



LAURISTON LEWIS ASSOCIATES LTD.
CONSULTING ENGINEERS

**CORPORATE TRAINING
FOR
GOOD GOVERNANCE PRACTICES FOR THE OVERSIGHT OF
CONSTRUCTION PROJECTS
BY
STATE AND PUBLICLY LISTED PRIVATE-SECTOR BOARDS**

**CRITERIA FOR ASSESSING CONTRACTS &
PROJECT PERFORMANCE
ON A CONSTRUCTION PROJECT**

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EXECUTIVE SUMMARY

This paper outlines the key corporate governance knowledge and board practices required for members of a state board to effectively provide oversight of a construction project contract and evidence of *duty of care* and *due diligence* associated with a state company becoming involved in a construction project.

It recognises that many state companies must engage in construction works in order to service their core mandate, for instance, The National Library and Information System of Trinidad and Tobago (NALIS) though responsible for the provision of library services, must be party to a construction contract for the purpose of building libraries to provide its core service. Similarly, a non-construction start-up or ongoing business may require new warehouses or data centers to be built for their expanding operations. These corporations or state agencies however are not likely to have engineers or construction professionals on staff to manage and direct the construction of their libraries or data center development.

The paper is written for non-construction professionals, who through their position on a board, must safeguard the investments of the organisation which they represent, and simultaneously, must protect their individual liability and reputation by ensuring that clear evidence of duty of care and due diligence has been established. For governance purposes, this includes maintaining sufficient knowledge and understanding of the project's affairs, ensuring that delegated functions are appropriately supervised, requiring timely and adequate advice from management and external consultants, and closing out material action

items and red-flag risks through documented board decisions during the course of the construction project and their tenure on the board.

To be explicitly clear, the board's role is **not** to perform the duties of the engineer, architect, quantity surveyor, project manager, contract administrator or contractor. The board's role is to:

- (i) approve the project at clearly defined governance gateways;
- (ii) set and monitor delegated authorities;
- (iii) require adequate evidence before making decisions;
- (iv) interrogate material risks, assumptions, departures, and exceptions; and
- (v) ensure that minutes, approvals, action trackers, and contract records are sufficient to evidence informed decision-making and follow-up.

As a body with collective responsibility, it is useful for board agenda planning and coordination of ideas and common understanding to create alignment of members prior to initiation of construction projects.

The paper is premised on the idea that neither collectively, nor individually, do members of the board of directors act as the construction professionals that actually build the infrastructure, produce the designs for which the infrastructure is to be built, or directly administers the contract between the contractor who builds the infrastructure and the organisation.



Criteria for Assessing Contracts & Project Performance on a Construction Project

The practices associated with *good corporate governance* are usually framed within the ideas of effectiveness and high performance. To create a framework for corporate governance practices related to construction projects, we must first define an effective or high performing construction project, and then, create measurements to assess the level of performance of these projects.

To provide a detailed assessment of a project's performance, we must first identify the criteria used to determine acceptable performance, and then compare what actually happened during the execution of each phase of the project to this acceptable performance criteria.

This paper is therefore structured in three sections:

- A. BASIS OF ASSESSING PERFORMANCE – DESIGN STAGE**
- B. BASIS OF ASSESSING PERFORMANCE – CONSTRUCTION STAGE**
- C. BOARD MEMBER ROADMAP – BOARD GATEWAY QUESTIONS, MINIMUM EVIDENCE, METRICS AND DELEGATED AUTHORITIES**



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A. BASIS OF ASSESSING PERFORMANCE – DESIGN STAGE

1.0 Design Drawings, Specifications and Tender Documents

The design drawings and specifications will usually comprise:

- a) architectural drawings and specifications
- b) civil and structural engineering drawings and specifications
- c) mechanical, electrical and plumbing (MEP) engineering drawings and specifications

The quantity surveyor (QS) would then utilise this package of drawings and specifications to produce the tender documents, which in the case of a design-bid-build project, will usually include a bill of quantities.

1.1 Sources of Errors in Design Drawings & Specifications and Tender Documentation

It is generally accepted, that there will be some level of error in the design package. The most common error involves coordination issues between the different design disciplines.

e.g. Internal walls not aligned between the architectural drawings and the structural drawings, or plumbing chases missing from the architectural drawings.

The ongoing drive to eliminate these errors has therefore driven the modern use of building information modelling (BIM) software. Nevertheless, these errors, termed human error, persist, and are normally managed through the inclusion of a contingency sum that can range from 5% to 15% of the cost of construction.

To understand these human errors, we must first understand the design process.

The design process is an interactive process which involves both forward and backward flow of information - from the architect who leads the designs (backward flow to the supporting sub-consultants); and specialist design guidance up to the architect (forward flow to the design leader who is the Architect).

See Figure 1: Flow Chart of Design & Construction Work Stages

Within this complex flow of information, lies the key oversight and board member duties that safeguard the State's purse strings, and the board members' reputations.

KEY CHECK POINT:

The reader's attention is drawn to the symbol.  The board member reading this document must pay close attention to anywhere that this symbol is found within the flow chart in *Figure 1* as it is at these points in the process that the actions of the state board are brought to bear on the project, and a successful project is determined in the eyes of the Client.

During the course of this paper, the 'check points' where a board member  symbol shall be used to identify the key must perform his oversight tasks in order to achieve a successful construction project. These checkpoints are formal governance gateways. They do not exhaust the board's responsibilities. Between gateways, the board remains responsible for ensuring that management and consultants have provided adequate information, that delegated functions are supervised, that material risks are identified and managed, and that major action items from prior meetings are demonstrably closed out or escalated.



FLOW CHART OF RIBA WORK STAGES

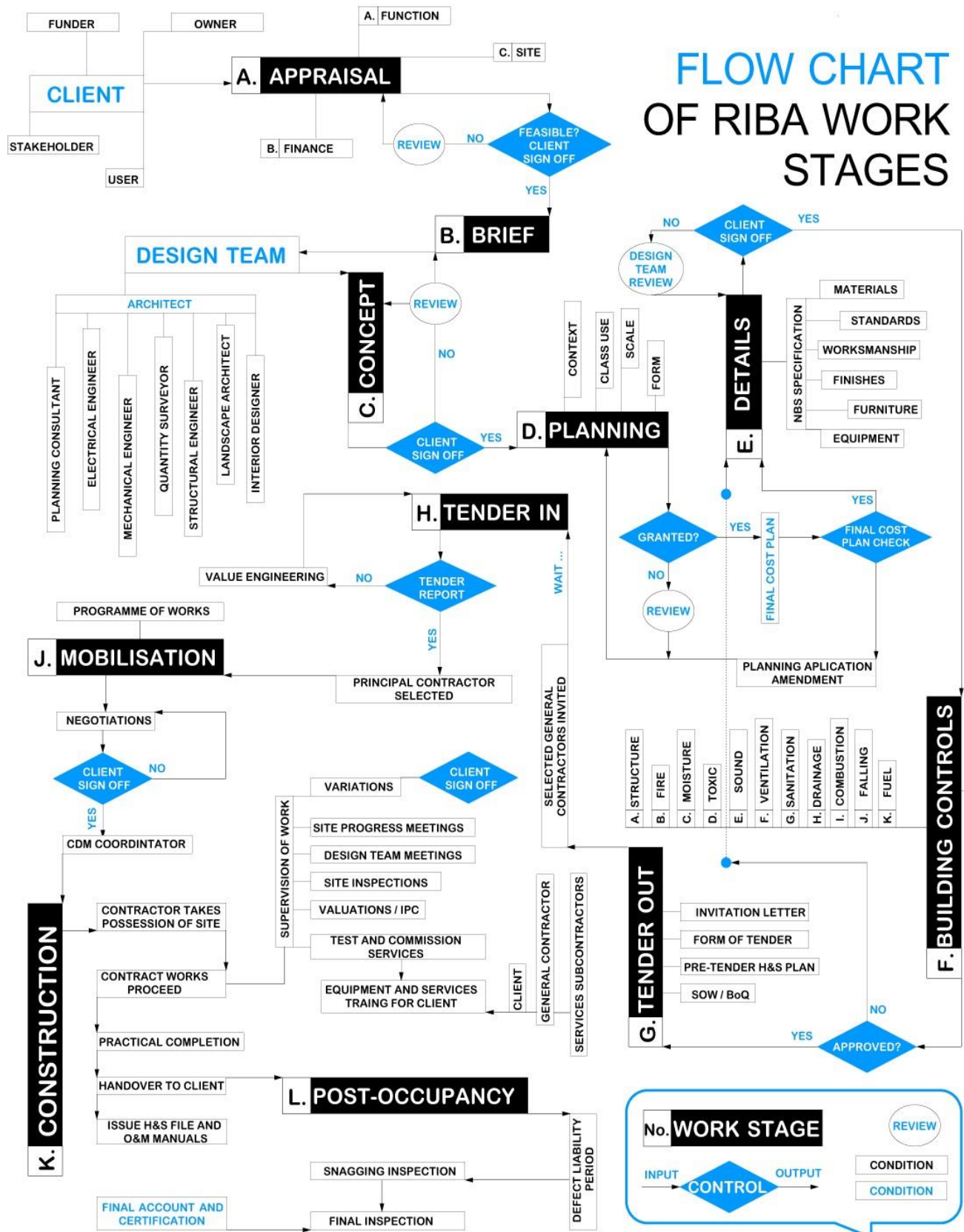


Figure 1 - Flow Chart of Design & Construction Work Stages



Review of the design process flow chart will show a complex process that is maintained for any design process, regardless of procurement method, whether design-build (DB) or design-bid-build (DBB).

In the design-build approach, the same process is ongoing among the design team, but not in full view of the client, thereby resulting in less client control over the final product.

A simplified way to look at the process is one in which the MEP design sits atop the structural and civil engineering design, which in turn sits atop the architectural design. By considering the process in this way it becomes easier to identify errors early in the design process such that they can be mitigated thus reducing contingency cost.

The reader must remember that portions of these designs are being conducted simultaneously.

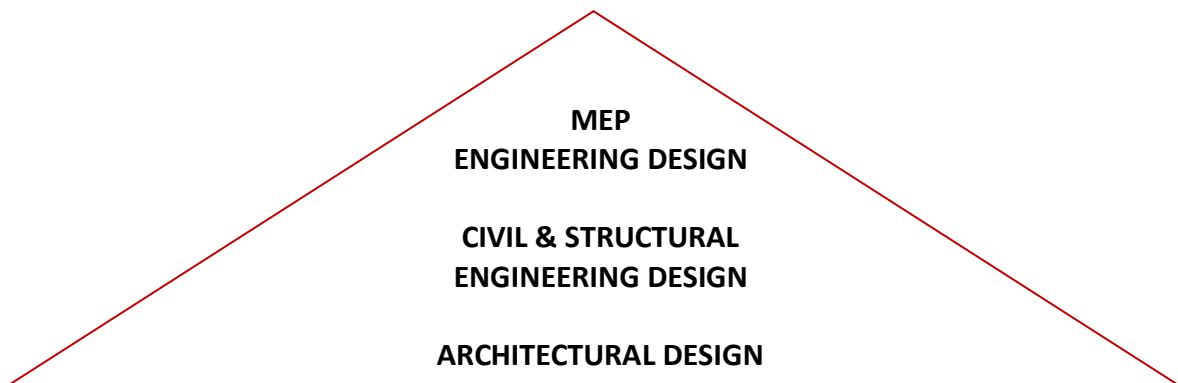


Figure 2 - Simplified Development of Design Information

Immediately, sources of errors become evident.

- 1) Architectural error 'A' incorporated into and shown on the civil and structural engineering designs and MEP engineering designs – same error on all designs.
- 2) Architectural error 'A' not designed into the civil and structural engineering designs, but included in the MEP engineering designs.
→ Which is the error? The architectural and MEP drawings, error 'A'?
OR the civil and structural engineering design drawings that do not show the error?
- 3) Architectural error 'A', not incorporated into the civil and structural engineering

designs, but a new civil and structural engineering error 'B' introduced that was not caused by error 'A'.

Both error 'A' and error 'B' are included in the MEP designs.

The question is, "who caused the error"?

Using the above procedures as examples, over 18 combinations of coordination and specification errors can occur and be transferred between consultants due to hiccups in the design process above – these are independent of the competency of the design team members in the specific discipline.



In addition to this permutation of possible errors, the Quantity Surveyor prepares the tender document and estimate, and may introduce another source of error.

In practice, the sum total of all of these errors should not usually exceed 15% of the cost of construction and is budgeted for upfront, along with the costs associated with in-house items that would only become apparent during construction.

Design-stage error is not limited to technical drafting mistakes. Governance risk also arises from ambiguous employer's requirements, inconsistent document hierarchy, unclear design responsibility, incomplete site information, undisclosed procurement criteria, and tender documents that shift risk in ways not visible to the board at approval stage.

Within this myriad of possible outcomes, the board should perform formal gateway reviews at the key checkpoints identified below. Those gateway reviews sit within a continuing supervisory duty: material risks, unresolved actions, and concerns about the adequacy or integrity of information must be followed up between checkpoints.

These key check points are summarily listed in section 1.2 below

The conduct of board members generally falls under 4 headings: due diligence, duty of care, duty of loyalty¹, duty of confidentiality²

Due Diligence: the effort made by an ordinarily prudent or reasonable party to avoid harm to another party or himself. Failure to make this effort is considered negligence.

¹ The Duty of Loyalty is a term used in corporate law to describe a fiduciary's loyalty to a corporation; in this case, the board members loyalty to the state agency and the general public.

Eric Lewis | 2026

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Question: Why this Pyramid Structure for Design?

Answer: Because "Form" Follows "Function". (*unless the core purpose of the structure is to achieve an aesthetic form*).

The function of the building determines the room layout.

e.g. The offices of the Secretary to the Chairman cannot be located in the middle of the General Administration Offices, it has to be located next to the Chairman's Office.

The structural frame has to then be built around the rooms. *e.g. Columns in the middle of the Boardroom should be avoided.*

Additionally the structural engineer must advise the architect on whether the proposed layout is structurally feasible, and that the design does not increase the risk to occupants due to seismic or hurricane loads; only then can the room layout be finalised.

Once the room layout is largely determined, only then can the MEP engineer design electrical and air-conditioning loads. Additionally, the structural engineer has to approve floor and wall penetrations to allow the MEP engineer's piping and equipment to pass or be supported.

Based on the above, the architectural design forms the basis of the process, and the MEP design sits built atop the structural considerations.

Duty of Care: a legal obligation imposed on an individual requiring that they exercise a

² The Duty of Confidentiality is the restriction on the accessibility and dissemination of information by the Board Members in the scope of their duties.



reasonable standard of care while *performing any acts* that could foreseeably harm others.

give board members a high-level appreciation of their responsibilities across the project lifecycle. They are not intended to make board members the designers, quantity surveyors, project

Question: What's the difference between *duty of care* and *due diligence*?

Answer: Due diligence means you need to *prepare* properly, duty of care means you must *act* properly, so that your actions or conduct do not affect others.

1.2 ***Performance Analysis that must be Performed by Board Members***

The board's performance analysis should be undertaken at defined project checkpoints. These checkpoints given below are intended to

managers, contract administrators, or contractors. Rather, they identify the points at which the board must ensure that the correct legal, financial, technical, procurement, and governance evidence exists before the project is allowed to proceed to the next stage.

No.	KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECK POINT
1.	Feasibility Report Assessment and Sign-off	Due Diligence Requirement: Board confirmation that the project is feasible in principle, having regard to the physical site, intended function, available financing, project constraints, and any apparent "fatal flaw" risks. The primary output is a board-approved feasibility decision confirming that the project may proceed to briefing, subject to any stated conditions or further investigations.
2.	Client Brief, Stakeholder Requirements and Concept Sign-off	Duty of Care and Due Diligence Requirement: Board confirmation that the concept proposed by the designers/consultants responds to the client's brief and that stakeholder requirements have been recorded. The primary output is a clear board record confirming either that the concept accords with the approved brief or that any deviation from the brief has been expressly identified, justified, and approved.
3.	Granting of Planning Approval (T&CPD) Sign-off	Legal Requirement: Board confirmation that the project has obtained the necessary planning approval, or that the status of planning approval is clearly understood. Due Diligence Requirement: Board verification that the approval granted by T&CPD is materially consistent with the scope and intention previously approved by the board. The primary output is a planning approval sign-off note identifying any conditions, limitations, or scope changes requiring further Board attention.



No.	KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECK POINT
4.	Cost Verification of T&CPD Approved Design	Due Diligence Requirement: Board confirmation that any changes arising from planning approval, statutory conditions, design development, or site constraints have been assessed against the original cost and financing assumptions. The primary output is an updated cost and affordability confirmation showing whether the project remains financially viable within the approved budget, contingency, and funding framework.
5.	Detailed Design, Design Responsibility and Document Control Approvals	Due Diligence and Duty of Care Requirement: Board confirmation that the detailed design package is sufficiently developed, coordinated, and controlled for the next project stage. The primary output is a design-stage approval record confirming the status of drawings, specifications, design responsibility, critical assumptions, document hierarchy, site information, geotechnical information, and unresolved design risks.
6.	Statutory, Utility and Technical Approvals	Legal Requirement: Board confirmation that all relevant statutory and utility approval bodies have been engaged, including, where applicable, WASA, T&TEC, Fire Services, EMA, Regional Corporation, Factories and Industries Board, OSHA, Ministry of Works Design Engineering Branch, and Ministry of Works Drainage Division. The primary output is an approvals tracker confirming approvals received, approvals outstanding, conditions attached, and any legal or operational risk arising from proceeding before full approvals are obtained.
7.	Pre-Tender Approvals and Procurement Readiness	Due Diligence and Duty of Care Requirement: Board confirmation that the project is ready to be issued to tender and that the tender process is consistent with the organisation's procurement policy, delegated authority, and tender rules. The primary output is a pre-tender approval confirming that the tender package, evaluation criteria, risk allocation, conflict declarations, and approval status are sufficiently settled before contractors are invited to tender.
8.	Tender Report and Selection	Due Diligence Requirement: Board confirmation that the evaluation process followed the tender rules and criteria previously approved, and that the recommended tender is financially and technically acceptable.



No.	KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECK POINT
		The primary output is a board-approved tender evaluation and recommendation record showing the basis for selection, evaluation compliance, financial acceptability, and any reservations or conditions attached to the award.
9.	Contract Formation, Negotiation and Award of Contract	Due Diligence and Legal Requirement: Board confirmation that the final contract reflects the approved scope, risk allocation, tender outcome, negotiated contract value, and state company's intended level of risk. The primary output is a contract award approval confirming the selected contractor, final contract sum, form of contract, material amendments, delegated signing authority, and any legal or commercial exceptions requiring monitoring.
10.	Mobilisation and Construction Commencement Controls	Due Diligence Requirement: Board confirmation that the project has moved from award to construction under proper control. The primary output is a mobilisation sign-off confirming that the programme, baseline cost, reporting structure, delegated authorities, contract administration arrangements, insurance/bonds, site possession, and key risk registers are in place before substantive works proceed.
11.	During Construction Interim Stage Sign-off / Monthly Oversight	Duty of Care and Due Diligence Requirement: Board review of periodic construction performance without assuming responsibility for day-to-day site management. The primary output is a recurring board construction oversight record addressing progress, cost, forecast final cost, time, quality, health and safety, risk, claims, statutory matters, and outstanding action items requiring escalation or approval.
12.	Variations, Claims, Extensions of Time and Material Modifications	Due Diligence, Duty of Care and Legal Requirement: Board confirmation that material changes are supported by



No.	KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECK POINT
		proper contractual, technical, financial, and delegated-authority justification before approval. The primary output is a change-control approval record showing the reason for the change, contractual basis, cost effect, time effect, funding implication, authority used, and whether the matter alters the approved risk position of the state company.
13.	Project Close-off, Practical Completion / Taking Over and Handover	Legal Requirement and Duty of Care Requirement: Board confirmation that the asset is safe, legally occupiable, operationally usable, and ready for handover. The primary output is a practical completion/handover report confirming statutory approvals, completion certification, testing and commissioning, defects or punch-list status, O&M manuals, training, warranties, and any residual risk to users or the organisation.
14.	Defects Period, Final Account and Certification	Legal Requirement, Due Diligence and Duty of Care Requirement: Board confirmation that outstanding defects, claims, certifications, statutory close-out matters, and payments are being concluded on evidence. The primary output is a final account and certification record confirming the final contract sum, approved variations, outstanding claims, defects status, statutory completion documents, payment position, and any reserve or unresolved liability.
15.	Post-Occupancy Review and Benefits Realisation	Corporate Governance and Value Realisation Requirement: Board confirmation that the completed asset delivers the function, service benefit, user value, and public purpose for which the project was approved. The primary output is a post-occupancy or benefits realisation review comparing the completed project against the original business case, approved scope, operating requirements, user needs, lifecycle considerations, and lessons learned for future projects.

Table 1 - High-Level Key Check Point Description During Construction Project Execution



2.0 **Correct Application of Construction Contracts**

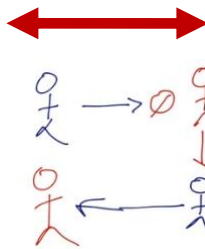
Any definition of a *performance of construction contract* must start by recognising that a construction contract is different to the normal ideas of contracts thought under the heading of contract law.

This is due to the complexity of building contracts compared with other contracts.

Typical understanding of Contract Law:

Typical elements of all contracts

- Intention to create legal relations
- Offer and acceptance
- Consideration

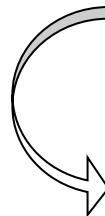


What it means to most people

- A counter offer is an offer made in response to one offered previously by the other party during negotiations for a final contract. **A counter-offer extinguishes the original offer**; one cannot make a counter-offer and then decide to accept the original offer.

However, consider the following typical scenario:

Is a client-instructed change a counter-offer?



- Contractor 'A' makes an offer by submitting a tender.
- The client accepts the tender, but during the works, decides to allow another contractor 'B' to do a portion of the works originally tendered by 'A'. He then tells 'A' not to perform those works.

Is this in fact a counter offer?

But in a building contract:

If the client changes his mind, he can go back to 'A' and instruct 'A' to perform the works he originally removed from him.

The complexity described above is recognised by law –

“Building contracts [] in the way of complexity and of control, often differ widely from other contracts which one can figure”

Lord Justice Clerk (Alness),

Spiers Ltd. vs. Peterson, (1924), S.C. 428



Therefore, the performance of a building contract cannot be assessed in the same way that one will assess a standard contract for services or merchandise.



For board-governance purposes, correct contract application means more than using the right standard form. It requires the board to understand the chosen contract's risk model, document-precedence rule, change-control mechanism, extension-of-time machinery, payment certification route, practical completion standard, defects regime, dispute pathway, and sign-off thresholds under delegated authority.

2.1 *Typical Contract Types Executed by State Agencies*

The most common contract types are:

- Lump Sum Contract
- Admeasurement Contract
- Rate of Payment Contract

• **Lump Sum Contract**



Buy furniture or construct repetitive buildings with no foundation works included



• **Measurement Contract**



This is the contract used by most state bodies/special purpose companies when the "FIDIC³ RED BOOK" contract is specified within their RFP to invite contractors for design-bid-build projects.

• **Rate of Payment Contract**



This is the contract LLAL recommends/actually uses to manage the construction of the works. When the FIDIC Red Book is specified, adjustments must be made to the contract particulars of the FIDIC Red Book to convert the standard form contract to this type of contract.



³ FIDIC – Federation Internationale Des Ingenieurs-Conseils



Forms of Contract vs. Type of Contracts

In construction *standard form* contracts are frequently used. This contract is a standard document prepared by organisations or governments.

This form of contract has been developed over many years, with changes and additions being made as construction went through new phases and experiences.

The FIDIC family of standard form contracts is the preferred form of the Government of Trinidad & Tobago. The typical contract names are:

- FIDIC RED BOOK – Design-Bid-Build Construction Contract,
- FIDIC ORANGE BOOK – Design-Build Construction Contract,
- FIDIC BROWN BOOK – Design-Build-Operate Construction Contract
- FIDIC WHITE BOOK – Consultancy Services Contract *Note: This is the form of contract that LLAL will usually be engaged under.*

i) Lump Sum Contract

The *lump sum contract* reflects an agreement by which the contractor is obligated to deliver the items as described in the specifications and contract schedule for a specified price. The work is not itemised and a single figure is agreed. The contract price will remain fixed for the life of the contract once no changes in the contract or specifications are required.

The actual payments are not made in one lump sum although the name may imply this. The payments may be broken up and paid in parts at milestones or on the completion of major stages of the work.

No bill of quantities is required, and providing one can often lead to inadvertently converting the intended *lump sum contract* into a *rate of payment contract*.



The danger of this stems from the process and level of diligence associated with developing a bill of quantities. If the bill of quantities is intended to be used as a budgetary guide to the board or consultancy management team, then it can be fairly loose in terms of accuracy and detailed measurement, but very descriptive for the purpose of the level of conversation that goes into decision making.

A bill of quantities that is measured and described for the purpose of competitive tendering is so detailed a layman will not usually be able to discuss the document for decision making purposes.

As such, the client can end up with a contract document comprising a bill of quantities that does not have the level of detail required to administer and control the contract.

This can lead to substantial cost escalation due to claims by the contractor that the client will not be in a position to refute, due to the lack of detail in the bill of quantities.

ii) Admeasurement Contract

This type of contract implies that the client gives the contractor units of work to compile to determine a total.

The client issues a bill of quantities with the invitation to treat, as well as specifications and tender drawings. The contractor then inserts his rate (i.e. prices per unit quantity) for each item. The payment to the contractor is then



based on these rates multiplied by the final quantities of work done.

All payments before the end of the contract are considered interim payments. At the end

of the contract, total work done is measured, and this constitutes the final contract sum. If the work done is more than the contractor has been paid, then the client owes the contractor the difference. If the work done is less than the contractor has been paid then the contractor must reimburse the client the difference.

iii) Rate of Payment Contract

The *rate of payment contract* can be considered as the best fit between the lump sum contract and the admeasurement contract.

In this contract, the quantity surveyor will produce a bill of quantities that itemises various elements of the work and provides approximate quantities for these items. The contractor is then required to tender a lump sum price that is based on these approximate quantities, based on rates he provides for performing the various items of work.

During the procurement stage, his lump sum price governs, but during the construction stage, he is paid based on measurement of work done.

This results in the rates being part of the contract but the quantities are not.

Using this form of contract, the client achieves the following:

- 1) The cost of the proposed work is ascertained as nearly as possible.
- 2) The contractor is bound to a calculable price, thereby facilitating cost control when changes are required during the contract.

Lump Sum Contract Scenario

Decision Making Information Required	Information Actually Obtained
Client requests the colour of the building be changed from yellow to green to match their brand colours.	Contractor says “No”. He priced to provide yellow paint. Green paint is not part of his contract.
Outcome: To get green paint, the client can either:	
a) Instruct the contractor to not paint the building yellow, but still pay him for yellow paint as though he had provided it.	
b) Repaint the already painted yellow building with green paint, likely using more than 2 coats due to the non-white background.	



Admeasurement Contract Scenario

Decision Making Information Required	Information Actually Obtained
• Prior to commencement, or just after the construction works has started, sometime after designs are complete, the client requests from the consultant the likely project cost to secure financing from the Division of Finance.	• The consultant informs the client that he cannot give this information as no quantities were produced, but they will know the cost once the building is completed. • The cost report with projected completion costs cannot be given either.

Outcome: Ability of budgetary planning and supervisor to sign on to new projects becomes difficult to achieve. Which manager is ever willing to sign onto a project without having an idea of the cost?

This contract type is therefore best suited to:

- a) Limit use to repetitive maintenance type work where the scope is well known through familiarity.
- b) Limit the value of projects to very small projects.
- c) Good for emergency/crisis situations such as after a flood, storm or earthquake.

Rate of Payment Contract Scenario

Decision Making Information Required	Information Actually Obtained
• During the project, the client requests from the contractor the projected final cost of the project.	• The contractor responds that the cost is \$22M, plus or minus \$2M.

Outcome: Though the information provided is not exact, it is sufficient for planning, budgeting and decision making within the level of accuracy provided.



To determine the final cost of the project with a higher degree of certainty (or a near zero degree of uncertainty), the following may be required:

Project consultants must first be retained using procurement methods weighted heavily in favour of technical capacity and not lowest cost.

- a) The design drawings and specifications must be reviewed by a third-party design reviewer for every discipline; this is done in the petrochemical industry.
- b) The design drawings and specifications must be measured by a QS, and independently measured by an Audit QS.
- c) The project QS measurements must then be independently reviewed by an Audit QS with transparency of the audit provided to the project QS to allow adjustment and reconciliation of values.
- d) Fees must be paid to both the project design team and the audit team prior to invitation to tender for construction works.

Activities and their associated costs identified in (a) to (e) would usually not receive approvals by most decision makers as the outcome still does not ensure absolute zero error or changes. Instead, items (a) and (b) only are usually performed, with a reduced contingency sum applied to the project budget.

Guidance on Board Reporting 1

In order to treat with the myriad of issues described above, the board should require a short written rationale for the selected contract type, identifying which risks are transferred, shared, or retained; what assumptions underpin price certainty; and what features of the project make the chosen model preferable to alternatives such as target cost, management contracting, or design-build.

No material departure from the approved form of contract should be agreed during post-tender negotiation unless the departure is specifically recorded and approved at the appropriate delegated level.

B. BASIS OF ASSESSING PERFORMANCE – CONSTRUCTION STAGE

Construction phase performance must be measured in terms of

- 1) Final cost versus contract cost
- 2) Actual time to complete versus contract period
- 3) Actual quality of final product versus designed quality
- 4) Value realised criteria: percentage of cost not related to actual building costs e.g. lost time, extension of time, punitive claims, etc.

3.0 Cost and Time Performance Criteria

These two items are legitimately affected by what is called the normal “cut and thrust” of the construction process.

The cut and thrust or normal construction-related issues occur due to unknowns or unforeseeable events that impact the performance of the work.

The most typical issues:

- 1) *Slightly* different soil type or bearing strength discovered during foundation works leading to a change in the size or depth of the foundation design



Why will this happen?

The site investigation would usually involve a field study prior to design. During this study, boreholes will be drilled into the soil and samples extracted and tested. In the Caribbean, an office building or factory shell may have 2 to 4 boreholes drilled.

These boreholes are roughly 150mm (6") wide, so combined, represents 0.0176m^2 (0.1894 sq.ft.) of area.

This area is used to assess the soil type of a building 1486.49m^2 (16,000 sq.ft.) in area.

The reality is that soil type and its layers change from place to place over the building's footprint, so while an informed extrapolation of the results of the borehole sample may be developed, engineering consultants really do not know what exists below ground for 99.9% of the site.

Similar to the human error that is budgeted for upfront, the uncertainty associated with all earthworks including foundation construction is budgeted for by measuring the item provisionally – that is, a lump sum figure is indicated, but the final cost will be derived from actual measurements on site, as opposed to calculations based on approximate pre-measured quantities.

The client can view provisional sums as a specified budgeted amount of money that he has given pre-approval to be utilised at the discretion of the consultants, without actually knowing what the final figure will be.

Indeed, it is a way to treat a specified item in a Rates Contract as per an Admeasurement Contract.

Question: Why can't the consultant just drill more boreholes and reduce the uncertainty?

Answer: The consultant can drill more boreholes but this comes with additional costs. Once the client/board is willing to pay for the additional costs, then many more boreholes can be drilled.

Because the professional scale of fees has generally been abandoned by the state agencies over the past few years, the lowest bid is used to acquire pre-planning information. Hence, the quantity of information acquired is the minimum required to perform the service within a certain commercially determined risk__not client determined value. This mean value to client comes second to professional commercial concerns, but conforms to the requirements specified by the client in the client issued competitive bidding documents.

To change this, the client/board member must seek to place quality of advisory services above lowest consultancy fee.

The tools to do this are already available to the board via the standard scale of fees published by each professional organisation within the construction sector.

Hence, procurement of professional consultancy services must move away from lowest bid considerations, to technical submission only, with a pre-determined scale of fees.



In the writer's experience:

An excessive number of provisional sum items in a bill of quantities is usually either a sign of incomplete detailing by the design team, or hurried preparation of a bill of quantities.

Earthworks however, are typically treated as a provisional sum.

- 2) *Substantially* different soil types or bearing strength discovered during foundation design leading to substantial changes to types of foundations or excavation required:

All the issues related to a slight difference in soil type and bearing apply, but the difference is extreme.

Instead of gravel or coral material which can support a small pad footing, expansive clays (e.g. sapata – in South Trinidad) are discovered when excavation begins.

Or, alternatively, the geotechnical report and engineering designs show a nominal retaining wall required due to the presence of rock, but upon excavation, weathered collapsible soil is discovered which will require a larger retaining wall.

As such, increases in provisional sums (final cost of items) would not usually be considered to be arising from an error in design or tender documents. It is simply part of the normal activities related to construction.

While the above as described can arise due to the normal construction process, admittedly that such situations will also often arise due to:

- a) Errors in the geotechnical report and insufficient boreholes taken.
- b) Engineering designs not premised on a soil report – often due to too short a design time frame to secure a geotechnical report.
- c) Competency of professionals.
- d) Inaccurate site information such as incorrect topographical survey, or positioning of a building structure differently on site than originally planned.

The issues described above can affect both time and cost, but these changes are legitimate and should not be considered a debit on the good performance of a job during the construction stage.



Guidance on Board Reporting 2

Cost and time performance should be reported not only historically, but prospectively. Board reports should state: the certified cost to date, forecast final

cost, approved contingency remaining, programmed completion date, current forecast completion date, extension-of-time status, and the principal causes of variance.



The Truth about Extensions of Time and Contract Delays:

Despite much fanfare being made by clients and the public at large about delays in time to complete construction works, contractually, time is **not** of the essence in most building contracts signed by state agencies.

“Making ‘time of the essence’ in a contract means that if the contractor fails to complete on time the employer can say that the contract is at an end and sue for damages for the contractor’s failure to complete on time.”⁴

“Where the terms of the contract provide for a possible postponement of the date of completion, or for the payment of liquidated damages in the event of delay, or for the payment by the contractor of a weekly fine during the period of delay, or where it provides a bonus in the event of completion being achieved by the date fixed, or for earlier completion by providing a fixed sum to be paid the contractor for every day or week by which his earlier completion precedes the fixed date, time ceases to be, in all these cases, of the essence to the contract;...”⁵

However, even where time is not legally ‘of the essence,’ delay remains a core governance risk because it may affect liquidated damages exposure, prolongation costs, operational readiness, user disruption, financing, and benefit realisation. The board should therefore monitor the contractual completion date, approved extensions of time, forecast completion date, critical-path risk, and the legal basis for each material time adjustment.

4.0 Quality Performance Criteria

The quality of the final product is influenced by the clarity of the employer’s requirements, the adequacy of the design and specifications, the allocation of design responsibility, and the standard applied at testing, practical



completion, and defects rectification. However, more than anything else, the quality of the final product is determined by the quality of the contractor engaged.

It can be said that

“The consultant sets the minimum required standard of quality, but the

⁴ RIBA Publishing, Good Practice Guide: Extensions of Time, Section 1, pg 3, 2008

⁵ Perrey, B. R, The Law relating to Building and Engineering Contracts, 6th Edition, pg 116



contractor

determines the final quality level that the job is built to."

The test of this criterion becomes a simple one.

- a) Was the building built according to the specifications?
- b) Did items of the works appear of higher quality than would be expected for the given specifications?
- c) Did items of the works appear of lower quality than would be expected for the given specifications?
- d) What percentage cost and what percentage user value were affected?

In essence, what was the client's intention to purchase versus what is the quality actually specified?

It is important to clearly define what quality is specified, as it is in fact the definition of what the client intended to purchase.

The client's intention is usually to acquire a building for use as an office, factory, home, etc.

Very often, individuals may see the design and construction process as a convoluted way of buying a building, resulting in the same expected outcome associated with buying a home or a building advertised in the media and inspected prior to making a down payment.

Though the process of having a unique building designed and constructed versus inspecting and buying are vastly different, the client's intentions are the same – secure a building for a particular use.



The key difference that must be recognised however, is that in the latter situation (inspect and purchase), the client is purchasing a building that comprises materials (blocks, concrete beams, paint) as is, where is. In the former situation (design and construct), the purchaser is not actually buying materials but is buying a methodology or work plan.

The idea is that if the contractor uses a certain method or work plan to pour and place concrete, when the concrete cures, it will be a slab acceptable for use 'as is, where is'.

The contractor, having executed the methodology and work plan specified by the consultants, cannot then be faulted if the outcome does not provide the client with the usability desired.

Guidance on Board Reporting 3

Quality performance shall be assessed by reference to the approved design criteria, statutory approvals, inspection and test records, non-conformance logs, defects status, and the contractor's and consultants' quality assurance obligations. Quality should not be reported by narrative assurance alone.

5.0 Value Realised and Benefits Realisation Performance Criteria

This criterion is best expressed by the commonly asked question

"Did we get what we paid for?"

We must firstly define what the client actually pays for:



Materials + Labour + Premium Management
Services + Overheads + Profit = Value of
Construction Works

Where:

Overheads = Administrative services,
Insurance, etc

Premium Management Services = the
coordination and acumen that goes into
combining the labour and materials to form
the finished product

When the client pays above the market rate
for the five items identified above, or pays
for additional items not included in the five
items, then the client does not get what he
actually paid for.

The client does not achieve value for money
in the following circumstances:

- 1) The cost of the material, labour,
management, overheads and profit are
tendered and accepted by the client at a
value higher than the current open market
costs.

a) *Bid Rigging:*

This situation is usually protected
against by public tendering, but bid
rigging and tenderer collusion would
render the public tendering process
irrelevant. A well-known public
instance of this, where bid-rigging
was admitted in court, is the 'Piarco
International Airport Terminal
Building Project.'

b) *Insufficiently Detailed Design &
Tender Documents Resulting in all
Contractors Increasing their Tender
Price to Account for Perceived Risk:*

A well-compiled, accurate and
coordinated tender document will
usually result in contractors of equal

competence and skill submitting
tenders within say 25% of each
other. i.e., the tender spread might
be \$1.0M to \$5.0M, but all
Contractors with 20 years'
experience with their own plant and
equipment may be between \$2.5M
and \$3.1M, all contractors with five
years' experience and no plant may
be between \$4.0M and \$5.0M, and
then a contractor with a lot of plant,
but little experience or in dire
financial constraints may submit a
"Hail Mary" tender for \$1.0M, thus
accounting for the spread.

This situation is often seen in public
tenders.

When the Tender Package is not
"tight", each tenderer applies a cost
for increased "risk" that is specific to
the tenderer's personal view of the
issue. Therefore, the tender price is
increased and the tenders are
arbitrarily spread over the range of
submitted bids. This situation is
currently seen in the design-build
public tenders that have been
executed over the past few years.

- 2) Contractor claims not tied to actual
material and labour costs.

These claims include:

- a) Interest for late payment of
valuations
- b) Cost of overheads claim, known as
preliminaries in the BoQ, due to
client delays that impede the
contractor from completing his work
- c) Cost of overheads claim due to
consultant delays that impede the
contractor from completing his work

In the above cases, the cost of the
materials, labour, management etc.



may be \$18.0M, but the actual amount paid to the contractor is \$19.0M. As such, \$1.0M will have been paid to the contractor; that representing value not actually fixed in the works.

- 3) Poor quality workmanship and clandestine dealings by the contractor.

This situation is usually protected against by having onsite supervision in the form of a clerk of works (COW) who inspects and signs off on all aspects of the physical construction works *as the works progress* - not after individual aspects of the works have been completed.

Collusion between the COW and the contractor undermines this process.

Value realised should therefore be measured at three points:

- (i) Commercial value at award, including legality and competitiveness of the tender outcome;
- (ii) Delivery value at handover, including delay, defects and claims leakage; and
- (iii) Operational value after occupation, including whether the asset performs its intended function and whether expected benefits are realised.



In the writer's experience:

“Clerk of Works” vs “Site Supervisor/Site Manager”

Over the last 3 decades, with the strengthening of the UWI's post-graduate diploma and MSc. in Construction Management, along with the surge in Professional Project Management (PMP) certification, the entity called a *Site Supervisor* or *Site Project Manager* has been replacing the traditional *Clerk of Works* (COW).

This has been to the detriment of the quality of building works as the project management training focuses on the theory of building management and the not practice of construction.

Quality problems arise due to construction practice issues and not paper trail issues.

As a result, the project faces the hurdle of having a site supervisor watch and document questionable quality being constructed in the worst case, without even realising that what is being constructed is of poor quality, and in the best case, with a threat to the contractor that the client or consultant will have the questionable works broken out after they have been constructed.

The COW on the other hand, would have been in the trenches, measuring the works, and approving the *construction process* before the contractor has expended cost in building an item of poor quality, thus major questionable quality issues are avoided altogether.

C. BOARD MEMBER ROADMAP - BOARD GATEWAY QUESTIONS,

MINIMUM EVIDENCE, METRICS AND DELEGATED AUTHORITIES



6.0 Design Stage Board Member Road Map

Each checkpoint in the project lifecycle should be expressed as:

- the suggested metric or exception trigger to be monitored; and
- the authority or delegation by which the matter is to be approved, noted, escalated, or implemented.

A checkpoint should not be treated as complete merely because the matter was discussed. It is complete only when the required output exists in an evidential form that can be audited.

In this paper, “evidence” should be understood to mean not only reports presented to the board, but also the retained record of the board’s decision: the question asked, the documents reviewed, the assumptions accepted, the conditions imposed, the delegated authority used, and the action required before the next gateway.

- a board question;
- the minimum evidence required to answer that question;
- the primary output of a successfully completed checkpoint;



KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECKPOINT	BOARD QUESTION	MINIMUM EVIDENCE	SUGGESTED METRIC	AUTHORITY / DELEGATION MAPPING	RELEVANT LEGAL NOTE
Strategic need and feasibility	Board-approved feasibility/business-case minute confirming project need, site viability, function, funding envelope, delivery model, and that no unresolved “fatal flaw” remains	Is the project still coherent as to need, site, scope, affordability, and delivery route?	Feasibility report; site constraints note; budget/funding note; delivery-model assessment	Fatal flaws unresolved = 0	Reserved to Board on CEO/SRO recommendation	Directors may rely on management, but only with sufficient understanding and follow-up; supervisory systems and informed questioning are required. [9]
Client brief and stakeholder record	Board-approved client brief and stakeholder engagement record	Has the client brief been fixed clearly enough for designers to proceed, and is stakeholder input evidenced?	Signed brief; stakeholder log; minutes of consultations; assumptions list	Material brief ambiguities open at gateway = 0	Board reserved for brief approval; execution delegated to CEO/SRO and consultants	Blind dependence on advisers is insufficient; the board should ask timely questions and retain the assumptions it is adopting. [11]
Concept sign-off against brief	Board minute confirming concept compliance with brief, or approving deviations expressly	Does the concept still match the board-approved brief, and if not, what deviations are being accepted?	Brief-to-concept comparison matrix; deviation schedule; concept drawings	Scope deviations accepted without express Board approval = 0	Board reserved where concept departs materially from approved brief	Formal documents are construed by text, context, and commercial purpose. If scope departure is intended, it should be recorded expressly, not assumed. [12]



KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECKPOINT	BOARD QUESTION	MINIMUM EVIDENCE	SUGGESTED METRIC	AUTHORITY / DELEGATION MAPPING	RELEVANT LEGAL NOTE
Planning application authority and planning approval sign-off	Board record authorizing planning submission and, later, board confirmation that granted approval matches intended scope	What exactly was applied for, what was approved, and does approved scope still reflect the board's intention?	Planning strategy; submission pack; approval notice; schedule of conditions; scope comparison note	Approved conditions changing scope/cost without board re-approval = 0	Board reserved if approval alters scope, conditions, or public risk profile materially	Courts are slow to second-guess management judgment, but boards must show they identified the actual decision taken and balanced competing considerations. [13]
Post-planning affordability and cost re-verification	Updated cost/finance approval confirming viability after planning and approval conditions	After planning conditions and scope refinement, is the project still financially viable on approved principles?	Updated estimate; cash-flow note; contingency statement; affordability paper	Change in forecast outturn versus prior board approval within tolerance	Board reserved for revised budget envelope; delegated onward control to CEO/SRO	Boards must continue to understand the company's affairs on an ongoing basis and follow up material issues; funding drift cannot be left implicit. [14]
Design responsibility, assumptions and document hierarchy freeze	Design-freeze note identifying responsibility matrix, critical assumptions, document precedence, design criteria, and unresolved risks	Are design responsibility, geotechnical/site assumptions, minimum performance criteria, and document	Design responsibility matrix; geotechnical summary; document-precedence note;	Critical assumptions logged before tender = 100%	Board approves the gateway; technical content delegated to designer/PM/QS	In complex contracts, clearer and more rigorous requirements prevail; express minimum performance/design-life obligations can



KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECKPOINT	BOARD QUESTION	MINIMUM EVIDENCE	SUGGESTED METRIC	AUTHORITY / DELEGATION MAPPING	RELEVANT LEGAL NOTE
		hierarchy explicit before tender?	design criteria schedule			bite even where detailed design followed an industry code. [15]
Statutory, utility and technical approvals tracker	Approvals tracker confirming status of all state/utility/regulatory approvals and any conditions precedent to tender or start	Are all required third-party approvals in hand, or is the board knowingly accepting a phased risk position with evidence?	Approval tracker; applications; correspondence; conditions register	Critical approvals outstanding at tender/start = 0, unless expressly waived by the board with reasons	Board reserved if works are to proceed before full approvals; routine tracking delegated to CEO/SRO/PM	Because directors may delegate only to the extent consistent with their s.174 duty, missing third-party approvals should be escalated, evidenced, and revisited. [16]
Procurement strategy, tender criteria and conflict controls	Board-approved procurement strategy and tender-rules note, including conflict declarations and evaluation model	Are the procurement route, evaluation rules, conflicts controls, and risk allocation intentional and final before tender release?	Procurement strategy; evaluation matrix; conflicts declarations; legal note; draft tender package	Material evaluation changes after release = 0	Reserved to board above threshold/risk level; otherwise delegated under procurement policy	Equal treatment and transparency require evaluation according to the published procedure; undisclosed criteria or post-release changes to essential conditions are legally dangerous. [3]
Tender issue authorization	Formal authority-to-issue tender, with confirmation that	Is the project genuinely ready to go to market	Issuance authorization memo; final tender set;	Tender addenda caused by board-level	Delegated to CEO/procurement lead only after	Official procurement guidance now separately treats pre-market



KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECKPOINT	BOARD QUESTION	MINIMUM EVIDENCE	SUGGESTED METRIC	AUTHORITY / DELEGATION MAPPING	RELEVANT LEGAL NOTE
	approvals and tender rules are complete	on stable documents?	approval status certificate	incompleteness after issue = 0	Board gateway approval	engagement, competitive procedure modification, assessment summaries, standstill, and conflicts as disciplined stages. [17]
Tender evaluation, moderation and recommendation	Complete evaluation record and award recommendation showing compliance with published rules	Did evaluators follow the published criteria and leave a complete, reviewable audit trail?	Evaluation report; moderation note; legal/procurement sign-off; board paper	Evaluation records complete before board decision = 100%	Board reserved for award recommendation above threshold; evaluation delegated to approved team	The authority must act by the published terms of its decision-making procedure; bidders must be able to understand what is required, and undisclosed criteria breach transparency. [18]
Contract negotiation, departures and award	Board-approved contract approval note identifying the final form, departures, negotiated value, risk allocation, and	Does the negotiated contract still reflect the approved risk posture, scope, and budget, and	Schedule of departures; legal exceptions list; final contract sum note; delegated-signature memo	Material departures from approved form tracked and approved = 100%	Reserved to Board for award and material departures; signature delegated per schedule	Courts read formal contracts by text and context; clear drafting matters, and essential tender conditions cannot be changed post-



KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECKPOINT	BOARD QUESTION	MINIMUM EVIDENCE	SUGGESTED METRIC	AUTHORITY / DELEGATION MAPPING	RELEVANT LEGAL NOTE
	delegated signature authority	have all departures been separately authorized?				competition if that could have affected bids. Standard forms should not be altered casually. [19]



7.0 Construction Stage Board Member Road Map

Before award, the board should require a contract approval note that identifies at minimum:

- pricing mechanism;
- design responsibility;
- document hierarchy and precedence;
- completion and handover criteria;
- variation and extension-of-time regime;
- insurance, bonds and guarantees;
- dispute escalation and avoidance procedures; and
- any departures from the organisation's preferred standard form or procurement risk posture.



KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECKPOINT	BOARD QUESTION	MINIMUM EVIDENCE	SUGGESTED METRIC	AUTHORITY / DELEGATION MAPPING	RELEVANT LEGAL NOTE
Mobilisation and baselines	Approved project baseline for programme, cost, risk, reporting, and change control	Before starting works, has the project established its baseline and the board's reporting cadence?	Baseline programme; cost report; risk register; reporting protocol; RACI / obligations matrix	Baseline approved before site start = 100%	Board approves reporting framework; day-to-day administration delegated	Contract-management guidance recommends RACI, obligations matrices, and early record structures before performance begins. That is the practical way to satisfy the board's supervisory obligation without managing the site itself. [20]
Monthly construction oversight dashboard	Board dashboard showing cost, time, quality, HSE, claims, approvals, and top risks with action tracker	Is the board receiving enough information to supervise performance, while staying out of day-to-day administration?	Monthly dashboard; progress report; photo report; QA/HSE report; risk register; action log	Forecast outturn variance; forecast delay; high risks open; overdue actions	Delegated to CEO/SRO/PM for preparation; Board reserved for exception handling	Directors must ensure continuing knowledge and understanding of affairs and follow up important action points; meeting records and action tracking are therefore legally significant. [21]
Variations, claims, EOTs	Approved change-control record showing contractual	Is each material change justified contractually and,	Change log; instruction/variation record; EOT analysis;	Value of unapproved changes = 0	Within thresholds delegated;	The prevention principle, concurrent-delay allocation, and



KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECKPOINT	BOARD QUESTION	MINIMUM EVIDENCE	SUGGESTED METRIC	AUTHORITY / DELEGATION MAPPING	RELEVANT LEGAL NOTE
and material modifications	basis, authority used, budget effect, schedule effect, and legal/procurement assessment where required	where applicable, legally permissible as a post-award modification?	legal note for material modifications		material changes reserved to Board	time-at-large disputes turn on contractual drafting and administration; public-law overlay also requires care where changes are substantial or modify essential conditions. [22]
Practical completion and statutory handover	Practical-completion gateway confirming legal occupiability, operational readiness, statutory compliance, and no outstanding critical defects	Is the asset safe, legally usable, and genuinely ready for handover?	Completion checklist; statutory approvals; defects list; O&M manuals; readiness review	Outstanding critical defects at handover = 0	Board reserved for handover acceptance on major/state assets; certifier acts contractually	Patent defects that are more than trifling prevent practical completion; seriousness, not mere irremediability, is the test. Official guidance also treats pre-handover readiness as critical. [23]
Defects / outstanding approvals close-out	Defects close-out report and statutory-close-out tracker	Are defects, residual risks, and remaining statutory matters being closed on evidence and within clear	Defects log; close-out tracker; approvals status; remedial-work certificates	Overdue critical defects / approvals = 0	Delegated to CEO/SRO/PM with Board exception reporting	Boards may delegate but must still monitor implementation and follow up unresolved material risks. Close-out should therefore be tracked as a live



KEY CHECK POINT DESCRIPTION	PRIMARY OUTPUT OF SUCCESSFULLY COMPLETED CHECKPOINT	BOARD QUESTION	MINIMUM EVIDENCE	SUGGESTED METRIC	AUTHORITY / DELEGATION MAPPING	RELEVANT LEGAL NOTE
		responsibility lines?				governance stage, not treated as automatic. [14]
Final account certification and final payment	Final account reconciliation approved against contract sum, certified variations, claims position, and payment evidence	Is the final payment supported by the contract record, and are claims and liabilities clearly reconciled?	Final account statement; variation register; claims report; payment confirmations	Final account approved only after claims reserve and outstanding liabilities are clear	Reserved to Board above threshold or dispute level; otherwise delegated per schedule	Delay-damages, caps, and contractual remedies depend on the actual wording of the bargain; poor close-out records create avoidable disputes over entitlement. Accurate records are specifically recommended in official guidance. [24]
Post-occupancy and benefits realisation	Post-occupancy evaluation and benefits-realisation review measured against approved outcomes	Did the board obtain the function and value it approved, not merely a completed work package?	Post-occupancy review; lessons learned; KPI review; user feedback	User and asset performance KPIs met within stabilization period	Board reserved for benefits review; operational management delegated	Official public-works guidance requires transition to operation, operation review, and benefit realisation. This is also the best practical answer to the paper's "Value Realised" theme. [25]



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He was awarded his M.Sc with Distinction from the University of the West Indies, with “Structural Retrofitting of Traditional Building Structures for Seismic Events” as his special area of research. During his post graduate studies, he was also awarded “The Leonard Prize for Construction Project Management”, “The NIPDEC Prize for Human Resources and Industrial Relations in Construction”, “The Trintoplan Prize for Infrastructure Planning and Construction” and “The Harricrete Prize for Construction Materials”.

His engineering career has included assignments on both new construction and renovation-upgrade of numerous Government of Trinidad and Tobago (GOTT) primary and secondary schools; many of these funded by either the World Bank 4th Basic Education Program or the Inter-American Development Bank (IDB) Secondary Education Modernisation Program. His involvement in GOTT Design-Build projects include the 9,894 sq.m (106,505sq.ft) Tobago Financial Complex which is the head office of the Tobago House of Assembly Division of Finance, and the 382 sq.m (4,120 sq.ft) Rio Claro Public Library.

Eric is the Managing Director of Lauriston Lewis Associates Ltd., a Consulting Engineering Firm founded in 1970 with an excellent history of projects successfully completed throughout the Caribbean and Guyana.