- Best practice principles and audits

- This is a **project profile** where each project is set out in terms of the checklist provided to demonstrate the core competencies in the checklist.
- The motivation report should set out why you selected the project, what you learnt it and provide more information that cannot be provided in the checklist.

• 4 - 7 PROJECTS

- A range in **different scope of work** e.g. commercial, residential, resort, campus etc.
- Small/basic in complexity projects e.g. residential, traffic islands, courtyards etc.
- Large/complicated in complexity projects e.g. Multi use development, roof gardens, etc.
- Work Stages 1-6 should be set out in all the projects chosen and if not, why not
- Before, during and after photos
- Please reference projects items with check list items
- Legibility



COMPREHENSIVE PROJECT PROFILE AND MOTIVATION REPORT

SUBMISSION NO LATER THAN 26 APRIL 2019 HARD COPY & PDF

DELIVERABLES	FORMAT
 Motivational report per project (Why, how etc) Checklist per project Summary checklist of the projects (all listed items to be checked at least twice between the 4-7 projects) Reports, motivation of methodology etc Mentor to sign off on your involvement in each project Affidavit 	A4 – Arial (10) single line spacing
 Project profile Plans per project Clear numbering and referencing (Core competency table) between the motivational report and the portfolio is critical to demonstrate how the SACLAP's core competency has been met. 	Legible A3 pdf files
	 Summary checklist of the projects (all listed items to be checked at least twice between the 4-7 projects) Reports, motivation of methodology etc Mentor to sign off on your involvement in each project Affidavit Project profile Plans per project Clear numbering and referencing (Core competency table) between the motivational report and the portfolio is critical to demonstrate how the SACLAP's

• Project Profile – candidacy requirement

- Use core competency table as outline
- With a project state the following information to illustrate the competency:
 - Your role in the project
 - The brief from the client
 - Project value
 - How it was accomplished
 - Draw attention to a specific skill, input, innovative resolution of detail, challenges faced and how resolved
- Include as much information as possible
- Information is to be legible
- Representative of work that you have actually done in the time of being a candidate
- Legible resolution of PDF file
- Importance of Affidavit and your signature on relevant documents
- Please reference projects items with check list items
- Before during and after photos are important

STEP 1: CONSOLIDATION TABLE

	PROJECT PROFILE CHECK	LIST							1
]
		a y	63	6)			a)	0	
		Name	Name	Name	Name	Name	Name	Name	ĺ
		Ž,	ž	Ž,	Ž,			Ż	
		11	t 2	t 3	t 4	1.5 .1	t 6	17 1	
		Project	Project	Project	Project	Project	Project	Project	
		Pro	Pro	Pro	Pre	Pro	Pro	Pre	
2	Landscape Design								
2.1	Landscape Master Planning/Design Framework								
2.1.1	Site survey/analysis/evaluation								
2.1.2	Design Framework/ Master Plans								
2.1.3	Reports and guidelines								
									1
2.2	Landscape Theories and Metholodologies								
2.2.1	Landscape architecture history, theory and critique. Adhering to national								1
	standards and specification								
2.2.2	Landscape design theory eg. sustainable design, green building,								1
2.2.3	Construction history, theory and critique								1
2.2.4	Cultural landscapes]
]
2.3	Landscape Design								

STEP 2: MOTIVATIONAL REPORT AND PLANS/DIAGRAMS

STEP 3: EVALUATED BY SACLAP PANEL

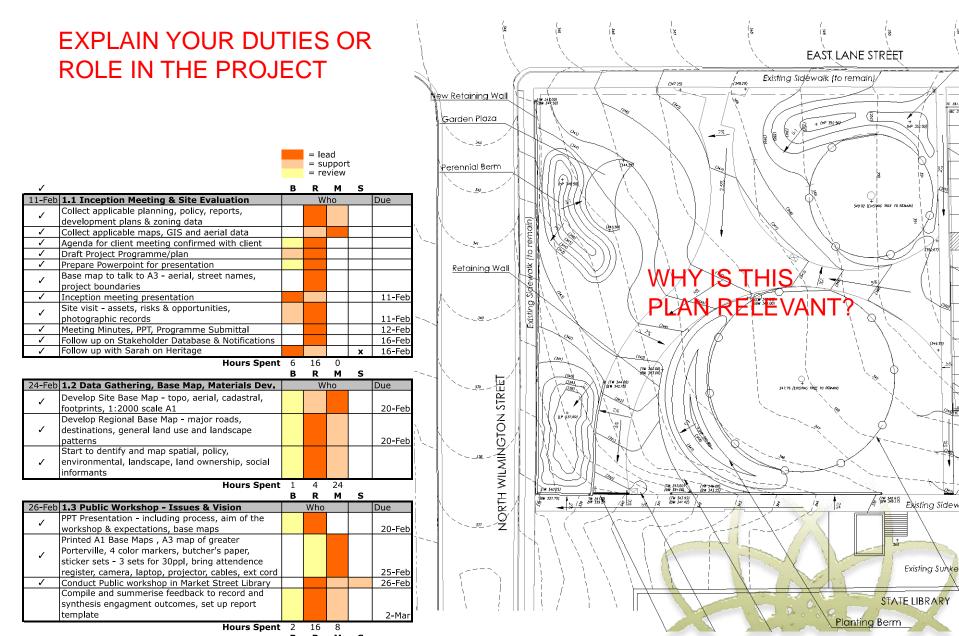
Scale of evaluation

Cor	re o	ompentancy compentacy level
Candidate name:	9	PROFICIENT: (practice orientated) An ability to demonstrate project based application of specialist
Category:	7	COMPETENT: (field specific competence) Demonstrate knowledge of and project based engagement in a
Mentor:	5	KNOWLEDGE AND UNDERSTANDING: (integrated knowledge) the assimilation and comprehension ofk
Date:	з	KNOWLEDGABLE: (to be acquainted with) To demonstrate detailed knowledge of one or more fields, dis
	1	INFORMED AWARENESS: To be sufficiently informed on matters pertaining to the profession i.e. demon:

2	Landscape Design	Professional Landscape Architect	Professional Serior Lands: ape Auchitec tural Te din clogist	Professional Landscape Architectural Technologist	Professional Landscape Architectural Technician	Mark (1-10)	% OF TOTAL	Sub- total Mark	0
2.1	Landscape Master Planning/Design Framework					0	20%	0.0	
2.1.1	Site survey/analysis/evaluation	9	7	5	1				
2.1.2	Design Framework/ Master Plans	9	7	5	1				
2.1.3	Reports and guidelines	9	7	5	1				
2.2	Landscape Theories and Metholodologies					0	5%	0.0	
2.2.1	Landscape architecture history, theory and critique. Adhering to national standards and specification	9	7	5	1				
2.2.2	Landscape design theory eg. sustainable design, green building, ecological responsive design, SITES, New Landscape Declaration, etc	9	7	5	3				
2.2.3	Construction history, theory and critique	9	7	5	3				
2.2.4	Cultural landscapes	9	7	5	3				
2.3	Lands cape Design					0	30%	0.0	

MARK OUT OF 100

Examples.....



2.1 CONVENTIONAL DESIGN

The conventional design focuses on three aspects:

Roof water

The water from the buildings are collected via gutters and down pipes and taken down the columns of the building below ground level to connect into an underground pipe network. Manholes are provided to access this network for maintenance. This system is sized for smaller storm events (1:5) and during greater event this system overflows onto the roads. Maintenance is required to ensure that the system doesn't get blocked and cause over flowing during smaller events too.

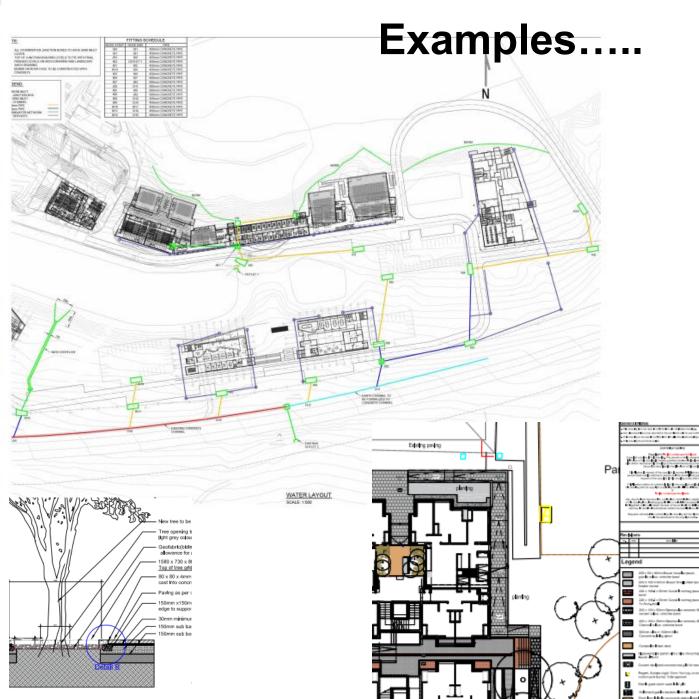
Road water

Water collected on the road network is typically directed towards kerb inlets where it flows into underground pipes. Similarly to the piping system serving the buildings, the system is sized for smaller events so that minimum water is on the roads. However during a major storm (1:20) event these pipes overflow and the road becomes the main carrier of water to prevent flooding of buildings and keeping people safe. The road becomes a source of pollution, typically via hydro carbons from car traffic and litter.

Piping system and attenuation

At some stage the two piping system combine and lead to an attenuation facility (small dam that is dry when not raining.) The road network typically takes the major water there too – with some larger pipes in places when necessary.

THE TEXT MUST BE LEGIABLE



LANDSCAPE TENDER RECOMMENDATION:

1 The last approved landscape budget for the soft landscaping and irrigation phase of the project was:

R 15 080 000 - R 500 000 (gabions) - R 203 000 (63 and 32 mm piping) - R 14 377 000. Exic VAT and Fees

Excluding VAT

R 14 377 000,00

2 The lowest landscape contractor is, LIFE LANDSCAPES:

The new contract value for Life Landscapes is :

3 The difference in budget and tender price is:

R 464 241,77

4 We recommend LIFE LANDSCAPES to be appointed for the contract.

Insite reviewed the rates for calculation errors and viability and requested additional information from both contractors to confirm viability of rates and determine the quality of material priced for.

Exc VAT (Below allowed budget)

R 14 49/ 8/5,60 E

13 912 758 23

The following sections can be reduced as a cost saving measure : Outside site boundary and Streetscape (Berkshire Blvd)

Life Landscapes initially indicates a 9 months installation period but after discussion it was agreed that a six (6) month period will be sufficient. The P % G amount is however still based on a nine month installation period. This will need to discussed at the client meeting.

Life Landscapes had no qualifications as part of their tender.

Life Landscapes has requested a meeting with the client should they be the successful contractor.

The tender is a fixed price tender

We believe that more savings will be achieved during the contract period

CONTACT DETAILS FOR PROPOSED CONTRACTOR:

HEAD OFFICE : Life Style Business Park, Block H Crn Beyers Naude Drive and Ysterhout Drive Randpark Ridge, 2194 Gauteng South Africa

P O Box 539 Weloble, Johannesburg, 1714, Gauteng, South Africa

Contact Person: Deighton Clegg / Ida Marie Strydom Tel +27 (0)11 959 1000 Fax +27 (0)11 959 1032 Email: anne@ilifelandscapes.co.za

Please do not hesitate to call us should you want to discuss this tender adjudication in more detail.

onsi 👘

Cape Town adress: Life Landscapes A Division of Life Green Group (Pty) Ltd PHYSICAL ADDRESS: Between Old Main Road/R102 and the N2, Somerset West, Western Cape, 7129 VAT NC: 4800219661

VAT (before adjustments)

Excl VAT

ITEM 6.5



605 882 64

695.882.64

97 423 57

793,306.21

0.00

695.882.64

97 423 57

793,306.21

179.844.25

46,692.58

133.151.67

0.00

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18 641 23

0.00

0.00

0.00

0.00

151,792,90

26

10.021

TOTAL AMOUNT CERTIFIED

NET AMOUNT CERTIFIED

10.1 Less Expense and loss payable to the employer [Recovery statement 1.1]

10.2 Less Penalties levied and pavable to the employer [Recovery statement 1.2]

13.1 Less Recoupment from contractor of a deposit [Recovery statement 1.3.2]

13.2 Less Default interest payable to the contractor [Recovery statement 2.2.1]

13.3 Add Deposit amounts paid to the contractor (Recovery statement 2.1.2)

13.4 Add Tax exempts items (salvage materials used in the works) [18.3.10]

TOTAL

ZAR CERTIFIED AMOUNT DUE FOR PAYMENT to the Contractor / Employ

SUB TOTAL

14 %

10.3 Add Damages payable to the contractor [Recovery statement 2.2]

6.0 Authorised adju

8.0 Less Previous gross amount certified [19.3.5]

7.0

9.0

11.0

14.0

15.0 Currency

12.0 Add tax on 11.0 [25.3.8]

16.0 Contract sum execution (Variable con

Security status Mark each box as appropriate

VALUE

SIGNATURE

Institute Date: Special by two excepts tools as agent for the employer, certifies that the positive or registries around stitled to DSG above is due and psychials by the date lands, imagencies of the date of appares of this certification

(C3.0/A11.0 x 100)

DRAW ATTENTION TO RELEVANT INFORMATION



PLANT KNOWLEDGE & PROPAGATION

Plant Specification & Standard

Planting"

- All Planting Works to be supplied, delivered and planted by the appointed contractor/sub-contractor.
- Purchased from registered SANA nurseries and transport to site.
- Transported to the site in trucks with closed canopies. May not be exposed to wind or any other harmful elements.
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- Refer to Plant Plan and Plant List supplied.
- All equipment and labour for planting of trees, shrubs and groundcovers to be supplied by the appointed contractor/sub-contractor.
- Backfill with soil, compost and fertilizer to specification and tramp down firmly.
- Remove all surplus soil.
- Provide all necessary stays for trees and secure tree firmly.
- Form pond around trees and shrubs and water well after planting.
- Contractor is to ensure the safety of services, underground or otherwise, prior to excavating.
- Trees out of 200 kg size Containers:
- 2,500 3,500 mm stem height after planting with stem diameter of ±50 mm measured 300 mm above soil level. Trees out of 100 kg size Containers:
- 2,500 mm stem height after planting with stem diameter of 35 40 mm measured 300 mm above soil level.

ARBORICULTURE

During a site visit, I noted that the recently planted Acadia sieberiana var. Woodii trees planted in the courtyard are struggling. The tree rings around the stems were very small and I have requested that they get enlarged so as to ensure that the tree's root ball receives enough water (as the irrigation provided for the lawn is not enough for newly planted trees.

SOIL KNOWLEDGE

Fertilicer Specification & Standard

- Contractor to spread and work-in topsoil for tree holes and all areas to receive landscaping. Topsoil to be of the highest quality sandy / loam soil. Topsoil must be free of weed, seeds, stones and alien materials.
 - Topsoil Spreading at the following thickness:
 - 50mm layer over lawn & groundcover areas
 - 0.3m³ per tree (100Ltr and larger)

ltem Compost

Contractor to spread and work-in compost for tree holes. Compost to be of the highest guality, aged and consistent throughout. Compost must be free of weed, seeds, harmful salts, soil, sand, animal by-products and pathogens. The compost must be made







PROJECT INSERT Pictures taken on site of various horticultural instructions & practices.

up of pure plant organics and manufactured to within a 6.0 to 7.0. PH range The resultant porous nature of the pro-PH range of duct must yield a high water retention capacity, ensuring vigorous early and sustained growth to the maturity of all plant material. Compost must not be stored in bulk on site and must be ensured safe covered storage away from wind, rain and sun.

Application rate 1 Trees at 0.3 m³/tree hole Groundcover areas - 25mm/m²

Lawn areas - 25mm/m²

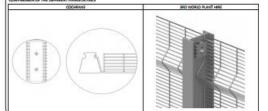
Sample of compost must be made available for approved by the Landscape Architect prior to delivery on site and comply with specification if required.

NEW LANDSCAPE DEVILOPMENT PROPOSAL FOR THE OFFICE PARK PRECINCT (ERF 1368) TENDER EXALURTED

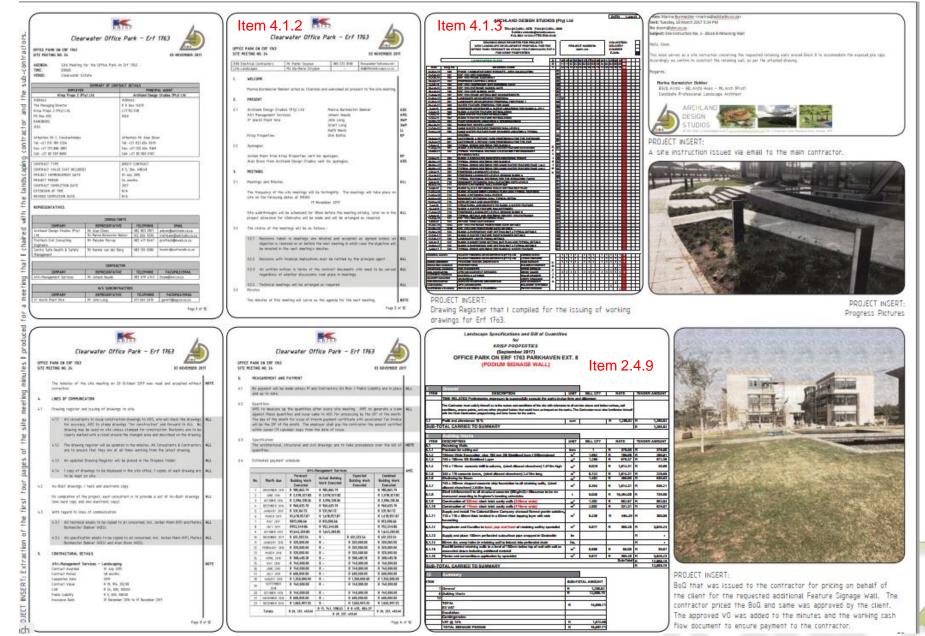
EUPPLY & HETALL: High density anti-cliniting and anti-cut precedement panel fencing 2, in high, formed of them diameter horizontal and item diameter vertical high tensile wires powde zaned (Colour: Anthracine Gay, RAI, 7555) with aperture das 76,2 mm x 12,7mm and winforcing "reaction rite, bathed with sandal resistant balts and clamping plates to post 3,0m high at a 2m antres with posts fixed to through the existing concerne footing by way of Minum core deliling per post between remaining massary work that has been taken down to at least 50mm below ma

COMPANY	DATE OF			POSTS					PANELS			Г		INSTALIATION			TOTAL (excl)	T	OTAL (incl)
CONFRANT	VOTALIATION	100	PRICE	TOTAL UNITS	-	TOTAL		PRICE	TOTAL UNITS		TOTAL		PRICE	TOTAL UNITS		TOTAL	States and		2,8357
COCHRANE	3016	R	632,52	25	я	15,813.00	R	1,959,00	24	R	47,016.00	R	195.00	80	Ŕ	14,900.00	8 77,629,00	R	88,497.06
2RD WORLD PLANT HIRE	3016	R	\$25,51	22	8	17,241,82	8	1,495,00	32	R	47,840.00		156.00	80	R	12,000,00	R 77,181,89	ŵ.	\$7,887,28





Section 2,4,5 - Landscape Architectural



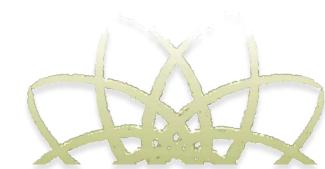
COMPREHENSIVE PROJECT PROFILE AND MOTIVATION REPORT

SUBMISSION NO LATER THAN 26 APRIL 2019 HARD COPY & PDF

	DELIVERABLES	FORMAT
1	 Motivational report per project (Why, how etc) Checklist per project Summary checklist of the projects (all listed items to be checked at least twice between the 4-7 projects) Reports, motivation of methodology etc Mentor to sign off on your involvement in each project Affidavit 	A4 – Arial (10) single line spacing
2	 Project profile Plans per project Clear numbering and referencing (Core competency table) between the motivational report and the portfolio is critical to demonstrate how the SACLAP's core competency has been met. 	Legible A3 pdf files

Thank you.....

15 minute break



		Professiona Arch		Landscape	onal Senior Architectural nologist	Professional Architectural			al Landscape al Technician
		NQ	F 9	NC	QF 8	NQF	F 7	NC	QF 6
						Competency			
	Core Competencies	upon registration	upon graduation	y upon registration	upon graduation	upon registration	y upon graduation	y upon registration	upon graduation
3	Environmental Planning & Management Processes		9		9		g		9
3.1	Environmental Management & compliance issues	5	3	5	3	3	3	1	1
-	Implementation of environmental management plans and compliance monitoring								
3.2	Environmental Planning	5	3	5	3	3	3	1	1
	Integrated environmental management, applciation of sustainable planning principles								
	Understanding the implications of the listed activities as set out in Environmental Legislation on a project level and responding in the appropriate manner i.e. identifying if formal process is required								
3.3	Rehabilitation	5	3	5	3	3	3	1	1
	Aspects of rehabilitation associated with the change in the landforms, appropriate soil preparation, erosion protection, planting, etc.								
3.4	Government Legislation, Regulations, Policies & Guidelines	5	3	5	3	3	3	1	1
	Pertains particularly to the Environmental related aspects at National, Provincial and Local level. e.g. biodiversity, protect areas, protected trees, alien vegetation, NEMA, Water Act etc.								
3.5	Natural Sensitive Habitat management	5	3	5	3	3	3	1	1
	Ecological systems, how they function, management of flora and fauna, legislative requirements that are to be met, maintenance of such areas e.g. wetlands, fynbos						Section and the		
3.6	Alien vegetation control	5	3	5	3	3	3	1	1
	Chemical/non chemical management of vegetation, methods of application, cost estimation of vegetation control, nomenclature						1		



Reference Material applicable to this Section

- National Environmental Management Act (Act 107 of 1998 as amended), associated amendments and regulations
- NEM: Protected Areas Act (Act 57 of 2003)
- NEM: Waste Act (Act 59 of 2008) and GNR 921
- NEM: Air Quality Act (Act 39 of 2004)
- Mineral and Petroleum Resources Development Act (Act 28 of 2002)
- National Water Act (Act 36 of 1998), associated amendments and regulations
- National Heritage Resources Act (Act 25 of 1999)
- NEM: Biodiversity Act (Act 10 of 2004)
- GNR 1002 of the 9TH December 2011 which provides listing notices for ecosystems that are threatened and in need of protection under the Biodiversity Act. Disturbance of these ecosystems requires an environmental application under sections 24(5) and 44 of the National Environmental Management Act
- NEM: Biodiversity Act (Act 10 of 2004): Alien and Invasive Species Regulations
- South Africa's National Listed Invasive Species as published in the Alien and Invasive Species Regulations (AIS), National Environmental Management Biodiversity Act (Act 10 of 2004) as published in the Government Gazette 29 July 2016
- Notice of Protected Trees under the National Forests Act (Act 84 of 1998 as amended). GNR 734 of the 16 September 2011
- Conservation of Agricultural Resources Act GNR 280 in March 2001

Reference Material continued

- NEM: Integrated Coastal Management Act (Act 24 of 2008)
- South African National Standard SANS 19011:2003, ISO 19011:2002 Guidelines for quality and/or environmental management systems auditing
- National Development Plan vision for 2030
- National Framework for Sustainable Development (July 2008)
- UN's Sustainable Development Goals
- Multilateral Environmental Agreements
- Green Building Rating Tools
- National Veld and Forest Fire Act, no 101 of 1998
- Guideline document to IEM Need and Desirability and Public Participation
- Notice 104 Of 2018 EAPASA registration authority recognition
- Notice 113 of 2018 Procedure to follow in applying for environmental authorization for large scale electricity transmission & distribution development activities
- Notice 114 of 2018 Procedure to follow in applying for environmental authorization for large scale wind and solar photovoltaic energy development activities
- GNR 350 0f 13 April 2017
- DEA Guidelines on need & desirability
- GNR 267 of 2017 WUL Procedure
- Government Gazette Notice 213 of 2018 Notice for adoption of the Integrated Environmental Management Plan of the Square Kilometer Array.

Environmental Management

Drafting of environmental management plans and compliance monitoring there against.

Aspects such as multilateral agreements SA is participating in.

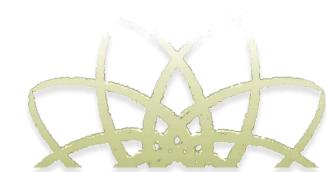
- Environmental Management Plans & Compliance
 - Description of the activity that is taking place
 - Description of environmental impacts
 - Environmental impact severity (high, medium, low)
 - Environmental impact mitigation & how to reduce the severity
 - Who is responsible for mitigation actions
 - Reporting to project & construction team
 - Usually requirement of Environmental Authorization (ROD) to send copy to Department
 - Site Environmental Officer vs Independent Environmental Officer

Environmental Management

Drafting of environmental management plans and compliance monitoring there against. Aspects such as multilateral agreements SA is participating in.

Multilateral agreements

- Kyoto/COP 17 (food security, carbon emissions, water scarcity)
- Transfrontier Parks
- Biodiversity/Protected area
- Etc.



Environmental Planning

Integrated Environmental Management, application of sustainable design principles.

- Integrated Environmental Management
 - Information Series 1: Screening
 - Information Series 2: Scoping
 - Information Series 3: Stakeholder engagement
 - Information Series 4: Specialist Studies
 - Information Series 5: Impact Significance
 - Information Series 6: Ecological Risk Management
 - Information Series 7: Cumulative Effects Assessment
 - Information Series 8: Cost Benefit Analysis
 - Information Series 9: Life Cycle Assessment
 - Information Series 10: Strategic Environmental Assessment

Environmental Planning

Integrated Environmental Management, application of sustainable design principles.

- Integrated Environmental Management (cont.)
 - Information Series 11: Alternatives in EIA
 - Information Series 12: Environmental Management Plans
 - Information Series 13: Review in EIA- link to attached file
 - Information Series 14: Environmental Auditing
 - Information Series 15: Environmental Impact Reporting
 - Information Series 16: Environmental Economics
 - Information Series 17: Environmental Reporting
 - Information Series 18: Environmental Assessments
 - Information Series 19: Trade Agreements
 - Information Series 20: Linking EIA's and EMS's
 - Information Series 21: Environmental Monitoring



Impact Assessment

Understanding and implications of the listed activities as set out in Environmental Legislation

- Know the listed activities
- Know when you require a Basic Assessment vs an Environmental Impact Report
- · Know when to include a specialist
- Be aware that if you do this kind of work you need to now also be registered with the EAPASA



Rehabilitation

Aspects of rehabilitation associated with the change in the landforms, appropriate soil preparation, erosion protection, planting, etc.

- Rehabilitation related to:
 - Stream beds
 - Wetlands
 - Road reserves
 - Servitudes
 - Mining activities
 - Slopes
 - Attenuation structures
 - Dunes

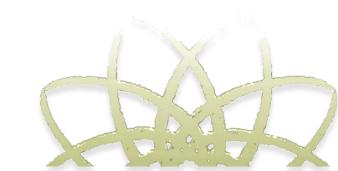


Government Legislation, Regulations, Policies & Guidelines

Pertains particularly to the Environmental related aspects at National, Provincial and Local level. e.g. biodiversity, protect areas, protected trees, alien vegetation.

- Municipal by-laws
- Other legislative requirements such as:
 - Heritage
 - Protected trees
 - Alien vegetation
 - Biospheres
 - Air Quality Act
 - Waste Act
 - Mineral and Petroleum
 - Aspects related to the Water Act
 - Water use licenses
 - Bore holes
 - Open water bodies
 - Rivers

- What is the essence of Legislation?
- How does it affect you as landscape architect/technologist?
- Advise to client
- Design constraints / opportunities



Green Buildings

Relates specifically to the landscape architectural contribution to such projects.

- Background
 - Team effort that affects all role players
 - Integration of design elements e.g. grey water to irrigation
 - Specific reporting requirements
 - Specific documents to substantiate certain claims
 - Easier to design 'green building' from the start than to retrofit



Green Buildings

Relates specifically to the landscape architectural contribution to such projects.

Man 5 – Building User's Manual

While the landscaping does not obtain 1 credit on its own, a section is to be written for this manual regarding the maintenance of the landscaping as well as the operation and maintenance of the irrigation system. It will also address the environmental strategy, monitoring and targets, waste policy etc.

Man 6 – Environmental Management

One point = contractor implements a project specific environmental management plan One point = contractor has valid ISO 14000 (EMS) accredited prior to and throughout the project.

Man 7 – Waste Management

Main aim is the minimisation of the amount of construction waste going to disposal.

Total of 3 points are available:1 point – 30%, 2 points – 50%, 3 points - 70% of waste to reuse or recycling. Must retain all documentation to prove as such

Green Buildings

Relates specifically to the landscape architectural contribution to such projects.

Wat 3 – Landscape Irrigation

Main aim is to reduce the consumption of potable water for landscape irrigation.

1 point – potable water consumption reduced by 50%

2 points – potable water consumption reduced by 90% or plants chosen requiring no additional watering once established.

If there is no landscaping or the total landscape represents less than 1% of the total site area these points are not applicable and excluded from the points available.

Mat 3 – Reused materials

1 point is awarded where at least 1% of the project's total contract value is represented by reused products/materials.



Green Buildings

Relates specifically to the landscape architectural contribution to such projects.

ECO – conditional requirement

Development is not on land of high ecological value as described in the rating tool. Assessors will make final ruling on project's compliance.

Eco 1 – Topsoil

1 point = where topsoil impact by construction works is separated and protected from degradation, erosion or mixing fill or waste.

And where at completion protected topsoil is spread over impacted areas to a minimum depth of 200mm or 75 % of all protected topsoil remains on site. And where protected topsoil remaining on site is productive.

Point is not applicable where no topsoil was impacted on by construction works.

Eco 4 – change of ecological value

To encourage and recognize developments that maintain or enhance the ecological value of site. 4 points claimable with conditions. Need to access the ecological value prior to and after construction.

Calculated with the assistance of the Ecological value calculator.

1. ASSIGNMENT AND OBJECTIVES

The purpose of the assignment is to apply the material in the reference list, which is not all material necessarily, with the requirements of the SACLAP's core competency table within the given context of a project proposal.

The candidate is to imagine, that a Client has approached him/her to provide advice and input regarding the environmental characteristics of the site and how this affects the decision making process and ultimately the design.

The candidate is to:

- Be analytical in the approach,
- Outline the environmental characteristics that are to be considered, why and how the design is to reflect the considerations
- Provide guidance as to what is required in terms of permits and approvals and why.
- Shortfalls / missed opportunities of the proposed development are also to be highlighted
- Writing of a report



ENVIRONMENTAL ASSIGNMENT

SUBMISSION NO LATER THAN 31 MAY 2019

HARD COPY & PDF

DELIVERABLES

- Document
- Mentor to sign off on your involvement in the assignment and you are to include an affidavit.

Questions.....

