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# AN ARCHAEOLOGICAL SURVEY AND ASSESSMENT OF THE PROPOSED NORTH MECKLENBURG WATER TREATMENT PLANT SITE NEAR HUNTERSVILLE, MECKLENBURG COUNTY, NORTH CAROLINA

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**Technical Report No. 21** 

Research Laboratories of Anthropology University of North Carolina Chapel Hill

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### **Management Summary**

An archaeological survey and cultural resource assessment was carried out at the site of Charlotte-Mecklenburg Utility Department's proposed North Mecklenburg Water Treatment Plant, located just east of Lake Norman near Huntersville, Mecklenburg County, North Carolina (Clearinghouse number CH 93-E-4300-0558). The project area consists of: (1) a 151-acre plant site on the west side of McDowell Creek; (2) a raw water pipeline corridor that connects the plant site with Lake Norman (approximately 51 acres); and (3) a pipeline corridor that runs between the plant site and Sam Furr Road along the west side of McDowell Creek (approximately 28 acres). An additional finished water pipeline corridor that runs along the existing right-of-way of Babe Stilwell Road between the plant site and N.C. 73 was not surveyed.

Field conditions were generally favorable for archaeological survey. Most of the plant site was under cultivation and surface visibility was good. The pipeline corridors also contained numerous patches of bare ground. Approximately 90 percent the project area was assessed by pedestrian survey. The only areas excluded from survey were steep slopes, thickly forested land, and marshy bottomland. The floodplain within the plant site also was systematically shovel tested to assess the potential for buried archaeological deposits. None were found. The central area of the plant site was extensively auger tested to assess the potential for archaeological features associated with a house that stood on the site during the early twentieth century. No such features were found.

As a result of these investigations, 13 archaeological sites (designated 31Mk631 to 31Mk643) were located and assessed. All of these sites contained evidence of prehistoric cultural activity. Four sites also yielded historic artifacts, and one contained extant structures dating to the mid-twentieth century. Because of extensive erosion and prior land modification at the project site, none of the sites meets the minimum standards to be considered significant by National Register of Historic Places criteria. Consequently, no further archaeological assessment is recommended.

#### Introduction

Between April 6 and April 23, 1993, an archaeological survey was conducted by the authors at the site of Charlotte-Mecklenburg Utility Department's proposed North Mecklenburg Water Treatment Plant, located on the west side of McDowell Creek between Lake Norman and I-77 near Huntersville, Mecklenburg County, North Carolina (Clearinghouse number CH 93-E-4300-0558) (Figure 1). The project was initiated at the request of Black & Veatch, Gaithersburg, Maryland, the engineering firm responsible for designing the plant (see Appendix).

The project area consists of a 151-acre plant site, a 500-ft wide corridor (approximately 51 acres) between the plant site and Lake Norman within which the primary raw water pipeline will be located, and a 200-ft wide pipeline corridor (approximately 28 acres) that runs from the plant site north to Sam Furr Road along the west side of McDowell Creek and parallel to an existing sewer line. An additional finished water pipeline corridor that will run along the existing right-of-way of Babe Stilwell Road (i.e., the plant's access road) between the plant site and N.C. 73 was not surveyed (Figure 2).

#### **Physical Environment**

The topography of northern Mecklenburg County consists of a plateau that has been dissected and eroded by numerous streams. The terrain is gently rolling, but becomes more broken and hilly along the larger streams such as McDowell Creek. Major drainage systems are formed by the Catawba River along the western border of Mecklenburg County and the Rocky River in the northeast section of the county (Hearn and Brinkley 1912:5-6). The soil in the project area is Cecil clay loam which is known locally as "red land." The surface soil is a brown, red, or reddish-brown clay loam which contains small quantities of gravel and quartz. Quartz is particularly common in the plant site soils. The subsoil is comprised of a bright red clay that is tough and hard when dry and sticky when wet. Cecil clay loam is the most widespread and agriculturally important soil in Mecklenburg County (Hearn and Brinkley 1912:24-25).

Soil augering and shovel testing along the McDowell Creek floodplain revealed the following generalized soil profile: dense brown clay loam (1.0 ft thick), underlain by a deposit of coarse sand (0.5–1.0 ft thick), underlain by blue-gray clay. Because of the clayey character of the floodplain soils, drainage is poor.

Most of the project area has been farmed since the nineteenth century and, at the time of survey, most of the plant site was under cultivation (i.e., planted in oats). The floodplain along McDowell Creek is largely covered by stands of young ornamental trees, shrubs, or pines. Largely because of past agricultural activities, most of the plant site has experienced severe soil erosion. Auger tests across this area consistently revealed a soil profile of red clay plowed soil overlying red clay. In addition, the plant site was extensively modified during the 1940s when the entire area was terraced to retard erosion (Mr. James Hubbard, personal communication,



Figure 1. Map of North Carolina showing the location of the project area (from Lonsdale 1967).

April 1993). At that time, virtually all traces of the nineteenth-century dwelling that stood at site 31Mk632 were obliterated. Terracing also undoubtedly rearranged most of the archaeological remains associated with sites 31Mk631-31Mk639.

Much of the land within the two pipeline corridors also has been altered by natural and artificial forces. Soil erosion has taken its toll along much of the raw water pipeline corridor; in addition, most of the corridor north of N.C. 73 has been obliterated by extensive earthmoving activities associated with the construction of a recreational park along the shore of Lake Norman. Most of the proposed pipeline corridor along McDowell Creek also has been disturbed by earlier sewer line construction.

## Archaeological and Historical Background

Over 600 archaeological sites have been recorded in Mecklenburg County. While most of these sites are located in the southern half of the county and were recorded as a consequence of urban expansion around Charlotte, 93 sites (64 prehistoric and 29 historic) were recorded during archaeological surveys of the North Charlotte Outer Loop (McNutt 1989) and two prehistoric sites were recorded at MCI's Huntersville Microwave Tower site only a mile southwest of the project area (Davis and Ward 1984).

More than 60 archaeological sites were located during 1960–1961 archaeological surveys of the Mecklenburg County section of nearby Cowans Ford Reservoir (now called Lake Norman) which inundated the Catawba River valley (UNC Research Laboratories of Anthropology site files). Numerous additional sites were recorded within the reservoir in adjacent portions of



Figure 2. Map of the proposed North Mecklenburg Water Treatment Plant project area (from the Lake Norman South 7.5-minute series topographic map, scale=1:24,000).

Iredell, Lincoln, and Catawba counties. Surface collections from almost two-thirds of the Mecklenburg County sites contain culturally diagnostic artifacts and indicate a relatively continuous occupation of the region from close of the late Pleistocene (ca. 8000 B.C.) until the beginning of the eighteenth century A.D. Projectile point types from these sites include: Hardaway-Dalton (late Paleo-Indian period: ca. 8000 B.C.); Palmer Corner-Notched and Kirk Corner-Notched (Early Archaic period: 8000-6000 B.C.); Stanly Stemmed, Morrow Mountain I and II Stemmed, and Guilford Lanceolate (Middle Archaic period: 6000-4000 B.C.); Savannah River Stemmed and Small Savannah River Stemmed (Late Archaic period: 4000-1000 B.C.); Gypsy Stemmed (Late Archaic-Early Woodland periods: 1000 B.C.-A.D. 1); Yadkin Large Triangular and Uwharrie Triangular (Middle-Late Woodland: A.D. 1-1000); and Caraway Triangular and Pee Dee Pentagonal (Late Prehistoric-Early Historic periods: after A.D. 1000). Pottery from Early Woodland and Middle Woodland period sites in Cowans Ford Reservoir was largely fabric impressed or cord marked; Late Woodland sites contained mostly net impressed pottery. Pottery from the late prehistoric and early historic occupation in the middle Catawba River valley consists of vessels with smoothed, burnished, simple stamped, check stamped, curvilinear and rectilinear complicated stamped, or cob impressed exterior surfaces. One late seventeenth-century Catawba village-the Bell Farm site (31Mk85) located below Cowans Ford Dam-also contained glass beads which indicate contact with English colonies along the Atlantic seaboard (see Wilson 1983:377).

Most of the Archaic sites recorded during the Cowans Ford survey represent temporary camps that probably were only seasonally occupied. Conversely, many of the later sites, especially those that contained pottery, were places of more permanent residence. This is particularly true for the Late Prehistoric period (after A.D. 1000) when larger villages were established along the banks of the middle Catawba River. The archaeological remains from some of these villages are being studied by Mr. David Moore as part of his doctoral research (David Moore, personal communication 1992).

In 1762, Mecklenburg County was created from Anson County. Initially, it included present-day Cabarrus, Gaston, Lincoln, and part of Union counties. The area was settled largely by Scotch, Irish, German, and English settlers who imigrated from Pennsylvania, Virginia, South Carolina, and eastern North Carolina. These early settlers were ". . . intelligent, labor-loving, industrious, and patriotic" (Hearn and Brinkley 1912:7).

One historical event of particular local interest was the Revolutionary War Battle of McCowans (Cowans) Ford which occurred on February 1, 1781, approximately 3.5 miles west of the project area. Here, an American force of about 300 men under General William Davidson intercepted Cornwallis and a British force heading east toward Salisbury. The Americans were defeated and General Davidson was killed (Tompkins 1903:64).

Early in the county's history, cotton was important and large plantations ranging from 2,000-5,000 acres were the rule. In 1800, gold was discovered, and in 1837, the first branch of the U.S. Mint was opened in Charlotte. Gold mining continued to be important in the county until after the Civil War. Today, farming dominates the economy of northern Mecklenburg

County while southern Mecklenburg is rapidly being overtaken with urban and suburban growth around Charlotte. The project area, because of its proximity to Lake Norman, has also experienced rapid commercial and residential growth in recent years.

#### Methodology

The project area was divided into four survey areas because of varying field conditions. They are: (1) the upland portion of the 151-acre plant site, (2) the McDowell Creek floodplain located within the plant site, (3) the pipeline corridor along McDowell Creek, and (4) the raw water pipeline corridor that connects the plant site with Lake Norman. Each of these areas is discussed below.

Archaeological sites were defined when two or more artifacts were found within about 100 ft of one another. The survey strategy employed throughout most of the project area was for both surveyors to walk transects approximately 50 ft apart. When an artifact was found, the entire ground surface around the artifact was inspected outward until no more artifacts occurred. Generally, the spread of artifacts across the surface could be associated with a specific, visible landform. No isolated artifact finds were recorded.

#### **Plant Site Uplands**

At the time of survey, most of this 132-acre tract was planted in oats (Figure 2, Area 1). Survey conditions ranged from good to excellent with about 40 percent to 90 percent surface visibility. The slopes along the two small streams that flow in a southeast direction across the plant site were either wooded or sown in thick grass and were not intensively examined; however, the lack of sites adjacent to these slopes suggests that no sites were missed. Transects were walked across the plant site uplands at about 50-ft intervals using the method described above for locating and surface collecting archaeological sites. Survey of this area resulted in the recording of 10 archaeological sites, designated 31Mk631 to 31Mk640 (see below). Most of these were scatters of lithic artifacts (i.e., prehistoric stone-tool manufacturing debris) situated on low upland knolls or "flats" or on upland terraces that flank the McDowell Creek floodplain.

Two-31Mk632 and 31Mk639-also contained substantial historic components. The 1910 soil map for Mecklenburg indicates that houses were standing at both of these locations at that time (Hearn 1910) (Figure 3). Since wood-frame structures were still standing at 31Mk632, it was considered a potentially significant historic site; consequently, these structures were carefully documented.

#### **Plant Site Floodplain**

Most of the McDowell Creek floodplain within the plant site area, covering about 19



Figure 3. Section of the 1910 Mecklenburg County soil map showing structures at sites 31Mk632 and 31Mk639 (from Hearn 1910, scale: 1 in=1 mi).

acres, is presently planted in ornamental trees, shrubs, or pines (Figure 2, Area 2). Because of a lack of ground surface visibility, and the potential for archaeological remains within the alluvial soils, a strategy of systematic shovel testing was employed to assess this area. Shovel tests were placed about 70–80 ft apart. In all, 38 1-ft by 1-ft shovel tests were dug 1.0 ft to 2.0 ft deep (until subsoil clay was reached), and all soil was dry screened through 1/2" mesh. No artifacts were found in any of these tests. A few of the tests near McDowell Creek yielded gravel from construction of the existing sewer line while some of the tests along the back edge of the floodplain contained some quartz residuum from the adjacent uplands. An inspection of the cultivated field along McDowell Creek just downstream from the plant site also failed to reveal any evidence of archaeological sites. Given the clayey character of the floodplain soils and consequently poor drainage characteristics, it seems likely that this area was poorly suited for prehistoric habitation.

# **McDowell Creek Pipeline Corridor**

This corridor is approximately 200 ft wide and runs along the west side of McDowell Creek from the plant site to Sam Furr Road approximately 1.2 miles to the northeast (Figure 2, Area 3). It covers approximately 28 acres. An existing sewer line and associated dirt access road also lies within this corridor. The survey strategy employed here was to inspect existing exposed ground (50–90 percent surface visibility) along the entire length of the access road. Two sites (31Mk641 and 31Mk642), both of which are situated on higher ground outside the floodplain proper, were recorded.

# **Raw Water Pipeline Corridor**

This corridor is approximately 500 ft wide and connects the plant site with Lake Norman approximately 0.8 miles to the northwest (Figure 2, Area 4). It comprises about 51 acres. Survey conditions within this corridor were highly variable. At the northern end (northwest of N.C. 73), the corridor crosses an area currently being developed as a public park and boat landing. Except for a 150-ft wide buffer along the shoreline, this entire area has been extensively bulldozed. A visual inspection of the lightly wooded buffer zone and eroding shoreline did not identify any archaeological remains.

For a distance of about 600 ft southeast of N.C. 73, the corridor crosses yards of both new and older (early twentieth-century) homes. None of these houses is historically significant; furthermore, landowners have been told by the Charlotte-Mecklenburg Utilities Department that the pipeline will be placed so as not to disturbed any standing structures (Mr. James Thornburg, personal communication, April 1993). One archaeological site (31Mk643) comprised of a few lithic and historic artifacts was recorded here.

The remainder of the corridor north of the plant site is either heavily wooded slopes of an unnamed stream or eroded, sloping, or low-lying pasture land. While not systematically

surveyed, this area was inspected in several places and determined to have a low potential for containing archaeological remains due to topographical conditions.

## Interviews

In addition to archaeological survey, two persons were interviewed who have firsthand knowledge of the archaeology and history of the project area. Mr. Danny Phillips currently farms the land within the project site along with Mr. Jim Hubbard. Mr. Phillips also has a collection of Indian artifacts, mostly projectile points, which he has collected from the project site over the years. While not extensive (i.e., <50 specimens), his collection contains a variety of types, including Kirk Corner-Notched, Stanly Stemmed, Morrow Mountain Stemmed, Guilford Lanceolate, Savannah River Stemmed, and a few triangular points. He says that most of these artifacts came from the vicinity of sites 31Mk632 and 31Mk638. Mr. Phillips also stated that, over the years, several other people had collected artifacts from the project site.

Mr. Jim Hubbard, who said he purchased the plant site property in the 1940s, provided very useful information about the present structures on site 31Mk632 and the history of land modification there. He told us that the land was extensively terraced with bulldozers during the 1940s; the modified landscape is still clearly visible. He also said that the original house that stood on the property (and which shows up on the 1910 soil map) burned before he purchased the land and was completely bulldozed away in the 1940s. The present wood-frame structures were subsequently moved to the property (not built on site) and occupied by a black tenant farmer.

#### **Results of Survey**

Thirteen archaeological sites (designated 31Mk631 to 31Mk643) were recorded as a result of the survey (Figure 4). They are individually described below. All of these sites contained evidence of prehistoric cultural activity. Four sites also yielded historic artifacts, and one contained extant structures that date to the mid-twentieth century. These sites produced a total of 376 artifacts, including 297 lithic artifacts, one prehistoric potsherd, and 78 historic artifacts (Table 1). None of these sites meets the minimum criteria for significance established by the National Register of Historic Places (36 CFR Part 60, as amended).

#### 31Mk631 (RLA-Mk139)

This site is located on a knoll approximately 700 ft north-northeast of the steel gate at the entrance to the plant site (Elevation - 750 ft; UTM - 17/3920690/509520). At time of survey, the site was planted in oats with about 50 percent surface visibility. The site measures about 200 ft in diameter and is defined by a very light scatter of quartz chipping debris.



Figure 4. Map of the project area showing identified archaeological sites (from the Lake Norman South 7.5-minute series topographic map, scale = 1:24,000).

Site Artifact Type		Quartz	Crystal Quartz	Rhyolite	Quartzite	Other	Total
31Mk631							
Cores		2	-	-	-	-	2
Flakes		2	-	-	-	-	2
Shatter Fragr	nents	3	-	-	-	-	3
Hammerstone		1	-	-	-	-	1
Total		8	-	-	-	-	8
31Mk632							
Stanly Stemn	ed Proj. Pt.	-	-	1	-	-	1
Core		-	1	-	-		1
Used Flakes		-	-	2	-	-	2
Creamware S	herd	-	-	-	-	1	1
Whiteware S		-	-	-	-	1	1
Total		-	1	3	-	2	6
31Mk633							
Hammerstone	e *	-	-	-	1	-	1
Cores		5	2	-	-	-	7
Biface		1	-	-	-	-	1
Used Flakes		2	-	-	-	-	2
Primary Flak	es	6	-	-	-	-	6
Secondary F		5	-	4	-	-	9
Shatter Fragi		5	-	-	-	-	5
Total		24	2	4	1	· -	31
31Mk634							
Biface		1	-	-	-	-	1
Side Scraper		1	-	-	-	-	1
Core		-	1	-	-	-	1
Primary Flak	e	1	-	-	-	-	1
Secondary F		1	-	-	-	-	1
Total		4	1	-	-	-	5
31Mk635							
Bifaces		1	-	1	-	-	2
End Scraper		-	-	1	-	-	1
Used Flakes		1	-	1	-	-	2
Primary Flak	tes	2	1	1	-	-	4
Secondary F		2	-	19	-	-	2
Potsherd (Sa	nd-tempered, Comp. Stpd.)	-	-	-	-	1	1
Total		6	1	23	-	1	3

# Table 1. Summary of Artifacts Collected During the Survey.

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Table 1 Continued.

Site	Artifact Type	Quartz	Crystal Quartz	Rhyolite	Quartzite	Other	Tota
31M	k636						
	Secondary Flakes	2	-	2	-	-	4
31M	k637						
	Projectile Pt. Frag.	(Prob. Archaic) -	-	2	-	-	1
	Biface	-	-	1	-	-	
	Used Flakes	1	-	3	-	-	
	Core	1	-	-	-	-	
	Primary Flakes	4	-	-	-	-	
	Secondary Flakes	4	1	38	-		4
	Total	10	1	44	-	-	5:
31M	k638						
	Projectile Pt. Frag.	(Prob. Archaic) 2	-	1	-	-	2
	Bifaces	2	-	-	-	-	
	Used Flake	1	-	-	-	Ξ.	
	Cores	6	-	-	-	-	
	Primary Flakes	5	-	-	-	-	
	Secondary Flakes	4	2	18	-	-	2
	Total	20	2	19	-	-	4
31M	k639						
	Hammerstone	-	-	-	1	-	
	Cores	2	1	-	-	-	
	Used Flakes	1	-	1	-	-	
	Primary Flakes	3	2	1	-	-	
	Secondary Flakes	3	-	1	-	-	
	Alkaline-Glazed She	erds -	-	-	-	6	
	Whiteware Sherds	-	-	-	-	28	2
	Porcelain Sherds	-	-	-	-	3	
	Bottle Glass	-	-	-	-	13	1
	Milk Glass	-	-	-	-	3	
	Window Glass		-	-	· -	3	
	Iron Pins	-	-	-	-	2	
	Iron Frags.	-	-	-	-	2	
	Brick	-	-	-	-	4	
	Coal	-	-	-	-	3	
	Total	9	3	3	1	67	8

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Table 1	Continued.
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Site			Crystal				
	Artifact Type	Quartz	Quartz	Rhyolite	Quartzite	Other	Total
31M	k640						
	Small Stemmed Proj. Pt.	1	-	-	-	-	1
	Hammerstone	1	-	-	-	-	1
	Cores	6	3	-	-	-	9
	Primary Flakes	26	2	-	-	-	28
	Secondary Flakes	27	6	8	-	-	41
	Whiteware Sherd	-	-	-	-	1	1
	Pressed Glass Frag.	-	-	-	-	1	1
	Total	61	11	8	-	2	82
31M	<b>k64</b> 1						
	Projectile Pt. (Prob. Archaic)	1	-	-	-	-	1
	Primary Flakes	2	-	-	-	-	2
	Secondary Flake	-	-	1	-	-	1
	Total	3	-	1	-	7 -	4
31M	k642						
	Used Flake	-	-	1	-	-	1
	Primary Flakes	3	-	1	-	-	4
	Secondary Flakes	3	-	8	1	-	12
	Total	6	-	10	1	-	17
31M	k643						
	Used Flakes	1	-	1	-	-	2
	Whiteware Sherd	-	-	-	-	5	5
	Porcelain Sherd	-	-	-	-	1	1
	Iron Horseshoe	-	-	-	-	1	1
	Total	1	-	1	-	7	9
Tota	1	154	22	118	3	79	376

The eight artifacts collected from the site include two cores, two flakes, three shatter fragments, and one hammerstone (Table 1). While no culturally diagnostic artifacts were found, the site probably represents a temporary Archaic campsite. The red clay soil on the site is heavily eroded and has been extensively modified by land terracing; consequently, the site has a low potential for intact cultural deposits and has minimal research potential. No further investigation is recommended.

# 31Mk632 (RLA-Mk140)

This site is located on a relatively level upland surface near the center of the plant site,

approximately 2,300 ft southeast of the steel gate at the entrance to the plant site (Elevation - 730 ft; UTM - 17/3920290/509820). At time of survey, most of the site was planted in oats with about 50 percent surface visibility. The site measures about 200 ft in diameter and is defined by a very light scatter of lithic artifacts and historic artifacts, and by a cluster of four wood-frame buildings (designated Structures 1–4), a modern pole barn, and a concrete-capped well (Figure 5). The six artifacts collected from the site include a Stanly Stemmed projectile point (Middle Archaic period), one core, two used flakes, one creamware sherd (c.1762–1820, South 1977:212), and one whiteware sherd (c.1820–1900+, South 1977:211) (Table 1). The lithic artifacts indicate site use during the Middle Archaic period; other artifacts from Mr. Danny Phillips' collection indicate both earlier and later site occupations as well (see above). Both historic sherds probably are associated with the original structure that burned before about 1940.

Structure 1 is a small house which dates to about the second quarter of the twentieth century. Structures 2, 3, and 4 are outbuildings which may date to the first quarter of this century and may be associated with the house. Information provided by Mr. Jim Hubbard (personal communication, April 1993), who bought the property from the Babe Stilwells, indicated that none of these four structures were built at this location. Mr. Danny Phillips (personal communication, April 1993) reported that a fire destroyed the original home which had stood on the property since the nineteenth century. When the property came into Mr. Hubbard's ownership, the remains of the old structures were removed, and the land was extensively cleared and terraced. The structures now standing on the property were moved to their current locations at this time. Mr. Hubbard reported that the dwelling (Structure 1) was rented to a black tenant farmer up until the mid-1960s. Archaeological reconnaissance of the area around the current structures indicates that the clearing conducted in the 1940s was extensive. Almost no artifacts from the nineteenth or twentieth centuries remain on the surface in the plowed fields which are immediately adjacent to the structures. In addition, numerous auger tests around and between the structures failed to reveal any organically enriched soils; instead, they consistently showed a soil profile of plowed red clay loam over red clay. This suggests that the topsoil containing all the artifacts from the old house site was graded and removed from this location in the 1940s along with all the remains of the original structures. The absence of debris from the later tenant farmer's occupation further suggests that subsequent, more recent grading may have taken place. The four structures described below, therefore, are not in their original geographic or archaeological context.

The small, frame house, designated Structure 1, measures 24 ft by 20 ft and is divided into four equal-sized (10 ft by 12 ft) rooms (Figures 6-8). Sills are circular-sawn, 4" by 6" pine timbers resting on stone piers at the corners. Studs are rough-cut, circular-sawn, 2" by 4" pine, set on 2 ft centers. Two inch by four inch diagonal braces were toe-nailed between the studs at each corner. Pine rafters measured 2" by 6" and were set on 2 ft centers. Its simple, gabled roof was decked with 1" by 4" pine and roofed with ridged tin, fastened with lead-headed roofing nails. Wire nails were used throughout.

Its exterior walls were sided with mixed pine and poplar 1" by 8" horizontal, ship-lapped planking. Windows in each room were 24" by 52" double-hung sashes with four-over-four



Figure 5. Map of site 31Mk632 showing the location of extant structures.

lights. Exterior and interior doors were 30" solid, raised-panel pine. Flooring consisted of 1" by 6" tongue-and-groove pine. Interior walls were horizontally planked with dressed, 1" by 8" pine and poplar. In some rooms, ceilings were planked with 1" by 6" tongue-and groove pine while others were planked with 1/2" by 8" poplar. Two brick chimney stacks, fitted with 6" ceramic flues, rested on the rafters and angle-iron braces. These apparently accommodated woodburning stoves or heaters.

Structure 2 appeared to have been used as a chicken coop (Figure 9). It measured 16 ft by 14 ft and may have predated the dwelling. Its sills were hand-hewn white oak of varying dimensions and the joists were hand-hewn pine. Corner posts were 4" by 6" rough-cut pine and studs were 2" by 4" pine on 2 ft centers. The simple shed roof was decked with 1" by 4" pine and roofed with ridged tin. Salvaged, single sash (6 light) windows were set along the from wall. Wire nails were used for framing and cut nails were used for the flooring.



Figure 6. General view of site 31Mk632 showing Structure 1 (right) and Structures 2-4 (left) (view to south).



Figure 7. Close-up view of Structure 1 at site 31Mk632 (view to south).



Figure 8. Close-up view of Structure 1 at site 31Mk632 (view to east).



Figure 9. Close-up side view of Structure 2 at site 31Mk632 (view to east).

Structure 3 measured 12 ft by 12 ft and had a simple gabled roof, no windows, and no ceiling (Figure 10). It was framed like the other structures with rough-cut pine of standard dimensions and fastened with wire nails. Exterior siding was 1" by 12" pine while interior paneling of 1" by 6" pine extended from the floor up to a height of only 3 ft. This structure appears to have been use for storage.

Structure 4 was a two-story building which measured 11 ft by 20 ft (Figure 11). Its sills were 4" by 8" rough-cut pine and other framing members were also pine of standard dimensions. Interior walls were paneled up to 4 ft. There were no windows in this structure and there was no passage through the ceiling from the lower to the upper story. Doors opened to the first and second floors on the front of the building. The function of this structure is not known.

Given the near total destruction of site context that occurred in the 1940s and the lack of architectural significance or contextual integrity of the present structures, the site is considered to have minimal significance. No further investigation is recommended.

#### 31Mk633 (RLA-Mk141)

This site is located on a gradually sloping upland surface approximately 1,000 ft southeast of the steel gate at the entrance to the plant site (Elevation - 725 ft; UTM - 17/3920360/509620). At time of survey, the site was planted in oats with about 90 percent surface visibility. The site measures about 200 ft by 500 ft and is defined by a very light scatter of mostly quartz chipping debris.

The 31 artifacts collected from the site include one hammerstone, seven cores, one biface, two used flakes, six primary flakes, nine secondary flakes, and five shatter fragments (Table 1). While no culturally diagnostic artifacts were found, the site probably represents a temporary Archaic campsite. The red clay soil on the site is heavily eroded and has been extensively modified by land terracing; consequently, the site has a low potential for intact cultural deposits and has minimal research potential. No further investigation is recommended.

### 31Mk634 (RLA-Mk142)

This site is located on a gradually sloping upland surface approximately 600 ft southeast of the steel gate at the entrance to the plant site (Elevation - 740 ft; UTM - 17/3920520/509520). At time of survey, the site was planted in oats with about 60 percent surface visibility. The site measures about 100 ft by 200 ft and is defined by a very light scatter of mostly quartz chipping debris.

The five artifacts collected from the site include one biface, one large side scraper, one



Figure 10. Close-up front view of Structure 3 at site 31Mk632 (view to southeast).



Figure 11. Close-up rear view of Structure 4 at site 31Mk632 (view to northwest).

core, one primary flake, and one secondary flake (Table 1). While no culturally diagnostic artifacts were found, the site probably represents a temporary Archaic campsite. The red clay soil on the site is heavily eroded and has been extensively modified by land terracing; consequently, the site has a low potential for intact cultural deposits and has minimal research potential. No further investigation is recommended.

## 31Mk635 (RLA-Mk143)

This site is located on a high upland terrace that flanks McDowell Creek floodplain, approximately 700 ft east-northeast of the abandoned wood-frame house at 31Mk632 (Elevation - 700 ft; UTM - 17/3920340/510000). At time of survey, the site was planted in oats with about 90 percent surface visibility. The site measures about 150 ft in diameter and is defined by a very light scatter of mostly small rhyolite chipping debris.

The 31 artifacts collected from the site include two bifaces, one end scraper, two used flakes, four primary flakes, 21 secondary flakes, and one sand-tempered curvilinear-complicated-stamped potsherd (Table 1). The potsherd is similar to pottery found on late prehistoric (after A.D. 1000) village sites within Cowans Ford Reservoir. The numerous small rhyolite secondary flakes also may be associated with a late prehistoric cultural component.

In addition to soil augering across the site to discover features and other buried cultural deposits (with negative results), three 1-ft by 1-ft shovel tests were dug where the potsherd was found. None of these tests yielded any artifacts. The soil profiles revealed by the shovel testing and augering consist of a red clay plowzone that is largely indistinguishable from the underlying red clay subsoil. In short, nothing was found to suggest that intact cultural deposits are present. Conversely, there is a high bank of soil along the terrace margin that probably was bulldozed off the site's surface. A similar situation also was observed at sites 31Mk636, 31Mk637, 31Mk638, and 31Mk639. Given these conditions of surface modification, the site has a low potential for intact cultural deposits and thus has minimal research potential. No further investigation is recommended.

#### 31Mk636 (RLA-Mk144)

This site also is located on a high upland terrace that flanks McDowell Creek floodplain, approximately 600 ft east-southeast of the abandoned wood-frame house at 31Mk632 (Elevation - 700 ft; UTM - 17/3920240/509980). At time of survey, the site was planted in oats with about 50 percent surface visibility. The site measures only about 70 ft in diameter and was defined by a very light scatter of four secondary flakes (Table 1). The red clay soil on the site is heavily eroded and has been extensively modified by land terracing (see discussion of 31Mk635); consequently, the site has a low potential for intact cultural deposits and has minimal research potential. No further investigation is recommended.

#### 31Mk637 (RLA-Mk145)

This site is located on a high upland terrace that flanks McDowell Creek floodplain, approximately 750 ft southeast of the abandoned wood-frame house at 31Mk632 (Elevation - 700 ft; UTM - 17/3920140/509990). At time of survey, the site was planted in oats with about 90 percent surface visibility. The site measures about 150 ft in diameter and is defined by a light to moderate scatter of stone tools and chipping debris.

The 55 artifacts collected from the site include two fragments from probable Archaic projectile points, one biface, three used flakes, one core, four primary flakes, and 43 secondary flakes (Table 1). Most of the secondary flakes were small and made of rhyolite. While the data are not conclusive, they suggest the presence of at least an Archaic cultural component at the site. As with most other sites identified within the plant site area, the red clay soil is heavily eroded and has been extensively modified by land terracing; consequently, the site has a low potential for intact cultural deposits and has minimal research potential. No further investigation is recommended.

#### 31Mk638 (RLA-Mk146)

This site is located on a high upland terrace and adjacent upland slope that flanks McDowell Creek floodplain, approximately 600 ft south-southeast of the abandoned wood-frame house at 31Mk632 (Elevation - 710 ft; UTM - 17/3920140/509860). At time of survey, the site was planted in oats with surface visibility that varied from about 50 percent to 90 percent. The site is large, measuring about 300 ft by 400 ft, and is defined by a light scatter of stone tools and chipping debris.

The 41 artifacts collected from the site include three fragments from probable Archaic projectile points, two bifaces, one used flake, six cores, five primary flakes, and 24 secondary flakes (Table 1). In addition, part of Danny Phillips' artifact collection probably came from this site. As with the other sites flanking McDowell Creek floodplain, most of the secondary flakes were small and made of rhyolite. Like 31Mk637, the data suggest the presence of at least an Archaic cultural component at the site. The red clay soil is heavily eroded and has been extensively modified by land terracing; consequently, the site has a low potential for intact cultural deposits and has minimal research potential. No further investigation is recommended.

#### 31Mk639 (RLA-Mk147)

This site is located on the eastern edge of a rolling upland surface, approximately 1,600 ft west-southwest of the abandoned wood-frame house at 31Mk631 and 1,600 ft south-southeast of the steel gate at the entrance to the plant site (Elevation - 760 ft; UTM - 17/3920160/509300). It is at the western edge of a large field that was planted in oats with about 90 percent surface visibility. The 1910 soil map for Mecklenburg County shows a house at this location (Hearn

1910). The site is large, measuring about 250 ft by 500 ft, and is defined by a light scatter of historic artifacts and occasional lithic artifacts. No traces of architecture are visible.

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The 16 prehistoric artifacts collected from the site include one hammerstone, three cores, two used flakes, six primary flakes, and four secondary flakes (Table 1). Sixty-seven historic artifacts comprise the bulk of the surface collection and include six alkaline-glazed sherds, 28 whiteware sherds, three porcelain sherds, 13 bottle glass fragments, three milk glass fragments, three window glass fragments, two iron pins, two other iron fragments, four bricks, and three pieces of coal. Overall, the historic artifact assemblage suggests a dwelling of an age (i.e., late nineteenth-early twentieth century) that is consistent with the information from the 1910 soil map. Again, heavy soil erosion and land terracing have extensively modified the site; consequently, the site has a low potential for intact cultural deposits and has minimal research potential. No further investigation is recommended.

### 31Mk640 (RLA-Mk148)

This site is located on a high, red clay, upland knoll that overlooks the McDowell Creek floodplain, approximately 1,100 ft south of the abandoned wood-frame house at 31Mk632 (Elevation - 720 ft; UTM - 17/3919940/509770). At time of survey, the site had been plowed but not yet planted; surface visibility was greater than 90 percent. The site is about 200 ft in diameter and is defined by a light to moderate scatter of mostly quartz tools and chipping debris.

The 82 artifacts collected from the site include one small stemmed projectile point that is referable to the Early Woodland Gypsy Stemmed type (see Oliver 1981:188), one hammerstone, nine cores, 28 primary flakes, 41 secondary flakes, one whiteware sherd, and one pressed glass fragment (Table 1). The latter two historic artifacts appear to be incidental finds. The site appears to represent a small campsite. Although this field has not been terraced, the elevated fence lines at the field edge indicate that the site has experienced extensive surface modification through soil erosion. Given this, the site has a low potential for intact cultural deposits and has minimal research potential. No further investigation is recommended.

#### 31Mk641 (RLA-Mk149)

This site is located along the northeast side of an unnamed stream at the northeastern edge of the plant site tract, approximately 900 ft northeast of the abandoned wood-frame house at 31Mk632 (Elevation - 700 ft; UTM - 17/3920480/509980). It was defined by the occurrence of one fragment of a probable Archaic projectile point, two primary flakes, and one secondary flake along a 400 ft section of a dirt road (20 percent visibility). The limited number of artifacts found, and the fact that they just as easily could have been mapped as four separate isolated finds given their dispersion along the roadbed, indicate very limited cultural activity. Consequently, no further investigation is recommended.

#### 31Mk642 (RLA-Mk150)

This site is located on a low, eroded knoll at the edge of the McDowell Creek floodplain, approximately 1,200 ft east-northeast of the abandoned wood-frame house at 31Mk632 (Elevation - 690 ft; UTM - 17/3920380/510140). Although this area was mostly covered in weeds, surface visibility was about 80 percent over much of the site due to soil erosion and the intersection of two dirt roads here. The site is about 200 ft in diameter and is defined by a light scatter of mostly rhyolite and quartz chipping debris.

The 17 artifacts collected from the site include one used flake, four primary flakes, and 12 secondary flakes (Table 1). Soil erosion has deflated the site and auger testing indicates that no topsoil remains. Given this, the site has a low potential for intact cultural deposits and has minimal research potential. No further investigation is recommended.

## 31Mk643 (RLA-Mk151)

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This site is located on a level upland surface in the front yard of Mr. James Thornburg, about 200 ft southeast of the intersection of Oliver Hager Road and N.C. 73 (Elevation - 780 ft; UTM - 17/3920780/509520). Though most of the site is in grass, there were several erosional areas with about 40 percent surface visibility. The site was defined on the basis of nine artifacts collected from these erosional patches. The artifacts include two used flakes, one horseshoe, five whiteware sherds, and one porcelain sherd. The two prehistoric artifacts suggest only minimal site activity; the historic artifact are attributed to occupation of the Thornburg's house, an extensively modified wood-frame dwelling which, according to Mr. Thornburg (personal communication, April 1993), was constructed during the 1920s or 1930s. This site has a low potential for intact cultural deposits and has minimal research potential. No further investigation is recommended.

#### Significance Evaluation and Recommendation

Thirteen archaeological sites were located and assessed. All of these sites contained evidence of prehistoric cultural activity. The numbers and kinds of prehistoric artifacts recovered from these sites reflect intermittent site activities rather than encampments of extended duration. Such activities would not be expected to leave intact archaeological deposits or features except under unusual conditions of alluvial or colluvial soil development. Without exception, all of the recorded sites have experienced moderate to severe soil erosion and, in most instances, were also extensively modified by heavy earth-moving equipment. Given these factors of site interpretation and post-depositional disturbance, none of the sites meets the minimum standards to be considered significant by National Register of Historic Places criteria.

Four sites (31Mk632, 31Mk639, 31Mk640, and 31Mk643) also yielded historic artifacts. These historic cultural remains have likewise been severely impacted by soil erosion and artificial modification of the land surface, and thus lack site integrity necessary to be determined significant. The four extant structures at site 31Mk632, while they probably pre-date 1943 and therefore meet the minimum 50-year age criteria established by the National Register, lack integrity of location since they were built elsewhere and subsequently relocated to their present setting.

Given these findings, it is concluded that none of the cultural remains identified within the project area are significant following criteria of the National Register of Historic Places. Therefore, it is our opinion that the proposed project will have no adverse impact upon significant cultural resources and that no further cultural resource assessment is warranted.

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#### APPENDIX

### BLACK & VEATCH

ENGINEERS - ARCHITECTS

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Charlotte-Mecklenburg Utility Department N. Mecklenburg Water Treatment Plant B&V Project 19729.116 B&V File F March 2, 1993

Mr. Steve Davis Research Laboratories of Anthropology CB 3120, Alumni Building Chapel Hill, NC. 27599

#### Subject: Archeological Evaluation

Dear Mr. Davis:

Black & Veatch is assisting the Charlotte-Mecklenburg Utility Department (CMUD) with the design of the North Mecklenburg Water Treatment Plant. CMUD plans to construct the plant on a 151-acre site situated at the end of Babe Stillwell Farm Road, southeast of N.C. Highway 73, near Lake Norman. The plant will withdraw water from Lake Norman for processing and final distribution to the CMUD distribution system. The plant will be sized for 18 million gallons per day (mgd), with ultimate expansion to 108 mgd. The proposed project will include a raw water intake on the lake, treatment facilities, treated water storage, high service pumping facilities, and raw and finished water transmission pipelines.

We are now preparing the environmental assessment that is required in support of state and federal regulations and are requesting your assistance with an archeological survey of the project area. The survey and site evaluation report should be conducted and prepared using North Carolina State Historic Preservation Office guidelines.

Attached for your information is a map showing the project area and the approximate location of the proposed facilities. We would like to meet with you, or one of your representatives, to discuss the project and to visit the site prior to beginning the work. I will call you at the end of this week to discuss your requirements and schedule so that we may begin the survey. If you have questions in the meantime, please call.

Sincerely, Balan Shance

Barbara Schauer

