

## Contract Cost Management

#### Mitigating Contractor Risk Premium

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#### Outline

- What is a contractor risk premium?
- Why mitigate?
- Various stages and related techniques to reduce risk premium
- Downside
- Questions and Discussion



# What is Contractor Risk Premium?

- Added bid cost due to:
  - Unknowns
  - Unclear description of work
  - Cost and supply uncertainty for materials and labour
  - Experience
    - Timely payment
    - Claims process / fairness
    - Project Manager
  - plus...plus....





## Why Mitigate?

- Reasonable, Realistic and Competitive Bids
- Vendor Retention to Bid Again
- Cost Predictability
  - → Budget Mngt





# Stages for Risk Premium Mitigation

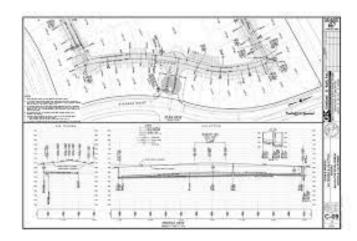
- Design
- Tender Package
- Award
- Construction





### Design Stage

- Have a clear understanding of project scope
- Do background investigations
  - SUE / Geotech / Hydrology / Archaeological....
  - Unknowns cost
- Use industry accepted designs and standards
  - Creativity costs
- Prepare high quality drawings
  - Don't make contractors guess
  - Confusion costs





#### Design Stage

- Consider value engineering exercise for complicated work
- Complete a materials cost and supply risk assessment
  - Ensure several alternatives are available
  - Will pay premiums for sole source materials that may or may not be available
  - Understand the market don't make assumptions



- Prepare clearly understood documents and stick to industry accepted specifications (i.e., OPS, AWWA, published municipal standard, area practices, ...)
  - Contractors don't read every SGC or SSP
  - Field staff often only know what was done last time
  - Highlight anything out of the ordinary
  - Surprise once pay later





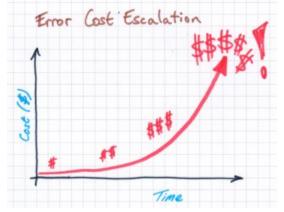
- Prepare Form of Tender that provides a detailed breakdown of work
  - Be clear on what work is included in each tender item (and what's not)
  - Avoid Contractors having to lump various and unrelated works together
  - Contractor will judge the risk and impact of quantities varying from that specified, and assign costs accordingly





- Consider cost escalation clauses
  - Best used on multi-year projects
  - AC index well accepted for road works
  - Guelph has developed municipally focused diesel fuel index based on MTO's spec in OPSS.PROV.100
  - Guelph is working on cost escalation and delay clauses

that share risk





- Determine best fit cost escalation clauses for your project
  - Materials Index
    - https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pi d=1810026501
  - Construction Labour Index
    - https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pi d=1810013902
  - Toronto annually adjusts costs in multi-year watermain replacement contract based on plastic/rubber and labour indices



- Use flexible liquidated damages clauses to exclude specific items that could be subject to long and varying lead times (i.e., girders, electrical)
  - Require material be ordered within a specific time of the contract award (i.e., 30 days) to qualify
- Use Novation Agreements
  - Major equipment or long lead time materials
  - Can reduce design, cost and schedule uncertainties



- Provide plenty of time to complete the works
  - More flexibility the better
  - Can use clauses that once a certain stage commenced (i.e., road closed, PS offline) that Contractor has a specified but reasonable time to complete a stage
  - Can help with locate delays



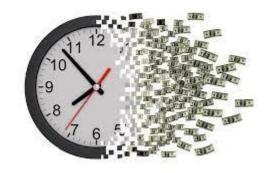


### Award Stage

- Permit adequate bidding period
  - Complexity
  - Time of year



- Have a game plan in place if over budget
- Notify successful Contractor as soon as possible to start at least on locates, shop drawings, procurement, etc.





#### Construction Stage

- Commit to review shop drawings in specific time
  - Consider real-time review with owner-contractorconsultant together
- Assist in cash flow
  - Use Advance Payment clauses in OPS GC 8.02.03 for materials
  - Key is bonded and secure storage



#### Construction Stage

- Give flexibility to substitute designs, materials and suppliers where possible
  - Contractors have valuable experience and will be able to save money
  - Don't be afraid to share the savings with them
  - Buys good well for later





#### Construction Stage

- Treat Contractors fairly and equability
  - Follow the contract terms and conditions
  - Provide claims process guidance
  - Will pay dividends on future bids





#### Downside

- Lower final cost predictability after Award
- Use of contingency funds
- Corporate buy-in for risk shifting
- Onus on upfront work to prepare quality design and tender package
  - Resourcing
  - Identifying shareable risks
  - Schedule management



# Questions and Discussion





