<u>PART D12</u>

INDEPENDENT DESIGN VERIFICATION

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1. GENERAL

- .1 This Part specifies the requirements for the independent design Verification process. In addition to Verification of the design undertaken by the Designer's own organisation, the Contractor must ensure that:
 - (a) Verification of the design is undertaken by an external organisation or organisations ("**Independent Design Verifier**"); and
 - (b) the Independent Design Verifier complies with this Part D12.

2. IMPARTIALITY OF THE INDEPENDENT DESIGN VERIFIER

- .1 The Independent Design Verifier must:
 - (a) be independent of the Designer's or Contractor's organisation;
 - (b) act independently of the Principal, Contractor and any of their sub-contractors, consultants and agents;
 - (c) be completely free of any other commitment or obligation to any other party to this Contract and any of their sub-contractors or consultants; and
 - (d) have not participated in the preparation of any part of the design of the Works in any manner whatsoever.
- .2 The Independent Design Verifier warrants that:
 - (a) as of the Date of Contract, it has no conflict of interest with the Principal or Contractor; and
 - (b) if it becomes aware of the existence or possibility of a conflict of interest during the term of the Contract, it will immediately notify the Principal and Contractor and take such steps to avoid or mitigate the conflict of interest or possible conflict of interest as the Principal and Contractor may reasonably require.
- .3 The Independent Design Verifier must not subcontract the performance of any of the Services without the prior written consent of the Principal.

3. <u>SELECTION AND ENGAGEMENT OF THE INDEPENDENT DESIGN VERIFIER</u>

- .1 This clause applies if the Contractor has not engaged the Independent Design Verifier prior to the Date of Contract.
- .2 As soon as practicable, the Contractor must obtain tenders from at least 3 suitably qualified and experienced companies for the provision the Design Verification services. The request for tender documentation is subject to the prior approval of the Principal. The tender submissions must include the following minimum information, which are also the selection criteria:
 - (a) Qualifications and experience;
 - (b) Approach and understanding of Independent Design Verification requirements(as outlined in the Design Verification Plan):
 - (c) Understanding of the Project;
 - (d) Understanding of the Principal's objectives and requirements; and
 - (e) Understanding of the Contractor' requirements;

- (f) Resources and program;
- (g) Industry Participation Policy; and
- (h) Price (30% maximum weighting).
- .3 The conditions of contract used to engage the Independent Design Verifier must be consistent with the "Abrahamson principle" and are subject to the prior approval of the Principal. The Independent Design Verifier must hold professional indemnity insurance for an amount not less than that required by the Contractor in this Contract.
- .4 The tender submission and assessment process must comply with any requirement of the Principal reasonably necessary to ensure probity and value for money. Representatives from the Contractor and Principal must interview key personnel from each of tenderer under consideration.
- .5 Within 10 business days of the date of entering into this Contract, the Contractor must submit a tender assessment report to the Principal nominating a preferred tenderer(s).
- .6 Provision of this report shall constitute a HOLD POINT.
- .7 The Contractor must engage the tenderer approved by the Principal to be the Independent Design Verifier.

4. DESIGN VERIFICATION PLAN

- .1 The Independent Verifier must prepare and implement a "Design Verification Plan" which describes in detail how the Independent Design Verifier will fulfil its obligations in accordance with this Part D12.
- .2 The Design Verification Plan must be controlled in accordance with the requirements specified for a Controlled Document (Refer Part G20).
- .3 Provision of the Design Verification Plan shall constitute a HOLD POINT

5. OBLIGATIONS OF THE INDEPENDENT DESIGN VERIFIER

- .1 The Independent Design Verifier must execute a Deed Poll in the format specified in Attachment D12A and provide each of the Principal and Contractor with a copy within 7 days of becoming the Independent Design Verifier.
- .2 The Independent Design Verifier must:
 - (a) verify that the Contractor's design complies with the requirements specified in this Contract and any associated legislative requirements;
 - (b) act honestly, diligently and reasonably;
 - (c) act with the degree of professional, knowledge, skill, expertise, experience and care which would be reasonably expected of an expert professional providing services similar to those required under this Contract;
 - (d) ensure that for each discipline / element being verified, the persons undertaking the Verification have the qualifications, experience and skills appropriate for that discipline / element;
 - (e) act within the time limits specified in this Contract and if no time limit is specified, within a reasonable time; and
 - (f) promptly provide the Principal and Contractor with a copy of all Records or other documents prepared or generated by or on behalf of the Independent Design Verifier arising out of or in connection with the carrying out the Verification services.
- .3 The Principal and Contractor must:
 - (a) not interfere with or attempt to improperly influence the Independent Verifier in the performance of any of its services;
 - (b) give the Independent Design Verifier access to the Site and to all documentation that is reasonably necessary for the Independent Design Verifier to carry out its functions; and
 - (c) cooperate with, and not impede, the Independent Design Verifier in the performance of its duties.

6. CORRESPONDENCE WITH THE INDEPENDENT DESIGN VERIFIER

.1 A copy of all correspondence between a party and the Independent Design Verifier must be provided to the other party, except for commercial correspondence between the Contractor and the Independent Design Verifier.

7. INDEPENDENT VERIFICATION PROCESS

<u>General</u>

- .1 The design Verification process must be:
 - (a) a structured independent process integrated through the design lifecycle;
 - (b) transparent to the Principal and the Contractor;
 - (c) include consultation with relevant DPTI technical personnel; and
 - (d) Include consultation with any specified external authorities.

Compliance Management

- .2 The Independent Design Verifier must:
 - (a) identify and document the specified requirements in this Contract that the design must comply with;
 - (b) monitor the design's compliance with the specified requirements, including the Design Basis Reports developed by the Contractor and all design packages as specified in the Contract Specific Requirements;
 - (c) identify any issues (or potential issues) with compliance to this CSTR and any additional comments based on its experience will assist the design achieving the project objectives and requirements;
 - (d) record identified issues and comments, and the designer's response, in an Issues and Comments Form for each individual package and design submission; and
 - (e) confirm compliance (or otherwise) to this CSTR, specified design standards or legislative requirements.
- .3 If the Independent Design Verifier considers that a specified requirement is ambiguous or requires further clarification, it must promptly advise the Principal of the issue.

Independent Design Analysis

.4 For those critical elements identified in the **Contract Specific Requirements**, the Independent Design Verifier must undertake an independent design analysis and prepare calculations and/or models based on the Contractor's design drawings and specifications, without reference to the Contractor's original calculations ("Independent Design Analysis").

Technical Meetings

.5 Unless directed otherwise by the Principal, the Independent Design Verifier must attend and independently participate in all technical design review meetings or workshops held between the Contractor and Principal. If requested, the Independent Design Verifier must deliver a presentation in regard any relevant issues identified through the design lifecycle.

Reporting

- .6 The Independent Design Verifier must prepare a monthly report which includes at a minimum:
 - (a) a description of the verification activities undertaken during the reporting period;
 - (b) the Independent Verifier's current and planned resources and staffing levels;
 - (c) details of any Contractor non-conformities raised by the Independent Verifier or the Principal and details on the verification of the rectification by the Contractor of non-conformities;
- .7 At the completion of each design package, a summary Design Verification Report must be prepared which includes, at a minimum:
 - (a) Identification of each work package that the report relates to;
 - (b) Details of the detailed review completed;
 - (c) Issues and comments identified and resolved during the Independent Design Review process;
 - (d) Summary and detailed outputs of Independent Design Analysis; and
 - (e) Reporting on compliance of the design to the requirements.

.8 The final Independent Design Verification Report must be submitted with each Independent Design Verification Certificate.

Independent Design Verification Certificates

- .9 Independent Design Verification Certificates must be issued in accordance with the form included in Attachment D012.B. The certificate must not be qualified in any way that could lessen the effect of the certificate without the written acceptance of the Principal's Authorised Person.
- .10 Where the Independent Design Verifier identifies an issue that will inhibit the provision of an Independent Design Verification Certificate or will require a condition the certificate, the Independent Design Verifier must immediately raise the issue or condition to the Contractor' and Principal's attention for clarification.
- .11 Provision of the Independent Design Verification Certificate will constitute a **HOLD POINT**.

Amendments to the IFC Design

- .12 Any amendment to the Design Documents after the issue of the Independent Design Verification Certificate must be referred to the Independent Design Verifier for review and written confirmation that the Independent Design Verification Certificate remains valid.
- .13 Where the Independent Design Verifier advises the amendment to the design has the potential to validity of the Independent Design Verification Certificate, the Independent Design Verifier must undertake further analysis and/or review to confirm the design complies with the requirements of this CSTR and issue and amended Independent Design Verification Certificate.
- .14 Provision of the amended Independent Design Verification Certificate will constitute a HOLD POINT.

8. HOLD POINTS

.1 The following is a summary of Hold Points referenced in this Part:

Clause Reference.	Hold Point	Response Time
3.	Tender Assessment report for the selection of the Independent Design Verifier(s) (if required)	10 Working Days
4.	Design Verification Plan	10 Working Days
7.11	Provision of Independent Design Verification Certificates	10 Working Days
7.13	Provision of amended Independent Design Verification Certificates	10 Working Days

ATTACHMENT D12A: DEED POLL

Recitals

- A. On or about the date of this Deed, the Contractor entered into the contract with the Principal in respect of [.....]
- B. Pursuant to the Contract, the Independent Design Verifier must verify that the Contractor's design complies with the requirements of the Contract.

Undertakings

The Independent Design Verifier acknowledges that:

- (a) it has received a copy of the Contract between the Principal and Contractor and that it has read, and is familiar with, the terms of the Contract to the extent they relate to design verification;
- (b) its will perform the obligations of the "Independent Design Verifier" under Part D12 the Contract, and
- (a) each of the Principal and Contractor:
 - (i) are relying upon the knowledge, skill, expertise and experience of the Independent Design Verifier in the performance of its obligations under the Contract; and
 - (ii) may suffer loss if the Independent Design Verifier does not perform its obligations in accordance with the requirements of Part D12 the Contract;

SIGNED for and on behalf of $^{\rm 1}$

XXXX Pty Ltd (ACN xxx xxx) in accordance with section 127 of the Corporations Act 2001 by

a director, and by

(signature)

a director / the secretary

.....

(signature)

¹ Amend accordingly if signed under a power of attorney

ATTACHMENT D12B: INDEPENDENT DESIGN VERIFICATION CERTIFICATE

Contract:	
Certificate Number:	
Design Package:	
Independent Design Verifier:	

Independent Design Verification has been undertaken on the design documents represented by the drawings, reports and specifications listed in the attached schedule. In undertaking this Independent Design Verification, I certify that:

- a) An independent detailed review, analysis, calculations and/or modelling as required under the Contract has been completed;
- b) Drawings, reports and specifications have been checked and accurately describe the Works;
- c) The design documents comply with the Contract and any relevant legislative requirements.

Design Documents:

Document Number	Revision	Document Title

Conditions:*

* note: written approval from the Principal of any conditions to certification must be submitted with the Certificate

Independent Design Verifier Representative (NER or CP Eng)

Name:		Qualifications	
Position:		Signed:	
Date:			