1.0 INTRODUCTION

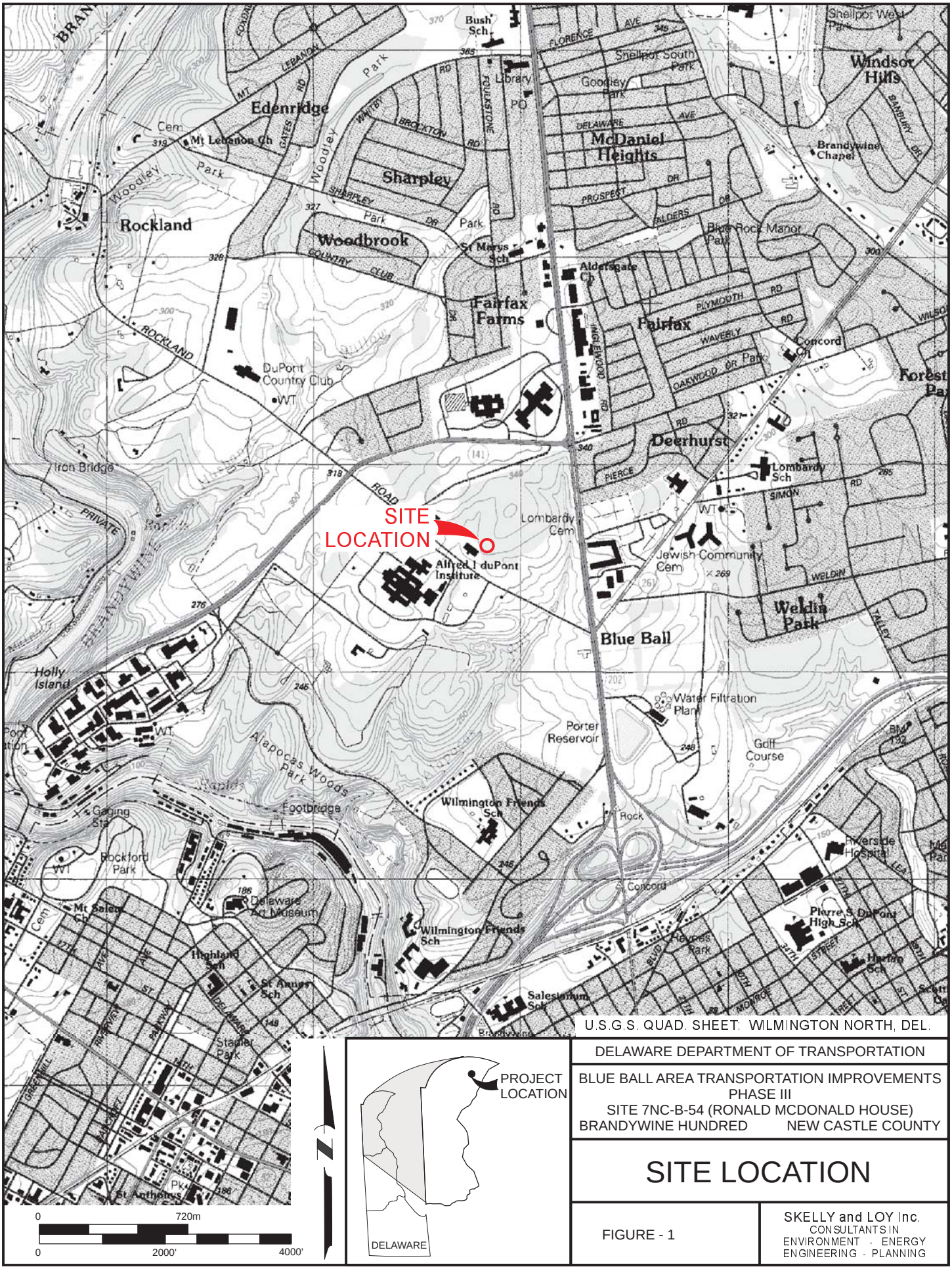
1.1 Purpose and Need

This report describes the Phase III archaeological data recovery investigations conducted by Skelly and Loy, Inc. for the Delaware Department of Transportation (DelDOT) at National Register of Historic Places (NRHP)-eligible archaeological site 7NC-B-54 (Ronald McDonald House) as part of the Blue Ball Area Transportation Improvements project located in Brandywine Hundred, New Castle County, Delaware (Figure 1). The transportation project includes improvements to the intersections of existing Route 202 with Route 141, Murphy Road, Rockland Road, and Foulk Road, and the interchange between Route 202 and Interstate 95. The location of archaeological site 7NC-B-54 (Ronald McDonald House) could not be avoided by redesigning the transportation improvements; therefore, mitigation for the loss of the site was planned and undertaken.

Since the NRHP-eligibility of Site 7NC-B-54 (Ronald McDonald House) was based on Criterion D, its ability to yield information important to our knowledge of the pre-contact period, Phase III data recovery investigations were proposed. The data recovery investigations were designed and executed in a manner conducive to identifying, recording, and recovering significant information about the pre-contact period use of the NRHP-eligible archaeological site, and to assure compliance with all appropriate federal and state cultural resources legislation, including Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992; the Federal-Aid Highway Act of 1966, as amended; the National Environmental Policy Act of 1969; and the Code of Federal Regulations: Advisory Council on Historic Preservation CFR 800. *The Guidelines for Architectural and Archaeological Surveys in the State of Delaware* (Delaware State Historic Preservation Office [DESHPO] 1993) were followed in preparing the project research design, methodology, and this report.

1.2 History of Research

Archaeological site 7NC-B-54 (Ronald McDonald House) was first discovered during the Phase I archaeological survey of the AstraZenca Property for the Blue Ball Transportation Improvements project. The site, originally called the Milner 1 site, was represented by 15 lithic artifacts recovered from three positive shovel test pits (STPs) which were emplaced at 5.0 m (16.4 ft) intervals, and two 1.0 x 1.0 m (3.3 x 3.3 ft) test units emplaced between the positive



U.S.G.S. QUAD. SHEET: WILMINGTON NORTH, DEL.

DELAWARE DEPARTMENT OF TRANSPORTATION

BLUE BALL AREA TRANSPORTATION IMPROVEMENTS
PHASE III
SITE 7NC-B-54 (RONALD MCDONALD HOUSE)
BRANDYWINE HUNDRED NEW CASTLE COUNTY

SITE LOCATION

FIGURE - 1

SKELLY and LOY Inc.
CONSULTANTS IN
ENVIRONMENT - ENERGY
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STPs (Roberts 1999). At the completion of the Phase I survey, the site was recommended as potentially eligible for listing in the NRHP, and a Phase II evaluation was recommended if transportation project impacts were proposed (Catts and Kellogg 2000). The DESHPO concurred with the recommendation of potentially NRHP-eligible in a letter issued August 4, 2000.

In 2001, McCormick, Taylor & Associates, Inc. conducted Phase II investigations at the archaeological site (Shaffer and Eiswert 2000). One hundred and sixty-three STPs emplaced at 5.0 m (16.4 ft) intervals across the site and nine 1.0 x 1.0 m (3.3 x 3.3 ft) test units were excavated. The initial artifact analysis suggested that 175 lithic artifacts had been recovered, including seven diagnostic projectile points: two quartz Bare Island-like projectile points; three argillite Lackawaxen-like projectile points; one quartz Jack's Reef-like projectile point (later re-evaluated as untyped corner-notched); and one quartzite Jack's Reef-like projectile point (Plates 1, 2, and 3). In addition, one unfinished, untyped projectile point, five projectile point/biface tips, and one projectile point base were recovered (Plate 4). Custer (1986) places Bare Island and Lackawaxen projectile points in the Clyde Farm Complex. More recently, Custer (2001) dates Bare Island projectile points from *ca.* 3,000 B.C. to A.D. 500 and considers Lackawaxen as probably related to Bare Island. Custer (1986) places Jack's Reef projectile points in the Webb Complex, which he most recently dates to *ca*. A.D. 600-900 (Custer 2001). The seven projectile points recovered during the Phase II testing at archaeological site 7NC-B-54 (Ronald McDonald House) are forms suggestive of a Woodland I period affiliation. The majority of the site was shown to have an A horizon overlying a BA horizon, with artifacts recovered from the 10.0 cm (3.9 in) thick A horizon and the upper 20.0 cm (7.9 in) of the BA horizon. No evidence of cultural features was identified during the Phase II testing.

Subsequent to the Phase II testing fieldwork, geomorphologist Dan Wagner excavated two STPs and examined a tree fall in order to address the question of whether or not the site had ever been plowed. He concluded that either the site had never been plowed, or that it had been irregularly plowed by draft animals in the past (Dan Wagner, Memorandum of February 2, 2001).

Following the Phase II testing investigations, the site eligibility recommendation was changed to not eligible (Shaffer and Eiswert 2000:16); however, DESHPO and DelDOT disagreed with the recommendation and suggested a reassessment of the archaeological site. Archaeological site 7NC-B-54 (Ronald McDonald House) is unusual in several regards: 1) it apparently has never been plowed; 2) it contains horizontally discreet artifact clusters; 2) it evidences several short-term, pre-contact period visits that represent limited activity; and 4) it is

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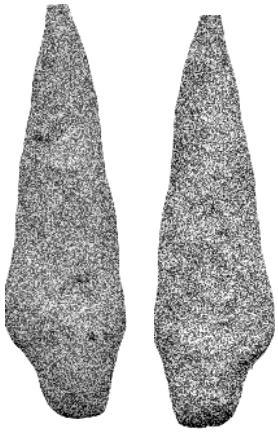

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Plate 1. Site 7NC-B-54 (Ronald McDonald House) Phase II Projectile Points.

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2000/21-112/B

Plate 2. Site 7NC-B-54 (Ronald McDonald House) Phase II Projectile Points.

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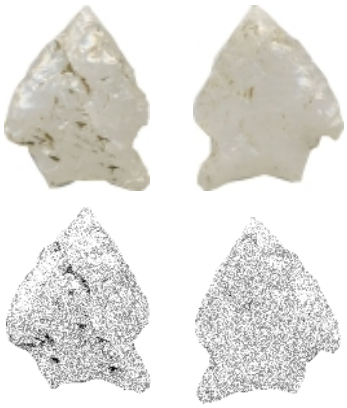

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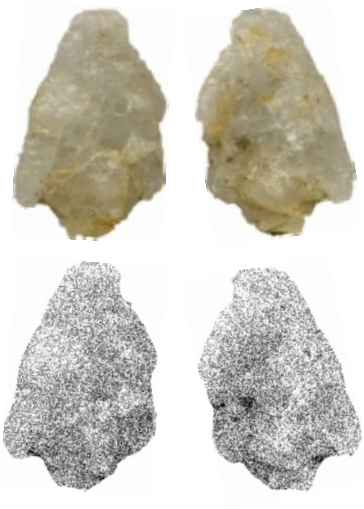
Plate 3. Site 7NC-B-54 (Ronald McDonald House) Phase II Projectile Points.



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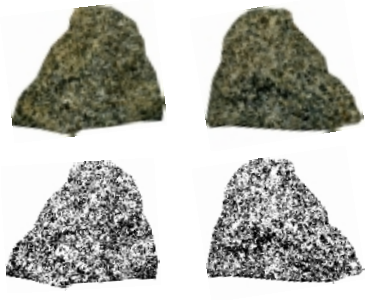

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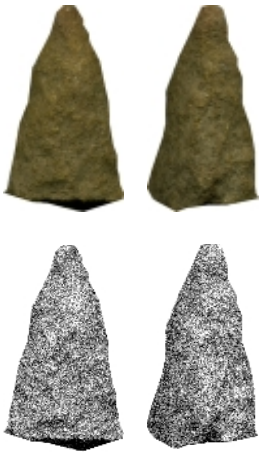

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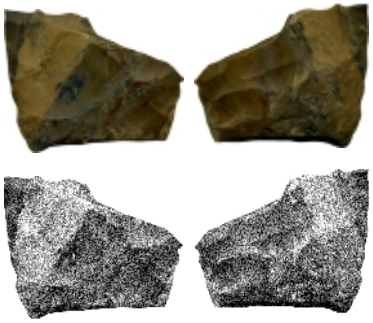

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Plate 4. Site 7NC-B-54 (Ronald McDonald House) Phase II Projectile Point Fragments.

areally small with shallow soils, allowing for the complete excavation of discreet artifact clusters. Upon reassessment of the site, it was deemed eligible for listing in the NRHP under Criterion D for its potential to provide information on non-base camp archaeological sites located in the Piedmont and associated with the Woodland I period. It was argued that the archaeological site might have potential for "developing a better understanding of the exploitation of the Delaware Piedmont during the Woodland I Period" (Draft NRHP Registration Form, Section 8, Page1). In DESHPO's review of the draft NRHP Registration Form, intra-site structure, intra-site variability in visit functions, individual behavior, and Piedmont settlement were identified as key research issues for further study at archaeological site 7NC-B-54 (Ronald McDonald House).

Since Site 7NC-B-54 (Ronald McDonald House) was considered eligible for listing in the NRHP, and it was not feasible to avoid the site through redesign of the Blue Ball Area Transportation Improvements project, a plan to mitigate the future loss of the site was developed by DelDOT, DESHPO, and Skelly and Loy, Inc. The mitigation plan involved a Phase III archaeological data recovery designed to isolate, investigate, and interpret discreet activity areas within the site in order to address the previously identified key research issues regarding intra-site structure, intra-site functional variability, individual behaviors, and Piedmont settlement. The Phase III data recovery plan was approved by DelDOT and DESHPO, and Skelly and Loy, Inc. personnel implemented the fieldwork portion of the research plan in September and October 2003, and January 2004. The resultant associated analytical studies have been ongoing since 2004 in conjunction with their approval and funding by DelDOT.