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Sustainable Renovation of Cultural Buildings Case Study: Red Bay National Historic Site, Canada

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Abstract : Sustainable renovations to cultural buildings and sites require a high level of competency in the sometimes conflicting areas of social/historical demands, environmental concerns, and the programmatic and technical requirements of the project. A detailed analysis of the existing site, building and client program are critical to reveal both challenges and opportunities. This forms the starting point for the design process – empirical explorations that search for a balanced and inspired architectural solution to the project. The Red Bay National Historic Site on the Labrador Coast of eastern Canada is a challenging project to explore and resolve these ideas. Originally the site of a 16th century whaling station occupied by Basque sailors from France and Spain, visitors now experience this history at the interpretive center, along with the unique geography, climate, local culture and vernacular architecture of the area. Working with our client, Parks Canada, the project called for significant alterations and expansion to the existing facility due to an increase in the number of annual visitors. Sustainable aspects of the design are focused on sensitive site development, passive energy strategies such as building orientation and building envelope efficiency, active renewable energy systems, carefully considered material selections, water efficiency, and interiors that respond to human comfort and a unique visitor experience.

Keywords : sustainability, renovations and expansion, cultural project, architectural design, green building
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