

Urban Regeneration through Remediation and Landscape Architecture in the 6th Ward of New Orleans

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Abstract

This proposal seeks BSA funding for a research-design-build project conceived to initiate urban regeneration through sustainable architectural and landscape solutions to site remediation in the 6th Ward of New Orleans, an area with unhealthy levels of ground toxicity as a consequence of Hurricane Katrina. The project will involve a multidisciplinary Boston-based academic team (students and faculty with architecture, landscape and environmental engineering backgrounds) and local agencies in a collaborative research that is active — research conducted through designing, planting, testing, and building on the site. This ongoing laboratory will double as a community education center and public remediation garden on a one-block site in the blighted 6th Ward. As such, the research is unique in the country (we will also be among the first two schools to be in New Orleans, and the first two address this issue on site), tailored to the specific remediation process and needs of this particular neighborhood. However, the findings will be valuable to other areas of New Orleans and beyond. Through cross-disciplinary design (architecture, urban space, and landscape) the ongoing discoveries of the research will be disseminated to a community that is desperately seeking design leadership, evidence of active work, and training in order to recover and rebuild its neighborhood.

RESEARCH METHOD: The team will investigate how natural remediation methods — coupled with design research in landscape and architecture — can help regenerate an area of New Orleans while reducing toxicity levels in the soil. The research has a two-fold method: first to plant, harvest, and test the natural materials; second, to demonstrate, visualize, and disseminate the remediation techniques in an effort to initiate urban regeneration. The group will plant Indian mustard (brassica juncea), poplar (populus tremuloides), fern (athyrium yokoscense), annual rye grass, perennial rye grass, and various fungi on separate test plots and compare them to a control group. Over a series of iterations, the team will harvest the plants and fungi, test toxicity levels, analyze the data

and distribute the information to the local community. This laboratory will create an ongoing and evolving public landscape exhibition — a remediation garden — which will provide safe paths and places to observe the plants. It will teach residents how to implement techniques of bioremediation and phytoremediation on their own. The resultant Environmental Lab and Education Center will be a place to test the processes, visualize the experiments, and disseminate information in order to help rebuild the community.