

ADDENDUM C

PROJECT	UPGRADE OF FOYER: PLANETARIUM INFRASTRUCTURE UPGRADE PROJECT
TITLE	SERVICES AND DELIVERABLES
REVISION	001
DATE	06 DECEMBER 2017

1. NOTES

- a) Services and deliverables indicated are generic. The actual services and deliverables might vary depending on specific requirements. Specific services and deliverables will be confirmed at the commencement of each work stage.
- b) Continuous deliverables are not listed, but do form part of each stage. These deliverables include:
 - Attend, convene, chair and keep record of design, planning, technical, progress, site and other meetings related to the project.
 - Liaise with, co-ordinate and provide information to all parties involved with the project.
 - Obtain and implement approvals.
 - Agree, revise and manage timelines and cash flows.

2. STANDARD ARCHITECTURAL SERVICE

2.1. Stage 1: Inception

2.1.1. This stage is in broad terms defined as follows:

Establish the requirement, preferences, needs and options relating to the project, appointment of necessary consultants, establish the project brief including project objectives, priorities, constraints, assumptions, aspirations and strategies.

2.1.2. Services:

- a) Assist to develop a project brief. ¹
- b) Advise on the procurement policies for the project. ¹
- c) Obtain and check all relevant statutory information, design guidelines, construction codes of conduct in terms of rights, constraints, consents and approvals relevant to the project.
- d) Advise and assist with the appointment of other consultants, including defining each consultant's scope of work. ¹
- e) Co-ordinate and obtain a surveyors' drawing and beacon certificate of the property, including re-establishment of the boundary pegs. ²
- f) Obtain as-built information of the existing structures and services on site. ²
- g) Compile and check all as-built, statutory, site analyses, and other information for design and documentation purposes.

2.1.3. Deliverables:

- h) Consultant service contracts.¹
- a) Report on rights, constraints, consents and approvals, as well as site and functional requirements relevant to the project.
- b) Beacon certificate. ²
- c) Compiled as-built information.
- d) Preliminary project program and cash flow projection. ²

2.2. Stage 2: Design concept

2.2.1. This stage is in broad terms defined as follows:

Prepare and finalize the project concept in accordance with the project brief, including the scope, scale, character, form, function, development program and viability of the project.

2.2.2. Services:

- a) Clarify the design requirements in terms of scale and relationships of spaces / areas, to satisfy and optimize functional and operational requirements.
- b) Prepare a design concept, illustrating in broad principles the provision of and relationship between different spaces / areas.
- c) Select general construction materials and intended finishes and equipment.
- d) Co-ordinate information with other consultants to prepare an order of magnitude cost estimate (quantity surveyor; not included with our fees).
- e) Review the design with the statutory authorities.

2.2.3. Deliverables:

- a) Concept design drawings (site plan, plans, sections, 3D model / drawings and other documentation to illustrate the design concept).

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² Services and deliverables completed previously by others

- b) Schedule, outlining finishes, equipment and other requirements not communicated on the site development plan.
- c) Order of magnitude estimate.

2.3. Stage 3: Design development

2.3.1. This stage is in broad terms defined as follows:

Develop the approved design to finalize the design, outline specifications, cost plan, financial viability and documentation program for the project.

2.3.2. Services:

- a) Incorporate all specific detail requirements into the design.
- b) Agree construction quality standards and prepare general specifications for the works.
- c) Develop the design to accommodate all required services installations (water, sewer, storm water, electricity etc). Actual services installations are not indicated on drawings at this stage.
- d) Prepare a structural concept for the proposed construction work and incorporate the structural concept into the design.
- e) Prepare a detailed cost estimate and co-ordinate any required changes to remain within budget.
- f) Obtain project specific requirements from the local authority to ensure conformity with the approval requirements.

2.3.3. Deliverables:

- a) Site plan, plans, sections and 3D drawings, complete with overall dimensions, floor levels, room names and basic descriptions of materials and finishes.
- b) General specifications.
- c) Report on statutory approval requirements and timeframes.
- d) Updated program.²
- e) Elemental cost estimate and cash flow projection.

2.4. Stage 4: Technical documentation

2.4.1. This stage is in broad terms defined as follows:

Prepare technical and procurement documentation, confirm and implement the procurement program, strategies and procedures for effective and timeous procurement of necessary resources for the execution of the project.

2.4.2. Services:

- a) Compile all necessary drawings and other documentation, submit and obtain approval for the design from the local authority.
- b) Co-ordinate and prepare architectural layout and detail drawings, schedules and specifications, including:
 - General construction layouts, including a site plan, plans, sections and elevations.
 - Services layouts, including water, sewer and electrical layout drawings, excluding specialist services layouts.
 - Construction details, including general construction details.
 - Schedules and specifications, including a general specification and door and window schedules.
- c) Co-ordinate and prepare engineering layout and detail drawings, including:
 - Structural layouts and details, including structural layout drawings and details, excluding steel reinforcement schedules and layouts.
 - Electrical design, including circuit and distribution board layout and specifications.
 - Mechanical layouts, including positions of all equipment and services lines, excluding schedules and specifications.
- d) Assess samples and products for compliance and design intent.
- e) Co-ordinate and prepare a health and safety specification.
- f) Co-ordinate and prepare documentation for the procurement of main contractor.
- g) Co-ordinate the procurement processes for the appointment of a main contractor.

2.4.3. Deliverables:

- a) Statutory approval documentation.
- b) Construction documentation.
- c) Health and safety specification.
- d) Bills of quantities and other procurement documents.
- e) Main contract tenders and recommendation.

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2.5. Stage 5: Construction

2.5.1. This stage is in broad terms defined as follows:

Manage, monitor and administer the contracts and processes, including the preparation and coordination of the procedures and documentation to facilitate practical completion of the works.

2.5.2. Services:

- a) Co-ordinate and prepare the main contract documentation and arrange for the signing thereof.
- b) Administer and perform the duties assigned to the principal agent as set out in the building contract.
- c) Co-ordinate and hand the site over to the main contractor in order to start with construction work.
- d) Convene, attend, chair and keep record of fortnightly site and technical / progress meetings. ²
- e) Monitor and report on the status and progress of construction work on site. ²
- f) Co-ordinate, prepare and issue further necessary architectural drawings and technical information, including:
 - Services layout drawings, including gas and other specialist services layout drawings.
 - Construction details, including specific construction and interior design details.
 - Schedules and specifications, including ironmongery, sanitary, electrical and finishing schedules and specifications.
- g) Co-ordinate, prepare and issue further engineering designs and specifications, as required to complete building work on site (civil / structural and electrical engineers; not included with our fees as well as subcontractors appointed for specific specialist installations) including:
 - Structural layouts, including steel reinforcement schedules and layout drawings.
 - Electrical layouts, including circuits and distribution board layout drawings.
 - Mechanical schedules, details and specifications.
- h) Co-ordinate, obtain and approve further and specialist designs and specifications, as required to complete building work on site (subcontractors appointed for specific specialist installations) including:
 - Specific specialist services installation layouts and details.
- i) Inspect the construction work in progress on site to ensure that the work being done complies with the technical documentation, specifications and applicable statutory regulations and ordinances.
- j) Inspect and sign off compliance to the National Building Regulations (SANS 10400) to obtain an occupation certificate after completion of construction work.
- k) Clarify details and descriptions during construction as required.
- l) Witness and review all tests and mock-ups carried out both on and off site.
- m) Check and approve shop drawings for design intent compliance.
- n) Keep record of all drawings and other documentation issued. ²
- o) Co-ordinate claims for work completed on site and issue monthly payment certificates to the main contractor.
- p) Coordinate and keep record of all amounts paid for work completed by the main contractor, selected subcontractors, prime cost amounts and other specific items related to the project.
- q) Co-ordinate and check valuations of all variations, obtain approval for the costs and issue the necessary instructions to the main contractor to commence with such variations.
- r) Co-ordinate and receive tenders / quotations for specialist installations, obtain approval and co-ordinate the appointment of selected sub-contractors for such specialist installations with all parties involved.
- s) Co-ordinate and receive tenders / quotations for the purchase of all prime cost items and other specific items related to the project, obtain approval and co-ordinate the purchase of such items with all parties involved.
- t) Co-ordinate and obtain an occupation certificate from the relevant home owners association and statutory authorities.
- u) Co-ordinate and carry out all required inspections and issue practical completion lists and certificates as required in terms of the building contract.

2.5.3. Deliverables:

- a) Main contract documentation.
- b) Cash flow projection.
- c) Construction program and information schedule.
- d) Site meeting minutes. ²
- e) Progress / technical meeting minutes / memos. ²
- f) Contract and site instructions.
- g) Drawing registers. ²
- h) Payment certificates and cost reports.
- i) Subcontract and prime cost amount tenders and recommendations.
- j) Occupation certificate.
- k) Practical completion lists and certificate.
- l) Hand the completed building over for occupation.

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2.6. Stage 6: Conclusion

2.6.1. This stage is in broad terms defined as follows:

Fulfill and complete the project close-out including the preparation of the necessary documentation to facilitate effective completion, handover and operation of the project.

2.6.2. Services:

- a) Co-ordinate and carry out all required inspections and issue works and final completion lists and certificates as required in terms of the building contract.
- b) Co-ordinate and prepare as built drawings after completion of construction work on site.
- c) Receive and check compliance certificates, guarantees, operating and maintenance manuals etc. related to services installations and appliances installed during the construction process.
- d) Prepare a handover file with all as built drawings, guarantees, operating and maintenances manuals and all other relevant information to the completed building.
- e) Co-ordinate the final payment settlement with the main contractor, including all costs of variations made during the construction process.

2.6.3. Deliverables:

- f) Works and final completion lists and certificates.
- g) Handover file, comprising of:
 - As-built drawings and documentation.
 - Compliance certificates, guarantees and operating and maintenance manuals.
 - Occupation certificate(s).
- h) Final account.

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