

# Basis of Schedule: A Lost Treasure Map

Back to Basics – Zone (B)

Session B3 - 11:30am on 14 November 2023



# INTRODUCTION – Daniel Such

Over 15 years' experience in project controls, claims and disputes.

- **Early Career:** Project Controls function on Power Stations (including new build gas turbines, coal-fired outages, upgrades and retrofits).
- **Later:** Contracts and Project Controls on LNG projects in QLD.
- **Current:** Associate Director at **Calibrate Consulting**, Assisting with claims and disputes, and providing expert opinion on matters, predominantly on Building and infrastructure projects (including high-rise mixed-use buildings, care facilities, roads, tunnels, bridges and rail projects).

# Basis of Schedule: **A Lost Treasure Map**



# BASIS OF SCHEDULE

## WHAT

The basis of schedule is a written document that accompanies the program.

## WHO

The Project Controls teams compile the information which has been used to produce the program.

## WHEN

It is initially created when developing the contract (and/or tender) program, but it should be updated contemporaneously, as the program changes during the project.

## WHY

To explain the reasonableness of the program and to provide a documented reference point so the underlying reasons that support the program can be referenced and are not lost.

# Preparation and use

- As a claims consultant I see missing or poorly prepared basis of schedule documents as a **missed opportunity**.
- The planners should take ownership of this document and the process: They have an opportunity to explain what you have done and why.
- Commercial managers should take the time to understand and interrogate the document. There is an opportunity the use this document to explain and quantify change on the project, whether that change arises from:
  - Altered methodology;
  - Scope increase;
  - Disruption impacts; or
  - Delay impacts

**These changes may give rise to cost claims.**

# WHERE TO START

Create a Basis of Schedule at the **same time** as creating the program.

## Scope of Work

- The scope of work defined in the tender or contract – the program needs to model all the planned work.

## Interactions & Release Points

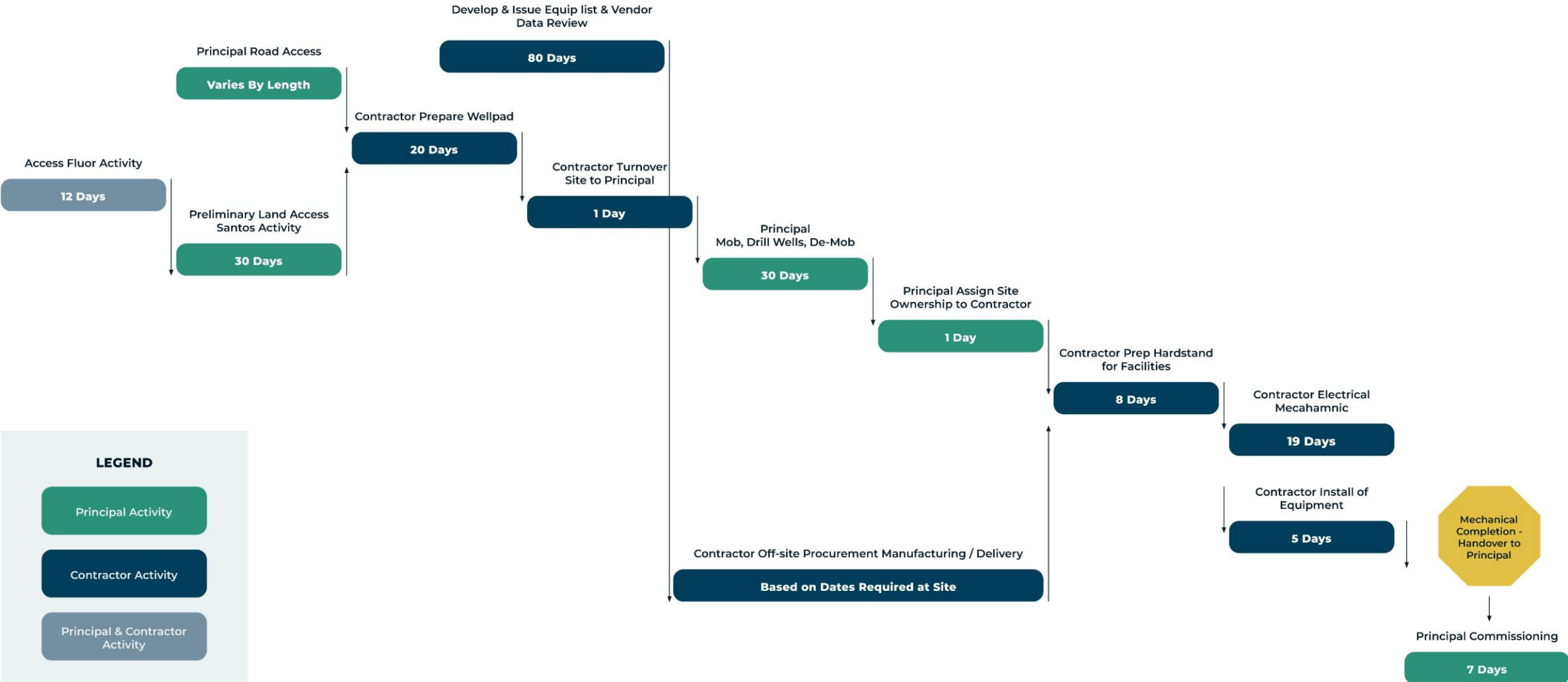
- List the key interactions between your scope or external entities.

# NEXT STEPS

## Methodology

- Note any key constructability factors
- Logic sequences diagrams and time cycles

# Logic Sequences Diagrams & Time Cycles



**LEGEND**

- Principal Activity
- Contractor Activity
- Principal & Contractor Activity



# Rules of Credit

- To substantiate your claim effectively, the crucial first step involves having well-supported documents. Subsequently, it's essential to gain a clear understanding of what was planned, what has been completed and what has changed.
- Rules Of Credit is a progress measurement system that can help by:
  - defining what constitutes completed work by breaking work into component parts (steps), and
  - setting quantification metrics, detailed present complete measurements for each of the steps.
- Using rules of credit provides a greater level of reporting accuracy and certainty. These steps can be rolled up to project milestone level and used for payment claims.

## EG: Pipe Installation

	Material at site	Lay Pipe	Prep Pipe	Fully welded	NDT	Pipe Supports	Final Inspection
Incremental	5%	20%	20%	35%	5%	10%	5%
Cumulative	5%	25%	45%	80%	85%	95%	100%

# DEVELOPMENT

## Quantities

- Labour Quantity
- Labour Histograms
- Equipment Type
- Equipment Amount
- Installation Units
- Rates of Progress



# WEAKNESSES & THREATS

## Risk

- Known risk
- Any risk reviews

## Assumptions

- If some project information or details are unavailable and assumptions have been made, take this opportunity to list those assumptions.

# COMPLETION

Before completing, remember to: **CHECK THE CONTRACT**

## Finalisation

- Program – critical path (including separable portions)
- S-curves – early dates & late dates

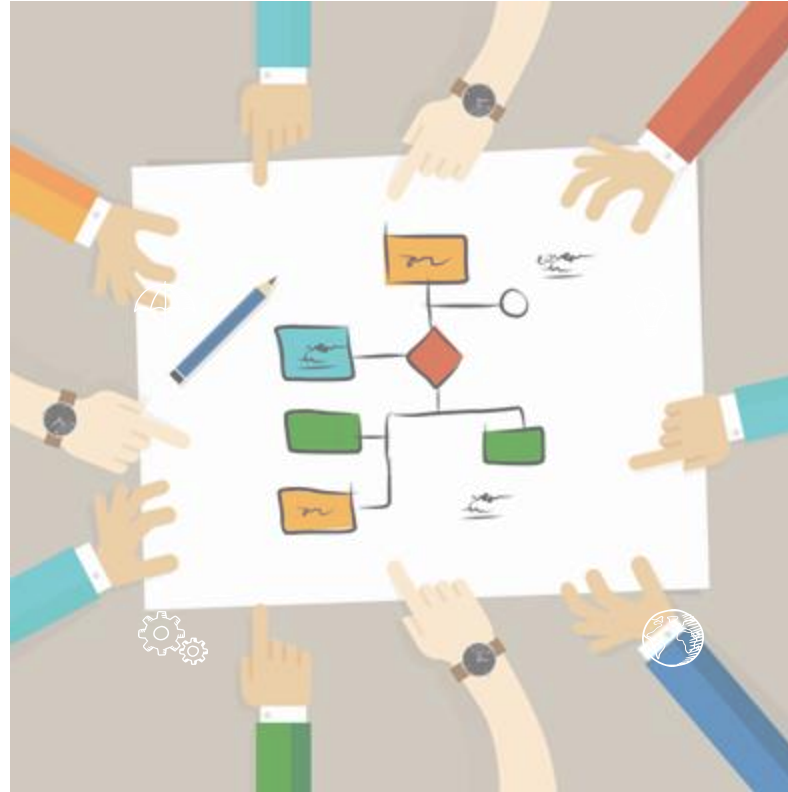
## Other Items

- Program calendars
- Software settings



# WHO BENEFITS?

1. Project Controls Team
2. Project Team
3. External Parties



# PROJECT CONTROLS TEAM

- Documentation allows the question of “why” to be answered.
- If the team experiences turnover, the new team members can understand the project and become effective sooner.
- Allows more effective communication with other departments.

# PROJECT TEAM

- Improves understanding.
- The commercial management team can easily convey the deviation from tender or contract and quantify the level of change using the basis of schedule.
- A benchmark to measure change.



# EXTERNAL PARTIES

- External parties can understand the project and be across the details more effectively.
- Improves understanding, especially among those less familiar with programs.
- Legal professionals seeking to understand the fundamentals of the project program (often after the project has finished). The basis of schedule can assist in answering the questions of: “why?” and “on what basis?”

# KEY TAKEAWAYS

- Start the Basis of Schedule before you start the program and maintain it.
- Consider the commercial implication of the basis of schedule. It can be used as a benchmark to explain and quantify change.

# GET IN TOUCH



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**THANK YOU**