

Chelsea Heights Neighborhood Plan

Task 1.0 Conceptual Design and Surveying

- a. Review 2008 Master Plan, previously adopted redevelopment plans or urban renewal plans and other relevant planning studies, including recommendations of the SRPR, Atlantic City All Hazards Mitigation Plan, FEMA HAZUS Model results, etc., to develop a detailed profile of the areas of vulnerability. We propose to utilize LiDAR Mobile 3D laser surveying technology to obtain detailed topographic information, inclusive of all vertical features as needed to develop conceptual design plans for neighborhood improvements. LiDAR Mobile Mapping Systems (MMS) offer many benefits for acquiring very accurate and precise field survey and geo-referenced 3D digital data. One of the biggest benefits for LiDAR mobile mapping is the full topographic information that is collected from the safety of moving vehicle that is operating at the posted speed limits regardless of daylight. The speed and efficiency of collecting large volumes of data drastically reduces timelines on most any large scale project. For example, an efficient conventional two person survey field crew is able to collect an average of 0.25 – 1 mile of topographical survey data per day in rural through urban environments. In comparison, the Maser Consulting LiDAR MMS is able to generate anywhere from one to sixty miles of complete topographical survey information per day in rural through urban environments which drastically reduces the time needed for the field data collection.



Figure 1: Example of image generated by a data point cloud from a Mobile LiDAR scan illustrating the level of detail of digital data collected, including recognition of painted lines, trees, etc. This technology is ideal for use in hazard mitigation planning, including a far more accurate analysis of wave formation during storm surges.

- b. We will prepare a capital improvement plan for recommended infrastructure projects as determined from the Concept Plan for Neighborhood Improvements in “a” above.
DELIVERABLE – 1. Chelsea Heights Topographic Base Map; 2. Concept Plan for Neighborhood Improvements; 3. Capital Improvement Plan for Infrastructure Projects

Task 2.0 Design Standards

Based on the Concept Plan for Neighborhood Improvements developed in Task 1.0, we will develop design standards for best practices for resiliency. In addition to the green infrastructure recommendations, we will evaluate the use of sustainable Best Practices for stormwater management



such as are found in the LEED Rating Systems such as LEED for New Construction and Major Renovations and LEED for Neighborhood Development for use in rehabilitation and redevelopment projects within Chelsea Heights.



Figure 2: Bing.com bird's eye aerial showing the geographic relationship between Bader Field and the Chelsea Heights Neighborhood. The redevelopment of Bader Field should be designed to provide maximum protection and hazard mitigation for Chelsea Heights.