As the inevitability of the rise in sea levels becomes apparent, design professionals need to know about resilient buildings. While many design firms will incorporate the principles of resilient design into their practices in the coming decade, doing so is not part of today's standard of care for the design of the built environment.

Resilient design recommendations are in response to studies that address the cost of risk in relation to buildings and infrastructure projects. Climate change, severe weather events, and the global rise in sea levels all present significant design challenges.

**A RESILIENT DESIGN IS BASED ON THE OWNER'S OR GOVERNMENT'S REQUIREMENTS**

Many clients and governments understand the growing need to design resilient infrastructure and building projects. Some owners see resilient designs as protecting their investments and the health and safety of building users against unexpected or immeasurable changes in the building's site and environment.

Some owners are hiring consultants to prepare feasibility studies that consider which design alternatives are most appropriate for a range of possible future climate changes, including rates of rising sea levels. The feasibility studies then use risk/sensitivity analysis to quantify the benefits and costs of design alternatives. These design alternatives usually include ones based on the observed historic trend in sea level changes and ones based on various possible accelerated rates of change.

**THE DESIGN PROFESSIONAL’S DUTY TO DESIGN FOR RESILIENCY**

**MANAGEMENT ADVISORY**

The language in a professional services agreement needs to reiterate that the design professional will meet existing codes during the design stage for the project. The analysis of the trade-offs between the increased costs of resiliency and the anticipated protection a resilient design might provide should be based on the owner's information and not the design professional's limited knowledge. And if the owner decides to increase the resiliency of a specific project by having the design professional address an anticipated sea level rise, the owner can then authorize the design professional to design the project based on a projected sea level designated by the owner or the owner's consultant.

All building codes and standard of care design practices are based on a historic group of statistics on which the design professional is allowed to rely. While governments and code developers may not be able to foresee catastrophic events, it is their duty to lead on the issue of resilience in the construction of capital assets, not the design professional's duty.

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**CONTRACT LANGUAGE SHOULD CLEARLY INDICATE THE SCOPE OF SERVICES**

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**CLIENT AND THIRD-PARTY EXPOSURES SHOULD BE MANAGED**

A design professional can address the possibility of client or third-party claims related to adverse environmental changes in many ways, including these:

- A statement that the design professional will design in compliance with existing codes and regulations
in place and applicable to the design services at the time the design is prepared.

- The inclusion of a force majeure clause (a provision of contract law) that includes disruptive climate events as being unforeseeable at the time the contract for services is negotiated.

- The addition of a specific waiver of consequential damages for disruptive climate events that are not identified in the contract as needing to be addressed by the design professional.

- A limitation of the firm’s liability to the owner for changes in the environment and site that exceed existing and applicable codes and are not identified at the time of the design as design parameters.

- A contractual “informed consent” provision that shows the owner understands that the design professional cannot anticipate changes in the project’s site or environment unless the owner specifically has those possible changes analyzed by a consultant and contractually requires that the changes be considered during the design stage of the project.

- A contractual recognition by the owner that the design professional has a right to rely on the information provided through the owner by the owner’s consultant.

- Acknowledgement in the contract that the services are provided solely for the owner’s benefit and that no third party is granted the right to rely on the design services.

As with every project, communication with the owner on the duties and limitations of the design professional is essential. That communication should be documented in the contract to show mutual understanding of the scope of services.

For more information about the standard of care and how it affects design services, please see our Management Advisory, “Standard of Care: Avoiding an Unattainable Obligation,” at www.Schinnerer.com/AE/Pages/Management-Advisories.aspx.

Visit www.Schinnerer.com/AEriskmanagement for more information or contact us at vos.RMeducation@Schinnerer.com.