7.0 VISUALIZATION STUDY

The superstructure of the new Indian River Inlet Bridge would rise some 319 feet above the water (Figure 41). At this height the structure would be visible from miles around, particularly across the great expanse of Indian River Bay. Consequently, the study area was defined to include a five-mile radius from the proposed bridge site.

Federal regulations recognize that effects on historic properties may be visual, as well as physical, atmospheric, or audible, in nature. According to the criteria of adverse effect, adverse effects include a "change....of physical features within the property's setting that contribute to its historic significance" or the "introduction of visual....elements that diminish the integrity of the property's significant historic features" (36 CFR Part 800.5 [a] [2] [iv] and [v]).

Technical guidelines provided by DE SHPO identify two types of visual effects: aesthetic effects and obstructive effects. An aesthetic effect occurs when there is an effect on the perceived beauty of a place or structure. An obstructive effect occurs when the proposed project obstructs any part of a historically significant property or scenic view from the historic property (DE SHPO 2003).

According to the DE SHPO guidelines, an adverse aesthetic effect on a historic property impairs its character or quality, thus causing a diminution of one's enjoyment and appreciation of it. An adverse aesthetic effect on a landscape substantially diminishes existing visual aesthetics through 1) elimination of open space or a scenic view, or 2) introduction of a visual element that is incompatible, out of scale, in great contrast, or out of character with the surrounding area. Determinations of aesthetic effects are based on a consideration of the historic property's significance and integrity, the visual features of the project location, the visual features of the historic property, and the visual compatibility of the undertaking (DE SHPO 2003).

An adverse obstructive effect on a historic property obstructs the property in whole or in part, causing a diminution of the property's historic character. An adverse obstructive effect on a landscape substantially blocks or intrudes upon a scenic view or introduces a visual element that would considerably detract from a scenic view. Determinations of obstructive effects are based on a consideration of the historic property's significance and integrity, the nature and quality of the view from the historic property, the extent of the obstruction, and the consequences of the obstruction. (DE SHPO 2003).

Based on the results of the GIS data collection, DE SHPO suggested that for purposes of the visual effects assessment, all mapped resources be treated collectively as historic properties. Generalizations would be extrapolated from an analysis of photographs/visualizations, taken from six, selected camera locations throughout the study area. The following discussion is based on these methodological assumptions.

7.1 CAMERA LOCATION 1

Camera location 1 is situated on the west side of southbound SR 1, approximately 1.8 miles north of the midpoint of the new bridge (Figure 42). From this location the new bridge would be visible along the SR 1 corridor to the south, but would appear small due to its relatively great distance from

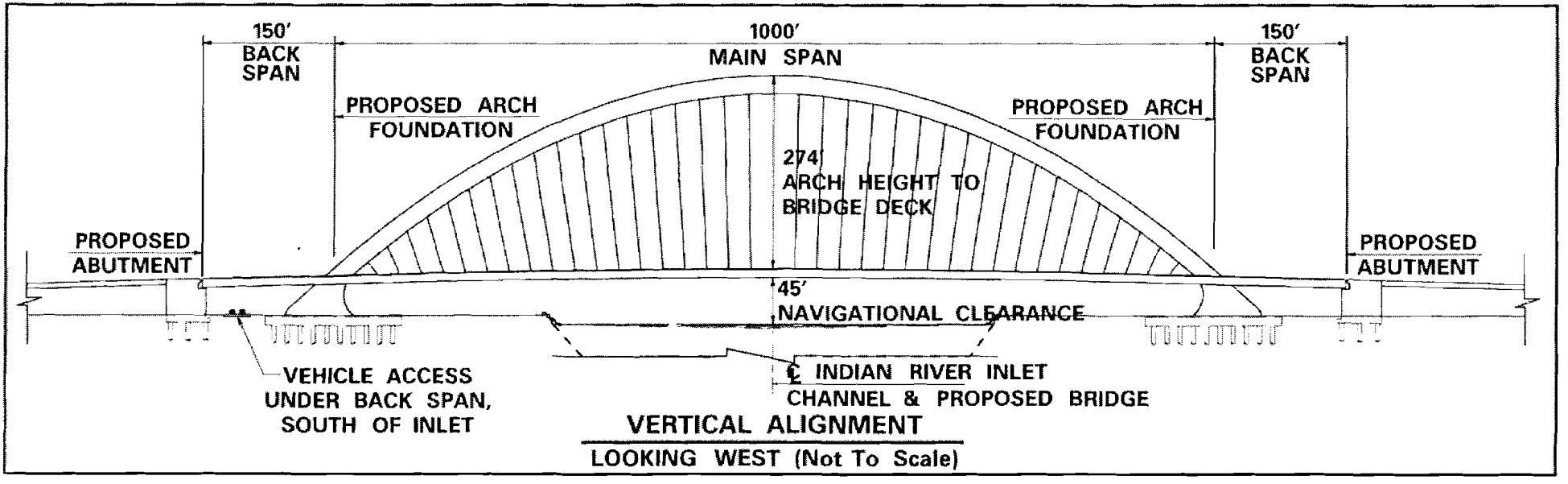
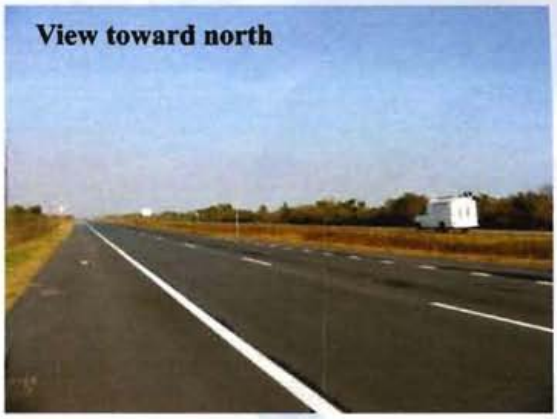


Figure 41. Elevation of proposed bridge (Figg Engineering Group 2003).

5-mile radius study area
Camera Location 1
Indian River Life Saving Service Station
Bridge
Architectural Resources
Camera Locations
0 0.5 1
Miles


View toward north

View toward

View toward west

View toward

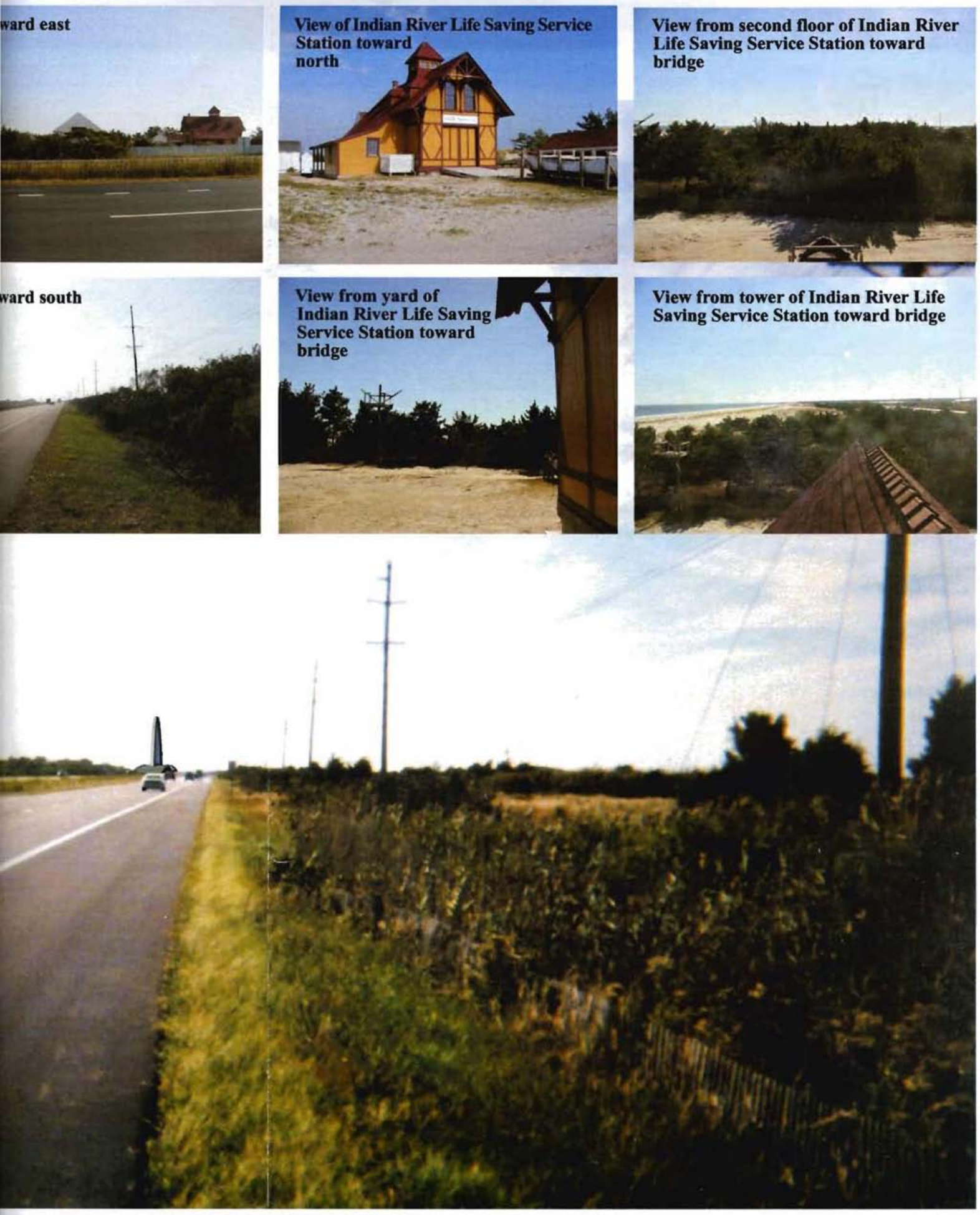


Figure 42. Visualization from camera location 1 (Figg Engineering Group 2003).

camera location 1 and the angle of view relative to this location. The new bridge would appear more as a short obelisk-like object, rising near the horizon, than a visually intrusive arched structure. Only a very small portion of the arched elevation would be visible from this location.

There is only one historic property in the vicinity of camera location 1, the NRHP-listed Indian River Life Saving Service Station (S-453) (Figure 42:insets). This property presently functions as a museum. The NRHP boundary is 164 feet east of camera location 1, and the station building is 358 feet southeast of this location. The distance between the historic property and the new bridge would be approximately same as the distance between camera location 1 and the new bridge. The angle of view, however, would change. While a very small portion of the arched elevation would be visible from camera location 1, little, if any, of the arched elevation is likely to be visible from the historic property.

Since the property functioned historically as a facility from which to observe vessels in distress, an unobstructed view from the property is a significant characteristic of it. The view toward the bridge would change, based on one's level of view (Figure 42:insets). From the ground level, the new bridge would not be visible due to the presence of intervening vegetation. From the second-story level of the station building, the same is likely to be true, although here the north end of the bridge superstructure may be partially visible through the tops of adjacent trees. In any event, the museum visitor is not likely to notice the bridge. From the tower level of the station building, the north end of the bridge superstructure would be visible above adjacent trees. However, the view is not likely to be noticed since the tower room is inaccessible to museum visitors.

While the view toward the historic property is an important aspect of one's enjoyment and appreciation of it (Figure 42:insets), the new bridge would be so far removed from it that it is very unlikely to obstruct views toward the property. Therefore, no aesthetic or obstructive effects are anticipated.

7.2 CAMERA LOCATION 2

Camera location 2 is situated near the Quillens Point boat ramp at the north end of Cedar Neck, approximately 1.5 miles south-southwest of the midpoint of the new bridge (Figure 43). The new bridge would be visible from this location due to its relatively close proximity. The full expanse of the arched superstructure would be suggested, albeit rather obliquely, due to the angle of view from this location.

There are no historic properties in the vicinity (Figure 43:insets). The nearest previously identified architectural resources (S-2564 and S-2569) are located some 0.3 mile to the south. Due to intervening vegetation, the new bridge would not be visible from these locations. However, the NRHP-eligible Fire Station Control Tower #2 (S-6049.2), located approximately 0.7 miles to the east, would be approximately the same distance from the new bridge as camera location 2. This historic property, situated between SR 1 and the ocean, is heavily overgrown with vegetation and inaccessible to the public.

Since the property functioned historically as an observation tower, the view from the property is a significant characteristic of it. Conversely, the view toward the property contributes to one's appreciation and enjoyment of it (Figure 43:insets). However, due to the presence of intervening

5-mile radius study area
Bridge
Camera Location 2
Fire Station Control Tower #2
Architectural Resources
Camera Locations
0 0.5 1
Miles

View toward north

View toward

View toward west

View toward

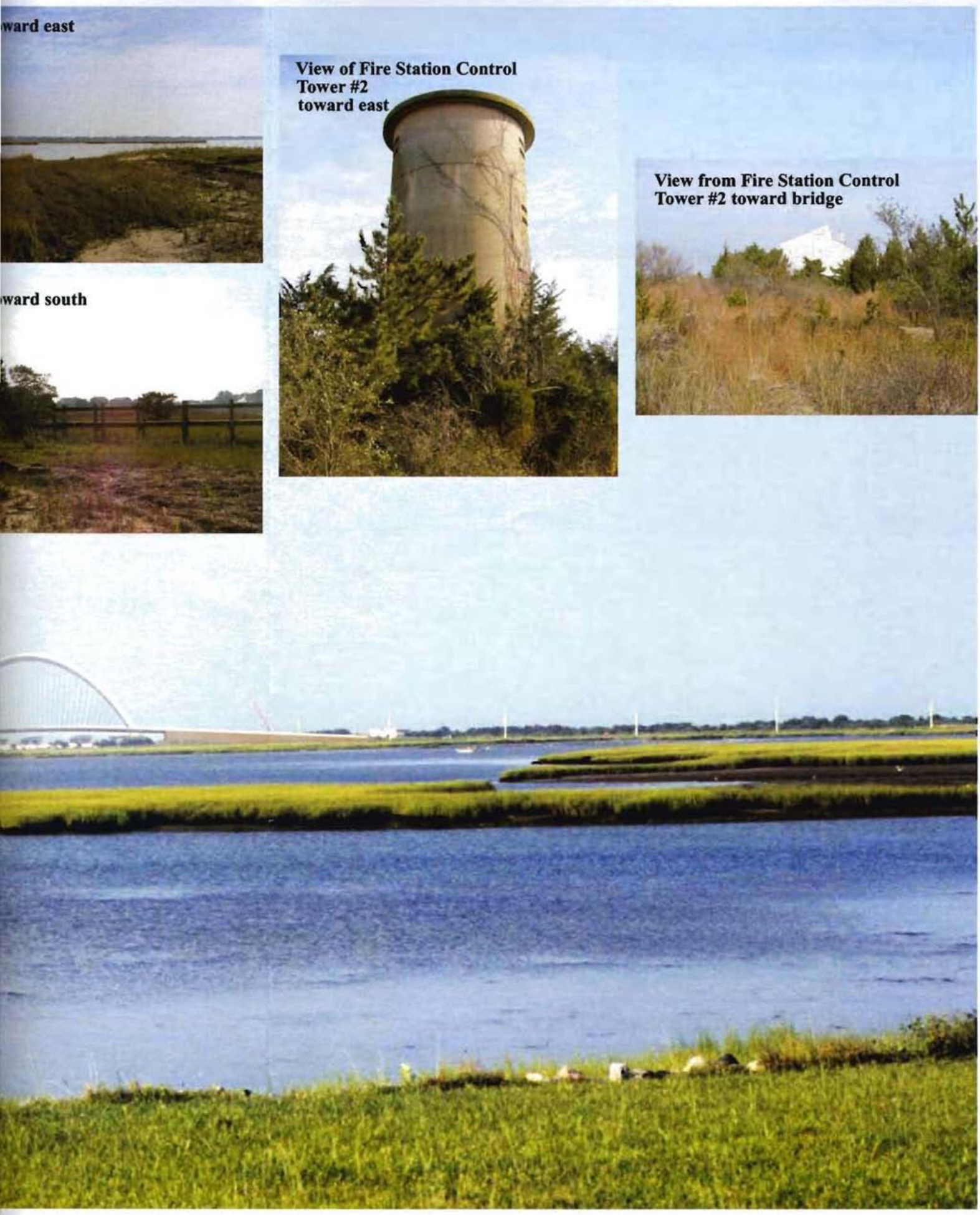


Figure 43. Visualization from camera location 2 (Figg Engineering Group 2003).

residential development and vegetation, the new bridge is not likely to be visible from the historic property Figure 43:insets), and the new bridge would be so far removed from the historic property that it is unlikely to obstruct views toward the property. Therefore, no aesthetic or obstructive effects are anticipated.

7.3 CAMERA LOCATION 3

Camera location 3 is situated along the west side of southbound SR 1, approximately 4.0 miles south of the midpoint of the new bridge (Figure 44). Views from location 3 to the east and west are heavily obstructed by vegetation, while views to the north and south are dominated by the highway. The view toward the new bridge from camera location 3 would be totally obscured by intervening vegetation and residential development. There are no architectural resources specifically at camera location 3. However the nearest previously identified resource, the NRHP-eligible Bethany Beach Training Site (S-9142) is situated approximately 0.25 miles southwest of the camera location, and the northernmost resources associated with the community of Bethany Beach (S-9923 and S-9925) are situated approximately 0.3 miles to the south (Figure 44:insets). In both cases, visual impact of the proposed new bridge will be even less than depicted at camera location 3.

7.4 CAMERA LOCATION 4

Camera location 4 is situated on the south shore of Indian River Bay, approximately 185 feet east-southeast of the boat ramp in Holts Landing State Park and approximately 3.6 miles west-southwest of the midpoint of the new bridge (Figure 45). In general the view from location 4 looking north and east provides a vista across Indian River Bay, with the low fringing marsh and tree lines visible to the east. Looking west and south the view depicts State Park land. The view from camera location 4 would be unobstructed, revealing the full arch of the bridge superstructure in elevation. However, its visual impact would be relatively small due to its distance from camera location 4. There are no previously recorded architectural resources in the vicinity (Figure 45:insets). There is however a previously recorded archeological site (7S-G-8) at the camera location. Previously recorded cultural resources are situated further south and west from this camera location, but these are approximately 1 mile further inland and are separated from the Bay by woodlands.

7.5 CAMERA LOCATION 5

Camera location 5 is situated on Long Neck at the north side of the Indian Landing marina inlet, approximately 2.1 miles northwest of the midpoint of the new bridge (Figure 46). Views east, west, and south from this location provide vistas of Indian River Bay, with Burton's Island intervening between the inlet and the camera location. The view to the north depicts a mobile home park. The view from camera location 5 would be somewhat obstructed by vegetation on Burton Island. However, from this oblique viewpoint, the top portion of the bridge superstructure would be visible above the trees. There are no previously recorded architectural resources in the vicinity (Figure 46:insets). A previously recorded prehistoric archeological site (7S-G-1, the Massey Landing site) is located a short distance northwest of the camera location. Previously recorded cultural resources situated further inland are unlikely to be visually impacted by the proposed bridge.

5-mile radius study area
Bridge
Camera Location 3
Architectural Resources
Camera Locations
0 0.5 1
Miles

View toward north

View toward

Approximate

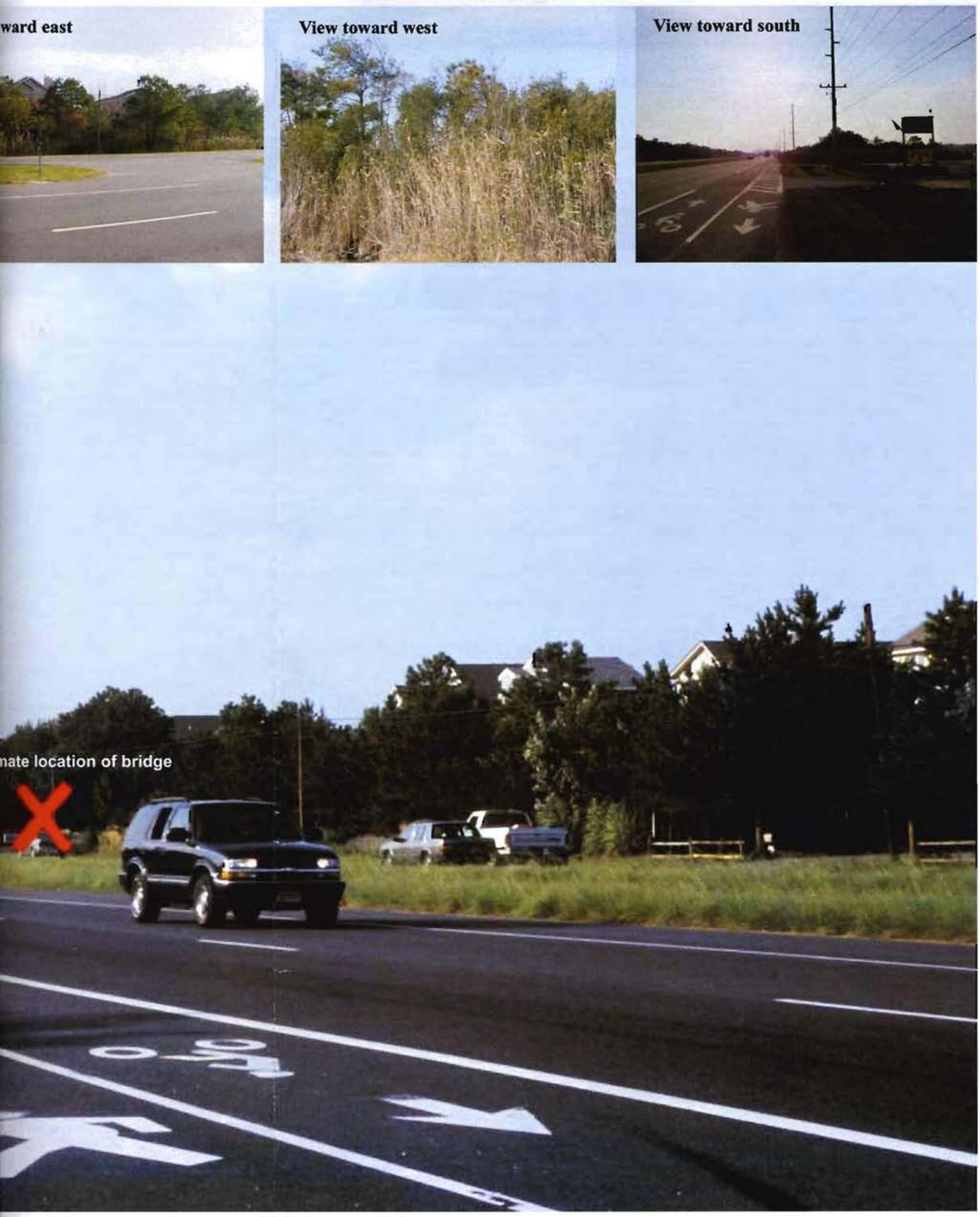


Figure 44. Visualization from camera location 3 (Figg Engineering Group 2003).

5-mile radius study area
Bridge
Camera Location 4
Architectural Resources
Camera Locations
0 0.5 1
Miles

View toward north

View toward

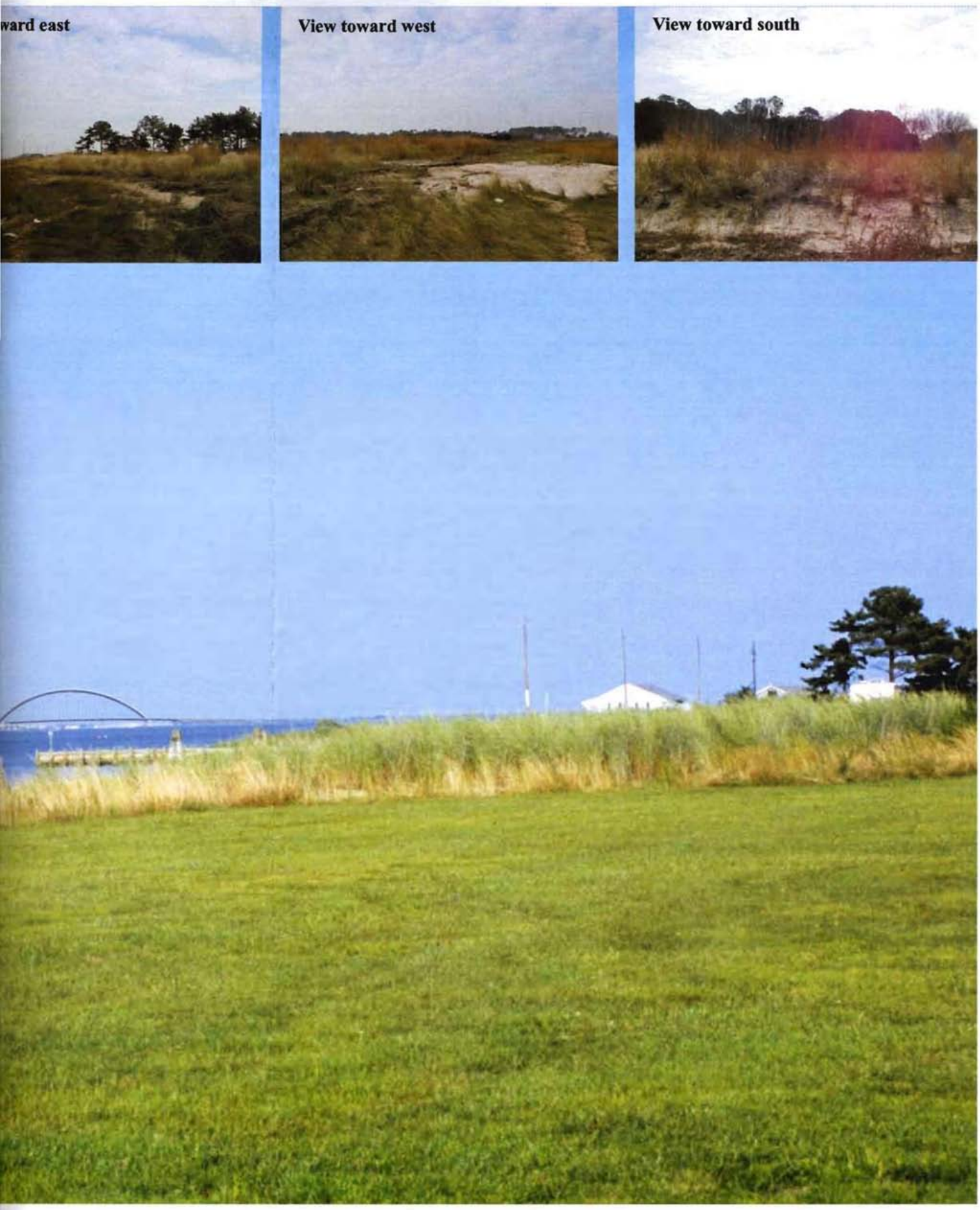


Figure 45. Visualization from camera location 4 (Figg Engineering Group 2003).

5-mile radius study area
Bridge
Camera
Location 5
Architectural Resources
Camera Locations
0 0.5 1
Miles

View toward north

View toward

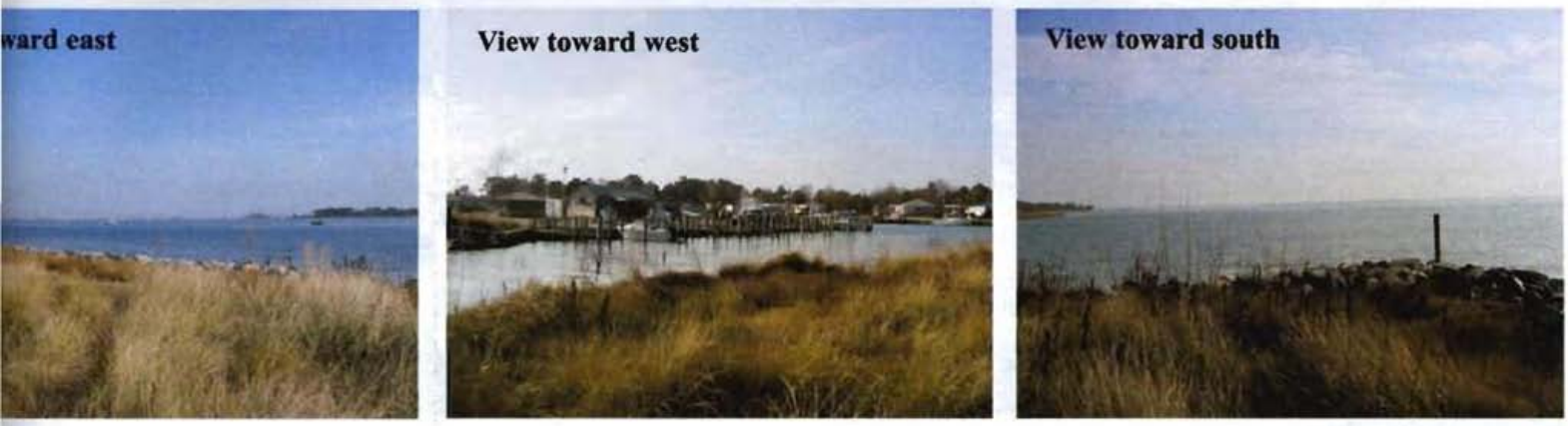


Figure 46. Visualization from camera location 5 (Figg Engineering Group 2003).

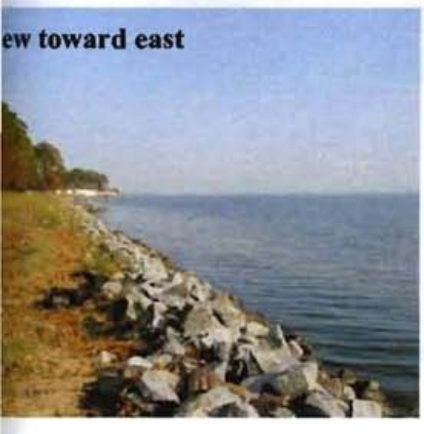
7.6 CAMERA LOCATION 6

Camera location 6 faces Indian River Bay from the south side of Long Neck at Pot Nets Cove, approximately 4.2 miles west-northwest of the midpoint of the new bridge (Figure 47). Views from this location to the south and east provide unobstructed vistas of the Indian River Bay and shoreline. Westward the view includes residential and seasonal housing along the bay front. To the north the view looks inland towards residential housing and woodland. The full elevation of the bridge superstructure would be visible from camera location 6. However, its visual impact would be relatively small due to its distance from the location. There are no architectural resources at the immediate point of camera location 6, however, White House Farm (S-202) is situated approximately 0.4 miles east of the location (Figure 47:insets). While not recorded as such in the SHPO site files, the White House Farm is considered NRHP eligible by the staff of the Delaware SHPO (Gwen Davis, personal communication, January 2004). It is likely that the visual impact on White House Farm would be similar to the view depicted from camera location 6.

5-mile radius study area
Bridge
Camera
Location 6
Architectural Resources
Camera Locations
0 0.5 1
Miles

View toward north

View to



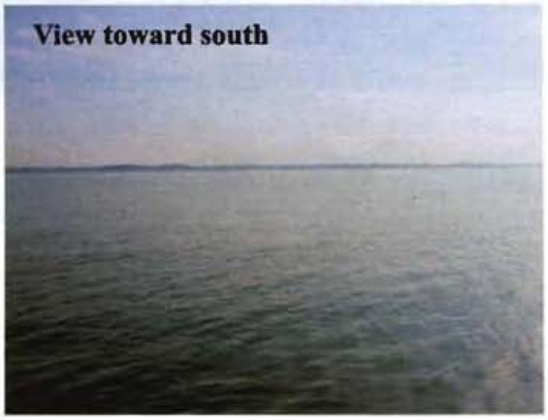


Figure 47. Visualization from camera location 6 (Figg Engineering Group 2003).