Anatomy of a Large Architectural Claim

Following is the chronicle of a large architectural claim from CNA’s claims files. How did our “Seven Key Risk Factors” (client, project, consultants, contractor, fee, other parties, and your firm) influence this claim?

An architect was retained to provide architectural and engineering services for a sports facility in a northern state. The prime architect then retained a local architect and structural engineer. The design team provided a performance specification for a standing seam metal roof.

What factors should have been considered at this point? Large public-use centers can result in severe claims. Did the design team have sufficient experience with this project type? Was this the right design for such a structure?

About three years after substantial completion, a section of the dome blew off during a windstorm. The roof was repaired for $250,000. The sports dome's property insurer paid for the repairs and two years later filed suit against the prime architect. The city filed their own lawsuit, claiming $5,000 in damages, which was the amount of their deductible, and other unspecified damages. Both suits alleged negligence, breach of contract, and breach of warranty. A reservation of rights was issued on the breach of warranty claim since professional liability insurance does not provide coverage for express warranties and guarantees.

Shortly after the claims were filed and while warranty work was being performed on the dome, it was determined that there were structural problems with the standing seam roof. In addition, the city identified problems with the parapet walls, the placement of the vapor barrier below the roof, and the attachment of the standing seam metal roof. The city also raised concerns about snow accumulation and resulting avalanches. The city subsequently increased the amount of their lawsuit to $8 million [Editor’s Note: The city's claim would later be reduced to $6.7 million, including damages, once more information about repairs were available.], which included the cost of replacing the skin of the roof and installing a new underlayment above the existing insulation. Damages also included $1 million to deal with the snow load issues. The contractors and the roof manufacturer were added as co-defendants.

The design team pointed to the roof manufacturer as having primary responsibility for the problems arising out of the standing seam metal roof, including the wind damage, failure of the bolts attaching the roof to the structural deck, and failure of the bottom supporting purlins of the roof.

What factors should have been considered at this point? Did the design team’s performance specifications affect this claim? Should other designs or materials have been considered?

The design team also argued that the structural overload that occurred on the southeast corner of the dome resulted from unusual and unanticipated weather conditions instead of design error. The roof was overloaded by a 500-year snow event that would not have been considered in design.

What factors should have been considered at this point? Should the design team have given greater consideration to the geographic and weather considerations that could have increased the risks on this project?

Although there were many defenses that would be raised during negotiation, the design team still faced exposure for the claims relating to the vapor barrier and parapet walls, faulty on-site observation of the flashing and roof
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detail, avalanching snow and snow management issues, and failure to detect contractor errors in the attachment of the roof. The design team was involved in all phases of the project, including design, shop drawing review, and construction observation. The contractors and the roof manufacturer faced substantial liability for the condition of the roof and improper installation.

What factors should have been considered at this point? Did the design team know in advance the identity of the contractor? Did the contractor have sufficient experience with this project type and with this type of design?

A mediation session was held and although it resolved the $250,000 subrogation claim from the sports dome’s property insurer, the mediation did not result in a settlement of the city's claim. The subrogation claim settled for $120,000, which included $35,000 from the design team.

The city appeared at the mediation with 15 representatives, including city council members and five expert witnesses. The mediator noted that the size of the city's delegation made negotiating a difficult task.

What factors should have been considered at this point? Public entity clients provide a unique set of risks. Refer to our online claims study, Claims Involving Public Entities, at www.PlanetRiskManagement.com/claims.html.

The city then decided that they would pursue a complete replacement of the roof structure and installation of snow fences, ground level roofs, and landscaping to address avalanching. The cost of this option was $5 million. In addition, the city intended to recover their out-of-pocket expenses of $1.7 million, bringing their total claim to $6.7 million.

The defendants attempted to convince the city that they might recover $3.5 to $4 million, but that a realistic recovery was $2.5 million. The city made a demand of $5 million that was countered by an offer of $1.7 million, which included $1 million from the design team. The city indicated that the public would never accept a settlement for less than the cost of the planned repairs. The city said that they would rather accept a judge’s decision for substantially less than voluntarily agree to compromise its claims for less than $5 million.

After mediation, additional investigation and discovery took place to fully evaluate potential legal defenses, evaluate responsibility for the damages incurred, and to respond to the city’s revised estimate of claimed damages. Early resolution of the claim appeared doubtful, especially considering the refusal of the contractors to realistically evaluate the case.

The design team planned to argue that $2 to $2.5 million of the city’s replacement costs amounted to betterments or improvements. The design team would also raise some legal defenses that would not be absolute defenses, but would improve their negotiating position. One of these defenses was based on the contractual statute of limitations in AIA Document B141, Standard Form of Agreement Between Owner and Architect.

What factors should have been considered at this point? Using standard form agreements such as those developed by The American Institute of Architects (AIA) and the Engineers Joint Contract Documents Committee (EJCDC) may help reduce risks, even if your usage is to compare them to a client-drafted agreement.

The design team became the target of the city’s claims. The city contended that the entire roof needed to be removed because the original design failed to include a protective waterproof underlayment beneath the standing seam roof. The city also alleged that the design team:

- improperly placed the vapor barrier beneath the roof;
- failed to specify the use of a waterproof gypsum board beneath the roof; and
- failed to properly accommodate in the design the collection of snow and snow avalanching resulting from the configuration of the roof.

The city also pointed to problems with installation and improper attachment of the roof. Specifically, the city
argued that the contractors failed to:

- supply a custom-designed roof as required by the plans and specifications;
- properly place steel purlins and attachments as required to secure the roof to the metal structure;
- provide sufficient structural capacity to accommodate snow loads; and
- properly install flashing at the top and bottom portions of the standing seam metal roof.

The city also argued that the design team was jointly liable for its failure to identify or prevent these defects. What factors should have been considered at this point? Did the design team adequately provide construction contract administration services? Did their file documentation adequately communicate what they observed during site visits and when these observations were made?

The contractors and suppliers argued that the alleged installation errors did not cause damages and that the entire roof replacement resulted from the alleged design errors. What factors should have been considered at this point? Did the prime architect retain qualified consultants, such as the structural engineer and other consultants?

The attorney for the design team estimated that the costs to the design team to prepare this case for trial would be approximately $500,000. The following experts would be needed: a structural expert; a roofing expert; a contractor/estimator to identify realistic repair costs; and a consultant to perform a detailed survey of site conditions to preserve evidence that might have been necessary as the trial proceeded. The design team decided to attempt a separate settlement with the city.

Later that year, the design team met with the city. The city's demand of the design team was $4 million in damages. The design team countered with an offer of $1.8 million. The city eventually came back with a demand of $3,350,000, which was 50 percent of their original alleged damages of $6.7 million. The design team argued that at $6.7 million they were paying for betterment and attorneys’ fees, which were not recoverable. The design team pointed out that their negligence was no more than 40 percent and offered $2 million (40 percent of the $5 million deemed necessary to repair the roof). The city responded with a demand of $3 million. The design team finally settled the city’s claim for $2.4 million. Legal fees, expert expenses, and the policyholder’s deductible added $1,270,000 to the cost, bringing the total cost for this claim to $2,670,000.

Did the design team adequately assess their risks prior to taking on this project? Could they have predicted a claim of this magnitude in advance? What could they have done differently? Analyzing new projects using our risk management matrix, Identifying, Assessing and Managing Project Risks, provides a systematic approach to analyzing and assessing risks. This analysis can help reduce risks on new projects. Policyholders can download a copy of the matrix at www.PlanetRiskManagement.com/pracmgmt.html.