

5.1 INTRODUCTION

This Chapter identifies whether known archaeological or historical resources are present in the Caithness Long Island Energy Center II (CLI-II) project area and includes an assessment of the probable impacts on cultural resources due to the construction and operation of the proposed project. The methodology for assessing the potential impacts on cultural resources is in accordance with the standards and methods contained in *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*, published by the New York Archaeological Council in 1994. Consultation with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) is ongoing.

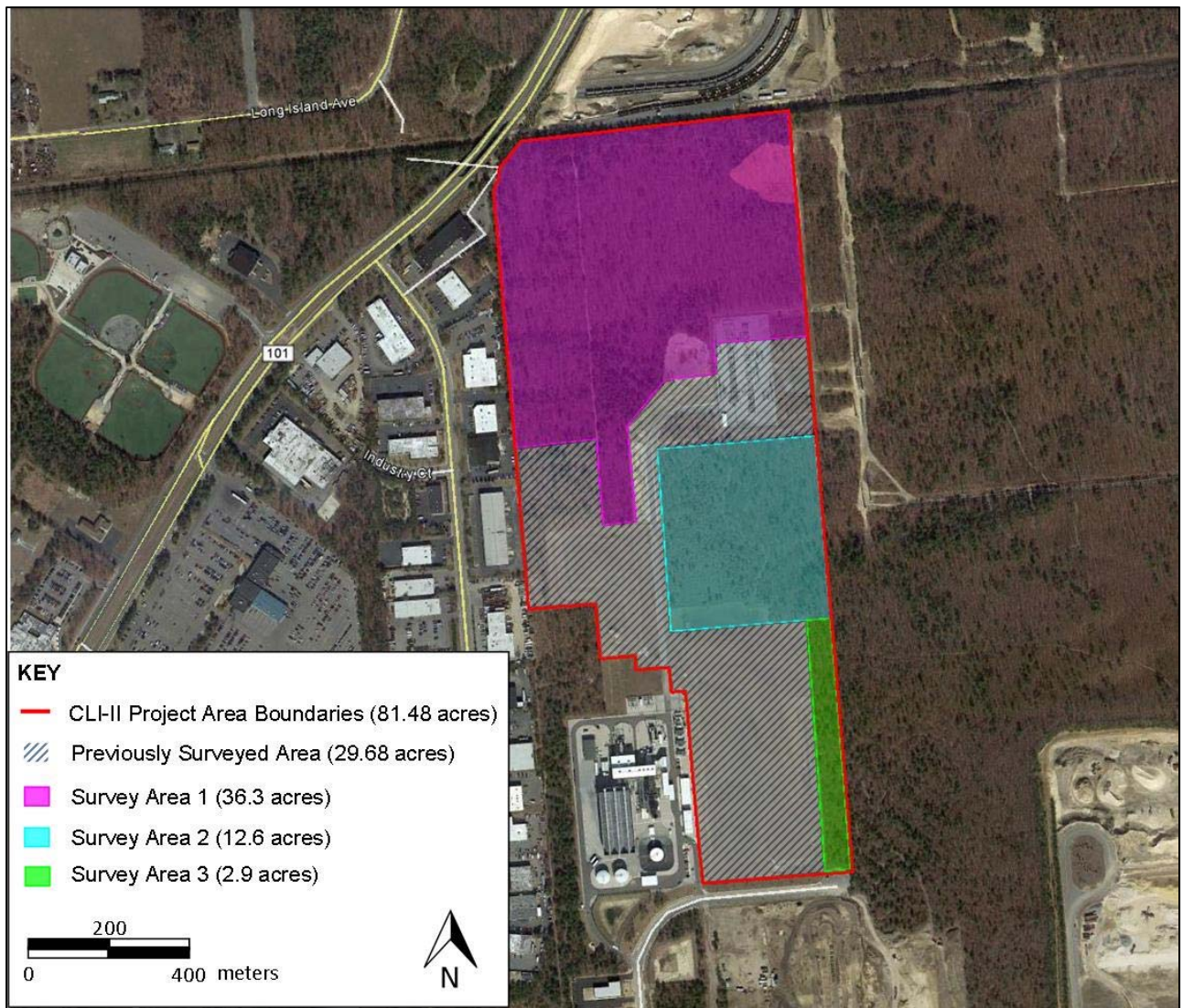
Two cultural resources surveys were previously conducted on portions of CLI-II property in 2002 and 2004 (OPRHP#s 02PR04839 and 04PR04367, respectively). No archaeological sites were recorded during these previous investigations, and no cultural material was recovered. OPRHP indicated at the outset of both previous site reviews that it had no concerns regarding potential impacts to historic architectural resources. As a result of the most recent prior survey, OPRHP recommended that additional archaeological study would be required on the remainder of the overall CLI-II parcel before any other work was carried out. In a letter dated October 18, 2013, the OPRHP reiterated that historic architectural investigations would not be required for the CLI-II Project (see Appendix C).

The archaeological survey reported herein was conducted in September 2013 on the remaining 51.8 acres of potential project impact areas not addressed by the previous surveys (Figure 5-1). As part of this study effort, a total of 816 shovel test pits (STPs) were excavated at 15 meter (m) intervals in three survey areas. All of the STPs were excavated at least 10 centimeters (cm) into sterile subsoil. No cultural material was recovered, and no further work was recommended. Under letter dated December 6, 2013, the OPRHP concurred with this recommendation (see Appendix C and D).

5.2 LEGISLATION

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended through 2000, requires that federal or federally permitted projects “take into account the effect of the undertaking on any district, site, building, structure or object that is included in or eligible for inclusion in the National Register [of Historic Places].” According to regulations implementing the NHPA, these cultural resources are called historic properties [36 CFR Part 800, Section 800.16 (l) 1] or designated historic properties [33 CFR Part 325, Appendix C 1(a)]. These cultural resources may be prehistoric (pre-European Contact Period) or historic (more than 50 years old), and include archaeological sites and historic structures and districts. Historic properties can also be generically termed significant cultural resources.

Potential project effects are assessed on historic properties, and occur when the undertaking’s effect(s) may alter the characteristics or use of the property that qualified



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**2013 ARCHAEOLOGICAL SURVEY
 AREAS**

**CAITHNESS LONG ISLAND
 ENERGY CENTER II
 TOWN OF BROOKHAVEN, NEW YORK**

FIGURE 5-1

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adverse effect on a historic property is found, measures to avoid, minimize or mitigate the effects would be sought, in consultation with the OPRHP.

5.3 AREA OF POTENTIAL EFFECT

An Area of Potential Effect (APE) for a project is defined as that geographic area or areas within which construction, operation or maintenance of a project may directly or indirectly cause alterations in the character or use of historic properties [36 CFR Part 800 Section 16(d)]. There are different types of potential effects a project may have on historic properties, including physical effects (such as ground disturbance or destruction), noise effects or visual effects of above ground structures on the setting of historic properties.

Based on OPRHP's acknowledgement that historic architectural investigations would not be required for the CLI-II Project, only the APE for archaeological resources was considered for the current project. The APE for archaeological resources includes those remaining areas that were not previously cleared by the OPRHP as part of the prior studies at the CLI-II parcels and may be subject to physical ground disturbance during construction, operation and maintenance associated with the proposed project.

5.4 ARCHAEOLOGICAL RESOURCES

5.4.1. METHODOLOGY

The cultural resource investigations involved three tasks: (1) preliminary research, including a literature, records, and map search; (2) field investigations; and (3) reporting.

A. LITERATURE AND RECORDS SEARCH

Before fieldwork began, a thorough records and literature search was conducted to identify previously recorded archaeological sites and/or historic properties in or near the present project site. Records examined include maps and reports on file at the OPRHP. Maps, reports, and other records were used to identify sites in close proximity to the project site. The Town of Brookhaven's files and records were examined for pertinent information, and an effort was made to secure historic maps of the area.

B. FIELD METHODS

Assessment

Initial assessment of the project area identified fairly uniform topography noting a few elevated landforms in the northern portion. Disturbed areas include the LIPA Sills Road Substation, a paved access road between the substation and the fenced portion of the existing Caithness Long Island Energy Center (CLIEC), as well as a gravel-lined stormwater management area. Several unpaved roads used primarily by hunters and all-terrain vehicle operators bisect the project area. Other disturbances consist of refuse dumping areas (e.g., furniture, miscellaneous metal items, tires, etc.), which are dispersed primarily in the northern portion along unpaved roads, and a 20 to 30-meter-wide power line corridor present to the east. In addition, spent shotgun shells, clay pigeon fragments, and a number of deer stands were observed throughout the area.

Subsurface Testing

The purpose of the fieldwork was to locate all archaeological resources in the project area that might be impacted by the proposed project. The field methodology was established based on guidelines set forth in the *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State* (New York Archaeological Council 1994). Subsurface testing was employed as appropriate based on the local topography and ground cover. Subsurface testing was conducted in all undisturbed areas that exhibited less than 80 percent ground surface visibility and less than 15 percent slope.

Subsurface testing involved the excavation of 40-cm-diameter shovel tests within natural strata to subsoil, or at least 10 cm into a sterile substratum. Soils were screened through ¼-in hardware cloth, and profiles were described using Munsell color charts and USDA texture classification schemes. All soil profiles were recorded on standardized field forms. In total, 816 shovel test pits (STPs) were excavated during the Phase I survey. Detailed notes on the survey methods, any sites or cultural material identified during the survey, and relevant environmental factors were recorded.

Reporting and Curation of Project Materials

A Phase IA/B report has been filed with the OPRHP for review. All written records, photographs, and project materials are currently being curated at the TRC Environmental Corporation office in Lanham, Maryland.

5.4.2. RESULTS

Background research for the previous 2002 and 2004 TRC Phase I cultural resources surveys included a literature review to identify previously recorded sites and/or historic properties in or near the project area. Records examined included maps and reports on file at the OPRHP and the Suffolk County Historical Society. Research indicated that no archaeological sites were previously recorded within the CLIEC project area at that time. Although no sites had been recorded within the project area, four prehistoric sites and 24 historic archaeological sites were previously recorded within a two-mile radius (Table 5-1).

On behalf of TRC, OPRHP Historic Preservation Specialist conducted an agency file research for this project and confirmed via email correspondence (dated September 18, 2013) that this information has remained unchanged – that there are no archaeological sites previously recorded within or adjacent to the project area and the 2002 and 2004 TRC Phase I surveys have been the only previous archaeological surveys conducted within or contiguous to the project area.

Table 5-1
Archaeological Sites within 2-Mile Radius of Project Area

| Site Number | Site Name | Age/Cultural Affiliation | Reference | Description |
|----------------------------|-----------------------------|--------------------------|-----------------|---|
| NYSM 8593 | | Prehistoric | NYSM | Floodplain adjacent to Carmans River, over 1.5 miles from the project site. |
| A10302.0524 | | Prehistoric | Johanneman 1980 | East of Carmans River. Two quartz tools, quartz and chert flakes, fire-cracked rock. |
| A10302.0040 | | Prehistoric | Johanneman 1980 | May be the same as NYSM 8593. One quartz tool tip, 10 quartz flakes, fire-cracked rock. |
| A10302.0030 A10302.0473 | | Prehistoric | Johanneman 1980 | East of Carmans River. Quartz and chert flakes and fire-cracked rock. |
| A10302.0010 | | 20th c. | Johanneman 1980 | Concrete foundation (subsurface) |
| A10302.0011 | White House site | Early 20th c. | Johanneman 1980 | Fieldstone foundation (subsurface) |
| A10302.0030 | Hart Lodge | Early 20th c. | Johanneman 1980 | Cement foundation |
| A10302.0465 | William Weeks House | 1854 | OPRHP | Visible octagonal foundation |
| A10302.0466 | Mordecai Homan House | 1807–early 20th c. | OPRHP | Visible foundation of house and outbuildings |
| A10302.0469 | William Fillinger House | Pre-1858 | Johanneman 1980 | Visible foundation, ceramics, glass |
| A10302.0472 | | Historic | Johanneman 1980 | Bottle glass and shell in STP |
| A10302.0509 | | Historic | Johanneman 1980 | Earthen/log dam remnants |
| A10302.0510 | Corduroy Road | Historic | Johanneman 1980 | East of Carmans River |
| A10302.0514 | | 19th c. | Johanneman 1980 | Foundation, ceramics, glass, nails |
| A10302.0515 | | Early 19th c. | Johanneman 1980 | Cemetery |
| A10302.0516 | | 19th c. | Johanneman 1980 | Dump |
| A10302.0517 | Homan-Smith-Gerard Saw Mill | Late 18th c. | Johanneman 1980 | Assigned a site number based on map documentation. |
| A10302.0518 A10302.0467 | Smith-Gerard Grist Mill | Late 18th c. | Johanneman 1980 | 1762 mill, replaced in 1865, destroyed in 1918. Visible ruins. |
| A10302.0519 | Homan-Gerard | Historic | Johanneman 1980 | Outbuildings |
| A10302.0520 | St. Andrews Cemetery | Early 19th c. | Johanneman 1980 | Cemetery |
| A10302.0521 | | Historic | Johanneman 1980 | Property mound |
| A10302.0523 | Homan Mill | Early 19th c. | Johanneman 1980 | Earth dam |
| A10302.0525 | Pheasant Pens | 20th c. | Johanneman 1980 | Visible concrete foundation |
| A10302.0526 | Swezey Mill Complex | 18th c. | Johanneman 1980 | Remains of an early mill |
| A10302.0527 | Homan Fulling Mill | 18th c. | Johanneman 1980 | Earthen dam, cellar feature |
| A10302.1559 | Swezey-Walters | mid-19th c. | OPRHP | Visible foundation, ceramics |
| A10302.1569 | Edwards site | Pre-1858 | OPRHP | Fieldstone foundation |
| A10302.1571 | Overton-Swezey House | Pre-1838 | OPRHP | Visible foundation |

As indicated, as part of the current licensing process a Phase IB archaeological survey was conducted in September 2013 of the remaining 51.8-acre portion of the CLI-II parcel that was not previously surveyed in order to determine potential impacts to archaeological resources by the construction, operation, or maintenance associated with the proposed project. As noted, a total of 816 STPs were excavated at 15-meter (m) intervals in three survey areas. The systematic subsurface testing provided extensive coverage and adequately surveyed the project area. No cultural material was recovered and no further work was recommended. Under letter dated December 6, 2013, the OPRHP concurred with this recommendation (see Appendix C and D).

5.4.3. UNANTICIPATED DISCOVERY PLAN

It is possible that archaeological sensitive sites could be discovered during construction. An unanticipated discovery plan would be developed and implemented as part of the construction of the proposed project. This plan presents the approach that would be employed to address such emergency discoveries and ensures that any potentially significant archaeological resources discovered during construction, including human remains, are dealt with in full accordance with state and federal requirements, including the most recent *Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State*. This approach would also ensure that procedures and lines of communication with the appropriate government authorities are clearly established prior to the start of construction so that discoveries can be addressed in a timely manner, minimizing the impacts to the construction schedule to the extent possible.

In its May 16, 2005 “Determination of No Effect” issued for the most recent prior archaeological study at the project site (OPRHP #04PR04367), the OPRHP recommended that “additional archaeological study be conducted before any other work is carried out on the remainder of the overall parcel”. The OPRHP indicated in its May 2005 determination that the undeveloped portion of the site “appears to be on a high terrace, punctuated by several ravines that probably identify relict waterways overlooking the Carmans River valley and is considered to have a high potential for prehistoric resources.” Nevertheless, no cultural material was recovered during the OPRHP-recommended additional archaeological study that was conducted for the CLI-II project.

In the event that sites are found during construction, it is important for all involved personnel to follow standardized procedures in accordance with all state and federal regulations. Both the environmental inspectors and the construction personnel would be provided with a preconstruction briefing regarding potential cultural resources indicators. These indicators would include items such as recognizable quantities of bone, unusual stone deposits and ash deposits, or black-stained earth that could be evident in spoil piles or trench walls during construction. In the event that potentially significant cultural resources or human remains are discovered during construction, the environmental monitors and construction personnel would be instructed to follow the specific requirements and notification procedures outlined below. Cultural resource discoveries that require reporting and notification include any human remains and any recognizable, potentially significant concentrations of artifacts or evidence of human occupation.

If cultural resources indicators are found by construction personnel, the construction supervisor would be notified immediately. The supervisor, in turn, would notify the environmental inspector, who would notify a designated archaeologist, who would be available to respond to this type of find. Based on the information provided, the archaeologist would determine if a visit to the area is required and, if so, would inform the construction crews. No construction work at the site that could affect the artifacts or site would be performed until the archaeologist reviews the site. The site would be flagged as being off-limits for work, but would not be identified as an archaeological site per se in order to protect the resources. The archaeologists would conduct a review of the site and would test the site as necessary. The archaeologist would determine, based on the artifacts found and on the cultural sensitivity of the area in general, whether the site is potentially significant and would consult with the OPRHP regarding site clearance.

5.5 HISTORIC RESOURCES

This study included a review of State Register and NRHP files maintained by the OPRHP and National Park Service. Four (4) National Register historic properties have been previously recorded within a two-mile radius of the study area (Figure 5-2):

- *Suffolk County Almshouse Barn* is located on Yaphank Avenue approximately 1.7 miles to the northeast. Reference Number 86002512 (1986-09-11)
- *St. Andrew's Episcopal Church* is located on Main Street, Yaphank. Reference Number 80002717 (1988-09-15)
- *Homan-Gerard House and Mills* is located at the Junction of Main Street and Yaphank Road, Yaphank. Reference Number 88002761 (1988-12-16)
- *Robert Hawkins Homestead* is located at Yaphank Avenue, Yaphank. Reference Number 86000702 (1986-04-10)

5.6 PROBABLE IMPACTS OF THE PROJECT

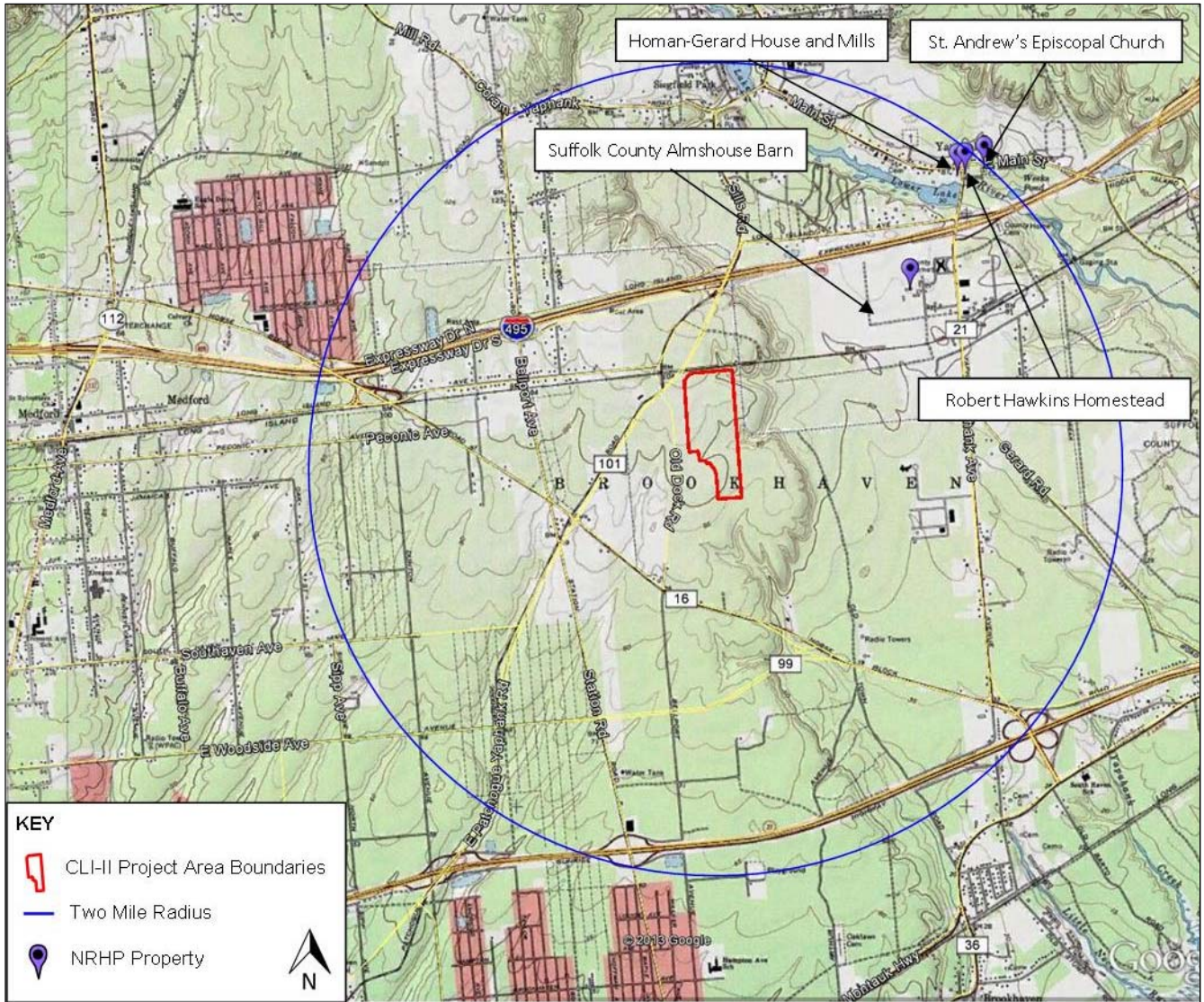
As noted above, the Phase IB survey recovered no cultural material and identified no archaeological sites. Therefore, no impacts to archaeological resources are expected from the construction, operation, and maintenance of the proposed project. A copy of the full Phase I Technical Report submitted to the OPRHP in November 2013 is included as Appendix D.

The project would not result in impacts to historic architectural resources identified above. Potential visual impacts to the historic architectural properties identified above are discussed in Chapter 6.0, "Visual Resources." Based on the results of the visual analysis presented in Chapter 6.0, there would be no significant impact on historic architectural properties within the project study area.

Similarly, the project would not result in any significant impacts to historic resources listed on or eligible for the State Register and NRHP.

5.7 CONCLUSION

No archaeological resources were identified as a result of the Phase IB survey and there are no historic architectural resources that would be affected by the project. As such, the construction, operation and/or maintenance of the proposed project would have no impact to cultural resources. *



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**NRHP HISTORIC RESOURCES
 WITHIN TWO-MILE RADIUS**

**CAITHNESS LONG ISLAND
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FIGURE 5-2

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