CONSTRUCTION RISK MANAGEMENT

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INTRODUCTION

University campuses and construction projects seem to be intertwined. Whether they are new capital projects or additions/renovations to existing structures, a construction project should be seen as an opportunity for the risk manager to add value to the academic mission of the University.

The following are some areas of consideration for the Risk Manager when addressing the risks associated with construction.

PROJECT START UP – RISK EXPOSURE ANALYSIS

Risk Managers should be involved long before the project is ready to break ground.

Considerations include the following:

- Project type
  - New Construction vs. Addition/Renovation:
    - CURIE does not insure new construction projects, therefore you will need to arrange separate cover for this activity
    - CURIE will provide property cover for existing buildings or structures undergoing renovations, additions or alterations having a total project cost of not more than $5,000,000 (including materials, supplies and labour). Universities will have to insure the liability associated with these types of projects under a separate cover

- Construction Site:
    - Assess the potential for damage to adjacent property or people (this should impact your decision as to limits of liability insurance purchased for the project)
    - What was prior use of land? Is this a greenfield site? Or brownfield site? Consider what potential pollutants may have entered the site.
    - What methods and type of construction will be used? Shoring, blasting, demolition? What is blasting contractor's expertise? Is surrounding area heavily populated or historic sites nearby which could be damaged by blasting?
    - Loss control and exposures associated with surrounding area? Is site open to public? Any polluting elements being brought onto site?
    - Site Security? Construction sites are an 'attractive nuisance" where people are naturally fascinated by the activities within and may venture inside despite common sense not to. Is the site secure to prevent any unwanted trespassers? Is this project the future home for controversial activities (Animal Husbandry; Level 3 Biohazard Lab)? Might be areas of protest during construction?
    - What natural features of site might affect project? Are the surroundings secure (vandalism/theft issue)
    - Review engineering/soil reports
    - Impact on existing pedestrian/ vehicular traffic around campus

- Timelines for completion
    - Timelines are often very tight but this should not mean the proper risk assessment and due diligence for safety, quality construction techniques, proper selection of labour and materials should be overruled by tight timelines
    - Consideration should also be given to delays in project start up or occupancy delays

    - Costs associated with these delays (direct costs– strikes, labour shortage, materials shortage, delivery, force majeure) (indirect costs– impact to academic term/ university strategic objectives) Project delays can be insured under a builders risk/course of construction policy

It is important that the Risk Manager evaluate the consequences of delay (to possible income-producing units/academic programs; parties that may occupy the building) and mitigate, reduce or insure these risks.

- Funding commitments
    - External funding commitments may have conditions regarding insurance and completion timelines
    - If the project is part of P3 ("public-private partnership") funding arrangement, there will be external stakeholders involved - the University risk manager should be consulted as to impact on university's risk tolerance and insurance coverage
    - Items such as soft costs (financing costs, legal/accounting expenses) can be included as a sub-limit under a Builder's Risk/Course of Construction

INSURANCE

1) Design, Procure and Manage/Monitor Program

Design - Typical Insurance Coverages

- Builder's Risk/Course of Construction (covers property-related exposures to structure being built and materials used in the course of construction)
- Equipment Breakdown (covers HVAC equipment - including elevators, transformers, etc. - prior to substantial completion of project)
- Wrap-up Liability (covers liability for loss/damage to third parties on the part of those participating on the construction project; covers owner, project manager, contractors, subs, architects, engineers, etc.)
- Professional/Errors and Omissions Liability *(Note: faulty design issues have often resulted in CURIE-related property claims in newly acquired buildings)*

Design - Other Insurance Coverages

- Optional Coverages (Environmental, Marine)
- Contractor required coverages – CGL (non-project exposures), Auto, Contractor Equipment
- Subcontractor Default Insurance – (See Page 11 for more details)

Programs
CCIP – Contractor Controlled Insurance Program
OCIP – Owner Controlled Insurance Program

Advantages and Disadvantages of CCIP and OCIP

- CCIP advantage – contractor manages program and bears risk
- CCIP disadvantage – owner has no control over claims and coverage requirements; risk manager must review policy wordings to ensure contractor's limits, sub limits, exclusions are acceptable

- OCIP advantage - can allow for *dedicated* project specific limits; manuscript policies; control of claims; flexibility in coverage, reduced premiums
- OCIP disadvantage - additional administrative burden can require a substantial level of effort if not managed competently; additional accounting effort may be required for extracting insurance costs from contractor and subcontractor bids and change orders; owner responsibility is increased for the implementation of safety and loss control programs.

CCIP vs. OCIP: Which to choose?
Risk Managers should understand institutional preference and experience with one or both type of programs to determine which suits their needs. Other considerations include:

- Type of construction project (large capital project vs. simple construction/renovation project)
- Project management (design build vs. stipulated lump sum)
- Resources available to manage insurance program
- Concurrent projects under one overall funding arrangement

- If there are large capital projects on the go at the same time, insurers will look at premium generation and offer manuscript policies with longer coverage (e.g., completed operations for 3 years as opposed to 2 years); removal of exclusions (existing structure)
- Time sensitivity of project
- Situations where University could be considered Constructor at Risk (multiple contractors working on same project)

2) Procure - Application for Insurance

Risk Managers need as much information as possible to allow insurance underwriter to properly assess the risk.

Items such as:

- Project Description; Project Budget; Construction Details (exterior walls, # of floors, roof type, framing type) Sprinklers; Building Area

Such items can be difficult to obtain when plans are being drawn up while application process is underway. However, underwriters will be more comfortable with less details if your University has a proven track record of (past projects, good loss history; responsive to questions, etc.)

3) Manage/Monitor

Claims

- Option: use your CURIE property adjuster as the control adjuster for your construction-related claims; advantage is the firm will be familiar with CURIE and construction policies
- OCIP advantage: owner controls claim not contractor; owner is first payee; contractor can continue work and not be delayed with claims handling
- OCIP disadvantage: extra work involved and need some understanding of how construction policies work
- Risk Managers must ensure that they are active participant in any CCIP-related claim to ensure the University's interests are being looked after
- Loss reporting – Risk Managers should develop loss reporting protocol with the project manager
- Review the Health and Safety policies and procedures of the project manager; this will give you a good indication if the project will be managed in a professional manner. Identify in your University procurement documentation the need for project managers to comply with the University's H&S policies and provide their own H&S policies along with the appropriate workers compensation documentation. Review all policies and documents and work with project manager to resolve any concerns you may have with them early in the project.

Contracts

CCDC (Canadian Construction Documents Committee) forms are industry standard

- CCDC 2 is the standard form but all CCDC documents are written in contractor's favour, risk manager should be familiar with the document to understand the University's insurance coverage is protected.

- If project is insured OCIP, risk manager must amend with appropriate insurance terms and conditions (owner's coverage; contractor's coverage), university's broker can assist in the review
- Construction insurance contracts state that coverage terminates at "substantial completion"; architects issue substantial performance certificates (allows for release of holdback but the building is not complete); insist on coverage which terminates when the building is ready

ADDITIONAL ADVICE

If project is insured under an OCIP, arrange for the contractors to provide an insurance deduction worksheet to help quantify potential project costs savings. Contractors must exclude these costs from the project budgets.

If an existing building is going through a major renovation/addition and is insured under an OCIP builder's risk policy, you may want to consider taking the building off your CURIE values. You will avoid double coverage and related complications as to which policy (CURIE or Construction) will insure loss during construction period and you will save some premium on your next CURIE renewal.

CURIE will sue responsible parties for losses. If there is a wrap-up policy in place, CURIE will subrogate against that policy for damages to CURIE insured property with minimal impact to CURIE's own program

Risk Management means being involved in the whole construction process. As the risk manager, you offer a different perspective outside of the traditional University parties involved in a capital project. You know your University's risks which can be impacted on capital projects, offer your input when possible.

What if a non-University project occurs on your campus? Risk-manage a 3rd party construction on your property as if it were your own.

Use the CURIE and broker resources available to you

- CURIE offers engineering reviews, water supply surveys and new building inspections free of charge to its members
- Your fellow CURIE members are accessible either directly or via the list serve
- Brokers have a wealth of experience. Large firms have dedicated construction teams which can assist in contract review, design and implementation of insurance programs and with claims management

The University may wish to consider an RFP for broker services for construction; especially for larger, multi-site capital projects where an OCIP is preferred approach. This process can provide access to knowledgeable, connected construction professionals which will be an invaluable partner.

Understand how construction policies dovetail with your operational insurance program - and when coverage (should or will) move from one to the other

COC policy to CURIE property policy
Construction Boiler to Operational Boiler
Wrap-up Liability to Comprehensive General Liability

BONDING

Bonds are a Surety Product. This is not an insurance policy and it is a three-party contract between the Surety, the Owner and the Contractor. The coverage is limited to the stated value on the bond, which is generally 50% of the contract value in Canada. It is interesting to note that an early default by a contractor, especially mechanical or electrical contractors, can cost 100% of the original contract value or more. What this means is that a 50% bond will often not be enough to cover all the costs associated with a default. Bonds will reimburse for hard costs incurred in case of a default.

In order to make a claim under a bond, the Surety Company must agree that a default has occurred. This can sometimes take additional time, meaning that work is not progressing on the scope of the defaulted contractor.

Types of Bonds:

1. Bid Bond*

A bond that ensures the winning bidder will enter into a contract with the Owner; usually issued for 10% of the Contract value. There is no charge for this bond, as long as Performance Bonding is required for the Contract.

2. Consent of Surety*

A letter from the Surety Company indicating that the Contractor will obtain the required final bonds if they are the successful bidder. There is no charge for this letter, as long as bonds are required by the Contract.

*(Note: Bonds are made out to the University and project name. They are valid for either 60 days, 90 days or for longer periods of time as required. All of the proper signatures must be on these bonds. Bid bonds come in several different forms so the specific form must be identified in the University's Procurement documents [RFx]).

3. Performance Bond**

A bond that guarantees the Performance of the Contract to the Owner. The standard performance bond has a 1-year warranty period, however, extended warranty periods can be obtained for a 2-year or sometimes even a 5-year warranty for a cost. Rates generally vary based on the following and apply to the total project value:

- construction period
- warranty period
- Design-Build Contract

** (Note: This type of bond can also be requested for non-construction type requests, such as Building Cleaning Services.)

4. Labour & Materials Payment Bond

A bond that guarantees that the suppliers and subtrades of the Contractor are being paid. The standard bond only allows for claims from subcontractors and suppliers directly contracted by the Contractor. Some Owners will require that claims from any sub-subcontractors and sub-suppliers on the project be allowed as well under a "Broad Form" bond.

This bond can only be issued in conjunction with a Performance Bond.

Rates vary based on Construction period and requirements for Broad Form and apply to the entire project value.

SUBCONTRACTOR DEFAULT INSURANCE

Subguard*, or Subcontractor Default Insurance, in contrast, is an insurance product where the parties are the Insurer and the Contractor. Subguard will only cover the subcontractors to the Contractor, so as an Owner, you would still want some form of security from your General Contractor/Construction Manager at Risk.

There are many benefits of Subguard, the main one being that the amount of coverage is not limited to 50% or 100% of the contract value, but instead to the limits of insurance. For an established general contractor, those limits of insurance would be well in excess of most subcontract values. Secondly, the Contractor can put a subcontractor in default and immediately start the process of hiring replacement contractors to ensure that the work keeps progressing. Thirdly, Subguard does not charge for longer warranty periods, as it is included in the policy based on the statute of limitations or the contract wording.

It would be prudent to ask for a copy of the Subguard policy wording from your general contractor as there may be some differences in coverage provided.

*Subguard is owned by Zurich Insurance Company